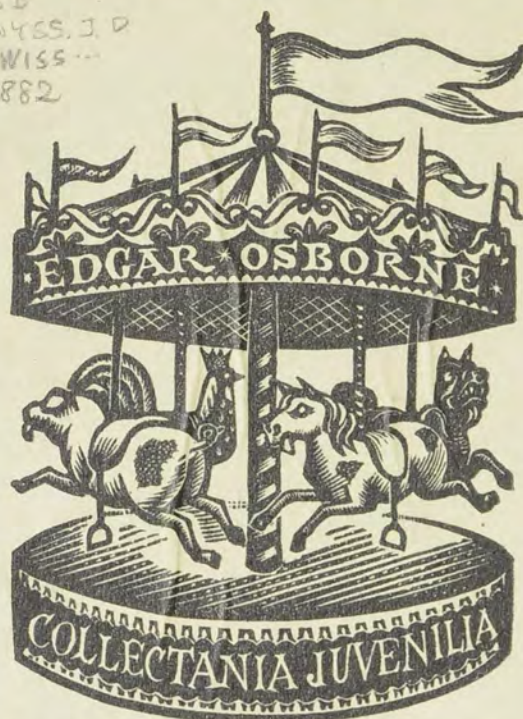




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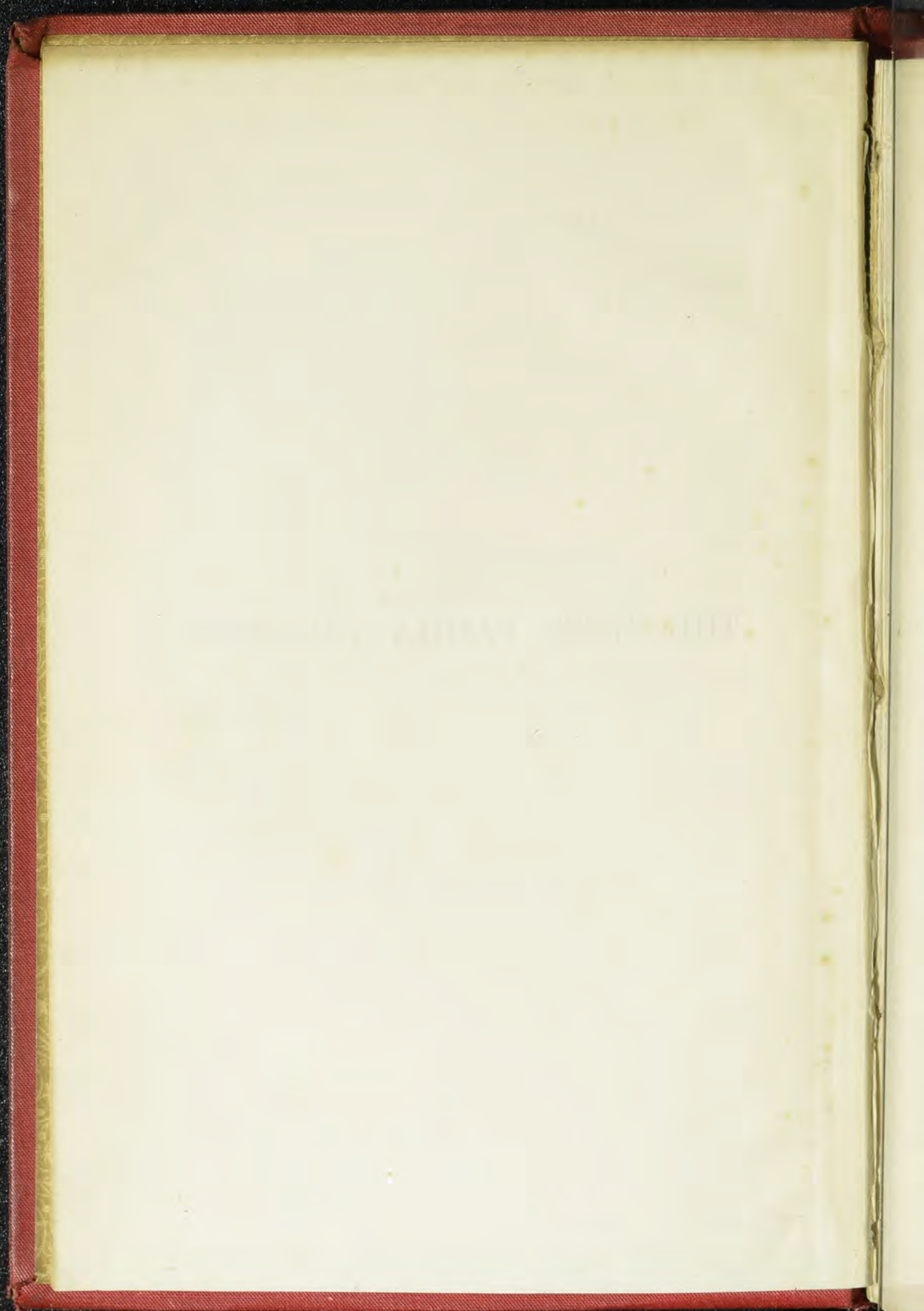


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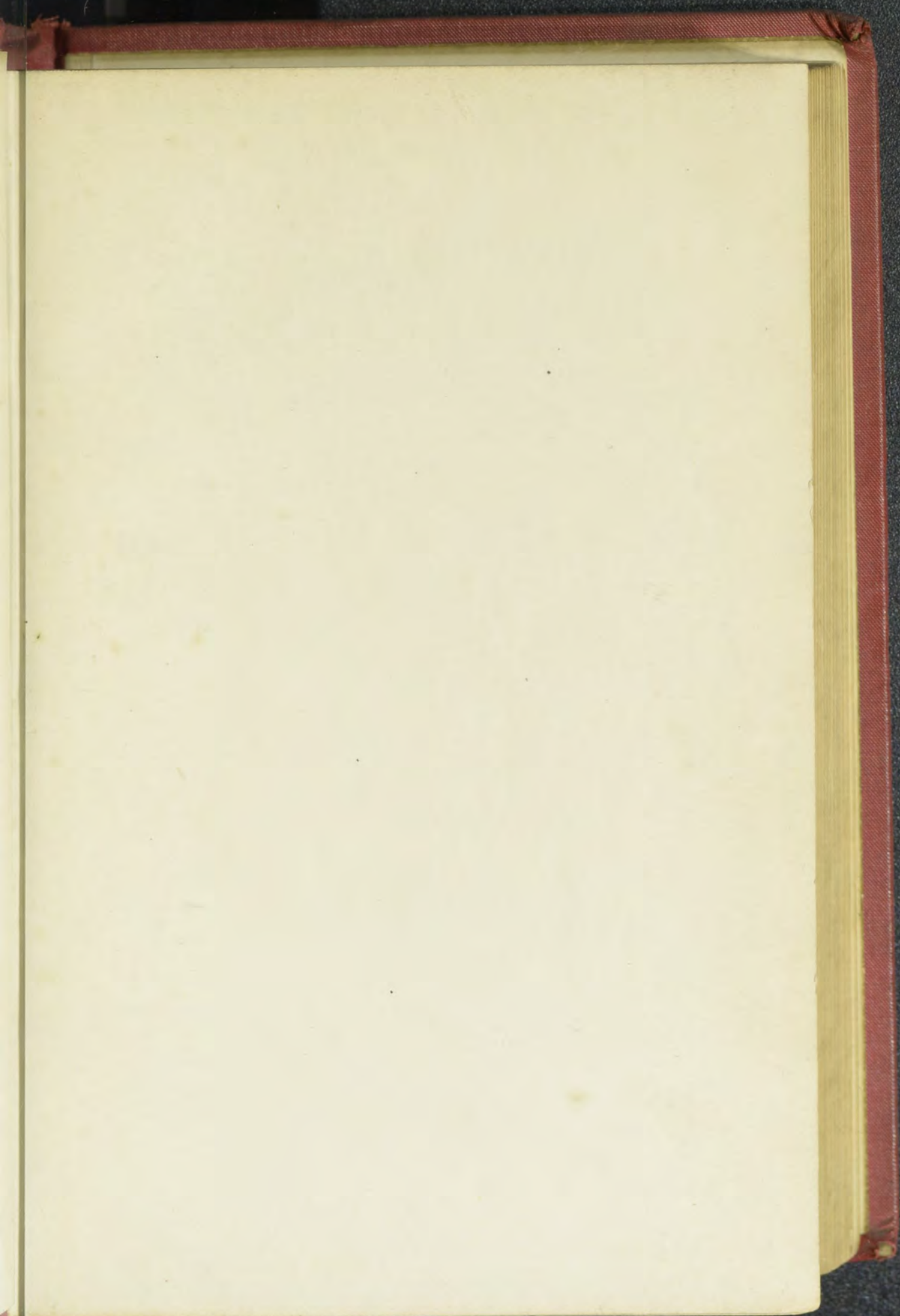


THE SWISS FAMILY ROBINSON.













BRINGING HOME THE MONKEY.



THE  
SWISS FAMILY ROBINSON;

or,

Adventures of a Shipwrecked Family on a  
Desolate Island.



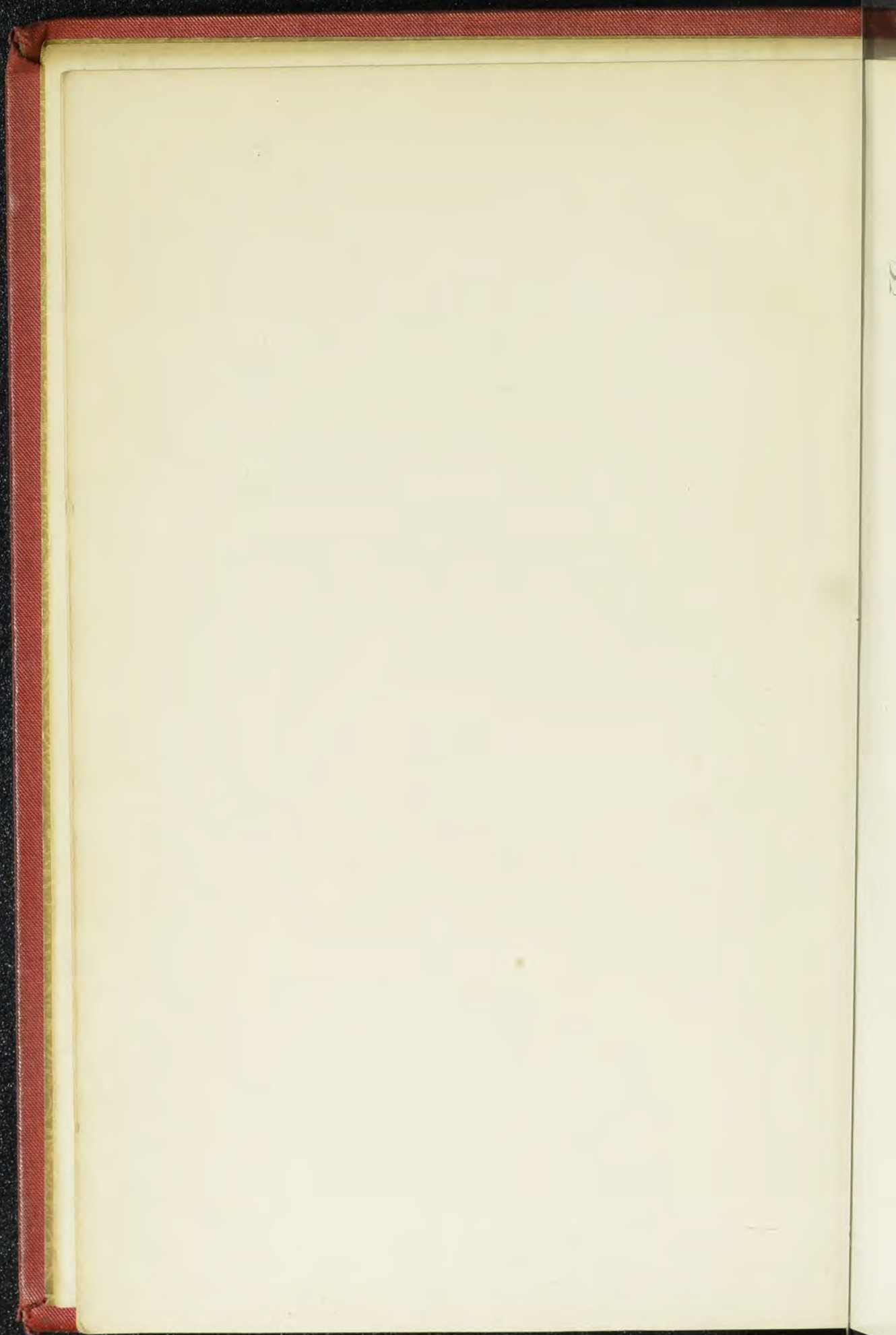
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Thomas Nelson and Sons,  
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THE  
SWISS FAMILY ROBINSON;

OR,

ADVENTURES OF A SHIPWRECKED FAMILY ON A  
DESOLATE ISLAND.

A New and Unabridged Translation.

WITH AN INTRODUCTION FROM THE FRENCH OF CHARLES NODIER

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" So they,  
Set in this Eden of all plenteousness,  
Dwelt with eternal summer. . . .  
The glows  
And glories of the broad belt of the world,  
All these *they* saw."

TENNYSON, *Enoch Arden*.

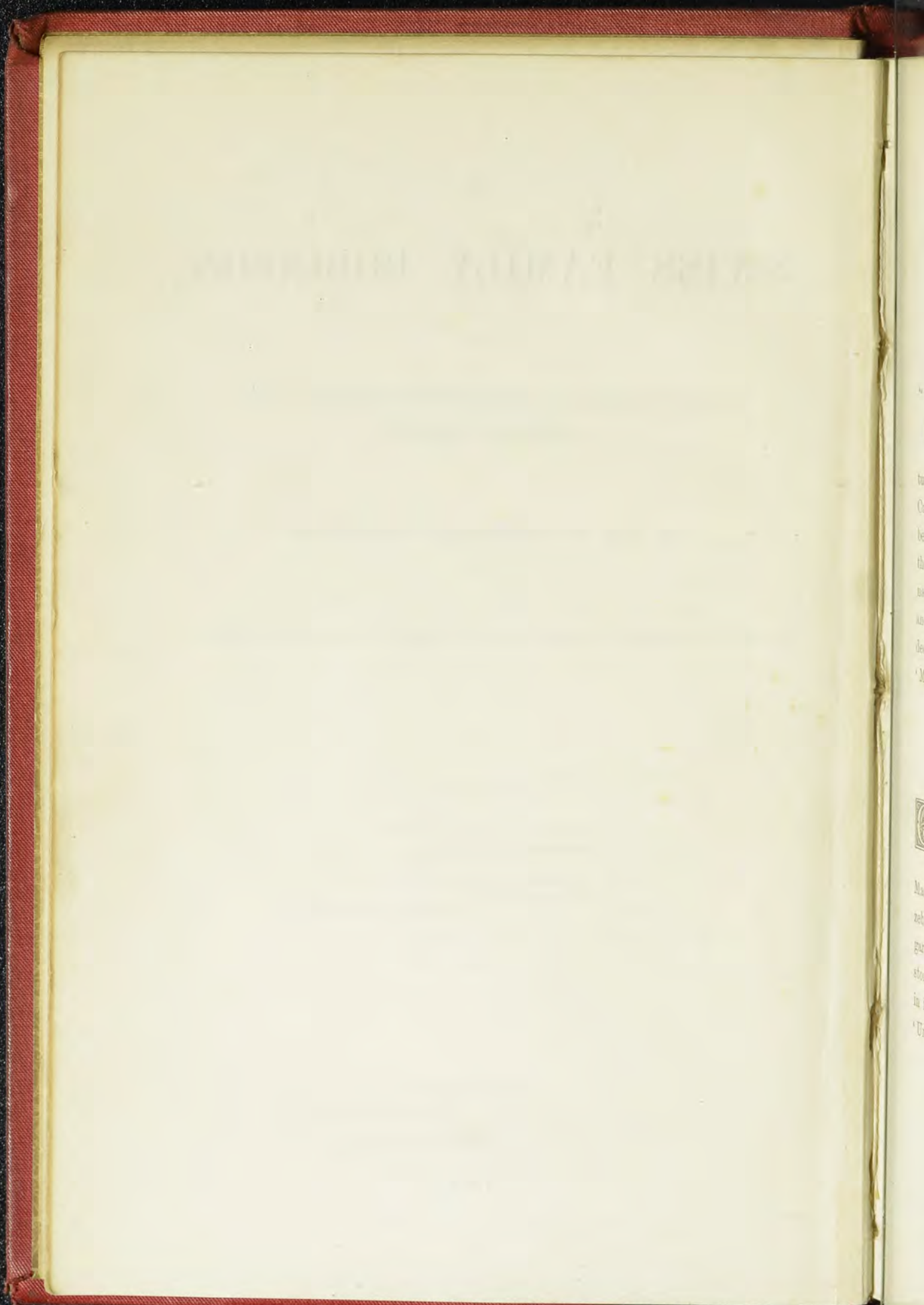
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T. NELSON AND SONS, PATERNOSTER ROW;  
EDINBURGH; AND NEW YORK.

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1882.









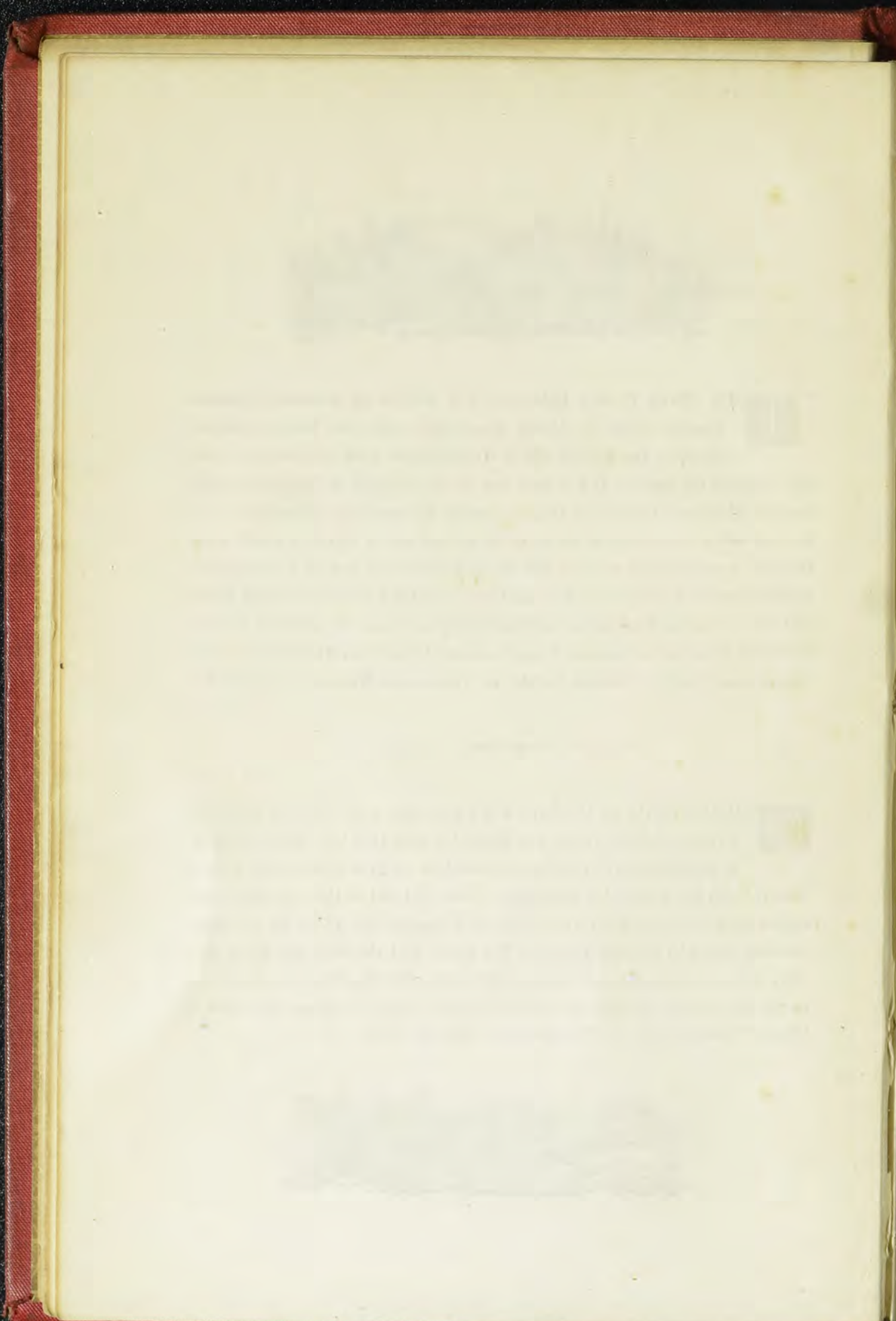
“**T**HE ‘Swiss Family Robinson’ was written by Joachim Heinrich Kampe, tutor to Baron Humboldt; and one longs to know whether the pupil’s spirit of enterprise fired the tutor, or the tutor formed the pupil. It has been one of the greatest of favourites, until Captain Marryat’s nautical criticisms cruelly disclosed its absurdities. To be sure, when one comes to think of it, no one but a German could have thought it practicable to land the whole family in a row of washing-tubs nailed together between planks,—and the island did contain peculiar fauna and flora; but the book is an extremely engaging one for all that, and we decidedly would prefer reading it at this moment than the rather characterless ‘Masterman Ready.’”—MISS YONGE, in *Macmillan’s Magazine*, July 1869.



**C**OMMENTING on the foregoing paragraph, a critic in the *Spectator* writes:—“Miss Yonge will be glad to hear that the ‘Swiss Family’ is beginning to be read again almost as much as it deserves. Bother Marryat and his nautical knowledge! They did sail in the tubs, and train zebras and ostriches for riding, and grow apples and pines in the same garden; and why shouldn’t they? We never met the child yet whom this story did not fascinate; and if some publisher would just have it translated in its old tedious fulness, we believe it would have a success like that of ‘Uncle Tom’s Cabin.’”—*The Spectator*, July 10, 1869.











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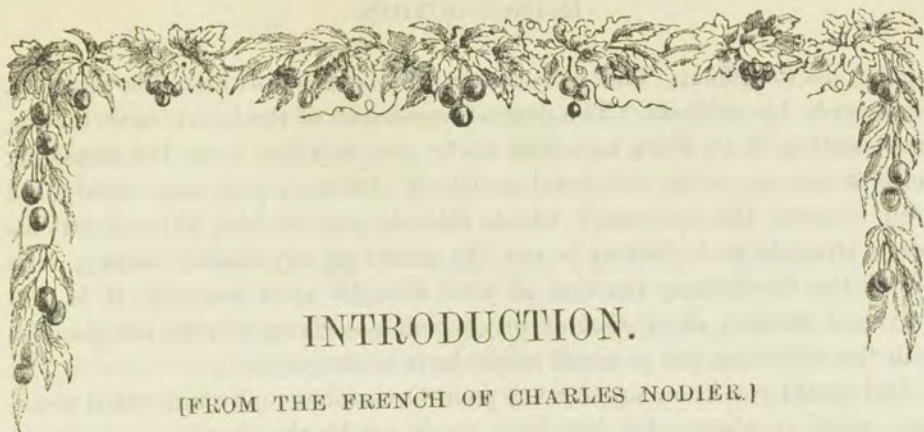
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## INTRODUCTION.

[FROM THE FRENCH OF CHARLES NODIER.]



O Daniel De Foe, one day, a great thought came; the idea occurred to him of surrounding a man with all those conditions most dreaded by humanity: necessity, peril, and, before all, solitude. He resolved that his hero, in this desperate state of misery and abandonment, should have but two auxiliaries: the moral courage which never quails, and that proverbial providence of the unfortunate which helps those who help themselves. He resolved to show how much might be accomplished by the natural instinct of self-preservation, the patience of a resolute and energetic character, and, finally, by that faculty of resignation which is patience exalted into the rank of Christian virtues.

The English ROBINSON CRUSOE\* is the inimitable type of Man in Solitude, and I can easily understand how powerfully it would have affected the morose and melancholy imagination of Rousseau.† The type, however, is truly religious, truly moral, truly social; and this last quality is as precious as it is extraordinary in a personage whom misfortune reduces to the most absolute isolation. Of the three chief duties of an intelligent creature towards God, towards himself, towards the creatures which resemble him Robinson Crusoe discharged the first two with admirable and touching fervour; he is tormented by the need of fulfilling the third, and as quickly as he may he *does* fulfil it, for he wanted but a neighbour to prove that he could love him. When, however, this conjuncture takes place, the dramatic interest of the story is at an end. Robinson Crusoe has his fields, his plantations, his

[\* "Robinson Crusoe" was first published in 1719. There can be little doubt that it was suggested to De Foe by the narrative of Alexander Selkirk, who lived for four years on the uninhabited island of Juan Fernandez.—*Translator.*]

[† A great French writer, born 1712, died 1775; the author of "Julie," "La Nouvelle Héloïse," and other works. His genius was of a morbid and brooding character; brilliant, but unhealthy.—*Translator.*]



houses, his kingdom. The new-comers will be his workmen, his servants, his tenants, his subjects. The dearest necessities of the heart, nevertheless, are forgotten in De Foe's immortal work; you nowhere hear the consoling voice of woman, or the delightful prattle of children; you love nobody, not even Crusoe; the sympathy which attracts you to him throughout his heroic struggle with destiny is not the result of any tender feeling; it is simply the involuntary reaction of your thought upon yourself; it is that universal instinct of egotism or pity which associates you in imagination with the sufferings you yourself might have undergone.

And would you know up to what point Crusoe has really interested you—how great an abstraction has been produced by the desolate position in which the romancist has placed him? Ask yourself what becomes of him when he quits his island, and admit, frankly, that you have never cared to ascertain. Thus, then, in Daniel De Foe's great work there occurs an impressive situation, an action full of disquietude and terror which constantly keeps our curiosity on the alert, and a pure and tender morality which strengthens the soul. This is much, it is true, but it is not enough! What are wanting are those tender anxieties, those mutual solitudes, those alarms, those joys which we can only share with others; what are wanting are, in truth, a father, a wife, and a family.

The "Robinson Crusoe" of Daniel De Foe is a masterpiece; but it is a cold masterpiece, and it leaves the heart cold, because the solitary unity of the interest rests on a purely exceptional fact; because Crusoe's misfortune astonishes and grieves more than it touches us; because this man, with his courage that impresses and his intelligence that reassures, is, when we come to analyze him, nothing but a singular and remarkable individuality, removed from all the ties, all the obligations, and all the affections of common life. Crusoe is admirable in his resolution, in his activity, in his ceaseless industry, and we cannot but admire him; only a romance which excites our admiration can never become the book of our heart. We are organized for something greater than the mere defence of our material existence against those dangers which threaten only ourselves. A most precious moral instinct, that which reveals to man all his future, leads him to go in search of his fellows, to love them, to protect them, to defend them, to serve them. There is in our bosom a still deep voice which cries, with the sage in the play of Terentius:—

*Homo sum ; humani nihil a me alienum puto.*

[I am a man, and think nothing human foreign to my sympathies.]

It is not, however, the object of these remarks to raise any spiteful objection against the just renown of the author of "Robinson Crusoe." They refer simply to an inevitable inconvenience of his subject, to a fault which was inherent in the very form of his work, and which the episode of Friday—ingenious and pathetic as it is in itself—could not completely get rid of.



Wyss, the author of the book now before us, did not arrogate to himself the merit of the invention—he accepted it, he built upon it, he proclaimed himself an imitator and a copyist of an immortal model; but to imitate, as M. Wyss has done, is even better than to invent; it is to apply a recognized invention to the most important of all possibly useful objects; it is to inspire with a soul this artist's figure of clay; it is to give life to Pygmalion's statue. "Robinson Crusoe" will ever remain a good and a noble book; but the "Swiss Robinson" merits, perhaps, the first place among all the works of imagination designed for the instruction of men as well as children, manhood no less than youth. Seek neither in romances, nor in the most special treatises which a tender philanthropy enlightened by science has inspired, a code of physical, moral, and intellectual education preferable to it! I wish you could discover such an one, but you will not. Those fortunate combinations of heart and genius to which the munificence of M. de Monthyon has appropriated an annual prize,\* are not altogether so common as he seems to have imagined; only three or four occur in a century, and these are not all of the same value. Pluche's "Le Spectacle de la Nature," the Abbé Gérard's "Comte de Valmont," Filassier's "L'Ami de la Jeunesse," the "Magasin des Enfants" by Madame Leprince de Beaumont; a few others, and how few!—*apparent rari nantes*†—compose that choice and special library which increases so very slowly. Meanwhile, until others are produced, if I had the honour to exercise any influence on the deliberations of the French Academy, I would engage it to bestow the prize yearly on the "Swiss Robinson" of M. Wyss, and to distribute that work yearly among our schools. I admit that such an arrangement would not be altogether conformable to the rigorous stipulations of Monthyon's will; but I am convinced that it would exactly fulfil the donor's intentions.

The "Swiss Robinson" of M. Wyss is "Robinson Crusoe" in the bosom of his family. Instead of the rash and obstinate sailor who struggles against death in a prolonged agony, it is a father, a mother, and their charming children, so different in age, character, and mind, who engage our interest. Do not imagine that interest is diminished because it is divided. It is multiplied, on the contrary, by all the sympathies which a family inspires. The new author's combination has changed the entire economy of his fable; it transports you from the final abode of a solitary adventurer to the cradle of human society. It puts before you the growth of communities when enlightened by God's wisdom and succoured by His providence. Crusoe's island expands before your eyes; and you may study there the progress of a rapid civilization which embraces every period of the world's history.

[\* The Baron de Monthyon invested, in 1782, a sum of 12,000 francs (about £450), the interest of which was to be spent as an annual prize for some literary work, equally meritorious in style and sentiment, which the French Academy should pronounce calculated to be most useful to society. The Baron died in 1820, aged 87.—*Translator.*]

†† "*Apparent rari nantes in gurgite vasto.*"—Virgil, *Aeneid*, lib. i.]



The Swiss Robinson is one of those men who has learned much from the simple but laudable design of gathering knowledge, and whom Necessity, that imperious ruler of minds, suddenly compels to transform all his theories into practice. Over man in a natural and uncultivated condition he has the advantage of instruction; like Adam, he knows the names and properties of things—a marvellous boon, which our species possessed in its primitive state, which it lost after the Fall, and which it does but slowly recover by collecting the discoveries and ideas of past generations; but this precious labour of an exalted intelligence our hero has undergone. All that can be known, he knows; all those mysteries of creation which are comprehensible and useful, have been revealed to him; and that knowledge which springs of God while accumulating in a judicious and submissive mind, has contributed to strengthen his religious faith. It is such a man as this who is called upon to shelter a wife and children—to feed, to clothe, to lodge them in a manner suitable to their habits—with the scanty resources of the desert; it is this man who succeeds in so great a task by means of arduous labours, indefatigable exertions, and a devout confidence in the unlimited goodness of the Master. His history embodies, then, the entire history of man, and even of society; it is space enclosed within a narrow boundary; it is time summed up in a brief succession of years—the prolonged and patient toil of humanity set forth in the internal economy of a small household. It is the peculiarly attractive and readable summary of an encyclopædia, conceived by men of true wisdom, and adapted to our actual needs.

A moment's reflection suffices to show that M. Wyss's plan embraces a complete Educational Course, and that it conducts the author, in a single generation, to the reasonable limits of *Progress*, understanding the latter word in its exact value—that is, without regard to the extravagant pretensions of those impious sophists who are always building Babel! The Swiss Crusoe asks of Nature all the help which Nature can give to man, and Nature refuses him nothing, because all creation is at the service of humanity. To laborious patience nothing is wanting, to inventive industry nothing is wanting, but those things whose need has not yet been experienced, and shall we say that aught is really deficient which is not necessary? It is true that the Swiss Crusoe's island is more than usually favoured in its natural products; but that we do not find the same resources wherever we cast our glances or plant our feet is due to imperfect inquiry, or, if we may so speak, to the absence of any absolute and imperious need. Who "in populous cities pent" has not trodden disdainfully on the much-contemned nettle and bracken,\* never reflecting that these could supply him

[\* The Common Nettle (*Urtica dioica*), which flourishes in all our hedge-rows, is a plant of great capabilities. Its roots afford a yellow dye; the juice of its stalks and leaves a beautiful green; the young shoots make, when boiled, an excellent dish, and are also esteemed as food for poultry; the *bast* fibre supplies the material of yarn and cloth, both of the finest and coarsest kinds. Much, too, may be said in praise of the common Brake or Bracken (*Pteris aquilina*). The root stock, ground and mixed with barley, can



with an agreeable and wholesome food, a tissue not inferior to that of hemp, a paper far preferable to that which we manufacture at present from cotton, a savoury bread, a brilliant transparent crystal? Truly we are very heedless and very ungrateful! But the Swiss Crusoe avails himself of all the gifts of God, while referring the glory of them to God; he studies, and he learns in company with his pupils, which is an excellent method of teaching; every discovery leads to an experiment, every experiment creates some art or suggests some handicraft; each day bears its own fruit; all these discoveries, all these successes, are so many acts of gratitude to the great Creator. See how this life is animated by wholesome pursuits, by useful and strengthening labours, by pious aspirations towards a merciful Father, by a sweet and tender emulousness who shall most contribute to the happiness of all! Show me anywhere a system of primary instruction which surpasses this, and whether it comes from Locke, Rousseau, the philosophers, or the University, I promise it beforehand my warmest praises!

CHARLES NODIER,  
*Member of the French Academy.*

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#### NOTE BY THE ENGLISH TRANSLATOR.

IN the present volume I have followed the French translation by Madame Voïart, which is, perhaps, superior even to the original in *style*; is more lucid, spirited, and expressive. This, I believe, is the first *unabridged* version offered to the English public of a work which has acquired a great and well-merited popularity from its happy combination of instruction and amusement, of the interest of romance with the discoveries of science.

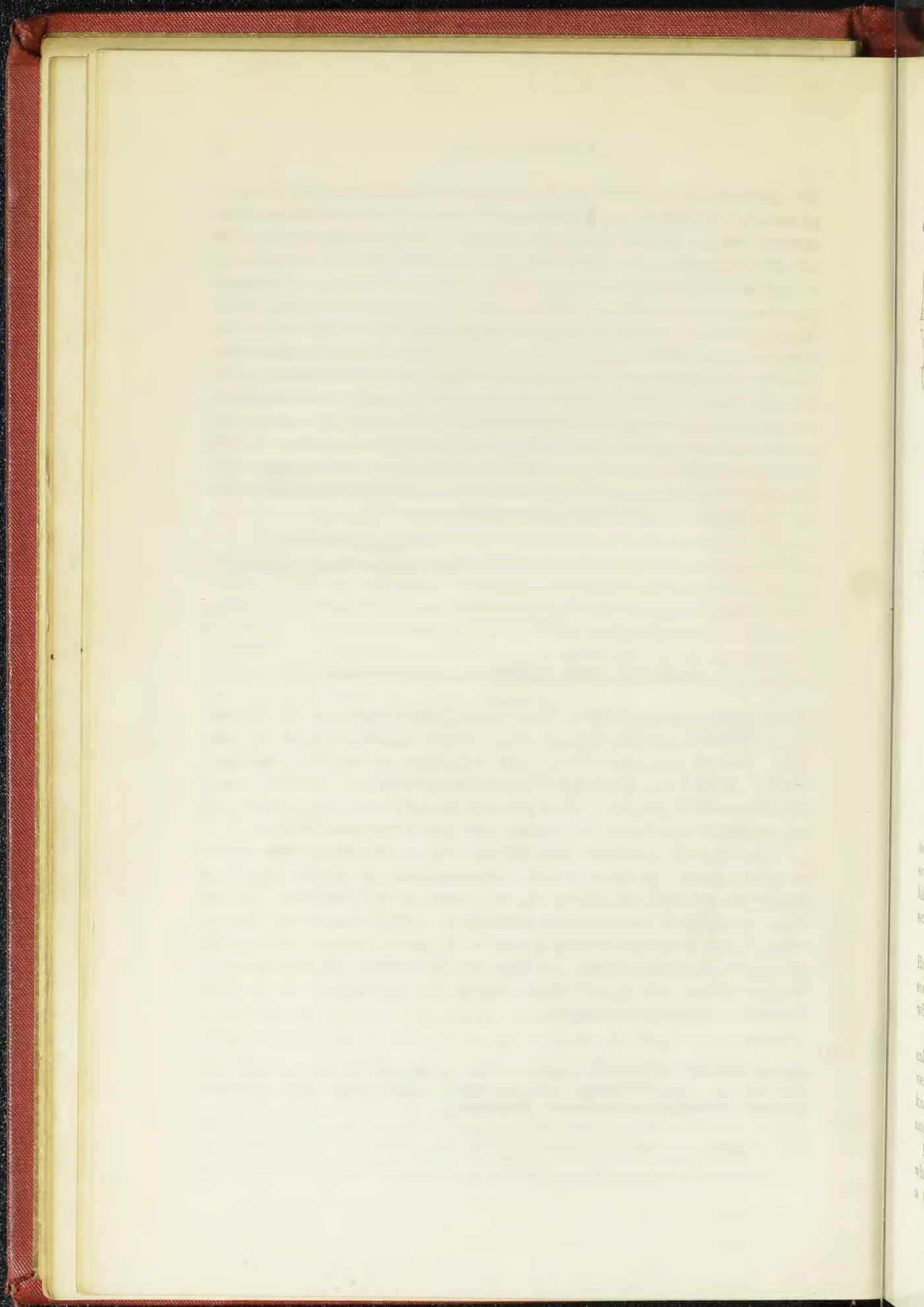
It may be as well, however, that I should caution the young reader on one important point. In order to make his expositions of natural history as *complete* as possible, the author of the "Swiss Family Robinson" did not allow himself to be trammelled by *geographical* considerations, and has collected in his imaginary islands a number of plants that are never found growing in the same *habitat*. He has even introduced polar animals into a tropical region. But in all other respects the accuracy of our author's descriptions cannot be impugned.

W. H. D. A.

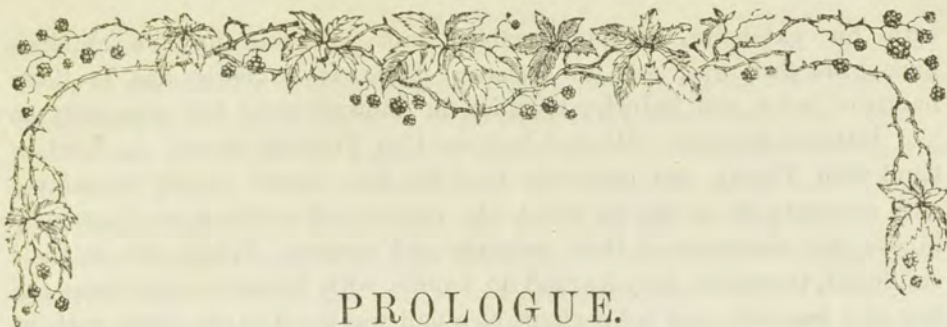
1870.

be used for bread; the ashes are employed in the manufacture of soap and glass; and the plant also serves for littering cattle, for fodder, and for thatch. The commonest things are not always the least useful.—*Translator.*]









## PROLOGUE.



SWISS family, whom the prospects of fortune summoned to America, had embarked at Havre on board a merchant vessel intended to transport a body of emigrants to the New World. A distant relative of M. Starck (such was the name of the head of this family) had recently died, bequeathing his estates to his cousin, on condition that the latter settled upon them in America with his children. Six individuals,—the father, the mother, and four children of different ages and characters,—composed this little family. The eldest child, who was named Frederick, was fifteen years old—a tall handsome boy, full of strength and agility, with a clear brain, a good heart, but more skilful in physical than in mental exercises; not, however, deficient in intelligence, though less clever than his brother Ernest. The latter, thirteen years of age, was of a slow, and even a somewhat slothful temperament; but naturally attentive, observant, and meditative, he constantly occupied himself in the pursuit of knowledge. He had a special inclination for natural history, and had already acquired a wide acquaintance with that fascinating science—the result of his experiments and his observations.

The third boy, whose name was Rudly (a pet abbreviation for that of Rudolph), was twelve years old. A frank, talkative giddy-pate, he was somewhat presumptuous, bold, and enterprising, but withal an excellent lad, whose good qualities of heart compensated for the levity of his disposition.

Finally, the youngest of all, whom his mother and brothers agreed in calling "Little Fritz," was a boy only eight years of age, very lively but very gentle, whose studies had been retarded by a feeble childhood. He knew nothing as yet; but being attentive and obedient, would quickly acquire that degree of instruction proper for his age and talents.

M. Starck was a man in the prime of life, a sincere Christian, wholly devoted to the exact discharge of his duties as a citizen and a father. The admirable education which he had received, combined



with his extensive reading, enabled him to bring up his children under his own eye, and to accustom them at an early age to those habits of order and industry to which he himself owed the prosperity he had hitherto enjoyed. He was desirous that Practice should go hand in hand with Theory, and especially that his sons should supply themselves with a variety of things for which the majority of children too frequently invoke the assistance of their servants and seniors. While still in their childhood, therefore, they learned to handle with tolerable adroitness the saw and hammer, and not a plank or a nail was fixed in the house without displaying the more or less skilful handiwork of the young carpenters. Bred up in the country, and almost all of them gifted with a robust constitution, they learned to brave, without danger to their health, the heat, the cold, the rain, and all the extremes of the different seasons. Accustomed to visit the stables and outhouses of their father's farm, they were neither afraid of horses, or cattle, nor of any other kind of domestic animals. At need they could even feed, harness, or drive them. Their father, while thus inuring them to labour and fatigue, was anxious not only to strengthen their constitution, and to lift them above the thousand puerile fears which children too often feel at the sight of animals, but to give them that practical knowledge of the things of common life which can never be acquired from books, and which, by teaching children to rely on their own resources, eventually makes them more useful to their fellow-men, and endows them with a noble independence. Little did he think, however—this wise and thoughtful father—that in this way he was providing his sons with the means, not only of extricating themselves from the most terrible dangers, but more, of ensuring their prosperity and the welfare of all their family.

M. Starck's admirable wife, whom he most frequently called "my good Elizabeth," was the true type of "a mother of a family." Solely occupied with the cares of her household, she ruled therein with gentleness and good humour. Her love for her children was as enlightened as it was profound; the earnest piety which inspired her soul preserved her from a misjudged weakness towards their faults, but it was seldom that her mild remonstrances proved ineffectual to control them; their respect for her was equal to their affection.

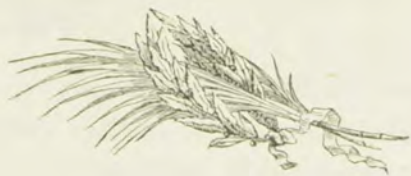
Summoned, as we have said, to take possession of a rich inheritance in the New World, M. Starck, in the hope of securing for his family a more advantageous future, did not hesitate to bid farewell to his country and embark for Philadelphia. The beginning of their voyage was singularly fortunate. According to his time-honoured custom, M. Starck took advantage of the novel circumstances which surrounded them to augment his children's stock of practical knowledge. The order and admirable arrangement which prevailed on board the vessel, the intelligent and well-regulated



toils of its crew, the wonders of the compass, the capabilities of the helm, all those grand achievements of the art of navigation wherein the powers of calculation and equilibrium work so many marvels, were, during the voyage, a daily and inexhaustible source of instruction and astonishment for the sons of M. Starck. They learned from the sailors to make and unmake those seamen's knots which are at once so simple and so indissoluble; they exercised themselves in hauling in the cables, in working the capstan; and when the carpenter had any repairs to make, were ever ready to assist him. Frederick laboured industriously with an enormous auger; Rudly with his mallet dealt heavy blows on the wooden plugs; and if Ernest did not appear to take so industrious a part as his brothers, he was not the less busy in making a host of curious or useful observations on the manner in which the artizan executed his tasks, whether he shifted, almost unaided, huge logs of timber, or raised them by means of the lever;—in a word, nothing escaped his vigilance, and he thus enriched his mind and memory with numerous facts which were destined soon to prove of great utility.

They had already reached lat. 40° N., and all things conspired to cherish the hope that in ten days their voyage would be ended, when suddenly the winds, hitherto favourable, completely changed, and raged with such fury that, spite of all the skill and energy of the crew, their ship was driven out of her course, a wanderer in unknown seas. A terrible storm arose, and for ten days and nights continued to increase in vehemence. In these terrible circumstances M. Starck and his eldest son, the only one who could take an active part at the pumps, evinced the utmost zeal and self-devotion. But at length, overcome by fatigue, they threw themselves on a mattress in the stern-cabin, where the mother, surrounded by her children, knelt in prayer, and commended to the mercy of God the cherished objects of her affection. While they thus snatched a brief repose, a great clamour was heard upon deck. . . .

But we shall now leave M. Starck himself to continue the narrative of this deplorable event, as well as of the strange incidents which followed. May its perusal prove agreeable to our young readers, while demonstrating this important truth, that whatever the severity of the misfortunes with which it is the will of God at times to chasten us, Providence never abandons those who do not abandon themselves!











THE

# SWISS FAMILY ROBINSON.

CHAPTER I.

Again she plunges ! hark ! a second shock  
 Bilges the splitting vessel on the rock :  
 Down on the vale of death, with dismal cries,  
 The fatal victims shuddering cast their eyes  
 In wild despair ; while yet another stroke,  
 With strong convulsion rends the solid oak :  
 Ah, Heaven !—behold her crashing ribs divide !  
 She loosens, parts, and spreads in ruin o'er the tide.

FALCONER: *The Shipwreck.*



IX days the storm had raged in unbridled fury. On the seventh, far from showing any signs of abatement, it seemed to increase in violence. We were driven towards the south-east, and no one knew in what region we should find ourselves ; the ship, all whose masts had gone by the board, leaked heavily ; her crew, spent with so many weary days and

sleepless nights, no longer addressed themselves to a toil which they considered useless : instead of the usual oaths or noisy songs, only tardy ejaculations of devotion, or low moans of despair, might now be heard ; in a word, the alarm and terror were general, and





while recommending their souls to God's mercy, everybody thought only how they might save their lives.

"Children," I said to my four sons, whom fear had almost stupefied, "God alone can rescue us, and if it be His pleasure He will do so. Should He in His wisdom order otherwise, we must submit; we shall be reunited in heaven, never again to separate."

On hearing these words, which prepared her for a terrible catastrophe, my worthy wife dried her tears, her lips murmured one last brief prayer; then she recovered her composure; she strove to reassure her children—who were nestling round her—with a courage and a strength of soul of which I myself was incapable; for I felt my heart breaking with agony at the thought of the fate which threatened the cherished objects of my tenderness.

A common feeling impelled us to our knees, and a devout and earnest prayer arose to the God of mercy, in whom alone we confided for our salvation. I perceived in this circumstance how even the childish heart can soar above all selfish thoughts, and draw from prayer the strength it needs to resist the pressure of adversity.



Frederick, my eldest son, prayed aloud: he entreated the Divine Ruler to save his parents and his brothers; he seemed to forget his own danger in thinking of that which menaced us; and, for a few moments, all my young family, inspired by this generous emotion, felt their terrors subside. My trust in Providence waxed stronger: "Will not our Lord have pity upon them?"—I said to myself, with throbbing heart—"they invoke him with so much love and such earnest faith!"

Suddenly we heard, above the roar of the waves which clashed and clanged against our fated vessel, the cry of the look-out man: "Land! land!" At the same moment the ship received a shock so terrible that it sent us reeling from side to side; it was followed by a dull, hoarse cracking, and by a sound of water pouring in with a violence which convinced me that the vessel's broadside had struck against

a rock; we were ashore! A voice, which I recognized as our captain's, shouted, "We are lost! Lower the boats! Quick, quick, my men, the boats!" *We are lost!* That sharp cry of anguish penetrated my very soul, as it was repeated by my children with a terrible expressiveness. With a strong effort, endeav-





ouring to control myself,—“Courage!” I exclaimed; “we are still above the water; the shore is close at hand; and God never forsakes those who trust themselves; I will go and see what hope remains to us of safety.”

I ascended to the deck. The torrents of rain and the furious billows which swept it prevented me at first from standing upright. At length I contrived to steady myself by clinging to the shattered stump of the main-mast. Imagine my consternation when I discovered that all the crew had deserted the vessel! I could perceive the boats pushing off filled with men, and a sailor cutting the rope which until then had held the last alongside. I ran to the main-chains—I cried—I commanded—I implored—but all in vain; my voice was drowned by the roar of the storm; and whether it was that the billows swelling mountain-high prevented the fugitives from perceiving my signals of distress, or that the tumult of the sea rendered it impossible for them to return, I was doomed to watch the boats driving through the waves with frightful speed, and to feel that all hope of succour must be abandoned! Yet, frightful as was this thought, I experienced an emotion of joy on discovering that the water, which already overwhelmed a part of the vessel, only rose to a certain height, and that my family, gathered in the stern-cabin, were consequently out of any immediate danger. I then cast my anxious gaze to the southward, where I made out, through the rain and fog, and at no great distance, the outline of a coast, tolerably wild, it is true, in appearance, but to attain which, in this dread conjuncture, became the object of all my desires.

Although deeply affected by the position in which our desertion by the crew had placed us, I assumed, on returning to my family, a composure which I was very far from experiencing.

“Dearest,” I exclaimed, as I entered the cabin, “be of good heart! All hope is not yet lost! In truth, our ship is fast a-ground, but the water does not reach the main-deck; and if in the morning the wind and sea go down, it will not be impossible, I think, to gain the shore; it is close at hand.”

This vague assurance suddenly tranquillized my children; and, with the sanguineness natural to their age and inexperience, they



were not slow in regarding as positive what, alas! was as yet very doubtful: they even began to congratulate themselves on the event which, by rendering the vessel fast and immovable, had relieved them from the terrible oscillations that had afflicted them so severely during the voyage, and especially since the beginning of the storm. But my wife, more accustomed to penetrate my secret thoughts, discovered the deep anguish which I strove to conceal.



A sign from me made known to her our forsaken condition; but I felt my courage revive when I saw that her trust in God was nowise shaken. "Let us take some food," she said, "and our minds will be strengthened as well as our bodies; the approaching night will, perhaps, be one of great suffering, and we must be prepared to undergo whatever trials God may see fit to ordain."



She immediately began to make ready the children's supper, according to her usual custom. They all ate heartily, while my wife and I forced ourselves to swallow a few mouthfuls. Soon afterwards our boys flung their weary limbs upon their beds, and fell sound asleep. Frederick alone, who felt more keenly than his brothers, because he more clearly understood the danger of our condition, seemed desirous of sharing our mournful vigil.

"Father," he suddenly exclaimed, "I have thought of a means of safety. Let us make for mother and my brothers a kind of swimming-jacket; I mean, let us fasten under their arms some pieces of cork or empty bottles, to support them in the water; as for you and me, father, I think we can swim without difficulty, and with no other help than our strong arms!"

"The idea is excellent," I replied; "and we must directly devise the means of carrying it out, that we may be to-night prepared for any event."

In our cabin were stored several small casks and tin boxes which had contained the provisions for our long voyage; I thought them exactly fitted for our present purpose. We fastened them together in pairs, leaving between each a space of about a foot; and my wife attached some stout straps to sling them under our arms. As soon as these novel trajectories were completed, and firmly strapped on the shoulders of our poor little ones, who underwent this preparation almost without waking, we waited patiently the return of day, in the hope that if the ship broke up during the night, we might contrive, partly by swimming and partly by floating, to reach the shore in safety.

I persuaded my son to take some repose, for the toils of the day had prostrated him, and it was not long before he fell asleep: my wife and I continued our watch. We passed the night—the longest and most terrible of our lives—in a state of incessant alarm; listening to every sound, and trembling at each movement of the shattered vessel, lest we should be overtaken by some new disaster. What sad reflections thronged thickly on our minds! What plans, as quickly banished as conceived! But ah, what ardent prayers rose from the depths of our anguished hearts towards an All-merciful and All-powerful God!



At length the night passed away, and without any accident. Towards morning the wind went down; the sky brightened; and the dawn, breaking on a cloudless horizon, foretold a day of calm. With reinvigorated heart I summoned my wife and children upon deck, whither I had already ascended: my sons at first were struck dumb with surprise at seeing none of their companions. "Where, then, are all our people?" they exclaimed; "why have they departed without us? how shall we finish our voyage?"

"My dearest boys, He who has protected us hitherto will know how to preserve us and free us from our present peril: let this teach you to rely only upon Heaven and your own energies. The comrades in whom we placed so much confidence have pitilessly abandoned us in the hour of danger; but there remain to us God and the understanding which He has given us; let us bow before the one, and turn the other to advantage. 'Help thyself, and God will help thee,' is a maxim we never should forget. Now, my children, to work! Let us contrive some means of quitting this wreck, and gaining the shore, which looms yonder at no great distance."

We discussed the matter together. Frederick, who was a bold swimmer, held stoutly to his original proposition, and even undertook to guide his mother with one arm while he swam with the other.

"You, papa, can conduct my two brothers; and Ernest is strong enough, with the help of these two casks, to accomplish the passage alone."

Ernest, somewhat slow and lethargic by nature, did not relish the proposal. "It would be better," he said, "to construct a raft, and then all of us might set out together."

"Undoubtedly," I replied; "if its construction were not a task beyond our strength, and, at the same time, a very hazardous embarkation. Let us think of some other plan; but first we will go over the ship; the examination may suggest some idea capable of being more easily carried out."

Immediately we all began to explore the vessel. For my part, I first visited the caboose, where the provisions and fresh water were stored, for the thought troubled me how all my people would



be fed. My wife and little Fritz went in search of the poultry and domestic animals, which, forgotten two whole days in the press of our misfortunes, were dying of hunger and thirst.

As soon as Frederick had discovered the powder-room, Ernest repaired to the carpenter's stores, and Rudly to the captain's cabin; but he had scarcely opened the door before two dogs burst forth, and in their joy at recovering their liberty, brought our little boy to the ground with their noisy caresses.

Rudly was at first much alarmed by the strange apparition, but he soon recovered himself; and as hunger had rendered the poor animals very tractable, found no difficulty in mastering them. Taking each by the ear he led them upon deck, whither I had already returned. His brothers arrived also from their various quarters: Frederick brought two fowling-pieces, some lead, and a small cask of gunpowder; Ernest carried an axe, a hammer, and a pair of pincers. He had filled his cap with nails of all sizes, and a chisel and half-a-dozen gimlets projected from his pockets. Not one of us but contributed something to the general store; even little Fritz presented a box in which he had found, he said, "some pretty hooks."

"Truly," said I, after I had examined his treasure-trove, "our youngest has made the best discovery; Fritz's 'little hooks' are good strong fish-hooks, which will, perhaps, do more to support our lives than anything else in the whole vessel. Thus it is, my children, that good fortune in this life often falls to those who seek and understand it least."

"As for me," said my wife, "I bring nothing but good news: I have found a cow, an ass, two goats, and seven sheep, as well as a fat sow, still alive; and as I have given them plenty of food, they will, perhaps, supply our wants if it be the will of God we should remain some time on this frail shelter."

"Undoubtedly," I exclaimed, my mind recalled to our most pressing anxiety, "your intelligence is very pleasing; but the difficulty is not yet solved. You, Rudly, for instance, in your concern for your favourite animals, have brought nothing useful; what would you have us do with a couple of dogs? They are only two mouths more to feed."



"But, papa," replied the child, caressing his favourites, "when we are ashore they will help us in the chase."

"Very true; but first we must get there, and you will not accomplish the passage, I suppose, on the back of your dogs."

"Oh!" said Rudly, with chagrin, "if I had but the great tub mamma formerly used in her washing, and in which I paddled upon the lake at home, I would soon manage to carry you all ashore: I would go much farther than that with my boat."

His words fell on my mind like a ray of light.

"Blessed be the fortunate suggestion," I cried; "though it issued only from a child's mouth. My God, I thank thee! Follow me, children; come, saw, hammer, nails, gimlets! We are going to work, I can promise you."

In a few words I explained my idea, and we immediately descended into the hold, where I had noticed some large casks floating in the water with which it was filled. After several fruitless attempts, we succeeded, at length, in getting possession of a few of them, and rolled them on the upper deck, which was nearly level with the waves. Made of substantial oak, and bound with strong iron hoops, I found them well fitted for my object; and, with the help of my wife and eldest son, sawed them in halves. I thus obtained eight small tubs, each about three feet in diameter and four in height.

I then sought out a long flexible plank, on which I arranged my tubs, placing them side by side in a row, and allowing my plank to project beyond them both in front and rear, so that it was bent or curved like a ship's keel; we then secured them with heavy nails through their bottoms, and some strong bolts, of which Ernest had found a quantity in the carpenter's workshop.

This first operation concluded, we enjoyed an interval of rest and took some refreshment, for the reader will understand that the unaccustomed labour had greatly fatigued us; we then resumed our work with redoubled ardour. Fortunately, we had excellent tools, and a plentiful supply of nails and timber. Two other planks of equal length I fastened along the sides of my tubs, so that their extremities, held together by bolts, formed, as it were,



the bow of my boat, while at the stern they were cut away at an acute angle, and also closely fastened. Although we had laboured with the utmost energy, it was nearly evening before our work assumed any appearance of completeness. When it was finished, we found a difficulty in conveying it from our dockyard to the sea; our feeble arms, it is true, had managed to collect the different parts, but it was impossible for them to move the whole. I comforted my children on this point by bringing them acquainted with an instrument whose effects seemed absolutely marvellous; I mean the screw-jack, a machine composed of a toothed iron wheel, set in motion by a winch; the said winch gradually raising an iron pincer, by whose agency the heaviest burdens can be lifted. While I sent two of my sons in search of this machine, I sawed a stout spar into several short rollers; and fixing the screw-jack under the bow of my boat, I turned the handle: slowly rose the mass, and one of the children placed the wooden rollers under the keel in such wise as to propel the boat towards the place where I intended to launch it. All these operations were sufficiently protracted, and Rudly especially was astonished at the slowness with which I turned the handle of the jack.

"It is better to go slowly than not at all, my son. It has been proved by numerous observations, and it is a principle of the science called Mechanics, that every machine loses in power what it gains in rapidity, just as it loses in rapidity whatever it acquires in power. The screw-jack is not intended to move swiftly, but to raise heavy weights, and the better it fulfils this function, the slower will be its action."

"But," replied the little unbeliever, "you have only to turn the handle a little quicker."

"You would break the spring which regulates the movement of the wheel, and that is all you would gain. It is not a question of time; with patience and intelligence we come to the end of everything, my son; and, aided by these two powers, I hope to bring our enterprise to a successful conclusion."

In fact, thanks to the wooden rollers on which our improvised boat now rested, it quickly glided with majestic motion towards the main-chains of the ship, whose broadside having been heavily



shattered by collision with the rocks, afforded an opening through which we might easily launch our bark. I had taken the precaution to attach to its stern a long cable, which I fastened at the other end to a strong piece of wood, so as to prevent our handiwork from drifting away from the vessel's side after it had been launched.

This final operation was accompanied by a loud cheer; but our joy was quickly changed to anxiety, when we saw the boat dance on the water as if inspired by some sudden frenzy, and reel from one side to another in such a manner as to alarm us with the idea that all our toil and anxiety would prove fruitless; for it seemed



impossible to trust oneself without peril to such a tottering craft. I meditated long and painfully on the probable defects of its construction. All at once it occurred to me that its lightness was possibly the sole cause of its insecurity; I therefore collected some of the shot piled up near the great guns, hurled them adroitly into the tubs, and soon had the satisfaction of seeing my uncouth bark gradually right itself, and finally sit "swan-like" on the surface of the water. Joyous outcries saluted this signal success, and so great was the confidence of my lads, they were fain to descend at once into the boat. But afraid that I might not have thrown in sufficient ballast, and that the movements of my hasty-spirited youngsters might capsize it, I conceived the notion of providing it with an outrigger in imitation of those which the savages employ to steady their frail canoes. I explained my idea to my companions, and set myself to work.



I fixed two portions of a topsail-yard, cut of equal length, one over the prow, the other across the stern, but in such a manner that they could easily be moved. The end of each I forced into the bungle-hole of an empty cask, so that the water could not enter.

It now only remained to clear the way for our departure. The great breach in the vessel's side afforded a very convenient passage; I had only to saw off some projecting timbers on either hand for my wife and children to get through with facility. Hauling in the boat's cable, I easily drew it alongside; but by the time all these preparations were completed the day was far advanced, and we judged it advisable to defer our expedition until the morrow. We were in want of oars, and had also to consider what useful articles it would be best to carry with us. We resolved, therefore, to spend another night in the ship, which had undergone no further injury, while we, too, had grown familiar with the perils of our condition. We took only the precaution of equipping our children and ourselves with the natatory apparatus devised by my eldest son, in case of any night-alarm; and I advised my wife to throw off her feminine costume, which was ill adapted for such critical circumstances, and to clothe herself in a sailor's garb, which would give her greater freedom of movement. She consented, though not without some repugnance, to this species of transformation. We then supped, and after I had assured myself that no immediate cause of anxiety existed, we addressed our grateful prayers to the God of mercy who had so visibly protected us. Afterwards each of us sought his couch, to prepare himself, by invigorating repose, for the labours of the morrow.

We awoke at daybreak, for Hope is no less an enemy to sleep than Sorrow or Despair. After our usual morning prayers and a frugal breakfast, I finished all my arrangements for our departure, advising my children to supply themselves with whatever they considered indispensable necessities, and my wife to provide the live-stock on board ship with several days' fodder; "for," added I, "if our expedition succeeds, we shall probably return for them."

Our new ship's cargo consisted of a barrel of gunpowder: three fowling-pieces; three muskets; two pair of pocket-pistols; one



pair of horse-pistols; ball, shot, and lead, as much as we could carry, and a bullet-mould.

In addition, my children and wife each bore a well-stocked game-bag, of which we had found several among the effects of the ship's officers. I placed a case of portable soup in the boat, another of biscuits, a barrel of herrings and other comestibles, with an iron pot, some fishing-tackle, a chest of nails, and one of carpenter's tools, and finally, enough canvas to make a tent. I was compelled to limit our choice to articles of absolute needfulness; but although I substituted these for the ballast thrown in the night before, the frailty of our skiff prevented us from carrying all I wanted.

Everything at last was ready. We had implored the blessing of Heaven upon our enterprise, and were on the point of embarking, when the cocks suddenly crowed a kind of melancholy farewell. It occurred to me immediately that these might easily be taken with us; "for," said I, "if we cannot feed *them* here, perhaps they can feed *us* there." My opinion was unanimously adopted: we went in quest of the poultry; and soon I had the satisfaction of seeing one of the tubs stocked with ten hens and two cocks, who were covered over with a cloth to prevent them from flying away. As for the geese, the ducks, and the pigeons, we gave them their freedom, convinced that they would reach the shore more quickly and more easily than ourselves, some by air, the others by water.

My children had seated themselves in the boat, and we only awaited my wife's arrival to cast off. As I knew her good qualities of foresight and prudence, I felt assured her absence was caused by some useful labours; and soon, indeed, she made her appearance, carrying a tolerably heavy bag. "This," said she, as she threw it into the tub where Fritz was seated, "is *my* bit of wisdom." I thought it was meant to provide the child with a more comfortable seat, and gave the matter no further consideration. Then I cut the cable, and pushed off. In the first compartment sat my wife; in the second, and by her side, was Fritz; Frederick, in the third, kept guard over our munitions, which, together with the poultry, completely filled up the fourth; our provisions stocked the fifth; Rudly, and various domestic implements, occupied the sixth.



Where was Ernest? In the seventh, surrounded by all sorts of tools; while I, the father and commander, standing in the eighth and last, steered with my utmost skill the frail and unseaworthy shallop in which was gathered all that I held most dear.

As we began to increase our distance from the wreck, the poor dogs whom Rudly had found in the captain's cabin, howled loudly their regret at our unexpected departure. Then springing into the sea, as if by a common impulse, they swam vigorously after us. Their weight prevented us from taking them on board; for one, whom we called Turk, was an English mastiff, and Juno, the other, a noble animal of Danish descent. At first I feared they would be unable to accomplish so great a distance; but by occasionally resting their fore-paws on our stern outrigger, they kept up with us easily.

Our navigation was tedious, but safe; the sea was tranquil, and bore us to the shore on gently swelling waves; not a cloud obscured the fair serenity of heaven. Around us floated numerous barrels, casks, and chests, which had broken loose from the wreck. Thinking they might possibly contain some provisions, I endeavoured to lay hold of them; and Frederick having slung them together with a rope, we continued our voyage, towing them alongside.

As we neared the shore, it seemed to lose somewhat of its bare and dreary aspect. Frederick's eagle-glance distinguished various trees, some of which he said were palms. Ernest, an ardent naturalist, could not restrain his joy, and related to his brothers the marvellous properties of the palm; describing the wine which it yielded, the milk, the butter, and a nut far more savoury than any grown in European woods. Upon my expressing a regret that I had forgotten the captain's telescope, Rudly put in my hands a small marine glass which he had found in the pilot's cabin, and which proved very useful in enabling me to select a landing-place.

After struggling stoutly against the currents, whose force threatened to sweep us out to sea, I contrived to steer my boat towards the mouth of a small stream, which poured its sparkling waters into the bosom of the ocean, and formed a little but convenient bay, where our ducks and geese appeared to await our arrival and in



dicate the channel. I approached with caution a point of the rocky coast, which was about the height of our tubs, with water deep enough to float our shallop.



Our landing was speedily accomplished. Everybody who could leaped ashore, and even little Fritz tried to crawl out of his tub, which was higher than himself, but was glad in the end to avail himself of his mother's help. The dogs, who had reached *terra firma* before us, received us with joyous barks. The geese and ducks, swimming in the bay, maintained an incessant clamour; and these sounds, mingling with the shrill cries of the penguins and other sea-birds perched upon the neighbouring rocks, swelled into a wild, a strange, but not an unpleasing harmony.

Our first care, when safely landed, was to fall on our knees, and with a feeling of the liveliest and tenderest gratitude, to thank our heavenly Protector, and commend our future to His almighty goodness. We then proceeded to unload our argosy. Ah, how rich we considered ourselves with the little we had contrived to save! My wife released the poultry, and set them free to follow their own devices, for as yet we had neither food for them nor shelter. I busied myself in selecting a suitable locality for our tent and our night quarters. Over a long spar, one end of which I thrust into a fissure of the rock, while the other extremity was supported by a forked pole planted firmly in the sand, I extended the canvas which we had brought with us. Thus, as if by magic, a tent was constructed of sufficient size to accommodate all my family. We steadied the sides by loading the edges of the sail with chests, barrels, and other heavy objects, while to the opening



in front we fixed a few hooks, that we might close it during the night.

I now dispatched my sons to gather a quantity of grass and moss, and spread it on the sand to dry in the warm sunshine, that we might not be compelled to sleep upon the bare earth. Meanwhile, I sought along the bank of the stream for some large smooth stones, and with these erected a rude fire-place at a short distance from the tent. With a quantity of driftwood which the sea had cast upon the shore I kindled a glorious fire, whose crackling, leaping flames soon rejoiced our eyes. The iron pot filled with water was placed upon it; my wife, with little Fritz assisting in the character of cook, cut up a few cakes of portable soup, and prepared our dinner. The child, whom his mother had employed to break up some biscuit into small pieces for the *pottage*, seemed greatly surprised at these arrangements.

"Mamma," said he, "what are you going to do with that thick glue? and how can you make any soup when we have no meat, and there is no butcher's shop where we can get it?"

"What you mistake for glue," she replied, "is the jelly of meat in a condensed state, and so prepared that no air can get at it. By this means men are able to carry with them a sufficient supply for long voyages, when meat would not keep, and it would be impossible to load the ship with enough cattle to provide for the wants of a numerous crew."

Meanwhile Fred had loaded his gun, and proceeded along the sea-shore. Ernest, reflecting that it might be neither safe nor pleasant to penetrate into the recesses of a desert island, also directed his steps towards the sea, while Rudly commenced exploring the weedy rocks in search of mussels, whose existence he had noticed on landing. For myself, I was occupied in hauling ashore the two casks which we had towed to our boat, when a sudden and piercing cry made me hasten precipitately in Rudly's direction. I found him up to his knees in a shallow pool among the rocks; a large lobster had seized him by the legs, and from its grasp the poor boy vainly endeavoured to release himself. I plunged immediately into the water. At my unexpected approach the animal retreated; but, watching my opportunity, I contrived to seize him by the



middle of his body, with a due mistrust of his claws and pincers, and striking him with a stick which I carried in my hand, dragged him ashore, to the intense gratification of my little son, consoled for his fright by the capture of so noble a prey.

LOBSTER (*Homarus*).

But in his eagerness to exhibit it to his mother, he forgot the size of the crustacean. Moreover, as it lay perfectly motionless, Rudly thought it was dead. Without a moment's hesitation, therefore, he took it up in his arms; but the lobster had only been stunned by the blow he had received, and with its tail gave his captor so violent a blow on the face, that he let it drop, and, with mingled feelings of anger and pain, burst into tears. "Learn from this incident," said I, "to be cautious how you handle an animal capable of defending itself." I then put an end to the lobster with a stone, and Rudly, recovering his good temper, bore it triumphantly towards the fireplace where his mother was cooking our repast.

"Mamma, mamma!" he cried, as he approached, "a lobster! Ernest! A sea-crab! Where is Frederick? Take care, Fritz, or he'll bite you terribly! I caught him yonder, down by the shore; the rascal seized hold of my leg, and would have wounded me, had I not been dressed in a stout pair of seaman's trousers—oh, it is a frightful monster!"

Ernest had been attracted to the spot by his brother's cries. After curiously examining the lobster, he sagely advised that it should be cooked in the broth, having read somewhere, he remarked, that soup made of crabs was an excellent dish. My wife received the proposal coolly; she feared to spoil her broth; but she



undertook to cook the animal separately with all possible care, and that Rudly should have the largest claw as his portion; "for, indeed, my boy," said she, passing her hand caressingly over his forehead, "you are the first, and as yet the only person, who has discovered anything good, and contributed it to the general stock of the community."

Ernest having returned from his walk empty-handed, seemed to feel a slight reproach in the eulogium bestowed on his brother.

"As for that," said he, "I also found some excellent provisions, but I could not secure them without wetting my feet, and—"

"Bah," cried Rudly, "I know what it was! Some filthy mussels not fit to eat! While, as for my lobster, that now is a first-rate dainty, is it not, mamma?"

"But if it was oysters," rejoined Ernest, "perhaps my treasure-trove would not be considered so despicable, and I should not be astonished if they *were* oysters from the manner in which they adhered to the rock, the shallowness of the water, and other signs—"

"Now, my dear professor"—for such was the title we sometimes bestowed on Ernest when he made an unnecessary display of his learning—"since you saw all these things so clearly," said his mother, "be good enough to go in search of some proof of your valuable discovery. In our position we must neglect nothing, and above all must not be afraid of wetting our feet, or of any other little inconvenience, when called upon to co-operate for the general good."

Ernest immediately started, accompanied by Rudly, who knew no greater pleasure than that of dabbling in the water: while his brother sought for a few stepping-stones, he plunged in boldly, and each being provided with an iron-pointed stick, they quickly loosened from the rocks a quantity of splendid oysters, returning with both their handkerchiefs well filled. When turning the rock, our young naturalist made another discovery: in a corner, from which the sea had receded, he caught sight of a white and shining substance. Having tasted it, he felt certain it was salt; and instead of satisfying himself with the mere pleasure of the discovery, resolved to profit by it; he filled a large mussel-shell, and



brought it to his mother, who received this new acquisition with evident pleasure. "This indeed is a treasure!" she exclaimed; "thanks to you, Ernest, our soup will now be somewhat savoury."

"But why not put sea-water in your broth, mamma, to salt it?" inquired Rudly.

"Because," replied Ernest, "sea-water is bitter as well as salt, as you may convince yourself by tasting it."

"Many thanks, my dear brother," said Rudly, spinning round on one toe; "I leave that to you."

Having hauled ashore the various casks and chests which contained our goods and chattels, I now returned to the *cuisine*, where my wife was busily stirring her pot with a stick. Tasting its contents, she announced that the soup was ready.

"Come, then," said Ernest, who was somewhat of a gourmand, and always very eager for his meals—"come, then, let us fall to."

"Surely," replied his mother, with a tone of reproach, "you would not begin without your eldest brother. Where can Frederick be?" she continued, a little anxiously; "and how can we eat our soup without plates or spoons? It is impossible we can take it up in our fingers! what *shall* we do?"

This important question, addressed to all the guests, elicited for a while no reply; we found ourselves in as awkward a position as was Master Fox when the Stork served up his dinner in a vessel with a long neck and narrow mouth.

"Had we only a few cocoa-nuts," said Ernest, "we might convert the shells into capital soup-dishes."

"Ah, if it were only necessary to say, Had we this, or, Had we that, I should wish for nothing better immediately than a dozen good silver plates, or pewter, or even wood; but to what purpose repeat such idle words?"

"Well, well," remarked Ernest, examining one of the oysters he and Rudly had discovered, "I think this oyster-shell is large enough to serve as a spoon."

"A good idea!" exclaimed his mother; "but first we must wash them thoroughly, or the taste of the sea-water will spoil our soup."

While she was engaged in this operation, we heard Frederick's



voice. He approached us shouting merrily, and we replied to him in the same manner. He advanced with his hands behind him, and with a countenance full of meaning.

"I have found nothing," he said to us.

"What? nothing at all?" I asked, a little surprised.

"Nothing at all," he repeated.

But his brothers had by this time gathered round him, and suddenly exclaimed, "Oh, a little sucking-pig! A sucking-pig! Where did you find it? How did you capture it? Oh, let us see it!"

Laughingly the young man displayed before our eyes an animal which certainly bore some resemblance to a young pig.

"I think your hunt has turned out very successful," I remarked; "but why spoil my enjoyment by an improper pleasantry? Oh, my dear son, never sin against the truth, even in jest; the habit is all unworthy of an honourable nature, and will lead you eventually into a fatal course of falsehood, the meanest and most shameful of the vices."

Frederick listened to my reprimand with a blush, and promised to remember my counsel. He then described to us how, after he had crossed the stream, he had found himself in a most pleasant country.

"The sea-shore," he said, "is smooth, and easy of access; you cannot imagine what a number of planks, and barrels, and chests the waves have deposited there; and you can see from thence the wrecked ship. Will you not go to-morrow, and fetch the poor cattle which we left on board? If we had only brought the cow, our biscuit, steeped in her milk, would be more eatable. On the other side, too, the pasturage is abundant, and a small wood would afford us an agreeable shelter, instead of our broiling here in the sun on a dry and barren plain."

"Patience, patience, my son," I cried; "there is a time for everything; to-morrow, and the day after to-morrow, will each have its separate duties. But first of all, let me ask you if you have discovered any traces of the companions of our misfortune?"

"Not the least," he replied; "neither on land nor sea."

"Let us hope," said my dear compassionate wife, "they have



THE AGOUTI (*Dasyprocta*).

been saved, and that some vessel has picked them up *en route*."

I made no answer, for I knew better than my wife the perils of a stormy sea and crowded boats; but I was unwilling to disturb my family with sorrowful and unavailing reflections. Frederick then resumed the narration of his adventures.

"I descried several animals of this species," said he; "I saw it leaping among the grass, and sometimes squatting in the grass on its hind-legs, and rubbing its snout with its fore-paws. Had I not been afraid it might escape me, I should have endeavoured to catch it alive, for it appeared to me tolerably tame."

Meanwhile Ernest examined the animal in question.

"It does not belong to the porcine race," he remarked; "for though it has a bristly skin, it has not the teeth of a hog, but only incisors like the rodents.\* It closely resembles an animal which I have noticed in the engravings of my Natural History, and if

[\* The *Rodentia*, *Rodent*, or *Gnawing Animals*, is an order forming a connecting link between the flesh-eating and herbivorous Mammals, and distinguished by the peculiar conformation of their teeth; having two long chisel-shaped incisors in each jaw, admirably adapted for gnawing vegetable substances. They rather leap than walk, and most of them have the habit of sitting upon their haunches, using their fore-feet to carry the food to their mouths. The squirrel, marmot, beaver, rabbit, hare, rat, lemming, cavy, capybara, jerboa, porcupine, mouse, are all *Rodents*. --Translator.]



I am not mistaken, this sucking-pig is, really and truly, an agouti."

"Listen, gentlemen, to our professor's lecture!" exclaimed Frederick, with an air of raillery.

"Do not jest so heedlessly," said I, in my turn; "your brother is right; I, too, only know the agouti from the pictures I have seen, and your sucking-pig reminds me of it. The agouti is a native of North America; he burrows under the roots of trees, lives upon vegetable food, and grunts like a hog.\* He is, however, of a very gentle disposition, and his flesh, I am told, is excellent eating."

"Come, come," interrupted my wife, "you will have plenty of time for scientific observations;—have you forgotten that the soup is ready? We must open these oysters, however, to provide ourselves with spoons, but how it is to be done neither Rudly nor I can determine."

"Here is an easy method," I answered, placing half-a-dozen oysters on the fire, when they no sooner felt the heat than they opened of themselves.

"Come, my boys," said I, taking one, "let us taste this famous shell-fish, which has for centuries been the delight of epicures."

I removed the oyster with my knife, and swallowed it; but though everybody imitated my example in order to provide himself with a spoon, the repast was not considered satisfactory. Oysters were pronounced a detestable dish, and we all gladly plunged our improvised spoons into the smoking pottage prepared by our excellent housekeeper. This was not done, however, without severely scalding our fingers, and loud cries arose of pain or impatience. Ernest then took the mussel-shell in which he had collected the salt, emptied it, cleaned it, approached the pot in silence, filled the shell—which was as large as an ordinary plate—with soup, and, quietly laughing, put his portion aside to eat when cool.

"You have thought only of yourself, Ernest," I remarked,

[\* The Agouti (*Dasyprocta*) is found in South, not North, America, and naturalists class it with the *Cavidae*, or guinea-pig tribe. It has sometimes been called the South American rabbit, but differs greatly in form and habits. It has the hog's external skin and voracious appetite; conceals the food it cannot eat; and hides itself under the roots of trees. It is very destructive to the yam and sugar-cane. Its flesh is white, tender, and when fat and well-cooked very palatable.—*Translator*.]



"which is not very amiable. Could you not have procured each of us a similar dish?"

"There are hundreds of them," he answered with embarrassment, "on the shore of the bay."

"The very reason why you could easily have done so; but I see with regret that you think only of yourself. Beware, my dear boy; selfishness is a terrible vice, which effectually shuts us out from the love and esteem of others. As a punishment for your egotism, I must beg of you to give the portion you have so prudently cooled to our poor servants the two dogs, who also stand in need of refreshment, and then come and burn your fingers along with us!"

My reproach wounded the lad to the quick. He obeyed, placed his shell before the dogs, who soon lapped up its contents, and returned much ashamed to take his place in our little circle. But while we were thus occupied, the dogs having scented Frederick's agouti, which he had placed in the shade behind our tent, discovered its place of concealment, and set to work upon it with greedy teeth. My boys were transported with indignation at the sight. Frederick in his rage seized his musket, and would have shot the dogs had not Ernest held his arm. He hurled at them a volley of stones, and in his excess of anger flung his musket after them with so much violence that the stock was broken, and the gun spoiled. I followed the young madman, with whose threats and vociferations the rocks re-echoed; I represented to him how ridiculous as well as hateful was such an outbreak of fury, and how surprised and grieved his mother felt to see her eldest son yielding to such unbridled passion, and setting his brothers so bad an example.

Though Frederick was impetuous his heart was sound, and the mere idea that he had alarmed his mother wounded him sorely. His anger suddenly subsided. Shedding tears of sorrow, he implored my forgiveness, and hastened to embrace his mother and remove the painful impression he had unwittingly caused.

The sun now sank below the horizon. Our poultry gathered round us to pick up the crumbs which had fallen during our repast. This my wife observing, she drew from her bag—we had already



named it the Enchanted Bag, because it contained a host of things no one would have expected to find there—a few handfuls of oats, peas, vetches, and other grains, beginning to distribute them among the expectant guests; but on my remarking that these precious grains might eventually be useful for seed, she substituted a few biscuits spoiled by the sea-water, and which, broken into pieces,



were duly relished by the fowls. Our feathered friends soon afterwards betook themselves to roost: the hens perched on the summit of our tent, the pigeons nestled in the crannies of the rocks, the ducks and geese took refuge among the reeds on the sea-shore;—everything announced the hour of repose, of which the day's fatigues made us keenly feel the need. I summoned the members of my little colony; we loaded our weapons as a measure of precaution; together we repeated our evening devotions, and the last rays of the setting sun lighted us to our nocturnal asylum.

Scarcely had we entered, when the deepest darkness succeeded suddenly to the glow of day. Observing my children's surprise, I said:—

“From this circumstance we may infer that our island, if island it be, lies near the Equator, where this phenomenon is of daily occurrence; for the twilight resulting from the dispersion of the sun's rays in the atmosphere, the more obliquely they fall, the further extends their enfeebled light; but the contrary is the case when they strike perpendicularly, and night comes on immediately the sun has sunk below the horizon.”

After this brief explanation, which, perhaps, no one understood, each of us, longing for sleep, cast himself on his couch of moss. Once more I looked outside to see that all was tranquil, then I closed the entrance with the hooks, and sought my bed.



Oppressive as the day had been, the night was cold, and we were compelled to creep together like sheep to keep ourselves warm. The slumbers of my family, however, were not the less profound; and many and anxious as were the thoughts which crowded on my mind, it was not long before I too was wrapped in the forgetfulness of sleep.

Early next morning we were awakened by the crowing of our chanticleers, and my wife and I consulted on our future proceedings. We both agreed that our first duty was to go in search of our missing comrades, and to ascertain the nature of the country, before determining upon any locality for a permanent residence. Great as was her reluctance to be separated from me, my wife perceived that it was impossible for the whole family to proceed on such an expedition; she consented, therefore, to remain in the tent with Ernest and the two youngest boys, while I should set out accompanied by Frederick, who was strong enough to endure the fatigue and to be of real assistance. She immediately began to prepare our breakfast, that we might start in the cool of the morning.

"It will soon be ready," she said, with a sigh, "for I have nothing to give you but the soup."

"What, then, has become of the lobster which Rudly caught so cleverly?"

"We must ask him, for I have seen nothing of it since the adventure with the dogs. It is to be hoped they have not served it as they did the agouti! Wake the children, while I kindle the fire, and make some water boil."

The boys were soon aroused. Their toilette did not occupy them long, since all had gone to bed in their clothes. I inquired of Rudly what he had done with his lobster; he ran off to a corner of the rock where he had hidden it, from a well-grounded alarm lest it should suffer the same fate as his brother's capture.

"You did well," I remarked; "and I am glad to see you can act with prudence. Happy are they who learn wisdom from the misfortunes of others! But tell me, Fritz, will you give us your share of the lobster to take with me on an excursion I am about to undertake?"



The word "excursion" produced the usual effect on these eager young spirits. All four of them capered and jumped about like nimble kids, exclaiming, "An excursion! Hurrah, an excursion!" I moderated their transports by naming a few reasons which prevented us from making the projected expedition in company. "Besides," I added, "we must not fatigue your mother to no purpose; you then will remain with her in this place, which seems sufficiently secure, and the vigorous Juno shall act as your guardian and sentinel. Turk shall accompany Frederick and me; such a robust comrade, and our two good guns, will command respect."

My sons readily acknowledged the wisdom of these arrangements. Rudly hastened with the lobster to his mother, that she might get it ready both for breakfast and as a provision for my journey, while Frederick, by my direction, prepared our weapons and loaded our two game-bags with powder and ball. Perceiving that his gun-stock was bent by his violence on the preceding evening, the young man, still ashamed of his frenzy, requested leave to take another; I willingly agreed, and added to his and my equipment a pair of pocket-pistols. Moreover, I armed myself with a light hatchet, the handle of which I passed through my sailor's belt.

A few moments afterwards, we were summoned to breakfast. Among our treasures my wife had discovered a tin pail, and into this she had poured the broth; the lobster she had cooked *au naturel*—that is, simply with water and salt. The flesh, though substantial, proved leathery and tasteless; however, Frederick and I stored the remains in our game-bags, with a few pieces of biscuit and a bottle of water; such was the provision for our journey. Before starting, we all bent our knees before God, imploring His merciful guidance and protection; beseeching His blessing on our enterprise, and His loving care both for those who went and those who remained. This pious duty discharged, I gave my wife some last instructions; I recommended my children not to stray far from their mother's side, and to obey her in all things; then, embracing each, I hastened to tear myself from these cherished objects of my tenderness, whose sobs and tears troubled my heart of hearts.

When we had proceeded a few paces on our journey I thought I heard the lamentations of my wife and little Fritz; it was only by



an effort of great self-control that I did not retrace my steps; however, as we drew near the little river of which I have already spoken, the prattle of its wandering waters drowned the tender farewells addressed to us, and we thought only of the object of our enterprise.

The banks of the stream were scarped, but near its embouchure occurred a small and narrow passage, by which we had descended when in want of fresh water. This circumstance rejoiced me greatly, as it ensured the safety of my family on that side, and on



the other they were sufficiently protected by the steep, rugged rocks at whose base our tent was erected. To cross the torrent we were compelled to ascend it for some distance, to a point where its waters precipitated themselves in a very rapid cascade; we picked our way upon the large stones scattered up and down its channel, and after some hazardous leaps reached the other bank in safety. Turning to the left, we travelled with much difficulty through rank tall grasses half withered by the sun, in the direction of the sea-shore, where we thought our progress would be interrupted by fewer obstacles. Scarcely had we accomplished twenty paces before we heard in our rear the rustling of leaves and the noise of crackling twigs, while, at the same time, the grass, which was nearly as high as a man, moved to and fro as if from the passage of some large body



Immediately I raised my gun, and with pleasure saw that Frederick was equally on the alert, and wholly undisturbed; aiming his musket in the direction whence the sound proceeded, and prepared to fire on any object that presented itself. We had soon reason to congratulate ourselves that we had not fired prematurely; the tall



stems parted, and lo, our good and trusty Turk came forward with a bound. In the anguish of our adieu, we had forgotten to take him with us, and our people had undoubtedly despatched him in pursuit.

I received the faithful animal with sincere pleasure, and, at the same time, warmly praised Frederick for the presence of mind and



the freedom from alarm which he had displayed, and for having retained so complete a mastery over himself as not to fire until he saw what kind of adversary he had to contend with.

"You see, my boy," I added, "how fatal our passions become if we do not hold them in strict control; if you had not known how to repress your anger yesterday, and your alarm to-day, you would have caused a great and irreparable injury."

"But, father," said he, "if the passions are wicked, why has God endowed us with them?"

"They are not wicked in themselves, provided we can submit them to the control of reason; we may even conclude that they were intended by the Creator to stimulate our faculties to a healthy activity, lest man should become the victim of his natural sloth. But, I repeat it, if reason does not control our passions, and direct them towards an useful purpose, they will degrade us to the level of the animals, and plunge us into woful crime."

While thus engaged in conversation, we moved towards the sea; on our right, at the distance of half a league or so, the rocks, which from our place of disembarkation formed a line parallel to the shore, assumed a rich crown of glorious leafiness. The space between these rocks and the sea was partly covered by tall grasses and by clumps of timber, which stretched down to the very margin of the waves. Gladdening our eyes with this pleasant landscape, we continued along the beach, in the hope that we might catch sight of the boats which carried our companions, or detect some indication of their having landed. But vainly did we examine the sands for their footprints, or search in the bushes for some sign of their progress inland; we could discover nothing.

"If we fired a few shots," said Frederick, "our comrades perhaps may be concealed somewhere, and hearing our signals, will come forward."

"Yes; if you are sure our signals would be heard only by friends, and not by the savages, whom the reports might soon bring down upon us."

"And after all, father, why do we thus fatigue ourselves in search of those wicked persons, who thought only of their own safety, and abandoned us in so cowardly a manner!"



"We ought to make the search," I said, "for more than one reason : first, because we must not return evil for evil ; next, because these men might be useful to us and assist in our secure establishment ; but, chiefly, because they may possibly stand in need of our beneficence, for we have certainly conveyed from the vessel many more articles than they did, and at this very moment they may be perishing of hunger !"

"Not the less are we losing our time in this haphazard journey, while we might have returned to the ship, and carried off the cattle, whose possession would be a signal boon."

"When several duties present themselves for fulfilment, we must give the preference to the most important ; it is far nobler to seek the salvation of human life than to trouble ourselves about brute animals, and having supplied them with several days' allowance of food, we need be under no apprehension that they will be starved to death. The sea, too, is very calm ; and for the present they are perfectly secure on board the wreck."

Having traversed the entire beach without discovering any signs of the lost, we halted in the shade of a small grove to rest and refresh ourselves. A bright and sparkling rivulet wound its silver thread through the leafy trees ; and all around us fluttered, and chattered, and sung a legion of unknown birds, differing from each other in form and plumage, but more remarkable for their splendid hues than for the melody of their strains.\* Frederick, a hunter by nature, pierced with keen gaze the obscurity of the leafy boughs, and caught sight of a little animal which seemed to him very like an ape, but he could not be certain from the brief and distant view he obtained of it.

Suddenly Turk gave a low growl, and with much disquietude fixed his gaze on the summit of a tree ; Frederick, in his haste to ascertain the cause, turned precipitately round its trunk ; his foot struck against a round body concealed among the herbage, and he stumbled and nearly fell. Picking up the strange object, and bringing it to me, he asked what it was. He supposed it to be a bird's-nest, from the filaments of which it seemed partly composed.

\* [The fact is, there are no song-birds in the tropics. The feathered minstrels of our temperate climes are, it is true, of somewhat dingy aspect ; but who would not prefer the nightingale even to a bird of paradise ?—*Translator.*]



I laughed at him a little, and at his bad habit of judging things superficially without troubling himself to investigate them carefully.

"I should rather think it to be a nut," said I, "and probably a cocoa-nut."

With a blow from my axe I split it open; but as it was very old, the kernel which it enclosed was hard, dry, and unfit to be eaten.

"But, papa, Ernest has often told me that the cocoa-nut contains a fresh sugary liquid, which people drink like almond-milk; now it seems that our dear professor was all in the wrong."

"And as for you, my boy, your sarcastic tongue is never quiet, especially when an occasion arises of exercising it upon your brother. Do not indulge, my dear Frederick, a tendency which does little honour to your mind, and will cause unfavourable opinions to be formed of your heart. You are judging now, as unfortunately is your custom, by appearances; the cocoa-

nut, when not completely ripe, is full of a clear, scented liquid, rather sweet, and very pleasant to the taste; but when the fruit is fully grown, it absorbs this liquid, and the interior is covered with a substance resembling the almond, which grows drier as it grows older, until completely shrivelled. If the nut falls on



THE COCOA-NUT TREE.



a favourable soil, this marrow swells, and the germ finally forcing a passage through the shell, fixes itself in the ground, and thus reproduces another tree."

"It is truly marvellous," exclaimed Frederick, rendered attentive by my remarks, "that so feeble a germ can break through its hard and threefold envelope to gain a second existence. I know, indeed, that such is the case with almonds, apricots, and peaches, but with them the core is already half split at the side; how does the cocoa-nut manage?"

"God," my son, "who foresees all things, has solved the difficulty which seems to you so insurmountable. Do you not see here, in the base of the nut, these three small round holes? They are simply covered by a kind of spongy padding, that, rapidly rotting, affords an egress to the germ, which immediately roots itself in the earth while remaining attached to the cocoa-nut, until it has consumed all the nourishing marrow destined to support its infant condition. It is thus, my dear son, the close observation of nature will always give you fresh cause for wonder and admiration, and ever afford new opportunities to bless and adore its divine Author."

We continued our progress through the woods, though frequently compelled to clear a path with our hatchet, the trees were so closely bound and interlaced by a multitude of lianas, and other creeping plants, which threatened to close the passage against us. At length we reached a more open locality; the forest stretched far away on our right, within gun-shot range, and some isolated trees of very curious aspect rose at intervals; Frederick, who led the advance, soon discovered them.

"Look, look, father," he cried; "here is a wonder! Surely these trees bear fruit, if, indeed, their monstrous excrescences are not immense mushrooms!"

I approached, and much to my satisfaction perceived that they were calabash-trees, and already loaded with fruit; we collected a few of different sizes, and I explained to my son the use which the savages made of these large gourds, whose strong and solid shell they convert into dishes, drinking-cups, and other domestic utensils, and in which they even manage to cook their food.



"Cook their food!" cried Frederick; "why, it would be impossible to place these upon the fire!"

"Well, and can nothing be cooked without fire! I have told you the simple truth; only there is no need you should always put *upon* the fire the vessel in which you are cooking."

Here Frederick looked at me with an air of great surprise, for I was smiling, and amusing myself with his embarrassment.

"I don't understand it," said he, "unless you employ magic."

"Magic! There is no magic except the intelligence of man. It is *that* which supplies him with strength and skill to accomplish so many things which to the ignorant eye appear marvellous. As for the mode in which we boil water or anything else in the calabash-shell, we first heat some stones red hot, and then cast them one by one into the vessel, until its contents are sufficiently cooked."

"Oh, what a simple affair! Of course I should have known, if I had reflected for a minute."

"You remind me of the companions of Columbus, when he proposed to them the problem of making an egg stand upon its end; the simplest means are frequently those of which we think the least. But to return to our calabashes: if we were to prepare a few immediately, and leave them here upon the sand to dry, we could take them up on our return, and your mother would be highly gratified with such an addition to her household stores."

Frederick, delighted with the suggestion, immediately drew his knife, and began to cut in twain a shell of tolerable dimensions; the two halves, he said, would make excellent soup-tureens: but the rind was hard as leather; the blade of his knife slipped about, and made an unequal and irregular cut; soon the hot, impetuous youth grew weary, impatiently flung aside the gourd, selected another, with which he succeeded no better, and, stamping angrily, turned to me, exclaiming, "I don't know how to manage it!"





"Your impatience always frustrates your designs," I said, "and your want of thought will ever prevent you from succeeding, if you do not take care. Here are some empty shells; or stay, take these fragments, and shape them into spoons; you will find it an easier task. Now see the means I shall employ to divide the gourd with neatness and exactness."

I took from my pocket a ball of string, and proceeded to tie in it one of those seamen's knots which are not easily undone; I twined it round one of the shells in the middle, and after I had tightly fastened it, struck it strongly with the back of my knife to trace the exact line of division; then, having attached one end of the string to the branch of a tree, I pulled the other with all my strength, and the nut was quickly separated into two equal portions.

Afterwards I scooped out the interiors, which contained nothing but a tasteless and watery substance, into a couple of drinking-cups, so strong and solid that Frederick regarded them with admiring eyes.

"But how came you," said he, "to think of this way of cutting without a knife? It is like cooking without fire, or, at least, without exactly making use of the fire to cook with."

"I remember to have read in a book of travels that the negroes and savages cut the shells which they use for culinary purposes in this fashion. Hence you may see the advantage of reading, and especially of knowing how, when opportunity occurs, to turn what you have read to advantage."

We quickly prepared a dozen smaller vessels, and Frederick acquitted himself with tolerable dexterity. In manufacturing our spoons we did not succeed so well, for the instrument I turned out was more like a shovel than a spoon. "They will answer better, however," said my son, "than our oyster-shells, with which it is impossible to eat our soup without burning our fingers."

"Moreover," said I, "in times of need we ought to consider ourselves fortunate in finding a make-shift."

"Do you not think, papa, that our heavenly Father sometimes involves his children in distress to teach them to be contented with little?"



"I admire your sentiment, Frederick, and it has given me more pleasure than would a hundred pounds."

"Ah, a hundred pounds is a large sum; but what would you do with them here, papa? If you had said 'a good basin of soup' or 'a joint of roast beef,' I should have comprehended better the value of my remark."

"Well, it is not the less precious, and I am greatly rejoiced to see that you are beginning to estimate a thing according to the circumstances which render it truly good and useful. Money, in truth, is but a means of exchange in human society, and it would lose here all its value, because we could find no employment for it."

While thus conversing we rose to continue our journey: we filled our gourds with fine sand, that the sun, in drying them, might not warp them into ungainly forms, and then set out, taking care to notice with exactness the leading features of the scene, that on our return we might re-collect our vessels.

After walking for about two hours, we arrived at the extremity of a tongue of land which extended far into the sea, and on which as a foundation rose a small hill of tolerable steepness. I judged this a favourable position for the object which throughout our journey we had had in view—the discovery of our missing comrades. It was not without great fatigue that we reached the summit of the acclivity, whence the view embraced an immense horizon. Though I carefully surveyed the panorama in all directions, I could not discover the slightest trace of those we were in search of, nor even of any other human creatures. But, as if to compensate us for the disappointment, Nature displayed before our admiring eyes her fairest graces. The smiling shores of a considerable bay, whose dim outline was lost in the blue of heaven, enclosed a softly rippled expanse of azure, which kindled like burning gold in the sun's rays. The beauty of the foliage of different shades of green, the fragrance of a thousand unknown plants, the aspect of this enchanted solitude, should have filled our hearts with joy, and inspired us with gratitude to the merciful God who had conducted us hither, as of old he had guided the patriarchs into the Promised Land. But the bright prospect of the glorious scene which had fallen to our inheritance could not dispel our



melancholy reflections on the fate of our former comrades, engulfed in the ocean depths, or perhaps thrown upon some barren and inhospitable shore.



"The will of God be done!" I murmured, clasping my hands; "it may be our lot to live and die in this island-solitude: let us unrepiningly submit to what He has ordained, and endeavour henceforth to be happy and contented in our condition."

My son assured me that he felt no apprehension at the prospect of a solitary life, and that the society of a good father, a tender mother, and his dear brothers, would amply suffice for his happiness, though he should spend the remainder of his existence in that uninhabited but most charming country.

We then descended the hill, and directed our course towards a little wood which we could perceive in the distance. To reach it, we were compelled to cross a plain planted with tall reeds, so entangled and twisted together that it was with no small difficulty we accomplished a passage. We proceeded very cautiously, for I feared some serpents or other venomous animals might lurk in the dense thicket. Our dog led the way, and with my axe I cut down one of these reeds as a more useful weapon of defence against a reptile than my musket. With some surprise I noticed a thick juice exuding from the cut I had made in the stem; out of curiosity I tasted it, and finding it sweet as honey, I never doubted but that



we had fallen in with the genuine sugar-cane. I restrained my joy, and eager that my son should also enjoy the gratification of so admirable a discovery, I called to him to cut a reed for his own protection, which he did immediately without suspecting my design. But, instead of making use of it to steady his steps, he amused himself with brandishing it to and fro, and swinging it round and round, like the arms of a windmill. By so doing he forced out at the two extremities so great a quantity of juice that his hands were soon completely covered.

Frederick suddenly halted, examined intently the syrup which escaped through every chink in the cane, tasted it, and perceiving immediately the great importance of the discovery, he leaped for joy, and shouted,—

“Papa! papa! the sugar-cane! Oh, taste it, papa! it is excellent. Oh, how pleased will mamma and the boys be when I tell them what we have found!”

Immediately he began to break the stems of the canes around him, and to suck the juice so eagerly that this sweet nectar trickled all over his chin.

I scolded him a little for his gluttony. We ought never to give the reins to our sensual appetites, and should be moderate in the enjoyment even of lawful pleasures.

“Oh, papa, I was so thirsty, and it was so good!”

“You excuse yourself, Frederick, just as drunkards do: they drink to excess on the pretext that they are always thirsty, and that they find the wine excellent. Thus they lose their senses, and eventually ruin both their health and their purse.”

“At least I may cut a supply of canes to carry home?”

“Undoubtedly; but do not take more than you can con-



SUGAR-CANE (*Saccharum Officinarum*).



veniently carry, nor waste the good which God has bestowed upon us."

In spite of my admonition, the young man, thinking rather of his appetite than his strength, cut a dozen of the largest canes, and collected them into a bundle; but though he had stripped them of their leaves, the burden proved too much for him. This, however, he would not acknowledge. At length we reached the



palm-grove, and seated ourselves in its grateful shade to enjoy our noontide repast. While we were thus engaged, a troop of monkeys of tolerably large stature, which had been howling and screaming in a neighbouring wood, clambered up the palm-trees with such rapidity that we had scarcely time to catch sight of them. As soon as they found themselves securely planted on the summits, they amused themselves by grimacing at us, and uttering the



shrillest cries. This noisy welcome did not intimidate me, and I was thinking of profiting by their malice, when Frederick, always inflamed beyond measure by the sight of prey, raised his gun, and I had barely time to prevent him from firing by seizing his arm.

"What are you about?" I cried; "and what advantage is there in disturbing and injuring these poor beasts?"

"Oh, papa, apes are such malicious and mischievous creatures! Just see what wicked gestures they are making; they would tear us in pieces if they could!"

"No doubt, my son, for we are intruders upon their domain; but is that a sufficient reason for taking their lives? Remember, my boy, that so long as an animal does us no injury, or that its death can be of no advantage to us, we are not justified in killing it; and still less are we authorized in tormenting it for our amusement, or for the satisfaction of an unworthy desire of vengeance."

"Well, papa, I should have shot one as I would any other game."

"As for that, I cry you mercy. I don't think your mother would have been much delighted with so unsavoury a provision. Moreover, it seems to me that an ape is much more useful alive than dead. You shall see; but 'ware heads! for, if I mistake not, there will descend from these trees a hail of cocoa-nuts which will be of far greater profit to us than your 'game.'"

I picked up a handful of stones and threw them at the apes with all my force, though I could hardly reach one half of the palms where they lay in ambush. Their natural love of imitation led them to salute *me* in a similar manner, and, seizing on all the cocoa-nuts within their range, they pelted us so fast and furiously that the ground was soon covered with the spoils of war. When our grimacing adversaries had exhausted all their munitions, they took refuge in the depths of the wood. Frederick, astounded by my stratagem and its success, laughed with all his heart at the grimaces and gambols of the fugitives. As soon as we could approach the scene of action without fear of being stunned, we gathered in our harvest, and established ourselves in a nook beyond the enemy's fire, to finish our dinner. Thanks to this new supply, it proved excellent: before breaking our nuts, we drank their



milk through some small orifices which I pierced with a gimlet; but if the juice, which resembles skimmed milk a little stale rather than fresh milk from the cow, or almond-milk, did not fulfil the expectations which Ernest's glowing descriptions had excited, we were all the better pleased with the kind of cream which is found in the unripe cocoa-nut, lining its sides. We mixed this cream with some sugar-cane syrup, and thus provided ourselves with a delicious dish. Master Turk, who regarded these dainties very indifferently, was entertained with the remains of the lobster and a piece of biscuit; it was rather hard, but appeased his hunger.

The day was rapidly drawing to a close; it would have been imprudent to venture further; and we resolved to retrace our steps. Selecting from the untouched cocoa-nuts those which were still provided with a stem, I tied them together, and loaded myself with them; Frederick carried the bundle of sugar-canes on his shoulders; and thus charged with the fruits of our adventure, we began our homeward march.

At the end of thirty or forty minutes, Frederick began to complain of the weight of his burden. He shifted it uneasily from one shoulder to another; next he took it in both arms; suddenly he halted, and sighing heavily,—

"No," he exclaimed, like one utterly overcome; "I could never have believed that a dozen sugar-canes would have been so heavy to carry! Were it not for my anxiety to see mamma and my brothers enjoying this delectable juice, I think I should deposit my package here."

"Patience! Patience and courage, my dear son," said I; "remember the pannier of bread which Esop carried,—how heavy it was at the beginning, how light at the end of his journey. Yours will be lightened in the same manner, for we shall use up more than one of your canes during the long march that lies before us. Besides, you may carry them much more easily than you are now doing, by placing your load cross-wise with your gun on your back; you will find it less heavy and less troublesome. Do you not see how many inconveniences may be remedied by a little imagination, and especially by a little reflection?"

We had continued our journey for some time, when Frederick,



seeing me drink the juice of my sugar-cane, would fain have followed my example. But he sucked in vain. Nothing rewarded his exertions, because he had neglected to make, as I had done, a little aperture above the first joint. By diligently searching for the cause of this phenomenon, he succeeded in ascertaining it, and soon enjoyed, as I had done, some mouthfuls of a cordial and refreshing syrup.

"If we go on in this way, papa," said Frederick, when, having exhausted my stick, I asked him for another, "we shall not have much to carry home."

"Do not grieve at that, my boy, for the canes cut and carried in the heat of the sun will not long be of any good; the juice now so sweet will quickly turn sour. If we should contrive to convey to our dear ones a few drops in all their excellence, we ought to feel satisfied; and we shall easily find again the field that produces so useful a crop."

"Well, well, if the sugar fails us, I have a capital stock of cocoanut milk in my tin porringer, and mamma and my brothers will enjoy it heartily: don't you think so?"

"The precaution is a pleasing proof of your affection; but I am sorry to tell you that your milk, before you reach home, will be converted into vinegar. The juice of the cocoa-nut, removed from its natural receptacle, very rapidly spoils."

"Oh, how annoying that will be!"

He seized immediately the little tin flask which hung suspended to his belt; but, just as he was about to examine its contents, the cork leaped out with a loud bang, followed by the liquor sparkling and frothing like champagne. Frederick tasted it.

"Oh, papa, drink; it is most delicious! It is much more like sweet wine than vinegar. True, it titillates the tongue a little, but the sensation is most agreeable."

"It is in the first stage of fermentation. The same result is obtained when we mix honey and water to produce hydromel: after the second stage, the liquor clears, and assumes a certain resemblance to wine. If we excite it by heat to the third stage of fermentation, this wine or liquor is converted into vinegar; and eventually, should it be neglected, it will undergo a last process of



fermentation—namely, corruption. Subjected to such a degree of heat as we have experienced to-day, these different stages of fermentation would succeed one another with great rapidity, and it might even happen that, instead of carrying home vinegar to your mother, you would simply present her with a supply of thick putrid water. For this reason we may as well drink at once what remains of your wine to recruit ourselves. Come," added I, taking the flask, "here's to your health, my dear son, and to the health of all whom we love."

We each drank a moderate quantity of this truly delicious beverage, and, much refreshed by the novel cordial, resumed our journey.

It was not long before we reached the place where we had deposited in the sand our home-manufactured domestic utensils. They were perfectly dry, and consequently easy to carry. As Frederick was sufficiently loaded, I took charge of them. While traversing the little wood in which we had breakfasted, our dog suddenly darted before us, and fell furiously on a troop of monkeys which, not having perceived our approach, were disporting themselves on the green sward. At the sight of Turk they all took to flight, except an aged ape less nimble than his fellows, who was seized and torn in pieces by the famished dog before we could rush to the rescue. A young monkey, whom the mother had carried on her back, and whose burden had undoubtedly prevented



her from flying as quickly as the remainder of the band, crouched among the herbage, and grinding his teeth, looked on at the horrible spectacle. Frederick, flinging down his load, had sprung forward to save, if possible, the poor mother. The young monkey leaped from his concealment, climbed upon his back, and clung to his curly head with so much force, that all the young lad's cries, shakes, and exertions could not make him release his tenacious grasp.



"Here is a trait of the monkey character," said I, laughing at my son's air of embarrassment, and assisting him to rid himself of the angry animal; "this little fellow, having lost his mother, seems to have selected you for his foster-father, and the poor orphan is assuredly in no condition to provide for his own wants. What shall we do with thee, poor little one?" said I, caressing him, and holding him in my arms, like a little child. "We are so poverty-stricken ourselves, and have already more mouths to feed than arms to work."

"Oh, papa," cried Frederick, "leave him to me, and let me bring him up; I will take the greatest care of him, and perhaps his instinct will one day assist us in discovering some useful fruits."

I consented, and we resumed our march, leaving Turk behind to finish his repast; the little food we had given him during the day not having satisfied his voracious appetite. The young ape, tranquillized by our caresses, took his seat on Frederick's shoulder, and I charged myself with his bundle of canes. After we had journeyed thus for about a quarter of an hour, we were rejoined by Turk; his jaws were still blood-bedabbled; his appearance renewed the monkey's terror, and quitting Frederick's shoulder, he took refuge in his arms, and hid his shrinking head in the folds of his jacket. My son's fatigue soon suggested the idea of transferring his burden to Turk's broad back. "Since you have deprived this little one," said Frederick, "of his mother, it is right you should act as her substitute, at least in this one respect." He therefore fastened the monkey to the dog's back in such a manner as to leave him full liberty of movement, and passing a cord round Turk's neck, took hold of it by one end, lest he should go astray, and some misfortune happen to his new favourite. At first the cavalier and his steed manifested a strong disinclination to travel in such close companionship, but by alternate remonstrances and caresses we contrived to quiet them, and the little ape soon appeared reconciled to this new mode of progress.

The expedient seemed to me a good one, and we continued our journey, much amused by the comical contortions of our young companion, and at the air of gravity with which our brave dog trotted along under his burden, keeping step by step with my son,



who held him in leash. "Truly," said I, "we shall appear like a couple of showmen, conducting their clever animals to the nearest fair. Just imagine the shouts of joy, and the exclamations of our little ones, when they behold us returning with so strange a comrade!"

"Ay, indeed," replied Frederick; "and Rudly will find in him a perfect model for grimace, although he is well accomplished in the art—"

"Ah, my dear boy, you have too keen an eye for the little defects of your brothers! Do not call attention to them at every opportunity; imitate in this respect your mother's goodness. See how she endeavours to hide your faults from each other, in order to maintain a kindly feeling among you! I do not like to see such a disposition to ridicule exhibiting itself in my eldest son. Take care, my boy; a sharp jest, though uttered without forethought, often leaves an ineffaceable impression."

Acknowledging the truth of my remarks, Frederick undertook to keep them in mind. We then discoursed respecting the monkey family, their manners, and the usefulness of animals in general; and I addressed myself to the task of rectifying in my son's character those errors which had been nourished by a habit of illogical reasoning, and especially by a proneness to judge hastily and without reflection. This conversation, while relieving the tedium of our journey, led us to speak of the animals we had left aboard the wreck, and of the hope we still cherished of transporting them ashore. Frederick expressed his regret that the horses we had embarked with us had been unable to support the trials of the voyage; they had perished, I ought to note, a short time before our own calamity occurred.

"Unfortunately," said he, "there remains but one donkey, and what should we do with a donkey?"

"Do not be too eager to deprecate that patient and humble animal: if we can but contrive to land it, you shall see what valuable services it will render. And as the one you speak of comes from a good stock, so far as I can remember, it may be that, with careful treatment and the influence of the climate, he will prove to us an efficient substitute for a horse."



We had now arrived, almost without knowing it, on the margin of the stream which we had crossed in the morning, and which separated us still from those we so dearly loved. Billy the Dane was the first to give notice of our arrival by a prolonged bark, to which Turk replied so vehemently that his little rider, terrified by the unusual noise, sprang the whole length of his cord, and took refuge in the arms of Frederick, whom he already learned to regard as his protector. No sooner did our dog feel himself relieved of his charge, than he darted forward like an arrow and crossed the brook. On the other side we could see our friends hastening one after the other to greet us, and exhibiting by unmistakable gestures their delight at our return. We kept along the stream until we reached the point where some projecting rocks enabled us to effect a passage, and soon found ourselves in the embraces of our beloved companions.



As soon as the first welcome was over, the boys began to leap and jump around us, exclaiming, "A monkey! A little monkey! Oh, what a charming fellow! Where did you find him? How did you capture him? What shall we give him to eat? But what are you going to do with those great reeds, Frederick? And what are those large boards wrapped up in tow, papa?" So great was the medley of questions, answers, shouts of joy, and exclamations, that we knew not to whom to listen. When the happy tumult had somewhat subsided, I began:—



"We have returned safe and sound, as you see, my dear ones; God has blessed our journey, and we bring back to you all kinds of good and useful things. But in the principal object of our day's adventure we have failed; we have not discovered the least trace of our companions in misfortune, nor of any human being. . . ."

"If such be the will of God," said my devout-minded wife, "let us learn to be satisfied, and thank him from our hearts that he has spared our little circle, and brought us again together without mishap. Ah, how I have prayed and wept during your absence, and how long it seemed to me! But once more I see you! Describe to us, as we walk along, your various adventures; but, first, let us relieve you of your burdens: we have had time to rest ourselves, and although we have by no means been idle, as you will see, we have scarcely quitted the place all day, except that the children have sometimes wandered a little to and fro."

Immediately the boys hastened to offer their assistance. Rudly took my gun, Ernest the load of cocoa-nuts, Fritz the calabash vessels, while my wife took charge of my game-bag. Frederick distributed his sugar-canes among his brothers, without warning them, in the first place, of their extreme value; and as he wished to replace the little monkey on Turk's robust back, he begged Ernest to take his gun. The young idler found the additional load somewhat inconvenient; however, he showed no signs of ill-humour, but his mother soon perceiving that he puffed and groaned, and shifted his burden every moment from one shoulder to the other, took compassion upon him, and relieved him of the parcel of cocoa-nuts, which, by the way, was not so very heavy.

When my eldest son detected the new arrangement, he exclaimed,—

"If Ernest knew what he was relinquishing, he would have bent double under the weight rather than have parted with it: they are genuine, veritable cocoa-nuts, Ernest, your beloved cocoa-nuts!"

"How! What! Cocoa-nuts!" cried the young naturalist, retracing his steps; "give them to me, mamma; I can carry them, and the gun also."



"No, no," said his mother; "I do not like to hear you groaning and sighing, as you were doing a few moments ago."

"But look here; I have only to throw away this heavy stick, which is good for nothing, and carry the gun in my hand; then—"

"If you do that you will be sorrier still, my poor boy, I can tell you," continued Frederick; "for, since I must reveal the secret, know that the heavy stick which is good for nothing is really and truly, a—sugar-cane! Come here all of you, and I will teach you how to extract the juice, which is not very easy unless you know the trick of it."

"Ho, ho, sugar-canes!" shouted the little band, and they gathered round Frederick, who showed them how to obtain the precious syrup. My wife was equally delighted with this discovery; but of all the useful articles which we had brought back, none gave her so much pleasure as the calabash dishes and soup vessels, for earthenware was an object of primary necessity, in which we were wholly deficient.

We arrived at our little settlement, where we saw with considerable satisfaction the preparations for an excellent repast: on one side of the fire were grilling some fish, threaded on a wooden spit, which rested upon a couple of forked sticks set firmly in the ground; in front of it a goose, disposed in the same manner, roasted slowly, the fat which trickled from it being collected in large mussel-shells ranged underneath; between these two viands, that is, in the midst of the fire, was planted the crock, whence escaped the steam of a peculiarly savoury soup. Finally, at some distance from the hearth, one of the casks which I had brought ashore on the previous evening with so much difficulty lay open, discovering in its interior whole rows of superb Dutch cheeses, which, wrapped up in lead, had not been injured by the seawater.

"It is very evident that you have not been engaged in doing nothing during our absence," said I, enchanted with these splendid preparations for the recruitment of our jaded bodies; "only I am sorry," I added, "that you have already killed one of our geese, for I wished to let them breed, as a resource for our future wants."



"Be of good cheer; our roast is not subtracted from our future poultry-yard, but was procured by Ernest's skill: he gives the animal a curious name, but assures me that it is good eating."

"Yes, father," said Ernest, delighted at the opportunity of displaying a little of his scientific knowledge; "I think the bird is what naturalists call the *Booby*, or, perhaps, the *Penguin*; it is, they say, a stupid bird; and so I should think, for it allowed me to approach so near that I was able to knock it down with a stick."



BOOBIES (*Sula fusca*).

"What was the structure of its beak? What the conformation of its feet?"

"Oh, it is a palmiped, for its four fingers, like those of ducks and geese, were united together by a membranous covering. It had only two rudimentary wings, without feathers, and which, hanging down on either side of its body, gave it so uncouth an aspect that it would have moved you to laughter, papa. The beak was long, narrow, robust, and curved somewhat forward: so that from these characters, its bearing, and especially its stupidity, I think it must be either one or the other of those silly birds described by naturalists."

"You see, my son, the usefulness of following up a systematic study of nature, since it enables us by the assistance of certain general characteristics to recognize the genera and species of animals."



I was about to have prolonged this interesting discussion when our manageress summoned us to her hospitable board, and each one of us selected some convenient place to sit down. The cocoa-nuts were opened, the milk having been given to the little monkey, who would eat nothing else that was placed before him. The children conceived the idea of dipping the end of a handkerchief in the milk, and giving it to the little animal to suck. He very much approved of the novel dish, and soon drank from it of his own accord. Meanwhile, as our stock of pottery was not suffi-

cient for the diversity of our viands, I sawed some of the nuts into halves, and scooping out their tender kernel, each of us found himself provided with a very convenient dish, in which my good wife served up her savoury soup. It was with keen delight she saw us, with our calabash spoons in our hands, and our basins before us, eating with a comfort and a decency we had previously been unable to secure.

Although the fish were somewhat dry, and the flesh of the penguin, despite of its appetizing fat, was very tasteless, we did full honour to the repast, enlivening it by a narrative of the in-



PENGUINS (*Aptenodytes pennatis*).



genious manner in which Rudly and little Fritz had angled on the shore of the bay; of the perseverance with which my good and gallant-hearted wife—the perspiration standing upon her forehead in beaded drops—had contrived to open up the treasures of the barrel of cheese, which was about to furnish us an excellent dessert. The word “dessert” reminded Frederick of his champagne wine, and full of joy, he presented his tin flask to his mother, that she might taste the sweet yet piquant liquor which it contained. As I had foreseen, the cocoa-wine had already been converted into excellent vinegar, which we employed to revive the faded savour of our fat goose. This use of it so raised its value in the opinion of our cook, that she unhesitatingly declared she preferred it to the best “dry champagne.”

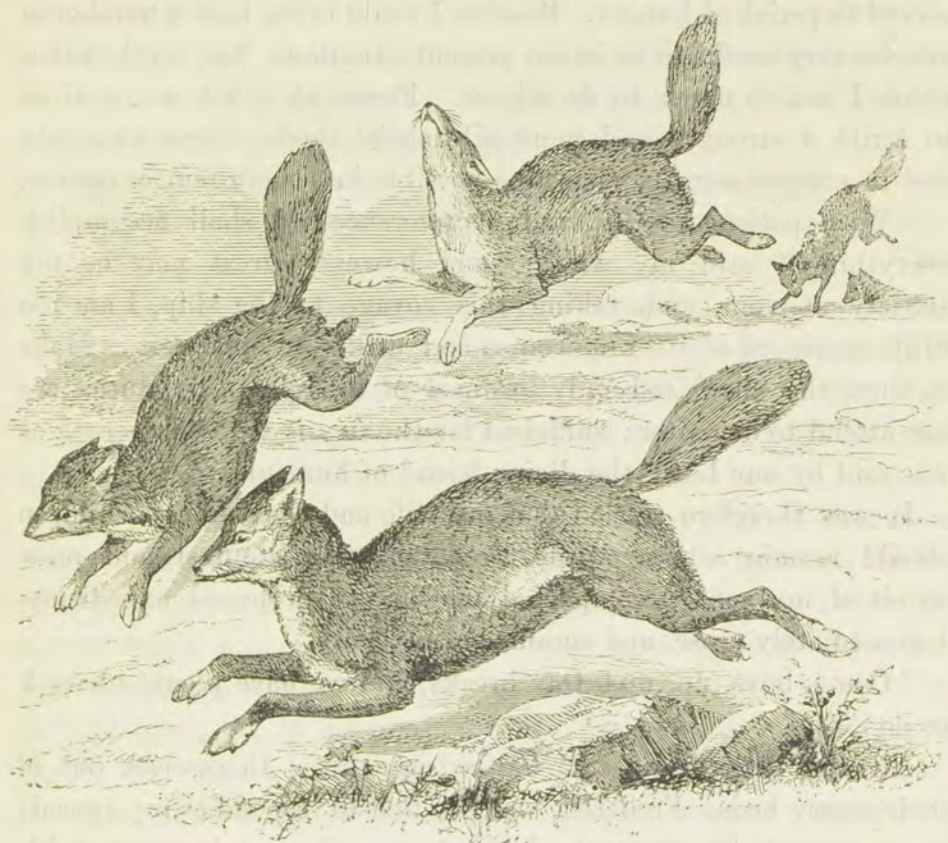
Our banquet ended, and the sun being on the point of retiring to its rest, we resolved to follow its example. Our poultry had already disappeared under the roof of the tent, the ducks and geese among the reeds and sedges of the bay; everything announced the arrival of the hour of repose.

After having offered up our mutual prayers, we betook ourselves to our frail asylum, where we found our housekeeper’s provision had supplied us with a fresh stock of moss and grass for our beds. Each retired to his separate corner; the little ape, whose protection was undertaken by Frederick and Rudly, nestled in between his two friends, who covered him with moss to protect him from the night cold. I was the last to enter the tent, which I closed behind me, and, happy in the companionship of those I loved, it was not long before I fell into a profound sleep.

This sweet repose I had not long enjoyed, when the loud incessant barking of our dogs, whom I had posted outside our tent as sentinels, suddenly aroused me. Our poultry fluttered about the roof of the tent in great agitation. Comprehending at once that an enemy was near, I arose, and my wife and Frederick followed my example; each seized a gun—which we had taken the precaution to place within our reach—and then we sallied from our habitation, my wife undertaking to keep our pieces loaded, for though she also carried a musket, she doubted too much the accuracy of her aim to fire.



By the full, clear moonlight we beheld a terrible struggle. A dozen jackals had attacked our two dogs; the latter had already brought to the ground three or four of their antagonists, and held the rest of the troop at bay by their bold and rapid movements. They were, however, in danger of being overwhelmed by numbers when we appeared upon the scene. A couple of well-directed shots levelled one of the marauders, and put the others to flight. Two of the fugitives were pinned by our dogs, slain, and devoured;



JACKALS (*Canis aureus*).

true dogs that they were, never heeding whether the prey was or was not of their own kindred!\* The alarm having no other result, we returned to our tent; Frederick, who had shot dead one of the jackals, dragging it after him, to protect it from the dogs, that he might display the trophy of his victory on the morrow to his brothers.

\* The jackal, like the dog, belongs to the order *Canidæ*



Nothing troubled our repose anew; the rest of the night passed in tranquillity; and at early dawn, the cock having awakened us by his morning clarion, my wife and I, while our family still lay asleep, discussed the operations of the coming day.

"My dear Elizabeth," said I, "I see so many things that require to be done, I don't know where to commence!"

In truth, a voyage to the wrecked ship appeared to me an absolute necessity, if we did not intend the cattle we had hitherto preserved to perish of hunger. Besides, I could bring back a number of articles very useful to us in our present situation. Yet, on the other hand, I had so much to do ashore. Foremost of all, we required to build a stronger and more substantial abode, where we might rest in greater security than was possible in a mere tent of canvas.

"With patience, order, and perseverance we shall accomplish everything," said my wife; "and however great may be my anxiety at your undertaking this voyage to the ship, I am too fully convinced of its importance and utility to oppose it. Make it, then, the chief and only business of to-day; other duties we can attend to hereafter; sufficient for the day is the evil thereof, as was said by our Lord, the divine friend of humanity."

It was therefore settled that my wife and the younger children should remain ashore, while Frederick, the stoutest and most adroit of my sons, accompanied me on my projected expedition. I immediately arose, and summoned my boys.

"Come, boys, up, up! Day breaks, and we have plenty of work to do!"

All the little faces, still half-asleep, raised themselves out of their mossy beds. Frederick was the first to respond to my appeal; in a moment he was out of the tent, and away in quest of his jackal. The animal's body was stiffened with the night cold, and Frederick placed it on its fore-paws at the entrance of the tent, to hear the children's ejaculations on perceiving it; but the dogs no sooner caught sight of their enemy erect, than they rushed towards it, barking so furiously that Frederick feared they would tear it in pieces. He contrived, however, to quiet them by caresses, and not, as on the preceding day, by rough treatment; he had remembered my lesson, and I saw it with much pleasure.



The clamour of the dogs brought the boys out of the tent, with the little monkey perched upon Rudly's shoulder. But no sooner did the poor beast descry the jackal, than he leaped to the ground, ran back to the tent, and hid himself, trembling, among the moss, so that only the tip of his nose was visible. Many were the inquiries whence had come the strange animal, which Ernest took to be a fox, Rudly a wolf, and Fritz a yellow dog.

"I tell you," exclaimed Ernest, in a dictatorial tone, "it is a striped fox."

"Ho, ho, Mr. Professor!" cried Frederick, "you don't know what you are talking about. How is it that you, who so quickly recognized the agouti, cannot identify the jackal?"

"But I think, from its characteristics," continued Ernest, examining the animal closely, "I can be certain I am correct in what I say."

"Ah, ah, our professor thinks he can be certain—from its characteristics; ah, ah, and why not make it out to be a striped wolf?"

"You are not very kind, Frederick," replied Ernest, with tears in his eyes; "one may be mistaken; and perhaps *you* would not have known the animal's name had not papa told you."

"Come, come, peace!" said I, interfering; "your readiness, Ernest, always to take offence at your brother's jests is a sign, I fear, of some little vanity and want of spirit: while you, Frederick, always push your joking too far; your good heart should guard you against this, and would do so, if you would but listen to its promptings. As it happens, you are both right, for the jackal shares the nature of the wolf, the fox, and the dog; one may, therefore, take it for either of these animals without committing any very serious error."

My decision put an end to the discussion; the two brothers were reconciled, and after we had offered up together our morning prayer, each of us went about his own business. In a very short time, however, the boys began to ask for breakfast. We had no other provisions, as the reader knows, than a barrel of biscuits, and with these the children were fain to be content, although they were very dry, and hard as rock. Some attempted to eat them with a little cheese; others moistened them in water; as for Ernest,



who never did anything like other people, he went prowling around one of the barrels we had fished ashore, and which had not yet been opened. Suddenly he came running towards me, and, with a joyous air, exclaimed,—

“Oh, papa, if we could but butter our dry biscuit, it would glide down much more easily.”

“True; but what one has not, one must do without.”

“But, papa, why not open this cask?”

“What do you say? What cask?”

“This great cask over here; it is full, I am sure, for some kind of fat, which seems to me like butter, has oozed out through a chink.”

“Blessings on your gourmandizing instinct!” I exclaimed; “if you have guessed aright, you shall have the first piece for your reward.”

We all ran to the cask, and I soon ascertained that my little son had found a precious booty. Frederick, always prone to expeditious measures, would fain have removed two or three of the iron hoops, and raised the lid; but my wife, observing that in that case we should soon lose our entire supply, which the increasing heat of the sun would quickly melt away, I made a hole in the cask with a large auger, so that by introducing a small scoop we could take out as much butter as was needed. We soon had a coconut-cup full of good Ostend butter, deliciously salted, and everybody was in turn provided with a slice. It was true that this did not render the biscuit softer, but by toasting it before the fire, and spreading the butter over it, it became more eatable, and even tasted very savoury.

All this time our dogs had remained seated quietly near us; their nocturnal meal seemed to serve them instead of breakfast. But I soon discovered that their tranquillity arose from quite a different cause. They had not come victorious out of their unequal combat without severe wounds, especially about the neck. It occurred to my wife, as a means of relief, to soak some butter in fresh water until freed from salt, and then to anoint the poor bleeding creatures with the soothing mixture. The remedy was simple, but proved very successful: our dogs began to lick each other in those places which they could not reach with their own



tongues, and after a few days' treatment, their wounds were entirely cicatrized.

Ernest on this occasion made the very sensible remark that it would be well if we armed our dogs with spiked collars to defend them against wild beasts.

"I will make one for each of them," said Rudly, who was never at a loss, and never thought anything impossible.

"We shall see," smilingly replied his mother, who knew the little boaster's failings; "provided you know how to execute what you invent, for, otherwise, all the genius in the world is useless."

I then informed my children of the expedition projected for myself and Frederick, and for which the latter was already prepared, since it was advisable to set out without delay. I recommended the youngest not to quit their mother during our absence, and besought our heavenly Father to bless our enterprise. I also arranged a set of signals with my wife, that we might interchange communications.

A strip of canvas floating from the summit of a long spar planted on the sandy beach was to assure us that all went well "at home;" if the spar were lowered, and three shots fired, we were to return immediately. My wife, cheered by these precautions, saw us depart with much less anxiety, and even promised me she would not feel alarmed if our work on board the wreck detained us until the next day.



We took with us only our muskets, and a supply of powder and shot, because we should find provisions on board the ship; Frederick was also accompanied by his monkey, whom he wanted to indulge in a supply of goat's milk. The moment of departure having arrived, we silently embraced each other, and with hearts deeply moved pushed off from the shore.



When we had nearly reached the middle of the bay, a strong current, fed by the waters of the brook which poured its tribute into the sea, seemed to me likely to carry us towards the ship, and so enable us to husband our energies. Slight as was my knowledge of nautical matters, I contrived to steer our skiff into this current, which bore us, almost without fatigue, over three-fourths of our course; we accomplished the rest by hard rowing, and in due time gained the broadside of the wreck. Here we moored our boat securely, and then made our way into the interior through the great gap I have already spoken of.

Frederick's first care was to carry some food to the melancholy animals assembled on the after-deck. The poor abandoned creatures seemed to salute us with their different cries, their lowings and bleatings and bellowings; it was not so much the want of fodder as the desire of seeing man which led to these manifestations of pleasure, for we found their troughs still partly filled. Frederick placed the young monkey near one of the goats, and he sucked the unaccustomed milk with a variety of grimaces which exceedingly diverted us. After having ministered to all the wants of our cattle, we took a little refreshment, that we might afterwards address ourselves to our labours with the greater energy and courage.

"Where shall we begin?" said Frederick, when our light repast was concluded: "for my part, I think we ought to hoist a mast and sail in our boat."

"What a singular fancy! I do not see that we should gain anything by the trouble."

"Ah, well, as we came hither I felt a tolerably fresh wind blowing in my face; we advanced, because the current swept us onward, but such will not be the case when we return: the boat, too, will be heavily loaded; and it seems to me we shall do well to take advantage of the breeze to assist us in our homeward voyage."

On reflection, Frederick's suggestion seemed to me well worthy of adoption, and I immediately set to work to carry it out. In the carpenter's store-room I found a good stout spar, well fitted for a mast, a triangular sail all ready fastened to its yard, and a tackle-block; that is, a combination of pulleys which is attached to the mast-head, for lowering or raising the sail by help of small



cables. Furnished with all these necessities, we soon rigged up a mast in the middle of our boat, stepping it in a kind of perforated plank which Frederick had previously nailed over one of the tubs, and which occupied the entire breadth of the boat; this plank formed a small deck for our strange craft. Finally, a couple of ropes, attached at one end to the yard, and at the other to the prow and stern respectively, enabled us to manœuvre our sail at pleasure, and to steer in any direction.

My son then begged me to decorate the mast-head with a small red streamer, that our vessel, he said, might wear a gayer appearance. This childish vanity, which often breaks out in the midst of the profoundest misery, made me smile sadly, for it revealed to me one of the characteristic traits of our humanity. However, I yielded to my son's desire, and eventually was as much amused as he was at seeing the little pennant waving gracefully in the breeze.

In these occupations the greater part of the day had glided by, and keen as was my desire to return home before night, I saw that it would be impossible, and that we must be contented to spend another day on board. Frederick had frequently swept the shore with his glass: everything appeared in order; we therefore made the preconcerted signals to indicate to our family the determination at which I had arrived; from the answer we received we found that our signs were understood, and that all was tranquil.

Reassured on this point, we employed the remainder of the day in unloading our boat of the stones which we had put on board for ballast, and in substituting all kinds of useful articles. Powder and shot, which would assist us in self-defence and in procuring supplies, were the first objects of our attention; we then collected with care the nails, hammers, and tools of every sort, with which the vessel was abundantly furnished, her freight having been intended for the establishment of a colony in the American backwoods; but it was necessary to exercise a rigorous selection in the midst of such an accumulation of treasures, inasmuch as our boat would not hold one-half of what we wished to carry away. This time, however, I did not forget the knives, forks, spoons, and other domestic utensils, of which we had already felt the privation. In the captain's



cabin I found a few silver covers and other pieces of plate, several pewter plates and dishes, and a small case filled with flasks of good wines: all this we embarked. We took also some gridirons, crocks, saucepans, and pots. Among the provisions intended for the officers' mess I selected a supply of preserved meats, Westphalia hams, and sausages; not forgetting various packets of dried vegetables and seeds.

Frederick remarking that our beds of moss were somewhat hard, and required to be renewed daily, I included among our cargo a certain number of hammocks, and numerous woollen coverlets, which would serve us, I foresaw, for more than one purpose. My son, who seemed of opinion we could never have too large a stock of fire-arms, brought me two or three muskets, and a whole armful of sabres, swords, and hunting-knives, sufficient for our defence against a host of savages! Finally, I filled the last tub or compartment of my boat with a small cask of sulphur, all the cordage and pack-thread I could find, and a great roll of sail-cloth. With the sulphur I intended to make some matches for my wife.

Our little craft was thus loaded to the gunwale, and I should probably have been forced to lighten her, had not the weather been so calm and the sea so serene.

Night had now gathered over the waters: a great fire, kindled by our beloved ones on the shore, flamed a welcome assurance of their welfare; we replied by lighting four large ship's lanterns to indicate our own safety. Two musket-shots informed us that our signal was perceived.

After a very tender and very fervent prayer for our dear absent relatives, and not without some anxiety on their account, we went on board our boat to find shelter in its compartments, under our sail; for such was the dilapidated condition of the wreck, it would have been the height of imprudence to have passed the night upon it. A rough sea might drive her among the rocks, and break her up in a few moments, while in our little skiff, which we could easily cut clear, we might hope, with the help of our canvas, to make the shore in safety.

Day dawned, but the coast was as yet scarcely visible, when, awakened by my anxiety, I sought the deck of the wrecked vessel,



where the telescope was mounted. I directed its tube towards the tent which enclosed my beloved family, to discover, if I could, whether any evil had befallen them through the night. Frederick brought me a fortifying breakfast, consisting of ham, biscuit, and a little wine. We seated ourselves so as to command a view of the shore. In a few minutes I had the satisfaction of seeing the tent open, and my wife come forth, and look attentively towards the sea.

We immediately hoisted a white flag, which we had previously got ready for the purpose; in reply, the signal on the shore was thrice raised and dipped. An immense weight seemed immediately lifted from my heart; for I then knew that the night had passed without any accident visiting those whom I held so dear.

"Come, Frederick," said I, with an air of merriment, "now that I am reassured respecting your mother and brothers, I am no longer in such a hurry to start; and I think we must endeavour to devise some means of saving these poor animals, which, if left on board, will almost assuredly perish before we can accomplish another voyage."

"If we constructed a raft, we might bind them down upon it with ropes."

"True, my son; but just think of the difficulties of the task. We have already failed once in the attempt: besides, even if it were possible to make a raft, how make one to hold a cow, an ass, a sow, and three goats? No; let us contrive some other means."

"Ah, well, let us pitch the old sow into the sea; her big stomach and her fat will float her in the water, and we can tow her with a rope."

"A very good plan, so far as our pig is concerned, but it would not answer for our other cattle; and I own I shall much regret the loss of the ass, and especially of the cow."

"But why not do for them what, at the outset, we did for ourselves? Let us fasten some floating apparatus to their sides; we have here a quantity of pieces of cloth which will answer admirably."

I thought the expedient a capital one, and proceeded to put it



into execution. We made our first essay with a fine large sheep: under the belly we passed a good-sized piece of linen, which we fastened securely round the animal's body; then we flung it overboard. At first, the creature in its terror went to the bottom, and we thought it lost; but it soon rose to the surface, struck out vigorously, and swam with an ease which it was pleasant to observe. After a few moments, growing fatigued, it rested; but the linen stuff supporting it, floated onwards tranquilly with the movement of the waves.

The success of this experiment hugely delighted me; not only was I certain of being able to carry away the sheep and goats, but I had likewise found out a method of securing the other cattle. We spent about two hours in providing each animal with its swimming apparatus: those of the ass and cow were made of a different shape, and of very different sizes; for them a plain piece of linen would not have sufficed.

We therefore selected for each of them two empty and well-corked barrels, which we bound together by means of a belt of stout sail-cloth, but so as to leave a space between them. This apparatus we suspended with a kind of yoke on the back of our two beasts, taking the precaution of winding it firmly about the belly and breast, that it might not get loose. Our next step was to prepare the ship's gunwale in such a manner that we might launch our herd into the waves with facility; fortunately, the billows, which for several days had beaten restlessly against the broken side, had opened up for us the way. As soon as our labours were ended, we brought the ass on deck, placed him a little on one side, and with a sudden thrust sent him overboard: at first he sank; but his two casks soon brought him to the surface,—he raised his head proudly, and began to swim as vigorously as the sheep had done. In due succession, the cow, the sheep, and the goats were treated in the same fashion, and acquitted themselves of their share of the work with equal success. The sow, however, gave us more trouble than all the others, she was so obstinate, and so difficult to guide; but once afloat, she behaved with so much spirit that she distanced all her companions, and reached the shore far in advance of them.



Having completed this delicate and important operation, we descended into our boat, and pushed off from the ship; I had taken the precaution of fastening to the head of each beast a tolerably long cord, terminated by what we call a float; that is, a piece of wood or linen, which keeps the end of the cord from sinking. Thus it was easy to draw around us all our floating troop: we secured the cords to the sides and stern of our bark, and as we had hoisted our sail, the breeze which Frederick had noticed on the preceding day swelled it famously, and gently bore us towards the shore.

Proud of, and happy in, the result of our arduous task, we gaily floated on the rippling waves, surrounded by the swimming cattle, whose good behaviour and orderly motions surpassed our most sanguine expectations. Seated at the foot of our mast, we made a hasty meal. Frederick sported with his monkey-pet, while I, always occupied with family cares, kept my telescope directed towards the shore, for I had ceased for some time to catch sight of any of the absent ones.



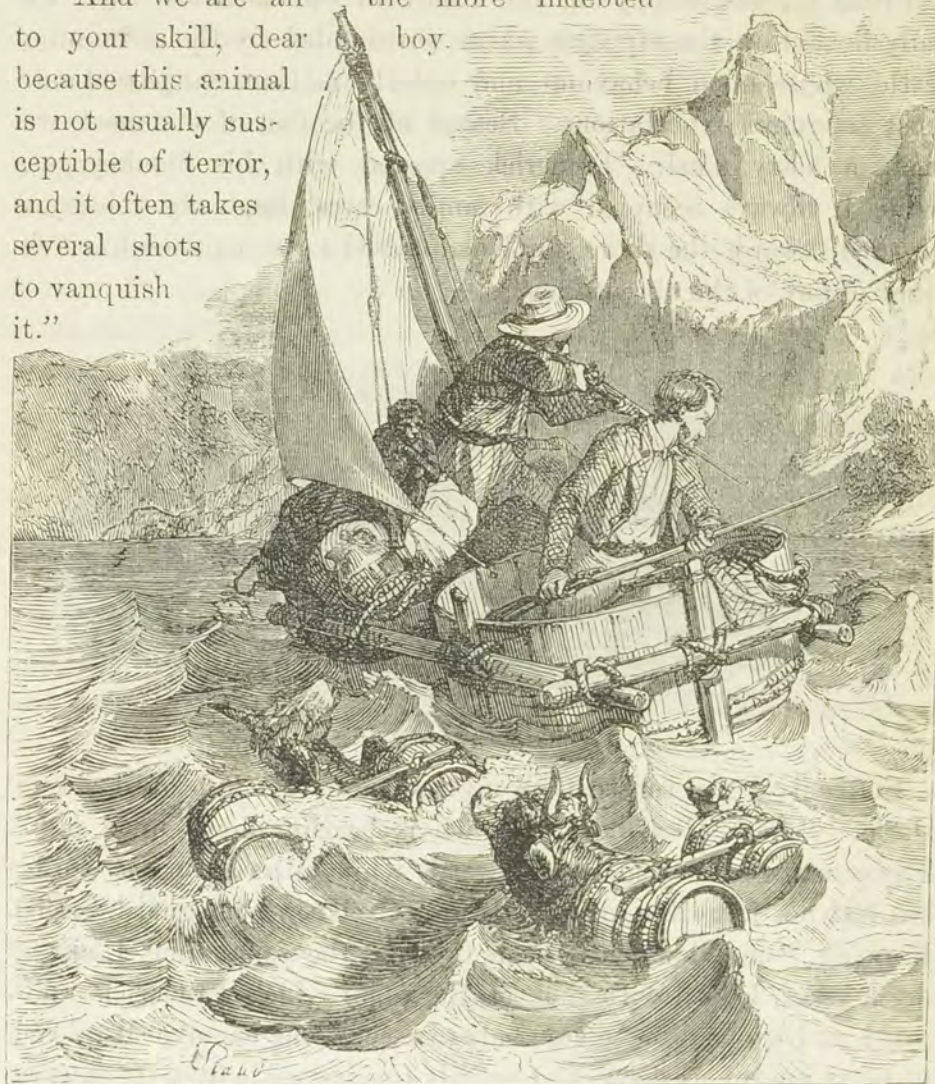
Suddenly I was roused from my reverie by Frederick's shriek of alarm,—“Father! a monstrous fish is bearing down upon us!” The courageous boy had turned pale while uttering these words, but had not forgotten to seize his gun. “Keep your guard,” cried I, rising, “and don't lose a shot.” At the same time I aimed my musket, loaded with shot, at the point which Frederick indicated, and we held ourselves ready to receive the enemy. It proved to be an enormous shark, and, swiftly turning aside from its onward



course, darted towards the sheep which was then swimming in advance, but was checked by Frederick's well-directed fire; receiving the entire charge in its head, it beat a retreat, and swam towards the open. At intervals its white shining belly reappeared on the surface of the waves, and a long track of blood proved that he had been seriously, if not mortally, wounded.

"I think our friend has had enough," said Frederick, his eyes sparkling and his cheek flushing with the pride of his bold achievement.

"And we are all the more indebted to your skill, dear boy, because this animal is not usually susceptible of terror, and it often takes several shots to vanquish it."





We reloaded our muskets, to be ready for any event; but, whether the current carried the shark \* out to sea, or whether it had plunged into the depths, we saw it no more. I took my place at the rudder, and, impelled by the auspicious breeze, our



THE SHARK (*Carcharias vulgaris*).

boat made a rapid progress. I took care so to direct our course as to give the cattle an easy access to the shore, and after throwing off the ropes which held them to our craft, I allowed them full liberty to reach the land in their own way.

The evening was drawing near, yet none of our family were visible. I had begun to feel uneasy at their absence, when a succession of joyous shouts, and the sight of my children hastening to meet us, followed by their mother, dissipated my fears.

\* The shark belongs to a genus of cartilaginous fishes, which are found in almost every sea. They are characterized by their elongated form, which tapers gradually towards the tail; by the projection of the muzzle over the mouth; by their formidable apparatus of teeth, and almost incredible voracity. In the White Shark, which frequently attains the length of thirty-five feet, there are six rows of teeth in the upper, and four in the lower jaw; the teeth are triangular, sometimes two inches broad, serrated, and sharp-edged. The varieties of the *Squalidae* are numerous, and distinguished by expressive names, indicative of some peculiarity of aspect, as the Hammer-head, the Fox Shark, the Dog-fish, the Tope, the Por-beagle, and the Cestracion. To the *Scymnidae* family belongs the Greenland Shark, which frequents the northern seas; to the *Carcharidae*, the Blue and White Sharks, the latter of which inhabits the warmer regions of ocean; and to the *Hamnidae*, the Basking Shark, which attains very formidable dimensions, but is of a comparatively harmless character.



After the first transports of affection were somewhat moderated, and we had replied to a volley of questions, we released our poor animals from the apparatus with which they had so long been encumbered. The invention astonished my wife.

"I might long have puzzled my head," said she, "to devise a means of getting the cattle ashore, and yet I should never have thought of anything so simple and ingenious."

"Honour to whom honour is due," I replied; "I must acknowledge that the original conception was Frederick's."

My wife embraced her son in silence; but one could see how her mother's heart rejoiced in the success of her first-born.

Ernest and the others hastened to the boat, where they very loudly and eagerly admired the mast, the sail, and, above all, the flag! We afterwards proceeded to disembark our various treasures. Regular work never agreed very well with Rudly, and speedily quitting us, he undertook the task of completing the release of our cattle from their embarrassing burdens. He laughed heartily at the spectacle of our donkey, still looking doleful in his unaccustomed harness. Our little fellow's hands, however, were not strong enough to disengage him from the cordage; but, as he could not remain quiet, he leaped on the donkey's back, and by dint of his voice, his hands, and even his nails, contrived to stimulate the poor animal into a rapid trot, and direct him towards us.

I could not help laughing aloud at seeing the ass parade himself with his swimming-equipage; but as I did not approve of this somewhat irregular exercise, I hastened to remove the young gentleman from his steed. I was much surprised to see my Rudly belted round with a girdle made of yellow hairy skin, in which was thrust a couple of pistols.

"Why, how now, Rudly? where did you obtain this brigand-like decoration?"

"It is my own manufacture," said he, with an air of self-satisfaction; "but that is not all. Look at our dogs!"

Then I perceived that each of our dogs was adorned with a collar of the same kind of skin, which collar, bristling with large nails, had a most formidable, defensive appearance.



"That is well done, my boy, if you both designed and executed it."

"I did it all myself; only mamma helped me a little in the cutting."

"But whence did you get the skin? Where did you find needles and thread?"

"Frederick's jackal supplied us with stuff," said my wife; "as for needles and thread, surely you know that a good housekeeper is never without them! You men, you think only of great things; we women think of the little, which we often find of assistance in a thousand embarrassing circumstances. Now, do you understand the reason why I crowded so many different articles into what you called the Enchanted Bag, which, I hope, you will find useful on more than one occasion."

It was with considerable dissatisfaction that Frederick perceived the use which Rudly had so freely made of his jackal's splendid hide. He did his best to conceal his ill-humour, but it lent sharpness to the tone in which he complained of the nauseous odour emitted by his brother's girdle. He held his nose, while he said to Rudly,—

"Be off with you, young flayer! You will poison me!"

"Whom do you call 'a flayer'? It is your jackal which you smell; you left it in the sun."

"And, in fact, Frederick," said I, interposing, lest the discussion should grow too warm, "you ought to have thought of that before we left yesterday; we must throw the carcass in the sea, or it will prove a very disagreeable neighbour."

"We may devolve that task, I think, upon him who has so cleverly skinned it," he replied, and still with a dissatisfied air.

"Truly your answer is a very sensible one, and well worthy of my eldest son!" I said to him in a low voice, for I wished him to have the credit of recovering his temper. He understood me.

"Come, come!" he exclaimed, smiling good-humouredly; "it is certainly Rudly who is poisoning us at this moment; but if he will remove his brigand's belt while in our company, I will help him to drag down to the sea my poor jackal's carcass."

This decision terminated the war of words. I clasped my son's



hands warmly, that he might see how pleased I was with the self-control he had exhibited.

Meanwhile, we had arrived in the vicinity of our tent, and as I saw no preparations for supper, I told Frederick to bring us a Westphalian ham, which was still soaking in its pickle. Everybody laughed at the order; but their laughter was changed into exclamations of delight when Frederick returned with a fine ham hoisted on his shoulder.

"Oh, this is capital!" said my wife; "the sight of the ham makes one's mouth water; but before it can be cooked, it ought to remain in the open air until to-morrow. I have here some dozens of eggs which we collected in our excursion this morning; and if, as Ernest assures me, they are turtles' eggs, I can dish up an excellent omelette; for, thank God, there is no want of butter."

"What! turtles' eggs!" I cried.

"Yes, papa; at least, they have all the appearance: they are white balls, with a shell like moistened parchment; we found them in the sand on the sea-shore."

"They are a treasure! And how did you make the discovery?"

"Oh," replied my wife, "that is a part of our chronicle of adventure, which I will relate to you by-and-by."

"Well, then, go now and prepare your omelette; you shall tell us your tale during the dessert. As for the ham, I can promise you, from the way in which it has been smoked, that the flesh is so tender we might eat it raw if we minced it into small pieces; still I do not doubt but that it will taste infinitely better when properly cooked. And now, my boys, while your mother is getting ready our supper, let us bring hither the remainder of our cargo."

Everybody accompanied me to the shore, and, with the help of their little but willing arms, the task was soon completed. We collected into one troop our domestic animals, some of whom still carried their floating-apparatus; having relieved them of their bonds, we returned to our tent, whither our manageress summoned us to partake of the finest omelette that was ever seen. The dish was served up on the lid of the butter-cask; the table



was plentifully supplied with plates, glasses, spoons, knives, and forks. Besides the turtles' eggs omelette, our cook treated us to some slices of ham; this extra dish, with fresh biscuit, salt butter, and Dutch cheese, composed a delicious repast, which a small glass of Canary wine, from the captain's cellaret, rendered still more complete.

All this time our dogs, hens, pigeons, sheep, goats, and, in fact, all our "live stock," collected around us, seemed to watch our proceedings with peculiar curiosity. The ducks and geese alone stood aloof from our society; they found themselves more comfortable in their own native element, where they feasted upon innumerable worms and small crabs, to which they appeared excessively partial.

When supper was over, and I had described the doings of Frederick and myself, I reminded my wife of her promise, and she proceeded to fulfil it by relating, as follows, the events which had transpired during our absence.







## CHAPTER II.

Beautiful is the land, with its prairies and forests of fruit-trees ;  
Under the feet a garden of flowers, and the bluest of heavens  
Bending above, and resting its dome on the walls of the forest.

LONGFELLOW.

### THE WIFE'S NARRATIVE.



IT'S kind of you (said my good wife, smiling) to show so much anxiety to hear my story, and yet half an hour has passed since I was ready to begin it, and you have given me no opportunity. But it matters not. The longer the water is gathering, says the proverb, the longer it is flowing.

I will spare you, however, the recital of our first day's labours ; it passed very sadly and slowly, on account of the anxious thoughts your absence caused me, and very monotonously, because I dared not move far from the spot whence I could catch sight of your signals. Besides, the day was only noticeable for the accomplishment of Rudly's scheme of making defensive collars for our dogs. I was seated close to the tent, the only place where I could find a little shade, when I descried Rudly, at a short distance from me, busily engaged on the jackal which Frederick had killed. By the help of his knife, which he sharpened at intervals on the rock, he cut up the skin into long strips, cleaning them in the best manner possible.

Meanwhile Ernest, with folded arms, stood contemplating the work ; but from the mocking air with which he regarded his brother, while pronouncing the trade of tanner, which Ernest had



chosen, a peculiarly disgusting one, I foresaw that they were on the brink of a quarrel. I hastened immediately to prevent it. Ernest I blamed for a fastidiousness which in our position was simply ridiculous, while I praised Rudly for having undertaken a not very attractive task in order to contribute to the general utility.

My approbation fired the zeal and imagination of our young tanner. Having finished cutting and cleaning his strips of hide, he went in search of a sufficient number of large-headed nails; he stretched out the skin, and covered it with a triple lining of sail-cloth of exactly the same size, that the heads of the nails might not wound the dogs' necks; then he begged me to sew together the skin and the canvas, as boys generally do not handle a needle with much dexterity: I consented, though to sew the newly-flayed skin was not a very pleasant occupation, and its smell, though Rudly will not confess it, is, *entre nous*, intolerable.

When the collars were finished, he wanted a belt; but Ernest judiciously remarking that the skin would shrink as it dried, and spoil the shape of everything made from it, Rudly followed his brother's advice, nailed his belt and collars on a plank, and exposed them to the sun; before night they were quite dry and fit to be worn, except for their disagreeable odour, which, I fear, they will long retain.

The remainder of the day passed without any remarkable incident. Towards evening, my mind being set at ease by your welcome signals, I retired with my children into our tent, whose entrance was guarded by our two faithful dogs. The night proved tranquil, but the reflections suggested by our position aroused me at an early hour. My children had suffered greatly on the preceding day from the heat, and I felt it would be impossible for us to remain much longer in a place so exposed on all sides to the sun's burning rays. A longing to discover some more suitable locality took entire possession of my mind, while the thought of the dangers you were bearing to improve our condition filled me with courage, and inspired me with the resolve to do something on my own part towards the general welfare. I recalled to my



mind all you had told us of the fair fresh country which you had visited two days ago, and I doubted not that Providence had there reserved for us an asylum quite as secure as, and much more convenient than, this bare and sandy coast.

At daybreak I hastened to the beach to make the signals we had agreed upon, and the joy with which I recognized yours you can understand; and as you had informed me it was probable you would not return until the evening, I prepared to undertake the little excursion I had projected.

After breakfast I communicated my intention to the children, who received the announcement with great delight, and each one provided himself with necessaries for the journey. The two eldest carried each a gun, a hunting-knife, and a game-bag filled with munitions and provisions; for my part, I took a hunting-bag well stored, a flask of water, and a small hatchet in my hand. I closed the entrance to the tent, and having cast a last look at the sea, we started on our journey, accompanied by our two dogs, and leaving the rest in God's good guardianship. Our steps were naturally directed along the course of the stream; Turk, who had followed you in your expedition, appeared to recognize the road, and acted as our guide. By this means we soon arrived at the point where you had crossed the brook, which we, in our turn, crossed in safety, although not without some difficulty.

Having reached the other side, we took our road a little by chance. On seeing myself alone in this desert, and with no protection for little Fritz and myself but two young boys of eleven and thirteen years old, formidable only because they were able to use their weapons, I thanked God, and blessed him specially in my heart, dear husband, because from infancy you had accustomed your children to the management of fire-arms, although I had often blamed you secretly for what I regarded as a complaisance which might be attended with fatal consequences, while it was, on your part, a prudent precaution, and at the same time a means of inspiring them with promptness and courage.

When we had climbed the ascent I was enchanted with the smiling aspect of the green and fertile country; and, for the first time since our shipwreck, my heart thrilled with mingled emotions



of joy and hope. I noticed especially a pleasant little grove at a short distance, and I resolved to direct our march towards it; but we had to cross a plain covered with such tall grass that it rose above my head, and considerably retarded our progress. This



induced us to diverge towards the left, and we soon discovered your original track; we followed it until we came in a right line with the little wood I speak of, when we quitted the path you had marked out, and moved in that direction.

We found ourselves once more among the tall grass, when a strange noise suddenly broke on our ears, and at the same moment a bird of prodigious size darted through the herbage, to our surprise as well as terror. My two boys seized their guns, but before they could take aim the bird was far away.

"What a nuisance!" cried Ernest; "if I had only had time to raise my gun, I would certainly have brought him down."

"That is not so certain as you affirm," I replied; "and, besides, why did you let him take you unawares? A good hunter ought always to be on the alert."

"That may be," rejoined Ernest; "and if similar game should present itself, I will have a word to say to it in passing. But let us find out the place whence our visitor emerged; perhaps he has his nest there, and we shall ascertain his species."

"For myself," said little Fritz, "I think he was an eagle; his size was so prodigious."



GREAT BUSTARD (*Otis tarda*).

"As if all big birds were eagles!"

"Besides," added Ernest, "eagles do not make their nests among the herbage, but in the rocks. I am more inclined to think he was a bustard, judging from his gray colour, and the feathery tuft which I caught sight of, like a couple of moustaches, near his beak. What a pity we did not shoot him."

Thus conversing, the two boys pushed forward among the high thick grass; but, behold, another bird, just like the first, although much larger, sprang up almost at their very feet, and was out of reach before my two hunters had adjusted and raised their muskets. I could not help laughing at the mortified looks with which they watched the flight of the lost bird.

"You have let a capital dish escape you, gentlemen," said I; "and yet you were warned in good time. Never mind; let us examine the nest; perhaps the young birds may be there still."

Our investigation, however, proved fruitless; for on approaching the spot from which the two birds had flown, we found, indeed, a kind of big nest, rudely built up of dry grass, but it was empty; and from the egg-shells around we conjectured that the little ones, though not long hatched, had saved themselves among the thick herbage.

"Now, Fritz," said Ernest, "you can see that they were not eagles; for not only do they never make their nests on the ground, but their young can never run for some time after emerging from the shell;



in this respect they are wholly unlike the gallinaceæ—that is, snipes, partridges, peacocks, turkeys, guinea-hens. As for these, from the dark gray colour of their plumage, the stripe of reddish-brown which borders their wings, and above all, from the few tufts of feathers like moustaches which I noticed at the corner of the beak of the first bird, I think I may positively declare they were bustards.”

“My dear boy,” said I, “you would perhaps do better to employ your quick vision in taking aim at the bird than in observing the colour of his feathers and the moustaches upon his bill; but, on the other hand, it would have been unfortunate for the poor fledglings if your skill had deprived them of their father or mother. Let us abandon for the present the tempting pleasures of the chase, and continue our journey.”

We soon arrived at the little wood towards which we had directed our steps; a host of unknown birds warbled and fluttered gaily around us, without evincing the least alarm at our presence. The



boys would fain have proved their skill as marksmen at the cost of the feathered minstrels, but this I would not permit, as it could not be of the slightest utility.

We found that what had appeared to us in the distance to be a small grove was only a group of twelve or fourteen great trees—trees of a size and stature which I have never before seen even approached. And singular to relate, these gigantic trees appeared



to grow rather in the air than in the soil; the trunk is raised above the ground by enormous roots, which cluster around it like so many flying buttresses, as if to support the centre of this wonderful edifice, and assure its stability.



Rudly clambered up one of the inner roots, and having measured with a piece of twine the girth of the trunk at the point where the branches diverged, we found it amounted to thirty-four feet. To complete the circuit of the space comprised within the boundary of the farthest roots, I counted forty paces. As for the height from the roots to the first branches, which spread out horizontally to a great distance, it seemed to me that it could not be less than forty to fifty feet. The foliage of these trees resembles that of our European walnuts: it is luxuriant, and affords a pleasant shade, so that the area which they shelter is clothed with fresh thick grass; neither bushes nor brambles mar the beauty of the verdurous carpet; but all things combine to render the spot a most delightful and attractive retreat.

Here we halted to enjoy a little rest, and make our noontide repast; our wallet of provisions was opened; from a crystal streamlet near at hand we quenched our thirst; and we spent a couple of hours in welcome repose. I could not satiate myself with the loveliness of our leafy asylum, and when reflecting on the numerous enemies to whose attacks we are exposed in this desert region, it seemed to me that if we could devise a means of establishing our dwelling-place among the branches of those noble trees, we should



BANYAN-TREE (*Ficus indica*).

be safe from every kind of accident. As, at the same time, I had no reason to presume I should find any locality superior to, combining more advantages than, this most charming spot, I resolved to go no further. Only, instead of returning the way we came, I decided to keep along the seashore, in case the waves should have flung upon the sand any portions of the wreck likely to be of advantage or utility.

In that direction, then, we bent our steps; but we found few things worth saving. Most of the articles drifted ashore consisted of chests, casks, and barrels, whose weight defied our efforts to



move them; we attempted, however, to roll them as far inland as possible, that they might not be washed out to sea by the next high tide. While the boys and I were thus busily occupied, I noticed that our dog Juno was eagerly burrowing, with nose and paws, in the hot sand, and greedily swallowing something which she disinterred. Ernest ran to the spot, and driving away the dogs, exclaimed,—

“Mamma, good news! Here are some turtles’ eggs; come and help me save them from voracious Juno, or she will not leave us one.”

I somewhat mistrusted the assertion of our young philosopher, even while I hastened to his assistance. It was with much difficulty we kept off the dogs while we collected nearly two dozen eggs, as yet intact; those which were broken we gave up to Juno as a reward for her discovery.

When we had stored away our spoil with the utmost caution in our hunting-bags, our gaze being directed towards the sea, we caught sight of a sail rapidly bearing towards the coast. I was moved with mingled feelings of surprise and anxiety at the spectacle, for I could not distinguish the boat which carried it. Ernest declared it was you; Rudly, that it was our lost seamen returning in the shallop; while little Fritz, always a timid boy, flung himself into my arms, crying that it was a body of cannibals coming to eat us.

However, as the boat drew near, we saw that Ernest was in the right. We ran full speed towards the brook, crossed it by leaping from stone to stone, and at length arrived at the place where you disembarked.

Such is a true account of our journey of discovery; and now, if you would make me happy, consent that henceforth we take up our abode in the shade of my magnificent trees.

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“What,” said I, with a slight smile, “is all the security you have found for us a tree sixty feet high, among whose branches, I suppose, we are to roost like fowls? that is, if we can get up to them—and I don’t know how, unless we make a balloon!”



"Oh, do not laugh at me," replied my wife; "I am sure my idea is not impracticable. Have you not seen in our native land—at Zoffinque, for example—an enormous lime-tree, with a dancing-platform constructed among its boughs, to which people ascend by a flight of wooden steps? Can we not, in the same fashion, build our sleeping-rooms on the summit of one of the smaller of these trees? At least, I should then no longer dread the visits of jackals, and of other nocturnal marauders of a more terrible character. As for the means of carrying out my suggestion, I leave it for you men to discover; and I have no fear but that you will succeed, if you put your heart into your work."

"Well," I answered, "we will see what can be done to satisfy you in this matter; but, under any circumstances, from the description you have given me of these singular trees, we should be able to erect a convenient habitation within their roots, and I think they ought to supply the framework of a more comfortable retreat than the canvas tent which has hitherto sheltered us. Tomorrow we will go and examine the spot."

At this promise my wife's countenance recovered its serenity, and our evening meal ended as joyously as it had begun.

"Do you know, dear Elizabeth," I said the next morning, when I woke at an early hour, "your scheme for changing our residence presents some considerable difficulties in more than one respect? And before proceeding to carry it out, let us discuss it a little. In the first place, it seems to me prudent to remain on the spot where Providence has planted us, and where we find both the means of supplying our wants from the stores which we can still obtain from the wreck, and security, protected as we are on the landward side by this chain of encircling rocks, and by the brook which descends thence into the sea."

"Let me interrupt you there," said my wife; "the barrier you speak of did not prevent the jackals from intruding upon us, and who shall say that tigers and other wild beasts may not soon discover the same track? As for what supplies may still be drawn from the ship, I confess, seeing the great quantity of articles already collected, I could almost wish the sea would swallow up the remainder of that ill-fated vessel. As long as it remains there,



my anxiety will be continual. And besides, you do not know how much we suffer here from the heat. While you and Frederick wandered in shady woods, gathering delicious fruits, you little imagined the torture inflicted upon *us* by the burning tropical sun. Consider all these inconveniences, Albert, and I am sure you will yield to my arguments."

For a while I sat silent: if my wife's eloquence had not entirely converted me to her side, at least I could not help acknowledging to myself the truth and force of her objections.

"Well," I resumed at last, "since you consider this change so needful, we will attempt it; and, to meet both our views, we will construct an habitation in the shadow of your giant trees, while, at the same time, we avail ourselves of our present abode as a storehouse, and a stronghold in case of invasion. I hope, with the help of gunpowder, to fling down some rocks on this side, and so close up the passage that not even a cat could force it; but before undertaking anything else, we must throw a bridge across yonder stream, if we intend to march out of our present settlement like honourable warriors, with our arms and baggage."

"Ah, well, then," cried my poor wife, in a tone of despair, "it will be long before we shall establish ourselves in my charming retreat. Build a bridge! Can you think of such an undertaking? And why not let us, as a beginning, load ourselves with simple necessities, and ford the stream as we have done already? The ass and cow will carry on their backs the remainder of our wealth."

"Which they would do in any case, and much more conveniently if the bridge were built. But then we must provide them with some kind of saddle, or some suitable harness. Well, while you are arranging all these matters, my sons and I will pretty nearly finish our bridge, which, once erected, will be always serviceable. The brook, too, is neither more nor less than a mountain-torrent, which in the rainy season will probably swell so as to render the passage impossible, or perilous. We shall run the risk of losing all our animals; and shall we ourselves be always as fortunate or as skilful as we have lately been in crossing those wandering waters on a row of stepping-stones?"

My wife yielded to my reasoning.



"Come," said she, with a resigned air, "let God's will be done. But let us set to work immediately, for we have no time to lose."

We aroused the children, and communicated to them our intentions. Great was their delight at the prospect of changing their residence, and of erecting a new settlement in a more agreeable and sheltered locality. But the preliminary task of constructing a bridge they did not relish so heartily, for they foresaw that it would entail upon them much hard and painful labour.

While my wife, who had been engaged in milking the cow and the goats, prepared a dish of *soupe au lait*, or milk-broth, for our breakfast, my sons and I launched our boat, for I wished to revisit the wreck in search of planks and beams suitable for our bridge-building. Our manageress soon summoned us to our open-air repast, which vividly reminded my children of the *al fresco* breakfasts of their native land; and, as soon as it was over, I embarked with Frederick and Ernest, whom I took to assist at the oars, because I knew the weight of the timber I intended to bring back would render our progress slow and tedious.

With the favour shown him Ernest was enchanted; he seized an oar, and handled it with equal energy and skill; we soon gained the offing of the brook, where the current caught us, and bore us



A FLOCK OF SEA-BIRDS.



rapidly out to sea; on our route we sighted a little islet, which was crowded with gulls, puffins, and other sea-birds, filling the air with their hoarse clamour.

To ascertain the cause of such an assemblage, I rowed with all my might to get clear of the current; then, when we had made out the bearings of the isle, I hoisted my sail, and a fresh breeze soon brought us up to it.

"I think, papa," said Ernest, "the birds are attracted thither by some kind of prey."

And in fact, on landing, we found the carcass of an enormous fish lying upon the beach, and covered with a host of great sea-birds, which were so busily engaged in tearing it to pieces, that our loud shouts, and even the discharge of a gun loaded with powder into their midst, did not frighten them from their prey. This fish was the shark which Frederick had so cleverly marked the day before, and we discovered in his head the three large holes still filled with blood where he had been shot.

"If we could get rid of these voracious companions," I remarked to my sons, "we would cut off some strips of the hide, which is very firm and tenacious; at need, they would provide us with excellent shagreen."

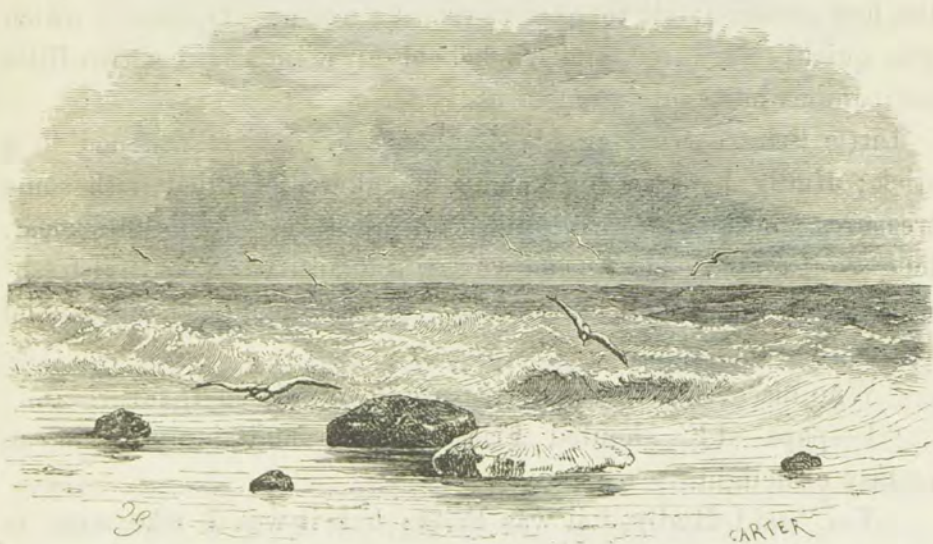
Ernest immediately drew his ramrod, and striking courageously to right and left through the famished host, opened a passage for me. Once masters of the battle-field, we easily prevented the birds from approaching; in hot haste we removed a few pieces of the monster's skin, and bore them to our boat.

This was not the only advantage we derived from our descent; for, on examining the shore of this islet, or rather sandbank, we found it covered with spars and planks of all shapes and sizes, which the waves had drifted thither, and which were undoubtedly the remains of wrecked vessels. This valuable discovery relieved us from the necessity of visiting our ship. We selected those timbers which seemed most suitable for our purpose; then, by means of a screw and two levers which we had brought with us, we raised them from the beach and started them into the water. I next bound together the beams as securely as possible with stout ropes, and, with the help of my two sons, stretched the planks upon



them, and nailed them firmly in their places. Having thus constructed a kind of rude raft, I took it in tow of our boat, hoisted sail, and set out on our return voyage.

To render it as little wearisome as possible, I endeavoured to take advantage of the breeze which blew inshore, and after a few manœuvres, which were not unskilful on the part of mariners of so little experience, we had the pleasure of seeing our canvas swell, fill out, and bear us majestically towards the land. During our voyage Frederick, in obedience to my orders, nailed the bands of the shark's skin to the mast and deck to dry them in the sun. Ernest, always interested in any details of a zoological character, attentively examined some of the birds he had so valiantly knocked down with his ramrod, and having decided their genera and species, he related some interesting particulars relative to the stupidity of gulls and their congeners, which live wholly on dead fish and carrion; whence their flesh contracts so disagreeable a flavour that



it is impossible to eat them. From the gulls, our conversation passed to the strips of hide, which Frederick endeavoured to keep stretched out, but which curved and shrivelled in spite of all his care; but when I told him that, even in such a condition, the skin would furnish us with excellent leather useful for many purposes, Ernest made a remark which I ought not to forget.



"It is very fortunate," said he, after reflecting awhile, and just as I had concluded my remarks on the shark's ferocious habits, "that God has placed the shark's throat under its snout, and not at the end."

"Why?" I inquired.

"Because, so nimble and gluttonous is the monster, that it would speedily have depopulated the seas if it had not been obliged to turn on its back to seize its prey; which frequently gives the prey an opportunity of escaping."

"Bravo, my young philosopher! I approve of your remark; and if we are not admitted to a knowledge of the Creator's secret designs, such conjectures are always a useful intellectual entertainment!"

Having gained the little bay in safety, we lowered our sail, and, after mooring our boat in its usual station, landed on the shore which we had quitted four hours previously. None of our family were there to receive us, but their absence did not alarm me as on the first occasion; all three of us raised a joyous "Hurrah!" which was quickly answered, and we beheld my wife and her two little companions hastening to meet us.

Little Fritz carried on his shoulder a fishing-net fastened to a stick; Rudly held in his hand a handkerchief filled with some treasures whose nature we could not conjecture. As he drew near, he gave it a gentle shake, and we saw a quantity of beautiful fresh-water crabs make their appearance. My wife had her handkerchief full of the same spoil.

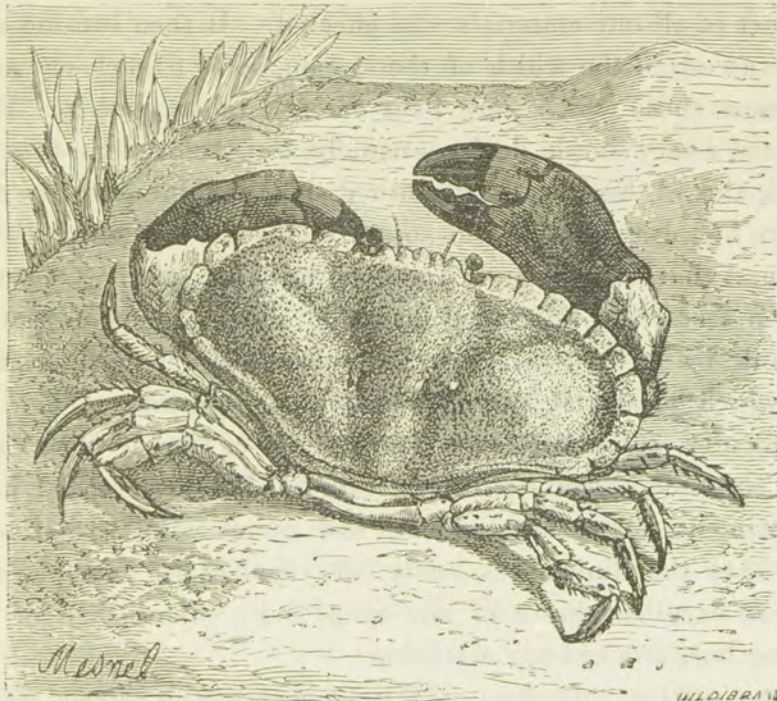
"Who discovered this new treasure?" exclaimed I, surprised.

"I—papa—I!" shouted Fritz, leaping and jumping in an ecstasy of delight.

"Yes," said Rudly, "it was Fritz; but it was I who went in search of the net, which, as you know, papa, I brought from the ship, with some beautiful fishing-tackle; and it was I who walked into the water up to my knees, to catch these jolly crabs. Fritz, while looking for pebbles on the bank of the stream, saw them swimming around the jackal's carcass which we flung into the water yesterday; it was covered with them, and we should have caught many more if we had not heard your voice."



"You have caught quite enough for to-day, my boys; in fact, like prudent fishers, you must throw back into the stream all the young ones; we shall catch them again by-and-by. God be thanked for this new means of supplying our wants! Let us enjoy, but not abuse it."



CRAB (*Cancer pagurus*).

After liberating the smaller crabs, which were restored to their natural element, my wife carried off what remained to prepare our dinner. Meanwhile, we occupied ourselves in hauling ashore the timber necessary for the construction of our bridge. Rudly, during our absence, had looked out a suitable spot, and having pointed it out to me, I perceived that it was in reality the most advantageous point, but it was at a considerable distance from the place where we had moored our raft. We had no means of transporting it thither, and to think of accomplishing it by our unaided strength was obviously absurd.

I then bethought myself of the simple modes of transport in vogue among the Laplanders, who harness the reindeer to their sledges. I secured a long and stout rope to the horns of our cow—



for all the strength of these creatures is in their head—and the other end I fastened to the piece of timber which I wished to remove. For the ass I contrived a kind of rope collar, and then attached to it a couple of cords, which, of course, were also looped round the burden he was intended to draw.

The expedient proved wholly successful. In a few trips, the transport of all our materials was effected. It then became necessary to ascertain the width of the stream, so as to pick out among our beams those which were long enough to traverse it. Ernest suggested a very simple device—namely, to fasten a stone to a piece of pack-thread, hurl it to the other side, and measure the string after we had drawn back the stone. This we did without delay, and found that the distance from one bank to another was about eighteen feet. As it seemed desirable the bridge should overlap the bank by at least three feet, we selected among our beams all those which measured twenty-four feet or upwards. Then came the difficulty—how were such heavy pieces of timber to be thrown across the steep scaurs of the stream? We lost much time in attempting to solve the problem, and as my wife had given us notice that the dinner was ready, we repaired to our open *salon*, where an excellent basin of rice-soup, and a superb dish of crabs smoking hot, awaited our attention.

Before seating ourselves at the table, my wife showed me the work on which she had been engaged all the morning—namely, a couple of large sacks made of sailcloth, and fastened with pack-thread, for our ass and cow. I could not but admire her patient industry; for as she had neither awl nor needle strong enough for such rude work, she had sown up the bags with a nail. With almost incredible perseverance she had thrust the thread through each hole pierced by the nail; so true is it that to an intelligent being nothing is impossible.

Our meal was hurried, for we wished to get forward with our work while daylight lasted. We discussed, while eating, the best method of hauling our beams into their places, and at last I thought of a feasible scheme.

On the side of the brook lay the trunk of an old tree; by means of our jack, I got one of the timbers stretched along the bank in



such wise that one extremity touched the base of this trunk, to which I fastened it by a tolerably slack rope. I also twisted round it another rope, long enough to go twice across the brook; next I took the other end, and carrying with me our boat's tackle-block, crossed the current on the stones with which it was besprinkled.

Having reached the other side, I hooked the tackle-block to a tall stout tree, ran my rope through its pulleys, and so brought it back to the place where my young architects were standing, overcome with astonishment at my operations, which they did not understand. I then brought up the ass and cow, harnessed my cable to them, and driving them *away* from the brook, of course they stretched the rope quite taut. It glided easily through the pulleys, raised the beam, turned it gently round the trunk of the tree, which served to steady it, and gradually drew it across the brook, where I lowered it into its position.

After the first beam was fixed, our work grew easy; we quickly got four into their proper places; and my boys, who could not deny themselves the pleasure of skipping merrily over this imperfect erection, arranged the ends on one bank while I did the same on the other; next we placed a number of planks across them, as close as possible, only I did not nail them to the joists, that we might be able, if called upon to defend ourselves against any unforeseen attack, to destroy the bridge at once, and impede the passage of the rivulet.

The day's work completely exhausted us; we returned to our tent, and after having supped, and thanked Heaven for the new favours it had showered upon us, we sought on our grassy couches the rest of which we stood in urgent need.

My first care, on the following day, was to assemble my children round me, and explain to them the manner in which they ought to conduct themselves in their present situation.

"We are going," I said, "to reside in a country which is perhaps more agreeable, but will also be less secure than this; we know as yet but few of its resources, and not all its dangers. Be prudent, therefore; keep always on your guard; and, above all, take good care that during the journey none of you stray from the main body or loiter behind."



My sons promised to pay the greatest attention to my instructions, and assured me of their implicit obedience.

After morning prayer was over, and breakfast finished, we made the necessary preparations for our departure. We collected our cattle. The cow and the ass were loaded with our heavier articles: both carried a great sack in the form of a saddle-bag—that is to say, closed at the ends and open in the middle—which enabled us to place in them a great quantity of things without any fear of their falling out. This first journey we could only carry absolute necessities, such as our cooking utensils, our biscuits, butter, cheese, portable soup, powder and shot, our ordinary fire-arms, our hammocks, and woollen coverlets.

The loading was nearly completed when my wife arrived with her famous bag, for which she claimed a place.

“Nor is that all,” said she; “we must find the means of carrying away our poultry, it would be all over with the poor creatures if we left them to the mercy of the jackals. And you must put little Fritz on the donkey. The child could not walk all the distance, at least not without greatly retarding our progress.”

I contrived to mount our little boy on the donkey’s back among the bales, and his mamma’s bag, which we had christened the *Enchanted*, served him as a cushion. As for the poultry, I hardly knew how to carry out my wife’s desire; they were dispersed all about the place, and my sons hunted them vigorously without being able to secure a single prisoner.

“Enough, enough,” cried my wife; “do not heat yourselves with running, for I have thought of a way to entrap them.”

“Come, then, mamma, let us see it; you will be very cunning and skilful if you succeed.”

“You think so? Well, you shall see, my boys, whether those who have recourse to their intelligence do not succeed better than those who trust blindly to their strength or agility.”

At these words, fumbling in her *Enchanted Bag*, she drew forth a few handfuls of seed, and making a gesture of scattering them abroad, began to call the fowls. Lo, not only the hens, but also the pigeons, made their appearance at the good housewife’s voice, and followed her into the tent, where, having flung them the grain,



upon which all the feathered troop rushed eagerly, she closed the entrance, and, in a moment, made them prisoners. The children laughed heartily at their mother's stratagem, and acknowledged that she was much cleverer than they were. Rudly was instructed to creep into the tent, like a fox into the poultry-yard, to seize the captives one after another, and hand them out to us. Then



we tied their feet, and placed them pell-mell in a basket on the cow's back, taking care to cover the basket that the darkness might reduce the noisy crew to silence. We afterwards piled within the tent all the articles we could not transport on this occasion, closed the entrance, and having rolled against it our barrels and chests, abandoned the remainder of our property to the guardianship of Providence.

At length we started on our march, fully armed, and each carrying on his back a bag of provisions. Frederick and his mother led the van. Next came the cow, and the donkey, with Fritz mounted



on his back. The goats, directed by Rudly, formed a third body, the little ape, perched on his foster-goat, making incessant grimaces. Grave Ernest took charge of the sheep, and, finally, the father of the family, watchful and anxious, formed the rear-guard. Our flanks were protected by the two dogs, like active aides-de-camp, who rushed continuously from the head to the bottom of the column.

The caravan advanced slowly, but in good order, and presenting quite a patriarchal appearance.

"Behold us," I said to Ernest, "traversing the unknown desert like our fathers of old, and as the Arabs, the Tartars, and other nomades do at the present day, who continually change their quarters, accompanied by their numerous herds. But when they accomplish their migrations they have their good strong horses, their much-enduring camels, and not, like us, only a poor emaciated cow and a starveling donkey. For my part, I sincerely trust that this journey may be the last of its kind."

"I hope, my dear," said my wife gently, for she detected a covert reproach in my last words—"I hope, and, in fact, I so surely believe that we shall find ourselves happily situated in the place to which I am conducting you, that I will gladly submit to your censure for having suggested this undertaking, if hereafter you do not express your entire satisfaction."

"Do not doubt it, my dear," said I, hastening to answer her; "we follow you with pleasure, and the comforts we shall enjoy hereafter will be doubly dear, because we shall owe them to you."

Beguiling the way with agreeable conversation, we arrived at the bridge, where our cortege was increased by the accession of a new member who had not previously formed part of it. The pig, always obstinate and intractable, we had been compelled to leave behind, but on seeing us depart he had set out full gallop after us; he rejoined us as the cattle defiled slowly over the bridge, and mingled with the troop, although his continual grunting proved that he was much dissatisfied with his journey.

On reaching the other bank, we were obstructed by an unforeseen incident. The rich luxuriant foliage which covered the soil proved so tempting to our poor beasts, that they spread themselves



in every direction to enjoy the unaccustomed banquet. Disorder prevailed in the ranks, and we should have found it a difficult task to reassemble the stragglers, but for our trusty dogs, who set to work, barking and jumping, to drive them into their places, and enabled us, after awhile, to resume our march. But for fear such an event might again occur, I ordered our advanced guard to keep to the left, and skirt the sea-shore, where there was no probability our cattle would be exposed to a similar temptation.



Scarcely had we gained a more open country than our dogs darted away, with furious barkings, into the tall herbage whence we had just emerged. One would have thought they were attacking a wild beast. Frederick immediately loaded his rifle; Ernest took his stand by his mother's side, making ready his musket also; Rudly, always rash, ran in the direction whence the sound proceeded without even lifting his gun, while for myself, with my weapon lowered and my finger on the trigger, I advanced cautiously towards the same point, impressing upon everybody the necessity of coolness and prudence. But Rudly, transported by his fervour, had dashed into the thick grass; almost at the same moment he reappeared, crying,—

“Oh, papa, an enormous porcupine! A monster! With bristles as long as my arms! Come, come quickly!”

I hastened to the spot, and saw our dogs hovering anxiously around a porcupine, which was by no means a monster in size, but which, with a terrible noise, rolled itself up into a ball and



erected its spines so rapidly and so vigorously that its two brave assailants, with bleeding muzzles, were at a loss how to seize their enemy.



THE PORCUPINE (*Hystrix cristata*).

Rudly, seeing their discomfiture, drew from his belt of jackal's skin a pistol, aimed, and fired almost close to the creature's head. The porcupine fell dead. I reprimanded Rudly for his impetuosity—he might, in his haste, have wounded one of us, or killed one of the dogs; but the young gentleman was so transported with delight at his victory that he paid but little attention to my reproaches; nothing would content him but to carry off the porcupine. With his brother's assistance he knotted his handkerchief around the creature's neck, and dragged it towards the place where his mother was resting herself, in great anxiety respecting the issue of the event.

"See, mamma," he cried, as he approached; "look at this terrible animal, which I have killed with one shot from my pistol! We must carry it with us, for papa says its flesh is capital eating."

While my wife willingly congratulated her son on his exploit, she did not accede very warmly to his proposition. Ernest meanwhile examined the animal with curiosity, and remarked that it had incisor teeth, and ears and feet shaped like those of man.



"I wish," said Rudly, with a somewhat boastful air; "I wish you could have seen it raising its bristles against the dogs! But I advanced, and, puff—with a single shot I stretched it dead! Ho, ho, but it is a terrible beast to attack!"

"Not so terrible either," replied Frederick, a little jealous of his brother's achievement, though he showed no sign of it, "since *you* dared to approach him. It is true that *we*—that father and I—treated it respectfully, and that without your eagerness—"

"It is not less true that it was I who killed it," answered Rudly, spiritedly; "and before you!" added he, with a mocking air.

I checked the discussion, for it was on the point of becoming dangerous, and once more reminded my sons of the union which ought to exist between brothers.

"You all of you work for the general good, do you not, my boys? What matters, then, who was the most fortunate or the most skilful in this encounter? And now, before going further, let us relieve our poor dogs from the bristles which are tormenting them. Though the least boastful, they were not the least courageous."

Our brave companions were covered about the muzzle with a quantity of these darts, which, owing to their slight adhesion to the porcupine's skin, had got loosened in the combat. Hence, the ancients were wont to say that the animal was at once quiver, bow, and arrow. During this operation, which required a tolerable amount of address, I gave my sons some curious details concerning porcupines and their ways, and took care to expose the folly of the vulgar error that they possess the faculty of hurling their own darts against the dogs or hunters who attack them.

"It is very strange," added I, "that natural history, where truth is always palpable, should be the one of all human sciences which man has most disfigured by embellishing it with marvellous circumstances, as if nature was not beautiful and wonderful enough in itself; as if it needed the assistance of our silly imaginations to render it what it really is—grand, magnificent, and ever worthy of admiration."

At Rudly's urgent request, we decided that the porcupine should be included among our luggage. With great care I removed all



the animal's spines, wrapped it up in grass, and afterwards in a piece of canvas, fastened it on our donkey's back, and then gave the signal to resume our march. Frederick, with his gun sloping, and his finger on the trigger, marched at our head, in the hope of discovering some game which he might bring down on his own account.

At length we arrived at the trees, the goal of our journey; in height and size they surpassed my utmost conceptions. "What trees!" exclaimed Ernest; "they are truly colossal. But to what family or genus do they belong? Are they mangoes? or are they—"

"Bah!" cried Rudly, who gave his opinion on all things without reflection; "you need only look at the leaf to see that they are walnuts."

"You are grossly mistaken," interrupted I, "for I think these gigantic trees, from their aspect, and from the extraordinary elevation of their roots, must belong to the fig-tree genus, or *Ficoidæ*, and perhaps to that species known as the Fig of the Antilles, or, in India, as the Banyan. But whatever their right name, my dear Elizabeth," said I, turning to my wife, who appeared to enjoy my mingled admiration and surprise; "whatever their right name, I must acknowledge that their discovery, and the idea of establishing our home amongst them, does you honour. We must, to begin with, take up our lodging in the lower part—that is, among the roots, which seem like the ready prepared framework of our cabin; but if we ever succeed in perching ourselves at the summit, we shall be perfectly secure from wild beasts. I would defy even the bears of our native mountains to climb a trunk so immense and so free from knot or projection."

We then began to unpack our baggage; and, to prevent the animals from straying, tied the fore-legs of each, except of the pig, who, as ever, proved utterly intractable; we were compelled to give her her liberty. We allowed the hens and pigeons full license to settle themselves where they would. While thus occupied, we were somewhat startled by a musket-shot at a considerable distance in our rear. All our surprise vanished, however, when we heard the merry voice of Frederick, who, issuing from the wood, shouted loudly,—



"Hit! I have hit him!"

With one leap he was at our side.

"See, papa, what a splendid tiger-cat I have tumbled over!"

"Bravo, Mr. Marksman," cried I; "you have performed a chivalrous action on behalf of our pigeons and poultry, for to-night



this gentleman would have spared us the trouble of ever putting one of them to the spit. You will do well to keep your eyes open, in case any of his congeners come prowling in our neighbourhood, for they are the deadliest enemies of every kind of fowl."

Ernest did not fail to display his science in reference to this new



prey, and while jesting him on the erudition which he tried to air on all occasions, we agreed that instead of the name of tiger-cat, hastily bestowed by Frederick, that of margai would suit it better.

"All that I ask now," said the young sportsman, "is, that Rudly won't spoil this creature's beautiful skin, as he did the jackal's. See, papa, what a fine effect these brown stripes and spots produce on the golden yellow ground of the fur! It would be a great pity, would it not? And I should like to make a belt out of it to carry my pistols and hunting-knife."

I approved of the project, and as the animal's flesh could be of no use to us, I thought it would furnish a capital meal for our dogs, of whose nourishment we had also to take care. Consequently, I explained to my son how he might skin the margai without doing it any injury, and the flesh we immediately divided between the dogs. Rudly, who wished to render his porcupine serviceable, then begged me to assist him in skinning it, because he was of opinion that the hide would make admirable defensive collars when their present ones were worn out. These operations at an end, I cut the porcupine into halves, one of which was deposited in the crock, where my wife was preparing our soup; the other was salted, and hung up in the open air, for next day's use.



At a short distance from our tree rippled the limpid waters of a pleasant streamlet. We found some stones in its bed, which



served for the erection of a fireplace; with dry twigs and branches we kindled a glorious fire, and we left our good housewife busily preparing our dinner.

Meanwhile I amused myself in converting some of the porcupine's quills into needles, as a gift for my wife, to whom I knew I must speedily have recourse for assistance in making a set of harness. I took a large nail, and wrapping the head in a piece of thick stuff, I placed the point in the fire until it was red hot; I was then able to pierce a hole in the quills without any fear of splitting them; and in this fashion I contrived a variety of needles of different sizes, fit only, it is true, for working twine or pack-thread. Yet were they gladly accepted by my wife, who knew that they would considerably lighten her sewing operations.

Constantly brooding over the idea of an aerial habitation, I conceived at length the project of fabricating a ladder of rope; for, besides that we had no means of making any other, it was necessary, at the outset, we should fasten to the lowest boughs the rope by which we might ascend them.

I therefore exercised my children in throwing stones to which a long piece of twine was attached; but the branches being fully thirty feet from the ground, none of the projectiles reached them, and I was compelled to adopt some other expedient.

But my wife announcing that the dinner was ready, I deferred the matter for the present. The porcupine, boiled, made an excellent soup, and we found the flesh savoury, though hard; my wife, however, could not conquer her prejudices against it, and contented herself with a slice of ham and a morsel of Dutch cheese.

No sooner was our meal at an end than I began to make ready our night-quarters: I suspended our hammocks under the vault formed by the branches of our giant tree, and covering the whole exterior with our great piece of sail-cloth, we were quickly provided with a shelter from the night dews and the attacks of insects.

When this task was completed, and while, on her part, my industrious wife was engaged in the fabrication of a set of harness for the cow and ass, which I designed employing on the following day in hauling up the beams and timbers necessary for our aerial residence, I repaired with Frederick and Ernest to the sea-shore



to examine the articles which lay there, and especially to search for materials wherewith to construct my projected rope-ladder.

The beach was covered with driftwood, but most of it was unfit for our purpose, or to have made it fit would have required a considerable amount of labour; and my scheme would probably have come to nothing, had not Ernest discovered a pile of bamboos partly covered with sand and mud. These were just what I required: I extricated the bamboos from the sand, stripped them of the leaves with which they were still garnished, cut them into canes each about five feet long, and made them up into three bundles, that they might be the more easily removed to our establishment. Afterwards I looked about for some patches of reeds, where I might find a few light and hollow stems suitable for arrows—all being necessary to work out the scheme I had devised for scaling our colossal tree.

We accordingly directed our steps towards a thick copse which seemed to me of the kind I wanted. According to our custom, we were armed, and we advanced cautiously towards the brushwood, in doubt whether it might not conceal some reptile or other dangerous animal. Our dog marched before us; but as soon as we came near the bush, Juno darted forward with her usual vehemence, and roused a covey of fine flamingoes, which, beating their wings with a great noise, soared slowly into the air. Frederick, always prompt, and this time on his guard, fired right into the midst of the winged squadron, and brought down a couple of the birds. One of them remained where it fell, but the other, being only slightly wounded, began to ply its long legs in swift and sudden flight. Frederick hastened to take possession of the dead bird with so much precipitation that he plunged into a swamp. Warned by his mishap, I made a detour in pursuit of the fugitive, but I should not have overtaken it without the assistance of Juno, who, cutting off its retreat, seized it adroitly by one wing, and so gave me time to come up. I carried it to my sons, whose joy at seeing this handsome bird still alive was indescribable.

"Is it much hurt?" they exclaimed; "can we dress its wounds? Oh, if we could only tame it! If we could find a place for it with our hens!"



ROSE FLAMINGO (*Phoenicopterus ruber*).

And they poured out a score of questions, which I answered in the best manner possible.

"What a splendid plumage!" cried Ernest; "what lively and brilliant colours! It is strange," continued the young observer; "this bird has webbed feet like those of the goose, and long legs like the stork's. So it runs upon the land as swiftly as it swims in the waters."

"You may add that it flies equally well in the air, for its wings are strong and vigorous. There is more than one genus of birds which unites these various advantages."

"But," asked Frederick, "have all the flamingoes a rose-hued body and flesh-tinted legs like these? I thought I saw some gray and grayish-white in the flock which I fired at."

"Oh," replied Ernest, who found himself now in his element, "those you saw were young birds; they only assume these beautiful colours as they advance in years."



"In that case," rejoined Frederick, "the one I have shot won't make a very dainty 'roast;' for, from the beauty of its plumage, it must be very old. However, we will carry it for our mother to see."

Delighted with their double capture, my children were now very busy: Frederick, in tying his game by the feet, that he might carry it comfortably upon his back; Ernest, in wrapping his handkerchief about the wounded bird, that it might suffer as little as possible. Meanwhile, I cut down a handful of reeds; I picked out those which had already flowered, because I knew that with these the American Indians always made their darts. I also cut two or three stems at their full length, to assist me in measuring the height of our tree by a geometrical procedure. To Ernest I intrusted the reeds; the wounded flamingo I took charge of myself; while Frederick, besides his game, carried two of the packets of bamboos we had left upon the beach. Loaded in this fashion, we returned to our family, and were received, as usual, with shouts of joy, but this time mingled with exclamations of surprise.

"Oh, what have you got there, Frederick? What a magnificent bird! What do you call it? Is it spiteful? Will it bite? Oh, the poor thing is wounded! How will you cure it?" and a hundred similar observations. Our manageress, however, did not seem to participate in the general enthusiasm, and remarked that so many animals to be fed at home would require a large supply of provisions. But I reassured her by explaining that our new guest would not put us to any cost, for, as the flamingo feeds only on insects and small fish, it would pick up its own meals on the bank of the stream, where I intended to establish it.

The anxiety of my wife was soothed by this information, and it brought back a pleased smile to the countenance of my younger auditors. Then I examined the poor bird's wound. It turned out to be nothing more than a slight bruise on the right wing, which was also somewhat injured by Juno's teeth, but I had no doubt it could easily be healed. I anointed the sores with a mixture of wine and butter, and supported the wing by a suitable bandage; after which I tied a good-sized stone to the bird's foot, by a cord long enough and slack enough to permit of its walking



about freely, and getting down to the brook. My surgical treatment proved very successful; for in a few days the wound was healed, and the bird, conquered by the cares and caresses lavished upon it, soon grew tame.

Meantime, my sons, by stringing together the tall reeds I had cut down, thought they could devise a means of measuring the stature of our tree. They speedily discovered their mistake, and came to tell me, laughing, that it would take ten times as many to reach the lowest branches.

"I doubt it, gentlemen," said I; "but there is a far simpler method than yours of ascertaining the tree's height: it is the method employed for estimating the elevation of lofty mountains; geometry applies it, and you shall see me put it into practice."

So I set to work; and with a couple of canes planted in the ground, and some twine, which I twisted round the trunk of the tree, and which I fastened at the other end to some very short stalks, I drew out a triangle. Then I calculated its dimensions geometrically, and having found that it measured thirty feet from one angle to another, I informed my young people, who had watched the process with much curiosity, that the height of our future abode would be thirty feet above the ground. The result appeared marvellous in their eyes, and inspired them with a strong taste for geometry. I had studied it deeply in my youth, and now found it a great advantage that I retained some knowledge of so useful a science to extricate me from much embarrassment in my novel situation.

Now that I had ascertained the exact height, I ordered Frederick to measure off our stock of cord; and the little ones to roll up the twine into a ball, as I should shortly require it. Seating myself on the sward, and bending a strong bamboo into a kind of bow, I shaped the reeds which I had collected for the purpose into arrows, but arrows without any points. To render them swifter, and surer of flight, I tipped them with flamingo feathers, and soon found myself the owner of a savage weapon of tolerably handsome appearance. The boys, when they caught sight of it, capered about me, crying, "Ha, ha! a bow! a bow!



Yes, and arrows also! Oh, papa, let me shoot! no—I, papa—I can shoot famously.”

“Patience, boys, patience; I claim a prior right to my invention; so, with your permission, I will fire the first shot, for you must surely believe that I have not made this for a mere plaything, but to be of some service in carrying out my designs. Elizabeth, can you give me a ball of good stout thread?”

“Who knows whether my Enchanted Bag may not be able to supply your wants? Come,” said she to her treasure, “show thyself truly worthy of thy name; we have need of a ball of good stout thread.”

She gave it a gentle shake, and thrusting her arm in to the very bottom, withdrew from it the required article.

“See,” said she, laughing; “is not my bag truly marvellous?”

“Ah, what a fine mystery!” exclaimed Ernest; “you draw out of your bag what you first put into it.”

“Unquestionably, my dear boy,” she replied; “there is nothing in it which is not quite natural; all the mystery lies in my having placed there beforehand what might be useful on emergency; but the results of a little foresight sometimes pass for miracles, especially in the eyes of the thoughtless, who can never see further than their nose.”

Having now unravelled the ball of thread, I tied it to the extremity of one of my arrows; the latter I planted firmly against my bowstring, and aiming at one of the larger branches of the great tree, I pulled the cord: the arrow, carrying with it the thread, flew over the branch, remained suspended to it by means of the thread for a moment, and then, by its own weight, was borne to the ground.

Delighted with the result of my invention, I began to make my ladder. Frederick appeared, dragging behind him two enormous coils of strong cord; he had measured them, and each contained about forty yards. This was just the quantity I required. I stretched them along the ground in two rows at an equal distance of about twelve inches. Frederick, with the axe, cut up the bamboos into pieces two feet long, to serve for the steps; Ernest handed them to me, and I fixed them at regular intervals by the



knots which I had previously made in the ropes designed to serve as the uprights of my ladder.

As fast as I passed them through the knots, Rudly drove a stout nail into them to prevent them from slipping.

Thus, in a very short time our ladder was completed.

The next proceeding was to carry over the bough of the tree a rope of sufficient strength to raise the ladder. As soon as the latter was in its place I fastened the rope to one of the great roots, and the ends of the ladder I fixed very securely in the ground, with a couple of stakes, to prevent it from shaking, and to render the ascent safer. Scarcely had I finished these preparations, when the boys began to dispute who should first attempt it. I would only allow Rudly, because he was the nimblest and lightest.

The daring little fellow, whom gymnastic exercises had rendered equally supple and skilful, clambered like a cat from rung to rung, and arrived safe and sound at the top of the tree.

The ladder having been thus tested, Frederick mounted: he carried with him a hunting-bag, containing a hammer and some nails, to fasten the top of the ladder firmly to its bough, and in this succeeded so completely that I did not hesitate to climb, in my turn, to the arboreal region.

I found the branches of the tree so strong, and so closely interwoven, that not only could we seat ourselves in ease and safety, but I perceived that we should not require any beams for the flooring of our residence, and that a few planks would suffice when the branches had been properly levelled.

With my axe I commenced this preliminary work, but as I found my sons a little in the way, I allowed them to go down. I had cried to my wife to fasten a stout pulley to the loose cord still hanging by the side of the ladder: I drew up the pulley, and secured it to one of the strong upper branches, that, on the morrow, we might easily raise the timber and other materials we stood in need of. This operation, which I accomplished by the light of the moon, concluded my day's work. Spent with fatigue, but my heart overflowing with hope, I rejoined my family. On first reaching terra firma, I was a little disturbed by seeing neither



Frederick nor Rudly, who, I thought, had descended before me; but suddenly two pure and harmonious voices sounded from the summit of the tree I had just quitted, which I immediately recognized as those of my two sons, chanting an evening hymn, as if to consecrate our future abode.

Instead of descending, they had climbed from branch to branch until they had gained the crest of the leafy giant; there, overcome by the beauty of the scene spread out before them, they had instinctively broke forth into a psalm of praise and thanksgiving.

I summoned my little musicians, whom I had no disposition to reprimand, and we immediately made our preparations for the night, kindling great fires all around our encampment to prevent the approach of any wild animal. My wife then showed me the task on which she had been occupied during a part of the day; thanks to the porcupine needles, she had made complete sets of harness for our two beasts of burden. In return, I gave her the assurance that on the morrow we should be able to establish ourselves in our new domicile.

Ernest, who was unequal for any work demanding the exercise of physical strength, had remained with his mother, and, assisted by little Fritz, had taken her place as cook; before the fire, on a couple of wooden spits, roasted a fine fat piece of porcupine, giving forth a peculiarly delicious smell, while another boiled in the crock; for table-cloth a large sail was stretched upon the sward, and upon it figured the ham, a quarter of a cheese, some butter, and some biscuit—the latter, it is true, a little dry.

As soon as we had arranged our piles of wood around the encampment, collected our cattle, and driven them under the vaulted roots where we intended to pass the night—as soon as our hens and pigeons had taken up their roost among the neighbouring branches—we set ourselves down to supper, free from all anxiety, and what with hunger, fatigue, and the daintiness of our viands, made a very cheerful and hearty repast. The moon was at its full, and lighted up the scene with the most glorious illumination; but gradually the merry gossip slackened, audible yawns were continually repeated, I pronounced the evening prayer, and dismissed everybody to a much-needed repose.



Before following the general example, I lighted one of the piles of wood, made the circuit of our habitation, and only entered within when I had satisfied myself that nothing threatened, at least for the time, the safety of my family. As I climbed into my hammock I heard impatient exclamations uttered on every side—my little boys, who had manifested so much delight at the idea of sleeping in a hammock, now found it detestable, and bitterly regretted the beds of grass and moss, on which they were at all events able to stretch themselves at their ease. I showed them how to render themselves comfortable in this species of couch—that is, by lying diagonally, or from one corner to the other. “Wrap yourselves tightly in your coverlets,” said I, “and lie as quietly as you can; surely, where the mariner of every nation contrives to sleep, a brave little Swiss boy can do the same.”

After a few vain attempts and some smothered sighs all became tranquil, and before long I knew from their peaceful and regular breathing that my little world was asleep.

During the first half of the night I was not without anxiety—the slightest noise, the wind stirring the leaves, the distant murmur of the sea, were so many sources of alarm. When I saw my wood fire was nearly out, I hastened to kindle another; but, thank God, all my fears proved vain; and towards morning I fell so soundly asleep, that far from arousing my children at daybreak, according to my usual custom, it was they who gaily summoned *me* when the dawn was far advanced.

My wife was already engaged in her customary occupations—milking the goats and cow, and giving them their food. Next she gave us our breakfast; after which, calling Ernest and Rudly to her assistance, she harnessed the ass and cow, and started for the beach to collect the planks and spars I needed for my building operations.

Frederick and I then ascended our tree, and resumed the labour begun on the previous day; the axe and saw quickly rid us of all useless and troublesome branches; we reserved a few, however, about six feet above those intended for the flooring, on which to hang our hammocks, and some others, still higher up, to support the sail-cloth that would act as a temporary roof. This was a long



and painful task. My wife collected for us at the foot of the tree a great number of planks and light beams, the fragments of some vessel wrecked by the tempest. These had to be raised to the branches, which I accomplished by means of the pulley fixed on the preceding evening; my wife fastened the end of the rope to them below, and Frederick and I, by dint of energetic toil, hauled them up and ranged them in order, one after another, until they formed a smooth and solid platform. By degrees our edifice began to assume a definite shape; it was stayed against the trunk of the immense fig-tree; the sail-cloth, thrown over the upper boughs, and falling down on either hand, closed in the sides; while the fore part, remaining open, admitted the fresh air of the sea, which was clearly visible from this elevated post.

These divers labours occupied us for a great part of the day, and so ardently did we pursue them that we contented ourselves with a cold lunch, and did not stop to make a regular dinner. I had raised on the sides and in front of our aerial domicile a kind of balustrade, high enough to serve as a protection; and, to prevent any mishap, I nailed the canvas which formed the roof and sides to the edge of this balustrade. This done, we hauled up our hammocks, coverlets, and other necessary objects. We suspended them to the boughs reserved for the purpose, and after sweeping the flooring clear of the leaves and shavings which covered it, we descended to the ground, and made known to the remainder of the family that their new abode was ready to receive them.

A few hours of daylight still remained, and having found some planks at the foot of the tree, I could not resist the desire of making a table and a couple of benches, that we might partake of our meals in a more convenient fashion; a few posts planted firmly in the ground, and a sufficient number of spars roughly hewn and nailed upon them, were all my cabinet-making. However, this additional task completely exhausted me. Seated on one of the benches, I wiped the sweat from my brow, and said to my wife, "I declare that to-day I have worked like a galley-slave; so I intend to rest myself all to-morrow."

"You will enjoy your rest the more when I remind you that to-morrow is Sunday. According to my calculation, it will be the



second we have spent on this island, and I trust we shall not pass it, like the last, wholly absorbed in the painful cares of this life, and without consecrating the smallest portion of it to the Lord."

"I promise you, my dear Elizabeth, to-morrow shall not be so wrongly neglected. But I believe, in the terrible position in which we found ourselves, our first duty was to ensure the safety of our family. Throughout all these anxious labours our hearts have not ceased to rise in praise and thankfulness towards heaven; but now that, thanks to God's goodness, we are in security, and for some time provided with food and shelter, it would be inexcusable if we omitted to worship the Creator, on the very day which he has consecrated, with more solemnity than by our ordinary devotions. But say nothing about it beforehand to the children; they will be agreeably surprised to-morrow morning to find they have before them an unexpected day of repose and recreation. But come, now I have made you a table, what will you give us to eat? Let me inform you that I feel ravenously hungry."

"Well, then, call the children, and I will serve up your supper."

Our small troop was soon assembled round the table, on which my wife deposited a large earthen dish. From this she drew, with a long fork, a stewed fowl of the most appetizing smell and appearance; it proved to be the flamingo which Frederick had killed on the preceding day.

"Ernest, who is an excellent adviser in all culinary matters," said my wife, "assured me that the bird, being already old, would taste hard and tough, and would be much better boiled than roasted. You shall judge."

We laughed heartily at Ernest's gastronomical tastes, while approving the result; the flamingo, thoroughly cooked and well-seasoned, we pronounced excellent, and left but a very small portion.

While thus engaged in relishing our flamingo, his comrade, already thoroughly tamed, came gravely, accompanied by our hens, to pick up the crumbs that dropped from our table: we had relieved it of its bonds, and it did not appear the least disposed to forsake us. Our little monkey had likewise lost all his savagery, and his tricks amused us exceedingly; he was the pet of everybody, and it was droll enough to see him leap from one shoulder to another,



receiving from each person a few tit-bits, which he ate, with his two hands, in an infinitely graceful manner. Our fat sow, whom we had lost sight of for a couple of days, while she had been wandering in the woods at pleasure, now rejoined our assembly, and by her pleased grunts manifested her delight at having once more found us. My wife received her with marked distinction, and in order to persuade her to return home every evening, gave her all the milk she had saved from the day's supply.

"While we have no utensils in which to churn butter or make cheese," said she, "nor dairy nor cave wherein to preserve it, we may as well make use of the superfluous milk in this way—the heat of this climate quickly turns it sour."

"You are right, my dear," I answered; "but on the next voyage we make to our wrecked vessel I promise you I will not forget to bring away what you must so much want."

"Ah, heavens!" she exclaimed, with a sigh and a throbbing heart, "I shall never be at peace until the sea has finished its work; you cannot imagine the anguish I suffer while you dare a thousand dangers in your crazy boat of tubs!"

I reassured her as well as I could, and made her understand that it would be failing in our duty to Providence if we neglected, from a false and unreasoning prudence, to save the precious objects which seemed to have been miraculously preserved for our use and needs. She was convinced; for, if her tender love of me and our children inspired her with alarm on this subject, her calm good judgment enabled her to see the force of such considerations.

Supper being ended, our animals collected under their arboreal roof, I kindled a fire large enough to burn throughout the night, to scare all intruders, and we proceeded to ascend the tree and take possession of our future residence. My three sons soon reached the top of the ladder; my wife, who followed them, accomplished the ascent more slowly, but without accident. For me the task was less easy, for as I wished to raise the ladder several feet above the ground after we were all in safety, I was obliged to unloosen the lower end and climb up the wavering ropes, with all the more difficulty because I carried my youngest son on my back, and my movements were consequently much embarrassed.



However, I at length reached the balustrade where our apartment commenced, and having deposited my burden, I hauled up, by means of the pulley, a portion of our ladder, and hooked it to a strong branch suitable for the purpose; in this manner we entrenched ourselves in our stronghold, like those mediæval castellans who isolated themselves from the rest of the world by raising the portcullises of their castles. But although we might then consider ourselves perfectly safe, I loaded our fire-arms, so that if any enemy presented himself below, I could come to the assistance of our brave dogs stationed at the foot of the tree, and intrusted with the guardianship of our cattle, and from my watch-tower discharge a storm of bullets. This last precaution taken, we addressed our prayers to God, and finally established ourselves in our hammocks, where we quickly enjoyed the blessing of a sound and tranquil sleep, undisturbed by any care.







### CHAPTER III.

Thus was this place  
A happy rural seat of various view.

MILTON.



VERY early in the morning, everybody awoke fresh, gay, and inspired with new courage.

"What shall we do to-day?" said the boys.

"Nothing, my children — nothing at all."

"Oh papa, you are laughing at us!"

"No, my dears, I do not jest; we will take our repose to-day, because it is the Lord's day, and your mamma and I would fain celebrate it in a fitting manner."

"What! Is to-day Sunday? Oh, how delightful! We can amuse ourselves from morning till night." "Papa, will you lend me your bow and arrow?" said one—"I will make bow and arrows for myself," said another—"We can run or walk about as we please!" they lustily shouted.

"That is not exactly what you ought to do," I answered; "Sunday is the day consecrated to God; and on that day we ought to wean our hearts, as far as possible, from the vanities of earth, and meditate upon the goodness of our Lord and Saviour."

"But how can we do so," observed Rudly, "when we have here neither church nor minister?"

"As for that," exclaimed Ernest, "I think we can thank God and praise His name as well under the roof of heaven as under that



of a temple; while as for sermons, papa, who preached us such admirable ones in Europe, can certainly preach them to us here."

"And the beautiful hymns which mamma has taught us," remarked Frederick, in his turn; "can we not sing them among ourselves just as we used to sing them at church? Will they be less agreeable to God because sung without the accompaniment of an organ?"

"Yes, my children; God being everywhere, to bless Him for His goodness, to praise Him in His works, to submit ourselves to His holy will, and to obey His commands with all our heart, is to serve Him. We will celebrate this day as best our position permits us, and as becomes your age and your young intelligences. I do not remember any of the sermons or lectures I have composed sufficiently well to be able to repeat them; but, instead, I will substitute an apologue, which, by enlightening your mind, will touch, I hope, your soul, and nourish the precious seeds of Christian virtues which your mother and I have sown in your hearts, and which we would fain see fructifying therein as the principle and guarantee of your happiness in this world and in the next. But there is a time for everything," added I, to moderate the ardent curiosity which the announcement of my apologue had aroused in their young breasts. "First, let us address to God our daily prayer; afterwards, we will minister to the wants of our animals; then we will breakfast; and finally, we will all assemble under that beautiful leafy canopy which surrounds our dwelling, and commence by a hymn the celebration of this holy day."

I was the first to descend the tree; after lowering the ladder to the ground, I fixed the ends of it firmly, and my family quickly followed me. The first moments of the day were employed as I had marked out; then my wife and children having seated themselves on the turf, I took my place on a little knoll in front of them, and after collecting my thoughts awhile in silence, I began a little allegorical narrative, in which I sought to develop some of the important truths which serve as the foundation of the Christian's religious morality.



### The Apologue.



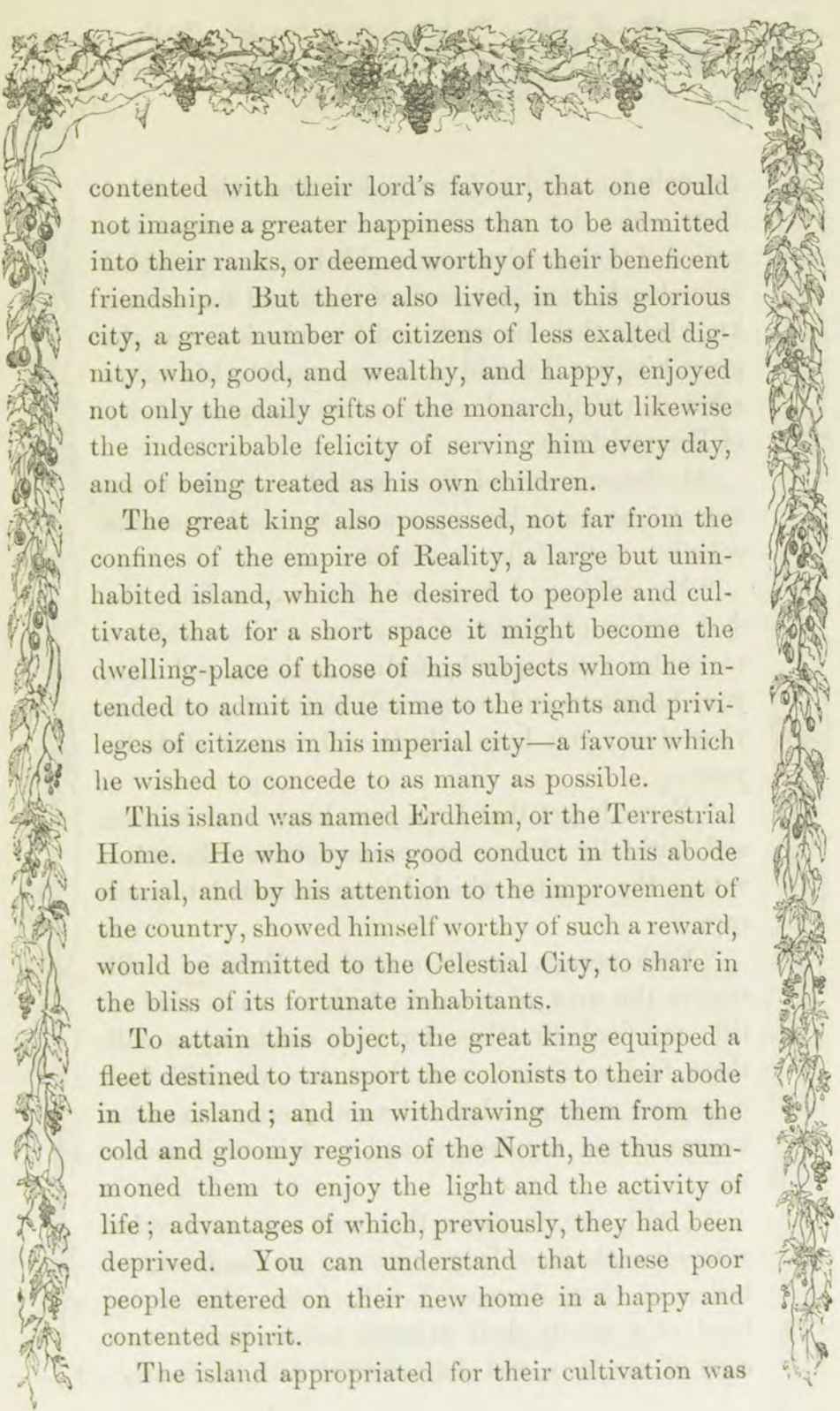
ONCE upon a time, said I, there lived a great king, whose kingdom was called the country of Reality, or of the Day, because a perpetual activity and unclouded light prevailed there. On the most distant frontier, and facing the icy north, lay another country, which likewise acknowledged the sway of a great king, and whose immense extent was known to none but himself. From the remotest ages this monarch had preserved its map in his archives; this other kingdom was that of Possibility, or the Night, because all was inert and sombre within its borders.

In the most fertile and agreeable district of the empire of Reality, the great king had a magnificent residence named Himmelsburg, or the Celestial City, where he resided and held his court, the most magnificent imaginable: millions of servants executed his will, and millions held themselves ready to receive his orders.

These were clothed in garments more shining than silver, and whiter than snow, because white was the king's colour; those in glittering, gleaming armour, a flaming sword in their hands or cased in a sheath of gold.

Each, at a sign from their lord, flew to accomplish his commands, with the rapidity of lightning traversing the clouds. All these faithful servants, vigilant, intrepid, and full of zeal for the service of their monarch, were so united among themselves, and so





contented with their lord's favour, that one could not imagine a greater happiness than to be admitted into their ranks, or deemed worthy of their beneficent friendship. But there also lived, in this glorious city, a great number of citizens of less exalted dignity, who, good, and wealthy, and happy, enjoyed not only the daily gifts of the monarch, but likewise the indescribable felicity of serving him every day, and of being treated as his own children.

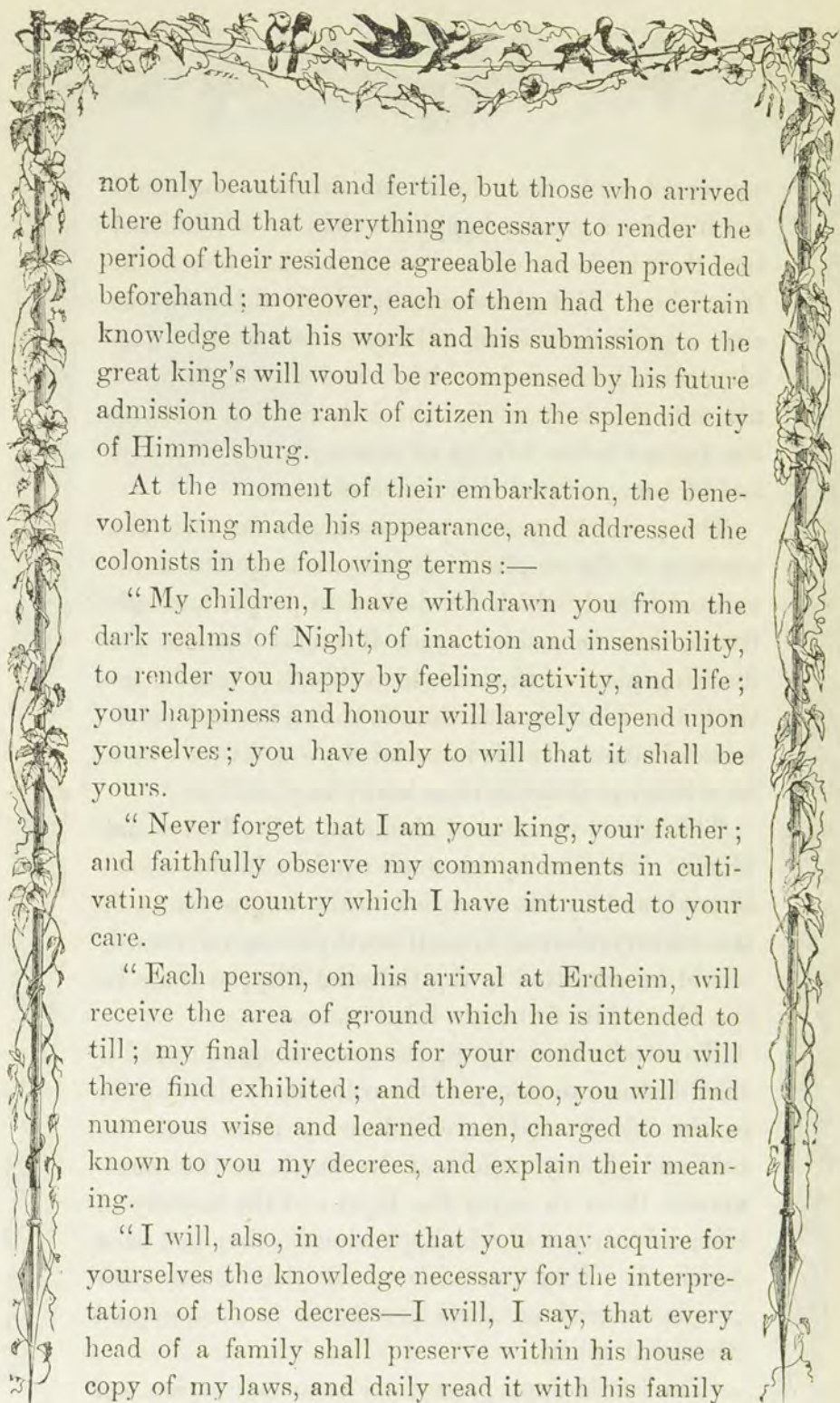
The great king also possessed, not far from the confines of the empire of Reality, a large but uninhabited island, which he desired to people and cultivate, that for a short space it might become the dwelling-place of those of his subjects whom he intended to admit in due time to the rights and privileges of citizens in his imperial city—a favour which he wished to concede to as many as possible.

This island was named Erdheim, or the Terrestrial Home. He who by his good conduct in this abode of trial, and by his attention to the improvement of the country, showed himself worthy of such a reward, would be admitted to the Celestial City, to share in the bliss of its fortunate inhabitants.

To attain this object, the great king equipped a fleet destined to transport the colonists to their abode in the island; and in withdrawing them from the cold and gloomy regions of the North, he thus summoned them to enjoy the light and the activity of life; advantages of which, previously, they had been deprived. You can understand that these poor people entered on their new home in a happy and contented spirit.

The island appropriated for their cultivation was





not only beautiful and fertile, but those who arrived there found that everything necessary to render the period of their residence agreeable had been provided beforehand; moreover, each of them had the certain knowledge that his work and his submission to the great king's will would be recompensed by his future admission to the rank of citizen in the splendid city of Himmelsburg.

At the moment of their embarkation, the benevolent king made his appearance, and addressed the colonists in the following terms:—

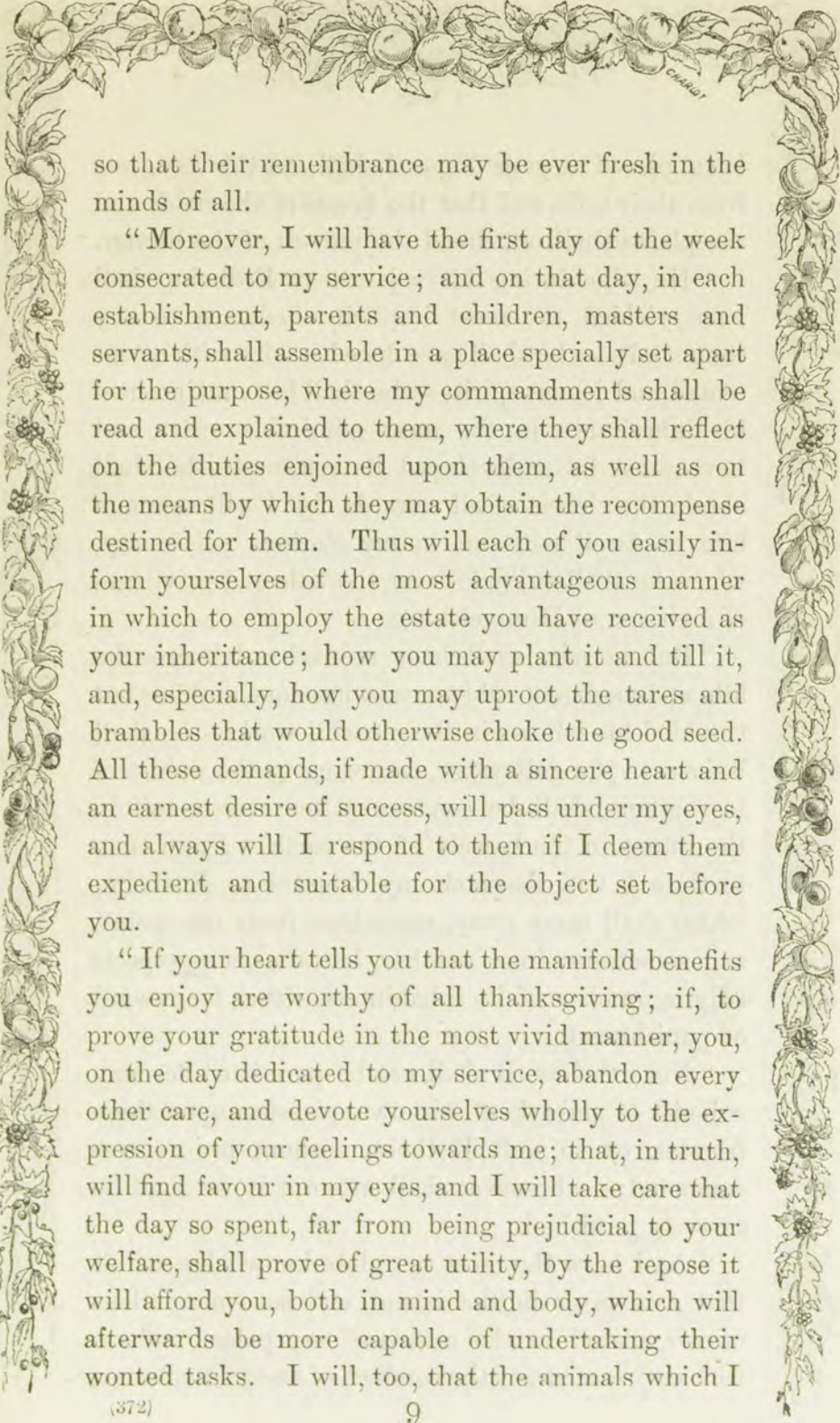
“My children, I have withdrawn you from the dark realms of Night, of inaction and insensibility, to render you happy by feeling, activity, and life; your happiness and honour will largely depend upon yourselves; you have only to will that it shall be yours.

“Never forget that I am your king, your father; and faithfully observe my commandments in cultivating the country which I have intrusted to your care.

“Each person, on his arrival at Erdheim, will receive the area of ground which he is intended to till; my final directions for your conduct you will there find exhibited; and there, too, you will find numerous wise and learned men, charged to make known to you my decrees, and explain their meaning.

“I will, also, in order that you may acquire for yourselves the knowledge necessary for the interpretation of those decrees—I will, I say, that every head of a family shall preserve within his house a copy of my laws, and daily read it with his family



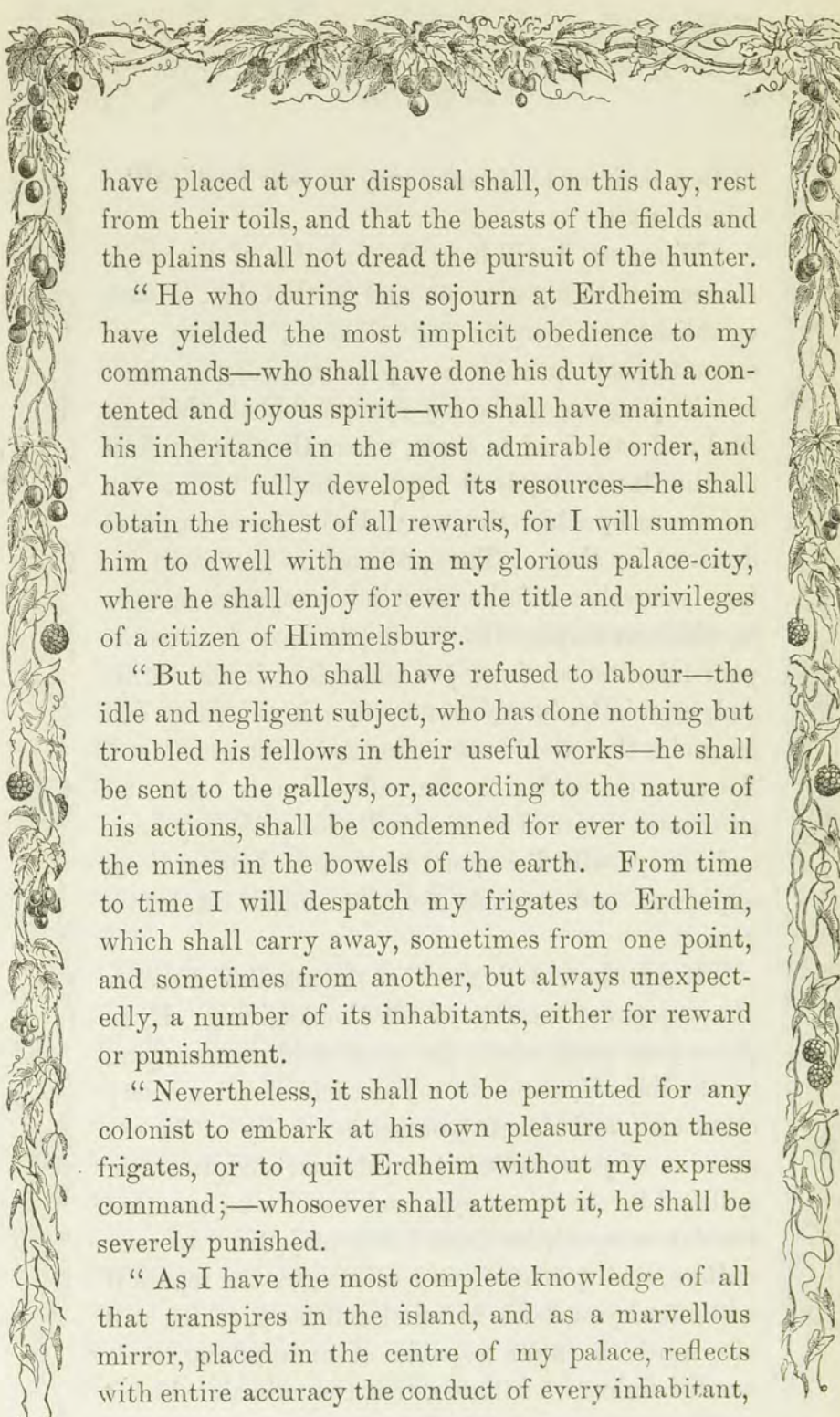


so that their remembrance may be ever fresh in the minds of all.

“Moreover, I will have the first day of the week consecrated to my service; and on that day, in each establishment, parents and children, masters and servants, shall assemble in a place specially set apart for the purpose, where my commandments shall be read and explained to them, where they shall reflect on the duties enjoined upon them, as well as on the means by which they may obtain the recompense destined for them. Thus will each of you easily inform yourselves of the most advantageous manner in which to employ the estate you have received as your inheritance; how you may plant it and till it, and, especially, how you may uproot the tares and brambles that would otherwise choke the good seed. All these demands, if made with a sincere heart and an earnest desire of success, will pass under my eyes, and always will I respond to them if I deem them expedient and suitable for the object set before you.

“If your heart tells you that the manifold benefits you enjoy are worthy of all thanksgiving; if, to prove your gratitude in the most vivid manner, you, on the day dedicated to my service, abandon every other care, and devote yourselves wholly to the expression of your feelings towards me; that, in truth, will find favour in my eyes, and I will take care that the day so spent, far from being prejudicial to your welfare, shall prove of great utility, by the repose it will afford you, both in mind and body, which will afterwards be more capable of undertaking their wonted tasks. I will, too, that the animals which I





have placed at your disposal shall, on this day, rest from their toils, and that the beasts of the fields and the plains shall not dread the pursuit of the hunter.

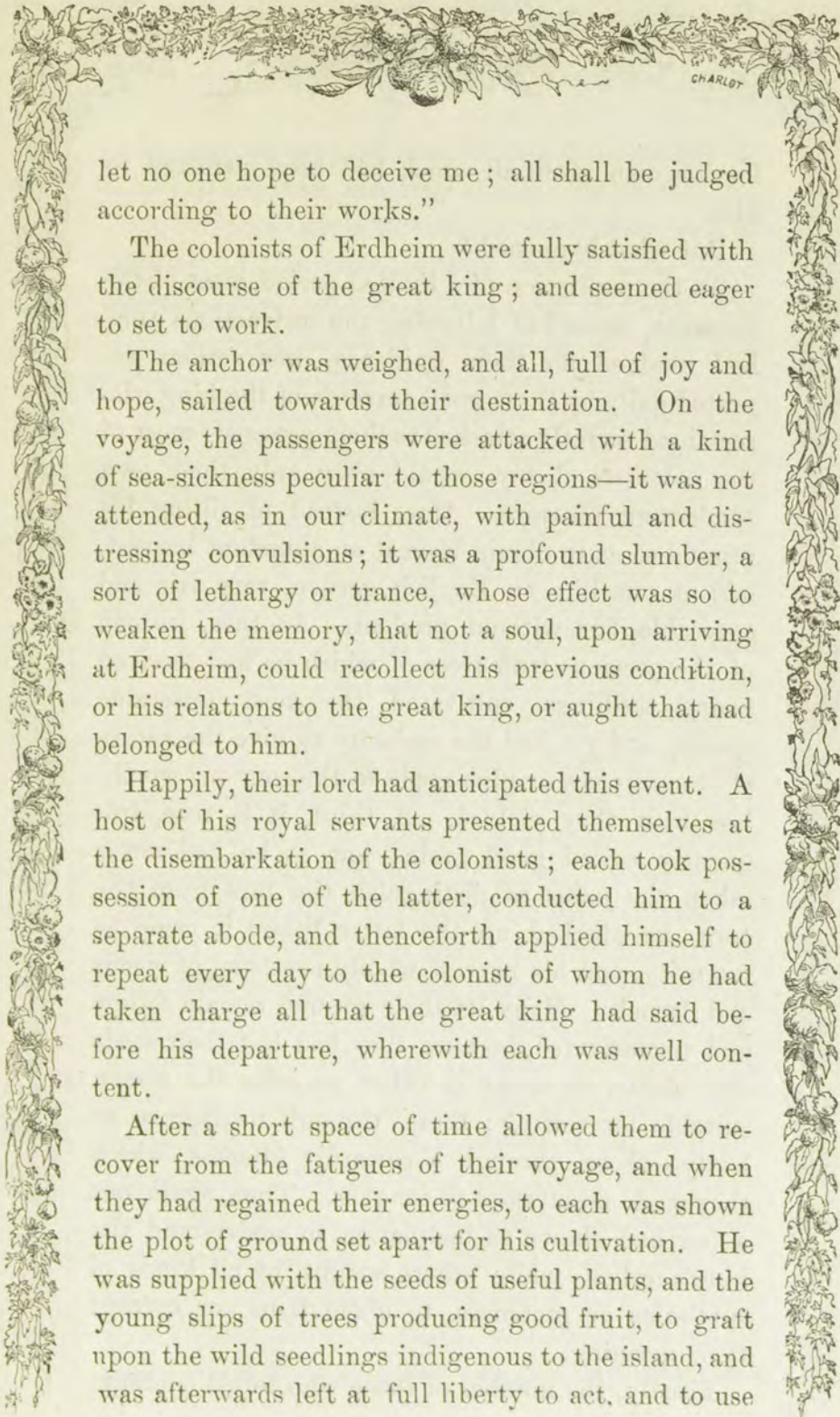
“He who during his sojourn at Erdheim shall have yielded the most implicit obedience to my commands—who shall have done his duty with a contented and joyous spirit—who shall have maintained his inheritance in the most admirable order, and have most fully developed its resources—he shall obtain the richest of all rewards, for I will summon him to dwell with me in my glorious palace-city, where he shall enjoy for ever the title and privileges of a citizen of Himmelsburg.

“But he who shall have refused to labour—the idle and negligent subject, who has done nothing but troubled his fellows in their useful works—he shall be sent to the galleys, or, according to the nature of his actions, shall be condemned for ever to toil in the mines in the bowels of the earth. From time to time I will despatch my frigates to Erdheim, which shall carry away, sometimes from one point, and sometimes from another, but always unexpectedly, a number of its inhabitants, either for reward or punishment.

“Nevertheless, it shall not be permitted for any colonist to embark at his own pleasure upon these frigates, or to quit Erdheim without my express command;—whosoever shall attempt it, he shall be severely punished.

“As I have the most complete knowledge of all that transpires in the island, and as a marvellous mirror, placed in the centre of my palace, reflects with entire accuracy the conduct of every inhabitant,





let no one hope to deceive me ; all shall be judged according to their works."

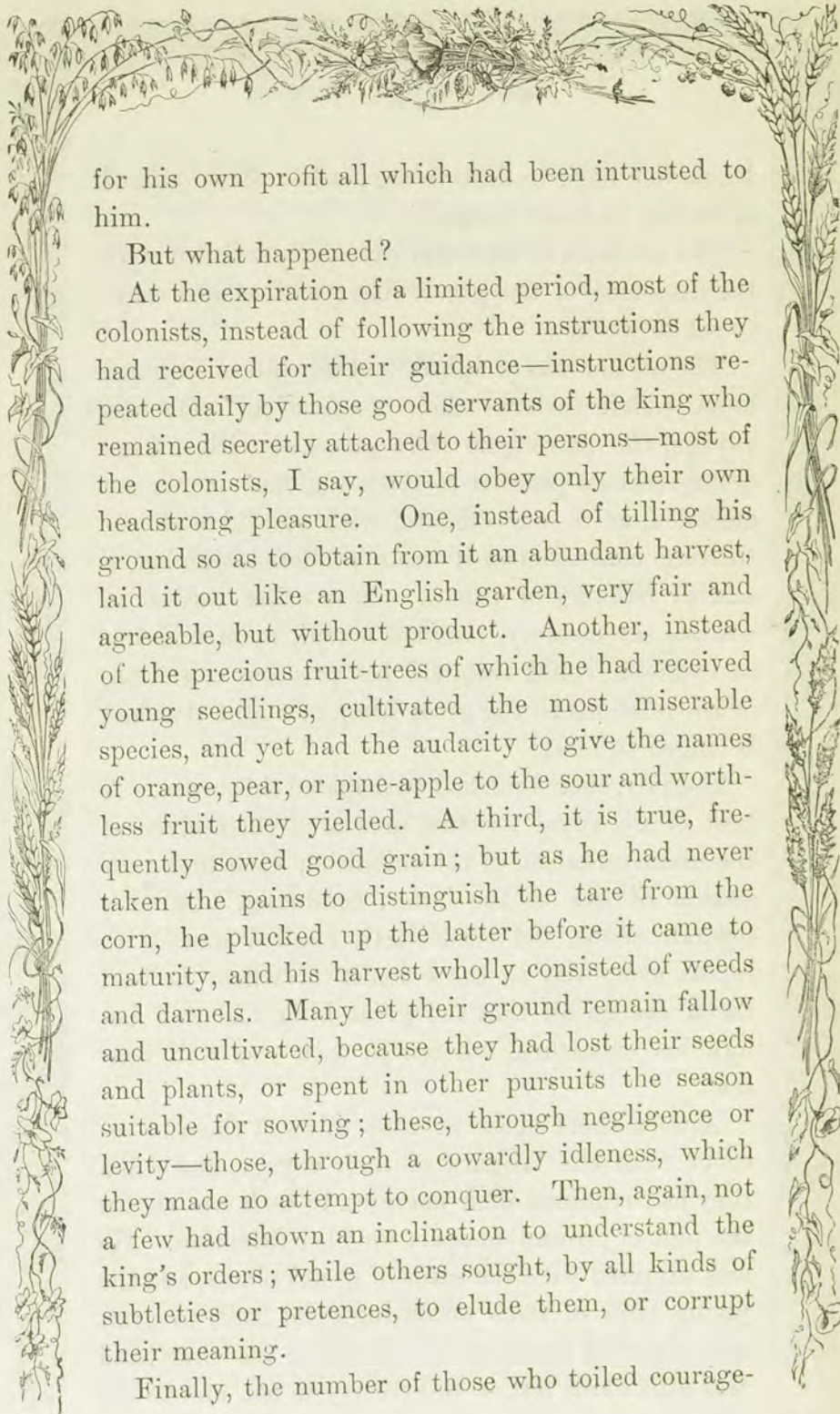
The colonists of Erdheim were fully satisfied with the discourse of the great king ; and seemed eager to set to work.

The anchor was weighed, and all, full of joy and hope, sailed towards their destination. On the voyage, the passengers were attacked with a kind of sea-sickness peculiar to those regions—it was not attended, as in our climate, with painful and distressing convulsions ; it was a profound slumber, a sort of lethargy or trance, whose effect was so to weaken the memory, that not a soul, upon arriving at Erdheim, could recollect his previous condition, or his relations to the great king, or aught that had belonged to him.

Happily, their lord had anticipated this event. A host of his royal servants presented themselves at the disembarkation of the colonists ; each took possession of one of the latter, conducted him to a separate abode, and thenceforth applied himself to repeat every day to the colonist of whom he had taken charge all that the great king had said before his departure, wherewith each was well content.

After a short space of time allowed them to recover from the fatigues of their voyage, and when they had regained their energies, to each was shown the plot of ground set apart for his cultivation. He was supplied with the seeds of useful plants, and the young slips of trees producing good fruit, to graft upon the wild seedlings indigenous to the island, and was afterwards left at full liberty to act, and to use



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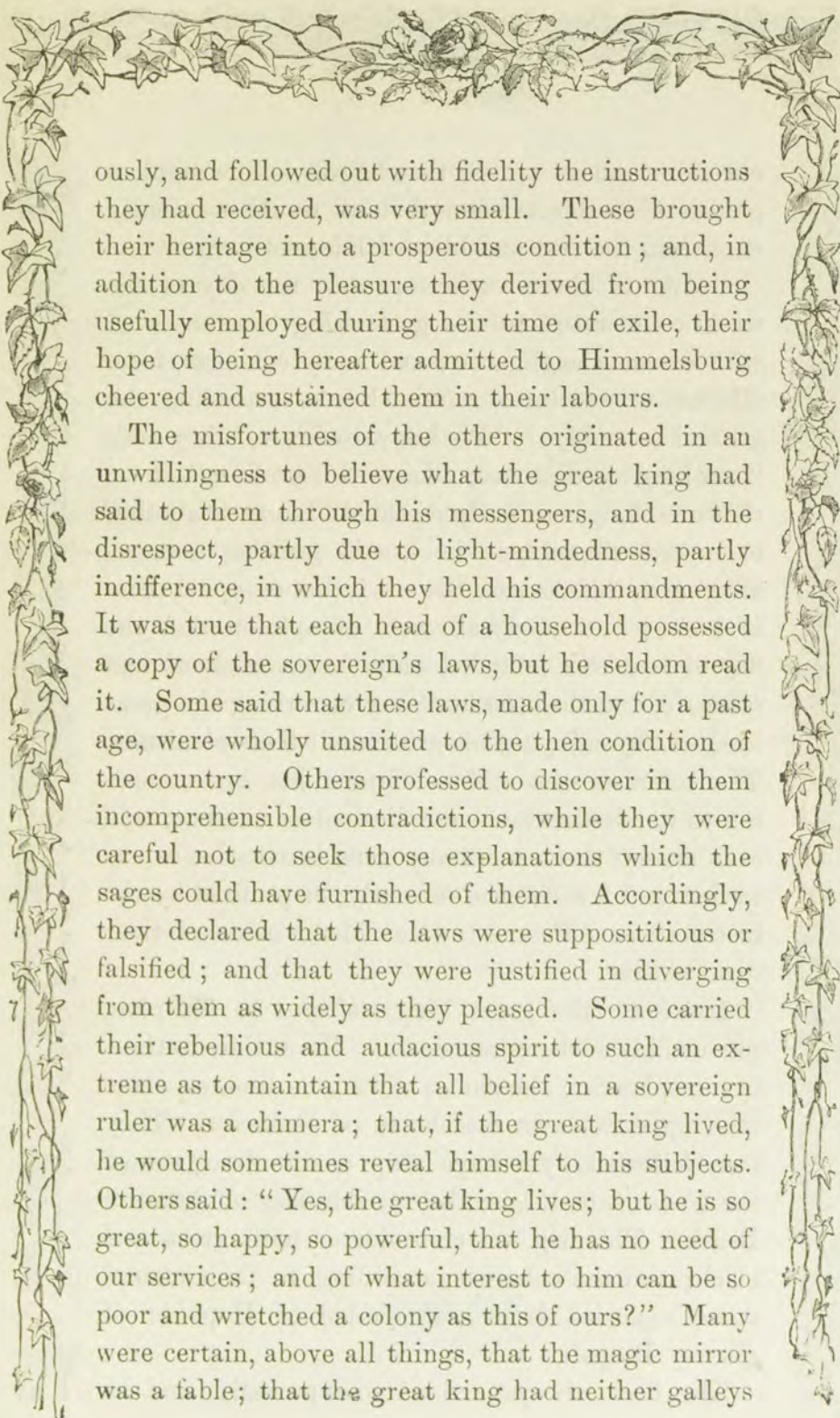
for his own profit all which had been intrusted to him.

But what happened?

At the expiration of a limited period, most of the colonists, instead of following the instructions they had received for their guidance—instructions repeated daily by those good servants of the king who remained secretly attached to their persons—most of the colonists, I say, would obey only their own headstrong pleasure. One, instead of tilling his ground so as to obtain from it an abundant harvest, laid it out like an English garden, very fair and agreeable, but without product. Another, instead of the precious fruit-trees of which he had received young seedlings, cultivated the most miserable species, and yet had the audacity to give the names of orange, pear, or pine-apple to the sour and worthless fruit they yielded. A third, it is true, frequently sowed good grain; but as he had never taken the pains to distinguish the tare from the corn, he plucked up the latter before it came to maturity, and his harvest wholly consisted of weeds and darnels. Many let their ground remain fallow and uncultivated, because they had lost their seeds and plants, or spent in other pursuits the season suitable for sowing; these, through negligence or levity—those, through a cowardly idleness, which they made no attempt to conquer. Then, again, not a few had shown an inclination to understand the king's orders; while others sought, by all kinds of subtleties or pretences, to elude them, or corrupt their meaning.

Finally, the number of those who toiled courage-

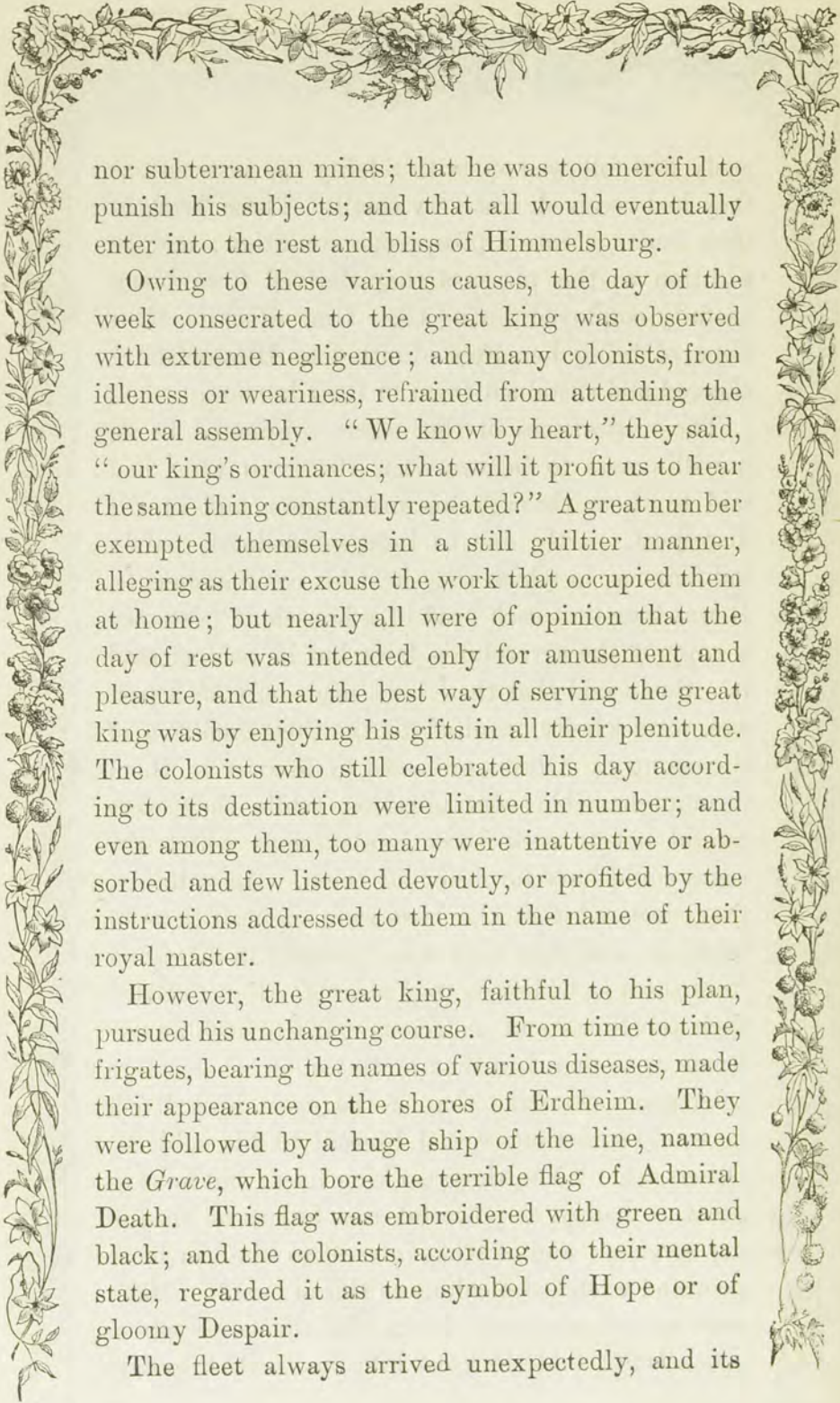


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ously, and followed out with fidelity the instructions they had received, was very small. These brought their heritage into a prosperous condition; and, in addition to the pleasure they derived from being usefully employed during their time of exile, their hope of being hereafter admitted to Himmelsburg cheered and sustained them in their labours.

The misfortunes of the others originated in an unwillingness to believe what the great king had said to them through his messengers, and in the disrespect, partly due to light-mindedness, partly indifference, in which they held his commandments. It was true that each head of a household possessed a copy of the sovereign's laws, but he seldom read it. Some said that these laws, made only for a past age, were wholly unsuited to the then condition of the country. Others professed to discover in them incomprehensible contradictions, while they were careful not to seek those explanations which the sages could have furnished of them. Accordingly, they declared that the laws were supposititious or falsified; and that they were justified in diverging from them as widely as they pleased. Some carried their rebellious and audacious spirit to such an extreme as to maintain that all belief in a sovereign ruler was a chimera; that, if the great king lived, he would sometimes reveal himself to his subjects. Others said: "Yes, the great king lives; but he is so great, so happy, so powerful, that he has no need of our services; and of what interest to him can be so poor and wretched a colony as this of ours?" Many were certain, above all things, that the magic mirror was a fable; that the great king had neither galleys



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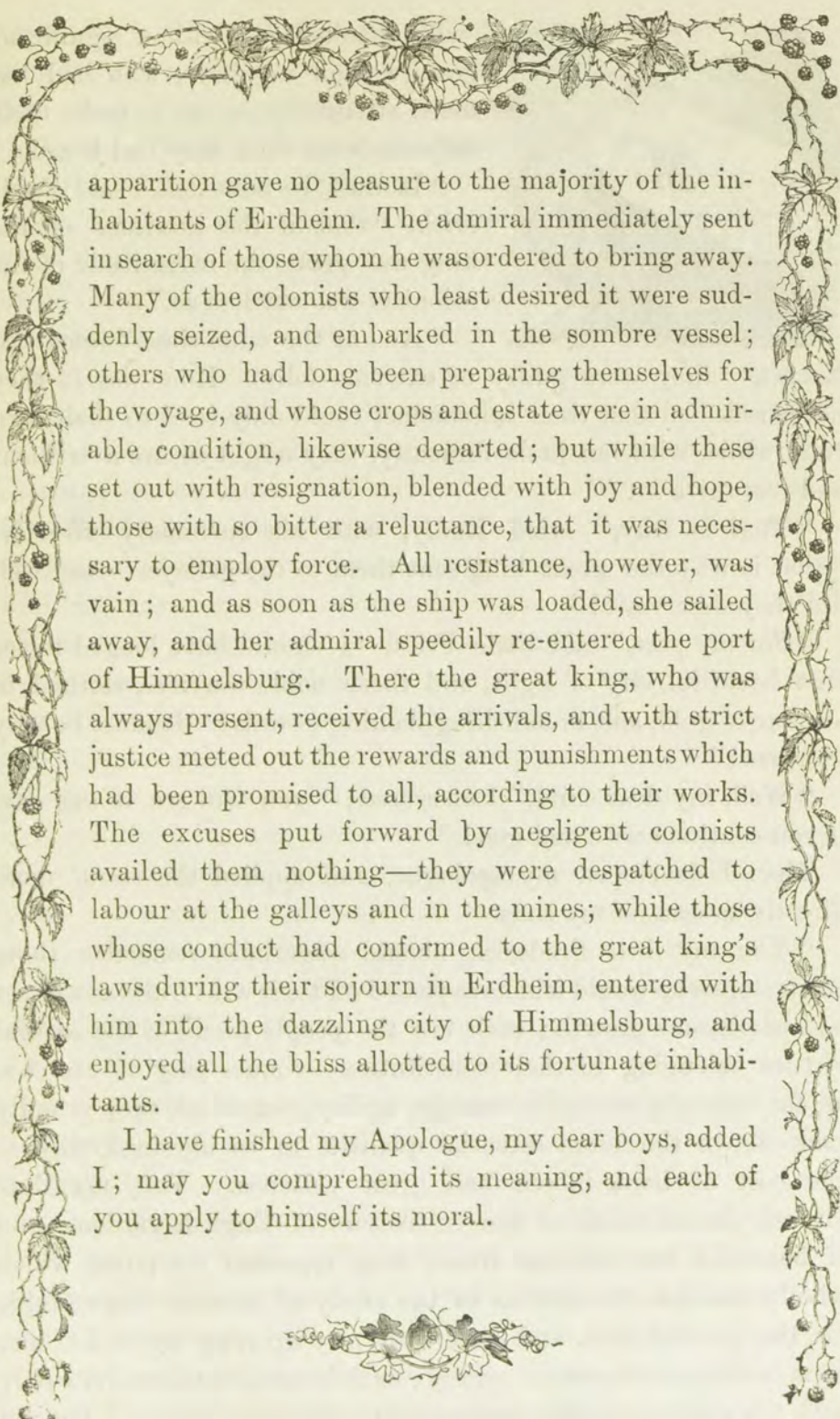
nor subterranean mines; that he was too merciful to punish his subjects; and that all would eventually enter into the rest and bliss of Himmelsburg.

Owing to these various causes, the day of the week consecrated to the great king was observed with extreme negligence; and many colonists, from idleness or weariness, refrained from attending the general assembly. "We know by heart," they said, "our king's ordinances; what will it profit us to hear the same thing constantly repeated?" A great number exempted themselves in a still guiltier manner, alleging as their excuse the work that occupied them at home; but nearly all were of opinion that the day of rest was intended only for amusement and pleasure, and that the best way of serving the great king was by enjoying his gifts in all their plenitude. The colonists who still celebrated his day according to its destination were limited in number; and even among them, too many were inattentive or absorbed and few listened devoutly, or profited by the instructions addressed to them in the name of their royal master.

However, the great king, faithful to his plan, pursued his unchanging course. From time to time, frigates, bearing the names of various diseases, made their appearance on the shores of Erdheim. They were followed by a huge ship of the line, named the *Grave*, which bore the terrible flag of Admiral Death. This flag was embroidered with green and black; and the colonists, according to their mental state, regarded it as the symbol of Hope or of gloomy Despair.


The fleet always arrived unexpectedly, and its





apparition gave no pleasure to the majority of the inhabitants of Erdheim. The admiral immediately sent in search of those whom he was ordered to bring away. Many of the colonists who least desired it were suddenly seized, and embarked in the sombre vessel; others who had long been preparing themselves for the voyage, and whose crops and estate were in admirable condition, likewise departed; but while these set out with resignation, blended with joy and hope, those with so bitter a reluctance, that it was necessary to employ force. All resistance, however, was vain; and as soon as the ship was loaded, she sailed away, and her admiral speedily re-entered the port of Himmelsburg. There the great king, who was always present, received the arrivals, and with strict justice meted out the rewards and punishments which had been promised to all, according to their works. The excuses put forward by negligent colonists availed them nothing—they were despatched to labour at the galleys and in the mines; while those whose conduct had conformed to the great king's laws during their sojourn in Erdheim, entered with him into the dazzling city of Himmelsburg, and enjoyed all the bliss allotted to its fortunate inhabitants.

I have finished my Apologue, my dear boys, added I; may you comprehend its meaning, and each of you apply to himself its moral.







My wife thanked me with a significant gesture; and my boys, who had listened attentively, began to make their reflections on what they had heard.

"It must be admitted," said Frederick, "that if the goodness of the king was great, the ingratitude of the colonists was not less so."

"And at the same time," remarked Ernest, "they were guilty of extreme folly. How was it they never reflected that their misconduct could only tend to their own ruin, while, with but little difficulty, they might secure a brilliant and fortunate lot?"

"That is why," cried Rudly, with his customary vivacity, "that is why the great king sent them to the galleys. And well did they deserve it!"

"For my part," said little Fritz, "I should have longed to see that beautiful city of light, and those noble warriors, clothed in armour of gold, and brandishing flaming swords! It must be very glorious!"

"Well, my dear child," I answered; "you will see it one day, if you continue wise and good."

Then I developed my apologue, and applied the *moral* more directly to each of my sons.

"You, my dear Frederick, should sometimes remember those cultivators who would fain have passed off their wild fruits as a sweet and wholesome growth; such are the people proud of the natural virtues belonging to their constitution—virtues easy of exercise, as, for example, strength, courage, agility, yet which they proudly rank above the more essential qualities to be obtained only at the cost of hard labour and great patience. You, my dear Ernest, should think of the cultivators of English gardens, and of beautiful but fruitless trees; they represent the minds which wholly abandon themselves to the study of sciences unprofitable for the general weal, and look with pity upon an active life and upon the improvement of society; which concern themselves only with life's enjoyments, and accomplish nothing of utility. I would



have you, my hasty Rudly, remember that those who leave their heritage uncultivated, or who do not learn to distinguish tares from wheat, will reap none but barren crops: such are the rash, the neglectful, who show themselves neither willing to study nor reflect, nor to apply themselves to discern good from evil, to practise the one and avoid the other; who throw to the winds all instruction, forget it in the course of a day, and thrust aside the good feelings to make room for the bad. But let all of us take for our exemplars the industrious husbandmen; at whatever cost, let us cultivate our soul; *that* is the inheritance which God has allotted to each one of us; let us nourish in it the celestial seeds of goodness, justice, moderation, whose fruits are virtuous actions, to the end that when, sooner or later, death shall overtake us, we may embark on board the black ship of the admiral Death without fear or distrust; and when arrived before the throne of our Sovereign Master, we may hear his gracious voice addressing to us the consolatory words, 'Well done, ye good and faithful servants: ye have been faithful over a few things, I will make ye rulers over many things: enter ye into the joy of your Lord'" (Matt. xxv. 21).

This brief address produced a deep impression on all my auditors: afterwards my wife and I sang some verses of the 119th Psalm, and my children, who knew them by heart, blending with ours their young pure voices, we terminated in this manner the religious solemnity by which we had sought to celebrate as best we could the blessed Sabbath.

Throughout the day this happy influence was felt: my children, while giving themselves up to some innocent amusements, did not forget the morning's salutary reflections; the mildness and self-control of some, the amiable eagerness and complacency of others, a certain tender and serious air among all, gave me the cheering assurance that my words had not fallen to the ground.

I had given up to the boys the bow and arrows which I had made previously to the construction of our ladder, and Ernest, who preferred these weapons to a gun, used them very skilfully to bring down a few dozen birds of the wood-pigeon tribe, which crowded the tree we had chosen for our abode. This tree, which we had at length decided to be a banyan, bore upon its branches a quan-



tity of fruit, good to eat, but of a sickly taste, and whose ripeness attracted the birds,—called the “ortolans of the Antilles,” on account of their great delicacy.

Master Ernest’s exploits brought the pastime of archery into favour: Rudly, and even little Fritz, begged also to be furnished with bow and arrows. I yielded to their desire all the more willingly, that I was not sorry to see my boys exercising themselves in this fashion. The bow, which had been the weapon of our fathers, and, indeed, of all peoples before the invention of gunpowder, might with us supply the place of the latter, when our stock became exhausted, and it was prudent to anticipate its failure. I therefore fashioned them a couple of bows, and a quiver each in which to carry their arrows; these quivers I made of a piece of thin flexible bark, which I rolled round like a tube; the bottom was of bark; and having attached to it a strap for suspensory purposes, I equipped my two little boys to their intense delight.



Frederick was busy preparing the skin of the tiger-cat which he had killed a few days previously. He thought of converting it into a belt for his pistols; but the disagreeable smell still lingering about Rudly’s, induced him to bestow more care on its preparation. In accordance with my instructions, he gave it several washings, and rubbed it with a mixture of wood-ashes and butter, which, by softening the skin, rendered it fit for the use he intended to make of it.

These different pursuits occupied part of the morning of the



Monday, until our good housekeeper duly summoned us to dinner. The ortolans killed by Ernest, our hens' eggs—for they had laid in heaps of dry herbs my wife had arranged on purpose—and a few slices of fried ham, furnished us with a repast at once savoury and substantial. The day being too far advanced for us to undertake anything of importance, we dallied over our dinner; and while discussing our projects for the improvement of our establishment, I made a proposal to my boys which pleased them extremely: it was to bestow appropriate names on all the principal points of the country we had colonized.

"As for the country itself," I added, "we will leave it without any name; for who knows but that some navigator may have already christened it? And, perhaps, it already figures on the map under the invocation of a famous saint, or the patronage of a celebrated hero. We will name, however, the different localities where we may form an establishment, or which may in any respect appear to us remarkable, so that when speaking of them we may have some means of identifying the places meant, and, by a sweet illusion, may even believe at times that we live in an inhabited country."

"Good, good," cried my boys; "it is a charming idea!"

"But, papa," said Rudly, "we must invent strange and very difficult names, like Zanguebar, Coromandel, Monomotapa; words which will blister the tongues of those who may hereafter visit our island!"

"What a fine invention!" said I, "when we should be the first to suffer, if the names we invent are to blister the tongues of those who pronounce them! No; let us be content to give to the places around us names which shall designate them clearly; and for this purpose let us take good homely German words. The language of our beloved Fatherland is so noble, that we need not seek in any other the denominations henceforth to be borne by the different parts of our present abode."

"Well, well, be it so!" cried the hasty little fellow; "but where shall we begin?"

"At the bay where we landed. Let us see, what name shall we give it?"



Each gave his opinion, and I was amused to find in the more or less boyish suggestions of my sons some traits of their characters. My wife also declared her idea.

"It seems to me that, in gratitude to the God who saved us, we ought to call it *Safety Bay*."

All our votes were given in favour of this appellation; and we proceeded to designate, by some natural or accidental circumstance, the different points already known. Thus, the eminence from whose summit we had sought in vain for traces of our lost and unfortunate comrades we named "Cape Hope Deceived;" the brook was called "Jackal River," because the carcass of that animal had made known to us one of our most precious resources—the fresh-water crabs. We christened our bridge "Family Bridge," in acknowledgment of the assistance which all had rendered in its construction; so, too, "Flamingo Swamp" and "Porcupine Plain" were chosen in allusion to the incidents that had rendered those places remarkable; but we found the most difficult place to name appropriately was our last establishment, the aerial castle of the giant tree. One would fain have called it *Baumschloss*, or "Tree Castle;" another proposed *Feigenberg*, or "Fig-Town;" Frederick wished to bestow upon it the superb appellation of *Aldershorst*, or "Eagle's-Nest;" but Ernest effectually ridiculed this high-sounding title by observing that eagles never built their nests in trees.

"I would venture to propose," said I, in my turn, "that we baptize it *Falkenhorst*, or 'Falcon's-Nest.' You are a young brood of pillaging birds, but nevertheless of noble race, susceptible of instruction, obedient, gifted with courage and vivacity like falcons; and Master Ernest himself will object nothing to this designation, because the falcons often build their nests on the crests of lofty oaks."

My advice prevailed. There only then remained unchristened the locality of our first habitation on the sea-shore; we named it *Zeltheim*, or "Tent-Town."

It was thus that in pleasant gossip we laid the foundations of the geography of our new home. After the meal was over, Frederick and Rudly returned to their occupations as curriers: one to complete the belt and pistol-cases which he wished to make out of his margai's hide; the other, to convert the spiry skin of the porcu-



pine into a defensive cuirass for our dog. The good and patient animal very complacently allowed himself to be enclosed in this warlike apparel, in which, it seemed to me, he might confront a tiger or a hyæna. Juno was not so well pleased with the costume as her comradè; for every time that the gallant dog approached her, the quills with which he bristled pricked her cruelly; she howled grievously, and was unable to shelter herself from her companion's incessant approaches. Rudly terminated his labours by fashioning out of the skin of the porcupine's head a kind of cap for his own wear as strange and as formidable as poor Turk's cuirass.

However, the sun sank, the heat decreased, everything invited us to enjoy a ramble, and I proposed to my family that the remainder of the day, already far too advanced for undertaking any important labours, should be so employed. Opinions at first were divided as to what direction we should take; but as our provisions were falling short, it was agreed we should go to Tent-Town, where our stores were placed, to obtain a fresh supply, but that we should take a different road for the sake of varying our walk. With this decision everybody was pleased: my eldest son wanted gunpowder, my wife butter, for the curriers had consumed a large quantity; Ernest wished to make an attempt to bring back from Tent-Town a couple of geese and ducks to establish them in the brook: even little Fritz had his project; he had furnished himself with a small net, and calculated upon catching some dozens of crabs in Jackal River. Rudly alone was without a scheme; but he rejoiced in all those of his brothers, and, wearing his strange bristling cap, strutted on before them in a most diverting manner.

We set out on our expedition, Frederick decorated with his belt of margai's skin, Ernest carrying a roll of cord on his shoulder, Rudly with the head-gear which gave him the air of a Carib—all armed with a gun a-piece, and Fritz carrying a bow and quiverful of arrows: as for my wife, she was loaded with a great empty pot and a bag, which she intended to fill with provisions. Turk and Billy led the advance; the former gravely, for his terrific accoutrements tempered to some extent his natural agility; his companion, still mindful of her wounds, kept at a respectful distance. Master Knips—such was the name the boys had given to our



monkey, on account of his small stature and grotesque manners—was somewhat disconcerted at finding Turk's back covered with a multitude of bristles; he consoled himself, however, by leaping gently upon Juno, for he could not dispense with the assistance of a steed. Even our stately flamingo would not allow us to travel without him; but after having kept company with my sons for some few minutes, disgusted, no doubt, by their tricks and jokes, he quitted them and placed himself under my wife's protection, very certain of not being tormented during the rest of the journey.

The route which we took, ascending the course of the stream, proved very agreeable: great trees overshadowed it, and the smooth crisp sward tempted us to wander hither and thither, without making any decided progress. My sons, following the bent of their inclinations, roamed first on one side, then on the other; but as soon as we got clear of the wood, the country appearing to me somewhat exposed, I was about to recall them, when I saw them hastening towards us, with Ernest at their head.

"Papa!" he exclaimed, out of breath, and his eyes shining with joy—"papa, such a treasure-trove! What do you think I have found?"



POTATO PLANT (*Solanum tuberosum*).

And he showed me a stem garnished with leaves and flowers, from which hung a number of small round balls of a clear green.

"Potatoes!"

I cried—for I recognized the flower, the leaf, and the small fruit of that precious plant—"O my chil-



dren, God be praised! We shall never want for food in this wilderness, since His goodness has enriched it with the potato. You have assured the safety of our colony, my dear boy; but where did you discover the treasure?"

"Down yonder, behind the wood; all the plain is covered."

We all ran thither with an impatience which you may easily imagine, and before us spread an immense field of potatoes; some already ripe, others still in flower; and the latter, spite of their lowly appearance, seemed to us more beautiful than all the roses of Persia.

"It must be owned, my dear Ernest," cried I, enraptured, "that you have made here a most interesting discovery."

"Was it not difficult?" said Rudly, enviously; "he had only to come down here to find it all out, and if I had come—"

"Do not try to lessen your brother's merit," rejoined his mother; "for if you had passed across this very field, it is by no means certain that you would have recognized the potatoes. You are quick and thoughtless, Rudly, while Ernest reflects, observes, and compares; and his discoveries are seldom due to chance."

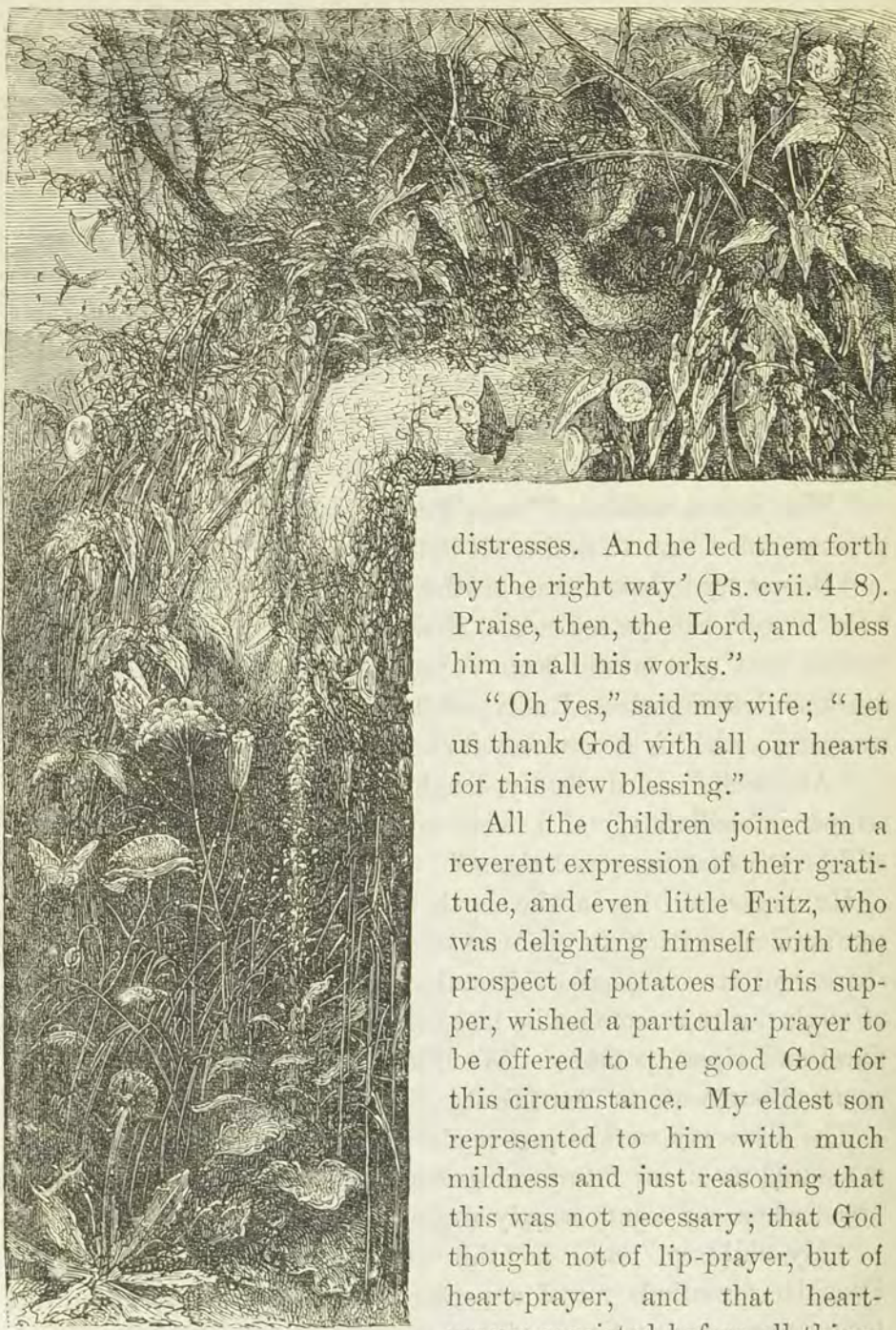
"Ah, well," cried Rudly, laughing, and recovering his good temper immediately, "if I were not the first to discover them, I will be the first to uproot them."

He began to dig in the earth with his hands, and his ardour communicated itself to the rest of us; even the monkey took his share, and it was soon evident that he was no novice at this kind of work, for in a moment he had turned up a great quantity of the finest and ripest potatoes. We filled all our game-bags, and then resumed our route to Tent-Town.

The discovery we had just made was of inestimable value to us; it assured us of our future subsistence, and would take the place of bread when our scanty supply was exhausted.

"My children," said I, "this new benefit from the hand of Providence reminds me of a passage in the Bible very applicable to our present situation. 'They wandered in the wilderness in a solitary way,' says the Psalmist; 'they found no city to dwell in. Hungry and thirsty, their soul fainted in them. Then they cried unto the Lord in their trouble, and he delivered them out of their





distresses. And he led them forth by the right way' (Ps. cvii. 4-8). Praise, then, the Lord, and bless him in all his works."

"Oh yes," said my wife; "let us thank God with all our hearts for this new blessing."

All the children joined in a reverent expression of their gratitude, and even little Fritz, who was delighting himself with the prospect of potatoes for his supper, wished a particular prayer to be offered to the good God for this circumstance. My eldest son represented to him with much mildness and just reasoning that this was not necessary; that God thought not of lip-prayer, but of heart-prayer, and that heart-prayer consisted before all things

in loving the Lord and paying devout obedience to his commandments.

"Well said, my dear Frederick," I remarked; "His benefits



ought to awaken our love, and love implies obedience, for how can we disobey those we love?"

Thus conversing, we arrived at the rock whence escaped our little streamlet, falling in a bright cascade, and with a gentle murmur. We once more found ourselves among the tall grasses, and made our way through them with difficulty—the crags on our left, and the sea on our right, at some short distance—till we reached a landscape of the most enchanting character.

The rocky wall presented the appearance of a magnificent European conservatory; only the various ledges, or terraces, instead of being crowned with vases and vessels, bloomed with the rarest and most diverse plants, nestling in every chink or cranny, and adorning every point of vantage. Here the rich flora of the tropics was revealed in all its superb luxuriance; the grasses and ferns blended charmingly with spicy stems and the most delicate blossoms; the large-leaved Indian fig, the aloe loaded with clusters of white flowers, the cactus rearing its tall straight column, like a taper crowned with purple jewellery; the jasmine, white and yellow; the





sweet-scented vanilla twining its graceful wreaths about the taller plants; while, high above all, the grass-plantain trailed its supple cords flushed with tufts of a vivid rose-red hue. But what most enchanted us was the abundance of that royal fruit, the precious anana. Several of these we ate with infinite pleasure, for hitherto we had only known the pine-apple by descriptions, and it seemed to us truly delectable, both from its agreeable perfume and its pleasant acidity of taste. My wife, always attentive to her children's welfare, cautioned them to be moderate in their appetites, lest the crudity of the fruit should render them ill. But it was difficult to check my little epicures, who, having shown Master Knips how to gather the harvest, made him bring them the largest and ripest, so that they incurred no risk of wounding themselves with the spines of the thorny bushes planted all about the rock.

While they were thus agreeably occupied, I made another discovery: among the bristling stems of cactuses and aloes I noticed a tall plant with large pointed leaves, which, from its general appearance and certain peculiarities, I decided in my own mind to be the karatas. A precious plant it is; for its leaves furnish thread, its stem tinder, and, bruised and cast into the water, it forms a bait which no fish can resist, while it renders them so lethargic that they can be caught by hand.

"My boys," I cried, "come here. I will show you something worth all your ananas. Do you see this noble plant? Look at its beautiful red flowers; its leaves resemble those of the anana; but it is of infinitely greater utility."

"Papa," replied my young gluttons, "when it bears fruit we will condescend to examine it; at present we don't know of anything superior to our pine-apples!"

"Ah, little epicures! how like you are to the generality of mankind! You only judge of things by their appearances, and I will, therefore, convince you, through your eyes, of the extreme usefulness of this plant. Tell me, Ernest, how would you light a fire if you had no flint in your fowling-piece?"

"Oh, I should do as the savages do; I should rub two pieces of wood together until they kindled."

"A long and tedious method, whose efficacy you have not yet



tested. Besides, it requires a particular kind of wood which is not to be found everywhere, while with my plant, which you treat with so much contempt, I can obtain a light in a moment; you shall see."

Accordingly I snapped in twain a piece of the karatas stem; it was hollow. I removed the pith, and striking together a couple of pebbles immediately over it, the sparks flew out, and the pith immediately caught fire. My sons stood astounded. I then explained to them the other properties of the plant, and it was with exceeding satisfaction my wife discovered it would furnish her with thread.

"What a happy thing for us," she exclaimed, "that you, my dear Albert, are so well informed, and have studied with so much industry! We, in our ignorance, should have passed by this treasure, and never suspected its value."

"You are quite right, papa," observed my eldest son; "the karatas would carry off the prize for usefulness from the ananas; but what purpose can be served by all these other plants armed with long prickles and darts, except to cripple people?"

"You are judging too hastily, Frederick; each of these plants has its mission, as it were—its part in nature's grand economy; some are filled with juices or resins, of which our physicians make daily use; others are of indescribable service in the arts or industry. Take, for instance, as a plant of peculiar interest, the nopal, or racket: it grows everywhere in the barrenest soils; it makes an admirable fence for fields and houses; its fruit, a kind of fig, is, they say, very wholesome and refreshing."

Scarcely had I uttered these words before Rudly, carried away by his love of gourmandizing, hastened to pick some of the figs I had just been praising. But the thoughtless fellow had not remarked that, like the entire plant, they were covered with thousands of small prickles, finer than the finest needles, which wounded his fingers sorely. He returned to me weeping, stamping his foot, and wringing his hands. We laughed a little at his gluttonous precipitation, and when I had removed the thorns from his fingers, I showed him how to open the fruit with suitable precautions: with my knife I split the rind of the fig, and then holding it on a

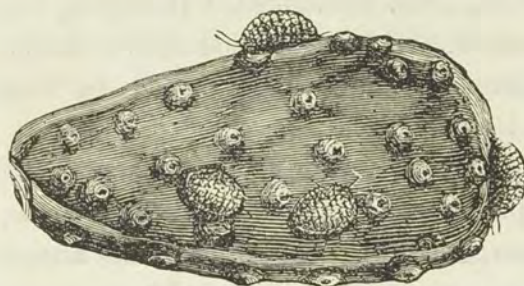


wooden skewer, stripped off the prickly envelope; the juicy contents, of a vermilion colour, were pronounced excellent. Everybody hastened to prepare some fruits in the same manner, and my little company enjoyed a new feast.

Meanwhile, I saw that Ernest examined one of these figs with particular attention.

"Oh, papa," he exclaimed, "what a curious thing! Do you see the little red insects with which this fig is covered? I have been trying in vain to shake them off. Will they not be the cochineal?"

I perceived that, indeed, they were those precious insects, whose nature and use I explained to my sons. "With these insects are made the beautiful bright colour known as scarlet. They are collected in America, and Europeans pay for them their weight in gold."



COCHINEAL INSECT (*Coccus cacti*).

Their attention having been excited by these circumstances, my boys plied me with incessant questions in reference to every plant we encountered; there was not one of which they did not want to know its uses and properties.

"My dear children," said I at last, "none but God can say for what object have been created many things which appear to us good, bad, or useless. Our experience and our studies have revealed to us but a very limited amount; but we may well believe that nothing has proceeded from the Creator's hands without sufficient reason, and that he has not endowed with life either plant or animal without assigning to it at the same time a distinct and necessary function in the admirable order of creation."

Discoursing thus on the marvels of nature, and on the necessity of increasing our knowledge of them by observation and reflection, we arrived at the Jackal River. We crossed it on a couple of large stones which embanked its bed—our bridge being much lower down—and speedily we reached Tent-Town. We found everything



in the same order in which we had left it, and immediately set to work collecting what we wanted. Frederick looked after our military stores. I opened the barrel of butter, and my wife and little Fritz proceeded to fill the tin bucket. Ernest and Rudly



ran to the bay, to attempt the capture of the ducks and geese ; but these wanderers, long abandoned to their own devices, having grown somewhat wild, the boys would have found it a difficult task to catch them, had not Ernest contrived an ingenious snare. He cut up some pieces of cheese, fastened them to long threads, and threw the bait into the water. As soon as the ducks and geese caught sight of the cheese, they swam towards it, and greedily swallowed not only the bait but the thread attached to it. The two boys then drew in their lines, and deftly brought ashore the rebellious birds, who were immediately tied by the feet, and de-



prived of all power of escape. I could not help smiling at this amusing invention, though some care was required to extract the thread from the *æsophagus* of the gluttons. We cut it off close to the beak, so that there was not much chance of its inconveniencing them.

We also furnished ourselves with a fresh supply of salt, and as our wallets were already filled with potatoes, we placed the heaviest on Turk's back, and relieved him of his bristling cuirass. Spite of their cries, we fastened the ducks and geese to our game-bags, and as the vessel of butter was too heavy for my wife, I took charge of it myself; and, after putting everything in order, we closed the entrance to the tent, and began our march, equipped even more grotesquely than on the preceding occasion.

The aquatic birds, torn from their reedy nests, filled the air with noisy and discordant farewells to the bay at Tent-Town; the grave voices of our dogs responded, and our bursts of joyous laughter frequently intermingled. This merry stir along our route seemed to lighten our burdens. We returned to Falcon's-Nest by the Family Bridge, and were not long in reaching home. My wife then lighted a fire and boiled our potatoes; afterwards she milked and fed the cows and goats. For myself, I released our birds, and after clipping their wings to prevent them from flying away, established them on the banks of our stream. With a delicious supper of smoking potatoes, milk, butter, and cheese, and our customary devotions, we closed the day's proceedings, and retired to our hammocks, blessing God for all his mercies.







## CHAPTER IV.

To-morrow to fresh woods and pastures new !

MILTON.



**L**OOKING about the beach the day before, I had remarked several curved and bended planks, apparently the remains of a ship's boat, which seemed to me well adapted for the construction of a sledge. With a sledge it would be easy for us to transport our casks and stores of provisions from Tent-Town to Falcon's-Nest, which otherwise, even with the assistance of our patient ass, our feeble strength could never remove.

At early dawn I rose noiselessly, and waking Ernest, whom I had decided to take with me—partly to accustom the lad, naturally somewhat lethargic, to more active habits; partly because I thought Frederick better able to protect the family in my absence—we quietly descended the tree, and leaving the others still plunged in profound slumbers, released Master Jackass from his rack, and fairly started on our journey.

In a short time we arrived at the shore. I had no difficulty in finding among the timbers piled upon the sand a sufficient quantity suitable for my purpose. We tied them together with the ropes we had brought, and harnessed our ass to the load, which the brave animal very complacently drew after him. To complete the cargo, we placed in the middle a chest which we found stranded on the beach, and then resumed our road to Falcon's-Nest, my son leading the donkey by his bridle, and myself assisting his progress by lift-



ing the load of timber with a lever whenever we encountered any large stones or irregularity of the ground.

On reaching home my wife was inclined to blame us for our clandestine departure; but on seeing the result of our journey, and learning that she might hope before long to be in possession of a sledge which would bring her all that was still wanting for the new establishment, she was appeased. I then opened the chest we had discovered. It contained nothing but sailors' clothes and a little linen, completely saturated with sea-water; but my wife was highly delighted with the contents, for she foresaw the time when our attire would need renewal.

During my absence, Frederick and Rudly had been hunting ortolans; but, less skilful or less fortunate than their brother, they had only brought down three or four dozen birds while consuming a great quantity of powder. I pointed out to them that such an extravagance was very imprudent in our situation, since we had no means of replenishing our stock of munitions, which would be of infinitely greater service as a means of defence than in procuring game. I therefore taught them how to make various kinds of snares for catching birds, and in this occupation the thread which we had obtained from the karatas proved of great utility. Everybody immediately set to work, and while my wife and two youngest sons occupied themselves in making and setting bird-traps, the two eldest and I began the construction of the sledge. We interrupted our various labours to enjoy our morning meal, consisting of the ortolans, a good nourishing milk-broth, and a white cheese which my wife had prepared, and which all the family pronounced a dainty dish.

After dinner, Rudly mounted to the top of our tree to dispose of a few of his snares, but quickly shuffled down again with the good news that the pigeons, which seemed to have adopted the tree as a common dove-cot, had built their nests among its branches, and were certainly going to breed.

"I resolved, therefore, not to set my snares," added Rudly, "lest the poor pigeons should be caught in them. But if you are willing, papa, we might fire a few shots up there to drive away the other birds, and we will find another place for our nets."



WOOD PIGEONS (*Columba oenas*).

I approved of Rudly's suggestions; remarking, however, that to drive away the enemies of the pigeons we need not waste our powder.

"But, papa," exclaimed little Fritz, "why don't you sow some of your gunpowder immediately, that we may have a field of it, like the potatoes? Then you would not be afraid of running short."

This simple speech was received with tremendous shouts of laughter, somewhat disconcerting my poor little boy, who thought he had discovered an excellent means of extricating us from our difficulty.



"Do you not know, then," said Ernest, "that powder is not a grain, and that it is never sown?"

"How should I know?" replied Fritz. "But come now, tell me what is this nasty powder?"

"I know that it is *made*, but *how* I cannot positively say. I think it is composed of charcoal, from its black colour; and of sulphur, from its peculiar smell when burning."

"Add saltpetre," said I, "which, indeed, is the very foundation of it. This latter substance, when combined with powdered charcoal, ignites easily, and disengages the air which it contains in a rapid and extraordinary manner; the sulphur, serving to unite the whole, also contributes to this effect."

This solution led me on to explain to my sons, as well as I could, the theory of combustion; or, at least, to state a few facts and principles, which I knew they could understand.

By the end of the day my sledge was completed. Two pieces of curved wood, bound together by four transverse beams, sufficed for its construction. The fore part resembled a couple of rude great horns, while the hind part was raised in the same manner, so as to prevent any casks or other articles placed upon the sledge from rolling off. To these side pieces I fastened the ropes designed to serve as traces for the cow and the ass, which I intended to drive in team.

On quitting my work I found everybody occupied in plucking a quantity of ortolans, which, during the day, had been caught in the snares. I blamed them at first for their prodigality; but my wife calmed me by explaining that she was preparing them for curing, according to my directions, in butter, after they had undergone a preliminary roast.

"And now that, thanks to your skill and industry," said she, "we are provided with a means of transport, we must go to our stores at Tent-Town for the remainder of our butter. Ernest tells me that the ortolan is a bird of passage; we must, therefore, profit by the present opportunity to lay up a provision which we shall recur to hereafter with great satisfaction."

No objection could be made to a proposal so reasonable, and it was settled that we should start early next day for Tent-Town.



We then enjoyed a delicious supper at the expense of our dainty birds, and after having established around us as much order and regularity as possible, we gave ourselves up to repose.

At daybreak we were all on the alert, and eager to set out. Ernest was again my companion, Frederick remaining behind to protect the rest of the family. Just as we started, my eldest son handed to each of us a belt of margai-skin, containing, besides our hunting-knife, a sheath, complete with knife and fork, and a ring in which to suspend a small hatchet. It was very ingeniously contrived, and we received our presents with a delight which fully recompensed Frederick for his trouble. Finally, we yoked our ass and cow to the sledge: for whips, each carried a flexible bamboo cane. We commanded Juno to follow us, Turk remaining behind "on guard," and we commenced our journey.

This time we travelled along the sea-shore, where our sledge progressed much more easily than it would have done through the tall grass, and in a very brief while we crossed Family Bridge, and arrived at Tent-Town.

After unharnessing our cattle, we proceeded to load the sledge. We placed upon it the butter-cask, considerably lightened by the excavations that had been made in its contents; the store of biscuit and cheese, all the rest of our tools, powder, shot, and the bristling porcupine armour that we had left behind; in fact, we piled upon our sledge everything which appeared to us calculated to be of service.

While we were thus engaged, our beasts of burden, guided by their instinct, had quitted the sterile vicinity of Tent-Town, and crossed Family Bridge to refresh themselves at their ease among the grassy pastures on the other side of the brook. I despatched Ernest and Juno in pursuit, and went in search of a convenient spot for bathing on the shore of the bay. I soon found a delightful little nook, where the waters slept in a ring of rocks, as still as a woodland pool. I waited until my son had brought back the fugitives. On seeing him re-appear, I called to him to fasten them to a post near the tent, and come and join me; but instead of doing this, I saw him hastening towards me at full speed.

"But, my boy," said I, "your beasts will stray back into



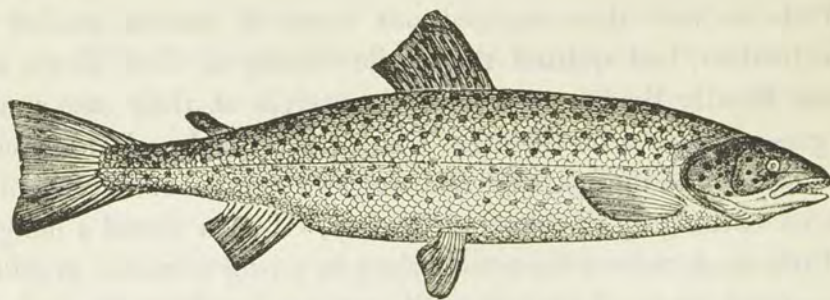
the meadow; if you do not fasten them up, how shall we catch them?"

"Oh, I defy them to run away," he cried; "I have taken up the first half dozen timbers of the bridge, so that they cannot get across."

I praised the invention, which assured us of their safety, and left us free to enjoy our bath undisturbed. Ernest was first done: I had told him to take our ass's saddle-bags, and fill them with salt, of which I wished to collect a good stock, and he now betook himself to the rock at whose base we generally obtained our supplies. He had been some time gone, and I had finished dressing, when I heard his voice loudly summoning me to his assistance.

"Quick, quick, papa! Here's an immense fish, but I cannot master him,—he will break my line!"

I ran to his help, and found that my son, after having filled his bags with salt, had thrown out his line at the extremity of a tongue of land which projected into the waters of Jackal River. The poor boy, lying flat on his stomach, with arms extended, held in with all his might a great fish which had caught his hook, and whose violent struggles threatened to drag the young angler into the current. I immediately caught hold of the line with a firm hand, and carefully playing the fish until his strength was exhausted, drew him into a shallow, whence once having entered it was impossible for him to escape. I found him to be a noble salmon, weighing at least fifteen pounds. We killed him with a blow on the head.



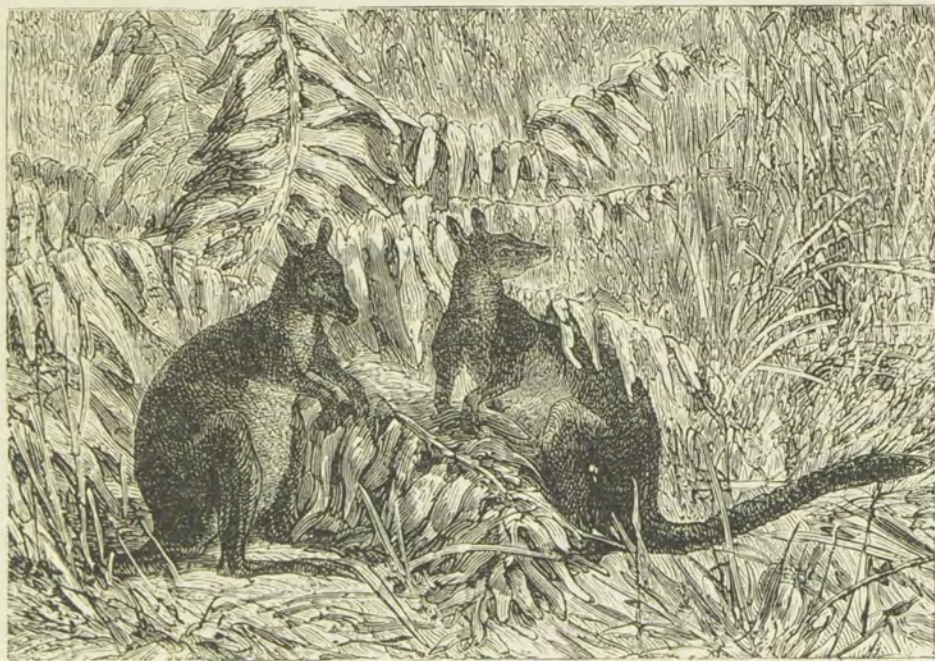
THE SALMON (*Salmo salar*).

"Ha, ha," said I, "this is a capital present to carry home to our manageress; and I give you much credit, my boy, for having remembered to bring your tackle with you."



Encouraged by these words of praise, Ernest informed me that the idea had occurred to him on our last journey to Tent-Town, when he observed that the brook at this point swarmed with fish, and he showed me a dozen small fry which he had captured before the salmon swallowed his hook. To take home our spoil in good condition, I cleaned the fish and rubbed them over with salt, for the heat was very great. Then we deposited them in a chest upon our sledge, and after having yoked our animals, much refreshed by their protracted repose, we took the road to Falcon's-Nest.

When scarcely half-way, and while skirting the high grass, Juno suddenly quitted us, and her vehement barkings soon started, at a short distance from us, a curious animal, which seemed rather to leap than run. Quick as I was to raise my gun, the creature's



KANGAROOS (*Macropus giganteus*).

irregular gait disconcerted the accuracy of my aim; I fired, and missed. Ernest, who had had time to prepare himself, fired in his turn, and with better luck, for he hit the animal just as it was about to regain its grassy covert. We ran eagerly to the spot where it fell, and stood, astonished at its singular conformation. It was about the size of a sheep; had the head and fur of a rat;



longer ears than a rabbit's; a pouch under the belly like the opossum; a tail large, round, and firm, like the tiger's; the fore-legs, armed with very strong nails, were short, and seemed not fully developed; while the elongated hind-legs were of the most curious structure.

At first we could not determine the genus to which the animal belonged; but Ernest, proud of his dexterity, was thinking less of science than of his success in bringing down such a splendid game.

"Oh, how happy I am! What a lucky shot! Won't my brothers be astonished! And mamma, what will *she* say?"

And a thousand other exclamations bore witness to his delight. When he grew a little more composed, we proceeded to examine the animal methodically; we observed the shape of its teeth, and of its paws.

"From its teeth," said Ernest, "it evidently belongs to the family of Rodents, from its paws to that of Jumpers, and by its abdominal pouch to the genus Opossum."

The word "jumpers" was like a flash of light.

"This strange creature," I exclaimed, "must be what in New Holland they call a Kangaroo: it is not astonishing that we could not identify it at the first glance, for it is very little known;\* and at all events it must be of a larger species than that which Captain Cook describes, and which the great navigator discovered in New Holland."

"Hurrah for the kangaroo!" cried Ernest; "but, papa, we must take care we do not spoil the skin; it will make a beautiful rug for mamma's feet to rest upon."

Consequently, we tied up our beast by its paws, and having slung it to a pole, contrived to transfer it to our sledge; after having taken the precaution to remove the entrails, and salt it internally, to keep it fresh until our arrival at home. This addition to their load did not at first seem pleasing to our team; but a few handfuls of fresh grass restored their courage,—they started off with increased ardour, and we soon reached Falcon's-Nest.

During our absence my wife had employed herself in washing

\* This statement is no longer correct, though true enough when the "Swiss Robinson" was originally written.



the children's clothes and linen, which she had replaced by the sailors' garments found in the chest I had brought up from the beach a few days before. Although they were not at all adapted for my sons, as far as their age and stature might be taken as a standard, yet she had preferred to see them moving about in a somewhat grotesque attire to their going entirely naked. On our arrival we were welcomed by cries of joy, to which we responded with shouts of laughter. The appearance of our little *bambinos*\* struck us as particularly ludicrous. When we understood the cause our laughter ceased, and we began to display our riches. The butter, the provisions, and especially the fish, delighted my wife; the strange animal excited the admiration of everybody. A little jealousy, however, was perceptible in the compliments which Frederick paid Ernest on his skill: however, he was sufficiently master of himself to conceal it from eyes less penetrating than a father's; he congratulated his brother with a tolerably good grace, but could not refrain from asking the favour of being allowed to accompany me on my next expedition.

"With all my heart, my son," I replied, "if it were only to reward you for having conquered an unkind feeling towards your brother. I have seen the struggle, and am proud of your exertions to master it. But I ought to explain to you that in leaving you here to protect your mother and younger brothers, I gave you an honourable mark of confidence: a noble heart finds the purest pleasure in the discharge of its allotted duty, and sacrifices to it its private inclinations. I praise you, therefore, my dear Frederick, for having striven against your ardent love of sport and remained faithful at the post where I had stationed you. To-morrow you shall come with me; but our expedition will be more important, for," added I in a whisper, to prevent my wife from hearing, "I contemplate a voyage to the ship to-morrow, and could not do without you."

This promise cleared the gloom from Frederick's brow. We then proceeded to dispose in their places the various articles we had brought with us: our cattle we returned to their stalls, providing them with what they considered a splendid entertainment, a

\* An Italian name for a dressed doll or puppet.



quantity of fresh grass sprinkled with salt: my wife prepared a portion of the fish for our supper, the remainder was salted and stored away for future use. After dinner I skinned the kangaroo, or rather, began to do so, for I was unable to finish the operation that day. I hung up the carcass in the open air, and deferred for a day or two the task of salting and smoking—or, in other words, curing—the flesh. Evening came, and with it an excellent supper of potatoes, fish, and ortolans grilled in their own fat. After returning thanks to God for another day of mercies, we all ascended with joyous hearts to our bed of verdure, where we speedily fell into a sweet deep sleep.

At the first shrill clarion-notes of chanticleer I sprung from my hammock, and, before waking the boys, descended in some anxiety to the ground, from a fear that the sight of the kangaroo suspended to a branch of the tree might have inspired our dogs to feast upon the delicacy before we had our share. I was not mistaken. As I approached the spot I found, from the growling of our two comrades, that they were already at work; in fact, they had contrived, by jumping, to seize the animal's head, and were whetting their sharp teeth upon it with infinite relish.

"Ho, ho, you impudent thieves," I cried, as I hastened towards them, armed with a pliant switch, "I am about to teach you to respect what is not yours by right."

I gave them a few hearty strokes on the back, and the two gluttons, reluctantly quitting their prey, took to flight, with terrific howls, and concealed themselves in a distant corner.

The noise awoke my wife, who rushed down the ladder in much alarm. She was quickly reassured on ascertaining the cause. While admitting that I was justified in chastising the gourmands, her good heart was full of pity towards them, and I saw her steal to their place of refuge and console them with some fragments of our evening meal.

I set to work to strip the kangaroo of its beautiful skin, taking every possible precaution not to injure it. The operation was difficult and prolonged, and kept me fully employed until breakfast. My children were up and about, busied in various little offices at their mother's side, who soon summoned all of us to



the morning meal. I asked permission to wash myself and change my garments, for the process in which I had been engaged had covered me with blood, and I was but a sorry spectacle.

Afterwards we breakfasted. I announced the new expedition we were about to undertake, and ordered Frederick to prepare all things for our departure. My wife saw the preparations with regret; but, as was her wont, she resigned herself to what she could not prevent.

When on the point of starting, I remarked that Ernest and Rudly had been absent some little time. I called them, and had begun to grow alarmed at their disappearance, when my wife satisfied me by saying that they had undoubtedly gone to the potato-field, our small stock being already nearly exhausted. However, I bade her reprimand them on their return, for they ought not to have left without acquainting us with their intention.

After a tender farewell, and an earnest appeal to my dear Elizabeth to put all her trust in God, who had hitherto watched over us with so much goodness and compassion, Frederick and I set out on the road to Tent-Town, carrying no other burthen than our arms, without which we never travelled. We had already got clear of the wood, and were nearing Jackal River, when forth sprung from a thicket and ran towards us, shouting merrily, both Ernest and Rudly. They acknowledged that when they heard me mention my design of visiting the wreck, they had stolen away with the view of joining us, and accompanying us on our expedition, which promised so much pleasure.

I received the young rascals with an air of great severity, and by no means gave them such a welcome as they had anticipated.

"If you had asked me in a straightforward manner at Falcon's-Nest, I might probably have permitted one of you to accompany us; but now it is impossible—your mother is alone, and if you did not return in a few minutes, judge how great would be her anxiety on your account! As you have acted like thoughtless boys, you must put up with the consequences. Go back to Falcon's-Nest as quickly as you can, and confess your escapade to your mother; and tell her, at the same time, that from the nature of our work aboard the wreck, it is probable we may not return to-day,



but that she need not be alarmed—I have taken every precaution for our safety.”

My two boys listened to their sentence with drooping heads and a confused air.

“That your journey so far from home may not turn out altogether useless,” I continued, “you can make a detour, and return by way of the potato-field. Fill your bags, and carry them back to Falcon’s-Nest, but don’t dally about too long: remember that your mother is easily alarmed. Get home before noon.”

They promised, and with full hearts were on the point of leaving, when I bade Frederick hand over to Ernest his silver watch, that the time might not slip by without their knowing it; and I promised Frederick one of gold when we reached the ship, for I knew there was a whole case of watches on board. This arrangement, and the delight of possessing a watch, somewhat consoled the two fugitives; and they departed, promising implicit attention to my orders. Frederick and I hastened onward to the cove where our boat was moored, and after getting her afloat, propelled her into the current with the help of a couple of stout poles, and were borne rapidly to the side of the wreck.

My first care, after fastening up our boat, was to devise some more effective means of transport, inasmuch as our crazy craft could not carry all that I wished to remove on this, which was probably my last, expedition. Frederick threw out a suggestion, to which I paid due attention; he reminded me that the savages constructed a rude kind of raft by simply binding together some trunks of trees, and supporting them with skins in the shape of bladders, and filled with air. We had no such vessels, it was true, but we had a large quantity of empty casks, which, as they were consequently filled with air, might prove an excellent substitute. Immediately we set to work; the casks, twelve in number, were securely bunged, and thrown into the water, between the side of the wreck and our old boat; upon them we deposited a platform of long planks, which we had previously fastened together with ropes and some pieces of wood. We raised all around a bulwark of about two feet in height, and thus found ourselves provided with a substantial raft, capable of carrying every kind of article.



This arduous labour occupied the whole day. We scarcely left off to lunch very hurriedly on a morsel of cold meat, which my wife had placed in our hunting-bags. Exhausted with fatigue, we retired, as soon as night came on, to the captain's cabin; but not without first examining the ship, and assuring ourselves that no immediate danger was to be apprehended. Stretched upon elastic mattresses, which our uncomfortable hammocks had almost driven from our memory, we enjoyed a most delightful repose.

At daybreak, after pouring out our gratitude to Providence for having protected our sleep and recruited our strength, we rose full of energy and ardour, and began to load our raft.

First we cleared out the cabin in which we had passed the night. I thought my wife would be heartily delighted to receive the different articles which had formerly belonged to us. We visited every corner of the vessel, detaching, with hammer and pincers, whatever we could remove; furniture, chests, windows, doors: we regarded everything as fair plunder, because some day or other it might all prove useful. Though the ship's crew had carried off their principal valuables, we nevertheless found a store of abundant wealth—some cases of jewellery, and bags full of gold and silver coins; these we were at first tempted to seize upon, but objects of greater utility and more real interest obtained the preference. I only permitted Frederick to take a few watches, partly to replace his own, and partly that from time to time I might reward my boys with a present I knew they would appreciate. The carpenter's and armourer's chests, filled with all kinds of tools, seemed to us infinitely preferable to these glittering trifles, these barren riches; and especially did I value a small box which contained some slips of our European fruit-trees, carefully packed up in moss, and ready for immediate planting.

Among these precious shrubs I recognized, with indescribable joy, the pear, and the apple, and the orange, the almond, the peach, the plum, and the chestnut, and, finally, a few shoots of the vine. We transported them to our raft, as well as several bags of grain, such as maize, oats, pease, lentils; numerous implements, for the ship's cargo having been intended for the supply of a young colony, we found a host of useful articles—a grindstone, all the fittings-up



of a smith's forge, a plough, various agricultural machines, and a quantity of lead, iron, and copper. To all this wealth we added a great fishing-net, the ship's compass, and its binnacle, and a harpoon with a couple of reels, such as is used in the whale-fishery. Frederick asked me to take this harpoon, and to attach one of the reels to the fore-part of the raft, that we might be in a position to strike at a shark if one presented himself on our homeward voyage.

There was still a host of articles to be carried in the boat; but both our craft were in due time so heavily loaded that it would have been imprudent to increase their cargoes. Before starting we fastened a stout towing-rope to our raft, and then loosening our sheet, and bidding farewell to the pillaged wreck, we began to row laboriously and slowly towards the shore.

Soon, however, the wind rose, and swelling out our canvas, considerably lightened our toil. Still our progress was slow; the floating mass which we towed in our rear retarded our bark. Frederick, who had taken to the raft, was attentively observing a strange body which seemed to swim on the surface of the water. He called out to me to port the helm, that he might satisfy himself as to its nature. I steered aside as he desired; but at the same moment I heard the whirr of the cord upon the reel, and our boat trembled under a strong shock, quickly followed by another.

"Frederick! my boy!" I exclaimed, "what are you doing? We shall be capsized!"

"I have struck it! I have got it!" shouted Frederick; "it cannot escape us."

"But what is it?"

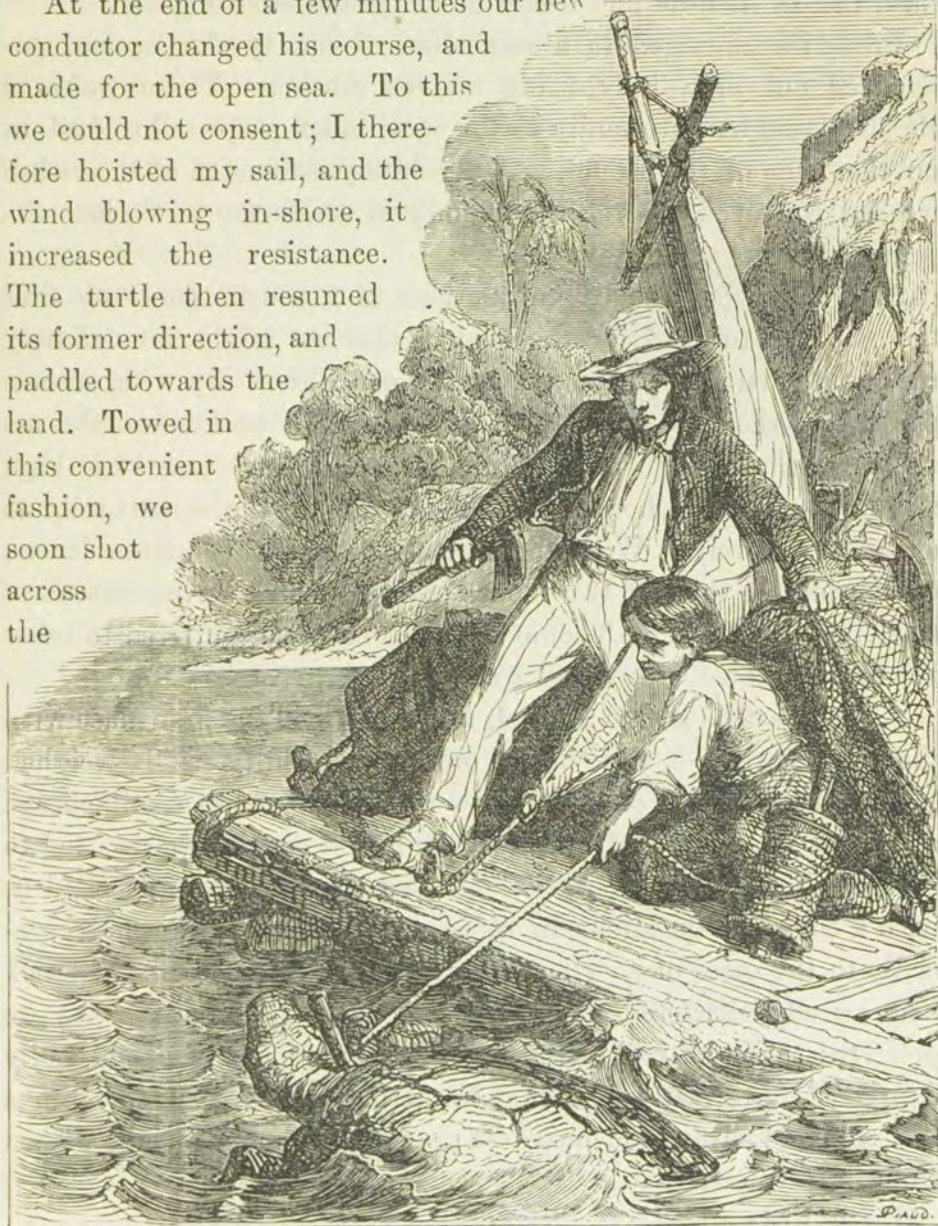
"A turtle, father, an enormous turtle! I hurled the harpoon at it, and with such good luck, that I hit it in the neck."

And truly I could see the steel of the harpoon gleaming in the distance, while the wounded turtle fled away rapidly, dragging us after it by means of the rope fastened to our boat. I lowered the sail immediately, and sprang forward to the raft, to cut the rope, and let the turtle go where it would; but Frederick begged me to do nothing, assuring me that there was no danger, and that if any threatened, he himself would sever the cable. I consented.



though with some reluctance. I saw the raft dragged swiftly onward by the animal, whose agony inspired it with fresh strength ; but as we were thus drawn to the eastward, I returned to the boat, and addressed myself to the task of keeping her head straight, that a blow against her broadside might not capsize her.

At the end of a few minutes our new conductor changed his course, and made for the open sea. To this we could not consent ; I therefore hoisted my sail, and the wind blowing in-shore, it increased the resistance. The turtle then resumed its former direction, and paddled towards the land. Towed in this convenient fashion, we soon shot across the





current like an arrow; and keeping a little to the left, we grounded in the neighbourhood of Falcon's-Nest, in shallow water, where, fortunately, there was no reef. The turtle, fatigued with swimming, was brought up on the strand. I sprang from the boat, and, axe in hand, hastened to terminate the agonies of the poor creature which had so miraculously conducted us into a safe harbour. I severed the rope, and as the turtle still struggled with great fury, cut off its head and feet, and completed our conquest.

Frederick indulged in a succession of hearty shouts, and announced our arrival by firing off his musket. These welcome signals brought our family to the spot, much surprised to find us on that side of the island, and absolutely astounded at the riches we had conveyed, and at the manner in which the turtle had expedited our voyage.

After receiving the congratulations of my dear ones, my first thought was to send for the sledge, that we might immediately remove a portion of the cargo to Falcon's-Nest. My wife, accompanied by the two younger boys, started off to harness the ass and cow; and as the ebbing tide began to leave our bark high and dry upon the shore, I availed myself of the opportunity to moor her securely. With the screw-jack and a couple of levers, we hoisted off the raft two blocks of lead, which served instead of anchors; and thus, with some strong cables, we contrived to moor not only the boat, but the raft also.

As soon as the sledge arrived, we loaded it in the first place with the dead turtle—a task of no ordinary difficulty, as it weighed fully three hundred pounds; with some mattresses, small chests, and other miscellaneous articles. Our first convoy we escorted to Falcon's-Nest, in high spirits. On the road the children plied us with a thousand questions in reference to our treasures, and especially to the cases of jewellery left aboard the wreck, for Frederick had already chattered about them. On our declaring that we preferred things of real utility to these dangerous frivolities, Rudly expressed his great regret that Frederick had not brought him a few gold and silver snuff-boxes for the rare seeds of which he wished to form a collection.

Little Fritz added :



"And at all events you might have brought me a bag of money, since you saw such lots of it, and then I could buy some spice-cakes and gingerbread when fair-time comes."

Everybody jested at the little simple fellow, who himself began to laugh at his foolish speech.

Having arrived at our establishment, I began to detach the turtle from its shell, in order that we might profit by its excellent flesh. We turned it over on its back, and propping it a little on one side, I severed with my hatchet the cartilages which connected the upper shell with the lower portion; the former is named the *carapace*, the latter the *plastron*. I cut from the animal a sufficient quantity for our dinner, and desired my wife to cook it, adding that it would require no other seasoning than a little salt.

My wife, who always felt a little repugnance towards the new meats with which we were forced to nourish ourselves, wanted to remove the green transparent fat hanging all about it.



GREEN TURTLE (*Chelonia mydas*).

"Take care what you are doing," cried I; "you will spoil all the goodness of our roast: when you have once tasted it, you will own you never partook of anything more delicious than that same fat."

I finished my work on the turtle, removed all the shell, covered the remainder of the flesh with salt, and flung the feet, head, and tail to the dogs, who fully appreciated the gift.

"Now," said I to my sons, "what shall we do with the shell?"

"Oh, papa," cried Rudly, "give it to me! I will make a pretty little boat to go sailing down the stream."

"If it were mine," said Ernest, "I would convert it into a buckler, to be of service in case of any attack from savages."

"And I," added little Fritz, "would make a beautiful little house."

"You forget, my lads," said Frederick, mildly, "that the spoils of the animal belong to him who killed it."



"And, indeed, the shell *is* fairly yours," I remarked; "but what will you do with it?"

"I would convert it into a basin, papa, and fix it here quite close to the bank of the stream, that my mother might always have clean water within convenient reach."

"Well thought of, my son! You have considered the general welfare, and not merely your individual gratification. Well, we will fix our basin as soon as we can find some clay fit for cementing it in its intended place."

"That is found already," cried Rudly; "I made the discovery in your absence."

"And I also made a discovery," shouted Ernest, "and one of far greater interest; at least, I believe so. I have found some roots very like radishes; the plant, however, has rather the character of a shrub than a herb; and I did not dare to taste the inviting-looking roots, though our pig fed heartily upon them."

"You acted wisely, my dear boy, for there are many plants which would not injure the sow, and yet would prove harmful to men. But let us look at your discovery."

He brought me a dozen large roots of the shape and colour of beetroot.

"Oh, my boys, if my science is not utterly at fault, I think that Ernest has made a discovery of the highest importance, and which



CASSAVA PLANT, OR YAM (*Manihot esculenta*).

alone, with the help of the potato, would preserve us from famine. This root, my dear Ernest, is the manioc, or yam, from which the Indians prepare a kind of bread called cassava. Used directly it is removed from the ground, the manioc becomes a violent poison; but when its poisonous juice has been extracted by pressure, it affords an aliment as agreeable as it is substantial.



We shall try it hereafter ; at present let us occupy ourselves in storing our provisions."

We returned with our sledge to the sea-shore, so as to procure a second cargo before evening, and meanwhile my wife got ready our supper.

On the road, my eldest son, whose mind still dwelt on his morning's capture, asked me some questions respecting the habits of the turtle. I informed him that, as far as I could judge, the animal which his skill had conquered did not yield the transparent and beautifully-coloured substance known as tortoise-shell, and that, therefore, we need not mind converting its carapace to the purpose he had suggested ; that the valuable product which forms so important a commercial staple belonged to a species of turtle called the *caretta*, whose flesh was not edible ; that the tortoise-shell, divided into regularly-shaped pieces over the entire carapace, was removed by fire or boiling-water, and after undergoing various processes, displayed the fine polish and agreeable shades for which it was so remarkable.

Having reached the raft, we placed on our sledge the chests brought from the wreck which contained our own effects, the tool-boxes, some cart-wheels, and a small hand-mill—the latter appearing to me of immediate utility since the supposed discovery of the manioc. The work of loading over, we returned as quickly as possible to our residence, where an excellent supper awaited us. We all seated ourselves at table ; the turtle flesh, roasted and basted with its own fat, proved a delicious dish ; and some smoking hot potatoes served instead of bread. The supper ended, my wife said with a smile,—

"My poor Albert, these last two days have almost spent you with fatigue ; I must give you something to restore your strength."

She rose, and from a cool shady corner brought forth a small bottle and a few glasses ; the latter she filled to the brim with an amber-coloured wine, and handed one to each of us. It proved to be the finest Malaga wine I had ever tasted, which the previous evening she had fallen in with while walking on the shore. Observing a small, neat, and hermetically sealed case, she had trans-



ported it, with her sons' assistance, to the foot of our aërial château, where she had covered it with leaves and moss to keep it cool.



The precious nectar so recruited our energies that before retiring to rest we resolved to remove to our exalted sleeping-chamber the mattresses we had brought ashore. We hauled them up by the pulley, and my wife, who had previously ascended, arranged them in our hammocks, where, after our customary evening devotions, we speedily fell into a sound and invigorating sleep.

I rose before day, and while my family still slept, dressed myself, and descended without noise. It was my intention to visit the shore, as I was somewhat uneasy about the possible injury the tide might have done my two boats during the night.

At the foot of the ladder I found our cattle and live stock all astir: the dogs gambolled merrily around me, the cocks crowed and flapped their wings, the goats nibbled at the dewy grass; but as for our ass, the only animal I was then in want of, he was still wrapped in the delights of repose, and appeared but moderately pleased with the preference I showed in waking him to accompany me on my projected morning walk. Despite, however, of his repugnance, I harnessed him to the sledge, and followed by my dogs, started for the beach.



I was much delighted to find that the boats had sustained no damage, neither from the violence of the waves nor the rising of the tide: the masses of lead with which I had moored them had effectually prevented them from shifting.

Without delay I loaded the sledge; only moderately, however, as I did not wish to knock up our honest "Neddy," and was in a hurry to return to Falcon's-Nest. So quickly did I get through my work, and with so much good-will did Neddy trot along, I reached home before breakfast. But what was my surprise to see none of my family, and not to hear a sound! In a state of great anxiety I climbed the tree, to find everybody still fast asleep! The noise which I made in entering our aërial tent aroused my wife, who, annoyed and ashamed that she had overslept herself, exclaimed:—

"There must have been some magic spell concealed in the mattresses which you brought us yesterday! I never before slept so soundly; and you see they have had the same effect upon our young people, who generally wake with the dawn."

And as she spoke, the latter yawned, stretched their arms, rubbed their eyes, and began to stir.

"Come, boys, come," I shouted, "look sharp; idleness is an enemy to whom we must give no quarter; the more we yield to him the more will he impose upon us. Brave boys ought to rise at the first summons, and spring immediately from their beds."

Frederick was the first on his feet; and Ernest, according to his usual slothful habits, the last. I reprimanded him gently, and besought him to conquer a lethargic disposition, which would in time destroy not only the vigour of his body but the energy of his mind.

As soon as all had descended, we joined in our usual morning devotions; and after a frugal and somewhat hurried breakfast, started for the beach to continue the unloading of our raft. We managed two journeys in succession; but as I saw the tide was rising, I sent back my wife, Ernest, and Fritz to our settlement, keeping with me Frederick and Rudly, who showed an anxious desire to wait in the boat until it was floated by the waves, and I took her back to her ordinary moorings in Safety Bay.



It was not long before we felt ourselves afloat; but instead of steering for the Bay, I was tempted by the beauty of the weather and the calmness of the sea to make a short course to the wrecked ship. We quickly reached it. The day, however, was too far advanced for us to obtain any considerable load; we could only catch up, in hot haste, the objects easiest of conveyance. My sons traversed the entire vessel; Rudly reappeared rolling along, with a great noise, a wheelbarrow, which, he said, would be of much service in carrying potatoes to Falcon's-Nest. But Frederick's tidings were of more importance. Between decks he had lighted upon a beautiful pinnace—a kind of boat with a square prow—taken to pieces, and supplied with all needful rigging, as well as with a couple of small cannon to arm her. At this announcement I abandoned everything to ascertain its correctness. And right pleased was I to see a heap of numbered planks, arranged in order, on the keel, already constructed, of the little bark; nothing was missing! I recognized the great importance of having such a boat in our possession; but could we do aught with it? How should we rebuild it—a work of immense labour which would occupy many days—and how, above all, should we launch it? The recollection of the excessive toil which it had cost us to finish our poor tub-boat induced me to renounce, at least for the time, so difficult an enterprise. I returned to our cargo; it was chiefly composed of household utensils and similar articles of utility—such as a great copper caldron, a few iron trays, some tobacco-graters, two grindstones, a barrel of gunpowder, another of gun-flints, and, as you will suppose, Rudly's wheelbarrow. I had found two others, which we likewise carried away; and loaded with all this booty, we quickly hoisted sail, to avoid being surprised by the land-breeze that arose every evening, and would have hindered our speedy return.

As we drew gently near the shore, we were greatly surprised to see a troop of little creatures ranged in a row along the very margin of the sand, and regarding us, apparently, with intense curiosity. They were clothed in black, with long vests of a dirty white; their arms hung loosely at their side, or at intervals were extended in an almost affectionate manner, as if they would fain have embraced us fraternally.



"I think," said I, laughing, "we must live in the land of the Pygmies; they have at length discovered their strange visitors, and have come hither to bid us welcome."

"No, papa," said Rudly, "they are Liliputians, though they seem to me rather larger than those of whom I have read in history."

"As if the romance of 'Gulliver's Travels' were history!" exclaimed Frederick, jestingly.

"Well, then, they are pygmies, as papa says."

"The one is no more true than the other," I rejoined; "all those stories of peoples excessively small of stature are the inventions of the old voyagers, who probably mistook some troops of apes for dwarfed men, or were willing they should pass as such, that they might have a wonderful yarn to tell their friends on returning home."

"The same is likely to be the case with *our* pygmies, papa," said Frederick; "for I begin to see they have birds' beaks; and the arms which they stretch out so amorously are a kind of wing, though certainly very short."

"You are right, my son; they are penguins, birds of the *booby* genus, as Ernest formerly told us. Now, the penguin is a capital swimmer, but he cannot fly, and on land he is deprived of all means of escaping attack."

Thus speaking, I steered in-shore, gently and noiselessly, to avoid frightening the birds. But scarcely had I reached a convenient place, than, behold! Master Rudly springs from the deck, wading in the water up to his knees. He approaches the confused penguins, and with a stick strikes right and left at the poor foolish birds. He brought down half a dozen, and the others, astounded by so shameful a reception, flung themselves into the sea, and quickly disappeared from sight. I scolded Rudly a little for so precipitately jumping into the water, and incurring the risk of drowning for so little gain; since the penguin's flesh, though covered with fat, is by no means good eating.

While we were mooring our boat, some of the birds, which had only been stunned, rose, and stalked gravely across the sand to reach the sea. Of course we opposed their retreat. We seized



them with the utmost ease; bound their legs with stout grass, and having filled our three wheel-barrows with the handiest articles, not forgetting the graters and iron-plates, we added the results of Rudly's semi-aquatic hunt, and set off for Falcon's-Nest.

On approaching our residence, I was gratified to find that our brave dogs gave notice, by prolonged barking, that visitors were at hand. As soon, however, as they recognized the strangers of whose arrival they had given notice, they manifested their noisy joy by leaps, and jumps, and endless gambols. Everybody hastened to meet us. Our stores were subjected to a prolonged and curious examination; they laughed a little at my tobacco-graters, but as I had an idea in my head I let them laugh. The living penguins I wanted to add to our poultry-yard, and I instructed my children to tie them securely by one foot each to a goose or a duck—although neither were very well pleased with the enforced companionship, and it was some time before a harmonious understanding prevailed among them.

My wife showed us a plentiful provision of potatoes which had been dug up during my absence; as well as a quantity of the roots which, the evening before, I had pronounced to be the manioc. Assisted by her two children she had collected all these supplies, and I warmly commended their thoughtful activity.

Afterwards we supped, and conversed of the things still remaining in the ship, and particularly of the pinnace we had been forced to abandon. My wife did not share our regrets upon this one point—she had always regarded our maritime adventures with repugnance; however, she owned that her anxiety would be diminished if we were provided with a small sea-worthy boat like the pinnace.

The day being far advanced, we made our usual evening preparations; but before retiring to rest I said to my sons:—

“Wake in good time to-morrow, gentlemen, for I want to teach you a new trade.”

“Oh, what is it, papa?” they all exclaimed; “what kind of trade?”

“You shall know in the morning: now go to sleep.”

The night passed quietly; and at the first faint dawn of day



curiosity roused my boys from their beds—roused even the indifferent Ernest, whose slothfulness had become proverbial among us.

“Papa, the trade!” they exclaimed, as soon as they found me awake.

“The new trade! You are going to learn it at once; come along, my boys, and I will teach it to you.”

We soon found ourselves on *terra firma*, and when all our little preparations were completed I said to my sons, who watched my movements with ill-disguised impatience,—

“Gentlemen, the new trade I am going to teach you is that of a baker.”

They all stood astonished.

“What! a baker?” inquired my wife, from whom I had carefully concealed my project; “a baker? And where, Albert, is your mill to grind the barley? and where your oven to bake the bread? And, first of all, where is your flour?”

“All shall appear in due time,” replied I; “only be calm, be composed; just at present I require two medium-sized bags of sailcloth, if you will get them ready; trust all the rest to me.”

She obeyed; but before she began a stitch I saw her place on the fire a large potful of potatoes; from which circumstance I gathered that she had but little faith in my success. Meanwhile, my sons brought me some of the manioc roots, which had been well washed and thoroughly cleaned. Then I stretched upon the ground a large sail, and giving to each of my sons a tobacco-grater (which I had likewise washed) and a few roots, I set to work, and, imitating my example, all grated their roots with the utmost assiduity, taking care that the manioc fell upon the sail. In a few minutes each had before him a little heap of what looked like damp sawdust, and certainly presented no very attractive appearance; but the lads were well pleased with their work, and entered into a vigorous competition.

“Here are some capital raspings!” shouted Ernest, with a burst of laughter; “bread made out of these will be something superlative!”



"It is the first time," said Rudly, in the same tone, "that ever I heard of bread made out of scraped radishes."

"I can't say I like the smell," added little Fritz, who rasped or grated away, however, with astonishing ardour.



"Laugh as you will, gentlemen," I replied; "have your quips, and your jokes, and your jests—your judgment I will ask hereafter. But I must confess my astonishment that you, Ernest,



should forget that manioc is one of man's most valuable alimentary substances, and that it forms the staple food of a great portion of the population of America, where even Europeans prefer it to ordinary wheaten bread. But go on with your work."

A sufficient quantity of the roots having been grated, I filled the two bags which my wife had sewn, pressing the pollard with all my might, until the manioc juice began to exude in every direction. But I found it would be necessary to apply a stronger pressure to extract this juice, which is a potent poison. Among our stock of timber I accordingly picked out a strong oaken beam, the bottom of which I cut away till it was small enough to be inserted under one of the roots of our great tree; at the base of the root I piled up a small platform of logs, and placed across it a bag of pollard. I then kept down the bag with a flat heavy piece of timber, secured the end of the beam to the tree, and by our united exertions drew the opposite end as near the earth as possible. To this we now suspended the weightiest articles we could find—hammers, bars of iron, masses of lead; the whole pressing upon the bag of manioc with a force which made the juice burst through the pores of the cloth, and trickle to the ground copiously. When I thought the pressure sufficient I removed the bag from the lever, and opening it drew out a handful of its contents, still rather moist, and resembling maize-flour.

"This is capital!" I exclaimed, enchanted with the result of my operations. "Now let us spread out the pollard upon a clean cloth, to dry it thoroughly: we shall soon have a supply of bread, not, perhaps, resembling our wheaten loaves in form or taste, but. I promise you, of very good quality notwithstanding. I now go to build an oven."

Having lighted several fires, I placed upon them the iron trays which I had brought from the ship on the preceding day; and as soon as they were heated, I spread upon them the cassava (for such is the name given to the farina of the manioc) to complete its drying. It collected into tolerably compact heaps, which we diligently turned and turned, so as to dry them thoroughly on every side.

My wife and children were in a flutter of excitement. All



wanted to taste the cakes, which now looked very appetizing, and it was with some difficulty I made them understand that they were only flour, and that another process was required before they would be eatable.

"Besides," added I, "of the three species of manioc one is much more deadly than the others; and as I am not quite certain how this is prepared, we had better test the quality of our cakes, in the first place, upon our poultry and monkey, lest we should poison ourselves, or at all events bring on a serious illness."

Consequently I threw a few morsels of the cassava to our hens and Master Knips: the latter soon gobbled up his portion, and the hens did not leave a solitary crumb.

I was reassured by the experiment, but I thought it advisable to watch its ulterior effects; and suspending for awhile our baking operations, we breakfasted upon the potatoes which my wife had taken the precaution of cooking. During our meal, we naturally conversed upon the manioc and upon its different uses. I informed my wife that a capital substitute for starch was made from the juice; but the information did not interest her particularly, since, clothed as we were in true nautical garb, she had no shirts or collars to starch. We also talked of poisons, and as I explained to my sons their various characters, I took care to caution them against the fruit of the manchineal tree, which probably grew in some part of our island. I described to them its appearance—which resembled a luscious golden-yellow apple, spotted with red; and reminded them that even to sleep in its shade was, according to some accounts, exceedingly deleterious. I therefore forbade them to eat any unknown fruit until it had been shown to me, and made them understand the importance of faithfully keeping their promises in this respect.

On rising from table we visited our fowls. Rudly whistled for Master Knips, who, at the signal, descended in three leaps from a tall tree, where, probably, he had been pillaging a nest. His liveliness and gaiety, as well as the peaceful cluck-cluck of our hens, satisfied us that the cassava had been wholly relieved of its dangerous properties, and I therefore resolved to give my children the pleasure of making their cakes and eating them. We re-



lighted the fires, and heated the iron trays; while I broke up the cassava flour, and kneaded it with a small quantity of milk. Each of us set to work. Having provided them with a cocoa-nut shell full of the paste or dough, I bade them imitate me exactly. With a spoon I poured a certain quantity of paste over a hot plate. As soon as I saw, from its swelling, that it was done on one side, I turned it with a fork, like a pancake, and in a few moments we were provided with a number of delicious cakes of a golden yellow, whose savoury smell equalled their appetizing appearance. All my family pronounced it a banquet fit for a king, and it was unanimously decided that thenceforth we should address ourselves to the cultivation of the manioc, since it furnished a food at once so delicate and so nutritious.

Next day I decided on paying another visit to the wreck. I could not banish from my mind the idea of the pinnacle, and my anxiety to obtain possession of it left me no peace. It was with much difficulty I obtained permission from my wife—whom these voyages always rendered unhappy—to take with me this time our three elder sons, for I knew I should need all the strength I could command. I promised to return the same evening; and at last we set out, carrying with us a day's supply of provisions. My young people were enchanted with the expedition; and Ernest especially, who had not been a single voyage, promised himself a peculiar treat.

We quickly reached the wreck, and began loading our boat with everything which seemed worth carrying away; but the grand affair, the main difficulty, was the pinnacle! She was stowed away in the ship's hold, immediately under the officers' cabin. How were we to get her out? True, the various portions had been taken to pieces, but from their bulk it seemed impossible for our feeble arms to transport them elsewhere; and if we put them together again how were we to launch her? I rubbed my forehead in a state of the utmost perplexity, without devising any escape from the dilemma, and yet I could not give up my project.

At length my sons, with the confident audacity of youth, exclaimed,—

“Let us first widen the space around her by knocking down these partitions, which prevent us from working. Then let us



rebuild the boat, since there is nothing more to do than to put the different pieces together in their proper places, and fasten them with bolts. After that, we daresay you will find some means of getting her out."

Under any other circumstances I should, perhaps, have demonstrated to my children the extreme folly of such a project; but an undefined hope of eventual success tempted me to undertake it, and I cried,—

"All hands then to work, and may Heaven prosper us!"

Throughout the day we toiled with unabated spirit, and towards evening the bulkheads were down. A clear area was opened up for our future exertions, to which we were encouraged by this first success. But it was now time to think of putting to sea; and with our cargo we set sail on our homeward voyage, fully resolved to return next day, and every day, until we had successfully accomplished our enterprise.

On disembarking in Safety Bay, we found my wife and little Fritz awaiting us on the shore. Elizabeth informed me that she had quitted Falcon's-Nest and established herself at Tent-Town, where she intended to remain until our great task was completed, partly that she might be nearer to us, and partly to save us every morning and evening a fatiguing journey.

This provident affection moved me deeply, for I knew how she loved the pleasant shades of Falcon's-Nest.

I tenderly thanked her, and to give her some gratification in return, displayed before her the treasures of our new cargo; two casks of salt butter, three of flour, several bags of grains and rice, and all kinds of useful utensils, which filled up our store-house, and afforded evident satisfaction to our manageress.

For a whole week we spent every day on board the wreck, engaged in rebuilding our pinnace; and as we punctually returned each evening at sunset, my wife gradually grew accustomed to our voyages, which at first had caused her so much anxiety. Our evening meal was always heartily enjoyed, and enlivened by our recitals of our different occupations during the day, while the pleasure we felt at our reunion invariably diminished our fatigue.

By dint of sheer hard work, by fixing the mortises and driving



in the bolts, our task daily advanced towards completion, and our pinnace began to assume a graceful outline. She was, in truth, very light and elegant in build, and from her appearance one could see she would be a good sailer, for her keel was nearly as smooth as that of a brigantine. We caulked her carefully; that is, we stuffed the seams with tow dipped in melted pitch. She was rigged with one mast, and carried the same amount of canvas as a brigantine; there was a half-deck at the stern; and we completed her equipment in every particular, even to mounting her two small guns on the poop.

There was our pinnace, but, unfortunately, immovable on the stocks. However, we admired her incessantly; walked round and round her like children; but we could devise no means of extricating her from her position. The difficulties of opening a passage for her through the mass of beams and planks covered with copper, which formed the ship's side, appeared insurmountable; and yet they did not damp my ardour. Suddenly the very excess of my despair suggested a bold but perilous project, by which it was very possible to lose all, instead of gaining all. Without communicating it to my boys, whom I wished to spare the chagrin of its probable failure, I proceeded to put it into execution.

I found on board the wreck an old iron mortar, which I filled with gunpowder, and hermetically closed with a stout oaken beam, fastened to the mortar by stout iron clamps. In one of the sides, just underneath this lid, I bored a hole to receive a sulphuretted match, and the match I made of such dimensions that I calculated it would take quite two hours to burn. All around the plank I filled in a quantity of pitch. Then I secured it with iron chains to increase the solidity of my machine, and suspended it to the ship's side, in the neighbourhood of the pinnace. These preparations completed, I gave the signal of departure to my sons, who, meanwhile, had been busily occupied in loading the boat. I delayed a minute or two to ignite the match, and then rejoined my children, silently praying Heaven to crown my plan with success.

My first care, on disembarking, was to unload our boat with all possible rapidity, as I intended returning to the ship the moment the explosion took place. While in the midst of our work, a violent



report was heard out at sea, which filled my wife and children with sudden terror.

"Oh! what is it—what can it be, papa?"

"Perhaps," said Frederick, "it is a signal of distress from some vessel in danger?"

"No," said my wife; "I rather think the report, which seemed to come from the direction of our ship, was that of an explosion. You have lit a fire, and a barrel of gunpowder has blown up!"

"You are right," I remarked; "we must go and clear up the matter. Who will accompany me?"

By way of answer my three boys leaped into the boat, and after promising my wife to return immediately, we pushed off. Never had we made the trip in so short a time. Curiosity lent twofold energies to my young rowers, and I myself was hotly impatient to ascertain the result of my experiment. I grew composed as we approached the wreck on seeing neither smoke nor flames issuing from her broadside, and that not even her position was changed. Instead of drawing alongside at the usual place, we pulled round the vessel's bow, and made for the opposite side. The sea was strewn with pieces of timber; the vessel's bulwarks were completely smashed; and the pinnace, uninjured—only heeling slightly over the stocks—was completely exposed through the opening made by my novel petard. At this welcome sight I exclaimed, with a transport which not a little astonished my sons:—

"Victory! victory! The beautiful pinnace is ours! My stratagem has succeeded, and now we shall easily get her afloat!"

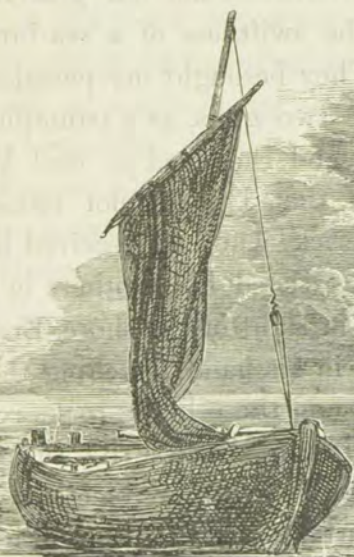
"Whew!" cried Frederick; "now I begin to understand it. Don't you see that papa himself has blown up the side of the ship to liberate our pretty frigate? But how did you manage it all so exactly?"

"I will explain it to you," said I, as I fastened our boat to one of the ship's beams; "but let us first make sure that no sparks are smouldering on board."

Quickly did we clamber through the rent flank of our unfortunate ship, and carefully did I examine every corner, fortunately without discovering anywhere the slightest sign of fire. It is impossible to describe the exultation of my boys when they saw the



pinnacle completely clear of all incumbrances. Shouts of admiration were followed by a volley of questions. I then explained the process by which so successful a result had been achieved. In fact, the mortar, when bursting, had struck the ship's side, and its weight, added to that of the iron chains around it, had done the work simultaneously of a shell and a hatchet. Planks, beams, joists—all had been shattered; and the pinnacle was now but a few feet from the sea-level. It was an easy job to clear the approaches, and as I had previously taken the precaution of laying her keel on rollers, we proceeded to launch her in precisely the same manner that we had launched our boat of tubs. With the screw-jack and a couple of levers, we propelled her gently; a very stout cable was fastened to her sides, to prevent her from sheering too great a distance from the ship; and soon our combined efforts launched her on the waters, where she speedily righted herself, and floated with infinite grace.



It was too late to do any more that day. I contented myself



with securing the pinnace against the violence of the waves, and then we pulled rapidly towards the shore, not to prolong our good housekeeper's anxiety. We agreed to say nothing to her concerning our success, that she might have the agreeable surprise of seeing us arrive at Tent-Town in our beautiful little vessel. We therefore only told her that a barrel of gunpowder had exploded, without doing any further damage than opening another entrance to assist us in our plunder of the vessel. At this information she sighed deeply, and I believe that in her heart she wished at the bottom of the sea the shattered wreck which tempted us to make so many dangerous voyages.

The rigging and final equipment of the pinnace cost us several days of unremitting labour. At length, when she had her mast and sails on board, we loaded her with a variety of articles which our weak tub of boats could never have carried.

We set sail. The wind was favourable, and our graceful bark glided through the waves with the swiftness of a sea-bird. My sons were in a fever of delight. They besought my permission, on drawing near the shore, to fire the two guns, as a triumphant and military salute to their mother; and they had so well kept the secret, and so courageously toiled, that I could not refuse them this slight satisfaction. So Frederick, who had received his commission as captain of the frigate, assisted his brothers in loading their artillery, and when we hove in sight of the shore, Ernest and Rudly, each with a lighted match in his hand, watching the signal from their brother, fired his gun, and the echoing rocks repeating afar the loud report, both my wife and little Fritz rushed from their tent in sudden alarm; but recognizing our voices, as we gave vent to a succession of joyous hurrahs, my wife waved her hand in token of welcome. As for Fritz, he was spell-bound with admiration of our splendid vessel.

When at length we reached the rock which served us as a quay, and where there was just sufficient water to float the pinnace, the two came down to meet us.

"Naughty boys!" she exclaimed; "what a fright you caused us with your artillery! I thought that this time the entire wreck had blown up; but, thank God, here you all are, safe and sound!"



Frederick now threw a plank from the pinnacle to the rock, and my wife ventured on board. She admired everything, and warmly praised our courage and perseverance.

"You have certainly worked hard," said she; "but pray don't fancy that Fritz and I have been lazy during your absence. If we can't announce our labours in so startling a manner as you have just done, a few good dishes of vegetables, which will in due time and place make their appearance without any noise, will also have a merit of their own. Would you like to see at once what we have been doing?"

We could not refuse so gracious an invitation, nor deny ourselves the pleasure of satisfying our curiosity. We quitted our pinnacle, mooring her securely to the shore, and with joyous steps followed our good manageress, who led us to the rocks where Jackal River rises, and introduced us to a splendid kitchen garden, neatly laid out in beds and walks. I could not recover from my surprise.

"This is my work, or rather *our* work," said my wife, as with affectionate pride she embraced little Fritz; "for this dear boy has worked with as much energy as I have done. The soil just here, composed of nothing but decayed leaves, is very light and easy to work. Yonder I have planted potatoes; there manioc roots; to the left pease, beans, and lentils; in the beds on this side are sown salads, radishes, cabbages, and all kinds of European vegetables. Here a place has been reserved for sugar-canes; I have already transplanted some ananas, and sown some melon-seed, which, I think, will answer famously. And, to conclude, I have sown all around the beds a quantity of maize, whose tall tufted stems will protect the young plants from the sun's excessive heat."

I was lost in wonder. I could not understand how a woman and a boy of Fritz's age had carried out such an enterprise in so short a time; and I was astonished at the discretion they had both exhibited.

"I frankly confess," said my wife, "that when I began my task I did not think I should bring it to such a successful conclusion; and for this reason I said nothing about it. Then, afterwards, I conceived the idea of giving you a pleasant surprise; and as for the secrecy which Fritz and I have so long preserved, there is no great



merit in it. Your continual voyages to the ship, and the silence you maintained respecting your daily occupations, convinced me there was some mystery in hand. We wished to take our revenge, and to surprise you in turn. Have we succeeded?"

"Perfectly," said I, embracing her, as well as my dear little Fritz, whose bright eyes sparkled with mischievous pleasure during his mother's explanations. After having once more praised their most useful labours, we returned to our boat; my wife, whose mind was absorbed in horticultural studies, reminding me, as we went along, of the fruit-trees we had brought from the wreck.

"I have covered them carefully with mould and grass," she observed, "and watered them daily to keep them fresh; but if you do not wish them to be ruined, it is time they were properly planted."

I promised that that should be the next day's work, and that I would establish my orchard in the vicinity of her kitchen garden.

We then busied ourselves in unloading our pinnace, depositing on the sledge all such articles as we thought might be useful at Falcon's-Nest; and having disposed of the remainder in our tent, we anchored the pinnace securely, besides mooring her with a strong cable to a post driven in ashore, and started for our forest residence. We lost no time on the road, for my wife longed to escape from the heat of Tent-Town and its burning plain, and all of us needed rest after our heavy toil.

During our residence at Tent-Town, and our daily voyages to the wreck, we had not neglected the due observance of the Lord's day. Our return to Falcon's-Nest was marked by a suitable solemnity: a new parable, appropriate to our position; and the reading of the Bible, whose pages are so full of consoling truths, completed for the day our religious exercises. It was with intense pleasure I watched the development in my children's minds of a feeling of devout thankfulness towards God, and read the straightforward expression in their countenance and looks, more serious on that day than was their wont. However, after dinner I felt the necessity of diverting their thoughts a little; and as it was my fixed principle to render whatever they ought to love as agreeable



to them as possible, I gave my young family permission to pursue their ordinary amusements.

To render these amusements useful, I reminded my sons of the gymnastic exercises in which they had taken so much pleasure the first Sunday we spent in the island. I wished to develop in them their natural vigour and energy; strength and agility being qualities too needful in our lonely situation for me to suffer any neglect of them. This time, to the sport of archery I added racing, leaping, and climbing trees—either by scaling up their trunks or by means of a rope suspended to the higher branches, in imitation of a ship's shrouds.

When all these games, in which my boys displayed more or less skill, were exhausted, I taught them one hitherto unknown to them; that of the lasso, a powerful weapon which the people of South America employ in hunting the panther, the wild horse, and the buffalo. Two large leaden balls I pierced with a puncheon, and having selected a stout cord about twelve feet in length, I fixed one to each end.

"Here, gentlemen," said I to my sons, who were looking at me very curiously, "here is a very simple weapon, but one day it may prove of the greatest utility. It is a kind of sling, as you see; but the weight, instead of striking the object towards which you direct it, returns upon itself, and thus entangles in an inextricable manner whatever the rope catches in its coil. I described the manner in which the Mexicans make use of these lassos to capture the wild horses; but as my young people seemed somewhat mistrustful of their marvellous effects, I myself made the first essay.

They pointed out to me a shrub standing at a certain distance; I flung one of the balls with my right hand, while holding the other in my left; and whether through chance or skill, the ball grazed the trunk, and returning suddenly on itself, formed a running knot, which I took care to draw as tight as possible.

"You see," said I, approaching the tree, and winding up the cord, "had this tree been a panther's neck, I should easily have mastered the animal."

This experiment raised the exercise of the lasso into high favour. Frederick soon acquired a remarkable degree of dexterity, and I





HUNTING WILD HORSES IN MEXICO.

pressed my sons to imitate his example, since such a weapon might one day be a great resource to us, and a substitute for our firearms when powder and shot were exhausted.

The next day the sea being much disturbed, as we could easily perceive from our "castle in the air," we were not tempted to return to the ship, and we occupied ourselves in effecting several improvements in our establishment. My wife made me inspect all the work she had accomplished in our absence. First, she showed me a cask of ortolans half-roasted, and preserved in butter, for winter provision; then a quantity of cassava cakes which she had carefully dried; next, she pointed out an awning spread above the roosting-place of our pigeons; and finally, she called my attention to our European fruit-trees, which she had kept quite fresh. I immediately looked out a suitable site for our orchard, and with the help of my sons, turned up the soil, and planted our young trees.



In this kind of work the entire day passed by ; but as our sole food had consisted of potatoes, cassava bread, and milk, we decided that on the morrow we would go hunting to replenish our larder with some pieces of game.

The first beams of morning found us on the alert, for on this occasion everybody, even my wife, intended to accompany me. She knew nothing of the country, and looked forward to her walk with much zest. After prayers, breakfast, and feeding our live stock, my sons and I took our firearms ; I harnessed the ass to the sledge, for the convenience of carrying home our spoils ; we furnished ourselves with provisions, and quitted Falcon's-Nest. Turk, splendidly clad in his porcupine armour, marched at our head ; my three eldest boys, armed with fowling-pieces, formed the vanguard ; their mother, leading the ass, and attended by little Fritz, composed the main body ; and myself, at a short distance, brought up the rear, our procession being rendered amusing by Master Knips mounted on patient Juno's back.

At first we skirted Flamingo Marsh, my wife never weary of admiring its beautiful vegetation and colossal trees. Meanwhile Frederick, who judged the spot a suitable one for finding game, had strayed a few paces from us, and when we least expected it, a loud report boomed upon our ears, and almost simultaneously an enormous bird fell at a short distance in the thick of the tall grass. Off started our dogs, and I quick y followed. I found Frederick puzzled how to seize his victim, which, though stretched on the earth and wounded in the wing, defended itself furiously with its beak and feet. Approaching cautiously, I flung my handkerchief over its head, and thus, by blinding and confusing it, reduced it to subjection. Tying its wings together, and its two feet, we carried the noble prey to the sledge, where the remainder of the family awaited us.

"Oh, what a superb bird !" exclaimed my wife, echoed by the children, when we reached them, and deposited our heavy load, which weighed not less than thirty pounds.

"It must be an eagle !" cried Rudly, admiringly.

"Papa," inquired Ernest, after carefully examining it, "is it not a bustard ?"



"Good!" cried Frederick, contemptuously; "where, then, are the webbed feet which, as you say, distinguish the palmipeds?"

"Do not laugh, Frederick; your brother is right; the bird is a bustard, though her feet are not membranous; she is also called the hen-bustard, though wanting the spur characteristic of the *Gallinaceæ*. But the language of hunters preceded that of naturalists."

"Ah," shouted Rudly, joyously, "she is one of those large birds which we started here once before, and which neither Ernest nor I could bring down. Do you not remember, mamma?"

"I do indeed think," said mamma, after examining it; "I do indeed think this is one of the birds. But," continued she, pityingly, "perhaps the poor creature's brood are hidden among the reeds; I think we ought to give her her liberty."

"Do not concern yourself, Elizabeth," I replied; "the little ones will provide very well for their own necessities. Besides, I want to tame this bird: when her wound is healed, she will make a noble addition to our poultry-yard, and, under any circumstances, will provide us with a capital dish."

After I had bandaged her wound as well as I could, we transferred the bustard to the sledge, and continued our journey. We quickly reached the Monkeys' Wood; for such was the name we had bestowed on the palm-groves where the apes had welcomed us with a volley of cocoa-nuts. Frederick related, laughing, the amusing incident to his mother and brothers. Ernest stepped to the front, and paused before a palm, whose stem was crowned with a quantity of beautiful fruit. He sighed as he said,—

"There's no chance of our climbing these trees! Come, Messrs. Monkeys, come and gather these fine nuts."

But the apes made no sign, and my little gourmand seemed sadly disappointed.

"Ah, who knows," he continued, with his eyes still intent upon the nuts, "perhaps they will fall when ripe!"

He had scarcely uttered the words, before one of the largest nuts came crashing down, almost on the nose of the young naturalist.

"Humph," said he, "this is like what one reads of in fairy tales! Scarcely is the wish formed before it is accomplished."



"Perhaps," I observed, "the genius of the tree may appear in the guise of an ape, and salute us with a bombardment, if we remain here any longer. Let us be off."

However, we could see nothing moving among the branches—not even a breath stirred their leaves—and we soon lost our feeling of uneasiness, though we could not divine why the nut had fallen, and as it was not yet ripe, it could not have fallen of itself.

While we were examining the tree and its fruits, the rest of our party came up. Then happened an inexplicable circumstance. Four fresh nuts, answering to the number of arrivals, successively fell, and came rolling to our feet, though neither the tree nor branches were even slightly shaken.

"Come," said I to my children, "we can no longer doubt the cause of this event! Some invisible magician is amusing himself at our expense—or, rather, for our advantage."

But Frederick, who had now got round the tree, here exclaimed,—

"I have found the magician, and certainly he is ugly enough to be considered one. Come and see, papa! Such a horrible head—large, round, and as big as my hat—with two terrible claws which he stretches before him—he is descending the tree."

At these words little Fritz took refuge with his mother. Master Ernest, not altogether himself, looked around him with anxious uneasy glances. Rudly alone, brandishing the butt-end of his gun in the air with a threatening gesture, made a step in advance; and all of us, full of curiosity, awaited the appearance of the monster described in such fearful terms by Frederick. Our impatience was not long provoked. An enormous crab soon showed himself, and advanced in utter disregard of our presence. Brave Rudly dealt him, as he passed, a blow which should have stunned him; but the beast, undismayed by the attack, opened his formidable claws, and marched straight upon his assailant, who, seized with affright, fled swiftly, loudly screaming. His brothers began to laugh at him; the gallant little fellow stopped, and recovering his presence of mind, took off his jacket, suffered the crab to come within reach, and then deftly flung his jacket over his back, paralyzing the creature's movements.



It was an excellent manœuvre, but it was necessary to take immediate advantage of it if we intended to seize the crab, which struggled under the jacket, and seemed likely either to get rid of it or to carry it away with him; so I advanced, and striking him on the back with my hatchet, terminated his existence.



LAND-CRAB (*Gecarcinus ruricola*).

"What a frightful beast!" cried Rudly, recovering his jacket; "I was less afraid than horrified. But, papa, do you know his name?"

"We call him a land-crab; and I think he is the cocoa-nut crab. To him we owe the agreeable harvest we have just gathered. The animal, though provided, as you see, with strong pincers, cannot break the fruits to which he is so partial—therefore he cuts them off the tree before they are quite ripe. Then he descends to the ground, and eats them by inserting his claws into the little apertures in the upper part of the shell, and skilfully scooping out the rind. Sometimes the nut is broken by the fall, and then Master Crab feeds upon it at his ease. However, my dear boy, I congratulate you on your courage and presence of mind. The idea of



throwing your jacket over the enemy was capital, for you had to deal with an antagonist both daring and cunning. You see that prudence and reflection are able to secure man the victory over the most redoubtable beasts."

The animal's hideousness, Rudly's mingled fright and bravery, occupied us as themes of discussion for some time. We deposited our prey on the sledge, and continued our journey.

Gradually the wood grew denser, and to open a passage for the ass and sledge through the intertangled lianas and creepers, we were



compelled to ply our hatchet lustily. The heat became intense, and we were making but slow progress, when Ernest, who followed at some short distance, and was as busy as usual with his observant eyes, exclaimed,—

"Halt! A new and an important discovery!"

The procession halted, and we joined Ernest, who showed us, among the lianas we had cut down to clear our road, some stems which poured out a clear and crystal water, like that of a spring. They proved to be that precious plant called the *red* or *water liana*, which supplies the South American hunters with so valuable a resource against thirst.

Transported with delight, Ernest took a cocoa-nut shell, filled it with the liquid, which flowed from the severed stems as from so



many fountains, and carried it to his mother. I assured her she might partake of it without fear, and as we were all suffering extremely from thirst, the relief came very opportunely.

"Reflect, just reflect, I pray you," said I, as each hastened to cut open one of these marvellous lianas, and refresh himself with the living stream; "reflect on God's exceeding goodness! These lianas are almost always found in barren localities, where water is wanting. Well; He has enclosed it in these plants, that the wayfarer in the desert may not perish of thirst. Let us devoutly thank Him for this new mercy; and, at the same time, let us give due praise to our dear Ernest's investigating mind, for without him we should have passed by this great boon unknowingly."

Our draughts refreshed us, and our energies being recruited, we resumed our march the more briskly, because I wished to reach Calabash Wood before we made our first halt.

It was not long before we arrived there; and the calabash-trees, with their curious fruits growing on their trunks, proved objects of astonishment and curiosity to my wife and our younger sons. Frederick repeated to them the particulars I had formerly given him in reference to the uses made of the gourds or pumpkins by the American savages, as well as by the negroes, who have no other vessels; and, illustrating precept by example, he very obligingly set to work to cut down a few calabashes, promising to supply his mother with baskets or dishes for her eggs, and a large ladle for skimming milk—articles she most desired to obtain. Consequently, we seated ourselves in the shade of the noble trees; partly to share in the work, and partly to enjoy our noontide repast, for all of us felt the promptings of hunger.

The provisions we had brought with us were spread out on the turf, and we gaily demolished our simple *déjeuner*. Rudly would have had us light a fire and boil his crab, after the manner of the savages, in an empty pumpkin, warming the contents with red hot stones; but the preparations which this operation demanded, our uncertainty whether the crab cooked in this style would be good and wholesome eating, and, more than all, the want of water, induced us to abandon the project.

Meanwhile Ernest, who had no fancy for working at the cala-



bashers, quitted us, and wandered into the wood. Suddenly he re-appeared, with terror painted on his countenance, and shouting in tones of alarm,—

“Papa, papa! A wild boar! An enormous wild boar!”

At this announcement Frederick and I seized our muskets, and hastened towards the spot which Ernest indicated. Our dogs had already preceded us.

Their barkings, mingled with hoarse gruntings, led us to believe they had attacked their prey, and the hope of securing such an important piece of game cheered us mightily. But what was our disappointment, on coming up with the dogs, to see them holding by the ears a great hairy animal, it is true, but to recognize in the supposed wild boar our own fat sow, whose intractable disposition and savage temper had compelled us to let her go free in the woods, and live at her own will and pleasure!

After the first moment of surprise, we could not refrain from laughter, and the forest echoed with our shouts, instead of the sullen report of musketry. We released our poor sow from her two assailants, and left her at liberty to regale upon the fruits with which the sward in that quarter was literally covered, and which had undoubtedly attracted thither the gluttonous animal; for no sooner had we dismissed her than she pounced upon them, and swallowed them greedily. I picked one. It was a kind of apple, crowned like the medlar, and its agreeable scent and yellow colour, like that of the apricot, were very inviting. I cut it open; the pulp seemed to me fine and juicy; but I did not eat it, though feeling convinced that it was the fruit which in America is called the guava. I was not quite satisfied by our sow's partiality for it. However, we gathered a considerable quantity, and, picking a loaded branch from the tree which bore them, we returned to our family, loaded with spoil.

No sooner did Master Knips catch sight of the fruits, than he flung himself upon them, and devoured them eagerly. This example removed all my suspicions, and following his example, we enjoyed a very pleasant dessert. We pronounced the guavas delightful, and my wife was much pleased with my assurance that they would make a very delectable preserve.



"Take particular notice of this wood," said she; "for here, indeed, you have made one of your choicest discoveries."

"Be it so," said Frederick; "but we have not yet caught any great game. The day advances, and we march slowly. I think it



THE GUAVA (*Psidium pyrifera*).

would be as well if mamma waited here, with Rudly and Fritz, and we others set out on an exploring journey."

I assented to the proposal, but Rudly expressed a strong desire to accompany us, while Ernest remained with his mother, who advised us not to go very far away, and especially not to stay too long.

We set out, and plunged into a labyrinth of woods and rocks extending on our right. All at once, Rudly, who led the van, halted, and cried in tones of bodily apprehension,—

"Oh, papa!—a crocodile!—I see a crocodile!"

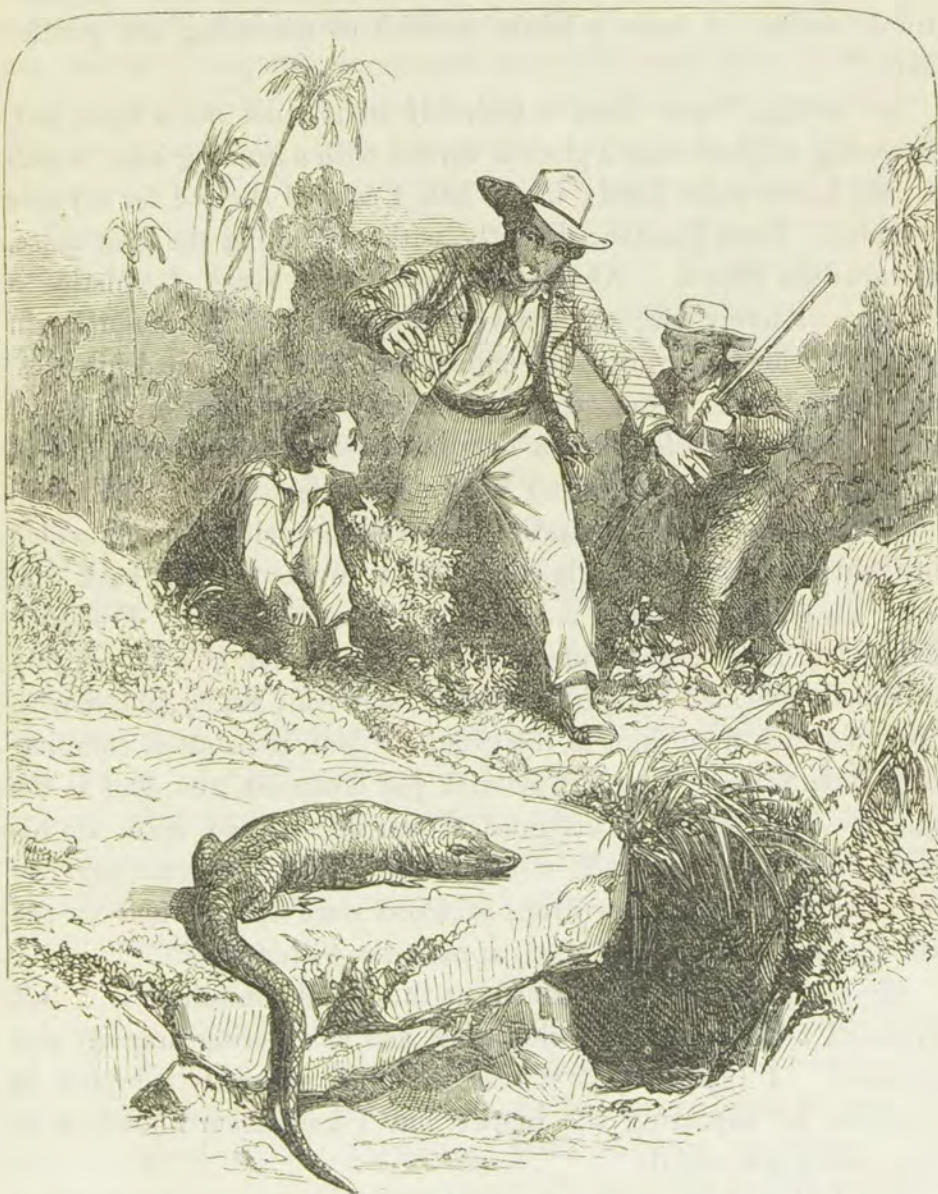
"Are you silly? A crocodile in a place where there is not a drop of water!"

"Papa, I tell you I see him," continued the poor boy, his eyes



fixed on one particular point; "there he lies on the rock, basking in the sun! I think he sleeps, for he makes no movement. He is certainly a crocodile; you will soon see!"

We advanced cautiously; but moving in the direction indicated



by Rudly's finger, I was quickly reassured by finding, instead of a crocodile, a superb lizard of the *iguana* species—an animal perfectly inoffensive, and whose eggs and flesh are both capital eating;



This specimen was about five feet in length. He was lying asleep, on a point of rock. Frederick, on catching sight of the monster, for he was certainly very ugly, had raised his gun, but I caught his arm.

"Stop," said I; "your shot would be wasted on these impenetrable scales. I know a better method of mastering our gentleman."

So saying, I cut down a tolerably stout stick and a light rod, fastening to the former a piece of thread with a running knot, which I held in my right hand; in my left, I carried the rod for my sole weapon. Then I advanced gently, without making the least noise, towards the sleeper. As soon as I got within reach, I whistled a sweet and lively air; at first very softly, increasing gradually in force and loudness, until the animal awoke. He opened his eyes, and appeared to listen with great pleasure to the unexpected melody. Soon he fell into a delightful lethargy, during which I contrived to slip my running knot around his neck. Then, still continuing my vocal exertion, I gave him a slight shock, which brought him down from his crag. I put my foot on his back, and with my son's assistance made myself master of him. Frederick would fain have fired at his throat, for the animal, now thoroughly wakened, defended himself vigorously, and dealt Rudly a blow with his tail which flung him to the ground. But, desirous of completing my enterprise, I bade Frederick put down his gun, and as the iguana—poor victim of his musical tastes!—turned upon me his jaws, bristling with small, strong, sharp teeth, I thrust my rod into the nostrils. A few drops of blood were ejected, and at the same moment the animal died, apparently without pain.

My sons, in their wonderment at this result, inquired if I had invented a new means of charming and conquering dragons and serpents. I replied that it was the one generally adopted in America for capturing the reptile, but I had never known it so completely successful.

We had now to think of carrying off our game; for game it was, and of the most delicate character. I decided to take the animal on my back by the fore-paws, while my sons supported it by the tail. Thus loaded, we retraced our steps to Calabash Wood,



not without laughing at the singular appearance I presented, staggering under so strange a burden.

On approaching the spot where we had left our sledge, we found my wife uneasy at our prolonged absence, and on seeing us draw near with slow steps, and without the usual huzzas, she felt afraid that some accident had befallen one or other of us. Our arrival, and our bursts of laughter, re-assured her; but poor little Fritz was much disturbed by the sight of the monstrous game we carried. We jested with the little coward for a minute or two, and then amused our family by describing the circumstances of our capture.

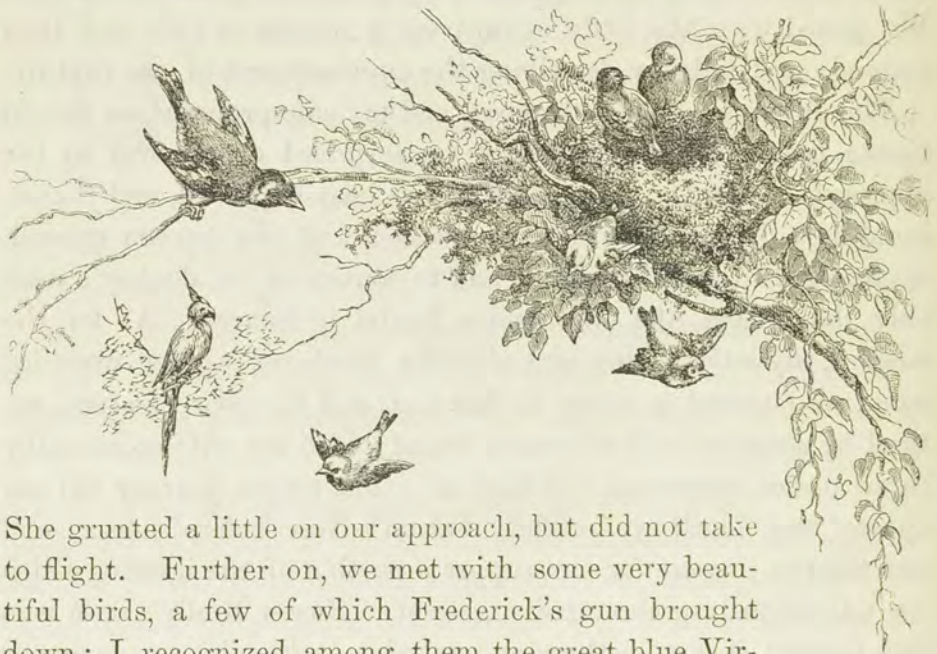
The day was now far advanced, and my wife proposed we should return home, for fear we might be surprised on our way by the approach of night. As the sledge was heavily loaded, and the ass could only draw it very slowly on account of the uneven ground, we resolved to leave it behind, and to convey on our donkey's back only the iguana, the crab, and a bagful of guavas. As for the bustard, my wife having very skilfully bandaged up her wounded wing, we fastened a string to her foot, and the poor creature, enticed by some morsels of cassava bread which my wife occasionally threw to her, consented to follow us. The return journey did not appear very long: we reached Falcon's-Nest before sunset, and had time to prepare for our supper a portion of the iguana, which we unanimously pronounced excellent. Master Rudly's crab won less favour; it was leathery and tasteless. Finally, we gave our animals their evening meal; I performed my accustomed circuit of our habitation; and night had already overspread the skies when we mounted to our leafy cradle, and sought the repose of which we stood in need.

I had a great desire to make an excursion, accompanied only by my eldest son, to ascertain the boundaries of the country on whose shores we had been so strangely thrown, and whether it was an island or the projecting point of some continent. To colour my absence in the eyes of my wife, who was always troubled when any of us left her, I had a capital excuse in the sledge, which we had left in the woods on the previous evening, and which it was necessary we should fetch. I took the ass and one of the dogs,



and my son and I, well armed, with a bag of provisions on our back, quitted Falcon's-Nest after breakfast.

While traversing a grove of young oaks, of the species whose acorns are sweet and good to eat, we found there our greedy sow occupied in regaling herself on a dainty so much to her taste, and I saw with pleasure that the service we had rendered her the day before in delivering her from our dogs had considerably tamed her.



She grunted a little on our approach, but did not take to flight. Further on, we met with some very beautiful birds, a few of which Frederick's gun brought down: I recognized among them the great blue Virginian jay, and various kinds of parroquets. While we were busy examining them, we became aware of a strange sound, something like that of a muffled drum mingled with the shrill noise of a saw being sharpened; the idea that it might be the war-music of a troop of savages induced us to shelter ourselves immediately in a neighbouring thicket. We had scarcely done so before we discovered the real cause of the mysterious sounds: on the trunk of a fallen tree, which lay stretched across a clearing in the wood, stood a beautiful bird of a lustrous greenish black, his wings and tail marked with broad white bands; there he stood, strutting to and fro, wheeling round and round, flapping his wings, and making a thousand strange contortions before a score of hens of his own species, which seemed to have assembled in voiceless ad-



miration. I immediately recognized the Ruffed Grouse of Canada, so named from the beautiful collar of feathers which he stirs and swells at will. These shrill quick accents, these rapid movements, and all this amusing pantomime were designed to gather around him the females of the neighbourhood; but the gun of my eternal hunter suddenly cut short the triumph of the fanfaronading bird; uttering sharp cries of alarm, the hens took flight, and the unfortunate fell wounded mortally.

I reprimanded my son for the inconsiderate ardour which led him thus to kill everything he encountered.

"Why," said I, "this rage for incessant and useless destruction! Undoubtedly the chase is lawful, as a means of procuring food or destroying dangerous and noxious animals; but to destroy for the mere sake of destroying is what I can neither understand nor pardon."

Frederick smiled, with an embarrassed air; he felt the justice of my reproach. However, the thing being done, I thought it was better after all to profit by it, and I despatched him to pick up his game.

"'Tis a splendid creature," said he, returning with it, "which would have made a handsome figure in our poultry yard, if I had been less impetuous."

Placing it on our donkey, we moved forward.

In Calabash Wood we found the sledge and its contents undisturbed. We decided upon leaving it there provisionally, while we attempted an excursion beyond our wall of rock, and penetrated into a region we had never before visited. But we took with us our patient "Grizel" to carry our provisions, and the game or any other articles with which we might have occasion to load him.

When we had found a gap in the rocks we entered upon a fair and smiling country, whose vegetation corresponded to that on the other side. Everywhere gigantic trees and tall luxuriant grasses; we could only advance slowly, and with great caution, keeping a sharp look-out on either hand that nothing of utility escaped our notice, and to guard against any unexpected danger. Turk marched in advance, his ears extended, his nose in the air. Then came the ass, with slow, indifferent step; and we, with our



guns on our shoulders, followed these faithful and peaceable animals.

From time to time we met with large fields of potatoes or manioc, among whose roots we could discern numerous troops of agoutis at their innocent play; but we passed by this game with scornful indifference, for we had not relished its flesh. On the road my attention was attracted by a new species of plant; its branches were profusely loaded with small white berries of about the size of a pea, covered with greasy matter: on pressing these between my fingers, I recognized the bush to be the candleberry myrtle (*Myrica cerifera*), which yields a wax suitable for the manu-



CANDLEBERRY MYRTLE (*Myrica cerifera*).

facture of candles. I felt delighted at the discovery, and before going further, picked a bagful of the berries, for I knew how keenly my wife would appreciate this "treasure-trove." Every day she deplored the necessity we were under of going to roost, like the chickens, as soon as the sun set. It was a precious "handsel," and we did not regret the time spent in collecting it.



As we continued our advance in the wood, our gaze was continually attracted by a thousand various or interesting objects, which made us unmindful of fatigue; sometimes our eyes rested upon flowers of marvellous beauty; at others, they were dazzled by resplendent butterflies, or birds of various form and gaily-coloured plumage. Frederick having heard the chirping of some little ones in their nest, climbed the tree where it was stationed, and was skilful enough to seize a pretty young parroquet, just as it was on the point of flying. He wrapped it carefully in his handkerchief, and, proud of his capture, put it in his bosom, remarking that he would bring it up and teach it to speak. A few

PARROTS AND PARROQUETS (*Psittacidae*).

paces beyond, we came upon a colony of social birds, all living together in a multitude of nests under a common shelter, which, undoubtedly they had all combined to build; it was a kind of sloping roof, made of straw, dry twigs, moss, and kneaded earth, which rendered it as impenetrable by rain as by the sun's beams.

We spent some time admiring this new marvel and we had to



remind ourselves of the danger of delay before we could abandon a spectacle so interesting as this feathered colony.



A FEATHERED COLONY.

It led us to speak of the facts concerning gregarious animals which naturalists have collected and recorded: we successively recalled the ingenious labours of the beavers and the marmots; the not less wonderful architecture of bees, hornets, and ants; nor did I forget to mention the details related by travellers of the huge and magnificent ant-hills of America, with their solid and artistically constructed ramparts. These frequently resemble an oven in



shape, and have been successfully employed by man for the same purposes.

During these anecdotes, to which my son listened with lively interest, we had reached a cluster of trees whose character and



ANT HILLS.

foliage were wholly unknown to us. They varied from forty to sixty feet in height, and their furrowed and rent bark exuded small drops of a thick resinous juice. With a little trouble Frederick detached one of these, which the air had hardened; but,



endeavouring to soften it in his hands, he found himself disappointed. The heat only made it stretch. He then tried to break it by pulling the two extremities, but immediately he let go of them it resumed its original form.

Equally surprised and delighted at his discovery, Frederick sprang towards me, crying,—

“Father, I have found some india-rubber.”

“Is it true?” I cried with eagerness; “for if so, you have made a discovery peculiarly valuable to us.”

My son thought I was jesting.

“Of what use,” said he, “will india-rubber be to us? We have nothing to draw with, and no pencil-marks to rub out.”

I explained to him the various uses of caoutchouc; how it was not only serviceable to the artist, but was one of the best substitutes in the world for cloth, on account of impermeability. I added that it would make us capital shoes and leggings. This idea interested him greatly, and he begged me to explain how such a result was arrived at.

“Caoutchouc,” said I, “is the milky juice which exudes from various Tropical trees. The natives collect it by making large incisions in the bark, receiving the sap in vessels, which they keep in constant motion to prevent it from



INDIA-RUBBER TREE  
(*Siphonia elastica*).

solidifying. In this state they lay it upon small bottles of an



extremely thin glass. It is then dried in smoke, and obtains the dark brown colour so well known as that of the india-rubber of commerce. When nearly dry the bottle is broken, and the pieces carefully extracted from the mouth. A similar process is employed in the preparation of boots and shoes: fill one of your shoes with sand, and lay upon the model thus obtained as many layers of caoutchouc as may be necessary to form a solid leather. Afterwards empty out the sand, and, unless I am mistaken, you will have a capital india-rubber shoe."

We seemed inspired to fresh exertions by the hope of securing comfortable boots, which would protect our feet from thorn and bramble. For some time we continued to traverse an apparently interminable forest, including trees of a thousand different species.



Some small apes, disporting among the cocoa-nut palms, supplied us with fresh nuts, of which, after plentifully regaling ourselves we collected a moderate supply. Among these trees I noticed



SAGO-PALM (*Phoenix farinifera*).

task occupied us upwards of an hour. We then became sensible both of hunger and thirst, and as, moreover, the day was rapidly declining, I did not consider it prudent to push our investigations

several of a tolerable height, which I conjectured to be sago-palms, from the white dust sprinkled over their leaves. I satisfied myself by cutting open a stem which had been uprooted and laid prostrate by the wind; and in its interior I found a white farinaceous pith, which was, indeed, the sago imported into Europe from the Indies. Delighted with this discovery, which was for us, as was everything of an edible nature, very important, my son and I set to work, stripped the bark from the trunk, and scooped out of the interior nearly twenty-five pounds of that precious pith. The



any further. We made towards the sea-shore, and having mounted the rocky headland which we had named Cape Hope Deceived, could see nothing novel anywhere around us. On all sides flourished the same rich and vigorous vegetation; the same landscapes, the same solitude, met our wistful gaze; and not a trace of human beings could be discerned. We decided, therefore, on retracing our steps to Calabash Wood, where we had left our provisions. In its pleasant shade we enjoyed a hearty meal, and having thoroughly rested ourselves, we deposited all our treasures on the sledge, harnessed our quiet donkey, and set our faces towards Falcon's-Nest.

My wife was delighted at our return, and received with great favour the new farinaceous product we had brought her. The pretty green and red parroquet which Frederick had captured, the story of the social birds, of the ruffed grouse, and, above all, of the caoutchouc, which was to provide us with impenetrable *chaussures*, amused and diverted us during our evening repast.

But my wife reserved her particular attention for the waxen berries, of which we showed her a large bag full. She rejoiced at the news that she would at length be provided with an evening light, and not be constrained to retire to bed, as had hitherto been the case, the moment day was ended.







## CHAPTER V.

Thro' mountain clefts the dale  
Was seen far inland, and the yellow down  
Bordered with palm, and many a winding vale  
And meadow.

TENNYSON.



ET the reader rest assured that, next day, my wife and children gave me no rest until I had undertaken my manufactory of candles. The trade of a candle-maker was, for me, an entirely new one. But I well remembered having seen the various processes, and endeavouring to recall to my mind all that I knew, I set to work.

First, I carefully picked off all the berries, and these the children threw into a large boiler, which I placed over a moderate fire. The waxen envelopes of the berries soon melted in the boiling water, and while the berries sunk to the bottom, a beautiful green wax rose to the surface. This I carefully removed with a large flat spoon, and as it collected, deposited in a great earthen vessel standing by my side. When it was nearly full, I took the wicks which my wife, meanwhile, had prepared of the thread of sailcloth, and fastened them in fours to a small stick.

After dipping them in the liquid wax, I suspended them on two branches of a tree to dry. I repeated this operation until the candle was of a sufficient thickness. The whole were then stored in a cool shady place near the fountain, to acquire a proper consistency, and that same evening we put their illuminating qualities to the test.



My wife was delighted with the invention; and although our candles were of unequal sizes, and their light was not very pure, they agreeably reminded us of European usages, while enabling us to add to our days several hours which had previously been wasted.

This success emboldened us to attempt another manufacture. My wife deeply regretted the daily loss of all the cream which might have been gathered from the milk of our cow and goats. She had attempted to make some butter by beating up the cream in a vessel; but whether she was deficient in patience, or whether the heat of the climate was the cause, she had not succeeded. A churn was required, but as I did not think myself skilful enough to make one, I conceived the idea of supplying its place by a simple method which I had somewhere read of as practised by the Hot-tentots.

These people fabricate their butter by enclosing a certain quantity of cream in a skin stitched up like a bag, and shaking it to and fro with a regular movement of the arm. For the skin I substituted a large pumpkin, cleaned out, and divided into halves; I filled it with about three quarts of cream, sealed it hermetically, and having fastened to four posts the corners of a square piece of canvas, I placed the gourd in the centre, and directed two of the boys to shake the canvas with a slow but regular movement, like rocking a child's cradle.

The exercise amused them greatly; but what was more to our advantage, when, in about a quarter of an hour, we opened our machine, we found therein a lump of excellent butter, which my wife made use of at supper, to the intense satisfaction of all her guests.

In another experiment I was less successful. I was desirous of constructing a cart or car to take the place of our sledge, which on some kinds of ground was almost useless; but though I had the advantage of a couple of wheels brought from the ship, I turned out but a heavy and ungainly machine. Shapeless as it was, however, it proved very useful for collecting our harvest.

While I was thus engaged in the improvement of our stock, my wife and sons were by no means idle. They undertook the deco-



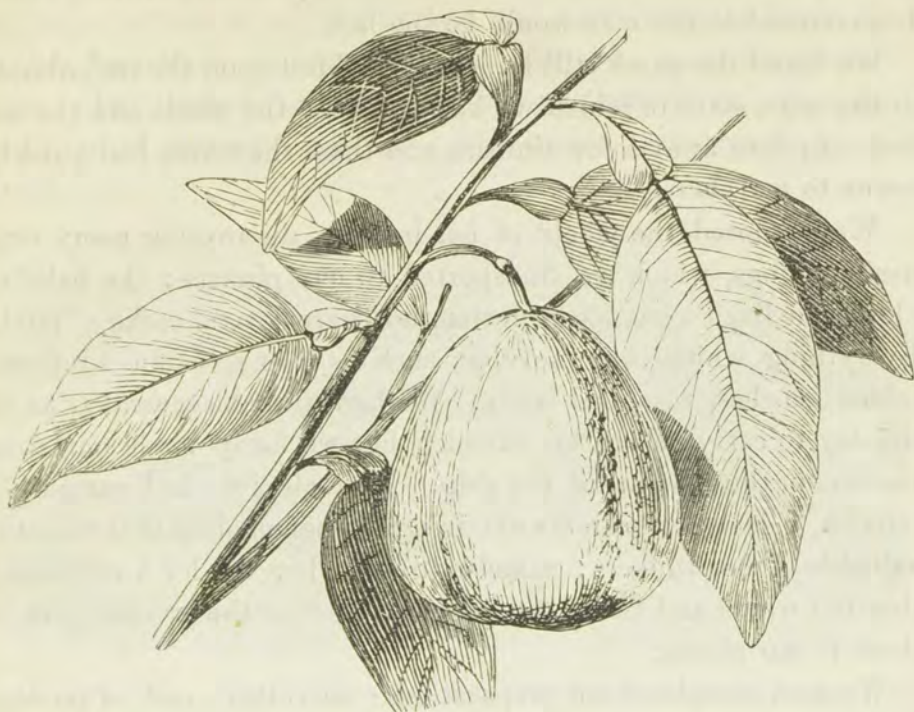
rative work; from the orchard where I had planted them they removed the fruit-trees, and arranged them, with much intelligence, in the places best adapted to facilitate their growth. I assisted the boys with my counsel, and in the more laborious part of their work with my active help. For instance, I directed them to plant the vine at the foot of the roots of our giant tree, and the chestnuts, walnuts, and cherry trees in parallel rows, stretching from Family Bridge towards Falcon's-Nest, and forming a shady avenue for our recreation when we visited Tent-Town. Between these trees we laid down a solid footway, which we might conveniently traverse in all weathers; and as our wheel-barrows were not strong enough for this work, I constructed a small cart, which was drawn by our patient ass.

We next addressed ourselves, with busy hands, to the improvement of Tent-Town, our first settlement, and our possible refuge in case of future danger.

Nature had done little for it; but we supplied her place as best we could by planting there those trees which flourish most under great heat, such as the citron, pistachio, and shaddock—the latter a kind of orange whose fruit is as large as an infant's head—the almond, the mulberry, and the Indian fig, with its long spiry leaves. In a short time we completely transformed this once desert spot, and our plantations thriving mightily, a barren and burning waste of sand was converted into a grove blooming with fruits and flowers.

But as Tent-Town was intended for an asylum in case of need, rather than for a "bower of delights" or an "Armida's garden," it was there we stored our arms, our munitions, and provisions of every kind; and, not content with embellishing it, we resolved to augment its defensive capabilities. For this purpose we surrounded it with a fence of stout prickly bushes, so as to render it impregnable against the attacks of wild animals, and even strong enough to hold out against a leaguer of savages, if there were any in the country. We likewise fortified our bridge, whose movable planks might, by being withdrawn, impede an enemy's passage; and a gentle eminence in the interior was mounted with the two small guns of the pinnace.



SHADDOCK (*Citrus decumanus*).

Upwards of three months were spent in the completion of these various important tasks; and every Sunday—for nothing was suffered to interrupt our devotional exercises—I heartily thanked God that the health of my children, far from being injured by their prolonged fatigues, was, on the contrary, improved, while their strength and vigour every day matured. All went well in our little colony: our food was abundant and wholesome; only one want made itself conspicuous—that of a new supply of clothing. Our linen and outer garments, though carefully mended by my industrious wife, fell into a truly disquieting condition of dilapidation, and we had no means of renewing them. I was aware that the wreck, whence we had derived so many useful and valuable articles, contained somewhere several chests of linen, bales of cloth, and other things of the same kind; but I had been prevented undertaking another voyage by the multiplicity of my labours. However, a desire to ascertain the condition of the ill-fated vessel, as well as the urgent need to which we were reduced, now determined



me to put to sea in the pinnace, and attempt an expedition, which I announced to my wife would be the last.

We found the wreck still lying hard and fast upon the reef, almost in the same state in which we had left her; the winds and the sea had only torn away a few timbers, and these the waves had quickly borne to our shores.

We explored the whole of her interior, discovering many very useful things, which we transported to our pinnace; the bales of cloth and linen were not forgotten, nor were several casks of pitch. Everything which was movable, such as doors, cabin-windows, tables, benches, was good booty. We had to make several trips in the day to carry off all this plunder, but we fairly made ourselves masters of the remains of the ship. And after we had gutted her interior, I devised a plan for obtaining possession of all that was still valuable of her timbers; namely, to blow her up, for I calculated that the winds and waves together would float the greater part of them to our shores.

We soon completed our preparations: we rolled a cask of powder to the bottom of the hold, and inserted in it a sulphur match which would burn for several hours; after which we pushed off from the doomed wreck with all speed. The current and the breeze bore us swiftly and securely to Safety Bay, where all our wealth was temporarily deposited. We felt ourselves thoroughly exhausted with the day's fatigue.

I proposed to my wife that we should take our evening meal on the summit of the small eminence I have spoken of, as from thence we could command a view of the wreck.

While seated at our table, gaily chatting, the shades of evening gathered over us; the darkness became deep and deeper; when suddenly there rose above the waves a vast pillar of fire, illuminating the waters, and even throwing a bright red reflection on the shore. A tremendous report quickly followed; it was the last groan of the ship as she sunk beneath the waves, and the last tie which united us to Europe was broken!

The reflection filled our hearts with sudden sadness, and instead of the joyous shouts which I had expected, I heard nothing but sighs and sobs around, nor could I myself refrain from shedding



tears. We then felt how powerful in the heart of man is that sentiment which we call Patriotism, and how closely it binds him to the place where he was born, and where he spent his youthful years. In gloomy silence we returned to Tent-Town; it seemed to us as if in destroying the ship we had destroyed an old friend.



The night's repose somewhat dissipated these melancholy reflections. We rose with the sun and hastened to the shore; the sea was strewn with wreck, which, with a little trouble, it was easy to get ashore. Among other things we secured some great copper pans which had been destined for a sugar refinery, and which we determined to use as powder magazines, covering with them the casks which contained that dangerous but precious material. A sheltered spot under the rocks was selected for the site of our arsenal, so that if even an explosion should take place, it would not injure us or ours.

While we were busied in these matters, my wife, who had shared in all our labours, betook herself to the sea-shore to obtain a little rest. There she discovered that two of our ducks and a goose had hatched a brood among the reeds, and were conducting to the water a pretty feathered family. This agreeable surprise gave us great satisfaction, and ducklings and goslings were saluted by us with a merry cheer, arising from a selfish hope that we should see them, in due time, figuring as "a roast" upon our table; we threw them some crumbs of bread to tame them. These domestic cares reminded us so vividly of all our little family at Falcon's-



Nest, and of the delights of that pleasant abode, that we resolved to put off for a few days our remaining tasks at Tent-Town, and return on the morrow to our leafy bower.

On approaching Falcon's-Nest we found most of the young trees bent by the wind, and I therefore resolved to go next day to the other side of Cape Hope Deceived, and cut some bamboos, which might be converted into stakes and fences for the protection of our young and still tender plants.

The day was spent in various occupations. On the following morning, when I made known my intended expedition, everybody wanted to accompany me; the general curiosity had been excited by our stories of the wonders of that region, still unknown to all the family but Frederick and myself. My wife and sons found a thousand pretences why I should not go without them: our hens were on the point of incubation, and some pullets' eggs were really needed; the wax candles were nearly finished, and a fresh supply of wax was urgently required; Rudly wanted to collect guavas, and little Fritz to cut some sugar-cane. I therefore consented that we should travel *en famille*. We harnessed our ass and cow to our new cart, and carried with us a supply of provisions and a large sail for a tent, for I foresaw that our absence would extend over several days. The weather was glorious, and we set out on our march, singing merrily.

I conducted my caravan at first across the manioc and potato-fields, and through the grove of guava trees, on whose fruit my sons amply regaled themselves. Our cart jolted painfully over the uneven soil, though we had greased the axle with lard, of which we had found a barrel in the wreck; but our axes and patience triumphed over every obstacle.

In due time we reached the great Bird-republic, which stimulated the admiration and curiosity of my sons, and afforded Ernest an opportunity of displaying his scientific acquirements. He informed us that the members of the immense colony belonged, according to the Linnean system, to the genus *Loxia gregaria*, and according to modern naturalists, to that of *Loxia socia*. He pointed out the sagacity of these birds, which, feeding almost entirely on the berries of the *Myrica cerifera*, had established them-



selves in a locality where that plant abounded. While listening with interest to Ernest's discourse, and watching the birds incessantly going in and out of their common city, we obtained a supply of wax from the neighbouring bushes. We filled two bags with the berries, and a third with guavas, of which my wife intended to make some preserves.



LOXIA SOCIA.

Next we directed our steps to the caoutchouc tree. I made some incisions in the bark, and arranged a quantity of calabash shells to catch the milky sap, for I had resolved to delay no longer the manufacture of impermeable shoes and leggings for my sons and myself.

Afterwards we entered the palm wood, and then directing our course a little to the left, debouched upon the most fertile and delightful plain imaginable. On one side extended a field of sugarcanes, crowned by a grove of palms; on the other, a breadth of rustling bamboos; before us stretched the rocky headland of Cape Hope Deceived, and in the distance the magnificent panorama of the shining sea.



It was unanimously decided that we should make this lovely place the centre of our excursions, and we were much inclined to establish in it our abode, and abandon our residence at Falcon's-Nest. But as it was unable to afford the security we enjoyed at the latter place, we quickly gave up a project which was only suggested by the beauty of a new and enchanting landscape.

We unyoked our cattle, and arranged to pass the night, and perhaps a day or two, in the valley. After a light repast, we proceeded to our different employments; some in search of sugar-canes, others to cut bamboos, to strip them both of their leaves, make them up into bundles, and deposit them in our cart. This hard work whetted the appetite of my young people, and as dinner was not yet ready, they compensated themselves by sucking the sugar-canes, and then went after a supply of cocoa-nuts, with which the trees were loaded. Unfortunately, they found neither ape nor land-crab to assist them in their harvest; they endeavoured to climb the trunks, but after gaining a certain height, they felt their arms relax, and came down with a run, somewhat confused by the shock.

I then went to their assistance, giving them some pieces of shark's skin, with which I had taken care to provide myself before setting out. They fastened the rough skin round their legs, and with the assistance of a rope passed round the trunk of the tree, clambered to the top with tolerable ease. Plying the axe which each carried in his belt, they poured down upon the ground a hail-storm of nuts! We opened them, and our dinner was duly followed by an agreeable dessert. Frederick and Rudly, who alone had scaled the palm-trees, were quite proud of their prowess, and ironically jested Ernest on his idleness; for the professor had passed the time in looking at his brothers, and now, absorbed in some private reflections, did not seem to notice that he was the object of their raillery.

All at once he gravely arose; then having cast a sharp glance at the crest of some of the palms, he took a cocoa-nut cup, and a small tin vessel with a handle to it, and advancing towards us in a dignified manner, exclaimed, in a serio-comic tone,—



"Madam and gentlemen, I confess that the action of climbing is painful and disagreeable; but since it seems to earn so much honour for those who practise it, I also would fain attempt the adventure, in the hope that I may accomplish something glorious for myself and agreeable to the company."

Thus saying, he saluted us: wrapping the shark's skin round his legs, he approached a palm-tree which he had been long examining, and began to escalate it with a vigour and an agility which astonished us. His brothers burst out laughing on seeing him climb a tree which bore no fruit, and were malicious enough not to tell him of it until he had reached the summit. Ernest made no reply, but seating himself among the leaves, struck hard at the top of the tree, and lo, at our feet fell a roll of young and tender leaves, which I immediately recognized as the palm-cabbage, esteemed so great a delicacy by the Americans. The rest of the family, not so well acquainted with natural history as Ernest, received our professor's gift with a fresh volley of sarcasms.

"What a bad boy!" exclaimed his mother; "because he has found no nuts he is spitefully mutilating the tree!"

"Don't fret, mother," calmly answered Ernest; "that cabbage is worth its price, and I wish I may never revisit *terra firma* if what I bring you is not worth all the cocoa-nuts in the world."

"Ernest is quite right," I remarked; "he is giving us a proof of the excellent use he has made of his books, and deserves our praise rather than ridicule. Ah, my dear boys, learn to mistrust that spirit of ungenerous rivalry which too often breaks forth in your words and actions, and leads you to undervalue things which you do not understand; you will easily grow unjust if you yield to it, and, what is more, ungrateful."

However, our little hero did not descend from his leafy throne, but remained there in complete tranquillity and apparent comfort.

"What on earth are you doing up there?" I cried; "are you trying to replace the cabbage you have just sent us?"

"No, no," said he, laughing; "I only want to bring you something to season it. I mean a capital wine, whose quality I shall



leave you to decide upon; but it flows more slowly than I could have wished."

There were fresh shouts of laughter and fresh signs of incredulity among his audience; but these quickly ceased when Ernest descended, and poured into his cocoa-nut cup a rosy and transparent liquid with which his tin vessel was about half full. With a graceful air he handed me the cup, and invited me to taste. I found it genuine palm wine; a scarcely less agreeable drink than champagne, and very invigorating when taken in moderation.

Everybody partook of the sweet liquor, and a thousand compliments were lavished upon Ernest, who felt himself amply repaid for the jests and quips of which he had been the object by the general praise and his mother's affectionate caresses.

As the sun was now sinking rapidly below the horizon, we began to think of pitching our tent for the night. While thus engaged, our ass, which had been browsing tranquilly at a short distance, seemed suddenly agitated by some extraordinary emotion. He pricked up his ears, raised his nose to the wind, and with a frightful *hee-haw* dashed off into the bamboo forest, and disappeared from our sight.

Surprised at such an escapade, we sent our dogs in pursuit of the fugitive, and ourselves followed up his track until we lost sight of him altogether. The dogs were not more fortunate, and after a long and fruitless search we were compelled to return without him.

I was disturbed by this unforeseen incident; not only because the loss of our ass was for us a serious calamity, but because I feared the poor animal's sudden frenzy was occasioned by the approach of some wild beast. To guard against the latter mishap, I kindled a huge fire before our tent; but as we had not a sufficient supply of dry wood to keep it up all night, I got some sugar-canes, tied them together in the shape of torches, and fixed them in the ground on either side of our tent—to serve as links or fire-brands, and keep off any prowling animals. Our supper ended, we withdrew into our tent; as the night was cool, we rejoiced in the warm air set in motion by our fires; and flung ourselves, without undressing, on our heaps of moss. Our arms lay by our side. We



were all so fatigued that we fell asleep immediately; but I woke in the night, and as the bonfire was extinct, kindled our sugar-cane torches; reassured by the clear and vivid glow which they spread all around, I again composed myself, and slept undisturbed till morning.

The bright day found us all in good condition. We thanked God for the protection he had accorded us, and thought with sorrow of our poor lost Grizel. I had hoped the blaze of our fires might have brought the fugitive back to us in the course of the night, but as such was not the case, I resolved to go in quest of him, and to cross if necessary the dense barrier of bamboos which confronted us, and where he had disappeared. The animal was of such great usefulness to us that we could not afford to leave untried any means of recovering him.

As the two dogs would be required on this expedition, I decided that my two eldest sons should remain to protect their mother and little Fritz, while Rudly accompanied me. He was overcome with joy at the preference thus accorded him, and we started immediately, well armed, and with a bag of provisions on our back.

In about an hour's time, and after much fruitless searching among the reeds, we entered upon a great plain, whose sandy soil exhibited evident traces of our fugitive's hoofs. We followed their track with great care, but the hopes they had excited were speedily clouded, for the hoof-prints of the ass were mingled with those apparently of a stronger animal, until both were altogether lost. After forcing our way through several bushes, and crossing two or three small streams, the trail entirely disappeared.

We then marched at hazard, casting our glances in all directions over the immense plain which stretched before us. Everywhere prevailed an utter tranquillity, an unbroken solitude; the birds were the only living beings we could discern.

Encountering a torrent of some depth, we ascended its course to discover a practicable ford. It made its way through a chain of rocks, where we fortunately came upon a narrow defile opening into a truly enchanted region of woods and pastures and sparkling streams, and brightened also by the ripple of a broad river.

Here we again discovered the traces of our fugitive, mingled, it



is true, with those of other animals; and in the distance we could



A CLUMP OF BAMBOOS (*Bambusa*).

see a troop of quadrupeds, whose species we could not distinguish, but which seemed to be about the size of horses. In the hope our ass might be among them, we bent our steps in that direction. To shorten the road, we forced our way through a clump of bamboos, whose stems, thick as a man's thigh, were more than five times a man's height. The discovery pleased me hugely, for I knew the many uses of

the precious plant, which the Indians fabricate into casks, boxes, ships' masts, and framework as light as it is solid.

This detour, however, was like to have proved fatal to us, for, on emerging from the reedy forest, we found ourselves unexpectedly face to face with a herd of wild buffaloes, not numerous, it is true, but of the most formidable appearance! The spectacle so overcame me with terror that, without even raising my gun, I stood rooted to the ground, like one petrified. It was fortunate that our dogs had dallied in the rear, for our presence did not appear to disturb these terrible animals, who, fixing upon us their great eyes, displayed more astonishment than anger. We were probably the first human beings they had ever seen.

I foresaw the possibility of our escape if we retired without



BUFFALOES (*Bos bubalus*).

noise. Recovering from my panic, I had loaded my gun, and was about to withdraw, when our dogs, coming in search of us, debouched from the reeds by a different path. We did all we could to hold them back, but at the sight of the buffaloes they sprang forward as if seized with madness: there was no longer any hope of retreat—the battle was begun. The entire herd arose, roaring and bellowing frightfully; the leaders advanced, beating the ground with their hoofs, or striking it with their horns.

Our brave dogs, however, showed no signs of alarm: they rushed straight upon the enemy, and, according to their usual mode of attack, flung themselves on a young buffalo, a little apart from its companions, and seized it vigorously by the ears. The animal began to bellow loudly, and made incredible efforts to shake off its assailants; its mother hastened to its assistance, and behind her stormed all the herd.

At this moment I trembled still; but giving the signal to my gallant Rudly, who stood at my side with his gun in its rest, we fired together on the raging troop.

Our two discharges had all the effect of a thunderbolt on our enemies; they suddenly halted in their impetuous rush, then, before the smoke had cleared away, took to flight with amazing rapidity, crossed the river swimming, and, still maintaining their headlong speed, were soon out of sight. Meanwhile, our dogs clung firmly to their victim, whose mother, stricken by our bullets.



rolled on the earth in violent agony, tearing up the grass and the earth with her frantic blows. Wounded as she was, our dogs were in danger from her ; I therefore advanced, and firing at her head



between the two horns, terminated at once her sufferings and her life.

We now began to breathe a little calmly : death had been close to us, and a horrible death ! I warmly praised my son for the coolness he had exhibited ; in fact, far from giving way to tears and cries, which would have completely prostrated me, Rudly had



bravely taken good aim, and fired his musket, without suffering the panic to overwhelm him. I exhorted him always to act in the same manner when beset by perils, from which only presence of mind can rescue us. But we had no time to discourse long upon the subject.

Our two dogs were still contending with the young buffalo, and I feared that fatigue would compel them to let go their hold. Yet I knew not how to render them any assistance, for the fury of the animal seemed to increase rather than diminish. He flung out his hoofs in such wise as to render very dangerous any near approach; and yet I did not wish to kill him, in the hope that I might eventually tame him, and use him as a substitute for our ass, which I was not disposed to seek much further. Rudly, however, started the happy idea of employing his sling, which he always carried about him. He retreated a few steps, and hurled it so adroitly that it coiled round the animal's hind-legs, and brought him immediately to the ground. I then advanced, drove off the dogs, and replaced the lasso by a stouter fastening; after which I served his fore-legs in the same manner. The poor buffalo was conquered; Rudly shouted "Victory!" and rejoiced beforehand at the presentation of this new captive to his mother and brothers. This, however, was not so easily accomplished, until I bethought myself of the method employed by the Italians to tame their wild bulls: I resolved to attempt it, though I felt its cruelty; but necessity compelled me.

First, I attached to the foot of a tree the rope which bound the young buffalo's legs, so as to prevent him from moving; I recalled my dogs, and making them seize the animal's ears, which they had so reluctantly let go, I thus rendered his head motionless. Then I drew my knife, which was pointed and very sharp, slit the nostrils of the poor little buffalo, and inserted in the opening a cord, to act as a rein in guiding him. The operation was successful; and when, after a while, the bleeding from the wound had ceased, I took the cord and tied together the two ends; the young buffalo, completely overmastered, followed me without resistance.

Meanwhile, I had cut up the she-buffalo, as well as I was able without the necessary instruments for such a task; extracted the



tongue and the best pieces of the thighs, and covered the whole with a good coat of salt (of which we carried with us a supply)—abandoning the rest of the carcass to our dogs. They threw themselves upon it with voracious appetite, but the vultures and other birds of prey did not long allow them to enjoy the repast unchallenged; clouds of winged robbers hastened from all points of the heaven to banquet on the spoil; and as fast as one troop were satisfied another took their places.

Among these avid birds we detected the King Vulture, remarkable for his splendid collar of downy feathers, and the Calao, also



CALAO AND ROYAL VULTURE (*Vultur papa*).

called the Bird-Rhinoceros, from the bony excrescence which he bears on his beak. We could easily have brought down some of them, as, seated in the bamboo-shades, we rested after our fatigues, and watched our dogs feasting on their quarry, and battling with the plunderers who wanted too large a share; but they



could have been of no use to us, and I preferred to employ my time in cutting down some of the gigantic reeds which flourished round us.

We did not, on this occasion, choose the largest, of which we might have made capital vessels by cutting them from one knot to another; we contented ourselves with making up a bundle of the smaller, which, being hollow, would serve, I thought, as moulds for our candles.

At length, when food and rest had recruited our energies, we began to think of returning; the buffalo, frightened of the dogs, and, above all, subdued by the rope which traversed his nostrils, did not show much obstinacy; and we set out, sighing over the loss of our poor patient donkey.

As we repassed the defile in the rocks, we caught sight of a large jackal, emerging from a cavern where she had her lair; our dogs soon conquered her, and Rudly would fain have penetrated into her retreat in quest of her young, but as I feared the male might be concealed there, I first discharged my pistols into the hollow. My son then crawled in, followed by the dogs; and it was with difficulty he saved one of the brood, for they pounced upon their prey in an excess of rage, and strangled all the others. The whelp rescued from their jaws was about the size of a small cat; his hair was of a golden yellow, and he was so handsome that Rudly begged my permission to take care of him and bring him up; I made the little fellow quite happy by my consent.

On the same occasion I made an interesting discovery. While detained by the incident of the jackal, I had fastened the buffalo to a small tree, which I recognized as the thorny dwarf-palm. This tree, growing and multiplying with extreme rapidity, makes the best of fences, and I resolved to come in search of some young plants to strengthen the enclosure at Tent-Town.

It was nearly night when we reached our temporary encampment. The appearance of the buffalo-calf instigated a host of questions; we related our adventure, and Rudly, always prone to boasting, was fain to crown himself with all the honour. I checked his fanfaronade, while praising his courage and presence of mind as they deserved. At length the interest of our narrative



led us so far, that the supper-hour arrived before I had time to ascertain what events had transpired in my absence.

I found that my wife and her young companions had not been idle. One had collected a quantity of dry wood for keeping up the fire, another had arranged the sugar-cane torches for the night; Frederick and Ernest, having discovered a sago-palm in the neighbourhood, had contrived to fell it, with the view of extracting the precious farina; but they had not strength enough for this operation, and waited my return to accomplish it.

But while they had been thus employed, a troop of apes had stolen into the tent and pillaged it completely. The marauders had drunk or spilt the milk, scattered the potatoes, eaten or spoiled the provisions, and in their incessant wanderings had so knocked up the palisade with which I had surrounded our habitation, that



INDIAN EAGLE.

when my poor lads returned, it cost them an hour's hard work to repair the damage. Frederick had also been highly successful in his favourite rôle of the sportsman. He had managed to surprise among the rocks a bird of prey, very young, but still fully feathered, which Ernest declared, and I confirmed his opinion, to be a Malabar or Indian Eagle. I advised Frederick to try and rear it,

since it was capable of being trained for the chase, like the falcon. My wife murmured a little at this decision,—



"I do not know," she said, "where we shall find food for all the mouths which you bring about you daily, to say nothing of the trouble they give me. I have really enough to do without so much additional anxiety."

This last observation was quite just, and induced me to proclaim in formal terms that, thenceforth, whosoever brought a new inmate to the colony must undertake its sole support; and that, on the first occasion of duty neglected, the captives whose masters showed themselves indifferent to their welfare, would immediately be restored to liberty. With this announcement my wife declared herself satisfied.

Kindling a fire of green wood, I next proceeded to expose to the smoke, by means of some timber spits, the pieces of buffalo flesh which I had brought back from our expedition, and which I left in this position during the night, that they might be perfectly cured. One of the tenderest pieces my wife had already broiled for our supper. It was a merry meal, and cheered by a lively discussion of all the incidents of an eventful day. Afterwards we fed our different animals, took the necessary precautions for our safety during the night, and retiring within our tent, composed ourselves to sleep, thoroughly weary, but very happy.

Frederick took the precaution to bandage his eaglet's eyes, to keep him quiet, and perched him on a neighbouring branch, fastening him there by his foot.

Rudly's little jackal, after a supper of good milk, coiled himself up like a cat in his young master's bosom, and both inmates, though naturally so wild and fierce, passed the night in tranquillity.

At daybreak we all arose, fresh, invigorated, and in high spirits; and after a tolerably light breakfast, I was about to give the signal of departure, when my wife and sons interrupted me with some observations.

"Do you think, then," said the former, "that after all our trouble in felling this sago-palm, we are going to leave it here, and derive no advantage from it? To say nothing of its precious pith, I have been thinking that, if you split the tree up in lengths, it would make a couple of capital gutters to carry the water



from Jackal River to Tent-Town. What do you say to my idea?"

"That it is a very good one, but rather too difficult to put into execution. However, we will make the attempt."

With all the tools we happened to have about us we repaired to the place where lay the humbled palm-tree. Having sawn off its two extremities, I contrived, by dint of axe, and wedge, and mallet, though not without great difficulty, to make a longitudinal groove in the trunk. We turned the tree to do the same on the other side, and after four hours' hard work, had the satisfaction of seeing it split in twain. The farinaceous pith we then removed in great handfuls, for being closely interwoven with fibres and filaments, it is of a very tenacious character. My wife wanted to make immediate use of it; but this was impossible, as it requires in the first place to undergo a certain amount of preparation, and we had no suitable utensils. So, wrapping it up in a clean cloth, we deposited it in our cart, and found ourselves once more provided with a wholesome and substantial aliment.

We spent the rest of the day in collecting our treasures and loading our cart. The cured buffalo meat, the cocoa-nuts, the sugar-canes, the guavas, and the wax-berries, were included in our cargo, without counting our live stock, among which the young buffalo, much pleased with the company of our cow, was not the least interesting animal. But great as was our impatience to return to Falcon's-Nest, we deferred our departure until the following day, and passed another night under the shelter of our temporary tent. On the morrow, as soon as the sun appeared above the horizon, the entire caravan set out on their march. The young buffalo, harnessed to the cart by the side of the cow, his foster-mother, proved an efficient substitute for the fugitive ass, and made his first essay as a beast of draught. We were glad that we had secured his services, for our load was of considerable burthen; and for this time, at least, we were compelled to give up all idea of transporting both our palm-wood gutters. We therefore took only one of them with us; and to diminish the weight, we suspended it to the axle, underneath the cart. Its length, however, rendering it difficult to travel through the woods, we were forced



to take the nearest route to Falcon's-Nest, and to give up a project we had formed of collecting some plovers' eggs. I turned aside with Ernest to pick up the vessels we had placed to catch the caoutchouc juice. There was no great quantity, but just enough for a first attempt at the manufacture.

As I rejoined my little troop, I heard our dogs barking in the most violent manner. They were ahead with Frederick and Rudly, and for a moment I felt afraid lest they had been attacked by a tiger or some other beast of prey. I commanded a halt, and starting forward, with my gun loaded and cocked, I caught sight of Rudly, lying flat on the ground, either through fear, I supposed, or to see better through the brushwood; but he quickly sprang to his feet, and turned towards me with a burst of laughter.

"It is our great fat sow, again," he cried. "Is the stupid creature always going to play these tricks?"

And above the noisy barks of our dogs rose the loud, half-angry, and half-alarmed gruntings of the recreant sow, whom I discovered among the bushes—not a prey to the griefs of solitude, but surrounded by eight to ten young sucklings, all imitating their mother's melodious accents. The latter, on seeing us, ceased her cries of grief and anger, and gave utterance to short friendly grunts, in proof that she recognized us. In return for this welcome, we gave her all that remained of potatoes and biscuit, and rejoiced greatly at the birth of her little family. It was resolved that we would leave the sow to nourish her young for some time longer; that then we would remove two of them, and breed them up at our colony; and that the others should be allowed to run free in the woods, where they might increase their numbers, and eventually furnish us with capital game.

Our arrival at Falcon's-Nest was a moment of happiness for all. Our domestic animals flocked around us, and showed their delight at our return in the noisiest manner. We fastened up the additional members of our herd until habit had rendered them sociable like the others.

Frederick took measures to secure his eagle in the same manner; but after attaching him by a small iron chain to a branch of the fig-tree, where the parroquet was also posted, he imprudently



uncovered his eyes. The burst of light produced an effect on the ferocious bird which terrified us; for suddenly he clapped his wings, darted to and fro his curved beak, and seizing upon the poor little parroquet, tore it in pieces before we could rush to its succour. Frederick broke out into loud cries of despair; he fell upon the eagle, and would have killed him, had not Ernest interfered and solicited his pardon.

"Give me the rascal," said he; "I know how to master him, and will make him as tame and tractable as a little dog."

"No, certainly, I will not give him to you," replied Frederick; "I caught him, and I will keep him. But you may as well teach me your secret how to conquer him."

"Oh, since you wish to keep your bird, I too wish to keep my secret."

I was obliged to interfere.

"Why," said I to Frederick, "would you have your brother reveal his secret for nothing? Why should he make less profit out of his reading and reflection than you out of the products of your rifle? Would it not be fair if you offered him something in exchange for his secret, which, by the way, seems to me a very wonderful one?"

"You are right, papa," said Frederick, growing calm. "Well, Ernest, I will give you my little ape if you will teach me how to master this proud animal, which, in spite of all, I would fain preserve; for, you see, the eagle is a heroic bird."

"Be it so," replied Ernest; "and as I have no taste for the heroic, I would not care about possessing your hero-bird. I would rather be a man of letters, and record your deeds of high emprise if ever you undertook any adventure with your eagle."

"Come, come; cease your jokes, and tell us your secret."

"The mode is simple, though whether it will be successful I can hardly say; but I have read that the Caribs tame the largest birds by making them inhale tobacco-smoke."

Frederick began to laugh incredulously; but Ernest, procuring a pipe and tobacco, set to work, and with imperturbable gravity smoked away beneath the branch where the captive bird still furiously struggled.



As the light whirls of the smoke rose in quick succession his violence abated. Ernest smoked all the more intensely, making the cloud revolve, as it were, around the fierce bird's head. By degrees he grew perfectly quiet, and, fixing upon us a semi-drunken and unconscious gaze, remained clinging to the bough in a state of complete intoxication. His eyes were then bandaged without difficulty.

Frederick thanked his brother heartily for the service he had rendered him; and to reward him, went in search of his ape, which thenceforward became Ernest's property.







## CHAPTER VI.

River sides, and woods, and heathy waste.

KEATS.



EARLY the next morning we set out to examine our plantations of fruit-trees, and to provide those which needed them with bamboo stakes and fences. We carried our bundles on the sledge, to which we harnessed our cow, leaving the buffalo at home until the wound in his nostrils was cicatrized. We gave him a handful of salt, which so raised us in his favourable opinion, that the poor beast, already half-tamed, would fain have followed us.

We commenced operations in the avenue leading from Falcon's-Nest to Family Bridge. The wind had levelled our trees to the ground; but we raised them carefully, and while I dug a pit at the foot of each, my sons inserted therein a stout stake, to which the tree was firmly secured by some yards of cordage, made out of the long stems of dried herbs, as supple and as tenacious as the osier.

While thus engaged, my sons addressed to me a number of questions, suggested by the character of their occupation, and I made the best replies I could. They all more or less referred to the training and cultivation of trees.

"Are these grafted or wild trees," inquired Frederick, "which you have planted here?"

"Wild!" exclaimed Rudly; "do you want to make us believe that there are wild trees and tame trees?"

"You think you have uttered a witty thing, my dear Rudly,



and you have only said a foolish one. Undoubtedly, no trees exist which lower their leafy crest at man's bidding; but there *are* wild trees, and trees which are not wild. We obtain the latter by the process called grafting; that is, by the insertion of a small branch or slip of a good fruit-tree in one which bears only rough or acid fruit. By-and-by I will explain this method to you practically, and you will find it very amusing; for not only do we procure by it every kind of fruit, but we also vary or change the species. For example, as a general rule, the trees which we graft are always of the same kind; we do not graft apples on a cherry tree, because the fruit of the one has pips and that of the other a kernel. But, for this very reason, cherries succeed perfectly if grafted on a plum-tree, peaches on an apricot, or pears on a quince."

This brief explanation greatly interested my young gardeners.

"But, papa," inquired my thoughtful Ernest, "how could any one form the idea of grafting, if, as you say, all trees bearing good fruit have been submitted to this preliminary occupation! Where did man find the slips of good fruits fit for grafting on the wild trees?"

"Your question is reasonable. However, it is inaccurate to say that all trees require grafting before they can yield good fruit; such is only the case with European trees. In Europe an unfavourable climate is detrimental to the production of good fruit, while in other regions, never tilled by human industry, are found entire forests of fruit-trees, such as cocoas, guavas, oranges, lemons, citrons, which owe only to nature their fragrance and delicious taste!"

"Is the origin of all our European fruits known?" inquired the young professor.

"Of nearly all. Thus: our shell-fruit, such as the nut, the chestnut, and the almond, come from the East; the peach from Persia; the orange and apricot from Armenia; the cherry, which was not known in Europe until some sixty years before the Christian epoch, was imported from Asia Minor by Lucullus; and the olive sprung from Palestine. The first olive-trees were planted on Mount Olympus, whence they spread into the rest of Europe. The



fig is a native of Lydia. Plums, to which you are so partial, except a few species indigenous in our own forests, belong to Syria, and the city of Damascus has given name to a well-known variety. The pear is a Greek fruit,—the ancients called it the fruit of the Peloponnesus. The mulberry is a native of Asia, and the quince comes from the town of Cydon, in the island of Crete. It is likewise said that the apple, named by the Romans Epiroticus and Asiaticus, is a fruit native to these countries; but for my part, I believe it is a child of the North, and always dwelt therein, with others of the same genus which people our forests, and have not been ameliorated by art. I think, too, that Europe has not been completely forgotten by the Creator in his division of the fruits of the earth, and that if most of them bear names indicative of a foreign origin, these serve rather to designate the species than the fruit itself."

While thus conversing with my young horticulturists, who frequently multiplied their questions to my infinite embarrassment, our work made rapid progress. After having propped up all the young trees of the avenue, we did the same good office for those in our south-eastern nursery-ground, where we had planted the more valuable shrubs which required a southern exposure, and it was near noon before we completed our task.

You may fancy with what a prodigious appetite we returned to Falcon's-Nest. Our good housewife provided us an excellent dinner, consisting of cured beef and palm-cabbage cooked with fresh butter—the whole, in our opinion, being a repast for a king!

Domestic labours occupied the remainder of the day. Towards evening I fixed upon a project which I had been long revolving in my mind, but whose execution presented some formidable difficulties; namely, the substitution for the rope-ladder, which my wife never ascended without fear and trembling, of a fixed substantial staircase. And, in truth, we should soon have to do more than pass the night in our aerial abode; the wet season would compel us to reside there altogether; we should then have to ascend and descend much oftener, and the shaking ladder might be the cause of many accidents. But such was the elevation of our leafy bower,



that not all the spars and beams we had removed from the wreck would suffice, when put together, to reach its level, even if our feeble arms had been capable of accomplishing so arduous and difficult an undertaking. Yet, looking at the tree and its gigantic trunk, I said to myself, a hundred times daily,—

“If it is impossible to mount it from without, is there no means of doing so from within?”

“Have you not told me,” said I to my wife, for I had made known my idea, and welcomed suggestions from everybody towards its execution; “have you not told me that a swarm of bees was lodged in the trunk of our tree?”

“Yes, papa,” cried little Fritz; “and wicked bees too! For they stung me so badly the other day that my face was all swollen—oh, they are horrid creatures!”

“You forget to say,” interrupted his mother, “that if they maltreated you it was because, while swinging on the ladder, you took it into your head to grope with a stick in the hollow where they go in and out!”

“Yes, mamma; but I only wanted to see if the hole was very deep!”

“Eureka! I have found it!” I exclaimed; “the tree is hollow enough to accommodate a swarm; no doubt the malady which has attacked its heart has extended further. Of this we must make sure: then let us enlarge the interior tube, or tunnel, and we will place there a staircase, the idea of which I have in my head. To work, boys; to work!”

But before I could give any instructions, my youngsters were off and away, some on the arch-like roots which supported the giant trunk, others swarming like squirrels up the ladder, and all four sounding the enormous fig-tree at different points to ascertain the extent of the cavity.

The experiment, too rashly attempted, was likely to have been attended with grievous consequences to one of the young experimentalists, for Rudly, when just opposite the aperture by which the bees made their exits and entrances, received in his face a full volley of the insects, which, frightened by the violent blows that shook their palace of wax, issued forth with a terrible buzzing.



He was compelled to let go. In a moment his hands and face were fearfully stung; his brothers, though lower down, escaped but little better; and the air echoed with their sobs and lamentations. My wife hastened to rub the wounds with wet earth, which afforded some relief.

This untoward event interrupted our operations. While my poor workmen were for a time *hors de combat*, I occupied myself in constructing a great hive for our warlike enemies, and in devising some method of driving them from their asylum without incurring the risk of being blinded.

I took the cylindrical portion of a large empty gourd, which I securely fastened to a plank with some wet clay, making a small hole beneath as an entrance for the bees. Half a calabash made a roof or covering for the hive. The plank I then nailed firmly to



SWARM OF BEES.

one of the lateral branches of our great tree, and this done, as the bees were still frightened and angry, I deferred further operations until the next day. It was my object to let them all return to their domicile, and the increasing coolness of the night compelled them to seek its shelter.

An hour before day I arose, and summoned my sons to assist me in the removal of the bees to the new residence I had constructed for them.

I had no mask, and in fact none of those appliances which bee-keepers use to guard against the attacks of the bees, but with a little industry and invention I did without them. I closed up all the openings of the tree except the one at which the bees went in and out, and this, too, I partially stopped with clay, leaving just space enough to admit the bowl of my pipe.

Having lighted it, and covered my head with a cloth, I began to



smoke energetically, puffing the intoxicating vapour into the hollow of the tree, so as completely to stupefy the little community I wished to make myself master of. At first we heard a loud buzzing in the interior, like the sound of a distant storm. Gradually it decreased, and was succeeded by a profound calm. The bees, overcome by the tobacco-smoke, were incapable of defence. With Frederick's assistance I then cut out an opening beneath their nest, like a window, and renewed the fumigation with a plug of tobacco, lest the noise and the fresh air should have awakened the swarm; but on this score there was nothing to fear. The poor stupefied insects had assembled in great clusters on the sides of their dwelling-place, and we had only to take them up gently in large calabash shells, and remove them to their new hive. Afterwards we examined the booty of which we had got possession, and were astonished at the great quantity of wax and honey collected in the hollow.

When we had transported all the inhabitants, to whom we left the upper combs and some half-finished fragments to reconcile them to their new dwelling, we gathered the remainder in our vessels, and such was the abundance, they were soon all filled. We then poured it into a carefully cleaned cask, which we stored away in the coolest corner of our establishment, and covered with sailcloth, planks, and leaves, lest the bees, attracted by the fragrance of the honey, should come in crowds to reclaim their own. For the same reason we deferred until the following night the separation of the honey from the wax; but we left out enough to serve as a treat at dinner, and truly we found it delicious.

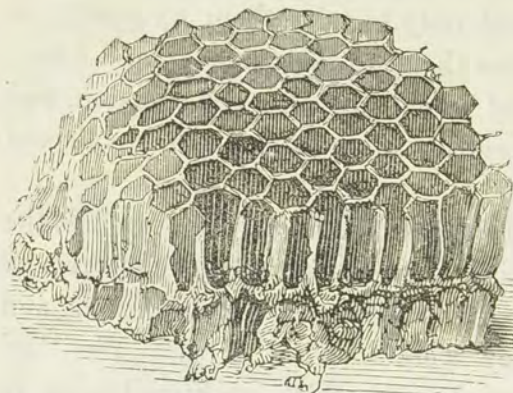
To prevent the return of the bees to their ancient nest, I placed some lighted tobacco in the interior of the tree, closed all its openings, except one at the bifurcation of the branches, and soon had the satisfaction of seeing the smoke pour out of the latter, as from a funnel; a proof that the tree, like the European willow, was entirely hollow, and derived all its nourishment from its thick bark. As for the bees, their state of stupefaction lasted but a few hours; undoubtedly, they were at first a little out of their proper element, and vexed, we will suppose, at the disorder which prevailed in their new hive, and all day they went and came, and



hovered and fluttered, around and about it; but in due time the tumult ceased; a soft hummer became audible; it announced the return of peace and order in the sage republic.

I had decided that on the morrow we would attempt the construction of our grand staircase: the materials we collected during the day; but as we had to spend a part of the night preparing the honey, we rested for a few hours after dinner to recruit our energies and fit ourselves for work. And at sunset, after the bees had retired, we descended from our sleeping-chamber.

We extracted the honeycombs from the cask, and broke them up



HONEYCOMB.

into pieces, to expedite the process of straining. After awhile we placed the honied fragments in a clean canvas bag, and subjected it to a heavy pressure, on just the same plan as we had adopted in the case of the manioc. The honey thus forced out was not so clear as the first supply, which we had poured into a small

and very clean barrel, but it was of excellent quality. The residuum was wax, which I wished to have preserved in the lump; but afraid that, if kept in that state, it would attract swarms of insects, I thought it better to melt it down at once. As I was incessantly occupied in making fresh candles, I knew the bees'-wax would be useful in giving them a greater solidity than my former attempts had obtained.

About midnight all our toils were at an end, and we retired to rest. But Frederick and I were again on the alert with the first dawn of day, unable to rest for the excitement we felt respecting our great enterprise. To speak the truth, I could hardly help looking upon it as beyond our strength, but I comforted myself with the reflection that intelligence, patience, and perseverance triumph over a host of obstacles. The latter two qualities we certainly possessed, and I was not sorry to find occasions for developing in



my sons these essential qualities to the success of every enterprise.

After deliberating with my young companions, for Rudly and Ernest were not long in joining us, we began our work by cutting at the base of the tree a doorway of the same size as the cabin-door which, with its hinges, we had brought from the wreck. Once we had cut through the bark we found it easy enough to excavate the interior of the gigantic trunk, for it contained nothing but rotten wood, which we removed with a spade. Having thoroughly cleaned the cavity, we planted in the centre a stout young tree, about twenty feet high, properly stripped and prepared, to serve as the axis of my staircase. We had got ready, the evening before, a number of boards from the staves of large casks, to form our steps. With chisel and mallet we made deep notches in the inner part of our banyan, and corresponding ones in the central pillar: in these notches I placed my steps, which I rivetted with large nails; in this manner I raised myself, step by step, but regularly turning round the pillar, until I reached the top. Once there, we fixed a second trunk upon the first, and disposed around it the steps intended to carry upward our staircase. A third and a fourth trunk brought us to the summit of our colossal tree, and the topmost step abutted exactly on the platform of our aerial abode. I smoothed and fitted the entrance with my axe; placed a rope on either side for a hand-rail; one descending the length of the axis of the staircase; the other following the interior surface of the tree, and fastened to it at regular intervals to keep it taut and firm.

I have forgotten to mention that, while constructing the staircase, and as I mounted upwards, I made several openings, in which I fixed some panes of glass removed from the cabin windows, so that the winding passage was conveniently lighted up, and a sort of watch-tower completed, which, one day, might possibly prove of great utility to us.

The erection of this firm and commodious staircase—of which I have here given but an abridged description—occupied us upwards of a month. We did not, however, devote the whole of our days to the work, but occasionally engaged in other labours. However,



we were masters of our own time—we had no one to order us, no stranger to satisfy: it would have been madness if we had toiled like galley slaves, without enjoying a little relaxation.

During this long period, then, we had undertaken and carried out various enterprises of minor importance, and several incidents relieved the monotony of our daily life. At first, we were presented by Juno with six little whelps, the prettiest Danish dogs that were ever seen; my children would fain have saved them, but I did not feel inclined to bring up so numerous a progeny: I decided that two should be left to the mother, and the rest drowned. As this occurred only a few days after Rudly's capture of his little jackal, he conceived the notion of thrusting the latter into the dog's kennel, and Juno welcomed the little-stranger with a good grace, sharing her milk between him and her own whelps. About the same time our goats presented us with a couple of kids, and the sheep with some lambkins—an augmentation of our flocks which we regarded with intense delight; and for fear these useful animals should indulge, like the ass, a vagrant fancy, we suspended to their necks some little bells, which we had found on board the wreck, and which would enable us, in case of necessity, to track the fugitives.

The training of our young buffalo was another leading occupation during our period of carpentering. Through the incision in his nostrils I had passed a short, slender stick, to whose extremities I attached a couple of reins, forming a bit after the fashion of the Hottentots, by which I could guide him as I willed; yet it was not without some difficulty that the restive animal submitted to control. It was not until Frederick had broken him in as a steed that we could make him carry any burdens. This was a most glorious triumph of patience over difficulties which at first sight seemed insurmountable. Not only did we train him to carry the ass's saddle-bags and other loads, but Rudly, Ernest, and even little Fritz, in imitation of Frederick, took lessons in riding, which were worth all the horsemanship in the world. For thenceforth my boys would have approached without fear the most spirited horse, convinced that if they could tame a young buffalo they could assuredly tame *him*.



Frederick did not neglect his eagle. The royal bird, rapidly advancing in his education, soon began to pounce down on the dead game which his young master exposed within his sight, sometimes between the horns of the young buffalo, sometimes between those of the goat, now on the back of our great bustard, and



now on that of the flamingo, with the view of accustoming him to stoop, when hunting, on animals as on a quarry. The eagle, thus skilfully trained, obeyed the voice or the whistle of his master, but the latter dared not as yet trust him in free flight, lest the bird's wildness of temper should break forth, and he be deprived of his captive.

The educational fever with which all of us burned also infected Ernest, who undertook the instruction of his little ape. Master Knips was quick and intelligent, but he took to his lessons with excessive reluctance. Ernest sought to accustom him to carry on his back a little pannier, in which he compelled him to deposit various articles, and afterwards to remove them; in truth, he wanted to train him as a travelling companion; and, eventually, the patience and composure of the master prevailed over the petulance and waywardness of the pupil. Education triumphed, and Knips, who at first had flown into a passion at the sight of his pannier, became so partial to it that he would never go without it.

Rudly was less successful in his educational attempts, and, though he had christened his young jackal *Hunter*, the beast hunted only for his own behoof; or, if he brought anything to his master, it was the skin of the animal whose flesh he had greedily devoured.

All this while I, the head of the family, was not idle: I brought



to perfection the manufacture of tapers by mixing bees'-wax with the *myrica* berries, and shaping them in bamboo moulds: I even contrived to give them the polish and roundness of European candles, by rolling them, while in a soft condition, between two very smooth boards. My greatest trouble was with the wicks: my wife wanted me to use for them the small quantity of cotton still left untouched. I had formed the idea of substituting a species of resinous wood, divided into splinters, like matches; but the wood carbonized, when burned, and gave a dull, disagreeable light. My wife then came to my assistance: she had recourse to the pith and fibre of the karatas, and with her own hands prepared a considerable quantity, which she carefully dried. I made another attempt, and my success was complete.

I also set to work upon the caoutchouc. A pair of socks, which I filled with dry sand, formed the moulds of my intended boots. I covered them with several layers of the elastic juice: when the whole was thoroughly dry, I emptied out the sand, nailed to the feet several strips of buffalo skin, and, to render them still more durable, after flattening down the points of the nails, I fastened on these strips two or three layers of very thick gum, and thus completed a pair of boots which served me as well as if they had been made by the best bootmakers of London or Paris. So delighted were the boys with my success, that they poured in their orders upon me; I accepted them, and, at the end of a few days, my whole family were provided with waterproof, light, and substantial boots.

These various occupations, to which we devoted a few hours daily, kept pace with our more important labour. We also carried out an undertaking in which my wife was greatly interested; the erection of water-works for the supply of Tent-Town. We built by the side of Jackal River a kind of cofferdam or reservoir to raise the water to a sufficient height for its conduct, by means of our palm-wood tubes, or gutters, into the great turtle-shell, which, placed near our dwelling, acted as a trough for washing purposes. The superfluous water flowed off through the hole made by Frederick's harpoon: a piece of cane, fitted to the hole, formed a kind of spout or jet, under which we placed a bucket: and thus



we were always provided with a supply of fresh water, which had previously been a pressing want.

Our "belongings" now assumed an air of civilization; our comforts were continually increasing, and we felt constrained night and morning to acknowledge the infinite goodness of God, who had not only rescued us from the death which our comrades had undoubtedly encountered, but in a seemingly desert region had provided us with all the necessities and luxuries of life.



One morning, when we were giving the final touches to our staircase—that is, filling up the spaces between the steps with pieces of wood vertically placed—we were suddenly surprised by hearing in the distance a succession of strange, shrill, and prolonged sounds, like the roar of some beast of prey, but, at the same time, mingled with so singular a kind of neighing, that I could not determine what animal they indicated. Our dogs pricked up their ears and prepared for battle. I collected all my family, and made them ascend into their aerial castle. We seized our guns, and having closed the door at the bottom of the staircase, stationed ourselves at the loopholes, and surveyed the surrounding country with some anxiety. Nothing appeared, but the noises grew louder, and the agitation of our dogs, whom we had armed with their porcupine collars, and left in charge of the cattle, continually increased.

Rudly thought the cause of the alarm must be a lion, and the ardent lad rejoiced at the prospect of a possible adventure. Frederick laughed at him, however, assuring him that the wild cries we heard were not a lion's regal roar, but more nearly resembled those of a herd of jackals bent on revenging upon us the death of their brothers. Ernest thought he recognized the voice of the hyæna,



as horrible, said he, as the animal itself; while poor little Fritz gave no opinion on the subject, but hid himself in the arms of his mother, who, standing in the upper balcony, gazed anxiously over the plain, and murmured with pallid lips her earnest prayers.

While we were thus tortured with the agony of expectation, the strange howling was heard anew, but this time much nearer to us. Frederick, who was leaning out of one of the windows, burst into a shout of laughter; he had discovered the terrible enemy.

"Come, see," he cried; "come see this lion, this hyæna, this troop of famished jackals! It is none other than our runaway ass! Yes, truly, our old Grizel, who is melodiously announcing, after his manner, the fact of his return to the bosom of his family! Ha, ha, ha!"



ONAGER, OR WILD ASS.\*

And behold, in a new *hee-haw!* slowly and majestically prolonged, we recognized the sonorous voice of our absentee; he quickly made his appearance through the trees; but, to our surprise, he came not alone—an animal of the same genus, but far hand-

\* The Onager is a native of Central Asia, where he is found from Tartary to Cape Comorin; but he is unknown in Australia, in the East Indian Archipelago, and Polynesia.



somer, larger, and of more elegant form, trotted by his side. On examining the latter I recognized, with extreme pleasure, the Onager, or wild ass, and I immediately considered how great a benefit his capture would prove to us. It is true that naturalists declare it impossible to tame this beautiful animal, but, at all events, we resolved to make the attempt, if we could only catch him.

In the first place, I enjoined the strictest silence. Frederick and I then descended to devise some means of effecting our much-desired conquest. My son would fain have tried his lasso, but I feared that the frightened animal, if the attempt failed, would take to flight, and never re-appear.

I therefore preferred another plan. One end of a stout rope I fastened to a root of our tree, and with the other I made a running knot. This done, I split up a piece of bamboo about two-thirds of its entire length, so as to form a kind of pincer for the animal's nose, if we could get up to him. Meanwhile, the ass and his companion continued their advance: the former, recognizing the locality, seemed inclined to do the honours to his new friend, and both began browsing the thick grass which clothed the shady soil.

Furnished with our running knot and the pincers, we stole towards them as noiselessly as possible: myself hiding behind the trees, and Frederick, who carried the lasso, approaching as near as its length permitted. On catching sight of him, for he was foremost, the onagra raised his head, and recoiled rather with surprise than terror. It was, undoubtedly, the first time he had seen the human form, and as Frederick remained immovable, he calmly resumed his feeding; the ass, to whom my son offered a handful of grain mixed with salt, immediately approached, for he recognized his former master; his companion followed him without suspicion, and as soon as he came within reach, Frederick adroitly flung the noose over his head, and the animal was caught; for, attempting with a prodigious leap to take flight, he only drew closer the knot which held him, and this he did with a jerk which brought him to the ground, half-suffocated, and his tongue hanging out. I ran up to him imme-





diately, loosened the cord, fixed the bamboo nippers on his nose, tying the two ends together by a piece of twine, so that he could not get rid of them. The pain caused by their pressure so subdued his spirit that we were able to approach him without danger, and we bound his legs together just as the smiths do when they have to shoe a vicious horse. I cut the running knot, temporarily substituting our ass's halter, and having secured him with fresh ropes to a neighbouring tree, we left him for awhile to recover his senses.

However, all the boys hastened up, now that we were masters of the animal. They admired his vigour, his beautiful form, which more closely resembled that of the horse than the donkey, and discussed a thousand schemes for the employment of this new courser; but we had not only to train him, but to tame him enough to permit of our approach; for the wild free-spirited creature broke into a fury the moment he caught sight of any one of us.

As the ropes which secured him were stout and new, I had given him, perhaps prematurely, the free use of his limbs, and he



profited by this liberty to leap and kick violently; nay, spite of the painful apparatus which he carried on his nose, he gnashed his teeth, and, with fiery glances, endeavoured to bite all who ventured within his reach.

We resolved to abandon him for a time to his own devices, after having tied up our donkey near him, that the sight of an animal of his own kind might somewhat console him in his disgrace.

Next day, when I carried him his food, I found him a little quieted by his captivity, hunger, and fatigue; for, by means of ropes carried under his belly and fastened to a kind of girth, we had compelled him to stand upright, and he had had no sleep. Satisfied with this first result, I continued, with a patience which certainly I should not have had in Europe, to watch our new inmate, and at the end of a month he was sufficiently subdued to enter upon his education.

The work of taming him, however, was long and difficult. At first, I conquered him so far as to carry a burden on his back; but I could not sufficiently moderate his savage fire to obtain the docility necessary for success in my other projects. I wanted to train him as a steed for myself and sons. But I durst not trust myself upon him without shackles, and I was at a loss how to proceed, when I called to mind the method employed by the American Indians to tame their wild horses, and resolved to employ it. Spite of his leaping and kicking, I sprang upon his back, and seizing one of his long ears, bit it until it bled. This experiment was marvellously successful; the animal was suddenly quiet, and stood almost motionless; I had discovered the secret of his strength, and the means of subduing it.

Thenceforth, we were completely his masters. My children mounted him one after the other; they christened him Lightfoot, and never did animal better deserve the name. As an extra precaution, I made him wear shackles on his forelegs for a considerable period; and instead of a bit, which his haughty spirit would never endure, we used a snaffle for gaining control over his head, and with a switch we struck his right or left ear, according to the direction we wished him to follow.

While we were occupied with these cares, our poultry-yard re-



ceived a considerable addition. Three successive hatchings had furnished us with forty young chickens, which, clucking, clattering, and scratching up the ground, became our good housewife's pride and happiness. She was exceedingly fond of all the



feathered tribe, and much preferred them to our favourite animals, such as the jackal, the ape, the eagle, and the onager, for, she said, they would do nothing but eat, and, with the exception of the buffalo, who was useful as a beast of burden, would never be good for ought!

Her poultry, on the contrary, cost little to feed, supplied us with eggs, and in the wet season, the winter of these climates, when we could not follow the chase, would help to spread our table.

My wife's observations reminded me that it would not do to defer until the rainy season a work essential for the welfare of our domestic animals; namely, the construction of a place of shelter for them during the incessant rains. The framework of the necessary edifice was furnished by the roots of our great tree: the roof was framed with bamboos,—split and placed tolerably close to one another, like lattice work; we filled up the interstices with moss and clay; and a layer of pitch spread over the whole rendered it so solid that we converted it into a platform, ornamented with a balustrade, where we promenaded at our pleasure. With a few planks we ran up half-a-dozen partitions in the interior, forming



a series of small enclosures in which we placed our animals, and also stored our provisions; stables, poultry-yard, dairy, granary, hay-loft, all were combined under one roof, leaving, nevertheless, a good-sized area for the reception of our edible supplies. After it was finished, we busied ourselves in laying up a store for some months' use, and not a day passed without our transporting thither some useful article.

One evening, on our return from gathering potatoes, I be-thought myself of sending forward my wife and two younger children, with the cart drawn by our cow, ass, and buffalo, while I made an excursion to the Wood of Acorns, to collect, if possible, a few bushels. Frederick mounted the onager, Ernest followed with his ape, and I with a canvas bag, which I counted on filling full of acorns. Having reached the wood, we tied Lightfoot to a tree, and all three set to work to pick up the fruit with which the ground was covered. We were disturbed in our occupation by strange cries and a flutter of wings proceeding from a neighbouring thicket. Ernest hastened thither, and soon called us.

"Run," said he. "Master Knips has made a fine discovery—a superb nest of Canadian heath-fowl—the eggs are here, and I have got both the male bird and his mate. Come, come, quick."

In two bounds Frederick was by his brother's side; he seized upon the two noble birds, which struggled violently and cried piteously, and speedily re-appeared, followed by Ernest, holding in his arms a large nest, deftly composed of inter-laced grasses, and containing several eggs.



It was, in truth, a treasure on which Master Knips had happened, and his gormandizing instinct for once had proved of real



value. We tied the legs of the two birds, and put the eggs in Ernest's hat. But the latter was not disposed to throw away the nest, composed of a supple and shining grass, which grew very plentifully in the neighbourhood.

"I would like to carry this grass home to little Fritz," said he; "its form is very curious, and he will call the spikelets little swords."

At the moment, being occupied with our capture, I did not pay much attention to what Ernest said; besides, night was coming on, and we had to hasten home. Our sack, half-full, we placed on the onager's back. Frederick then mounted his steed, and rode away in advance, guiding him with a handful of the long leaves I have spoken of, and which resembled those of the gladiolus. Ernest carried the two birds, and I undertook the charge of the eggs, which I covered over very closely, for, as they were still warm, I had some hopes of placing them again under the mother when we reached Falcon's-Nest. My expectation was not deceived. On my return, I handed over the brood to my wife, who attended to the poor mother with so much skill and assiduity, that in a short time she presented us with fifteen chickens.

Fortune, however, had favoured us far more than we imagined in this circumstance: the long flat leaves which Ernest had given to his brother for playthings were so supple and flexible that the child conceived the notion of cutting them into strips and plaiting them to make a whip. This led me to examine them carefully, and perceiving that their tissue was composed of a multitude of long, silky, and very strong fibres, I became convinced that the supposed gladiolus was really the *Phormium tenax*, or flax-plant of New Zealand. When I announced this important discovery, my wife was overwhelmed with joy.

"Bring me the leaves," she cried; "bring me all you can find! I know how to deal both with hemp and flax. When we have reduced this into tow, you shall make me a wheel, or, at all events, a spindle, and in the evenings I will spin you a supply for next year of shirts, stockings, trousers, and blouses, of good durable stuff."

I could not help smiling at my laborious companion's sanguine



anticipations of the great results to flow from our discovery.

However, my young people, always ready to take an interest in whatever interested their mother, immediately mounted their steeds. Frederick the onagra, and Rudly the buffalo, and after a two hours' absence returned with an enormous bundle of flax on their cruppers, which they gravely deposited at their mother's



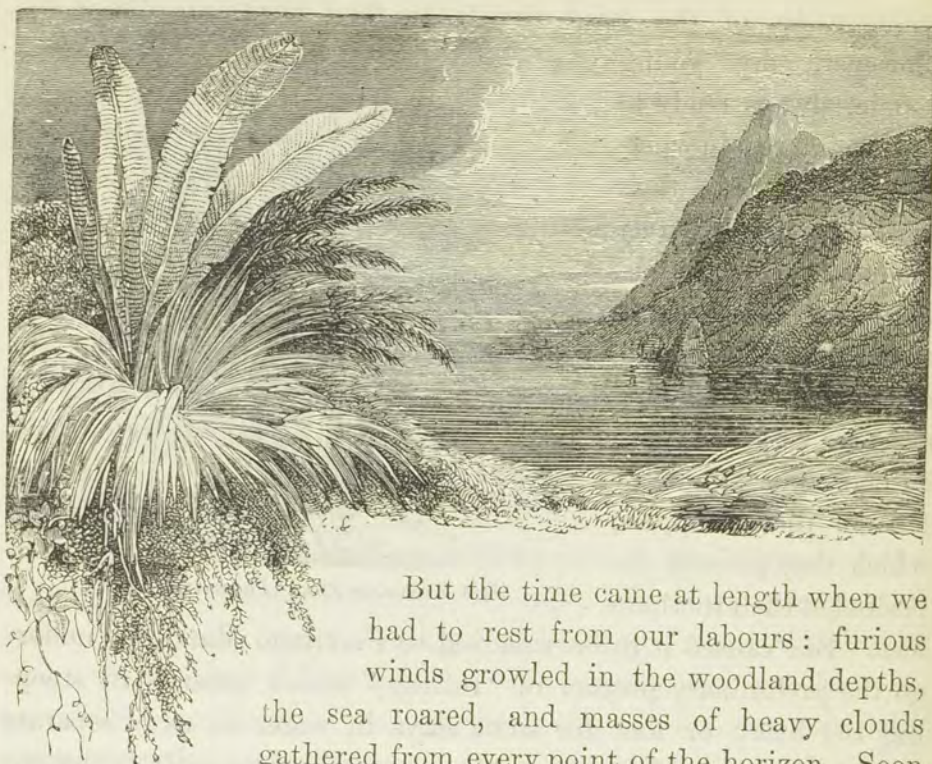
NEW ZEALAND FLAX (*Phormium tenax*).

feet. She caused it to be removed to Flamingo Marsh, to undergo the preliminary process of "retting," which consists in steeping the hemp or flax for some days in water so as to separate easily the vegetable part. As soon as this was entirely decomposed, we placed our bundles in a sunny spot until thoroughly dry, and, afterwards submitting the stems to a hard pounding, we collected by handfuls the tow which covered them.

The remainder of the work necessary to fit the flax for the spinner we deferred until the wet season, which was now rapidly approaching, and when I promised my wife I would make her carding combs, spindles, bobbins, ay, and a plaiting machine, though I was promising a work of no ordinary difficulty; but I had already accomplished so many things of apparent impossibility that I hoped for success even in this critical task.

We continued to accumulate provisions, as well for the animals as for ourselves. Daily we loaded our waggon with bags of sweet acorns, manioc, potatoes, wood, forage, fruits, sugar-canes,—in fact, with whatever we thought might be useful during the bad season, whose duration we could not even conjecture. We profited also by our last days of fine weather to sow all the barley and other European grains we had by us, that the rains might develop their germs and prepare for us an abundant harvest.





But the time came at length when we had to rest from our labours: furious winds growled in the woodland depths, the sea roared, and masses of heavy clouds gathered from every point of the horizon. Soon they broke over our heads, and torrents of dense rain fell, night and day, without the least interruption. The brooks swelled, and their waters, uniting around us, formed an immense lake. Fortunately, the spot where we had established our colony was more elevated than any other part of the valley; the waters did not approach us very closely; but formed a shining belt at a distance of about two hundred feet from our tree, which, with the little knoll it overshadowed, rose like an island out of the general inundation. My dear ones were sadly affected by the spectacle of this immense sheet of water, which seemed daily to expand. Before long we were compelled to abandon our leafy bower, where the rain penetrated on every side, and the terrible gusts of the hurricane threatened ever and anon to overthrow our domicile, and dash its inhabitants headlong to the earth. We resolved upon a removal, and sheltered ourselves under the roof formed by the roots of our colossal tree, where we had collected our live stock.

The area was limited, considering the quantity of provisions and



utensils we had amassed. The vicinity of the animals, the disagreeable odours which reached us, and, above all, the smoke which in this close confined cavern almost suffocated us, would have rendered a prolonged sojourn impossible, had I not bethought myself of constructing, with a couple of pieces of bark, coated with clay, a tube to carry off the vitiated atmosphere. I trenched upon the space which I had allotted to the beasts at a time when I had no idea we should require to dispute it with them; I turned out into the open air those animals which, native-born, were able to endure the inclemencies of the climate; so that I gave a sort of semi-liberty to the buffalo and the onager, keeping heavy clogs attached to their feet to prevent them from wandering to any great distance. The shade of our great tree afforded them sufficient shelter.

These arrangements carried out, we found ourselves much more comfortable; and as I had opened up a communication between our hut and the central staircase, we utilized the staircase by turning its steps into shelves for a variety of articles. My wife occupied the lower portion for herself, sitting near one of the windows to do her work. And we used the fire as little as possible. Fortunately the weather was not cold, and the majority of our provisions did not require long cooking. We had milk, meat, and smoked fish in abundance; our ortolans, fried in butter, were also a great resource; but my wife—excellent manager that she was!—only served them up to us occasionally as a dainty.

Looking after our animals occupied us for a part of the morning; afterwards we prepared some cassava flour, and cooked a supply of cakes on our iron trays. Though the door of our hut was lighted with a glass window, the perpetual obscurity of the sky, and our position under a vast tree with thick and leafy branches, brought on night at a very early hour. Then we lighted one of our wax candles, fixing it in a wooden foot on our common table. The good mother worked at her needle, and mended our clothes. I wrote my Journal, which Ernest copied in his beautiful handwriting, while Frederick and Rudly taught little Fritz to read, or amused themselves with drawing the plants and animals that had caught their attention. We then read together a chapter of the Bible, and after supper closed the day with prayer.



Such was our gloomy and monotonous existence. We had had no idea of the prolonged winter season of these tropical climates; and afflicted by incessant rains and perpetual gloom, regretted with infinite sadness of heart, springing, doubtless, from our love of fatherland, the ice and the snow of the mountains of Helvetia.

During this long seclusion, however, we executed several useful works. I made a machine, or beetle, for the flax. It was something like a large wooden knife, whose edge, fastened at one end to the table, rose and fell alternately on the fibres placed beneath, broke them up, and reduced them into tow. I also contrived some carding combs to detach the ligneous portions of the latter, and render it fit for spinning. These were a couple of pieces of hard wood, perforated with numerous holes, and slightly inclined on one side, to prevent them from being injured by use. Their backs were coated with a thick mixture of sand and pitch, which gave them solidity, and made them easy to handle. Of these new outcomes of our industry, however, we could make no use. The flax, which we had been compelled to collect in haste, was not sufficiently dry, and we were forced to execute this part of the process, as well as the spinning, in the shade of our smoky hut. The inconveniences we suffered inspired us all with a firm resolve to build, before another winter, a healthier and more commodious dwelling. Frederick reminded us of Robinson Crusoe, who had excavated in the rock a habitation wherein he braved all the inclemencies of the season; and the idea naturally occurred to us of doing the same at Tent-Town. The work would certainly be long and difficult, but what, said we, could we not accomplish with time, patience, and perseverance? Our imagination thus busy with the future, we forgot the hardships and weariness of the present, or contrived to prevent our minds from dwelling upon them; and this was much.







## CHAPTER VII.

Soft mossy lawns  
Beneath these canopies extend their swells,  
Fragrant with perfumed herbs, and eyed with blooms  
Minute, yet beautiful.

SHELLEY.



AN I venture to express in words the emotions of joy with which, after so many long and dreary weeks, we saw the heavenly azure once more reappear, the sun put to flight the last lingering clouds of winter, and diffuse its genial radiance over the face of nature? The winds subsided, the waters drained

away, and a few days sufficed to cover with a mantle of luxuriant verdure the scenes which had so long been a dreary and inundated waste.

At length we emerged from our retreat. We seemed unable to satisfy ourselves with gazing on the rejuvenated landscape; with expanded chests, we drank in deep draughts of the pure and invigorative atmosphere. We forgot all our sufferings; and with hearts full of hope and gladness, like the children of Noah on issuing from the ark, we raised a psalm of gratitude to the Creator.

All our plantations and our seed plots were in blooming prosperity. The young plants were showing their tender green shoots above the ground, and the trees were already loaded with a beautiful burthen of fruits and flowers. A prodigious quantity of vegetables of all kinds adorned the soil. The air breathed the



balmiest odours; the singing birds had resumed their minstrelsy; others, glistening with the most vivid colours, uttered their short shrill cries; and all were busied in the construction of their nests. It was spring-time in all its glory. Our first care was to clear our aerial castle of the leaves piled up within it by the winds. The mildness of the temperature enabled us to re-inhabit it; and as it had been but slightly injured, after a few repairs, which occupied only a day or two, we removed thither.

As soon as we had once more established order, I began, at my wife's desire, to prepare the flax for her weaving. During our days of seclusion, I had made a distaff, spindles, and a reel, and she longed to set to work with them. I therefore caused several parcels of the New Zealand flax, which were still a little too damp, to be dried before a fire; and afterwards the operations of beating and combing it were promptly and successfully carried out. My carding combs answered admirably; and in a very short time I had the pleasure of presenting my wife with a sufficient quantity of very soft fine thread. Without a moment's delay she began to ply her distaff. The spindle revolved rapidly in her nimble fingers, and was soon covered with a strong and tenacious material, which exceeded in quality our most sanguine anticipations. My wife, reminded by this task of her happy youth, was enchanted; she gave herself up to it with such absorbing ardour, that she went to and fro, with her distaff at her side, and her spindle in her hand, lest she should lose a moment. She selected little Fritz as her fellow-labourer, and while the mother spun, the child divided the thread into skeins.

While she was thus occupied, my sons and I visited our various establishments to repair any injuries inflicted by the heavy rains. The manioc and potato fields, those of barley and maize, my wife's kitchen garden, and our fruit-tree plantations, we found in the best possible order. Such was not the case at ill-fated Tent-Town: the tent was overthrown, the stakes were all uprooted, the canvas was rent in tatters, and a portion of our provisions injured by the wet; the pinnace alone had escaped; but our tub-made boat had doubtlessly been dashed in pieces, for not a vestige of it was visible. A more serious loss was that of two casks of gunpowder,



which, less sheltered than the rest, had been so soaked by the rain as to be no longer of any use. This accident made me keenly sensible of the necessity we were under of providing a more satisfactory shelter in the future than a canvas tent or a roof of leaves.

When we had remedied as well as we could the disorder existing in this locality, we called a council to discuss Frederick's



project, alluded to in my last chapter. He still pertinaciously held fast to his idea of excavating a suitable retreat in a part of the rock, in imitation of the cavern of his model, Robinson Crusoe. I could not shut my eyes to the difficulties of this project; the rocks encircling the narrow plain of Tent-Town confronted us like a solid wall, without the slightest chink or cranny; and, on the other hand, their apparent hardness seemed an insuperable obstacle to our success. However, as it was absolutely needful we should hollow out a small cavity for the reception of our remaining powder, I selected, in the most perpendicular face of the cliff, a point for the commencement of our Herculean labours. The site was preferable to that of our old tent; for the prospect extended over the whole of Safety Bay, and embraced the two banks of Jackal River with its picturesque bridge. I traced with charcoal the dimensions of the intended entrance to our cave; then my sons and I seized our chisels, our pick-axes, and our heavy hammers, and courageously commenced operations against the stone.

Little effect was produced by the first blows; the rock seemed impenetrable; the sun's rays had so indurated its surface that the



difficulty of the task covered our foreheads with beaded perspiration. The spirit of my young excavators, however, did not flag; every evening we quitted the work which we had pushed forward but a few inches, and every morning we returned to it with fresh ardour. At length, after five or six days' toil, having picked away the superficies of the rock, we felt the stone gradually grow softer under our persevering blows; soon it proved to be nothing more than a kind of limestone, which in turn gave way to a stratum of sand that could be wrought with the spade. Thereafter our labours grew light, and we indulged some faint hopes of eventual success.

For a few days we pushed on diligently, and had penetrated to a depth of nearly seven feet, when, one morning, Rudly, who was hammering away at the base of the cavern with his crowbar, suddenly exclaimed,—

“Papa, papa! I have got through!”

I was standing at the time on a ladder, and working away at the roof of the cave, so as to increase the elevation: without looking off from my work, I asked Rudly, laughing,—

“Can you see through the mountain, my boy?”

Frederick was wheeling the rubbish outside, but on hearing his brother's incessant shouts,—

“I have got through! I have bored a hole in the mountain!” he hastened to him, and called me in his turn, declaring that the crowbar had opened up a way into a great hollow, where it could easily be moved in any direction.

I thought the thing so extraordinary that I sprung from my ladder, and I found, in truth, on handling the crowbar, that it could easily be pushed to its full length. On trying it with a long pole, I came to the conclusion that only a thin wall of sand separated us from a considerable cavity. We all immediately set to work to enlarge the opening; and soon made it wide enough for one of my boys to enter. All volunteered, but I would not suffer any to attempt it, for on approaching the aperture to examine, if I could, the bottom of the cavern, a sudden rush of poisonous air turned me giddy.

“Keep off, keep off, boys,” I cried, in a panic, as I hastily



retired; "keep off—the place is deadly—if you breathe its air, it will kill you!"

I then explained, in a few simple words, that air can only be breathed with safety under certain conditions, and, first of all, that of incessant renewal. Air which has been long confined, I added, becomes a deleterious gas, immediately fatal to the unfortunate wretch who breathes it. There are several ways of detecting this vitiated state, and of guarding against its dangerous effects; the simplest as well as the surest is that of fire, which, by consuming the injurious particles, restores its elasticity.

Accordingly, we kindled a quantity of hay, and flung it in handfuls through the opening; its immediate extinction proved that the cavern was filled with a dangerous miasma. I therefore bethought myself of a more efficacious remedy.



We had brought from the wreck a chest of fireworks, intended for marine signals. By means of a rope I suspended in the interior



a number of grenades and fusees, which I ignited by a sulphuretted wick carried from the outside. We lighted it, and sought a place of shelter. In a few minutes a loud report was heard, and a dense cloud of smoke issued from the cavern. We continued this operation as long as our fireworks lasted. When these were consumed, and I thought the cavern might probably be purged of its pestilential vapours, I resumed the experiment of the burning hay, and this time with complete success; for as it burned as freely in



the cavern as in the open air, we knew that all the mephitic gas had been exhaled. Nevertheless, before venturing to penetrate into the depth, there were other precautions to be taken, and, great as was our impatience to ascertain its character and extent, I declared we must complete the opening



therefore Frederick and I resumed our spade and pick-axe, while Rudly was despatched on his buffalo to Falcon's-Nest, both to announce the marvellous discovery which had so agreeably shortened our labours, and to bring back all the torches and tapers he could find, that we might explore the cavern after effecting an entrance into it.

Rudly, delighted with his errand, sped away like an arrow on his big charger, which he had very appropriately named *Thunder*; he was away longer than I had expected, for during his absence we had time enough to widen the mouth of the cavern until it admitted of our easy entrance; then we heard the timbers of the bridge resound under the young buffalo's swift but heavy hoofs. My son arrived with a triumphant air; he was followed by my wife and Fritz in the cart, which the prudent Ernest guided, with its usual team. Our little messenger's eloquence had persuaded his mother to put by her work, and Ernest, with his curiosity vividly excited by his brother's recital, had yoked the ass and the cow to the cart to accomplish the journey more quickly.



They admired exceedingly the work we had accomplished, and were eagerly impatient to penetrate into the cavern, whose depth could not be conjectured from any external view. We immediately lighted our torches. Each of us carried one, and in his pockets a taper and a tinder-box. Thus accoutred, with our fire-arms on our shoulders, in case of accident, we pushed into the interior. I led



the way, and sounded the earth with my pole, from a fear we might fall in with some lake or cavity, and be unable to extricate ourselves. The rear was closed by the mother, holding by the hand little Fritz, who advanced in great trepidation. Even our dogs appeared intimidated, and instead of bounding and leaping from side to side, according to their custom, slunk along in our footsteps. Our curiosity and expectation kept us silent, but scarcely had we advanced twenty paces into the cavern, when, the light of our torches and tapers striking against its roof and walls, we simultaneously uttered a shout of surprise and admiration. Everything



shone around us! We were in a grotto of diamonds! Conceive for yourself a vast enclosure wholly composed of dazzling crystal, with columns of the same material rising at intervals to support



the dome of the magnificent edifice, which was also adorned with a prodigious number of stalactites, their prismatic surfaces multiplying beyond all calculation the gleams and flashes of our torches: one might have supposed it to be a royal hall illuminated for some gorgeous ceremony, or a Gothic cathedral lit up for the midnight mass!

It was, in truth, a marvellous palace, such as one reads of in books of fairy lore, and our little Fritz was almost inclined to believe that some good elfin queen really inhabited the brilliant structure.

When we had a little recovered from our first surprise, we advanced with greater confidence. The grotto was spacious, the ground level, and covered with a fine dry sand. From the form of the stalactites which hung pendent from the roof, I surmised that they partook of the character of saline crystallizations; and on tasting a portion I found that these shining decorations of our new palace were really rock salt—the best and purest of all salt.

This discovery was worth as much as that of the grotto itself. Thenceforth there would exist no necessity for us to gather at considerable distances this precious commodity, so valuable to us and our animals; we had only to collect it with the spade, and would not even be compelled to purify it, as was the case with salt conveyed from the sea-shore. The discovery, therefore, was the climax of our joy; we never tired of traversing the glittering cavern, and admiring its beauties. A few blocks of salt, which had apparently fallen from the roof, lay here and there upon the ground. Afraid that others might detach themselves unexpectedly, I made my sons load their muskets, and then, placing ourselves at the entrance of the grotto, we fired six shots into the interior, with the view of provoking, by the explosion, the descent of any fragments already loosened. More: with long poles we struck at every doubtful point; and after this double experiment, felt satisfied of the security of our magnificent abode.

It only remained for us now to establish ourselves in it, and fit it up in the best possible manner for our accommodation. As we returned to Falcon's-Nest, this was the sole, the inexhaustible subject of our discourse; everybody proposed a plan or announced an



idea; I gathered the opinions and suggestions of all, and on the following day returned with my sons to carry some of them into execution.

We began by squaring off the entrance to the grotto, and fitting into it the door of our staircase at Falcon's-Nest: as we had agreed to make the latter place a temporary habitation only, it no longer required so solid a defence; and besides, I intended to substitute a false door, made of the bark of the tree, to conceal it more effectually from the notice of the savages, if any ever came into our district. Next, we divided the area into two portions; that on the right we set apart for our dwelling-place, that on the left for our kitchen, workshop, and stables; the lower part was reserved for a cellar and magazines: besides, it was requisite to admit air and light into our new abode. We were occupied for several days in cutting openings in the face of the rock, and placing therein the windows which I had brought from the ship: the partition of the chambers, a chimney for the kitchen, with a funnel to carry off the smoke, the removal of all our goods, and their orderly arrangement, consumed a part of the summer; but the remembrance of the heavy rains, and the pleasant anticipation of passing the winter thenceforward in a comfortable and agreeable manner inspired us with courage, and rendered us forgetful of our fatigues.

We spent nearly all our time at Tent-Town, which had become our centre of operations, and whither we brought all our provisions. In addition to the gardens and plantations which surrounded it, we had there a variety of resources: such as the bay for our ducks; the turtles which abounded on the coast, and came there to lay their eggs; while the crab-fish of the river, the lobsters, mussels, and fish of kinds which swarmed in these parts, furnished our table with varied and excellent dishes. One morning, when we were all standing together on the beach, we were surprised by a singular occurrence. The waters, over a considerable area, were violently agitated by an extraordinary movement. They seemed to boil. A cloud of sea-birds hovered over the surface, and startled the echoes with their hoarse, deafening cries: some plunged into



the convulsed waters and then flew up into the air, where, pursued by their companions, they performed a thousand circles and evolutions, so as to leave us uncertain whether they were indulging themselves in peaceful sports or waging a murderous combat. Every moment the oceanic phenomenon assumed a more wonderful aspect. The entire surface of the waves, illuminated by the lustre of the sunrise, seemed covered with small flashes of living fire, which appeared and disappeared with startling suddenness.

All at once the entire mass quitted the open sea, and turned shorewards, making for the Bay of Safety, whither we hastened, full of surprise and curiosity. Each of us explained the phenomenon in his own manner. Frederick thought it might be a submarine volcano on the point of explosion. The presence of the sea-birds suggested to Ernest that it was some gigantic ocean monster, such as a cachalot, or perhaps a whale, and that the birds were engaged in picking up the small fish disturbed by the animal's various movements. The younger boys, always inclined to the marvellous, saw in it the action of some supernatural creature, such as a siren or a merman, of which they had often read the most surprising stories.

"If you ask my opinion," said I, in my turn, "I believe that all this is nothing more than a large shoal of the herrings which migrate every year from the Northern Seas."

My explanation, which events soon afterwards confirmed, suggested a host of queries, and I satisfied their propounders to the best of my ability.

"A bank or shoal of herrings is an immense quantity of those fish, moving in so close a column that they are frequently mistaken for a sandbank in the midst of the sea. The bank frequently covers a superficial area of several leagues, and is many fathoms deep : stretching along the surface of ocean, it bears to the coasts of inhabited countries the resources which Nature had refused them. The wandering legions are invariably followed by hosts of large fish, such as sturgeons, porpoises, and dorados, which destroy great numbers ; voracious birds unite against them with the monsters of the sea, and while the latter pursue them under the waves, the former harass them on the surface. Thus the herrings advance

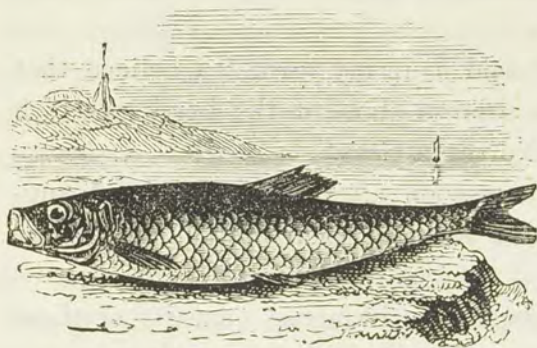


between two kinds of deadly enemies ; to which we must add man, into whose hands the greater portion fall of those spared by their other persecutors. With so many chances against them, one might suppose the herring race would be speedily exhausted ; but Providence, who watches over all, takes care to preserve the species, and we cease to be astonished when we know that a single female spawns every year fifty to sixty thousand eggs. But another fish, intended by Nature for human consumption, is still more prolific : the cod spawns upwards of three million eggs."

During these explanations, the glittering troop—for their scales shone upon the waters with a marvellous splendour—poured into the bay. My sons and my wife were transfixed with admiration at the spectacle of so prodigious a mass of fishes, which seemed piled one upon another.

"Admiration," I exclaimed, "is not our sole duty. The riches placed within our reach by Providence we must gather without delay."

I therefore sent for the necessary implements, and organized the fishing. Frederick and Rudly waded into the water ; and such was the density of the shoal, they caught the fish with their baskets as we take up water in a pail. As fast as they caught the fish, they poured them out on the sand. Ernest and my wife, each furnished with a



HERRING (*Clupea harengus*).

knife, rapidly opened, cleansed, and rubbed them with salt. Afterwards I deposited them in the small barrels we had collected for the purpose. First I placed a layer of fish, then a layer of salt ; and each cask, as I filled it, was placed on the back of our ass, which little Fritz led to the store-room. This work occupied us for several days, and provided us with a dozen casks of salted fish to add to our winter supplies.

Meanwhile, the refuse of the fish, which we had flung into the



sea lest it should poison the atmosphere, drew into the bay a number of sea-dogs, of which we killed half a score for the sake of the skin and fat: the latter yielded a capital oil for illuminating purposes, and served to some extent instead of our candles. As for the flesh, after we had splendidly feasted our dogs, we threw the remainder to the crabs in the Jackal River. I also constructed for these, and for the small fish which my sons caught by way of amusement, a kind of reservoir, out of two great casks, pierced with numerous holes, so as to admit of a free supply of water. When we were in want of crabs or fish for our table, we had only to resort to our casks, where they lived as well as they could have done in the stream.

We continued our work of installation; but it progressed slowly, we were so often diverted from it by other occupations. On examining more attentively the character of the rock in which our cavern was situated, I remarked that the basis of the saline incrustation which covered it was a stratum of gypsum, which I conceived might be advantageously employed in our building operations. Having found a pile of broken pieces under the rocky projection where I had first planted my powder magazine, I carried several of them into our kitchen, and heated them in the fire until they were red-hot. As soon as the stone grew cool again it became soft and friable, and was easily reduced into a fine white powder; which, though my sons could neither understand its nature nor utility, made a capital cement.

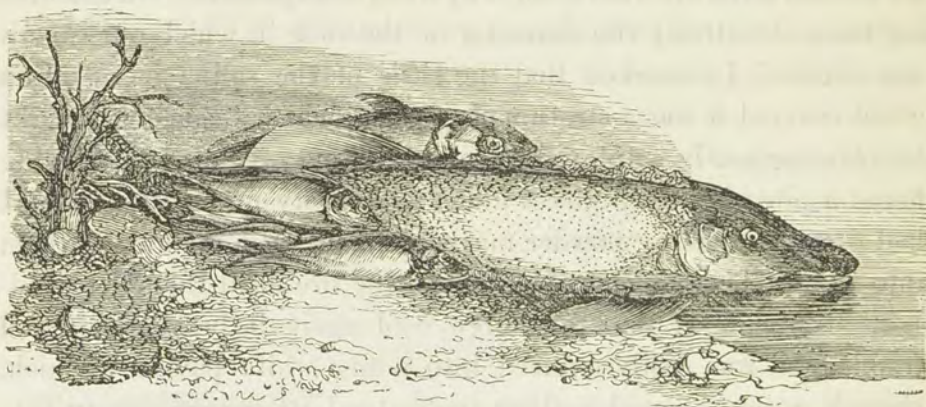
This discovery was, of course, exceedingly valuable, and I ordered my boys to prepare every day as large a supply as possible; and until some more useful means of employing it arose, I used it to cover over my barrels of salted herrings, and effectually exclude the air. However, I performed this operation only on one-half the barrels, as the others were reserved for smoked herrings, of which my wife was exceedingly fond. To cure these I built a little hut in the Dutch fashion, and suspended within it the herrings strung upon ropes. Beneath them we lighted a great fire of green branches, moss, and leaves, which threw off abundant clouds of dense smoke. Then I carefully closed all the openings of the hut, and thus obtained an excellent stock of dried herrings.



of a brilliant yellow, and as appetizing as those of the most skilful Dutch fishermen.

A month after the migration of the herrings, we were favoured with a visit from some other fish. It was Rudly who discovered them at the mouth of Jackal River, where they seem to have halted in their course, to deposit their spawn among the stones with which its bed was covered. Rudly supposed them to be young whales, from their enormous size; but, in truth, they were a large shoal of sturgeons, salmons, great sea-trout, and other genera.

"Well," cried the little fellow, delighted at having been the first to discover their arrival, "I hope that the fine fat fellows down yonder are worth as much as your little herrings."



"Agreed; but we cannot catch them in baskets as we did the others," I said, a little embarrassed.

"Bah! If you will help me, papa," cried Rudly, who was never troubled with doubts or hesitation, "we will soon manage the job. You and I together, papa! You shall see!"

Saying this, he ran off to the grotto, where by this time we were partly established, and speedily returned with his bow and arrows, a coil of stout rope, and a couple of dog-fish bladders, fully inflated. He fastened one end of the rope to an arrow, whose extremity was furnished with a strong iron fish-hook; and the other end to a large stone lying upon the shore: in the centre he fixed a bladder. Then he bent his bow, and aiming at the biggest salmon, hit it in the side.



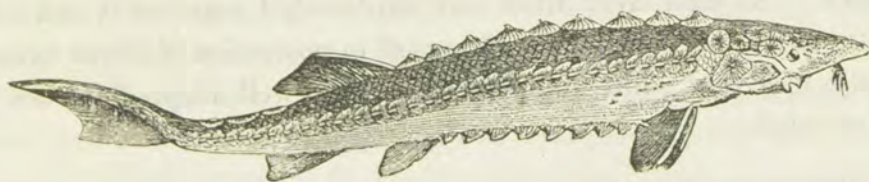
At first the wounded fish plunged beneath the waves, carrying with it the arrow, rope, and bladder, which indicated to us the direction of its flight ; but, brought up by the stone, he could not go very far.

"Now, haul in the rope, papa, and hold tight," shouted Rudly, in an ecstasy of delight. "The rascal must pay us a visit, whether he likes it or not."

It was no easy task, for the salmon struggled with extraordinary force ; but as he lost a great deal of blood, he began to grow enfeebled, and we contrived to haul him up on the beach, where we finished him.

My other sons had now come up, attracted by their brother's shouts. We complimented the young fisherman on the ingenuity of his invention ; and as there were grounds for fear lest the remainder of the piscine herd, terrified by this attack, should take their departure, and not return, we resolved to put aside all our other engagements and continue fishing.

Each resorted to weapons of his own choice. Frederick took the harpoon, and soon covered the sand with a goodly number of the largest fish. Ernest, with a capital rod and line, angled successfully for the finest trout. As for myself, armed like Neptune with an iron trident, I contrived to seize, among the stones where I had posted myself, two or three scaly monsters. We found the chief difficulty, not in killing our fish, but in getting them out of the water. Frederick, after harpooning a sturgeon fully eight feet



STURGEON (*Accipenser sturio*).

in length, could not manage to get it ashore. It defied all our united efforts, until my wife thought of fetching the buffalo. Then we fastened a rope to it, and in this manner rendered ourselves master of our mighty prey.



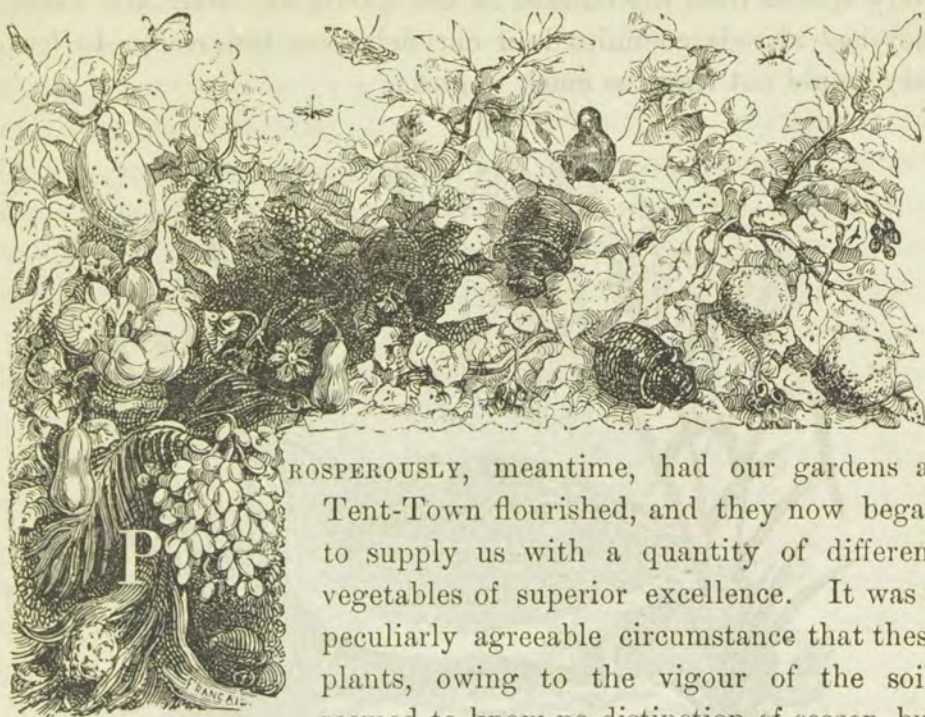
The next operation was to open and clean all these fish, and prepare their flesh. A part we salted; another part we dried like the herrings. My ever-industrious wife conceived the notion of curing some in oil, like the tunny. The sturgeon was a female, and contained a mass of eggs weighing forty pounds. The meat in flavour and appearance resembled veal. My boys would have thrown the eggs, as well as the intestines of all the fish, to their crabs; but I would not allow them, recollecting that the Russians with sturgeons' eggs prepare a very dainty dish, which is called *caviare*. Therefore I carefully cleansed them of all the skin and fibres with which they were surrounded, washed them in seawater, and having lightly sprinkled them with salt, I put them by in pumpkin-shells, pierced with holes, to drain. We piled some weights upon them to press them down tightly; and, in a few days' time, obtained a dozen cakes of a brownish-red, which we carried to our curing-house, and afterwards laid up as a winter provision.

I had also a wish to utilize the viscous skin, the fins, and the remainder of the sturgeon's entrails, by converting them into what is called isinglass.\* I placed the whole in a large iron vessel over a great fire; and when, through the process of evaporation, the mixture had acquired sufficient consistency, we strained it with a clean cloth. The substance thus obtained was very like the best isinglass, and so transparent that I thought it would furnish us with windows. For this purpose I divided it into very thin layers on a marble table, which was part of the spoil brought from the wreck. As each layer dried and hardened, I removed it and substituted another, until I found myself in possession of about twenty plates of a very white and very solid gum, well adapted for use as I intended.

\* Isinglass (from the German *hausenblase*, or sturgeon's bladder) was formerly obtained only from the common sturgeon, but is now procured of equally good a quality from the air-bladders of many other fishes.







PROSPEROUSLY, meantime, had our gardens at Tent-Town flourished, and they now began to supply us with a quantity of different vegetables of superior excellence. It was a peculiarly agreeable circumstance that these plants, owing to the vigour of the soil, seemed to know no distinction of season, but continued to flourish and yield their products without interruption. Pease, beans, and all kinds of pot herbs, kept up a continual growth throughout the summer; the maize, which hedged them round, bore spikes upwards of a foot in length; the cucumbers and melons surpassed our most sanguine expectations; and the sugar-cane and pine-apples were not less successful. As for the potatoes, the manioc, and the yams, we had whole fields of them, and had only the trouble of collecting our abundant crops. This prosperous condition encouraged us to hope that our distant plantations were equally thriving, and we resolved on paying them a visit.

One morning, then, we all set out in company for Falcon's-Nest: in the broad plain which lay *en route*, where my wife had sown her small stock of European grains, we found some of the cereals young and vigorous, and others grown to perfect maturity. There were barley, wheat, oats, pease, vetches, lentils, and all kinds of beans. We cut and piled up in sheaves all the ripened crops, resolving to watch over the maturity of the rest; for about them hovered a quantity of reapers, apparently much more eager than ourselves to banquet on these new productions—I mean birds of



every species from the bustard to the quail; and from the havoc they had already committed in our fields we had reason to fear they would not leave us much to glean.



THE QUAIL (*Coturnix vulgaris*).

To disturb them a little in their audacious pilfering, we put into requisition the talents of our tame animals. The eagle, which Frederick had trained for the chase like a falcon, pursued almost among the clouds a splendid hen bustard, and brought her to the feet of his young master; while Rudly's jackal, which was equal to any pointer in skill and cunning, captured a dozen of fat quails, and provided us with a capital repast.

This first excursion to our new possessions was also marked by a pretty invention of my wife's: she brewed us a refreshing drink, composed of the green blades of the maize crushed in water, and mixed with the juice of the sugar-cane; it made an invigorating and delightful beverage, as sweet as milk, and very like it in appearance.

The remainder of the day we spent at Falcon's-Nest, putting our



summer residence in order, picking the grains of our cereals, so as to preserve the precious seed for another year's sowing; and finally arranging everything for a little excursion which we proposed to make on the following day. The difficulty we experienced in feeding, and accommodating near us, our domestic animals during the wet season, had made me think of some means of acclimatizing them, that we might at all events be relieved of a portion of our anxiety; and I resolved to found a colony in a place where they could not escape, and where, nevertheless, they might find the sustenance necessary for their support. On the following day, we proceeded to carry our designs into execution. Consequently, my wife picked out from her poultry-yard a dozen fowls, and I, from the stable and pig-styes, selected four young pigs, two couple of sheep, and two goats. These animals we placed in the large cart, along with a supply of provisions, and such tools and utensils as we were likely to want. We then harnessed the buffalo, the cow, and the ass, and departed in high spirits on our new expedition.

Frederick, on his onager, led the way, to reconnoitre the ground, and prevent us from being involved in any very difficult situation. We took an entirely new direction, to reach the district lying between Falcon's-Nest and the promontory of Hope Deceived. We had to struggle against the tall grasses, and the woods intertwined with strong lianas; but through all these obstacles the axe opened a passage. We finally emerged on a bushy plain of the most curious aspect in the world; for not only their branches, but all the surrounding soil, was covered with white flakes, as if there had been a heavy fall of snow. Little Fritz at first thought that such was the case.

"Oh, the snow, the snow!" he cried, clapping his hands together with infantine joy. "Mamma, come down from the cart; I want to make some snow-balls!"

We indulged in a hearty laugh at the child's mistake, for, despite the appearance of the scene, the heat of the weather did not suffer us for a moment to believe that it was the result of snow. Frederick struck the onager on the ear, and it darted away like an arrow. He quickly returned to me with a branch covered with the snowy down, and to my great joy I perceived that it was cotton.



The discovery was of inestimable value to us; and my wife immediately began to recount all the advantages we should derive



COTTON PLANT (*Gossypium trilobatum*).

from it when I had furnished her with new machinery for threading, carding, and weaving it. We immediately collected a great quantity; and filled three capacious bags, intending to pick out the seeds mingled with the flock, and, in due time, to sow them in the vicinity of Tent-Town, that we might always have this useful plant close at hand. Having finished gathering our crop, we resumed our journey.

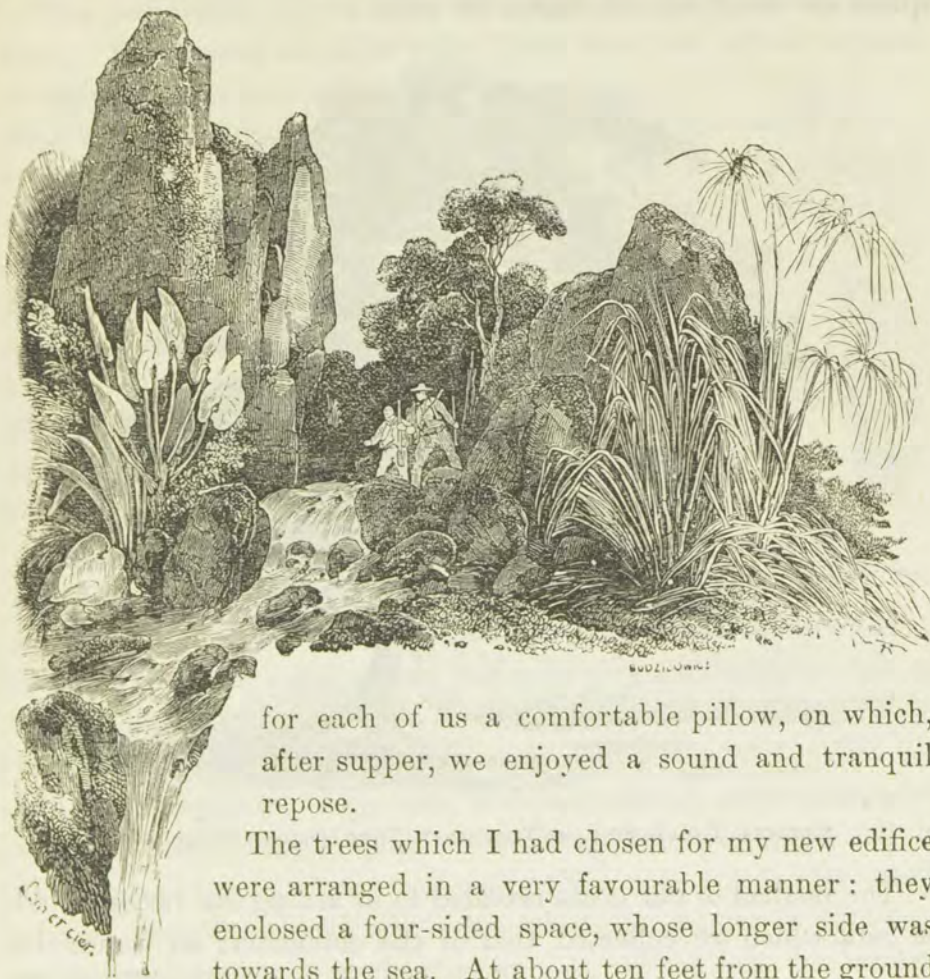
After traversing the cotton field, we ascended a lofty hill, from whose summit our delighted gaze extended over a real terrestrial paradise. Trees of all kinds clustered about the hillside; and a bright fresh brook, rippling over a rocky bed, enhanced at once its loveliness and its fertility.

It was sheltered from northerly winds by the wood we had just threaded; and the luxuriance of its herbage satisfied me that our cattle would always find pasture in abundance. Here, then, I resolved to establish our new farm, and my decision was universally approved.

We set to work to pitch our tent, to build up a fire-place with stones, and prepare our repast. As soon as we had thus provided ourselves with a temporary habitation, Frederick and I went in search of a place suitable for carrying out my projects. We soon came upon a clump of trees placed at sufficient distances from one another to act as the columns or posts I required to support my intended building. Thither we carried all our tools, but as the day was far advanced, deferred operations until the next morning



We returned to our tent, where my wife and children were busily picking the seeds out of the cottony down, and had prepared



for each of us a comfortable pillow, on which, after supper, we enjoyed a sound and tranquil repose.

The trees which I had chosen for my new edifice were arranged in a very favourable manner: they enclosed a four-sided space, whose longer side was towards the sea. At about ten feet from the ground

I cut deep mortises in their trunks, and again at ten feet higher, to form a second story; I then inserted transverse beams in these mortises, forming a framework which, if somewhat inelegant, was at all events solid; and over the whole I stretched a rustic roof made of bark. We stripped the bark from the neighbouring trees, and after having dried it in the sun—placing heavy stones upon it to prevent it from curling up—we fastened the pieces together with the spines of the acacia, as we could not afford to draw upon our small stock of iron nails; the roof thus constructed was not at all unlike in appearance the coats of armour worn by the Roman warriors. In the course of our labour we made several



new discoveries; the first was that of the terebinth and gum-mastic tree, and of that strong thorny species of acacia whose spines are excellent substitutes for nails.



PISTACIA, TURPENTINE, OR TEREBINTH TREE (*Pistacia Terebinthus*).

The instinct of our goats revealed to us among the various kinds of bark which we collected, that of the cinnamon; an acquisition



ACACIA (*Acacia vera*).

of no great importance, while, on the contrary, the terebinth and gum-mastic were two valuable discoveries. I hoped to make them useful instead of pitch, our small stock of the latter being completely exhausted. Of the origin, nature, and properties of all these substances, I had to furnish lengthy explanations. I replied as best I could to the questions of my little boys, and praised them as they deserved for the anxiety



they always manifested to extend the circle of their knowledge.

The completion of our new farmstead occupied us for several days. We dressed the sides with pliant branches woven together by strong lianas and parasitical creepers. This inclosure did not reach to more than six feet from the ground; the remaining space up to the roof was filled with a kind of open trellis-work which let both air and light into the interior. The entrance was constructed on the sea-ward side. As for the arrangements of the interior, they simply consisted of a series of compartments adapted to the number of the incoming tenants.



CINNAMON  
(*Cinnamomum Zeylanicum*).

We also contrived a small covered habitation, to accommodate us on the visits we should need to pay to our colonists. It was our intention to plaster the lower walls of the hut with clay and cement; but we put off this part of our task to another time, as it was sufficient, temporarily, that our cattle were conveniently sheltered. The first and most important thing was, that they should grow accustomed to retire there every evening on quitting their pasturage, and for this purpose we took care to leave in their cribs a tolerable supply of the food they liked best, with which, to render it still more tempting, we mixed a quantity of salt. This bait we resolved to repeat several times.

We all laboured with the utmost ardour; but, owing to our want of skill and experience, the work progressed slowly, and before it was finished we used up all the provisions we had brought with us. I was unwilling to return to Falcon's-Nest until the new establishment was completed; so I determined to send Frederick and Rudly for fresh supplies of food, and, at the same time, to provide with fodder the cattle we had left behind us. My two courageous messengers immediately started, each mounted on his favourite steed, and taking with them the lazy ass, whom Frederick guided with a bridle, while Rudly with a whip occasionally caressed his ears.



During their absence Ernest and I undertook a short excursion to see if we could find any palm-trees or a few patches of potatoes.

We ascended for some distance the course of the brook, and found that it issued from a great swamp, in whose centre lay a lake, the abode of birds of all kinds and sizes. On the borders of the marsh grew a tall tufted grass with long spiky blades, which, on approaching, I discovered to be a small kind of rice; small, it is true, but apparently of excellent quality. As



RICE (*Oryza sativa*).

for the lake, it reminded us of our Swiss fatherland. I seemed to have seen from infancy its tranquil surface, its deep clear waters; and I cannot describe my emotions of happiness as I rested upon its shores. It was Switzerland. It recalled to us our dear native home; but the illusion soon vanished: the shores, with their trees and prolific vegetation, forcibly impressed upon us the gloomy fact that we were no longer in Europe, and that between us and our country stretched the impassable ocean.

Ernest shot several birds with a skill and good fortune that surprised me. Meanwhile, Master Knips had made a rather interesting discovery; the epicure had smelt afar off the delicious odour of the fresh ananas, and when we were not paying him any attention, had softly leaped from Juno's back, and hastened to regale himself upon the delectable fruit. We profited by his example, when we ascertained the cause of his absence. Ernest did not forget his brothers and mother, and Knips' wallet was filled with fruit, which he was commissioned to carry to the farm. By way of precaution, we covered it with leaves and dry branches, lest the gluttony of our messenger should tempt him to lighten his burden on the road.

At an easy pace we proceeded along the shores of the lake, the landscape changing its aspect at every step. The district was more smiling and fertile than any we had hitherto explored. It swarmed with all kinds of birds; but what surprised us most was the spectacle of two black swans majestically floating on the water; their gleaming feathers were jet black, all except the snowy tips



of the broad expanded wings. In all other respects they exactly resembled their European congeners; they had the same stately port, the same slow and graceful movements. Ernest would willingly have given me, at their expense, a new proof of his skill; but I forbade him, for I should always have reproached myself if



ANANAS, OR PINE-APPLE (*Ananassa sativa*).

I had causelessly disturbed the serene tranquillity which prevailed among all these inoffensive creatures.

But Juno, who, probably, did not experience the same feelings of admiration for the beauties of nature, suddenly darting away from us, pounced upon an animal which was quietly swimming on the surface of the water, and brought it to our feet. Most singular was the creature's appearance; it resembled an otter in form, but was web-footed, like the aquatic birds; it had a long bushy tail, which it carried, like the squirrel, erect in the air. Its head was very small, its eyes and ears were almost invisible, and a long flat bill



like that of the duck, completed its fantastic appearance. All our knowledge of natural history was vainly tested to find a name for this strange animal. Not even Ernest could recollect it. I fruitlessly recalled all my memories of Buffon, and almost convinced that it had never before been discovered by man, we boldly christened it the *Schnabeltheir*, or "the beast with a bill."\* I recommended Ernest to take care of it, for I wished to stuff it and preserve it as a rarity.

"It shall be," said he, "the first curiosity of our museum."

"Exactly so," I replied; "and when that establishment shall be definitively constituted, I will name you its conservator."

I now remembered that our absence had been of some duration, and as I was anxious to spare my wife any unnecessary anxiety, we returned towards the farm, choosing the most direct route.

We found the good mother, whom a trifle alarmed, already beginning to grow disturbed. Our two messengers returned nearly at the same time from Falcon's-Nest, and we sat down to our evening meal an united and happy family. All related their deeds of prowess. Ernest favoured us with a lecture on his and my discoveries, and invested his descriptions with such an attractive colouring that I was obliged to promise Frederick I would take him on the next occasion. I learned with pleasure that all was well at Falcon's-Nest, and that my boys had had the good sense to leave the cattle a ten days' supply of provisions. This forethought on their part would enable us to prolong our absence, and to finish off the new settlement in a satisfactory manner.

We remained there four days longer, and in that time completed the enclosures; while my wife and sons, in the portion reserved for our own use, arranged some cotton couches for our accommodation on our occasional visits.

At length the moment of departure arrived. I gave the signal. The cart was loaded with our baggage, and we commenced our march. Our cattle would fain have followed us; and to prevent them Frederick was compelled to protect our rear, mounted on his onagra, sallying against them ever and anon, and driving them back towards the farm until they lost sight of us.

\* The bird intended is the Duck-billed Platypus



We had not as yet decided to return to Falcon's-Nest, and therefore took a different road, leading in the direction of the Monkeys' Grove, which we had descried from afar. The mischievous animals received us with a volley of pine-apples; but two or three discharges of small shot delivered us from their annoyance. Fritz picked up one of the fruits they had hurled at us, and I recognized it to be the stone pine, whose kernel is not only good eating but yields an excellent oil. We collected a supply, and continued our onward march.

At a short distance from Cape Disappointment we halted, and deliberated whether we should cross the ridge that rose to the right of the cape. The council decided in the affirmative, and, consequently, we directed our course towards it.

We were well repaid when we reached the summit for the



fatigue we had suffered in the ascent. The view extended over a rich and glowing country, everywhere meadows, and brooks, and groves, and flowering plants, and birds warbling in the leafy shades. In a transport of admiration I exclaimed,—

“Oh, my children, this is Arcadia!”

We pitched anew our travelling tent. We felt unwilling to quit this enchanting scene before we had built there another residence, for we resolved that our Arcadia should be the goal of frequent excursions. We had served an apprenticeship at the construction of the farm, and this time we raised our hut with far less toil and much more quickly. We prided ourselves on leaving at various



points in the island the memorials of our passage; they were so many conquests achieved by man over nature, by civilization over the desert.

The new establishment was named Prospect Hill. I would simply have called it, in good German, *Schattenbourg*, or, "The leafy town;" but the English appellation suggested by Ernest found more favour, and was unanimously adopted.

However, the object I had proposed to myself on undertaking this expedition was to find a suitable tree for making a canoe, or *periagua*, to replace our boat of tubs; this object was not yet attained, and had been almost forgotten in the various labours imposed upon us by our farm-building. We now remembered it, and after a careful inspection of all the trees in the neighbourhood, I halted before a kind of oak, whose bark was much smoother than that of the European oaks, and not at all unlike that of the cork-tree.

The trunk was fully five feet in diameter, and appeared to me admirably adapted for my intended purpose. I traced a circle at the foot, and cut the bark completely through; Fritz, by means of the rope-ladder we had brought with us, ascended to the lowest branches of the tree, and just beneath them, at eighteen feet from the ground, he cut a similar circle. This incision completed, we made another descending longitudinally, and in this direction cut off a large strip of bark; we were then able to introduce our wedges, and gradually detach the entire covering. We brought to the task our utmost skill and energy. The first part came away easily, but, as the work advanced, it became more difficult. After severe toil we accomplished it, however, and while the trunk stood bare and naked before us, its spoil fell gently on the ground.

I immediately applied myself to the task of dressing this cylinder of bark while the sap rendered it moist and flexible. My sons imagined that nothing more need be done than nail a plank to either extremity, but this would have given us only an ungainly tube, without lightness or elegance. It was my intention that the boat I was building should not figure badly by the side of our beautiful pinnacle, and this idea, much more than any considerations of fitness and convenience which I could put before



them, made my sons willing to wait until I had finished my task in a workmanlike manner.



I began by cutting off from each end of the roll of bark a triangular piece of from four to five feet: then, folding one over the other the sloping parts, I united them with pegs, and thus made a sharp prow and stern for my canoe. This operation had stretched the sides too far apart in the centre; as a remedy we passed strong ropes around it, which held them together, and gave the boat the necessary depth. Afterwards I exposed the frail fabric in the sun, taking care that it preserved, while drying, the direction and form I had given to it.

To put the finishing touches to my work, I was in want of several important tools. Rudly and Frederick were again despatched to Tent-Town, with orders to bring back the sledge, which would be required to transport our canoe. I was lucky enough to



find in the neighbourhood a kind of curved wood of a very hard quality, whose natural curvature was admirably fitted for supporting the sides of the boat. I likewise chanced upon a resinous tree, from which flowed a sort of pitch that was easily managed, and hardened quickly in the sun. Fritz and my wife collected enough to caulk the boat. It was nearly night when my two messengers returned from Tent-Town. A merry meal reunited us round a crackling fire, which mitigated the cool freshness of the night; and at daybreak on the morrow we resumed our labours.

The boat, the pitch, the pieces of wood, were placed on the sledge, and the patient ass started off before us at a steady pace. We also loaded it with a number of young plants for our Tent-Town gardens, which found convenient stowage in the boat. On our way we halted at the narrow pass between the river and the rocks, where we left another memorial of our toil, in an enclosure intended for defensive purposes and for a colony of the pigs, whom we were anxious to settle in some secure corner out of reach of our plantation. Dwarf palms with long prickles, and Indian figs with strong thorny leaves, formed the exterior line of defence. Within we dug a deep trench. These works occupied us four days. In a clump of bamboos we found a very tall strong stem, well-fitted for the mast of our canoe, and then we started for Tent-Town, where I intended to complete it. To our last construction we gave the name of *The Hermitage*; and by way of justifying the name, erected a small cabin of bark for our accommodation opposite the cascade.

We halted only two hours at Falcon's-Nest, to dine and attend to the wants of our poultry, and then resumed our route to Tent-Town.

After a brief interval of repose we again set to work upon our canoe, and we laboured with so much zeal and energy that it was soon completed and ready for launching. It was not only a strong but a graceful and shapely skiff; we had strengthened it by a double lining of planks resting on a solid keel, and supplied it with leather rings to receive the oars and the rigging of the mast. Benches for the rowers were nailed across, and in the centre rose majestically our mast of bamboo, with its triangular sail. The rudder at the stern was manœuvred by a handle; instead of ballast,



I laid down in the bottom a flooring of smooth stones, which I covered with planks so solid and so neatly jointed that no water could get through. But what did most credit to my inventive genius was the idea of suspending along the gunwales several bladders of dogfish skin inflated with air, which insured our boat against any event. Pitch, gum, tow, nothing was spared. Our fleet was thenceforth complete: we might at our pleasure beat out into the open sea, and adventure distant voyages in the pinnace, or in our canoe hover about the coast for fishing or exploring purposes.

I have forgotten to mention that soon after the rains were over our cow had given us a pretty live calf. I pierced its nostrils, just as I had served the buffalo, to train it more easily, and gradually accustomed it to bit and saddle.

"What shall we do with our bull?" said Frederick to me one day; "my opinion is that we might make use of him, as the Hottentots do, for fighting."

At the word "fighting" my wife started up alarmed, remembering what she had read of the Spanish bull-fights.

"For shame!" she cried; "would you train that poor bull for the ferocious and bloody games which amuse an idle and semi-barbarous population?"

"Do not be uneasy, my dear," I replied; "we are not thinking of picadores, or matadores, or those sanguinary sports which are celebrated at Madrid and Toledo. The fighting bull of the Hottentots, to which Frederick refers, is an useful animal, a safeguard against danger; and I do not know that we can render our calf more useful in any other manner.

"The Hottentots," I continued, "inhabit a region which has ever been infested by troops of wild animals. Divided into tribes, they are almost entirely supported by their herds, which live in the open air, and are constantly exposed to the voracity of hyænas, lions, panthers, and the like. As a protection against this peril they train the fighting bulls. For no sooner does the bull bred in this manner perceive by its instinct the approach of danger, than he warns the cows, and they gather together in a compact mass. Then he ranges them in a circle, with the calves in the centre, and the whole herd presents to the assailant a ring of horns,



while the fighting bull stands alone before them. If well-trained, he darts at the enemy, and with his long horns tears open his sides; but should that enemy be as formidable as the lion, who never retreats, the bull will devote himself, and bravely yield up his life to give the herd time to effect their escape."

This explanation reconciled my wife to the use I intended to make of our young bull, and we all agreed to educate him as a combatant who should not only protect our domestic animals, but even render ourselves assistance in the hour of need.

We had some difficulty in deciding to whom the work of education should be confided. Each of us had his pet animal, whose wants he carefully provided for. Little Fritz alone was without any such occupation, for the two dogs we had given him had grown much more quickly than himself, and there remained for him nothing more to do. However, I considered it useful to supply the little fellow with some motive for activity, to prevent him from yielding to an indolent disposition.

"What say you, little Fritz?" I suddenly exclaimed; "would you like to be appointed instructor to our bull?"

Fritz's blue eyes sparkled with exuberant delight.

"I accept the trust, papa! Have you not told me of a wonderfully strong man—his name, I think, was Milo—who began by carrying a little calf on his shoulder, and after awhile grew so robust by the repeated exercise, that when the calf became a bull he could still carry it? Besides, if I am little, I shall know, at all events, how to make my pupil obey me. I will take such care of him, and treat him with so much kindness, that he cannot fail to love me. He will come at my call, like Ernest's onager. I will make him my horse, and gallop up and down upon him, like Rudly on his big buffalo."

It was therefore agreed that the young bull should be handed over to the charge of Fritz. We asked him what name he would wish to give to his new pupil; he chose that of *Broum*, in allusion to the animal's noisy bellowings. Rudly profited by this incident to obtain an official sanction to the name of *Storm*, which he had bestowed on his own buffalo.

"This will do splendidly!" said he, laughing; "when I arrive



at full gallop, you will exclaim, 'Here comes Rudly bestriding the Storm!''"

"Just," said Ernest, smiling, "as in the poems of Ossian, we read of the gigantic shadows of the heroes descending in the chariots of the clouds."

Fritz immediately commenced the education of his new pupil. He was so fond of him, and lavished upon him so much attention and so many caresses, that the grateful animal grew faithfully attached to him, and followed him everywhere.

It wanted still a couple of months to the winter rains, and we took advantage of the interval to increase the commodiousness and add to the comforts of our cavern of salt. With the planks saved from the ship we built the partitions that separated the different compartments. We also made some long and large screens of reed, which we covered on both sides with plaster. We manipulated this substance with a skill that astonished ourselves, and by means of small trowels of wood we spread it almost as well as experienced plasterers could have done. We found it particularly useful in the partitions raised between ourselves and our cattle, since it intercepted the disagreeable exhalations of the stable much more effectually than timber.

Every day the internal aspect of our grotto became more comfortable. With a mixture of isinglass, goat's hair, and a few handfuls of sheep's wool, I contrived a kind of thick felt, which answered very well as a carpet, to protect us from the damp during the approaching rains. This time the advent of winter did not alarm us; we awaited it with composure; and, indeed, my boys, with the usual impatience of youth, were sometimes ready to complain it came too slowly, since it delayed us from taking definitive possession of our resplendent palace.





One morning, having awoke before any of my family, I began to compute the time which had elapsed since our shipwreck on the island. I calculated the date with the nicest exactness, and found that the anniversary of that great event had at length come round. It would be a year on the following day since the mercy of God had rescued us from a terrible death. A new sentiment of overpowering thankfulness absorbed my soul, and I determined to celebrate that happy anniversary with all the ceremony our situation permitted.

As I had not decided on the arrangements of my intended solemnity, I said nothing about it to my family. Breakfast passed as usual; the day was devoted to divers labours in the interior, with the view of securing order and cleanliness around us; and it was not until the evening, after supper, which I made half an hour earlier, that I announced in the most majestic tone the morrow's fête.

"Prepare yourselves," said I, "to celebrate the anniversary in a worthy manner. It is that of our salvation, our rescue from the jaws of death; let each one of you make ready to keep so memorable a day with due respect."

My sons were overcome with surprise and joy at my announcement. Nor was their mother less astonished to find that we had already been a twelvemonth on the island.

"It is the gift of labour," I replied, "to shorten time; the days have leaden wings for the idle man, but for him who works they pass by on eagles' pinions."

A short discussion arose in reference to the expression I had employed, "the anniversary of our salvation;" but all criticism and metaphysical objection gave way to the intense desire of ascertaining in what manner I had calculated the time.

"The thing is very simple," said I to my sons. "When the shipwreck occurred it was just the end of January. Our calendar had still eleven months to run; I have followed it up carefully to the end, and find there are four weeks wanting. If my recollections do not mislead me, it will be exactly one year to-morrow since we landed on this isle. But my memory, while serving me sufficiently well for a period beyond four weeks, will not as readily



embrace a much longer time. My calendar will soon fail me altogether; and since it appears," I added, with a smile, "that my Zurich bookseller obstinately refuses to execute my orders this year, let us try to dispense with his assistance, and make for ourselves the almanac we stand in need of."

"Well," said Ernest, "let us make an almanac, *à la* Robinson Crusoe, with a piece of wood, and a notch for every day."

"Exactly so; but that is not all you want. Your notches will be worth nothing if you do not know how many days make a month, and in what order the seasons succeed one another."

Our young professor, in the monitorial tone familiar to him, immediately gave us a lesson on the division of time.

"Some of the months," said he, "have thirty, and some thirty-one days, except February, which has only twenty-eight or twenty-nine. There are 365 days in the year, 24 hours in the day, and 60 minutes in the hour. The minutes are also divided into 60 seconds each. Everybody knows that."

"Very good," I replied; "and that does well enough for common usage. But do you yourself really believe that the year consists of exactly 365 days?"

"No," he answered; "astronomers tell us that its actual length is 365 days, 5 hours, 48 minutes, 45 seconds."

"Well, then, what do you do with this surplus of hours, minutes, and seconds?"

"I put it aside, and every four years it gives me one day more, which I add to the fourth year, and distinguish that year as Bissextile, or Leap-Year."

"Admirable! But it seems to me that, notwithstanding all your science, we shall still have some difficulty in putting ourselves right here. How shall we know which are the Bissextile or Leap-Years? And who will tell us which months are to have thirty, and which thirty-one days? Shall we not run the risk, on our wooden calendars, of strangely confounding the time and the seasons!"

"Not at all, papa: to distinguish the months, and determine their duration, we shall have a living almanac that does not leave us; and it will suffice to place our calculations on a correct basis, if we know the point from which we set out."



The little philosopher, who always shone most when required to put his knowledge and capacity to the test, stretched towards us his closed fist, and began to point out, on the bones and cavities which follow the origin of the fingers, the order in which the months with thirty and those with thirty-one days succeed one another. His brothers were astonished at his science. I complimented him on having treasured up in his memory a thing apparently childish, which nevertheless, on occasion, might prove of great utility.

We chattered away for some time on other matters. At last I gave the signal of retreat. My little fellows had already retired to their beds, where I heard them questioning one another on the intended festivities of the morrow.

That longed-for day soon dawned upon us, and with the first rays of morning the report of a cannon echoed among the rocks. Words cannot describe my alarm; and I immediately started up to know if either of my sons had heard the threatening sound. I found them, to all appearance, tranquilly sleeping in their beds; Rudly was snoring loudly; however, he could not long keep up the farce. He had scarcely caught sight of me when he exclaimed, "Whew! what a terrible noise down yonder!" I understood it all; but instead of joining in their laughter, reproached them for this fresh instance of prodigality in a thing so precious to us as gunpowder. They begged my pardon; and as I was unwilling that any cloud should rest on the day of festivity I had announced, it was gladly given.

All arose and dressed. Our toilette did not occupy us long, but the greatest propriety presided over it. After our customary devotions, we proceeded to breakfast. My wife excused herself for having been taken unawares, and scolded me for not having thought of the fête in time enough to enable her to make becoming preparations. I jested with her on the idea, which she had imported from our beloved Switzerland, that a dainty repast is the indispensable accessory of a holiday; however, we did all honour to the meal she had got ready, and then began the celebration of the anniversary.

"My children," said I, "it is twelve months since we first



landed on this island ; now is the moment when we may fitly cast a retrospective glance over the past, and see how much we have accomplished."

Thus speaking, I drew forth my journal, which I had carefully filled up every day, and read it to my attentive audience, dwelling particularly on the more important circumstances of our sojourn.

As soon as I had finished, I invited my family to turn their minds towards the God of good, and thank Him anew for all the mercies and blessings He had poured out upon us.

I opened the book of Psalms ; the sacred parables of the prophet-king assisted us to elevate our souls, and strengthened in us those sentiments of gratitude with which we were truly and earnestly penetrated. It was an interesting spectacle to see those four children kneeling on the sea-shore, and with pure and simple voices pouring out their thanksgivings to the God who had saved them.

This act of devotion filled them with a grave and serious thoughtfulness, which pervaded the conversation that ensued, and converted it into a semi-philosophical discussion far above the customary range of such young children. Frederick and Rudly revealed the native goodness of their dispositions, but Ernest astonished me by the subtlety of his answers, and by the force of the objections he occasionally put forward. I was the first to change the tone of the conversation ; I insensibly led it from its grave and severe character ; and ended by announcing to my sons that the day would be incomplete if not terminated by those exercises which usually signalised our fêtes.

"You have been exercising yourselves for a year," said I, "in the mimic struggle, the race, the lasso, and horsemanship ; it is now time your efforts should be rewarded ; you shall contend to-day in the presence of your mother and myself, and the crown shall be given to the conqueror. Come, champions !" I exclaimed, in my most emphatic manner ; "come, the barrier is thrown open, the lists are prepared ; and you, trumpets, sound the hour of battle !" I cried, and turned towards the ducks and geese babbling in the little bay.

At this serio-comic apostrophe, the entire troupe of chattering



birds, terrified perhaps by my gestures and loud voice, broke into a wild uproarious clamour, which seemed to my young people so admirably opportune that they gave way to repeated bursts of laughter.

I then arranged the order of procedure. First, firing with gun and pistol; next, the lasso; then the race; and lastly, feats of horsemanship and swimming. I quickly prepared all that was necessary for the shooting trials—namely, a mark: it was a rudely fashioned piece of wood, which we called “the kangaroo,” because the props that supported it might be taken for its legs; the part representing the creature’s head we decorated with a couple of strips of leather for ears. Rudly would have preferred that the mark had represented a savage, and this, too, Frederick considered much more warlike; but I hastened to repress such awakenings of military glory, by impressing upon my sons what I had already, on more than one occasion, pointed out: that war against men is a scourge, a curse, and a crime, and that we should rest content with the campaigns we carry on against animals, as much for our personal safety as to provide ourselves with means of subsistence.

Rudly accomplished wonders; whether by skill or good luck, he cut off one of the ears of the kangaroo; Frederick hit it in the head; and Ernest in the middle of its body. All three shots were worthy of praise.

We passed on to another trial. This consisted in firing at a small leaden ball, wrapped in bark, which I flung up into the air with all my might. Ernest succeeded best: his piece of bark was perforated with shot. Frederick also fired with great skill, but Rudly did not touch it. The same exercises were repeated with pistols, but shortening the distances, and I had again occasion to applaud the address of my sons; they had made very rapid progress in a twelvemonth.

Next came the use of the sling. In this exercise, which demands as much strength as skill, Frederick carried off the palm. Then followed archery, in which all distinguished themselves, even little Fritz. Afterwards came running and pedestrian feats: I prescribed for the course from Family Bridge to Falcon’s-Nest.

“Whoever arrives there first,” I said to the competitors, “shall



receive as the reward of victory my knife, which I have left on the table, between the roots of the fig-tree."

The signal for starting was three claps of the hand.

My three sons set out: Rudly and Frederick with all the impetuosity natural to them; Ernest, on the contrary, went slowly at first, with his elbows pressed in closely to his side, but gradually increased his speed. I augured well of these tactics, and recognized in them the true character of the boy—prudent, skilful, deliberative—who never did anything without due reflection. My runners were about a quarter of an hour absent. Rudly returned first; but he was mounted on his buffalo, with the ass and onager following him.

"What?" I exclaimed, "is this the way in which you run races? It was *your* limbs, and not those of the buffalo, which I wanted to exercise."

"Bah!" he cried, as he leaped from his steed, "I was regularly beaten before we got half-way; so I thought it wisest to abandon the struggle, and as the pedestrian was to be followed by an equestrian feat, I profited by the neighbourhood of Falcon's-Nest to bring hither our coursers."

Frederick followed close upon him, and came in breathless, and his forehead covered with sweat; but he had not the knife, which was brought to me by Ernest.

"How is this?" I inquired; "you are the conqueror, and yet Frederick returns before you."

"The explanation is simple," answered Ernest; "in going, my brother, who had darted away like an arrow, could not maintain his speed. He was forced to pause and draw breath, while I continued running, and was the first to reach the goal. On our return, Frederick had learned a lesson; like me, he kept his elbows close up to his body, and breathed regularly with his mouth shut; thenceforth the victory was only a question of limbs and physical strength. Frederick is sixteen years old, and I am only thirteen: that is why he returned home before me."

I praised them both for the good sense they had displayed, and proclaimed Ernest the victor.

Meanwhile, Master Rudly, mounted on his buffalo, loudly



demanded that the horsemanship should begin, he was in such haste to retrieve the check his reputation had incurred.

"To the saddle!" he cried, "to the saddle! and let us see who of us can manage his steed most skilfully; let us see if you are as clever in keeping your seat on horseback as in stretching your long legs."

I hastened to comply with the little boaster's desire; Frederick mounted the onagra, and Ernest took the ass; both accomplished prodigies of skill, but Rudly undoubtedly surpassed them. I was actually frightened at the audacity with which the frail little fellow abandoned himself to the vigorous animal which bore him. To urge him forward, to wheel or stop him in the very midst of his furious career, seemed but play; an experienced horseman could not have managed with greater ease a thoroughly trained steed. And frequently, in the ardour of his passion, the boy arose, sprang on the buffalo's back, and stood thereon with extended arms, like the performers in the equestrian sports of the arena; but I thought it necessary to prohibit this useless and dangerous display of prowess.

Just as I declared the exercises over, and was about to comfort poor Rudly by announcing his triumph, we saw, to our great astonishment, little Fritz suddenly break into our midst, mounted on his young bull *Broum*, who was now between three and four months old. My wife had made him a saddle of kangaroo-skin, with a couple of stirrups adapted to his little legs; in his right hand he held a bamboo whip, and in his left the bridle—consisting of a couple of ropes attached to an iron ring which I had passed through the animal's nose in lieu of a bit.

"Gentlemen," said the young cavalier, saluting us gracefully, "I was unable to compete with you so long as you handled gun, pistol, or sling; but will you now permit the little Milo of Crotona to exhibit before you his equestrian accomplishments?"

We received his childish oration with hearty applause, and Fritz immediately began to put his charger through his paces. He did this with a coolness and courage far beyond his age, but what I almost equally admired was the animal's docility. My wife then acknowledged that during our various expeditions she



had assisted her "little Benjamin" in training the animal entrusted to his charge; so that it was not without a sentiment of justifiable pride she witnessed the successful display of her fondly-loved son. Fritz was unanimously pronounced a capital horseman.

After the equestrian feats, some little time was devoted to archery, swimming, and climbing. When the whole programme of exercises had been carried out, I announced that the prizes would be distributed, and the brows of the victors adorned with the crowns won by their skill and courage.

In all haste we returned to the grotto, which was brilliantly illuminated with all our torches: on a species of platform was placed a chair embowered in foliage and blossoms, and therein we installed our manageress as the queen of the revel. I then summoned before her the competitors. She gave herself up to this innocent pleasantry with infinite zest; holding in her hands the palms and crowns, she distributed them to her sons, giving each a tender kiss.

Frederick, as the victor in the shooting and swimming exercises, received a splendid English musket, and a hunting-knife, which he had long been desiring.

Ernest, as the prize for the best runner, was presented with a beautiful gold watch, like his brother's.

Rudly, the most accomplished equestrian, obtained a magnificent pair of steel spurs, and a whalebone whip.

Little Fritz also received a pair of spurs, and a box of colours, as a reward for the patience and ability he had displayed in training his bull.

The distribution of prizes over, I arose, and turning to my wife, presented her with a very pretty English "Ladies' Companion," containing all those little articles—thimble, needles, scissors, bodkins—in which industrious housewives delight.

"Receive," said I, "my dearest wife, this token of gratitude and affection, this acknowledgment of your patience and zeal during the twelvemonth past, and of your daily services towards your little colony, though I know that your tender devotedness to me and your children finds in itself its sweetest recompense."

The day was concluded as it had begun, with songs and joyous



manifestations. All were contented, all were happy, for all tasted that pure and unequalled happiness which can only spring from a blameless life, an industrious and energetic spirit, and the calmness of a soul which trusts in God.

We reminded each other opportunely of the share each had taken, a year ago, in hunting down the merles and ortolans, which had now, at a similar period, settled down like a dense cloud, on the colossal banyan of Falcon's-Nest. We resolved to quit our rock-habitation, where we had now been for some time almost definitively settled, to renew, if possible, the productive chase which had formerly provided us with one of our most prized and most delicate winter stores. My gallant little fellows, animated with warlike intentions, made ready to start. Frederick the marksman—Rudly, who trod closely in his footsteps—rejoiced in anticipation at the capital shots they should secure; but I could not altogether share in their enthusiasm. I recollected with alarm the prodigious quantity of powder wasted on this game the year before, and was fully determined on a more economical course. I remembered reading in a book of voyages that the Pellew Islanders caught with glue far larger and stronger birds than our ortolans, and I thought it possible to compose of caoutchouc and oil a mixture which might enable us to save our military munitions.

The stock of caoutchouc collected on our last excursion was, however, exhausted. I had used it in manufacturing our waterproof boots, and before anything could be undertaken we must renew the supply. Frederick and Rudly were despatched to the caoutchouc-tree wood. I expected they would find a sufficient quantity all ready for them at the foot of the trees, for we had taken care to make large incisions in the bark, and to place calabashes beneath them to receive all the liquor that exuded; and as we had learned from experience how quickly the sun hardened the resinous juice, we had disposed around the incisions a number of leafy branches to protect them from the solar rays.

Our two messengers were out of sight, when my wife suddenly exclaimed,—

“How thoughtless I am! I might have given the boys a gourd



in which to bring back the gum; the shallow vessels we left at the trees will be of little service to them. And I ought to have gone with them, to see if my gourds were ripe."

I relieved my wife's anxiety with the assurance that her sons were clever enough to contrive some substitute; then, recalling the expression she had made use of, "my gourds," I asked her what was the meaning of it.

She then informed me that she referred to a superb plantation of pumpkins, of which she had found some seeds among our European grains, and these seeds she had sown in the kitchen garden near Jackal River. She led me thither; and we found among many other plants a considerable

number of bottle-shaped gourds, such as the peasants sometimes carry to the fields. Many were ripe; others already formed; several only just in flower.

We selected a few whose maturity and shape would render them useful to us, and began to empty them.

Then, by a dexterous use of knife and saw, we converted them into bottles, plates, and dishes. But Ernest, my companion and assistant, had little taste for this kind of work, and could not help showing his satisfaction when he heard me declare that our supply of utensils would be sufficient. He flung aside his knife, and seized his gun, with the intention of pouring a discharge of shot among the jays and ortolans of the fig-tree. I checked him, lest his unseasonable ardour might drive away for a considerable time the peaceable birds, against which I meditated an equally deadly, but far less noisy warfare.



PUMPKIN (*Cucurbita pepo*).

Meanwhile, our two messengers had had time enough to collect the caoutchouc in the calabashes, for the sun was already sinking, and our utensil-manufacture had occupied us during a great part of the day. Ernest looked in the direction his brothers had taken,



and soon caught sight of them in the distance; they returned at a swift gallop, one mounted on the onagra, the other on the buffalo.

"Well," said I, "have you succeeded in your mission?"

"Succeeded!" replied Ernest, in a singular tone, "I should think so, papa!"

They leaped to the ground, and showed us what they had brought. First, they displayed a piece of anise, which Rudly had stowed away in his buffalo's pannier; a root wrapped up in leaves, which they called "monkey's root;" two calabashes filled with caoutchouc, another half-full of terebinth, a bag crammed with wax-berries, and, finally, a crane, which Frederick's eagle had brought down and killed. But while exhibiting these treasures, their speeches grew so incoherent that I was compelled to request them to make their narrative a little more connected.

Rudly related how he gained possession of the anise and the terebinth. Of these two articles the former was certainly superfluous in our position, but the latter could not fail to prove of great utility. The resin would answer much better than oil in the bird-lime I intended to spread about the fig-tree. As I was making inquiries in reference to the so-called "monkey's root," Frederick took up the tale:—

"Of what, if any, importance this root may be to us, I am unable to say; but this, at least, I may affirm—that its taste is very agreeable, and that the manioc approaches it neither in savour nor fragrance. We found it at a short distance from the farm, and owe its discovery to a company of apes who were regaling themselves upon it. You would have laughed to have seen these hideous and mischievous animals tearing it out of the ground. They employed in doing so a method which, I daresay, is not familiar to our European labourers, and which would be ludicrous enough if they practised it in gathering turnips or carrots; they plucked it by turning head over heels."

"What! head over heels?" we all exclaimed simultaneously; "why, your tale is really marvellous!"

"Yes, head over heels," answered Frederick, "and this is how they manage. Each ape, after having cleared away with his claws



a little of the earth round the root he covets, seizes the top of it with his teeth, and throws himself head over heels without letting go; he repeats this exercise until his efforts have drawn from the soil the much-desired root. We stood for some time watching the grimaces and contortions of these ugly animals, but, curious to judge for ourselves of the merits of a plant which they seemed to relish so greedily, we resolved to disperse them, and occupy the field of battle. A discharge of musketry would have put to flight the whole legion, but, remembering my father's instructions, we contented ourselves with galloping through the midst of the gourmands, who scattered in all directions. Then we tasted the root, and as it seemed to us delicious, we brought away a few pieces, carefully wrapped up in leaves, to see if you could find for it any better name than monkey's root.

Here Frederick paused.

I again examined the root, and after tasting it, gravely informed my sons that their discovery was one of some value, for I believed it to be no other than the ginseng; a sacred plant in China, where the people look upon it as an universal panacea, and the emperor alone has a right to the crop.

Sentinels are stationed about the places where it grows, I added, but this does not prevent the Americans from smuggling a prodigious quantity into China.

"Blessed be the apes," cried Ernest, "for having put into our possession this precious treasure of the mandarins!"

"Bless them as much as you please," replied Frederick, with an expression of chagrin; "but as for me, I curse them! After gathering the roots now before you," he continued, "we continued our course to the caoutchouc-trees. The calabashes were full. We emptied their contents into others which were easier to carry, and as the sun was still high in the heavens, we thought we would see how our colonists fared in the new farm. But imagine our surprise and grief to find the farm all in disorder, the walls of the hut thrown down, and the planks scattered here and there! The hens were strangled; the goats and sheep were huddled up together, and trembling with alarm; everywhere, everywhere destruction and devastation! Our beautiful settlement had been



sacked and plundered from top to bottom by a host of implacable enemies, and these enemies were the monkeys! Oh, how I then repented that I had dispersed the villains by simply riding through them, and had not punished them for their hideous outrages by striking down half-a-dozen of the wretches! We collected as best we could our poor frightened cattle, which came running up to us at the welcome sound of our voices; we also did our best to repair the gaps in the enclosure; but instead of resting among the ruins of our beloved abode we turned towards Swan Lake. It was there my eagle brought down the bird you see. We then began to think of returning, proud of our discoveries, and of all the riches we had acquired, but overwhelmed with grief at the destruction of our farm, and at the sorrow you would experience on hearing our melancholy tidings."

Frederick ceased speaking.

The news he had brought filled every heart with sadness. I immediately perceived the necessity we were under of inflicting a signal vengeance on the malignant tribe, for unless we could make them fear us, it would be wholly impossible to preserve anything in the island.

I consoled my sons with the assurance that we would quickly retrieve our losses, and that, to prevent the recurrence of a similar calamity, I would organize a grand monkey-hunt, in which they would have numerous opportunities of distinguishing themselves.

Then we had supper.

The ginseng was pronounced excellent, but as, from its aromatic nature, I looked upon it more as a medicinal remedy than as an article of food, I forbade its too frequent use, while requesting my wife to include a few roots of it among our choicer plants. The sad impression produced by Frederick's narrative of the ravages of the apes gradually wore away, and we separated after our evening devotions, deciding that the first task on the morrow should be the preparation of the bird-lime. This was a new thing, and my sons were too young—that is, too fond of novelty—not to look forward to it with pleasant anticipations.





## CHAPTER VIII.

There  
The sunshine in the happy glens is fair,  
And by the sea, and in the brakes.

MATTHEW ARNOLD.



AS soon as we had exhausted, next day, our customary and diurnal occupations; had read prayers, breakfasted, and fed our cattle and poultry, my young family reminded me of my promises. They were impatient to see my projected device in full activity, and anticipated much amusement from this new kind of sport. Accordingly I commenced the manufacture of the bird-lime: mixing a certain quantity of the liquid caoutchouc with some terebinth, I placed it over the fire. While the mixture was boiling and thickening into consistency, I employed the lads in cutting a number of little sticks from the bushes. All that remained for us then to do was to dip each stick in the bird-lime, and arrange them among the fig-tree branches, where the fruit attracted hundreds of ortolans, finches, thrushes, and other birds. And so eager were they, and in such crowds did they come, that a blind man beating about the tree could not have failed to bring down numbers. This plentifulness of game suggested to me another idea. If the ortolans came in such flocks during the day, I thought they would hardly be less numerous by night; and I resolved upon a torch-light hunt, after the manner of the Virginians, in the belief it would be both more expeditious and more productive than the process of trapping.

Meanwhile, the boys, who laboured steadily at the construction of their traps, were themselves ensnared. Hands, clothes, face, all



were besmeared with bird-lime, and to such an extent that you could not touch them without being covered. Their consternation was excessive, and that of our good manageress almost amusing; she had little linen to give them for a change. I comforted her and them with the information that a few ashes and some clean water would suffice for cleansing purposes, and get rid of all the smears and stains that so alarmed her. As for the boys, I rallied them on their want of skill.

"I was prepared to see my bird-lime catch larger birds than ortolans," said I; "but I never thought it would catch three or four clumsy lads."

They tried to defend themselves, but were not very successful, and I showed them how to avoid the inconvenience of smearing their fingers, by taking a pair of pincers, and plunging into the mixture seven or eight sticks at a time, instead of dipping them in singly. They found this a much pleasanter method. When I thought they had got ready a sufficient quantity, I ordered Rudly and Frederick to climb the tree and arrange among the branches as many as possible, and in a short time the unfortunate ortolans began to fall at our feet, limed about the claws and wings, and still attached to the treacherous sticks on which they had perched.

By degrees the sport became so hot that it was as much as Fritz, Ernest, and my wife could do to pick up our victims and kill them, while the two climbers replaced among the branches the baits which had fallen with the birds, the same trap serving three or four times. But, abundant as was the game, I soon perceived that the results would not be proportionate to the fatigue imposed upon us, especially as Frederick and Rudly, in replacing the traps, had to climb from sixty to seventy feet. I therefore meditated seriously upon a torch-light hunt, and commenced my preparations, in which I found the terebinth a powerful auxiliary.

While thus occupied, my attention was called by Rudly to a very elegant bird, much larger than an ortolan, which he had just ensnared.

"Is not this a pretty creature?" cried the young sportsman; "what a pity to kill it! See, papa, it is almost tame; I declare, it seems to recollect me as an old acquaintance."



"I should think it did," said Ernest, who had now joined us, and with his observant eye had already recognized the bird; "I should think it did, for it is one of our European pigeons; it is the offspring of a pair which brooded last year among the branches of our fig-tree."

Taking the bird from Rudly's hands, I found, on examining it, that Ernest was in the right. I rubbed with wood ashes those parts of its legs and feathers which the bird-lime had smeared, and placed it under a hen-coop for safety, already thinking over some means of adding a pigeon-house to our domestic properties. We caught some others, and



WOOD-PIGEON (*Columba palumbus*).

when night came found ourselves the owners of two beautiful pairs of pigeons. Frederick suggested that we might find a place for them in the rock where we resided. I liked the idea, and resolved upon carrying it out, if possible, as soon as we had finished the task which then occupied all our energies.

But successful as our hunt had been, we as yet had filled but one barrel.

"This will never do," I said; "and I have thought of a quicker and less toilsome method; only take care, before it grows quite dark, to notice in what trees the ortolans seem to prefer to roost at night."



ORTOLAN (*Emberiza hortulana*).

In this matter we were quickly satisfied by finding the bark of



two or three fig-trees covered with their traces; so, after supper and a brief interval of rest, I began my preparations.

They were very simple, for I required only three or four long bamboo canes, a couple of bags, and some torches made of sugarcane and resin. Frederick, our "grand huntsman," looked at me with a kind of ironical incredulity; he could not understand how I was to effect the wonders I had promised with such strange instruments.

Night, in those latitudes, treads close upon the footsteps of retiring day. It was soon a deep, dense darkness. We then set out, and at the foot of the trees we had taken note of lighted our torches. Scarcely had the glare broadened around us in a bright wavering circle than a cloud of astonished birds broke from the trees, and flew frantically round and round the shifting blaze.

"Now, gentlemen," said I to my sons, "you see my stratagem is not such a bad one after all! Now is your time; I have brought the game within your reach; you have only to stretch out your arms and effect your captures."

At the same moment I handed to each a bamboo cane, and set the example by striking right and left among the ortolans. The poor birds fell as fast and thick as heavy rain, so that we quickly filled our two bags. Our torches lasted us until we regained Falcon's-Nest, and as the bags were too heavy for any one person to carry, we slung them upon our sticks, and divided their weight among four of us. The darkness of the night, the flaming torches, the burdens borne by each couple, invested our march with a strange, mysterious character, and reminded us of the funereal processions we had read of in certain romances.

We arrived safely at Falcon's-Nest, and before going to sleep, inspected our game-bags, to put an end to the sufferings of the unfortunate birds stunned, but not killed, by our blows. Next day all hands were engaged in picking, cleaning, and preparing this new provision, a necessary but not very agreeable task, which occupied us until evening. We filled two barrels with the ortolans, half roasted, and preserved in butter.

I had not forgotten, among these culinary labours, the expedition which I meditated against the apes, and I now fixed it defi-



natively for the following day. We rose early; my wife supplied us with provisions for a couple of days, and we set out. Frederick mounted the onagra, I took the ass, Rudly and Ernest were seated together on the buffalo's back, which carried, moreover, our rations, our field-tent, and other necessities. We took our fire-arms, but not with the intention of using them; I hoped to make the resin and caoutchouc answer every purpose, and I filled with these substances an immense leather bag shaped like a bottle, which was more convenient to carry than any kind of vessel.

I had announced to my sons that the war to which I was leading them would be "war to the knife," and that I was fully determined to put a stop, at once and for ever, to the malice of our enemies.

"This is the reason," I added, "that I wished Fritz and your mother to stay at Falcon's-Nest, and spare them a painful spectacle."

The idea of death, which I had thus put before them, strongly impressed the imagination of my young hearers, and I listened with a certain degree of pleasure to the objections they suggested, but I did not the less persist in my project, and hastened to correct their sentiments on this subject.

Here is the whole question, I observed: between us and the apes exists a mortal quarrel. If they do not yield, *we* must yield; it is a matter of self-preservation. Undoubtedly the effusion of blood, and needless killing, are horrible; but, under such circumstances as these, they become lawful and excusable.

I supported my statement with a long array of arguments and comparisons; but I cannot boast that all my reasoning produced any signal effect on the naturally compassionate and kindly disposition of my sons. I did not convince them, but I succeeded in making them understand something of the imperious law of necessity.

During this discussion we reached the borders of the lake, which we found covered with beautiful lilies. I selected a favourable site for our encampment, and we descended from our steeds. Our tent was immediately pitched; we fastened clogs to the legs of our cattle to prevent them from straying, tied up our dogs, and went



in quest of the enemy. The farm, or rather what remained of it, was abandoned. The spectacle of its sad disorder, of its shattered walls, of its ruin and desolation, wounded me to the heart, and



confirmed the determination I had formed to exact a severe retribution.

Frederick was despatched to scout. Before long he returned with the information that he had discovered the plundering horde at some distance off, tranquilly playing and contending with one another on the threshold of the wood. Immediately we prepared to carry out the plan I had designed. Around the farm, at irregular intervals, we planted a number of small posts, taking care to fix them very loosely in the ground. We interlaced them with long flexible lianas, and here and there deposited some opened cocoa-nuts, small gourds filled with cooked rice or maize, fruits, or palm-wine, of which I knew the monkeys were inordinately fond—smearing posts, and lianas. and cocoa-nuts, and shells very



thickly with caoutchouc glue. We also spread our baits on the roof of the hut, along the trees at whose foot I had planted the acacia-branches, and smeared with glue these, and the thorns of the stone-pines, and every kind of fruit, so that it was impossible to penetrate into the kind of labyrinth we had constructed without lifting up a post, and impossible to touch one of the vessels of rice or palm-wine without remaining glued to it. My sons asked my permission to place some traps among the neighbouring trees. I consented; and as soon as the ambuscade appeared complete, we retired to our tent, that the enemy might have leisure to approach. The day passed, however, without any incident. I began to fear that the cunning animals had caught sight of us, and mistrusted the nature of our operations. At night, after doing justice to the cold meats we had brought with us, we retired to rest, and nothing disturbed our slumbers.

We rose early on the following morning; but the apes were before us, and the first thing which met our gaze was the entire troop coming up in the distance, and directing their course towards our hut. It is impossible to conceive anything more amusing than the march of this hideous army; some stalked on their hind feet, and advanced majestically, like men; others moved on all-fours; while the youngest leaped from tree to tree, and indulged in a thousand comical tricks. We remained perfectly still, lest we should alarm them, and put them to flight, and we soon had the satisfaction of seeing them involved in the labyrinth we had so ingeniously constructed. What I had foreseen now actually occurred; in a few minutes the whole company was one single mass; united one to another by the gluey lianas, posts, and calabashes, which adhered tenaciously to their hairy skins. It was a strange and truly a burlesque spectacle, the efforts they made to free themselves from their unwelcome bonds; but all was in vain, and from every side arose a cry of baffled rage and fury; never had I seen such hideous grimaces, such horrible contortions. Those whose greediness had led them to the rice and palm-wine, had the calabashes firmly glued to their faces; others dragged the posts and lianas behind them, and grew frantically indignant at their incumbrances. At length, when I thought the disorder com-



plete, we let loose our dogs; they pounced furiously upon the troop, and tore them with their teeth; while we, on our part, laid about us with heavy sticks.

The unfortunate apes uttered the most lamentable groans, and rolled at our feet as if they would fain have besought our pity; but I had determined "no quarter" should be given, and we did not rest until we had finished the task of extermination. Our sticks were red with blood; and the scene could only be compared to that of a battle-field when the fight is over.

My sons were horrified at what we had done, and expressed themselves with an energy which I was far from blaming.

"No more of these massacres," they exclaimed, "however necessary they may appear; the apes are too like humanity; their cries and supplicating gestures are frightful to hear and see."

We dug a trench three feet deep, and interred the slain. I thought it prudent to surround the place with a palisade, so as to keep off our cattle. Feeling very weary, we then enjoyed a little rest, and I sought, by conversing on various topics, to divert the minds of my sons from the gloomy ideas suggested by the slaughter we had accomplished. Afterwards we laboured at the restoration of our farm. We re-collected the stray cattle, and having done as much as our limited time allowed to restore order, we raised our tent, and started for home. Before setting out, however, we made a new capture; that of two beautiful birds larger than the ordinary ringdove, which I recognized as Molucca pigeons; their plumage was brilliantly coloured with blue, green, yellow, purple, and violet. This prize was due to Frederick, who had placed a small shell of rice, well smeared with glue, on a palm-tree while we had been busy about the ambushade for the apes; and the birds were taken in it. After cleansing their wings from the glue that covered them, we tied together their feet, and carried them with us, to be admitted into the new pigeon-house which we had intended to construct at Tent-Town.

We hastened to return to Falcon's-Nest, where our dear companions heartily welcomed us. My wife was delighted with our new captives, and warmly approved my project of a pigeon-house. Consequently, our cart was immediately loaded with provisions,



MOLUCCA PIGEON (*Columba dilopna*).

and with all things necessary for a few days sojourn in the country, and we took the road to Tent-Town.

As soon as we had arrived there I chose a suitable position for our dove-cote in a part of the rock near the cavern. The stone, after a foot or two, became quite soft, and we soon excavated at a height of ten feet from the ground a hollow sufficiently large to accommodate twenty pair of pigeons. On a couple of beams or props fixed in the rock we placed a plank for a small platform, and protected it by a sloping roof in front; the recess was closed with a door, in which we made a loophole to admit air and light, and a rope ladder suspended to one of the props enabled us to ascend and look after the gentle inhabitants. We spent several weeks of hard work in constructing this little edifice, in fastening the timbers securely, covering the interior with a coat of plaster to exclude the damp, fixing a perch or two, and arranging the nests; we were constrained, in fact, to appeal anew to that magical charm which had already conquered so many obstacles and surmounted so many difficulties—the magic of energy and patience. My little workmen had learned the efficacy of these two grand agencies, and brought to their labours a zeal and a perseverance beyond their years.



"Well," said I to Frederick, "there is the building, but what about the inhabitants? It will require all our cleverness, I fancy, to induce our pigeons, both wild and tame, to take up their residence in these new quarters; it is not only necessary they should stay here, but they must bring their companions with them."

"It seems to me, papa," answered Frederick, "that without sorcery or enchantment this will never be done."

"Sorcery? no; but, difficult as it appears, I intend to attempt, and I hope to succeed, with the assistance you can render me."

"Oh, I am quite ready, papa! you have only to give your orders; I am impatient to know how you will set about your task."

"It is to a pigeon-dealer I owe the secret I am going to put to the proof. I don't guarantee its success, for I have never before tried it; but it consists simply in perfuming the new pigeonry with anise. It is said that pigeons are so partial to its scent that they will return every evening to enjoy it, and thus accustom themselves to their new residence. We make with salt, clay, and anise a solid lump, which we place in the centre of the pigeon-house; they begin pecking at it, their wings rub it off, and it is in this way they insensibly exchange their wild wandering life for a domesticated condition."

"Nothing seems easier," exclaimed Frederick; "and chance has befriended us wonderfully, for the root of anise brought home by Rudly will just answer your purpose. We will crush out its seeds with a stone, and if by this process we don't obtain as pure an oil as we should by distillation, it will not be less good nor less odorous."

"I am of the same opinion," replied I; "and I heartily congratulate myself now that I allowed Rudly to put in the ground a plant which, when he discovered it, I thought of very little value."

We immediately proceeded to prepare our oil of anise, and with the powerful-smelling liquid I rubbed the door of the pigeon-house, the perches, and every place which the pigeons were likely to touch with their wings or claws. Next, I made a kind of cake with salt, anise, and clay, which I exposed for a short time to a moderate fire, until it was thoroughly interpenetrated with the



aromatic odour of the plant, and, after placing it in the middle of the dove-cot, we shut in the pigeons we had recently made captive. We left them there a couple of days, with a supply of food, that they might have time to enjoy at their leisure the smell of the anise.

When our little lads, who during this period had been working with their mother in the kitchen-garden, returned, we solemnly announced to them that the pigeons had taken possession of their new residence. Then it was who should climb the ladder first to get a peep at the feathered tenants! The two panes of isinglass I had let into the door were invaded by eager eyes, but I observed with pleasure that the pigeons did not seem frightened at the apparition. They continued pecking at the anise cake, and when I entered their abode, received me as if they had been thoroughly tamed.

Two days elapsed, and I grew curious to ascertain whether there was really any virtue in the charm.

On the third morning I roused Frederick very early, and directed him to rub with fresh anise oil the little trap in the pigeon-house door, and the cord which, running through a pulley, served to raise it. This he did, and without saying a word in reference to our preparations, we awoke all the family. I informed them that this was the day appointed for the release of our prisoners, and everybody was quickly up and stirring. We arranged ourselves in two lines on either side of the door. I intrusted Rudly with the cord, and striving hard to preserve a serious air, I described with a stick some magical circles in the air, and muttered a few incoherent words like a wonderful conjuration.

When I had finished I ordered Rudly to pull the rope which he held in his hand. At first the captives timidly popped forth their heads; next they ventured upon the platform; and then, on a sudden, they soared to such an elevation above us that my wife and son, following their flight with straining eyes, thought they were for ever lost to us. But, as if they had only risen to that astonishing height to embrace at a glance the vast extent of land and sea which spread beneath them, they immediately descended,



and quietly hovered around the pigeonry they had just before quitted.

This little incident, which I had not foreseen, added greatly to the effect of my pretended magic, and I hastened to say, in my most serious tone,—

“I was certain of it; though they were so high in the clouds, I knew they were not lost.”

“How could you know that, papa?” inquired Ernest.

“Because,” I answered, “my charm held them fast to the pigeon-house.”

“Your charm!” cried Rudly; “are you then a conjuror, papa?”

“Stupid!” said Ernest, “are there any conjurors?”

“Yes, yes,” exclaimed Frederick; “and you, my dear professor, shall soon see some magical feats which will surpass all your science.”

At this moment, the pigeons, which were quietly pecking at our feet, again drew our attention. The two Moluccas suddenly quitted their European brethren, and started in the direction of Falcon’s-Nest with such rapidity that they were soon lost to sight.

“Adieu, gentlemen!” cried Rudly, taking off his hat, and executing a thousand comical gestures—“adieu, gentlemen, and a prosperous journey!”

My wife and Fritz began lamenting the loss of these beautiful birds. I, however, preserved a serene countenance, and, as if I were addressing myself to some aërial spirit, murmured in a low voice, turning in the direction of the fugitives, the following words:—

“Go, little ones, go; I give you leave of absence until to-morrow; but do not forget to return, and, above all, bring back with you your comrades.”

I then turned towards my young family, who stood astonished and stupefied by my strange address, and were half inclined to think me serious.

“There,” said I, “we have finished for the present with the strangers; let us now see what we can do with our compatriots.”

The latter did not seem by any means inclined to follow the example of their congeners. Content to flutter about us, and peck



at the ground, they were already completely tamed; they had once more enjoyed the shelter of a pigeon-house, and willingly resorted to it.

"*These*, at least," said Rudly, "are not beasts! They prefer a good home and plenty of food to the wind and rain the others have gone in search of."

"Wait a little, wait a little," rejoined Frederick, confidently; "did you not hear papa speaking to his familiar spirit, who will bring them back to us?"

"A familiar spirit!" exclaimed Ernest, shrugging his shoulders; "such balderdash won't do for me, my boy!"

"Not so fast," said I, in my turn; "it is by the result we must judge the means, in all cases of magic, and I predict that the means I have employed will be crowned with success."

We spent the remainder of the day in the neighbourhood of the pigeon-house, conversing upon sorcery and the pigeons it was to restore to us. We often lifted our glance to the skies, and looked towards Falcon's-Nest, but no bright wings appeared. Evening came, and with it silence; our European pigeons retired to their roost in tranquillity. For ourselves, our evening meal was a peculiarly merry one, and we flung ourselves upon our cotton mattresses to await the coming of the morrow, and with that morrow my victory or defeat.

Next day we resumed our customary labours. I was growing anxious for the return of the fugitives; my sons were impatient to see the issue of the affair; all, in fact, looked forward to the evening with restless feelings; but lo! a little after noon, Rudly came running towards us, clapping his hands, and gaily shouting,—

"He has returned! he has returned! He has positively made his re-appearance!"

"Who is *he*? Who is it?" we demanded of him.

"The blue pigeon," he replied; "the blue pigeon, the beautiful blue pigeon! Come, come and see it."

"Bah!" rejoined the unbelieving Ernest; "what a sorry joke! It is not worth going so far to see an empty pigeon-house!"

"Who knows?" I said to the professor; "now, *I* put full faith



in my science, and shall be no more astonished at the return of the second pigeon than I am at that of the first."

Frederick asked Rudly whether the blue pigeon had not brought back his mate; but our hasty friend had not the gift of seeing so much as that at a single glance, and had not troubled himself to ascertain. But on reaching the dove-house we found not only the blue pigeon, but perched on the outer platform his gay-coloured mate, whom he was coaxing to enter the interior. He thrust in his head, and then returned to entice his companion; and such was his address that he prevailed over her reluctance, and we had the satisfaction of seeing both installed in the pigeonry.

The boys then wanted to close the trap, that we might make sure of our prisoners; but I would not permit them, because I felt assured we should have to open it again by-and-by.

"How will the two whose return I expect this evening, how will they enter if we shut the door in their face?"

"I begin to think," exclaimed my wife, at length, "there is something extraordinary in all this, and if you have not resorted to some kind of enchantment I do not understand it."

"Chance! It's all pure chance!" said Ernest.

"Chance!" rejoined I, laughing; "that might answer *once*; but will you call it chance if the other pigeon returns this evening with her mate?"

"Humph! I shall certainly then feel nonplussed; but it is improbable that the same phenomenon will occur twice on the same day."

While we were thus conversing, Frederick suddenly interrupted us; his eagle eyes had caught sight of the second pair, whose arrival we were expecting.

"I see them! They are coming!" he shouted.

And before long our two fugitives were fluttering above our heads. They were received with such joyous manifestations that I was compelled to interfere, lest the clamour should frighten away the two birds so effectually that not even the fragrant anise would draw them back.

Silence was restored, and the two new-comers entered with the same ceremonies as their predecessors.



"Ah, well," said I to Ernest, "what do you say now, Mr. Professor? You see the second pair have returned like the first."

"I do not know what to say," he answered with a serious face; "it is all extraordinary; but as for sorcery and magic, I cannot believe in them!"

"I am glad you are not credulous: but if there should appear to-day a third pair of Moluccas, would you call it good fortune or chance?"

Ernest did not reply, but his silence was far from wearing the character of conviction. We returned to our work, leaving Fritz and his mother to get ready the dinner. But scarcely had we been away two hours before our little scullion made his appearance, with a grave air and composed mien.

"Most illustrious signiors," he said, in tones of mock solemnity, "I have the honour to invite you, in name of our good mother, to meet a new and truly royal pigeon, who, with his beloved spouse, has just taken possession of the magnificent palace you prepared for him."

"A wonder! a miracle! You are welcome, Mr. Messenger," we eagerly replied. "Oh, what good news!"

We hastened to the pigeon-house, where my wife, warning us to be silent, pointed with her finger to two magnificent birds, which the Moluccas in the interior seemed eagerly pressing to share their commodious domicile.

"I give it up," said Ernest; "my science and my limited intelligence are regularly baffled; but I know that there is no sorcery in the matter. Come, papa, I hope you will bring us acquainted with your secret."

Little Fritz, who had heard us pronounce several times the words "magic" and "sorcery," besought us to explain them, and to say if they did not both refer to one and the same thing.

"Nearly," I answered; "the first of these two words differs only from the second in its foreign origin. It comes from Persia, where sages and philosophers formerly bore the name of *magi*; but as, in the eyes of the ignorant, science often assumes a supernatural character from the wonderfulness of its effects, the two words became confused in common use, and sorcery is frequently



called magic. Otherwise, in both the same main principle prevails; that is, a more or less profound acquaintance with certain secrets of nature which are unregarded by the vulgar, and may be employed either for good or evil; so that there may be good magic and bad magic."

Fritz inquired if the magic lantern belonged to the good or the bad magic. I satisfied him on this point, and after a few questions on magic and magicians, Master Ernest, who never lost sight of anything, took me up very adroitly with a reference to my recent achievement.

"Since you say that sorcery consists simply in the employment of certain natural means unknown to the common people, tell us what were those you employed to bring back the pigeons!"

I did not wish to prolong our young professor's embarrassment, and I explained in detail the various steps which Frederick and I had taken. Rudly laughed heartily on finding that the mysterious charm was nothing more than his root of anise! I did not forget to praise Ernest for his clear reasoning and sagacious incredulity; and I recommended our impetuous Rudly to imitate his brother in this respect, and not to accept so readily as he was wont to do the very first idea broached in his hearing.



The following days were devoted to the completion of our pigeonry, and we saw with pleasure that its new inhabitants had permanently established themselves beneath its hospitable roof. They had already begun to make their nests. Among the herbs



which they collected for this purpose, I distinguished a sort of long grey moss, which I had already remarked on the trunks of the aged trees, hanging from them in great clustering wreaths. I recognized it as the plant which is employed in India, instead of horsehair, for stuffing mattresses. The Spaniards also weave it into a rope of such lightness, that a ball of twenty feet, fastened to the summit of a mast, will float in the wind like a banner. I informed my wife of this discovery, and the reader will understand with how much gratification she welcomed it; for a good housewife it was another treasure, and her sanguine imagination saw in it thread, and cloth, and all those domestic goods whose real value can only be appreciated by the mother of a family.

At intervals we found among the ordure of the pigeon-house some nutmegs; this precious spice was brought to us by the Moluccas. We washed them, and though they were stripped of their fibrous husk, committed them to the earth, but without cherishing any excited hopes of the success of our plantation.

NUTMEG (*Myrica*).

We were engaged for about a fortnight in this kind of work, either attending to our pigeons or to other internal arrangements and domestic conveniences which our new residence needed. The three pair of native pigeons grew rapidly familiar with the pigeonry, and soon became quite as docile as their European congeners. The latter multiplied in such a ratio, their broods succeeded each other at such short intervals, and were so numerous, that we were compelled to fix a limit; or our beautiful blue pigeons would infallibly have been turned out of doors by this increasing population. We therefore reduced the European pigeons to five pairs; and as the increase was not wholly due to the natural multiplication of the family, but also to frequent migrations from Falcon's-Nest to the cavern, we laid a snare for the intruders, and every morning placed our traps around the pigeonry before we



opened it. This stratagem—a murderous one for the feathered victims!—furnished our cuisine for some time with a provision not less abundant than delicate, and gave a respite to Frederick's eagle.

The monotony of our existence was somewhat relieved about this time by an adventure of which Master Rudly was the hero. One day he set out alone on an expedition whose end and object he did not enlighten us about; but his absence was of brief duration, and he returned covered from head to foot with a thick black



REEDS (*Calami*).

mud, and dragging after him a bundle of Spanish reeds, which were equally soiled. Tears filled his eyes; and from the irregularity of his gait, it was evident he had lost one of his shoes. At his tragi-comical appearance we could none of us refrain from laughing; his mother alone did not join in the general hilarity, and even received him with some degree of coldness.

"Truly," she exclaimed, "we should have to search far to find your equal! Do you think we have a complete wardrobe at your service, that you go and lose your clothes in this manner? How did you get yourself into such a woful condition?"

"Ha, ha, ha!" shouted Frederick; "he resembles a Barbary duck!"

"Not exactly," rejoined Ernest; "he is the god Neptune, and has just emerged from his watery realm with all his mythological attributes!"

"Laugh, gentlemen, laugh," said Rudly, in a tone of vexation; "I have not the less had a narrow escape with my life."

These words rendered me attentive; and I reprimanded his two brothers for the unkindness of their ridicule. "These are not," I said, "the sentiments of brothers." Then I requested the gloomy hero to relate the incidents of his adventure.



"Where have you been," I inquired, "to render yourself so uncomfortable?"

"To Flamingo Marsh."

"But what on earth took you there?"

"Alas!" replied the poor boy, smiling, "I went to gather some Spanish reeds to make baskets for our pigeons and similar useful articles."

"Your intention was praiseworthy, and it would be doubly unjust to thank you only by sarcasms. It is not your fault if the enterprise did not succeed as you could have wished."

"No, indeed, it has *not* succeeded as I could have wished; and but for two bundles of reeds, I think I should certainly have lost my life. To plait my baskets I wanted thin, flexible reeds. All those on the edge of the marsh were much too big, and therefore I pushed towards the centre, leaping from turf to turf until I reached a spot where there was nothing but black thick mud. My feet sunk into it at the outset, without my paying much attention; but soon I was immersed to the knees, and I felt myself gradually sinking deeper and deeper, until the mud was up to my chest. I called for help with all my might, but no one heard me."

"I think the noise of the wind and the waves must have drowned your voice," said Frederick, "for you may be sure that if we had heard you, we should have lost not a moment in hastening to your assistance."

"However," continued the young adventurer, "if there were no human beings within call, I had a companion who never fails me. My young jackal heard me, and dashing through the morass, made the air resound with his incessant barking and howling."

"But why," inquired Ernest, "did not you have recourse to swimming? You, who surpass every one of us in that exercise?"

"Sage advice, truly! I should like to see you swimming in a swamp, with a forest of reeds around you, and a belt of mud close up to your arms! But listen, and I will tell you how I at length escaped. When I perceived that my voice was all spent upon the air, and that neither my cries for help nor the howling of the jackal brought you to my assistance, I began to think of extricat-



ing myself from my embarrassment, for I felt I was sinking deeper every minute, and had no time to lose. I drew my knife from my pocket, and cut away around me till I had collected two large bundles of reeds, which I placed under my arms to serve as a support. On these I leaned with all my might, and by alternately moving my chest, arms, and legs, I succeeded in partially freeing myself from the damp prison in which I was nearly suffocated. Meanwhile my jackal stood on the bank, continually howling, as if he longed to lend me some assistance. I thought of a method of utilizing his evident goodwill: I called him to me, and catching hold of his tail with a firm grasp, the brave little fellow made such good use of his paws that he drew me to *terra firma*."

"Heaven be praised, my poor boy," said I, "that you are restored to us in safety! You may well thank your jackal, while we acknowledge the presence of mind you exhibited under such difficult circumstances."

"Who knows!" remarked Frederick; "perhaps not one of us would have imagined such a means of escape."

"For my own part," added Ernest, "I really do not know what I *should* have done."

"Oh, your inventive mind," replied Rudly, "would have devised something, I am confident, provided your prudence had not been too long in coming to a decision. There is nothing like necessity; it is the best master."

"But you forget one important thing," remarked their mother, "which necessity teaches—namely, Prayer. What would be the use of all our attempts and resolutions, unless favoured by Providence?"

"True, true, mamma," answered Rudly; "and in my danger I recited all the prayers I knew. I recalled the disastrous day of our shipwreck; I remembered that God had then assisted us because we had turned our hearts towards His throne; and I thought that perhaps He would have pity on me in my distress if I humbled myself before Him."

"Good, my boy," I exclaimed; "and God indeed *did* hear you, for if you are now in safety, it is because He willed it. It was He who gave strength to your arm, who inspired you with the



happy idea that proved your salvation; it was He who made the jackal reply to the summons of your voice. Glory, then, and all honour to God! let us thank Him with our lips and with our heart!"

Meanwhile the poor adventurer had been washed and cleansed by his mother, who rinsed his jacket in the brook, where it left a black muddy trail. We also washed his reeds, and having completed these very needful matters, began to speculate in what manner we could best make use of his prize. They were too stout and hard to be plaited as they were. We therefore split them up into long thin strips, and commenced our apprenticeship to the art of basket-making. My sons understood but little of it, and their inexperience was the frequent cause of quarrels among them, in which I was always obliged to intervene. I lost no opportunity of reminding them that, as a general law, "union was strength;" and that in our case in particular, the success of the colony wholly depended upon our mutual agreement. As their dispositions were naturally good, they always listened very readily to my advice; but their impetuosity often prevailed over their better knowledge, and their disputes recommenced on the first opportunity.

With Rudly's reeds I now began the construction of a machine which my wife had long been in want of—a weaving-loom. Two reeds split up their entire length, and firmly fastened with cord in such a manner as to preclude their warping or curving while being dried, furnished the four bars required for the part called by the weavers *the combs*. For the teeth of these combs the boys cut me a number of small pieces of wood, and having collected these indispensable materials, I put them aside in a secure corner, without saying a word to anybody of their intended destination, as I wished to surprise my wife with the machine when completed. The jokes levelled at my little sticks, which my boys pleasantly designated *toothpicks*, found me quite impassive, and I kept my secret.

"What are you going to do with all those bits of wood?" inquired my wife, with a woman's natural curiosity.

"Oh, 'tis a fancy of mine!" said I, laughing. "I am going to make you a superb musical instrument after the manner of the Hottentots—a *gom-gom*! Give me time to finish it and you will



thank me heartily; nay, you shall be the first to dance to its melodious strains."

"Dance! Indeed, I have something else to do. Dancing and music, I can assure you, will have no charms for me while we remain in this island."

"If you are really intending to construct a gom-gom," said Ernest, "our little sticks will be of no use; for the gom-gom is nothing more than a few strings stretched tightly over half a gourd, and the musician plays upon these strings with the quill of a feather."

"A splendid instrument!" cried Rudly; "well adapted, I should say, to frighten cats and dogs!"

"However that may be, my description of it is quite correct; for I have seen one, and the sound it produces closely resembles the monotonous syllable *gom-gom, gom-gom*."

My wife then returned to the charge, and all I could do was to repeat my promise, that when the instrument was finished she should be the first to enjoy its use, and that I was sure she would need both her hands and feet to play it.

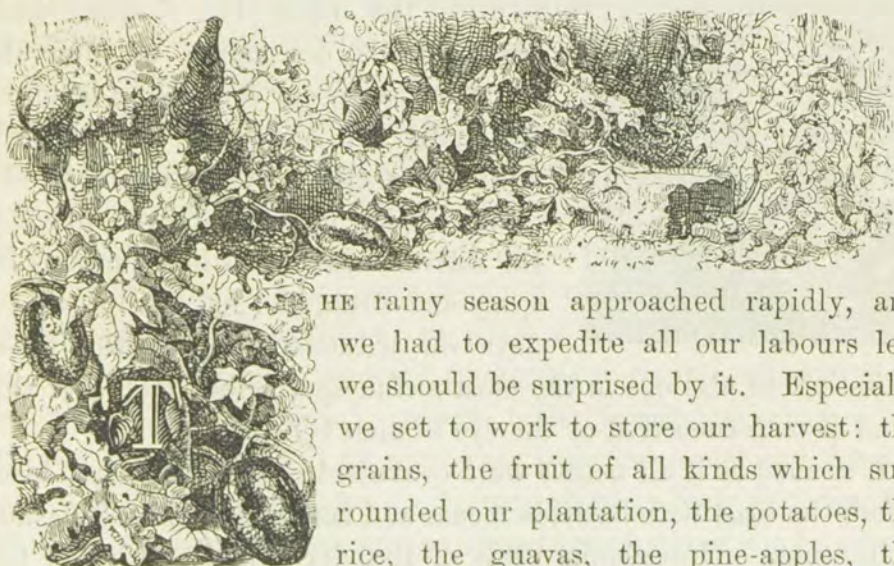
About this time our onager presented us with a pretty little foal. We received it with much satisfaction, for it was not only another beast of burden added to our stock of useful animals, but also another courser who might one day make a distinguished figure in our cavalcade. I bestowed upon him the significant name of *Rasch*, or *Swiftsure*; for I intended him more particularly for purposes of equitation, and I was delighted to see that his form, as it developed, gave every promise of strength and speed.

The approach of the rainy season, and our recollections of the difficulty we had experienced in collecting every evening those animals we had allowed free pasturage in the fields, set me thinking of some means of easing our labour; and I resolved to accustom them to return to their sheds at sunset when a sort of horn was sounded, which I made out of a large shell, with a piece of wood fitted to it like the mouthpiece of a flageolet. We accompanied our first experiments on this instrument with a liberal distribution of food and salt, which insured the success of our invention. The pigs alone were restive, and manifested a preference for a state of free-



dom, but we abandoned them willingly to their own devices, knowing that whenever we wanted them our dogs could hunt them up.

Notwithstanding all the additions and improvements we had made to our winter-palace, a reservoir was still wanted for fresh water, which we were compelled to fetch from the Jackal River. As such a journey would have been impossible every day during the winter season, I was anxious to remedy the inconvenience before the rains commenced. The idea occurred to me of bringing an aqueduct from the brook, and of thus securing a fountain of living water, as we had done at Falcon's-Nest. For our tubes we made use of bamboo canes fitted one into another; we supported them upon strong wooden props, and a cask sunk in the ground served for basin. The work was rude and rough, but we proposed to render it more elegant, as well as more complete, when the weather permitted. As it was, it answered its object admirably, and my good wife declared she was as well contented with it as if the fountain had been wrought in the purest marble, and surrounded by sculptured sea-horses, dolphins, or naiads, pouring the crystal lymph through mouth and nostrils!



THE rainy season approached rapidly, and we had to expedite all our labours lest we should be surprised by it. Especially we set to work to store our harvest: the grains, the fruit of all kinds which surrounded our plantation, the potatoes, the rice, the guavas, the pine-apples, the anise, the cassava, nothing was forgotten.

We renewed our sowings as in the preceding year, in the hope that the European grains which we thus committed to the fresh-dug



earth would be more quickly and more favourably developed by the humidity of the season.

We filled the canvas bags made by my wife with these various products, and placed them on the back of our patient beasts, who carried them to our magazines, and there we piled up the contents in casks and barrels. This task was not accomplished without difficulty, any more than the harvest; for the barley, having been sown at different times, was not all equally ripe, and we had to make our choice among the ears, which was not particularly easy. I resolved next year to grow it, according to rule, in a field properly prepared for the purpose. We had now a pair of buffaloes to assist in the work, and nothing was wanted but a double yoke for our team, which I proposed to manufacture during our winter seclusion. We ought, I felt, to become in time most accomplished labourers, for we were successively cartwrights, boat-builders, farmers, carpenters, basket-makers, architects, gardeners; and, in a word, adepts in every occupation to which Necessity, that great teacher of men in all industrial arts, had made us serve an apprenticeship.



MEANWHILE, the rains had begun; and heavy floods descending at intervals made us hasten our concluding labours. Gradually the horizon became loaded with dense clouds, while raging winds came swirling up from the sea, driving the waves before them in mountains of spray and foam, and for nearly twenty days we witnessed one of the most majestic, but also one of the most awful, spectacles which ever the mind of man conceived or the eye of man beheld.

It seemed as if all nature were convulsed: the great trees bent before the blast with horrible moans and lamentations; swift flashes of lightning and deafening peals of thunder mingled with the incessant noises of the rains and winds;—in a word, all the voices of earth, sea, and air blended in a sublime harmony, of which the growling thunder furnished the base, while the shrill whistlings of



the hurricane filled up the parts with their clearer and more sonorous notes.



We endeavoured to recall the opening scenes of the previous winter ; but whether it was that our memories served us badly, or that a present danger always appears more formidable than a past peril, it seemed to us as if the tempests of the preceding year had not been of so violent a character. However, the winds subsided a little, and the rain, instead of descending in headlong torrents, began to fall with that hopeless persistency which we knew it would exhibit for twelve long weeks. The first hours of our enforced seclusion were melancholy enough ; but as it was necessary to submit with composure to a lot that could not be modified, we began as cheerfully as possible the internal arrangement of our subterranean abode.

We had with us only a part of our live-stock—the cow, because of her milk ; the onager, for the sake of her foal ; and Lightfoot and Storm, because we intended to employ them in such excursions as might be absolutely necessary. The limited space we had allotted for stabling had prevented our bringing either our sheep or goats. We had left them at Falcon's-Nest, where they found a shelter from the weather, and an abundant supply of food. Moreover, one of my cavaliers went there daily, notwithstanding the rain and the wind, to carry them a few handfuls of salt, and to see if they wanted anything. It is needless to say that the dogs, the



jackal, the ape, and the eagle had followed us, and the sports and feats of this domestic menagerie materially contributed to shorten the long evenings we passed under the stalactite roof of our grotto.

We devoted ourselves at first to numerous minor tasks which we had been unable to foresee, but which not the less proved of the utmost importance. We had taken definitive possession of our residence, and had much to do before we could make it thoroughly comfortable. It is true that all the apartments were on the same floor; but the ground had not been levelled with any great exactness and we had now, in the first place, to smooth down its ruggednesses, and to fill up its hollows, in which, at every step, we ran the risk of breaking our necks. Our new fountain did but poorly supply our domestic necessities, and we removed the basin into the interior of our kitchen. We manufactured shelves, and tables, and benches,—in a word, we considered all the exigencies of our position, and did our utmost to render our abode thoroughly comfortable as a winter residence during the long captivity that too probably awaited us.

Yet one inconvenience remained which we had never anticipated—the want of daylight. The grotto had only four openings—the door, the kitchen door, another that opened into our workshop, and a fourth which led into the sleeping-apartments. Consequently, my sons' little rooms and all the recesses of our palace were constantly shrouded in profound darkness. We had certainly let some windows into the partition-walls, closing them up with glass and thin gauze; but the light entering through these and the exterior door was so feeble, that nothing was visible in the inner part of the grotto. It was evident that two or three more windows were wanted, but this task we were compelled to defer until the return of dry weather. Meanwhile, I devised a temporary method of lighting up our residence.

I had kept by me one of the largest of the bamboos which I had used for the pipes of our fountain. It happened to be the exact height of the roof; I planted it in the ground about twelve inches deep, and supported it with props to keep it steady; then I called into requisition little Rudly's agility and address. I gave him a pulley and a hammer, passed a thin rope round his body, and sent



him spinning up the new mast I had raised. He was at the top in a minute, and there, in obedience to my directions, fixed in a crevice of the rock the pulley I had given him. The cord he drew over the wheel, and then glided down on the mattress which I had placed at the foot of the mast in case of mishap. The next step was to suspend one of the largest of the ship's lanterns to the cord, and carry it up to the roof, where, reflected by the myriad crystal drops which adorned our grotto, it shed a light like that of day.

The benefit to us was immense; our organizing labours were resumed with renewed activity. Ernest and Fritz commenced the arrangement of our little library, and disposed upon neatly fitted shelves the books saved from the wreck. Rudly and his mother undertook the management of the kitchen, and Frederick and myself put the workshop into order. For this task more physical strength was necessary than either of his younger brothers possessed.

In the first place we set up, by the side of the window, a superb English turning-lathe, with all its tools, which I had discovered in our captain's cabin on one of our visits to the wreck. I had been accustomed at one time to amuse myself with turnery, and I now promised myself to employ advantageously my small acquaintance with the art. We next erected a forge, supporting our anvils on stout wooden logs, and arranging all our cartwright's and cooper's implements in admirable order upon the shelves or in the racks I had fixed to the wall. Nails, screws, hooks, pincers, hammers, saws, adzes, planes,—there was a place for everything, and everything in its place; and our improvised workshop soon assumed an appearance of carefulness and good arrangement of which I was very proud. Often did I congratulate myself on having cultivated in my youth a taste for mechanical pursuits; and to this taste it was owing that, if I could not make skilful use of all the tools in my possession, none were absolutely foreign to me.

Our grotto, by degrees, assumed an air of perfect order, and we were then able to wait, without any particular feeling of weariness, until the sun restored us to liberty. We had our workshop, our dining-room, and our library—where we could repose in our leisure hours, and refresh ourselves by intellectual enjoyments when



fatigued by our daily labours. The chests we had removed from the wreck contained a tolerably large number of books; treatises of navigation, travels, and works in natural history, botany, and



zoology. Some were enriched with illustrations, which proved a source of incessant amusement. One evening, when turning over their leaves, we recognized the monkey's root, which Frederick and Rudly had discovered, and which I had suspected to be the ginseng



of the Chinese; it proved to be that most valuable plant. We had also maps, numerous mathematical and astronomical instruments, a portable terrestrial globe, of English make, which swelled like a balloon; but, as is generally the case in a ship's library, the greater part consisted of dictionaries and grammars in all languages.

We all knew something of French, which is spoken in Switzerland almost as generally as German. Frederick and Ernest had begun to learn English at Zurich, and I was sufficiently acquainted with that language to direct their studies. I entreated them to revive their knowledge of it, since it had become the language of the seas, and one seldom met with a ship but some of its crew understood or spoke it. Rudly, who as yet had not learned any tongue but his own, wished to undertake Spanish or Italian; their pomp and melody attracted his warm imagination. As for me, I began to study Malay; for my examination of the maps, and of the position of our island, daily strengthened my belief that the first men whom we should encounter would belong to the Malay race.

It was agreed that we should pursue together the study of French and German, that I should teach English to my wife and little Fritz at the same time as to Frederick, and that the others should take up what languages they chose. Our study-room was not unlike a little Babel, when, by way of relieving our silent absorption, we began to recite aloud some extracts from our favourite books. Singular as this exercise may appear, it was not without advantage; it provoked numerous questions and explanations, which had always the result of teaching us some foreign word or phrase previously unknown. Ernest took the lead of us all; he was gifted with the essential elements of success—a strong memory, a clear intelligence, and unfailing industry. Not content with learning English, he continued his Latin exercises; and, in truth, his love of natural history made a knowledge of that language almost indispensable. The ardour with which he prosecuted these studies was so great, that we were frequently compelled to tear him from his books and engage him in some physical exercises, for the preservation of his health.

As yet I have said nothing of the thousand little treasures which we had found in the chests removed from the wreck. These in-



cluded articles of furniture, looking-glasses, several pretty cabinets, secretaries well provided with writing-materials, even a superb clock, which would have struck the hours, if I had known how to put it in order. As it was, it made a handsome figure on a marble console in our saloon. Every day we so added to the conveniences and decorations of our abode, that our children were at a loss for a fitting appellation. Some wished to call it the Fairy Palace, others the Glittering Grotto: an interesting discussion arose upon this important question, which terminated in our selection of the simple but appropriate title, *Felsenheim*, or Rock-House.\*



Engaged in so many occupations, we found the time pass rapidly away. Upwards of two months had gone, and I had had leisure neither to make a yoke for our buffaloes nor a new pair of fine carding-combs, though my wife asked for the latter daily, and required them for spinning her cotton.

At the end of August the weather again grew stormy. The rains, the winds, the lightning, the thunder, returned with augmented fury; ocean was shaken to its lowest depths, and under our crystal dome we seemed to feel its violent convulsions. How fortunate we considered ourselves in having secured so solid a shelter!

\* Literally, "the home in the rock."



What would have become of us in the ærial bower of Falcon's-Nest? Our tent would never have resisted the impetuosity of the elements.

At length the weather began gradually to clear. The clouds scattered, the rain ceased, the wind blew with bated breath, and we could venture from our grotto to see if the world still rested on its ancient foundation.

As in the year preceding, we found Nature renewing herself amidst the recent signs of wide-spread ruin and disaster. We gaily traversed the belt of rocks extending along the coast, and as we stood in need of free exercise, took a pleasure in scaling the loftiest heights, and surveying the varied panorama unrolled beneath us.

With his usual intrepidity Frederick had mounted to the summit of the cliffs, and with his keen eye, which almost rivalled the eagle's, he discovered afar, on a little island in Flamingo Bay, a black spot, though he could not distinguish its nature or form; he supposed it to be a stranded boat. Ernest, who had followed him, thought it was a sea-lion, of the family described by the historian of Lord Anson's voyages. On hearing their report, I proposed we should immediately hasten to the spot, and satisfy our curiosity. Without delay we regained the shore, emptied our periagua of the water with which she was filled, launched her and pushed off, all except Fritz and our good manageress, whose unadventurous disposition was not inclined for such excursions.

As we rowed along each of us gave vent to fresh conjectures. But when at length we came in sight of the object of our expedition, and could recognize it clearly, what was our surprise to see an enormous whale thrown up on the sand, like a wrecked ship! As I did not know whether it was really dead, or only sleeping, I thought it best to advance very slowly, and keep watch against any movements of the animal which might have endangered our frail boat. Therefore we pulled round the little island where it lay, and landed on the opposite side. This island was nothing more than a sandbank slightly elevated above the waves; but its vegetation was singularly vigorous and luxuriant. There were no trees, however; the winds and waves, I suppose, destroying their growth. It was about an eighth of a league in length though its



size might easily have been doubled by banking out the sea. Sea-birds of every species frequented it, and we found an abundance of eggs and nests: of the former the boys collected a good supply, that they might not return, said they, to their mother empty-handed.



SEA-BIRDS.

There were two ways by which we could reach the whale: the more direct, over the rocks, would be exceedingly troublesome; but the other, though longer, was free from all difficulty. I chose the former for myself, and ordered my sons to take the latter. I was inspired by a wish to examine the island, which required only trees to render it most enchanting, from the higher ground. And from this elevation I surveyed the entire coast of our own settlement from Tent-Town to Falcon's-Nest: in contemplating so superb a spectacle I almost forgot the whale, and when at length I descended in that direction, I found that the boys had arrived before me. They ran to meet me with demonstrations of the liveliest joy, their hats full of the shells and corals they had collected on the sands.

"Oh, papa!" they exclaimed, "just see what a superb lot of shells and corals we have found! Who could have brought here all these marvels?"

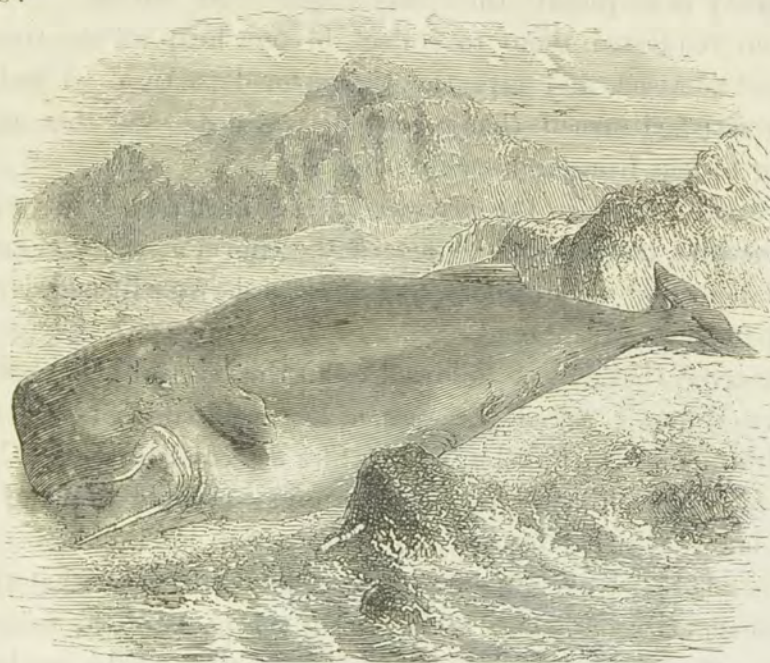
"The sea," I answered; "the sea, when shaken in its deepest abysses; nor does it seem to me astonishing that it should have strewn the shore with these light playthings, when it could fling upon it so huge a monster as that now lying before us."

"In truth," said Frederick, "he *is* a giant; and it is strange, I admit, that we should amuse ourselves with such trifles instead of examining our whale. For my part, I should never have believed he could be so large."

"Examine him!" cried Ernest, laughing; "well, we don't want



either microscope or magnifying-glass! As for me, I willingly abandon to you the unwieldy mass, which is utterly devoid of beauty, for these charming and delicate-coloured shells. Look, papa, look at their various and vivid hues! Look at their graceful forms!"



THE WHALE (*Physeter macrocephalus*).

Here a dispute arose between Ernest and his brother, half-comical, half-scientific, on the nature of true beauty. Each defended his position with lively enthusiasm, but Frederick was no match for his brother. His adversary's language revealed something more than mere admiration of nature; the deep and earnest devotion of the scientific student who has passed long hours, with his microscope in his hand, studying a minute fibre, or investigating a simple ring on an insect's back.

I terminated the argument, and restored harmony between the two disputants by telling them, that in the immense work of creation everything was of equal beauty, everything equally admirable; from the fleshworm, imperceptible to the eye, up to the huge whale and colossal elephant, whose heavy and ungracious forms in no wise displayed that delicacy of organization which astonished us in the mollusc, the worm, or the fly.



"All things are beautiful," I exclaimed, "which occupy the place in creation assigned to them by their Creator; and we must take care not to measure the amount of admiration we accord to certain objects by the credit they enjoy in our imagination, when their rarity is frequently their only claim to our notice."

I then requested them to collect in one heap all the treasures they had amassed, and gave the signal for departure. I had previously satisfied myself that the whale was dead, and that we had nothing to fear from approaching it.

"We will return in the afternoon," I said, "and bring with us the necessary instruments to attack the enormous prey ocean has kindly deposited at our doors, and afterwards we will endeavour to turn it to some advantage."

I observed that Ernest followed us to the boat with ill-concealed regret. When I asked the reason, he declared that if I would leave him alone on the islet, to live like a second Robinson Crusoe, he should think himself perfectly happy. I could not but smile at the fancy, which I hastened to banish from his mind.

"Poor lad!" I exclaimed, "do you not know then that the life of Robinson Crusoe is only attractive in the pages of the romancist, and that the project of your fervid imagination would involve you in a thousand bitter troubles? You would quickly repent of your solitude; disease and weariness would soon crush your energies; and the unhappy hermit ere long would be found lying dead upon the strand, like the whale we have just quitted. Oh, Ernest, I bid you thank God that you were not separated from us when our ship was wrecked! Man is made for the society of his kind; he has need of them and of their assistance. We are six in our island, and yet you know with what extreme difficulty we sometimes procure the things indispensable to our well-being. If you were alone, what would be your chances of subsistence? Of what avail would be your feeble arms against the obstacles which our united energies can scarcely surmount?"

The would-be Robinson acknowledged the force of my reasoning, and we put to sea. My little rowers found it hard work rowing as the waves ran somewhat high, and began to lament very piteously the miseries of their lot.



"Really, papa," they said to me, "you ought to devise some way of making the condition of a rower more endurable."

"You seem to think me endowed," I answered, "with more power than I really possess; but if you could only procure me an iron wheel, about a foot in diameter, I would see what I could do to please you."

"An iron wheel!" exclaimed Frederick, immediately; "why, there are two amongst our stock of old iron. I think they must have belonged to a turnspit; and I can easily get them for you, if mamma has not already made use of them."

I was unwilling to make any further engagement, and without exactly promising or refusing, I encouraged my rowers to redouble their exertions, and contend valiantly with the tide, until the good time coming when boats should sweep over the waves of their own volition.

Soon after the conversation turned upon the subject of coral, and Rudly asked me what use was made of it in Europe.

I told him that formerly coral was highly esteemed, and employed as an ornament for ladies' dress, but that such was now only

the case among savages. However, if Europeans met with a branch of more than usual beauty, they deposited it in their museums. "And," I added, "we will do the same with what you have collected here; it will probably find a place in our library, as one of nature's most curious products."

To what natural kingdom did coral belong? was Frederick's



A BRANCH OF CORAL.



next inquiry. "I have read," said he, "that it is a kind of worm."

"What you have read," I replied, "is quite true. And just as every kind of shell is formed of the viscous matter of the animal which inhabits it, so is coral composed of the slaver of a very small snail, which lives in the water, but whose existence is so frail that it can only fight the battle of life as one among myriads."



I then described the various phenomena of the existence of polypes; I also informed them in what way the coral-fishery was conducted; and while thus conversing we reached the shore, where my wife awaited our arrival. She greatly admired the treasures we had brought back, though remarking that they would be of no great value in the *ménage*. But when I acquainted her with my intention of returning to the islet in the evening and cutting up the whale, from which I hoped to obtain a good supply of oil, my industrious partner declared that she would share the perils of the expedition.

Her determination enchanted me, and we all hastened to put on board the boat provisions for two days, as I mistrusted Ocean. It might detain us in the islet as prisoners for a longer time than we contemplated, and it was well, therefore, to anticipate all mishaps.



Directly after dinner, which we took care to advance an hour earlier than usual, I went in search of casks to contain the fat I hoped to collect. I was unwilling to take those we had stored up at Falcon's-Nest and Rock-House, because the infectious stench of the oil would render them thenceforward unfit for general use. My wife reminded me very opportunely that there were still remaining four of the tubs of which we had made our first boat. These I quickly moored to the stern of my periagua, and my sons having armed themselves with knives, hatchets, saws, and every cutting and carving instrument we could possibly require, we weighed anchor and steered towards Whale Island. The sea was calm, and our voyage without accident, notwithstanding the heavy load on board our boat.

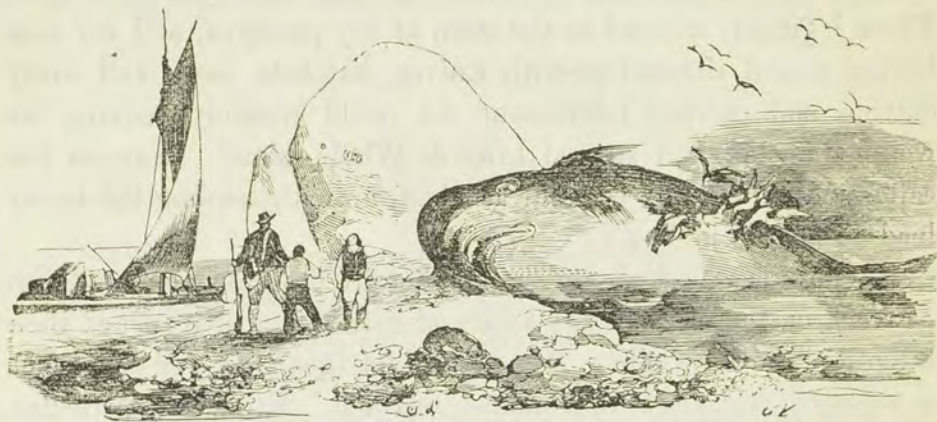
Having disembarked, we hauled her high up on the sand, out of reach of the waves. My wife and little Fritz then turned their attention to the whale. It was the first time they had seen such a monster, and they were almost terrified. Fritz, in particular, could hardly take his eyes off the enormous mass that lay upon the shore. Our whale in every respect resembled the Greenland cetacea; its back was of a dark-green colour, its belly yellow, its fins and tail quite black. I found on measuring it that it was seventy feet long and forty feet in girth; being the usual proportions attained by the whales of this species. My boys were particularly struck by the colossal dimensions of its head, which formed one-third of the entire animal; its jaws, nearly twelve feet long, were garnished with a kind of beard composed of those long flexible appendages which are called whalebone, and, as such, form an article of European commerce. Frederick remarked the smallness of the monster's eye, which, in truth, was no larger than that of an ox, while the opening which communicated between his cavernous mouth and his throat was scarcely equal to my arm in diameter.

"Voracious as this animal may be," said Frederick, laughing, "it is certain that he cannot swallow very large pieces at once!"

"You are right," I replied, "and the whale owes his enormous fat entirely to a little fish found in the Polar seas, of which it is exceedingly fond. Only, instead of swallowing them one by one.



he engulfs at every repast a prodigious quantity. At the same time he absorbs a large supply of sea-water, which he ejects through two apertures, or blow-holes, placed just above his nostrils. Hence his name of the blow-whale. He shares this peculiar faculty with some other ocean-monsters not inferior to him in size and voracity."



When Ernest took note of the narrow dimensions of the animal's throat, he began to wonder how Jonah could possibly have found a passage! In reference to this matter, I pointed out to my sons that we must not always put a literal interpretation on the words of Scripture, and that under the general name of "whale" was evidently included some other marine monster of equal dimensions, whose interior organization might render possible the miracle recorded in the Old Testament.

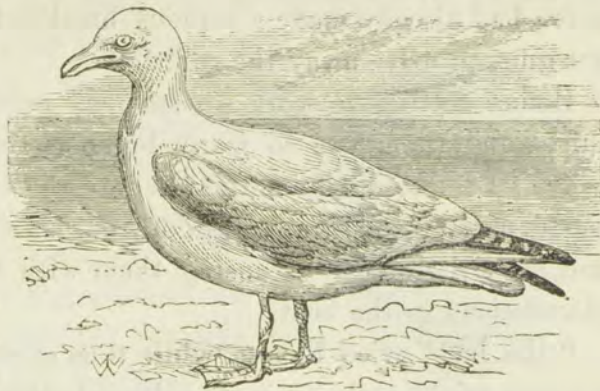
"But," added I, "let us adjourn for the present these scientific discussions and learned conjectures. To work, gentlemen! And let us profit by our treasure-trove before night overtakes us."

Frederick and Rudly took possession of the whale's head, and, toiling together with axe and saw, cut off the fins, which Fritz and his mother, in their turn, conveyed to our periagua. We obtained nearly two hundred of these stems, of different degrees of strength. Meanwhile, Ernest and I, with our axes, made way in the thick fat which lined the sides of the animal for some feet in depth. We literally *swam* in it, the thickness of the fat not being less than three or four feet.

But we were not long left alone to the enjoyment of our booty.



From the skies descended a myriad of winged brigands, with the intention of participating in our labours. At first they cautiously hovered around and above our heads; then, as their numbers increased, they came nearer—so near as to snatch lumps of fat from our hands and under the very edge of the axe, flying off immediately with their plunder. These birds had little attraction for us as sportsmen; but my wife, like a good manageress, remarking that their down would be exceedingly useful, we knocked down a few of them, which were immediately deposited in our boat.

SEA-GULL (*Larus*).

I had proposed to myself to remove from the animal's back a belt of skin long and broad enough to make a set of harness for the ass and the two buffaloes. In this design I succeeded tolerably well, though the work was rough; I had not suspected that the whale's hide would be so thick and so hard to cut. I would willingly have carried off a portion of the intestines and the tendons of the tail, but the day rapidly declining, I was forced to think of returning.

The casks were piled in the canoe, and we rowed towards the shores as quickly as our novel cargo permitted. It was one of extreme value to us in our peculiar position, but by no means very agreeable to carry—neither rejoicing the eye nor being of a pleasant odour. Having reached our shore, we quickly disembarked the load, and the ass, cow, buffalo, and onager immediately transported it to our plantation.

Next morning we were again in the canoe, only Fritz and his mother did not accompany us on our third expedition. The work which I projected was certainly of no pleasant character, as I intended to penetrate into the interior of the whale, and obtain a portion, if possible, of its enormous solid intestines. We therefore



started by ourselves, and a fresh breeze carried us swiftly towards the islet, which we found covered by a crowd of gulls and other marine birds. They had fallen pell-mell upon the whale, and despising the sail we had taken care to throw over the exposed parts, had already made a copious breakfast. We had recourse to our guns to drive away the robbers.

Before setting to work we stripped ourselves of our vests and shirts, and then, like so many butchers, cut open the monster's belly. I selected as much of the intestines as I thought would be useful, cutting them into slices of from six to twelve feet in length, and after thoroughly cleansing them with sand and sea-water we placed them in the boat.

"Ha, ha!" cried Ernest, while thus engaged, "with these skins mamma might make us some splendid sausages!"

The idea pleased Rudly immensely. "They would be worth cutting into!" said he.

And he blew with all his might into a bladder which was not less than a foot or a foot and a half in diameter.

The remainder of the intestines we abandoned to the voracious birds, and after renewing our supply of fat set sail for home; the sun was already sinking, and the approach of night compelled us to quit our prey.

My object in preparing, as we had been doing, the intestines of the whale, was to use them instead of vessels for holding the oil we extracted from the lard. My little boys thought the scheme a marvellous one, and were anxious to know what suggested it to my mind.

"The author of the idea," said I, "is Necessity, that grand moving principle of all human industry. It is Necessity which teaches these unfortunate creatures, living on shores where no timber grows, to supply its place by other materials. It is Necessity which has taught the Samoyedes and the Esquimaux to convert the whale's bladders into casks and reservoirs which otherwise they could not have constructed; and it is Necessity, moreover, which has assisted them to discover, in the carcass of this animal, a multitude of precious things which the riches of our more favoured countries do not permit us to appreciate."

The whale's bladders, and the further preparations they must



undergo, were the subjects of conversation during the remainder of our voyage, and served to beguile its tedium. We also discussed the various uses which men have made of the intestines of animals; from the violin strings, whose melody inspires the young and delights the old, to the aerostatic spheres by whose aid man soars into the clouds; balloons, in fact, are made of the skin of the bladder. Ernest, who was almost as well informed in physics as in natural history, then explained to his brothers the phenomena of aeronautic ascents.

"Balloons," said he, "can only raise and maintain themselves in the atmosphere by being much lighter than the volume of atmospheric air which they displace."

"What makes them lighter?" we inquired.

"The air which they contain, and with which they are inflated is in itself much lighter. It is the phenomenon of vessels filled with atmospheric air that they maintain themselves on the surface of the water, because atmospheric air is lighter than water."

"How do aeronauts obtain their light air?"

"By heat, which, expanding or dilating the atmospheric molecules, necessarily provides that a smaller quantity will occupy any given space. But as this method is not very easily put into practice, instead of heated air they now employ hydrogen gas."

"Papa," here interrupted Rudly, "will you not make me a balloon out of a piece of these great bladders? Oh, how I should delight in riding in a vessel inflated with gas, and crossing forests and rivers by flying through space, like Dr. Faustus astride on his cloak!"

I told my would-be aeronaut that there was only one objection to his project; namely, that when he had mounted his aerial courser, it would assuredly not carry him up into space, though inflated with hydrogen, on account of his superabundant weight; and that instead of a simple bladder—to raise a little fellow, weighing sixty pounds, including his small brain—a balloon twenty-four feet in diameter would be required.





"However," I added, "do not let this grieve you, for aerostatic science will be of little advantage to man until he has found some means of guiding himself in the air. At present, he can only go wherever the atmospheric currents may waft him."

Thus conversing, we reached the shore, where our good mother received us with no very gracious welcome. In truth, the pitiable and repulsive condition of our attire almost provoked her to anger, since to clean and repair it would be a formidable addition to her daily labour.

I quieted and soothed her as well as I could by promising marvellous advantages from the rich booty we had secured. Then we refreshed ourselves with copious ablutions, donned clean linen and outer garments, which my provident wife had got ready for us, and all repaired in a body to Rock-House.



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## CHAPTER IX.

No sail from day to day, but every day  
The sunrise broken into scarlet shafts  
Among the palms and ferns and precipices;  
The blaze upon the waters to the east;  
The blaze upon the waters to the west.

TENNYSON.



DAY had scarcely dawned when we were "up and doing." We placed on our sledge, as a makeshift for a platform, the four casks of fat, and we applied the heaviest pressure we could devise to obtain the purest and clearest part of the oil, with which we filled some of the vessels I had previously dried in the sun. The remainder was collected in a caldron, and over a slow fire reduced to a liquid state. With a great iron ladle which we had saved from the wreck, and had originally intended for use in the sugar-refining, we poured the oil into the casks and bladders. These operations we carried on at some distance from Rock-House, that our residence might not be polluted by the fetid odour of the melted lard.

As soon as we had obtained a sufficient supply, we got rid of the refuse in Jackal River, where our ducks and geese feasted upon it to their evident satisfaction. In the same manner we disposed of the sea-birds which my good wife had stripped of their down; their flesh proving much too tough and unsavoury for us. The crabs were less dainty, and we profited by the eagerness with which they threw themselves on this new prey to replenish our exhausted basin.



While we were engaged in disposing of our store of oil, my wife made a suggestion which received my entire approval—namely, that we should found a new colony on Whale Island. That small tongue of land was, in truth, so rich and beautiful, and of so fertile a soil, that it would have been a pity not to have derived some advantage from it.

“It is my opinion,” said my wife, “that we might easily establish there a colony of poultry. There, at least, our hens would have nothing to fear from apes or jackals, those two great enemies of the poultry-yard. As for the sea-birds, they will soon give up possession, if they find we intend to settle ourselves in the island.”

I strongly approved of my wife’s project, and it was so warmly received by my young family, that they wanted to put to sea without a moment’s delay, and begin to carry it into execution. The day, however, was too far advanced. I checked their ardour, and, to compose their minds, announced that I wished in the first place to fulfil the promises I had made on the subject of the periagua, and insert a machine to render its propulsion easier.

“Ho, ho!” cried Rudly; “we shall see the canoe dashing through the waves of its own accord! How I shall rejoice!”

“Of its own accord! Come, come, you are too quick. All I can undertake, at the utmost, is to spare your arms a little fatigue, and increase to some extent the speed of our canoe.”

I set to work immediately.

All my resources consisted of a turnspit-wheel and the toothed axis on which it had revolved. What I constructed with such materials was no masterpiece of invention or execution, but it was, at all events, a machine which worked in the desired direction. A handle set it in motion, and two large broad blades of whalebone fixed at either extremity of the iron axle corresponded tolerably well to the paddles of a steam-boat. On turning the handle, the whalebone blades struck the surface of the water in regular rotation, and the boat moved forward. Its speed was in exact proportion to the rotatory movement communicated to the wheel and axle, which made from fifteen to twenty revolutions per minute.

It is impossible for words to describe the joy and rapture of my children when they saw the canoe churning its way through the



waters. They clapped their hands, they leaped and tumbled, while Frederick and I made our first voyage, steering in the direction of Safety Bay. I was myself astonished at the rapidity of our progress. We had scarcely regained the shore before everybody sprang on board, and wished me, without landing, to make an excursion to Whale Island. This I refused for the time, but promised that next day we would try our machine out at sea, and go by water to our farm at Prospect Hill, that we might examine into the condition of our colonies of European animals.

My proposal was warmly received. We made at once the necessary arrangements for the voyage, got ready our arms and provisions, and retired to bed earlier than usual, that we might start the sooner in the morning.

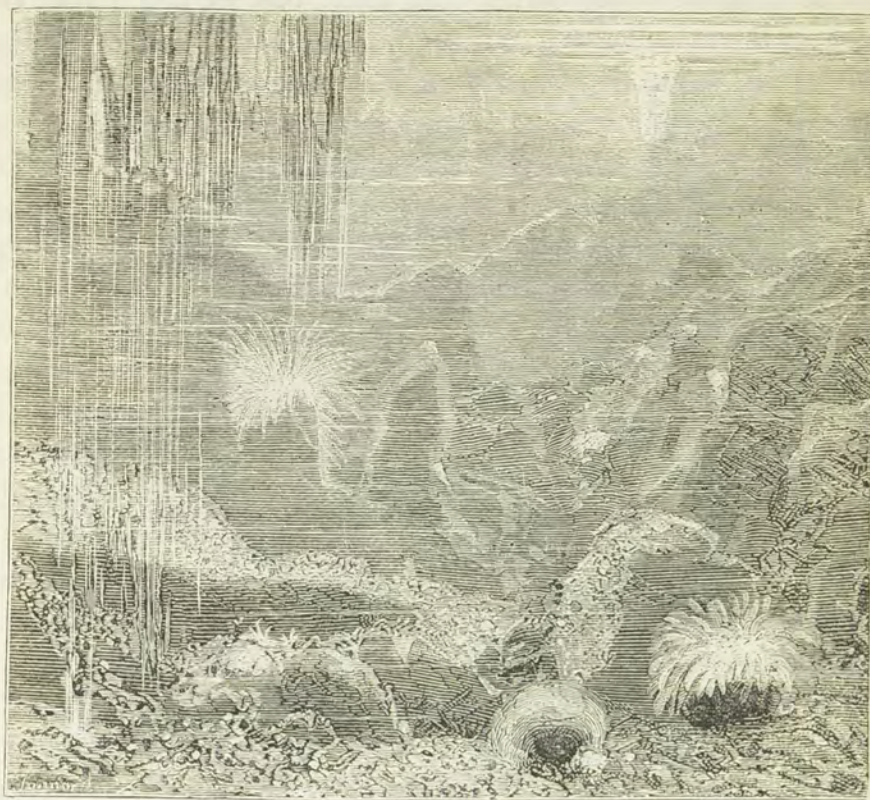


With the first rays of light everybody was stirring. Even my wife had consented to join our party; and she did not forget our food supplies, giving especial prominence to a piece of whale's tongue, wrapped in cool fresh leaves, which had been cooked and spiced, at the recommendation of Professor Ernest, as a peculiarly delicate dainty.



In high spirits we pushed off, and the current from Jackal River tranquilly bore us out to sea. The wind was favourable, and everything promised a happy voyage. We soon came in sight of Shark Island, and of the sandbank where the whale's carcass still lay exposed. So admirably did our machine work, that we quickly found ourselves in the latitude of Prospect Hill.

I had cautiously kept at some distance from the shore, so as to leave sufficient depth of water for our loaded boat. The distance permitted us to embrace in one extensive panorama the magically beautiful pictures invoked before our eyes. On one side rose Falcon's-Nest, with its giant-trees; against the horizon, a belt of



SEA-WEEDS AND AQUATIC PLANTS.

lofty cliffs seemed to mingle with the clouds; while, if we directed our gaze to nearer objects, it rested with delight on Whale Island, its luxuriant verdure agreeably relieving the sublime and majestic uniformity of ocean. Nor, as we neared the shore, were we less



charmed with the beauty of the sea-weeds and aquatic plants which flourished in the limpid waters. Our hearts swelled with emotions of gratitude and admiration, and we could not but raise our thoughts to the Almighty Maker of the world.

Having arrived opposite the Monkeys' Wood, we made the land in a convenient creek, and leaped ashore to renew our supply of cocoa-nuts. With a lively thrill of pleasure we heard the sudden clarion of our chanticleers ring through the groves, and proclaim the immediate neighbourhood of our farm. The welcome, however, reminded us somewhat too keenly of our native country, where this friendly music invites the traveller to share the hospitality of some peasant's hut which he has not perceived among the tall trees environing it. There was something sad and yet consoling in the remembrance; but I hastened by lively conversation to dispel the mournful images it naturally awakened in every heart.

After gathering along the shore a few mangrove plants to defend our proposed colony at Whale Island against the encroachments of the waves, we resumed our voyage. The nearer we approached to Prospect Hill, the louder grew the voices of our domestic animals. At length we disembarked, and proceeded towards the farm. Everything was in excellent order; though we were surprised at the extreme wildness of the sheep and goats, who fled from us like timid hares. My boys started in pursuit; but as the long-bearded fugitives were too nimble for them, they drew their slings from their pockets, and used them with so much skill that three or four prisoners were soon handed over to our custody. A ration of salt and potatoes seemed to give them entire satisfaction, and in exchange they furnished us with several jars of delicious milk.

My wife was desirous of securing a few chickens, and a dishful of rice and oats speedily gathered round her the whole feathered company. She made her selection, and the prisoners, with their wings and feet securely fastened, were deposited in the boat.

We dined at Prospect Hill. Our principal dish was the cold meat we had brought with us, for the whale's tongue was unanimously pronounced detestable, and fit only for the coarsest appetites. We abandoned it to Rudly's jackal, the only one of the



domestic animals which had followed us. He made a luxurious meal, to judge by his avidity, while we endeavoured to get rid of



the taste of rancid oil it had left in our mouths by several hearty draughts of milk.

Leaving my wife to superintend the preparations for departure, I went with Frederick to cut two bundles of sugar-cane. I also selected some shoots of the precious reed to plant in Whale Island.

Weighing anchor, or, more correctly speaking, unfastening the cable with which our boat was moored, we steered in the direction of Cape Disappointment, which I intended to double; but this time, too, that headland justified its name, and a sandbank projecting for a considerable distance suddenly arrested our course. It was very fortunate that the ebb came opportunely to carry us out to the open sea, or we might have been wrecked in the shallows. I unfurled all my canvas; we plied our rowing apparatus with increased vigour; and, thanks to a gentle wind blowing off shore, arrived with tolerable speed in the latitude of Whale Island.

This portion of our voyage was distinguished by a truly novel



spectacle. We thought we could descry in the distance, and on a level with the waves, a mass of huge rocks. But by degrees the mass seemed to divide into two parts, and as we drew nearer, a variety of strange noises convinced us that what we had mistaken for reefs were two troops of marine monsters engaged in sanguinary battle; we could see them manœuvre, dash against one another, rend each other in pieces, now advancing, now retiring. We were dumb with alarm; and I need not say that we summoned up all our energies to put a considerable interval between ourselves and such dangerous antagonists.

My first care, when we landed on our little island, was to plant the shrubs we had brought from Prospect Hill; but my little companions, on whose assistance I had relied, did not consider the work of planting sufficiently important for them, and left me with my trees, while they went in search of shells. My good wife volunteering her services, we both set to work; but had hardly begun before we saw Rudly hastening towards us, quite out of breath.

"Papa, papa!" he cried, "come hither, I beg; I have discovered a prodigy—the skeleton of a mammoth!"

I could not help laughing, and replied: "That I supposed his mammoth was neither more nor less than the carcass of a whale."

"No, no," he said; "these are certainly no fish's spines, but really and truly bones; and besides, the waves have carried away the whale's carcass, while my mammoth is much higher up on the sand."

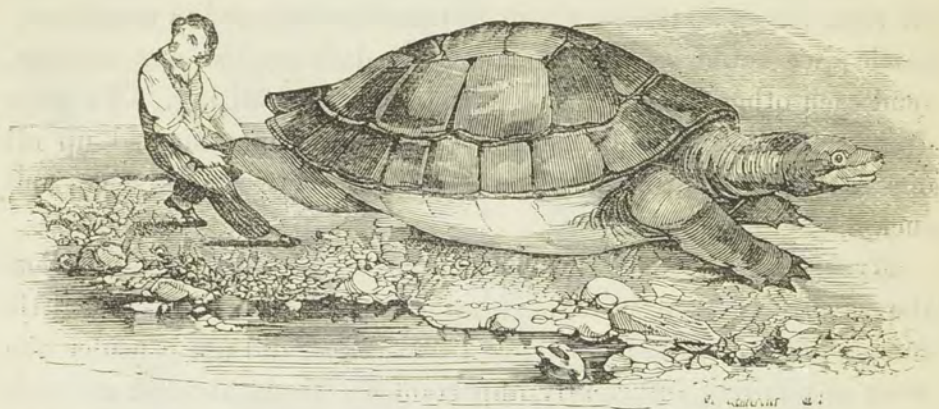
Rudly pressed me so earnestly that I consented to accompany him. But on the way we were suddenly stopped by another wonder.

"Run, run, run!" cried Frederick, waving his arms to expedite my movements; "oh, come quickly, papa, for here is an enormous turtle which we can hold fast no longer."

Arming myself with a couple of stout oars, I hastened to their assistance, and found Ernest clinging to the hind-paw of a gigantic turtle, which, spite of all his efforts, had got within a few paces of the sea, where he would infallibly have made his escape. I was just in time; and giving one of the oars to Frederick, we both



managed so cleverly that we contrived to upset the enormous creature, and lay him on his back. He was a prodigious capture—weighing at least five hundred pounds, and measuring not less than



eight feet and a half in length. I did not exactly see of what use he would prove to us, but the position in which we had placed him gave us leisure enough for reflection.

Meanwhile, Rudly had not lost sight of his discovery, and at his repeated entreaties we went to inspect the supposed skeleton of the mammoth.

I had no difficulty in convincing the little fellow that his mammoth was really and truly our whale! But it is true that it had been completely dissected, and that the sea-birds had not left the smallest fragment of skin or flesh upon its bones. Hence arose Rudly's mistake. I showed him our footprints still impressed in the sand, and some fragments of the fins which we had neglected to pick up.

"But whatever set *you* dreaming," said I, "of a mammoth's skeleton?"

"As for that," he said, "the idea is not mine; it was suggested by Professor Ernest; it was he who taught me to believe in mammoths!"

"Then, without further inquiry or reflection, you accept whatever any one chooses to tell you, and do not even care to inquire whether people have been laughing at you?"

"But, papa, I felt convinced that the ocean-waves had brought this carcass hither."



"Exactly; and there is your blunder. But, surely, you did not require any very large allowance of good sense to perceive the impossibility of the sea's carrying off, in one and the same day, the skeleton of a whale and replacing it by that of a mammoth."

"True; I never thought of that."

"Then, by way of penalty, you shall tell me all you know about the mammoth."

"We only know, respecting this animal, that its bony relics, of enormous magnitude, have been discovered embedded in the soil in Arctic countries."

"Really, you have become quite a philosopher! I see that before Professor Ernest began to joke with you, he took care, at all events, to give you some solid information."

I added a few words on the existence of this antediluvian monster, which would seem to have been an extinct species of the elephant genus. But Rudly's credulity cost him a few quips and sarcasms from his brothers.

"What a good boy is Rudly!" exclaimed Ernest; "he had swallowed his pill in a truly amusing manner! He has taken for the skeleton of an antediluvian animal the carcass of a whale which we dissected yesterday!"

"Well," answered Rudly, smiling good-humouredly under the infliction of his brother's jokes; "well, I am no philosopher, and I thought fish had spines, and not bones; certainly, these are not spines."

"No, undoubtedly," said I, "you are not a philosopher; the more's the pity, or you would have known that whales, and all fish of the same family, have real bones. So have birds, men, and all living creatures; only the structure and composition vary according to their different destinations. The bones of fish are formed of a kind of oily matter lighter than water, which assists them to maintain their equilibrium in the element in which they live. Birds have bones inflated, as it were, with air, and adapted to their voyages in the upper regions. As for the terrestrial animals, their bones are more solid, because they are intended to support the entire bulk of their body."



"Can we not," said Frederick, eyeing steadfastly the skeleton of the whale, "make some use of this mountain of bone?"

"I do not exactly see," was my reply, "how we can profit by it. Yet the Dutch manufacture posts for their meadow-fences, and even rustic chairs, out of this bone; and they are said to have a very good effect. Perhaps, one day, when we have leisure, we might attempt the construction of a chair of natural history for our museum. But there is no hurry; and, indeed, it will be an advantage that the sun and winds should thoroughly dry and whiten this immense carcass, which will only be the more suitable for the various uses we contemplate making of it."

Thus discoursing, we returned to our plantation; but I was forced to own it was too late to finish the task before night. We covered with soil the roots of the shrubs still remaining, and deferred to succeeding days the end of this important operation. We found enough to do until the time of departure in attending to our monster turtle. We first brought the boat right opposite the spot where it was lying on its back. Then arose the question, How should we get it on board? This was a puzzle that kept us for some time silent.

"I have it!" I exclaimed suddenly, striking my forehead with my hand; "we are troubling ourselves about a trifle. Instead of *our* carrying this monster, let us make *him* convey us back to Rock House. A turtle makes a capital ocean-charger, as Frederick and I can very well remember."

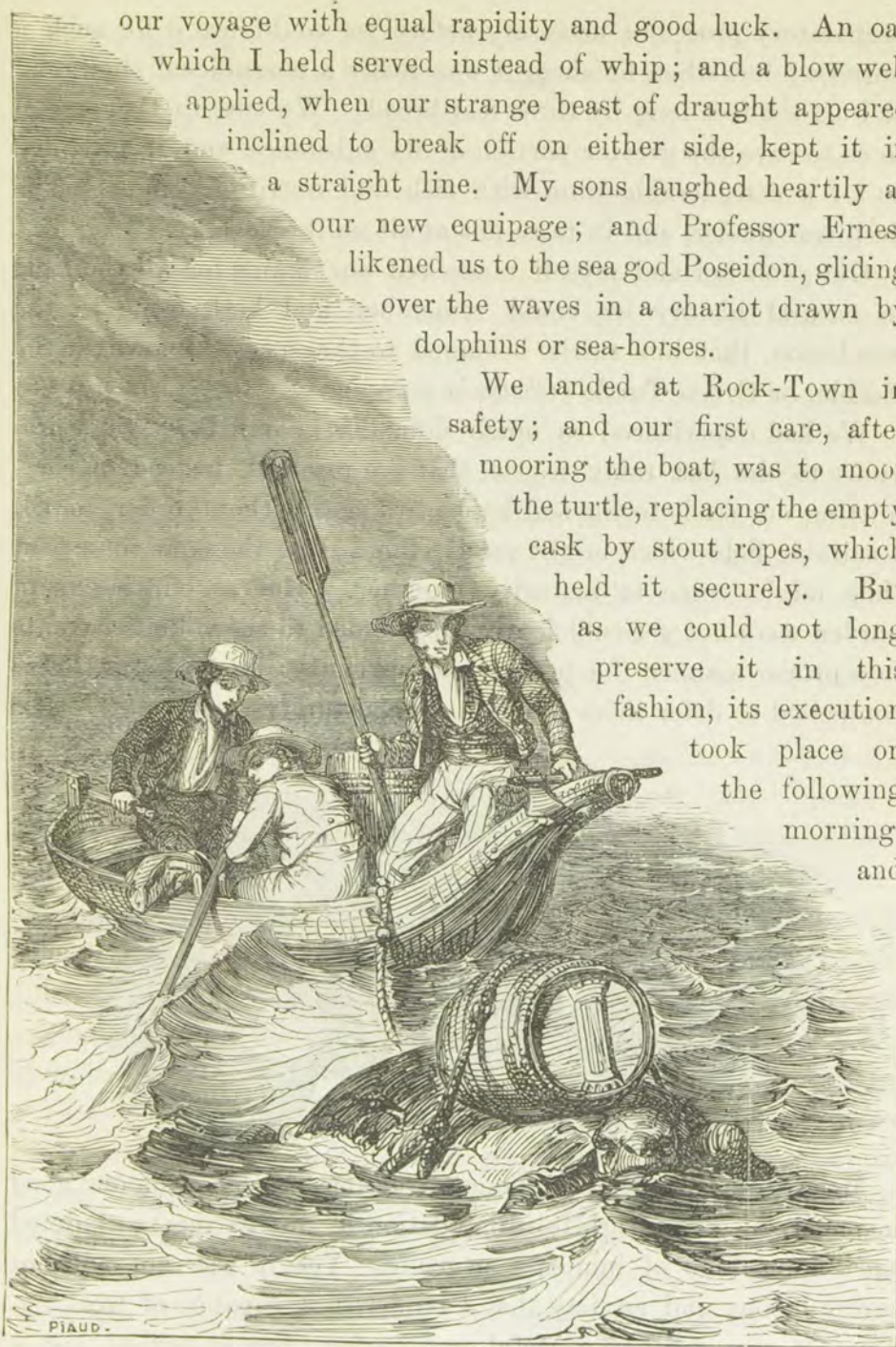
The thought was a happy one, and everybody capered merrily. I hastened to the periagua; we emptied the barrel of fresh water we had brought with us, and, after replacing the turtle on its feet, bound it very securely to its back, lest it should plunge downwards into the depths, and drag us after it. Our towing apparatus was simply a rope passed through a hole which we bored in its upper shell and fastened to the bow of our boat; and, without losing a moment, we all sprang on board just as our amphibian darted into the sea.

I placed myself at the bow, armed with a hatchet, and ready to cut the cable at the first indication of danger. We were not compelled, however, to resort to this extremity, and we accomplished



our voyage with equal rapidity and good luck. An oar which I held served instead of whip; and a blow well applied, when our strange beast of draught appeared inclined to break off on either side, kept it in a straight line. My sons laughed heartily at our new equipage; and Professor Ernest likened us to the sea god Poseidon, gliding over the waves in a chariot drawn by dolphins or sea-horses.

We landed at Rock-Town in safety; and our first care, after mooring the boat, was to moor the turtle, replacing the empty cask by stout ropes, which held it securely. But as we could not long preserve it in this fashion, its execution took place on the following morning, and



its enormous carapace was set aside for the basin of the fountain we had constructed in the interior of our grotto. We found it no easy matter to clear out the flesh, and subject it to the various



preparatory processes necessary before we could use it for such a purpose ; but when finished, it was really a magnificent shell, and at least six feet long by three feet broad. We cut up the animal so as to save the greater portion of its substance, and it provided us for a considerable time with rich and nutritious soups. The flesh was tender, and in taste not at all unlike veal.

Our professor and myself ransacked our brains for all the facts in natural history we could remember, and both came to the conclusion, that our turtle belonged to the species known as the Edible, or Green Turtle (*Chelonia midas*).

We had experienced so much difficulty in our harvesting previous to the last rainy season, that we resolved, instead of committing our seeds to the soil haphazard and without order, to till a suitable field which might receive them all at the same time, that they might come to maturity together. But as our beasts of burden were not yet sufficiently accustomed to the yoke to execute in a proper manner the preparatory agricultural operations, I was compelled to defer them to another opportunity.



Meanwhile, I undertook the construction of a loom for our good manageress. The frightful dilapidation of our garments rendered such a machine of immense urgency. Yet it was not without severe labour and anxiety that I rendered it capable of working. True, it was neither graceful nor perfect, but it turned out a tolerably good piece of stuff, which was all we required. How I congratulated myself, then, that in my youth I had frequently visited the workshops of our weavers and made myself acquainted



with the details of the manufacture! As we had no wheat flour to make the paste used by the weavers in gluing the threads to prevent them from becoming entangled, I employed isinglass as a substitute, and I can venture confidently to assert that my method was superior to that of the weavers'; for isinglass preserves a degree of humidity which common paste cannot retain, and, by using it, one can weave just as well in a dry and lofty room as in the damp cellars where our weavers have from time immemorial been accustomed to imprison themselves.

I have already mentioned the window-panes I had fabricated out of this material; not adapted, it is true, to windows exposed to the rain, but very suitable for ours, which, on account of their deep embrasures, were sheltered from all external dampness.

I was so encouraged by the success of these two enterprises that I resolved to attempt another, and, in poetic language, to add a third flower to my industrial crown. My young cavaliers had long tormented me for saddles and stirrups; our beasts of burden were in want of yokes and collars.

I set to work, and constituted myself "saddler and harness-maker," as I had just been "machine-manufacturer," and "glazier." The skins of the kangaroos and sea-dogs furnished me with leather; and for hair I employed the vegetable fibre with which our Molucca pigeons had brought us acquainted. But as, after awhile, this fibre would have become flat and hard under the rider, I directed my sons to curl it by winding up several staples in a twisted yarn with a winch. It was suffered to remain in this position until it had assumed the required curl; then we unwound it, and thus obtained a kind of frizzled hair as elastic as horse-hair. In a short time we were provided with saddles, stirrups, girths, bridles, straps of all kinds, collars, and yokes, proportioned to the size and strength of the various animals for which they were intended.

However, the buffalo and the bull, for whom we destined the best part of these ornaments, did not seem to appreciate them, and but for the iron rings in their nostrils by which we managed to guide them, I do not think we should ever have succeeded in making them wear a collar or support the yoke. At last we conquered; but instead of harnessing them by the horns as is



customary in Germany and France, I adopted the English method, and placed the yoke on their necks. In fact, it appeared to me that it was with their shoulders rather than with their foreheads that our oxen did their work, and our labours were sufficiently well done to convince me that I was not mistaken.

These labours were not entirely at an end when we were visited, as in the preceding year, by a shoal of herrings. We had derived too much profit during the wet season from the results of our former fishery to neglect the present opportunity.

The herrings were followed by the sea-dogs, and these we also welcomed for the sake of their skins and bladders, which we had now learned to adapt to many important uses. We killed from twenty to twenty-four, of different sizes, and turned to advantage their fat and skin, abandoning only their hard, coarse, and heavy flesh to the crabs of the Jackal River.

This long continuance of sedentary toil, however, proved in time distasteful to my young people, and they eagerly solicited me to indulge them with a hunt in the country. I still adjourned this recreation—at all events until after the completion of a task which I had long meditated, and whose need daily became more urgent. I refer to the manufacture of some hampers and baskets, which had become indispensable to our good housewife for the storage of seed, and fruits, and vegetables. Our first attempts were below mediocrity, and the clumsy manikins we turned out were fit for nothing else than the reception of potatoes. But Practice makes Perfect; and when we thought ourselves sufficiently experienced we brought into use the Spanish reeds which had cost our poor Rudly so dear. With these we produced a few panniers and baskets with handles, which answered their purpose admirably well. They proved very valuable to us; and if they had not all the elegance and firmness which more skilful hands might have given them, they were light and solid—the two primary conditions on which we insisted.

My sons had made a kind of large hamper to hold our cassava: in a spirit of fun they deposited little Fritz in its interior, and Rudly and Ernest, having passed a couple of bamboos through its



handles, set off running with him as far as Family Bridge, while he struggled and shouted lustily.

Frederick, who had been looking on with much amusement, turned to me, and said,—

“We might take a hint from this trick, papa. If, while our hands are in, we could make a litter for mamma with some of our strongest reeds, we might induce her, perhaps, to join more frequently in our distant excursions.”

“True,” I answered; “and a litter would certainly be as comfortable a conveyance as the back of our old ass, and a far easier one than the cart.”

The notion was taken up by my children with transports of joy. But my wife, laughing gaily, bade us observe that she should make but a sorry figure in our caravans, seated in a basket! I promised, however, that her litter should be more graceful in form than any of our recent contrivances.

“We will make you,” said I, “a palanquin, after the fashion of the Persians, or the American colonists.”

“Mercy!” immediately exclaimed Master Ernest. “A palanquin pre-supposes slaves to carry it, and then woe to our shoulders!”

“Be not afraid, boys,” replied the good mother, “I will never take you for my slaves; and if I consent to trust myself on some future occasion in the machine you are projecting, it will only be when you have the means of placing it on broader and stronger shoulders than yours.”

“I think we are troubling ourselves very needlessly,” remarked Rudly; “have we not the bull and the buffalo? Master Lightning, my servant, will do all that may be required of him, and I answer beforehand for his perfect docility and good-will.”

I warmly approved of this idea, and complimented upon it our hasty young fellow, who was not always wont to enunciate such sensible and practicable notions.

We immediately applied ourselves to the construction of the palanquin. The two animals were brought upon the ground; and Rudly and little Fritz, who usually attended them, and whose voices they knew perfectly, were commissioned to make them



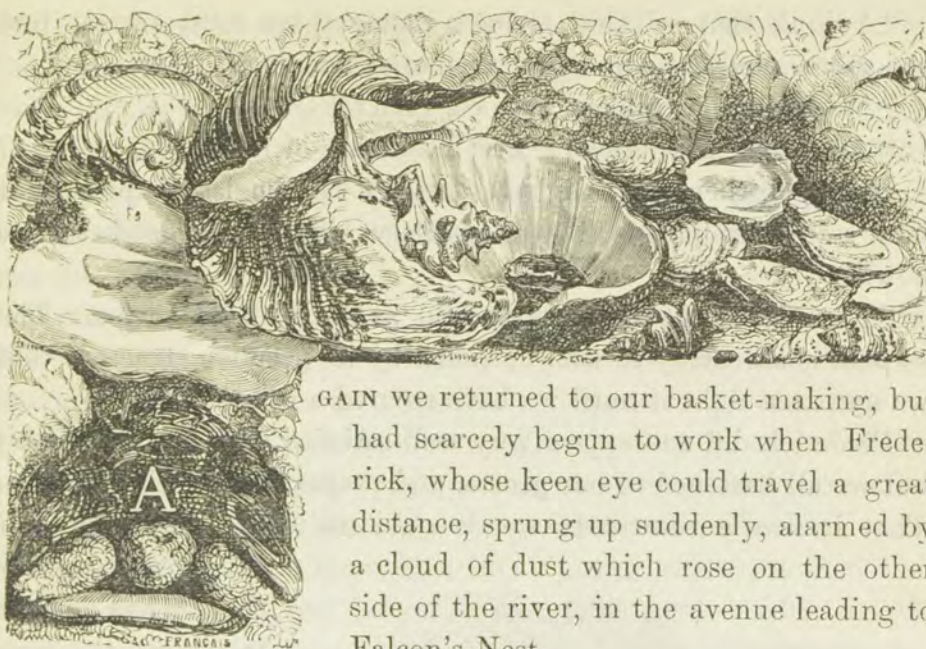
understand, as far as was possible, what we expected from them. We substituted for their ordinary harness a network of ropes and straps, intended to support at the side a couple of shafts. Between these we slung a great, oblong pannier, which was immediately honoured with the title of "palanquin," and wherein Ernest was placed to test its convenience and security. Rudly mounted Lightning, and little Fritz Thunder, and, at the word of command, they trotted off, like two docile animals. At first they progressed easily, and the pannier, nicely balanced, swung as lightly as any Oriental litter suspended on springs of steel. But Master Rudly had no intention of treating his brother to an excursion of pleasure or a chariot-ride; he meditated playing him a trick. So, on a preconcerted signal between him and Fritz, the two mischievous postilions whipped up their steeds, which broke into a gallop, and subjected poor Ernest to a new and grotesque kind of punishment, as at every bound of the animals he was violently bumped. The joke was rough, but not dangerous; and we found it impossible to refrain from laughing at the contortions of our phlegmatic Ernest.

"Hallo there!" he cried, to the conductors; "hallo there! Stop! Stop!"

But they turned a deaf ear both to his commands and entreaties, and the poor victim was compelled to endure his punishment all the time they were galloping to the edge of Jackal River. You may conceive his indignation, and the reproaches he poured out on his brothers, when he leaped to the ground; and the quarrel would, perhaps, have proved serious, had I not intervened at the right moment. This passing cloud, however, did not disturb our domestic peace. I reprimanded Rudly, and Ernest was soon so completely pacified that I saw him assisting his brother to unharness the buffalo, and lead him back to the stable. He even came for a handful of salt, to regale the poor animal which had been the innocent instrument of his mystification.







AGAIN we returned to our basket-making, but had scarcely begun to work when Frederick, whose keen eye could travel a great distance, sprung up suddenly, alarmed by a cloud of dust which rose on the other side of the river, in the avenue leading to Falcon's-Nest.

"There must be some animal yonder," he exclaimed, of more than ordinary size and strength, to judge by the dust it is raising! And, what is more, it is evidently coming in our direction."

"I don't know what it can be," I answered; "for our cattle are in the stalls, resting themselves after their experiment with the palanquin."

"Very probably," remarked my wife, "it is two or three of our sheep, or perhaps our sow has recommenced her gambols by rolling herself in the sand."

"No, no, no," said Frederick, earnestly; "'tis something extraordinary, I tell you; I can see by its movements. In order to advance, the animal alternately rolls and unrolls itself. I see the rings which its body forms. Stop! it is now upright; it looks just like a mast raised above the dust. It advances—it pauses—it is moving again—but I cannot make out its feet or legs."

My wife was frightened by this description. I ran for a telescope which we had saved from the wreck, and then directed my gaze in the direction of the cloud of dust.

"I can see plainly," observed Frederick, "that the creature, whatever it may be, has a green body. What do you think of it, father?"



"I think that, without losing a moment, we must retreat into our grotto, and close up every avenue or opening."

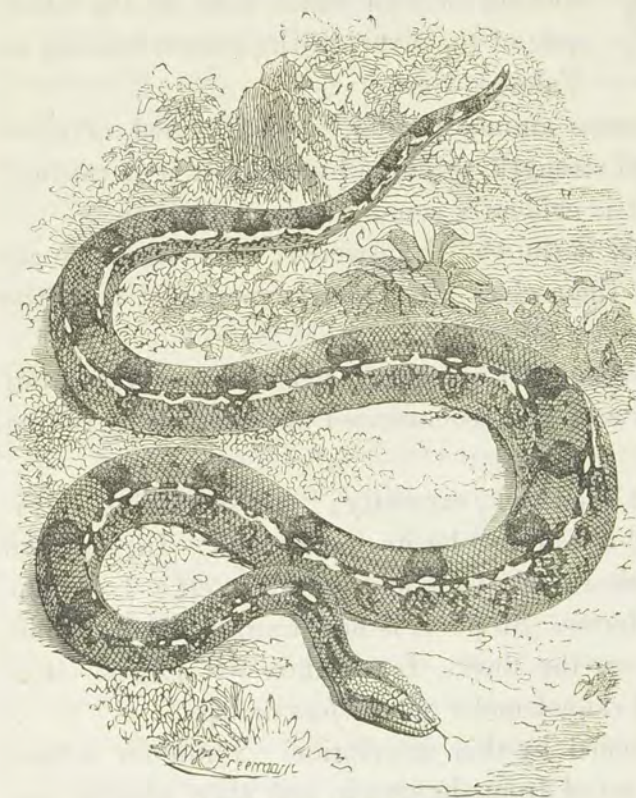
"What do you think it may be, then?"

"A serpent, Frederick! Yes, I am sure of it."

"Hurrah, then, for a fight! I won't be the last to present it with our compliments. Our artillery will be of good service now."

"I hope so; but not an open field as you seem to advise. The serpent is an enemy so well defended by its peculiar structure that we must not fight it until we have secured a safe position."

Frederick did not appear very well satisfied with my prudence; but we all hastened to our grotto, and prepared to receive the foe. That it was a boa-constrictor I could no longer doubt; and it



BOA-CONSTRICTOR (*Python*).

advanced so swiftly that we had no time to remove the timbers of our bridge, and put Jackal River between it and us. We watched its movements closely, and it was not without a feeling of dread we saw it roll along the shore its enormous coils. At intervals it reared its huge crest fully fifteen to twenty feet above the ground, turning its head slowly to the right and to the left, as if examining the neighbourhood in quest of prey; and incessantly darting from its open jaws its long and forked tongue.

Having crossed the bridge, it moved towards our grotto. We

advanced so swiftly that we had no time to remove the timbers of our bridge, and put Jackal River between it and us. We watched its movements closely, and it was not without a feeling of dread we saw it roll along the shore its enormous coils. At intervals it reared its huge crest fully fifteen to twenty feet above the ground, turning its head slowly to the right and to the left, as if examining



had barricaded as stoutly as possible the door and every opening, and retired into the pigeon-house by an inner passage which we had long ago constructed, and which now proved very useful. Through the lattice-work projected the muzzles of our guns, and we stood with our fingers on their triggers, closely observing every movement of the enemy. A deep hush prevailed among us ;—it was the silence of terror.

Meanwhile, the boa, in its advance, instinctively became aware of the neighbourhood of man, and we remarked that it seemed to hesitate. Again it moved forward, until, either by accident or because it detected some alteration in the locality, it stretched its huge bulk right in front of our grotto, at about thirty paces distant. Scarcely had it taken up this position before Ernest, from a feeling of fear rather than from any martial ardour, pulled the trigger of his gun, and before it was time gave a false signal. Rudly and Fritz followed his example ; and my wife, to whom the danger lent a courage beyond that of her sex, and who handled a musket like ourselves, also fired.

The monster reared ; but whether because the shots had missed it, or because its scales were impenetrable to them, it seemed to us unwounded. Frederick and I then took careful aim, but with no better success, for we had the mortification to see the creature recoil itself, and glide with incredible rapidity towards Duck's Marsh, where it disappeared among the reeds.

A general shout accompanied its disappearance. We felt ourselves relieved from an enormous weight, the presence of the monster had so oppressed us. We once more began to speak ; everybody claimed the merit of a careful shot ; yet it was certain that if all of us had been skilful, the enemy had been *more* skilful, for it had escaped from the field without a wound. We were all agreed as to its immense proportions, but not as to the colours of its skin, each, on that point, giving free vent to his imagination. I allowed my children to chatter as they pleased, that their thoughts might be diverted from the difficulties of our position. The neighbourhood of the boa still caused me a keen anxiety, for I could think of no means of conquering it ; against so formidable an enemy our united strength was insufficient. Meanwhile, I



ordered all my family to remain within the grotto, and forbade them to open the door without my express permission.

For three days our dread of this terrible neighbour kept us imprisoned; three days of alarm and anguish, during which I would not suffer the least infraction of the rule I had established. The interior service of the grotto was the sole consideration which occasionally induced me to relax my severity, and then we confined our movements to the space of a few yards before the door, or as far as the reservoir of the fountain.

The monster gave no indication of its presence, and we should have thought it had disappeared, either by crossing Duck's Marsh or by some defile in the rocks unknown to ourselves, but for the restlessness and agitation which still prevailed among our water-fowl. We saw them every evening, as night approached, taking their flight along the shore, and directing their course, with shrill cries, towards Shark Island, as to a safer asylum than the lake.

My embarrassment now increased daily, and the motionlessness of the enemy only rendered our position the more painful by affording us abundant leisure to reflect upon it. We were too weak a force to take the field and march direct upon Duck's Marsh. Such an expedition would have cost the lives of one or more of us. Our dogs were equally powerless; and to have exposed our beasts of burden only for a moment would have been an useless sacrifice. On the other hand, our stock of provisions diminished visibly, and the season was not sufficiently far advanced to justify our encroaching upon our winter riches. In a word, we were in a most deplorable condition, when Heaven came to our aid. The instrument which it made use of to save us was our poor old ass; that mild and patient animal became the assurance of our safety.

The forage which we had by us in reserve diminished rapidly: we had to support the cow, for she contributed to our subsistence; but what could we do with the other animals? I resolved to give them their liberty, and leave them to find their own food. Whatever might be the inconvenience of this plan, it was assuredly preferable to seeing us all die of hunger, shut up in the grotto. I considered that on the other side of the river they would not only obtain food but be quite safe from the boa, while it remained



buried among the reeds. But I was unwilling they should pursue in their migration the usual route across Family Bridge, for I feared it might arouse the enemy. I thought of the ford where we had first crossed the river, and determined to effect a passage there. We tied our animals together, and Frederick, the boldest

and bravest of our company, volunteered to lead them, mounted on the onager, while I superintended the march, and saw that they preserved good order. I bade my son, at the first indication of the serpent's presence, to fly full gallop towards Falcon's-Nest. As for the animals, I committed them to the care of Providence. I proposed to take up my own station on a rock



overlooking Duck's Bay, to discover the boa's retreat, if possible; and in case of his advancing to the attack, to retire to the grotto, where a well-directed volley might rid us of him.

We loaded all our fire-arms. My younger sons were posted as sentinels in the pigeon-house, and directed to watch every movement of the enemy, while Frederick and I began to arrange our train of animals; but a misunderstanding suddenly upset all my plans. My wife, who was stationed at the door, did not wait for the signal, and threw it open before all the animals were yoked. Three days' rest and abundant food had inspired our ass with a strength and energy beyond his age; and the moment a ray of



daylight penetrated the shadows of our grotto, he darted out like an arrow, and was far away in the plain before we were sensible of his departure. The gambols which he then indulged in were so ludicrous that we burst into a fit of laughter. Frederick, mounted on his onager, would fain have gone in pursuit; but as he had taken the direction of the marsh, I would not allow him, and we contented ourselves with adopting every means of persuasion we could think of to induce his return. We called him by his name; we sounded the horn with which we announced to our cattle the hour of repast; but all was in vain! The intractable fellow thought



only of enjoying his liberty; and, as if impelled by some fatality, proceeded, with many a bound and leap, towards the Duck's Marsh. What a shudder thrilled through every heart when suddenly we saw the horrible serpent rear its crest above the reeds! Brandishing its triple-forked tongue, it darted in the direction of the ass, which, poor beast! seeing his fatal mistake, brayed loudly, and took to flight; but neither his braying nor his legs availed him against his terrible enemy. In less than a minute he was seized, entangled, and, as it were, crushed in the enormous folds of the monster's body.



My wife and children uttered a simultaneous shriek of horror, and we retreated hastily into the grotto, whence we could see the dreadful struggle between the ass and the boa. My boys would fain have fired, and rescued, by a well-delivered volley, our poor servant from the deadly embrace of his antagonist. I prevented them.

"What will your musketry effect?" said I; "the boa is too busy with its prey to be terrified into releasing him; while if you are lucky enough to wound it, who will say that you would then escape the consequences of its fury? Undoubtedly, the loss of our ass is a misfortune; but, I hope, it will save us from a greater one. Let us remain here in safety, and before long the monster will fall into our hands, defenceless and incapable of injury. Only wait until it has swallowed its victim."

"But we shall then have a very long time to wait," exclaimed Rudly. "The ugly brute will not swallow our poor ass at one mouthful, I suppose, and it will be horrible to see it rending him limb by limb."

"The serpent does not rend its prey," I answered; "its teeth are only fitted to seize it, and when it has killed the ass, it will swallow it at a single gulp!"

"What!" cried little Fritz, his voice half choked by terror, "can a serpent swallow its prey at one mouthful? Is this one poisonous?"

"No," I answered, "the boa is not venomous; but is not less terrible on this account. It is gifted with prodigious strength; and when it has rendered itself master of an animal, whatever may be the latter's size, it crushes it, pounds together flesh and bones, and buries the whole in its stomach."

"Impossible!" said Rudly; "that boa could never crush our ass and engulf him in its throat; for he is much larger."

"Impossible, do you say, Rudly?" exclaimed Frederick; "why, look, the monster is already at work; see how he crushes and tortures our poor servant! Observe: it kneads and pounds the body into a suitable size for swallowing, just as we do with a mouthful of bread."

With hideous ardour the boa completed its preparations for a



luxurious banquet. My wife was so frightened that she could no longer endure the painful spectacle, and withdrew into the recesses of the grotto with little Fritz, whom she did not wish to grow accustomed at so early an age to the image of carnage. I was glad she did so, for every moment the sight grew more horrible, and I could scarcely bear it myself. The ass was dead; we had heard his last *hee-haws* choked by the boa, and could distinctly hear the snapping and cracking of his bones. The monster, to increase its power, had coiled its tail round a rocky projection, which gave all its efforts the force of a lion; and we saw it knead the shapeless mass into a soft and plastic paste, so to speak, in which we could only recognize the poor animal's head, all bleeding, and covered with wounds.

The monster having completed its preparations disposed itself to enjoy its victory, and swallow its meal. It placed before it the pounded mass, which it covered with a viscous slime; then, extending along the ground the whole length of its body, distended its jaws to their extreme width, and began to swallow it. It seized the ass by its hind feet; then, little by little, and with great effort, the remains of the slaughtered animal disappeared in the serpent's *æsophagus*. The latter paused at frequent intervals; and, in truth, one would say that there was as much toil as pleasure in the operation, though it was rendered easier by the quantity of saliva with which it covered its prey. Nevertheless, we observed that as the work advanced, the animal lost more and more of its strength and energy; so that when it arrived at the head of the ass, which it had forgotten to knead and crush like the rest, it was compelled to stop, and fell into a complete state of torpor.

So protracted had been the process that, though it had begun at seven in the morning, it was not terminated until noon.

As soon as I saw the animal was perfectly motionless, I exclaimed:—

“Now, then, my sons—forward! forward! We can easily make a conquest of the giant.”

With my gun ready cocked I rushed from the grotto, followed by Frederick and Rudly; Ernest, naturally of a more timid dis-



position, lingered in the rear. I thought it prudent to dissemble my perception of his intentional delay, as there might be some danger in compelling the lad against his will to approach an enemy whose appearance was still formidable. Fritz and his mother remained in the grotto.

I discovered, when I drew near the monster, that my conjectures as to its genus were correct, and that it was the boa-constrictor of naturalists. It raised its head in my direction, and after casting upon us a glance of powerless rage, let it sink back again.

We halted at about twenty paces, and Frederick and I fired at the same time. Our two charges entered the creature's head; but they were not fatal, and its eyes sparkled with a final gleam of rage. Two pistol shots, delivered from a nearer stand-point,



completed our task; its tail uncoiled itself on the sand, and it lay stretched before us like the trunk of an enormous tree. Rudly, however, wished to share in the victory, and approaching the monster, fired into its body the contents of his pistol. The shock produced a kind of galvanic motion, and the tail being suddenly raised, knocked Rudly over; he escaped, however, with nothing worse than a fright.

Immediately we raised a song of victory, and shouted so lustily and so enthusiastically as to bring Ernest, Fritz, and my wife upon the scene.

"What an uproar you have made!" she exclaimed, for she still suffered from her nervous panic; "one would have thought it was a troop of savages after some deadly combat."



"And it was, indeed," I answered, "a deadly combat; and we have good reason to rejoice after so important a victory, which rescues us, in my opinion, from no light danger. Not to us, however, belongs the honour: to God be all the praise and glory, for it is His hand which has saved us."

"For my part," said Frederick, "I must own that during the last three days I have suffered intensely from fear and anxiety. At length we can breathe freely; but we owe a debt of gratitude to our poor ass, who devoted himself for us, as, of old, Curtius sacrificed his life for the salvation of the Roman people."

"And thus," added Ernest, "those things which we value the least often prove, in this world, to be the most useful."

"Poor dear old ass!" exclaimed little Fritz, with a melancholy air and in a plaintive voice, "we shall no longer go riding upon his back."

"It is true, my boy," said his mother, "we must regret him as a good and faithful servant; but if our safety could only be secured by the sacrifice of one of our animals, let us thank Heaven that the one selected was the one we could best dispense with. He was already old and feeble, and it is probable that, before long, we should have been compelled to get rid of him. The dragon has only shortened his life by a few months; but his end was not the less horrible."

Fritz noticed the new expression employed by his mother to designate the boa.

"Mamma," said he, "has called the monster a dragon; is it a dragon like those which anciently lived in Switzerland?"

"A wise remark," I exclaimed, "for so small a head! The dragons of which we read in the chronicles and old national songs of our mountains have never existed, save in the imagination of the poets who hymned them. Their wings are a fable, which, however, is explained by the rapid movements of the boa, and of these you yourselves have had sufficient proof."

"But," replied Fritz, "do people eat serpents? Because if they do, there is meat enough here to last us for a week!"

"Oh, horrid!" we all exclaimed, with an expression of infinite disgust.



"I think the best thing we can do with it," observed Frederick, "is to empale it."

"Just so," said Rudly; "and we will plant it before our threshold to keep at a distance the dangerous beasts which might otherwise approach it."

"But it would also drive away our domestic cattle," added Frederick. "No; its place should be in our library, where it will figure handsomely along with the branches of coral and curious shells we have collected."

"And," said Ernest, laughing, "along with the ginseng, that sacred herb of the Chinese."

I pretended to reproach our young professor for treating our infant museum with so much contempt; but while I was exerting myself to prove that the richest and most beautiful collections had all begun on as small a scale as our own, my wife reminded me of Fritz's question in reference to the eatableness of the serpent's flesh.

"The boa," I said, "is not venomous; but even if it were, it might be eaten without danger. The rattlesnake is eaten, though it is the most poisonous of reptiles; and many savage tribes feed upon the animals brought down by their envenomed arrows."

"It does not matter," replied my wife; "I should never have the courage to taste it."

"Prejudice! all prejudice! And I assure you that I would not hesitate to eat a slice of boa, if I had no other food. However, to the viands of savages I own I very much prefer those dishes more in harmony with European habits."

This was an excellent opportunity for a lesson to my sons on the natural history of serpents, and I replied with much pleasure to the numerous questions they put to me respecting them. I told them that some pigs left one day on the shore of a North American island infested by rattlesnakes had completely annihilated them.

Ernest inquired if it were true that the serpent really possessed the faculty attributed to it by many writers of fascinating the birds which fluttered within its reach, and killing them by its breath.



"Men of undoubted sobriety of judgment," I replied, "have shared in this belief; but it is probable that the sole magic of the rattlesnake lies in the terror it inspires in its feathered victims, and that in its supposed process of fascination its breath does not perform any part.

"Besides," I added, "we meet in Africa with a bird called the Secretary Bird—in reference to a feather which it carries in its ear, like certain scribes—and which plays such havoc among serpents as effectually to contradict the power of fascination popularly attributed to the latter."



SECRETARY BIRD, OR SNAKE-EATER (*Serpentarius secretarius*).

Afterwards I explained to my young auditors the manner in which was disposed the venom carried by poisonous serpents.

"To the lower jaw," said I, "two small bags are suspended, and two inferior teeth, long and pointed, corresponding to them, are concealed in or ejected from the gums at the animal's pleasure. When it would only bite or seize its prey, it makes no use of these fangs: when it would kill, it raises them; their points penetrate



the bags of poison, which flows into a kind of channel in the centre of each tooth, and thence exudes into the wound made by these same teeth in the reptile's prey."

I also spoke of the Spectacled Snake (*Serpent à lunettes*), which the Indian jugglers train to dance to the sound of music, much to the admiration of the ignorant people for whom the sight is intended. In a word, I related all that I knew concerning serpents great or small, injurious or harmless. This lecture, whose special merit was the presence of the boa, greatly interested my young pupils; but as it would not have quite so much attraction for my readers, who have probably never met with a boa except in a menagerie, I terminate my notes of it to resume the history of our adventures.

After the three days of anxiety we had endured in the confinement of our grotto, we enjoyed to the utmost the pleasure of breathing freely; it was a second deliverance, and almost as important as that of the shipwreck. One never feels so keenly the happiness of living as after a danger to which one has nearly fallen a victim.

We had now to decide what should be done with the boa. I sent Frederick and Rudly to the grotto, with orders to harness the two buffaloes. I remained with Ernest and little Fritz in guard of our capture, to defend it against the birds of prey already attracted to the scene, as I was desirous of preserving its brilliant robe.

When we were alone I reprimanded Ernest for the timidity he had displayed in the attack on the serpent; and by way of punishment, I jocosely commanded him to prepare an epitaph for our poor ass. The penalty was really a pleasure for our professor, who invariably composed all our New Year congratulations and anniversary madrigals. He set to work, and after sitting for about ten minutes with his head upon his hands, he rose, and with an air half-timid, half-confident, recited the following lines:—

#### EPITAPH.

*Written in French by Doctor Ernest.*

" Ici repose un Âne, laborieux serviteur,  
Lequel, pour avoir été une seule fois désolant,  
S'est vu dévorer par un horrible serpent.



Une famille, père, mère, et quatre garçons,  
 Naufragée sur cette cote déserte,  
 Firent pour le sauver d'une mort cruelle  
 De vains efforts: il mourut victime de son imprudence,  
 Et pleuri de ses amis, dont sa mort assurait la vie."

*Englished:—*

"Here rests an Ass, a servant loyal and true,  
 Who once his master's orders disobeyed,  
 And to a monstrous serpent victim fell.  
 A family, wrecked upon this desert shore,  
 Father, and mother, and four hopeful sons,  
 All vainly sought to save him from his doom;—  
 He died, a sufferer for a venial fault,  
 Much mourned by friends whose life his death assured!"

"Admirable!" said I, laughing; "here are eight lines, and four of them have as many feet as a centipede! But it matters not. As they are probably the best verses ever composed in this island, they will figure very well on the mausoleum of our poor unlucky ass."

At the same time I drew from my pocket a red crayon, and traced on the rough surface of the rock the verses (no less rough) which my little poet dictated with becoming modesty.

I had scarcely finished, when Frederick and Rudly returned with the buffaloes. The donkey's epitaph naturally became the subject of conversation; but it was pronounced so deficient in poetry, and we overwhelmed its author with so many sarcasms, that Ernest had no help for it but to give up his composition to our criticism, and join in the general laugh.

Then we began our task. We harnessed the bull and the buffalo to the ass's head, which still projected from the serpent's jaws, and while we held on firmly to the monster's tail, they contrived to extricate from its distended interior the disfigured remains of our unfortunate servant. We dug a trench to receive them, and piled a heap of rocks above their resting-place to serve as a monument.

The buffalo and his companion were next yoked to the boa's tail, and we made them take the road to the grotto, dragging the monster behind them, its head supported by a rope to prevent it from touching the ground.

"What shall we do now?" inquired my sons, on reaching home; "how shall we remove the skin?"



"Think for yourselves," I answered; "your young heads will never invent anything as long as you count on the complacent assistance of a third to extricate you from embarrassment."

"I remember," said Frederick, "to have read in the *Voyages of Captain Steadmann*, that a negro, having killed a boa whose skin his captain was very anxious to preserve, adopted a very ingenious method of flaying it. He passed round the head a stout rope, which he threw over the branch of a tree; hauled up the serpent's head to the height of the branch; and escalading the trunk, clung to the same branch with his left arm, while with a sharp knife in his right hand he made an incision in the creature's throat. He then glided down the whole length of the serpent without letting go his knife, and thus effected a deep cut in its skin from head to tail, which considerably facilitated the process of flaying."

"Capital, capital!" shouted all my little fellows, as with one voice. "But there is this difficulty; not one of us is as nimble as the negro; and so, good-bye to the incision!"

"I can suggest a simpler means," cried Ernest; "one which I have frequently seen employed by cooks in skinning eels, and our experiment with the buffaloes in extricating our poor ass from the serpent's interior will here be of infinite assistance to us. It is just this: cut the skin close to the head, and remove a tolerably long portion where we can twist round the ropes of our harness; after securely fastening the serpent's head with a cable to the foot of a tree, we will make the buffaloes move gently forward in an opposite direction, and thus they will draw off the creature's skin, and strip it even to its tail."

"Ah, well," said Rudly, "that is not so amusing as the negro's plan; I should uncommonly like to slide along the great serpent's body."

"For the sake of utility," interrupted I, "we can very well dispense with amusement. Ernest's notion is simple and easily carried out; so, gentlemen, to work! You do not require my assistance for this operation, and I will leave to you all the honour of it. Nothing can be easier than the preparation of this skin, which shall be yours for the ornament of your natural history



museum. You first dissect as well as you can the animal's cranium; next, you wash the skin with sand, water, and ashes; dry it in the sun, scour it well from head to tail, stuff it with hay, cotton, and any other kind of light and dry material; and your work, I assure you, will then be fit to do you honour."

Frederick assured me that he understood clearly the various processes I had described, but confessed that he did not expect to succeed in them. I encouraged him to make the attempt, remarking that if man always suffered himself to be arrested by difficulties, he would never undertake anything.

At length my young people addressed themselves to their task, in which they displayed considerable skill and intelligence. The skin was dried and prepared in accordance with my instructions, but I could not help laughing heartily at the strange fashion in which they empaled it. After having carefully cleansed it internally, they hauled it up to the branches of a tree with a pulley, just as I had formerly suspended the rope ladder, and Ernest, dressed like a swimmer, glided down the creature's skin, gradually stuffing it with the hay, cotton, and moss his brothers handed up to him on the top of long forked poles. He pressed this elastic fibre into a consistent mass with his knees, and when the skin was filled to the top, we saw him put forth his hand, as if out of a window, and he cried, with a loud voice,—

"Look at my masterpiece! And remember it was Ernest who empaled the great boa!"

After finishing this job, which occupied a whole day, we had to select a place for the monster, thenceforth incapable of mischief.

We closed up as well as possible the holes our musket-balls had made in its head; with the cochineal found on the Indian figs we gave its tongue and jaws the blood-tint of which death had robbed them; then we raised it on a kind of wooden cross, where it assumed a very picturesque position, inlacing its folds around the foot, and lifting above it its open jaws in a most menacing manner. Our dogs on catching sight of it barked their loudest, and our terrified animals recoiled as if it were still alive.

Having completed our arrangements, we formally installed it in the library, where it took its place among the wonders of our



nascent museum. At the same time my boys wrote above the entrance an inscription which bore a double meaning :—

ASSES MUST NOT ENTER HERE.

We disregarded the allusion to our lost servant, and agreed that the legend should thenceforth bear but one signification; namely, that the library being sacred to Science and Study, it would naturally be interdicted to Idleness and Ignorance.

We had nothing more to apprehend from the vicinity of the boa; yet I felt some anxiety whether it had left behind it its male, or any eggs or young ones, which might one day renew our terrors, and against which, perhaps, we might not be so fortunate. I therefore resolved to make a careful examination of Duck's-Marsh, and of the neighbourhood of Falcon's-Nest; following up the defile in the rocks as the only passage by which I thought it possible an animal of the size of the boa could penetrate into our quarter of the island.

We began with Duck's-Marsh; but when on the point of setting out, Ernest and Rudly showed me very plainly that they would much rather remain in the grotto than share the glory of the excursion.

"I tremble still," said Rudly, "when I think of the blow the ugly monster gave me with its tail; I would have burst into tears, if I had dared."

It seemed to me that I ought not to yield to the lad's timidity, which might be of fatal example for the future; and I therefore inveighed against cowardice as a vice unworthy of man.

"When one has triumphed over a *real* danger," I remarked, "one ought not to shrink in this fashion from a danger existing only in one's imagination. It will avail us little to have killed the animal which you stuffed yesterday, if we are surprised to-morrow by another of the same size, or if, in a few weeks, an entire brood of little monsters should emerge from the reedy swamp. He has done nothing who pauses in the middle of his work."

Accordingly we all started in full hunting costume, carrying, besides our weapons, some planks and sea-dogs' bladders; the latter to support us in the water, if occasion arose for us to trust



ourselves to that element; the planks to assist our progress in the marsh, and, when placed one upon another, to form a kind of causeway across the quaking soil. And, in truth, these proved a great help, and enabled us to explore the whole area of the marsh at leisure. We easily discovered the boa's track; the reeds were bent and broken where it had passed, and deep spiral impressions in the mud marked the spots where its huge coils had rested. But we could find no indications of the existence of its companion; we met with neither eggs nor young; all we found was a sort of nest made of dried reeds, but there was no sign that it had belonged to the boa. However, at the extremity of the marsh we made an interesting discovery; a new grotto opening into the rock, whence issued a small streamlet, to spread its waters among the luxuriant reeds.

This grotto was tapestried, so to speak, with stalactites, which everywhere enlarged into massive pillars, as if to support the roof, and were frequently shaped into the strangest and most fantastic outlines. For some minutes we gave ourselves up to a warm admiration of this new wonder of Nature, and penetrating a few paces into the interior, I remarked that the



soil beneath our feet consisted of an extremely fine white earth, which, on examination, I perceived to be fuller's earth. Collecting a few handfuls, I carefully stowed them away in a handkerchief, exclaiming to my sons, who looked at me with astonishment,—

"Here is a discovery which will delight your good mother? If we continue to take her, as we have hitherto done, our clothes in a filthy condition, we can give her something with which to cleanse them, for this is—soap!"

"I always thought soap," said Ernest, "was a product of human industry, and never found in a natural state in the earth."

"Quite right: the soap usually employed in Europe is composed



of several salts, corrected in the aggregate by the addition of certain fatty matters, which, by weakening their action, render them easier to work with. But the manufacture is long and costly, and men have fortunately discovered an earth which combines in certain proportions all the qualities of soap ; it is the earth now before you. It is called fuller's earth, because chiefly employed by fullers in cleaning woollen stuffs, instead of soap."

Thus discoursing, we approached the source of the streamlet, which trickled from an opening in the rock a few feet above the ground.

Frederick, after examining this opening, cried out that the grotto extended much further in that direction than we had supposed. I therefore climbed the rock, and made my way into another cavern.

Firing a pistol, we were able to determine by the prolonged echo, that the grotto stretched to a great distance. We lighted a couple of tapers, with which our game-bags were always provided ; they burned brightly, and the clear, strong light which they diffused around us, convinced one of the wholesomeness of the atmosphere. We therefore continued our advance—that is, Frederick and I, for we had left the others in the outer cavern—and suddenly we saw, with mingled joy and surprise, the glare of our torches repeated *ad infinitum* on the different faces of the rock.

"Oh, papa," cried Frederick, in an ecstasy of admiration, "look here ! look here ! Another grotto of salt ! Oh, how splendid ! Look at the enormous masses lying all around us !"

"You are mistaken," I replied ; "these masses cannot be salt, or the water flowing here would have a saline taste ; and, besides, they would infallibly be dissolved by the damp air. They are not salt but crystal ; we are really and truly in a palace of rock-crystal !"

"Better still ! A palace of rock-crystal ! Why, it is an incalculable treasure."

"Yes, just as the gold mine was to Robinson Crusoe !"

"Stop, papa : here is a fragment which I have broken off. It is not salt, as you say, but if it is crystal, why is it not transparent ?"



"That is your fault; in breaking it off, you have *disturbed* or *troubled* it."

The expression was quite new to my son, who could not understand how it was possible to *trouble* or *disturb* a piece of crystal. I accordingly explained the formation of crystals, and endeavoured to make him comprehend the meaning of the term I had employed.

"All these masses before our eyes," I said, "form, as you see, hexagonal, or six-sided, columns or pyramids. The fine powdery earth on which they rest supplies them, as it were, with nourishment, and properly speaking, they are only the *base* of the crystal, not the crystal itself. Upon them are deposited those transparent masses which you have seen in Europe, and which require the greatest skilfulness on the part of those who would detach them. Excessive force determines in the interior of the crystal the long needles growing there, and produce the obscurity noticeable in the fragment in your hand. The crystal is then called 'troubled crystal.' As to the primitive crystal, the dull masses which you see around us, considerable portions are carried away, as you have noticed in our European museums. And this is done before the pure transparent crystal clinging to them can be removed."

"Well, then," said my son, with an air of chagrin, "it is evident our discovery will be of no great service to us, except," added he, "to ornament our museum, and the fragment I have here will make a tolerable addition to the curiosities already included in that collection."

Frederick's curiosity was keenly excited by the information I had given him on the subject of crystals. He overwhelmed me with questions, and I saw with pleasure that his young imagination began to occupy itself with all the miracles of Nature that were displayed before it. I told him that crystals were formed of the residuum of watery emanations, which, gathering on the sides of the rock, coagulated, and after awhile acquired a greater solidity than even the very metals.

"In our Swiss mountains," I added, "crystals have been found in their intermediate condition, supple and malleable, and thus attesting the different phases they pass through before arriving at a solid



state. The ancients supposed crystal to be indurated glass; modern science has gone further, has studied it in its formation, and so successful have been its investigations that the discovery of crystals is no longer, as it once was, a matter of hazard and good luck, but men know exactly where to look for them. Crystal is on a large scale what precious stones are on a small: in these two treasures of the earth, man, for a long time, has found only an object of decoration or a material for the manufacture of articles more brilliant than useful; but both are now beginning to pay their tribute to science. The jeweller's art shapes and moulds at will the crystal of the rock, and extracts from it precious appliances for chemistry and physics. The diamond is used in horology; and has been of immense advantage to that science, by enabling it to attain a rigorous exactness, not to be secured by the hardest metals."

The light of our tapers now began to flicker, and I thought it prudent to begin our retreat; especially as we had discovered no sign of a speedy termination to the grotto. Frederick fired a second pistol before departing, and the report was lost in a space whose remoteness we could not venture to calculate.

On re-appearing at the entrance of the cavern, we found Rudly in tears. The moment he saw me, he flung his arms around my neck, and lavished upon me a thousand caresses.

"What has happened," I inquired, "that you are mingling so strangely joy and tears?"

"Oh, it is my happiness at seeing you again, papa, for I have suffered the most terrible anxiety. . . . I heard two frightful crashes, and I thought you were buried under the rock, and that I should never see you again."

As he said these words he repeated his embraces. I was much moved, and clasped him tenderly to my heart.

"Let us thank God, my poor Rudly," said I, "that no accident has befallen either of us. The noises you heard were the two pistol-shots fired by your brother to test the solidity of the rock, and determine the extent of the grotto. We have discovered a new palace, as brilliant as that of Rock-House; an immense palace, whose dimensions we will one day ascertain. But what have you done with Ernest? Where is he?"



Rudly led us to the border of the marsh, where we found our phlegmatic philosopher, who had heard nothing of the two explosions, tranquilly occupied in plaiting a reed-basket of the size and shape of those used by fishermen; a narrow aperture being left at one end through which the fish could enter, but by which they could not afterwards escape.

"Here, papa!" he exclaimed, on catching sight of us, "come here! I have killed a little serpent."

We had talked so much about serpents, eggs, and their young, that the poor boy, with the best faith in the world, had taken a superb eel four feet in length for a small boa! He had marched straight up to it, and had dealt it two or three blows on the head with the butt of his gun; blows given with so much goodwill that they would have broken the skull of the most dangerous reptile.

The conqueror's glory was somewhat obscured when I demon-



THE EEL (*Anguilla vulgaris*).

strated that the supposed serpent was only an eel; but his capture was not the less warmly commended. We now returned towards Rock-House, skirting the morass, whose borders offered an easier and safer route. We found my wife and little Fritz waiting for us at the fountain. They learned with pleasure the fortunate issue of our exploration, and after my wife had examined the lumps of fuller's earth, we related to her the details of our adventures and the day's discoveries.



As yet, however, I had accomplished only half my project: I had still to explore the neighbourhood of the farm, where I feared the boa might have left her eggs; and I wished, if it were possible, to protect ourselves from the visits of similar intruders by fortifying the passes in the cliffs. Before setting out we made ready for every event, by collecting provisions, and weapons, and utensils, and all that could insure the ease and safety of our excursion. We did not forget a supply of torches to burn at night, and keep off the beasts of prey that might otherwise be tempted to assail us; in a word, any spectator seeing us leave Rock-House with our heavily laden vehicle would have thought we were going on a campaign.

It was the first time we had travelled with such an equipage. The good mother was seated on the cart, which was drawn by Thunder and Valiant, ridden by their respective cavaliers; the cow preceded the team; and Frederick on his onager acted as scout, keeping some sixty paces in advance of the caravan, while Ernest and I followed tranquilly on foot. This mode of travelling was more congenial to our young philosopher than either riding or a seat in "the chariot;" it suited his love of conversation, and the scientific discussions suggested by the objects of interest we met with on the way.

The flanks of our convoy were guarded by our faithful dogs, while Rapid (such was the name of our young onager) gambolled freely around us.

We descended in good order the avenue to Falcon's-Nest, where we found some traces of the boa already half-effaced by the wind.

At Falcon's-Nest nothing was disturbed; the crops and fruits prospered, and inspired the most radiant hopes for the coming winter. The goats and sheep were well pleased to see us, and came of their own free will to receive the handfuls of salt we offered. After a short delay we pushed forward to our settlement on the Lake, the principal object of our excursion, where we wished to arrive in sufficient time to collect a supply of cotton down before night, for our pillows and couches.

As we left Falcon's-Nest behind us all traces of the boa disappeared. In the cocoa-nut grove not a solitary ape was visible, and we rejoiced when the monotony of our journey was broken by the



distant crow of our chanticleers, and the bleatings of our goats. We found everything in order. Here we halted. Our manageress lost no time in commencing her culinary duties, and meanwhile we set about collecting a sufficient stock of cotton.

After dinner I announced that our battue must begin immediately, and I divided our little troop into three detachments, allotting to each the exploration of a certain extent of country. Ernest and his mother were instructed to attend to the commissariat, and to gather all the ripe ears they could discover in the rice-field. As this sedentary occupation might prove no less dangerous than our own tasks, we left them the courageous Juno as a protector. Rudly and Frederick, accompanied by Turk and the jackal, took the right bank of the lake; and I followed up the left, with little Fritz and the two young dogs he had brought up. As it was the first time the youngster had shared in any of our expeditions, and the first time he had been intrusted with a musket, he marched with head erect, and with as much pride as a youth who has just

attained the dignity of manhood. Boasting of the excellence of his weapon, he ardently longed for an opportunity to make use of it. But the cracking of the dry reeds beneath our feet only started a covey of herons, which rose so swiftly into the clouds that we had no time to take aim at them. Fritz was sorely vexed, but lost none of his enthusiasm, which burned all the more fiercely on



BLACK SWAN (*Cygnus atratus*).



our emerging from the reeds, and finding ourselves in front of a host of ducks and black swans, which furrowed the waters in every direction. The sight fired the little hunter beyond all control. He was about to discharge his musket in their midst, when a kind of hoarse prolonged cry rose, like the lowing of cattle, among the reeds, and was borne in our direction. I stopped in astonishment. Fritz did the same; and the cry being repeated, he said,—

“I know what it is—our little foal.”

“Impossible,” said I, “for it is attached to the onager, and could not have made its way into the reeds without our seeing it pass. I am inclined to think that it is a fen-bird called the *butor*.”

“But how could a bird low or bray like that? Oh no, papa; it must have been the voice of our buffalo or ass. If not, what an immense size the bird must be!”

“Not at all; it is neither bigger nor stronger than the other herons, to whose family it belongs. You forget that the voice of an animal has no connection with its bodily strength, but is regulated by the conformation of its throat and the muscles of its chest, which have the property of expelling air with more or less force. Thus the nightingale and canary, though exceedingly small birds, fill the air with their song, and indulge in sharp and prolonged modulations which you would think impossible to such feeble frames. As for the *butor*, naturalists say that when it sings it thrusts the extremity of its beak into the mud, and to this precaution are owing those deep, majestic notes, which more resemble the voice of a bull than that of a bird.”

“Oh, how I would like to kill it!” cried my young sportsman; “I should be proud if my first shot brought down so extraordinary a creature!”

“Well, then, be on your guard, and try to take straight aim when the bird sweeps past you.”

At the same time I called our dogs, which were scenting all about, and started them in among the reeds. Almost immediately the report of Fritz’s gun broke on my ear; but instead of firing in the air, my young huntsman had poured his shot right into the thick overgrowth of the marsh, and I saw the birds, frightened by our dogs, fly out on the other side, all safe and sound.



"Little bungler!" I exclaimed, hastening towards him, "you have let your game escape!"

"On the contrary, papa, it is mine—it is mine!" he shouted, in a frenzy of delight; "come and see!"

And, lo, he made his appearance, dragging after him an animal not unlike an agouti, and immediately so christened by its conqueror. But on examining it carefully, I saw that there were notable points of difference between it and the animal killed by Frederick on our first landing in the island. The latter was about two feet long, with incisive teeth like a rabbit, a cloven lip, palmed feet, but no tail.

"You have well compensated, Fritz, for your want of skill; you have shot a rare and curious animal, a native of South America, and a member of the family of agoutis and peccaries. It is a cabiai, and what is more, a cabiai of the largest size."

"And what *is* a cabiai? I have never before heard of such an animal."

"No, perhaps not; but you have heard it *bray*, for it was the



CABIAI (*Cavia Cobaya*).

voice of this animal which I mistook for that of a heron. Its habits are nocturnal; it runs with some agility; swims well, and is very partial to the water, remaining a long time under its surface; it eats its food while standing, propped up on its hind legs:



and its cry, as you know from experience, is not unlike the bray of a donkey."

It was now time to think of returning, and little Fritz amused himself with anticipations of the triumph that would await him on his presenting his spoil to the family. Throwing the cabiai over his shoulders, he started, but I saw the burden was too heavy for him. However, I would not render him any assistance; I wished him to have all the merit of overcoming the difficulty.

"How ridiculous of me," he suddenly exclaimed, "to load myself with such a weight! If I cleaned my game I should have all the less to carry."

"A good idea!" said I; "you cannot do better, since we could not eat its entrails, and our dogs, to whom they rightfully belong, will gladly rid you of them."

"Come on, then," he cried; "to work!"

And he began the operation of disembowelling the cabiai, acquitting himself with considerable dexterity. I bade him remark that, in this world, trouble always goes hand in hand with pleasure; but my moral maxims fell unheeded. My little boy was intoxicated with the delight of victory, and I must confess he paid no attention to me.

When he had finished his task we resumed our route, but the cabiai proved still too heavy for his young shoulders. At last he conceived the idea of placing it on the back of one of his dogs.

We arrived at the grove of pines, where we collected a supply of the cones which we had previously found good eating. In the distance we descried some monkeys, who disappeared at our approach; whence we understood that if our chastisement had driven them from our plantations, it had not banished them from the country. As for the boa, we nowhere found any traces either of its progress or of its young.

On our return, we found Master Ernest quietly seated on the bank of the river, surrounded by a prodigious number of tolerably big rats which he had killed during our absence. The phlegmatic philosopher related to us as follows the history of the massacre:—

"My mother and I were busy picking the ripest grains in the rice-field, when at a few paces from the border I discovered a kind



of high solid embankment, resembling a causeway, constructed in the midst of the morass.

"I immediately sprung upon it, followed by Master Knips, who had been assisting us in our rice-picking. But scarcely had he set foot upon it than I saw him dart upon a small animal, which, however, was swifter than he was, and disappeared with wonderful rapidity under a dome on the side of the causeway. I noticed as I advanced that these domes or vaults were numerous, and formed on each side a continuous row of little buildings of the same height and shape.

"Desirous of knowing what they contained, I inserted into the opening of one of them the bamboo cane which I carried in my hand. The moment I withdrew it, a host of animals, like those before you, darted forth, and soon vanished in the rice-grounds. Knips pursued, but did not overtake them, being unable to force a passage through the closely growing stalks. An idea then occurred to me. I placed the bag in which I had been gathering my crop at the mouth of one of the little edifices of earth, and striking the roof with my stick, I so terrified the inhabitants that they gladly took refuge in the bag. Then I closed it, and began to belabour my prisoners soundly. But these, in revenge, gave utterance to such shrill and piercing cries that my heart failed me, and I was about to leave the work unfinished, when I was suddenly assailed by an army of rats, which issued from all the retreats, and mounted my legs to the assault. Knips made the most horrible grimaces. My stick was of little avail, my cries were of less, and truly I know not what would have happened had not Juno heard me and come to my assistance. She attacked the army of rats with so much good will, and effected such a terrible carnage, that I was soon released. The victims before you bear witness to the efficacy of my stick and of Juno's teeth. As for the remainder of the army, they have returned to the concealment of their burrows."

Ernest's narrative piqued my curiosity. I wished to see the dyke and the habitations, and it was with unfeigned admiration that I examined a range of works similar to those of the beavers, only of less extent. I made my son notice the kinship evidently existing between the rats he had just killed and the beaver of



northern latitudes;—there were the same membrane at the extremities, destined to facilitate their swimming; the same broad flat



A BEAVER'S DAM.

tail; and, like the beaver, they also carried two small glands full of musk.

While I was thus engaged, Frederick and Rudly returned from their survey, bringing with them a fine fat hen and a nest full of eggs, which we placed under one of our hens to be hatched.

Then we all collected round some rice soup which our good housewife had prepared for us. She also cooked a piece of the



cabiai, but we could not relish it, and willingly gave it up to our dogs, who appeared to appreciate it more than we did. They had been more difficult to please with the great rats, whose skin we had stripped off; turning away from their flesh contemptuously, undoubtedly on account of its strong odour of musk. The meal was a lively one. We felt happy in having discovered no trace of the terrible boa, and my gay mischief-makers indulged in a war of epigrams against the great rat-killer, as they designated poor Ernest.

We were naturally led to speak of the uses to be made of the animals' skins. It was resolved to convert them into a carpet for one of the apartments of the Grotto, to preserve it from damp during the rainy season. According to custom we had already partially prepared them, by cleansing them with sand and ashes. The two little pouches of musk which each animal carried in the interior of its thighs had strongly excited my boys' attention, and they poured upon me a volley of questions on the manner of collecting this precious substance so highly esteemed by Europeans.

I told them that many animals enjoyed the same advantage of



MUSK-RAT (*Fiber zibethicus*).

carrying a supply of musk—the gazelle, the castor, the ondatara (for such was the real name of the rat killed by Ernest), the fourmart, the civet, and the musk-deer. At the same time, I briefly explained the various processes employed to secure this natural product, and how the Dutch, having tamed some of the animals,

draw a regular revenue from their property, by shutting up, at intervals, the fourmarts, musks, and civets in places where they may deposit the contents of their pouches, and then letting them go, to repeat the operation at a later period. But as musk would never prove of much utility to us, I only entered into these details as far as was necessary to satisfy the curiosity of my children.

Meanwhile, our discussion on the civet and the ondatara had not succeeded in making us forget the detestable taste which the cabiai had left in our mouths.



"Ah," said Ernest, with a sigh, for he was naturally somewhat of an epicure, "if we had only a little dessert to free us from the fishy smell left by the coarse fetid flesh of that accursed animal!"

At this exclamation, Rudly and Fritz ran to their game-bags.

"Look at this, my gentleman!" said the latter, placing before the epicure a handful of pine-cones.

"And look here, my gentleman!" exclaimed Rudly, in his turn, throwing on the table some small shiny apples, of a pale green, which diffused a strong odour of cinnamon.



MUSK-DEER (*Moschus moschatus*).

A general cry of admiration testified to our surprise and pleasure.

"Stop, stop!" I cried; "before you taste this unknown fruit Science must pronounce upon it, and Master Knips perform his usual experiments; these fruits, perhaps, are those of the manchineel tree, and manchineel apples are poisonous."

I took one of the fruits and cut it open. I saw at once that I was deceived in my apprehensions, for the manchineel apple has a very hard kernel, and this had pips. While I was expatiating to my sons on the difference, Knips contrived to slip under my arm, and carry off one of the apples, which he began to masticate with infinite relish. This proof was sufficient: I distributed the fruits all round, and each, on tasting them, declared them excellent. Frederick wanted to know their name.

"They are, I believe, the cinnamon apples. They grow upon a tolerably tall bush, do they not, Rudly?"

"Oh, yes—yes—bush—cinnamon apples—I am very sleepy," muttered the thoughtless young gentleman, rubbing his eyes and yawning.

Immediately I gave the signal for retiring; we made the necessary arrangements around our tent to insure security during the night, and then sought on our cotton couches the repose which the fatigues of the day had rendered necessary.



Next morning we resumed our journey of discovery and exploration. We moved in the direction of the sugar-cane plantation, where we had left a small hut built up of leaves and branches. We found it in a very dilapidated state. We stretched over it the sail-cloth which had served us as a tent, and halted, with the intention of remaining in that neighbourhood until after dinner. While my wife made her preparations, we penetrated into the marshy grounds around the sugar-canes; a likely retreat for a serpent or its family, if the country contained any others than the one we had destroyed. Fortunately, our investigations proved fruitless, and we were on the point of quitting the plantation when suddenly our dogs began to bark as if they had brought some dangerous animal to bay. We could discern none; but as it was imprudent to remain among the canes, I ordered my sons to make at once for the open ground, and set them the example. We were soon clear of the reeds, and almost simultaneously saw a numerous herd of hogs break forth, of a size and strength almost incredible. At first I thought it was the progeny of our sow, who still continued to claim her liberty, but their numbers effectually dissipated the notion. Moreover, the grayish colour of their skin, and the wonderful order which they preserved in their march, convinced me they were of no European breed. They trotted one after the other without haste or confusion, and with a regularity of step which would have done honour to a regiment on parade. I raised my gun; fired both barrels; and two animals fell. Their loss made seemingly but little impression on the rest of the herd, who did not swerve a hair's-breadth from their course, or in the least degree quicken their movements. Truly, it was a strange spectacle to see this family trotting along the skirts of the sugar-cane plantation with an imperturbable tranquillity: they all followed in a line without any attempt to pass one another; and, on examining them closely, one would have said that the leader made in the sand an impression in which all his followers were bound to tread.

Meanwhile, Rudly and Frederick, who were standing a few paces from me, could not remain inactive. *Piff! paff!* I heard a succession of musket and pistol-shots, which informed me that

my boy  
seizing  
On a  
prey bel





THE PECCARIES.

my boys had joined in the attack. Nor were our dogs idle, each seizing and strangling a victim.

On coming up to the field of slaughter, I discovered that our prey belonged to the genus *tajacus*, or pouch-bearing hogs; and as



I knew they carried under the belly two little glandular pouches which required to be removed immediately after death (otherwise, the liquid they contain spreads through the flesh and renders it detestable), I lost no time in performing the operation. My two sons assisted me gladly—they were so proud of the superb results of our chase, for six hogs lay stretched before us, and each was about three feet in length.

While thus occupied we heard a couple of shots in the distance. I suspected they were fired by Ernest and Fritz, who, having remained in the tent, would necessarily take the hogs in flank as the troop passed by. Nor was I mistaken, as Ernest informed me, on bringing up the cart to receive our spoil. So that we had three more victims, Juno having also done her duty, and prostrated one of the fugitive herd.

The arrival of our professor naturally provoked a discussion on the name and characteristics of our captures. Frederick thought they belonged to the race of Tahitian hogs described by Captain Cook. Ernest was of a different opinion, and at length it was determined that their proper designation was *peccary*, an animal very common in Guiana and throughout South America.

Before loading the cart with our spoil, we resolved to reduce its weight by removing the intestines.

Diligently as we laboured at our task, we were unable to finish it before dinner-time, and we thought ourselves fortunate in finding some sugar-canes, and refreshing and invigorating ourselves with their nutritious juice. We threw to our dogs an enormous quantity of offal, on which they feasted heartily, and then resumed the road to our tent; but we were so proud of and delighted by our successful battue, that my young merry-makers insisted upon converting our convoy into a triumphal procession. They cut a plentiful supply of green branches to adorn their vehicle; decorated themselves and their guns with flowers; and raised a loud song of victory.

"You have kept me waiting, gentlemen hunters," said my wife on our arrival, "until my roast is spoiled. But, O me, what an immense supply of meat! We cannot make use of Nature's bounties; we must waste or destroy them."



We excused our delay as best we could, and the boys presented their mother with some sugar-canes, which were very graciously received. I explained to her that our provisions need not be wasted, and we determined to prepare them immediately for keeping.

Frederick proposed to entertain us with a dish of roast pig, after the Tahitian fashion. We accepted his proposition, but deferred its execution till the following day, as the curing of our hogs would leave us no time to think of anything else.

I gave orders for the collection of a quantity of green leaves and branches for smoking the bacon. Meanwhile, we lost not a moment. Ernest singed the hair off the pigs; Frederick and I cut them up; my wife salted the various portions; and the younger lads ran to and fro at our several behests. I piled up the legs and all the pieces of bacon, so that the salt might thoroughly penetrate them; and we afterwards basted the heap of meat with the brine that kept dripping from them, until the smoking or curing hut was ready. The heads and bones we gave to our dogs and jackal.

Next morning Frederick reminded me of my promise of the preceding evening, and asked permission to serve up to the family "a roast" after his fashion. I had already thought of this, and reserved a pig for special treatment. We dug a broad and deep trench in the ground; then Frederick seized the pig, washed it carefully, rubbed it inside with a coat of salt, and stuffed it with a mixture of chopped meat, potatoes, and herbs; but the addition of the salt and the force-meat was not warranted by the custom of the Tahitians, who are contented with the driest and most tasteless dishes, while the European will not touch them unless they are seasoned.

The trench, meantime, had been filled with combustible materials. We set fire to them, and Rudly and Fritz at intervals, as their elder brother ordered, threw in large stones, and left them to get red hot.

My wife regarded all these preparations with a somewhat sarcastic air.

"Fine cooking, in truth," said she, shaking her head; "a whole hog! Earth, ashes, and a fire of dried straw! I am of opinion,



gentlemen, that you will surprise us with a dish of extraordinary daintiness!"

Nevertheless, despite the little confidence she felt in the success of our enterprise, she could not help giving her sons the advice her experience suggested, and she assisted Frederick in giving his pig the most appetizing appearance possible, and in rendering it fit to figure on the board of the most fastidious epicure.

Our preparations being completed, the head cook enveloped his Tahitian roast in leaves and bark; cleared out a space among the embers large enough to receive it, covered it with the red-hot stones, and spread over the whole a thick layer of earth, to prevent the air from reaching it.

When she beheld this last ceremony, my wife dropped her arms, and in a tone of the most complete despair exclaimed,—

"Good-bye to your cooking, gentlemen! No more of it for me! It may do very well for savages, but don't for a moment think that a Swiss woman, who flatters herself she knows something about the theory of roasting and boiling, will ever touch the smoky, blackened, and detestable mass of grilled meat which will come out of yonder pit!"

However, Frederick did not despair, and learnedly appealed to all the eulogiums recorded by voyagers on the famous roast viands of the Tahitians, in proof of his assurance that he would soon extract from the burning trench a dish of superlative excellence. I interrupted his erudite exposition by recalling attention to the curing-hut which we had erected for the preparation of our salted meats. We had fully fourteen superb hams, and I wanted to dress them like the Westphalian, as a precious resource for our family during the rainy season. We therefore filled the hut with green leaves and damp boughs, which we set on fire, keeping it up for several days until the meat appeared sufficiently smoked.

But to return to Frederick's experiment. Two hours sufficed to cook his pig, and it was not without some astonishment that after he had removed its triple enclosure of earth, embers, and red-hot stones, we found ourselves regaled with a most delicious odour. I had scarcely counted upon anything really eatable, and lo, smoking before us, was a dish cooked "to a turn," with a



perfume of spices so admirably combined, that the whole would have done honour to the most skilful cook. Frederick triumphed; the good mother frankly confessed that she was beaten; and everybody was of opinion we ought to proceed without delay to the proof positive of eating, and that the roast pig should be solemnly tasted. We freed it from a few remaining traces of earth and embers, and commenced our banquet: it was pronounced delicious. I was most surprised at the odour of spices which impregnated it, but I arrived at the conclusion that it was owing to the leaves in which we had wrapped up the animal.

This mode of cooking was, for us, a new discovery, and one of no little importance, as it insured us an agreeable seasoning for our ragouts, which Nature would spontaneously renew every year. I endeavoured to refer the leaf we had used to its proper genus in the vegetable kingdom, and after some reflection determined it was the *Ravensara* of Madagascar, which naturalists call *agatophyllum*, or "the good leaf." I took care to burn a small quantity in our curing hut, where we had hung up the legs of pork, in the hope the latter would imbibe the aromatic savour which had so much delighted us.

For the three days occupied by our curing processes, I set out regularly with my elder boys to explore the surrounding country, while one remained with their mother to defend her and watch over the safety of our encampment.

In these journeys we gained no information of the boa's former habitat, but frequently came upon little shadowy nooks, very fair to see; and they never terminated without our making some new discovery, without our bringing back some useful article, to enrich our abode, and render our existence more agreeable. One day, having rambled in the direction of Bamboo Marsh, we returned with a supply of vessels of every size, made out of the reeds, which we had cut above and below their nodes or joints, and which were of so large a diameter that many of our little buckets—for such they really were—measured from eighteen inches to two feet in width. On the very same day we made another discovery; namely, that each node distilled a saccharine matter which crystallized in the sun, and which, when collected



in a suitable vessel, closely resembled rapé sugar. The reeds also furnished us with long stout spines, which served very well instead of nails.

These various articles, and especially the rapé sugar, gratified our good manageress exceedingly; and the buckets received that warm and admiring welcome which every housewife accords to utensils that will facilitate the domestic economy of the house. They were precious treasures, and it was not long before she found a suitable employment for them.

One of our excursions, I should add, was to Prospect Hill; but we found everything there in sad disorder. The enclosures were broken down, the flocks had fled; the apes had visited our settlement, and left indisputable memorials of their savagery. It became evident that we should be compelled to undertake a war of extermination against our steadfast and malicious enemies, who were clearly of a mind that we should enjoy no peace in any of our colonies. But I deferred the solution of this important problem to another time.

Meanwhile, we threw up a rampart of earth round the curing hut; we fortified it, to the best of our ability, with stones and branches of trees, to protect our winter stores against birds of prey and wild beasts; and we made arrangements to start, on the morning of the fourth day, on a further survey of the country. It was our intention to pass beyond the defile which opened from the quarter we had for the last two years inhabited into an entirely unknown district, whither we had penetrated on but one occasion, and had nearly fallen victims to a herd of buffaloes.







## CHAPTER X.

Groves whose rich trees wept odorous gums and balms.

MILTON.



LIKE the lark, we rose with the sun; and after about two hours' marching, halted within gunshot of the defile which separated the two districts; a position which appeared to me eminently favourable, the pine forest and the mountain forming a natural rampart for our little camp. Moreover, we had reached a considerable elevation, whence the eye included a wide range of prospect, and easily surveyed the surrounding country.

"What an admirable position!" exclaimed Frederick; "here we might easily defend ourselves against any hostile attack. If you will take my advice, father, we shall establish a post here."

Rudly, who, according to his laudable custom, had not paid the slightest attention to anything passing around him—which, however, did not prevent him from taking a part in the conversation—caught up his brother's concluding words, and confounding a military *post* with the useful institution for delivering letters,—

"A post!" he cried; "and for what countries are we to receive letters?"

"For Sydney, Melbourne, and New South Wales," I answered, gravely.

My reply attracted the attention of Fritz, who asked me why I



had named these particular places,—did I think we were really in that part of the world, or had I only mentioned them at hazard?

"Every time," said I, "that I have consulted the captain's charts, I have come to the conclusion that our island must be situated in the Australian waters. The leading circumstances of the shipwreck, the route previously followed by our vessel, the heavy tropical rains, the productions of the country, the sugar-canes, the spices, the palm-trees, all concur to strengthen me in that opinion. But wherever we may really have been cast away, we still belong to God's great family, and Him we must thank for our preservation, and the treasures He has daily lavished upon us."

It was Frederick's anxious wish that, before quitting this locality, we should build, as a memorial of our visit, a fortress after the Kamtschatdale fashion, which simply consists of a platform erected upon four pillars, at such an elevation from the ground as to defy the attacks of wild beasts. Before entertaining his proposal, I deemed it advisable to examine the neighbourhood more closely; but in our survey we met with nothing more formidable than a couple of *margais*, or wild cats, which darted out of the bush where they had been concealed, and were lost in the forest before we had time to raise our guns.

The rest of the morning was devoted to various labours needful for the safety of our encampment. Then we dined; but the heat was so oppressive that we found it impossible to resume our march, and deferred until the following day our excursion into the savannah.

The night passed undisturbed. We rose with the sun, and in a few minutes had completed our preparations for departure. I took with me my three eldest sons, as on penetrating into an unknown region I wished our *force* to be as strong as possible. The reader will laugh, perhaps, at such an expression applied to an imposing army of four persons, two of them very young boys, another only seventeen years old, and one a man. Nevertheless, this army represented our entire military resources. Fritz and his mother remained in charge of the baggage. We breakfasted, filled our



game-bags with provisions, and took leave of our dear manageress, who saw us depart with feelings of keen anxiety.

We traversed the defile at whose extremity we had formerly raised a palisade of bamboos and thorny palms. Our barrier had ceased to exist. The posts were scattered about in all directions, and we recognized in the sand the marks of the boa's passage, whence we concluded that the monster had made its way from the savannahs into our quarter of the island through this very defile. The storms of winter, the torrents fed by days of heavy rain, the apes, the wild hogs, the buffaloes, and, perhaps, other and far more terrible animals,—all seemed to have united in destroying the first structure raised by man in the region where they had formerly reigned as undisputed lords. I thereupon conceived the idea of building a barrier of far greater solidity, which should be proof against the fury of the elements and the assaults of wild beasts; but as there was no need that the work should be immediately begun, I deferred it to a more convenient opportunity. We had first to explore the entire savannah. Emerging from the defile, we therefore set foot on what was, for us, a *terra incognita*—an unknown land.

Rudly quickly recognized the place where we had captured our buffalo, the river which divided the plain into two parts, and whose banks were clothed with a prodigality of vegetation.

We followed its course for some time, and found the grotto or cave where my son had entrapped the young jackal. Then, as we turned aside from its bank, we perceived that the appearance of the country visibly altered; vegetation disappeared; and we found ourselves in the midst of an immense plain, whose boundaries were lost in the far horizon, beyond all hope of our attaining them. The sun shot its burning arrows direct upon our heads; the sand was scorched and fiery; in a word, the desert was before and around us, a desert without a tree, a sandy waste, where two or three geraniums, dried up and withering on their stems, and a few grasses, contrasted singularly with the arid soil. In crossing the stream we had filled our gourds with fresh water; but the heat of the sun had so warmed it that we were unable to drink it, and were fain to endure our thirst.



"What a difference between this dreary wilderness," said Rudly, with a sigh, "and the beautiful scenery where we encountered the buffaloes!"

"This is Arabia Petræa—Arabia the Stony," observed Ernest.

"If ever there were a land accursed, it is this!" added Frederick, energetically; "all the poisons of the New World might have grown here in company; the place is admirably suited for them."

"It is a volcano," cried Ernest again, "for I feel my feet burning; we walk on red-hot iron."

I endeavoured to re-animate the courage of my children.

"Patience!" I exclaimed. "Patience! Nothing is obtained without work; nothing won without suffering. '*Ad angusta per angusta*,' says the Latin proverb,—through difficulties to triumphs. See, as we advance, the plain grows less monotonous. Already we can distinguish a hill rising at no great distance from us. Who knows? On the other side may lie a new Eden, where we shall find freshness and repose."

At length, after two hours' weary walking, we reached the foot of the hill which for some time had been visible. We were so fatigued that we could not climb its rocky acclivity to reconnoitre the country lying beyond. We threw ourselves down in the shade, utterly exhausted. Even our dogs were overcome, and stretched their limbs by our side. We then cast our gaze over the wide space we had traversed; we were isolated in the centre of the desert; and the river, which we could still perceive, was defined upon the horizon like a thread of silver amid the verdure which clothed its banks. It was the Nile, seen from the summit of a mountain, in the heart of the burning plains of Nubia.

We had scarcely been seated ten minutes, before Master Knips, who had accompanied us in our excursion, suddenly quitted us, making the most comical grimaces, and disappeared along the rocky path. We concluded that he had detected the neighbourhood of some troop of monkeys, or that his gormandizing instinct had revealed to him some hidden dainty. We suffered him to go where he would, but our dogs, and Rudly's jackal, followed him.

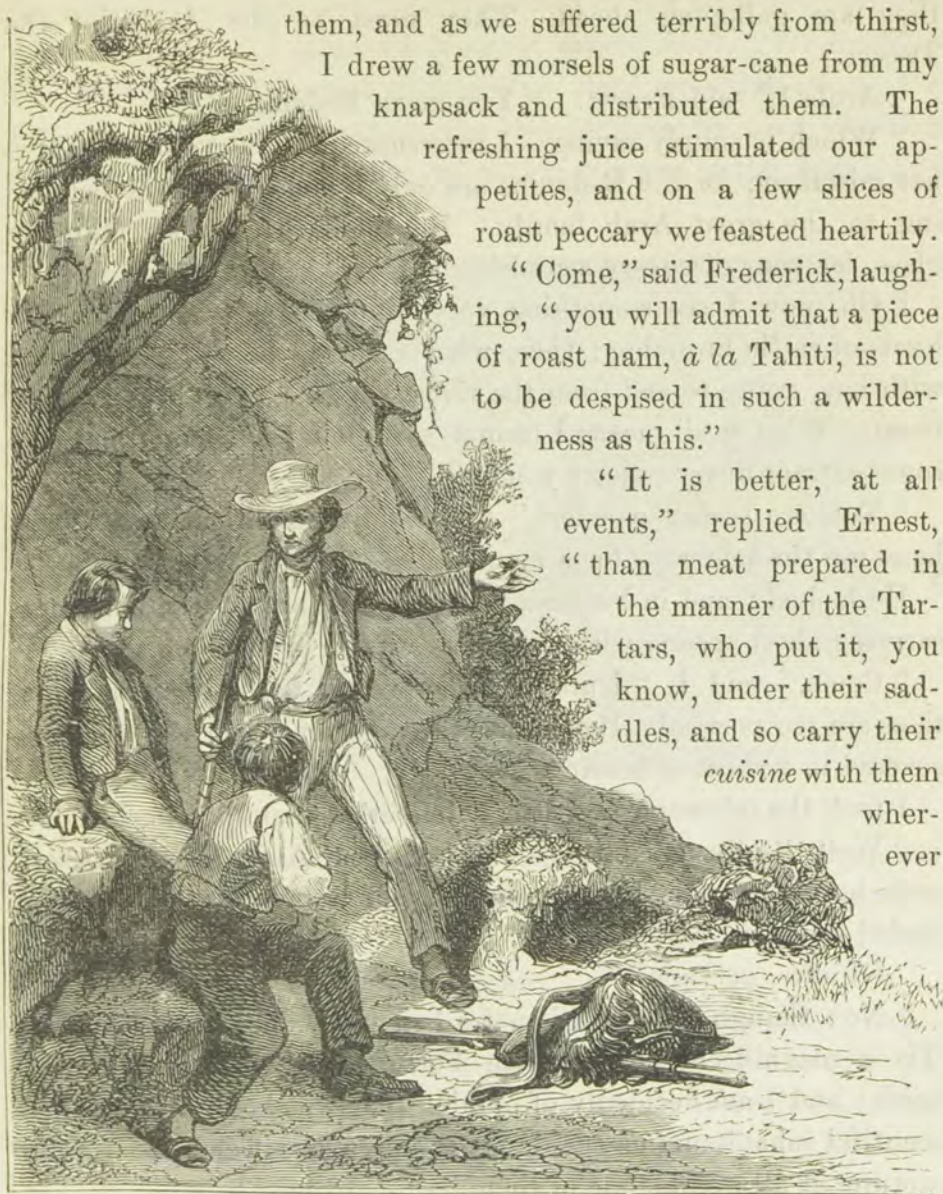
We were still too exhausted with heat and fatigue to pursue



them, and as we suffered terribly from thirst, I drew a few morsels of sugar-cane from my knapsack and distributed them. The refreshing juice stimulated our appetites, and on a few slices of roast peccary we feasted heartily.

"Come," said Frederick, laughing, "you will admit that a piece of roast ham, *à la Tahiti*, is not to be despised in such a wilderness as this."

"It is better, at all events," replied Ernest, "than meat prepared in the manner of the Tartars, who put it, you know, under their saddles, and so carry their *cuisine* with them wherever



they may betake themselves."

This bit of erudition originated an interesting discussion; but while I was explaining my reasons for disbelieving this story—which, however, is accredited by most travellers—Frederick, whose sharp eyesight was always discovering things no one else could catch a glimpse of, rose with a sudden panic.

"What do I see?" he exclaimed. "Here are two horsemen bearing down upon us! Now a third has joined them, and



they are galloping ahead. They must be the Arabs of the Desert."

"Arabs!" said Ernest. "You mean Bedouins."

"Which is simply saying," I interrupted, "that your brother is not mistaken; for the Bedouins are only a nomadic people belonging to the great Arab family. But hold, Frederick; take my glass, for your discovery astonishes me."

"Oh, now I see something very different! I can make out herds of cattle browsing; then, what seem to be waggons loaded with hay, going to and from the river. Now I have lost sight of them. What it all means I cannot say; but I am sure there are some extraordinary objects yonder."

"You are seeing wonders," said Rudly, impatiently. "Pray, hand me the telescope for a moment."

He looked; and in his turn declared that he saw the horsemen, carrying short spears, with streamers waving from them.

"Come," said I, "I mistrust the eyes of both; your imaginations are too poetical. Remember the monster which you once discovered in a shoal of herrings."

I took the telescope, and after a deliberate examination, I said,—

"Well, Rudly, what do you think your Arabs of the Desert, your horsemen armed with spears, your wandering herds, your loaded waggons, really are?"

"Giraffes, perhaps?"

"No; though the guess is not a bad one. They are ostriches. 'Tis a magnificent chase which Fortune has placed within our reach; and I am decidedly of opinion that we should not let these beautiful inhabitants of the desert escape without endeavouring to capture, at all events, one of them."

"Ostriches!" exclaimed Frederick and Rudly together. "Ho, ho! what luck! We will tame one, and its feathers will be a splendid ornament for our caps."

"Yes," replied Ernest, gravely; "the feathers will be a splendid ornament *when* we have captured the bird which bears them!"

Meantime the ostriches approached, and we had to consider the best means of entrapping them. I thought the simplest plan was to lie in ambuscade, and take them by surprise. I therefore



dispatched Frederick and Rudly in quest of the dogs and monkey, while Ernest and I sought a place of concealment. We found a shelter behind some great clumps of a plant growing among the rocks, which I recognized as the *Euphorbium*, or what chemists call *wolf's bane* (*lait de loup*), whose juice is one of the most active of the poisons of the vegetable world.



THE OSTRICH HUNT.

Rudly and Frederick returned with our hunting companions, who had made good use of the time they had been gone, and, as we saw from their dripping skins, had contrived to quench their thirst and enjoy the luxury of a bath.

The ostriches having come within sight, I made out that the troop consisted of four females and one male; the latter being recognizable by the long white feathers which adorned his croup. We immediately lay down behind our leafy screen, holding in our dogs, lest their natural impetuosity should spoil our stratagem.

The birds continued their advance, while we discussed the ordinary manner of capturing ostriches.

"Get ready your eagle," said I to Frederick; "for if our legs and those of our dogs should fail, we must have recourse to his wings."

"Do ostriches run so very swiftly?" inquired Rudly. "At all events, Frederick and I are not snails; and as for Ernest, has he not gained the prize for running?"



"Oh," said I, "Ernest's legs, good as they are, would be of no use; the ostrich can outstrip a horse at full gallop."

"How are they caught, then? I have seen pictures of ostrich-hunting, and the huntsmen are always represented on horseback."

"True; but it is rather by stratagem than by the speed of their horses that they succeed. This is how they manage: The ostrich cannot be attacked in front or rear, but only from the side. When the bird is pursued it describes a circle of more or less extent, always returning to the point from which it started. The hunter, therefore, confines himself to the task of limiting as much as possible the circumference of this circle. For this purpose he stations himself on the bird's side or flank, follows it, presses it close, harasses it, and when it is exhausted it falls into the hunter's hands. But as it sometimes describes a circle of great extent, and one horse would be unable to tire it out, the hunters provide themselves with relays to keep up the chase; and thus it happens that a single ostrich sometimes tests the energies of a whole caravan."

"Is it true," asked Ernest, "that the ostrich will hide its head in the sand or behind a stone, and because it cannot *see*, thinks it cannot be *seen*?"

"To answer you I should require to know what passes in an ostrich's head; and I do not think those writers who first ascribed this gratuitous stupidity to the ostrich have ever possessed any well-determined data respecting its intellectual faculties. It is much more probable that if it hides its head at the approach of danger, it is in obedience to the instinct of all creatures to defend, as far as they can, the most sensitive part of their bodies, than with any idea of rendering itself invisible. It may be, however, that the ostrich, by thrusting its head into the sand, seeks only a *point d'appui*—a leverage which will give it more force to resist its enemy, and deal the horses attacking it in the rear a succession of well-planted kicks. For my part, I believe the bird has been calumniated, and that the fable transmitted from generation to generation is wholly baseless."

I now perceived that the ostriches had recognized our scent. They hesitated to advance; but as we remained immovable in our hiding-place, they would probably have mistaken us for stones, and



advanced right upon us, had not our dogs, whom we had restrained with difficulty, broken loose from our grasp. Barking frantically, they threw themselves upon the timid birds, who disappeared with a rapidity comparable only to a flight of feathers impelled by a strong wind. Their feet did not seem to touch the ground; their expanded wings, slightly bent, might be likened to the sails of a ship; and the wind, by supporting them, increased the extraordinary swiftness of their course. I then gave Frederick orders to unhood his eagle. The noble bird immediately clove the air like lightning, overtook the male ostrich, pounced upon it, and so



AN EAGLE ON THE WING.

vigorously attacked it that the gigantic animal soon rolled in the dust. The dogs and jackal hastened up; and when we arrived the ostrich was past all chance of rescue, and died of the numerous wounds inflicted by our ferocious confederates.

This deplorable termination of our chase grieved us exceedingly; but the evil being beyond remedy, we contented ourselves with saving what we could. We drove off the eagle and jackal as the most dangerous of the victors, stripped the unfortunate bird of the snowy feathers which adorned its tail, and placed them boastingly in our much-worn and dilapidated caps, where these rich and sumptuous plumes had a singular effect, though the shadow they cast rendered the heat of the sun more tolerable.

Frederick seemed never weary of admiring the gigantic proportions of the dead ostrich.



"What a pity," he exclaimed, "that so splendid a bird should have been slain! How well it would have figured among our domestic animals!"

"How," said Ernest, "can so large a bird find sufficient nourishment in the desert?"

"You are influenced," I replied, "by a European prejudice. What we call a desert, so far as man is concerned, is no desert as regards all other animals; and the barrenest plains invariably produce some scattered plants, palm-trees, and turf, which suffice for the maintenance of the creatures inhabiting them. Moreover, the ostrich resembles all the animals of unproductive countries: it is an extremely frugal bird, and capable of enduring hunger easily. Finally, of one thing be persuaded, my dear son; that the Divine Author of Creation has taken care that the creatures He plants in the desert shall no more perish of want than those He places in the most fertile countries, on the smiling banks of rivers, whose waters carry richness and abundance wherever they penetrate."

On this subject our conversation was prolonged for some time. We noticed the sharp points at the end of their wings, which act as spurs to quicken their march when they are pursued. I confuted the false notion which my sons had picked up from some book of travel, that the ostrich occasionally flings stones or sand at its pursuers.

"The same might be said of the horse," I remarked, "for he, as he gallops, dashes up stones and mud along the roads he travels; and yet no one has thought of attributing to him the singular kind of faculty attributed to the ostrich."

Frederick inquired whether the bird had any cry. I told him that in the night it gave utterance to a kind of plaintive moaning, and at other times to a loud roar not unlike that of the lion.

While we were thus conversing, Rudly and Ernest, in following the jackal, had made a discovery, and returned to apprise us of it, waving their plumed caps in the air to attract our notice.

"A nest!" they cried; "an ostrich's nest! Come quickly!"

And, indeed, there *was* an ostrich's nest; if that can be called a nest which is simply a hole dug in the sand. We found about



thirty eggs, each as large as an infant's head, arranged symmetrically in the interior.

"Take care," I cried to my hasty lads, who were about to seize the spoil; "take care you do not disarrange them, or disturb the order in which they are placed. If you do, the female will not return to her nest."

I then asked Ernest how he and Rudly had lighted upon this discovery. It seemed that Ernest had noticed that the last ostrich which fled before our dogs had risen suddenly from the ground, and he therefore concluded she was probably engaged in the work of incubation. He made known his opinion to Rudly; and the two, accompanied by the jackal, started in search of the nest. The animal's instinct proved unexpectedly serviceable; but as he had first sighted the eggs, he rewarded himself by breaking one, out of which emerged a chicken, only to be immediately devoured. This recital induced me to suggest to Rudly that his pupil's education was not yet completed, and that he should correct his savage ardour with a few whippings.

My sons wished to take the eggs, and hatch them, they said, by exposing them to the sun during the day, and by covering them over at night with the hottest materials they could find. But I pointed out to Frederick that as each of the eggs weighed fully three pounds, the nest would weigh nearly one hundred, which, as we had neither beast nor vehicle, we could not possibly transport across a desert where we had with difficulty dragged along ourselves, our guns, and our game-bags; and that it was doubtful, moreover, whether we could satisfactorily substitute a factitious heat for the mother's influence. But as my children ardently pressed their proposal, we came to a compromise, and it was resolved that each should modestly take a single egg, which might be carried in a handkerchief. But this additional burden was soon found extremely onerous; and my boys, had they dared, would willingly have abandoned all hopes of young ostriches to get rid of the eggs. They changed their load from one hand to the other, with every indication of ennui and fatigue. At last I came to their assistance, advising them to cut some twigs from a species of low pine which throve about the rocks, and to make use of them



in carrying their eggs, just as the Dutch milkwomen carry their milk-pails. Each balanced his handkerchief as well as he could at the end of a stick, and we resumed our journey. My plan succeeded famously, and the boys made no more complaints.



In due time we reached the border of a small morass, which seemed to be the gathering-ground of several springs issuing from the cliffs, and uniting here into one channel. We recognized the traces of our dogs and ape, and found that they had enjoyed their refreshing bath in this convenient locality. In the distance we perceived numerous herds of buffaloes, monkeys, and antelopes; but they were too far

off to molest us. Nowhere was any sign of the serpent visible, nor anything to suggest the idea that it had either sojourned in or passed through this district.

Halting on the outskirts of the morass, we took our dinner; and after an interval of repose, having filled our empty gourds with fresh water, prepared to set out, when Rudly's jackal disinterred from the sand a round object, which seemed like an ungainly lump of moist earth or clay. I threw it into the water to cleanse it, and was astonished to find that what I had taken for some unknown root was really a living creature—a turtle of the smallest species, about the size of an apple, which began to crawl away from us.



"Why, I thought," exclaimed Frederick, "that turtles lived only in the sea. How has this one got here?"

"Who knows?" said Ernest: "perhaps there has been a shower of turtles in this desert. The Romans have recorded a shower of frogs."

"Stop, stop, professor!" I rejoined. "Your irony is no proof of your knowledge, for, as far as I can judge, you seem ignorant of the fact that there are land and freshwater turtles of this family; and not only do you find them in the neighbourhood of swamps, but in gardens, where they prey upon snails, worms, and all kinds of insects."

"Well, then," remarked Ernest, "we had better carry some to mamma to cleanse her garden of its destructive vermin, and we can also put a specimen in our natural history museum."

Rudly's jackal all this time was scratching up the sand, and we soon collected a dozen little turtles, of which I took charge in my game-bag. Frederick then returned to the subject of turtles, and their different species.

"These," I said, "are generally found in the alternately dry and marshy plains of the Cape of Good Hope. In the summer, when the sun converts the country into a breadth of dry sandy wilderness, they bury themselves several feet deep in the sand, emerging at the return of the rainy season to enjoy the freshness of the air. Thus these animals resemble numerous European species which spend a portion of the year underground. Frogs, for instance, embed themselves in the mud, and there, at a depth of several feet, hybernate in security. And in our Swiss mountains do not the marmots bury themselves in the recesses of their burrows and sleep through all the winter?"

We quitted the borders of the pool, and instead of retracing our steps, followed for some time a runlet which issued from it, and brought us back to the cliff where we had formerly rested. It was a delightful route compared with any we had previously taken in the savannah, for it was overarched with leafy trees and surrounded with blooming verdure; in truth, it was an oasis in the desert, and we showed our appreciation of its beauties by christening it





*The Green Valley*  
We would gladly have bestowed a more pompous appellation, if that would have been any measure of the pleasure we had derived from it.

We soon lost sight of it, and re-entered the desert. The heat, however, was not so intense. Whether our rest had restored our enfeebled energies, or the thought that we were travelling towards a secure asylum rendered the march less

wearisome, certain it is that on our return we progressed easily, and neither sighs nor complaints were heard. Our ostrich's eggs were the only capture we had made; but it was not our fault if game had failed us. As we had remarked that the animals of these regions were often more afraid of our dogs than of us, we had taken the precaution to hold in leash our faithful but too impetuous companions. Frederick led Braun, Ernest Falb, I took charge of Turk, and Rudly of his jackal. As for Juno, she was honoured with Master Knips as her rider, and therefore, having less fear of her escapades, we let her go free.

We had arrived within half-an-hour's march of the Jackal's Cave. Rudly and Frederick halted a moment to shift their burdens; I stopped with them; and Ernest continued his journey, followed by Falb.

"Our philosopher is in a hurry to gain the cool shades of the



grotto," said Rudly, laughing, "and starts on ahead at so brave a pace just that he may be the first to rest."

He had scarcely uttered the words when we were startled by a shriek of distress. It was Ernest's voice. Then came two very distinct growls, to which our dogs replied with a howl of alarm. Almost immediately Ernest reappeared, running with all his might, his face pale, his voice choked with terror.

"The bears! the bears!" he cried; "they are following me!"



A FIGHT WITH BEARS.

And the poor boy fell into my arms, more dead than alive. I had no time to reassure him or rouse his courage, and felt a sudden shudder thrill through my frame when an enormous bear came in sight, quickly followed by a second.

"Courage, my boys, courage."



I could say no more, but seized my gun, loaded it, and prepared to give the enemy a warm reception. Frederick followed my example, and, with a courage and coolness beyond his age, placed himself by my side. Rudly also took his musket, but remained in the rear, while Ernest, unarmed, for in his fright he had dropped his gun, retreated still further.

Our dogs meanwhile had rushed to the attack, and grappled gallantly with their terrible adversaries. We fired together, and though our shots did not bring down the enemy, they nevertheless made their mark. One bear had his jaw smashed, the other a shoulder broken. The struggle was not ended, however; only the first could no longer bite, nor the second strangle us. Our trusty companions accomplished prodigies of courage and intrepidity: they fought like men; they rolled in the dust with their opponents, whose blood reddened the sand.

We would fain have delivered a second volley, but were afraid of killing or wounding one of our dogs. In the spirited combat which had taken place it was impossible, at our distance from it, to fight with sufficiently exact an aim to hit an enemy without injuring a friend. We resolved to advance, and, when within four paces, we discharged our pistols. Their reports were succeeded by a howl of rage and anguish which made us tremble; but the two monsters were prostrated, and victory was ours.

"A good work well done!" said I; "let us return thanks to Heaven, which has once more saved our lives."

We remained for some time mute with astonishment before our two terrible adversaries. Our dogs, covered with blood and wounds, still tore them with their eager teeth. Afraid of a feint, and to satisfy myself that they were really dead, I fired a pistol into each one's heart. Rudly, who had preserved a cheerful countenance throughout the engagement, then raised a song of triumph, and brought up poor Ernest, still trembling in every limb.

I desired him to tell us how he had made the discovery of these formidable foes. He confessed, with tears in his eyes, that he had hurried on before us to reach the grotto first, where he had intended to conceal himself, and frighten Rudly by imitating a bear's growl.



"I thought I should have died of fear," said he, "when I saw my wicked scheme so fully realized; it seemed as if God wished to punish me immediately for my fault. How I managed to return to you I cannot tell, for all my strength seemed suddenly to fail."

There was no need to reprimand him, he was so deeply and sincerely penitent; but I profited by the opportunity to impress upon my sons the dangerous character of these practical jokes, which, though intended only to excite laughter, sometimes lead to the most pitiful results.

"If we have not found the serpent's nest," I added, "we have not the less accomplished a good work for the security of our plantation; these two monsters would have caused us very serious anxiety."

Rudly here observed that the presence of bears in so hot a region as that which we inhabited was an extraordinary circumstance.

"Nor do I well know how to explain it," said I; "for my knowledge of natural history is not sufficient to determine if those two bears belong to the European genus, or to that of North America, or to the race sometimes met with among the wilds of Tibet."

My boys now stood contemplating the carcasses with mingled terror and admiration. They examined the large and solid teeth which bristled in their jaws; they raised the paws armed with such frightful claws; they drew out the yellow or tawny hair mingled with white spots. The conclusion they arrived at was, that we ought to consider ourselves very fortunate in having got quit of them so quickly and at so little cost. What signifies a past alarm when we can forget it in present victory?

I now inquired to what purpose we should turn our spoil.

Rudly thought we should convert the heads into a couple of helmets, calculated to render their wearers terrible to any enemy who might attack us. The less bellicose Ernest suggested that their skins would make admirable wrappers for winter use, or rugs, which, spread on the ground, would protect us from humidity.

It was too late, however, to think of undertaking any further work, and we resumed our homeward journey, first dragging the



two carcasses into the cavern, and covering them with boughs as a protection against carnivorous animals and birds of prey. We also decided on relieving ourselves of the weight of the ostrich eggs, and we buried them in the sand: it was the only way we could take care of them, and we should have gained nothing by carrying them further.

It was sunset when we rejoined little Fritz and his mother, who received us with demonstrations of the liveliest joy. A good fire and an excellently cooked supper greatly refreshed us, and restored our spirits. My little heroes then related the toils and triumphs of the day; and Rudly, if he had not done much, now made amends by boasting more than any one. My wife was much alarmed at our adventure with the bears; she could not hide the tears which gathered in her eyes when she thought of the peril we had incurred, and spite of my assurance that we should find the bears' flesh as good a provision as that of the peccaries, she had much difficulty in recovering her composure.

We found that Fritz and his excellent mother had not been idle in our absence. They had discovered on the banks of the streamlet a kind of rich oily earth, so fine and white that it seemed to me well adapted for making porcelain. They had also collected in buckets of bamboo, ranged along the rock, a sufficiency of water to supply the wants of our cattle; and, finally, by dint of patience and energy, they had contrived to accumulate at the entrance of the defile a quantity of the materials most requisite for the construction of my projected fortification.

I heartily thanked her for all her exertions. We had kindled a great watch-fire for our nocturnal defence, and our dogs, whose recent wounds we had washed and bathed with fresh butter, stretched themselves around it. Before retiring to rest I would fain experiment with the white clay, and fashioning a couple of bowls, I placed them in the centre of the crackling flames. I also lighted some torches to scare away wild beasts in case the fire went out. Then we withdrew under the sheltering roof of our tent, and sweet sleep, Nature's restorer, soon sealed our eyes.

It required incredible courage to draw ourselves from our beds next morning: after unheard-of efforts, however, we succeeded. I



found the clay pipkins thoroughly baked. The clay was porcelain, as I had suspected; not of the best quality, it is true, but only requiring a little additional preparation. We hurried over our breakfast; harnessed our beasts to the cart; set out in blithe spirits, and arrived without accident or circumstance at the cavern of the bears.

We found the entrance occupied by a throng of birds, who, from the arrangement and colour of the feathers round their necks, we supposed at first to be turkeys (*coque d'Inde*); but on a closer and nearer view, perceived they were birds of prey anticipating us in despoiling the two bears. They flew into the cavern with a thousand discordant cries, and soon returned carrying great pieces of flesh in their talons, which they retired some distance to devour. From their prodigious numbers we feared that our



THE CONDOR (*Sarcoramphus gryphus*).

work was taken out of our hands, and that their ferocity would leave only the bones of the formidable game we had slaughtered on the preceding evening. We knew not how to make our way into the cavern, for the plunderers seemed in no wise disquieted by our approach. Suddenly a great noise of wings was heard above our heads; a black shadow was outlined upon the ground; and lifting up our eyes we beheld another marvel—an immense bird, of astonishing size and strength, whose expanded wings seemed to cover in the air a space of fifteen or sixteen feet.

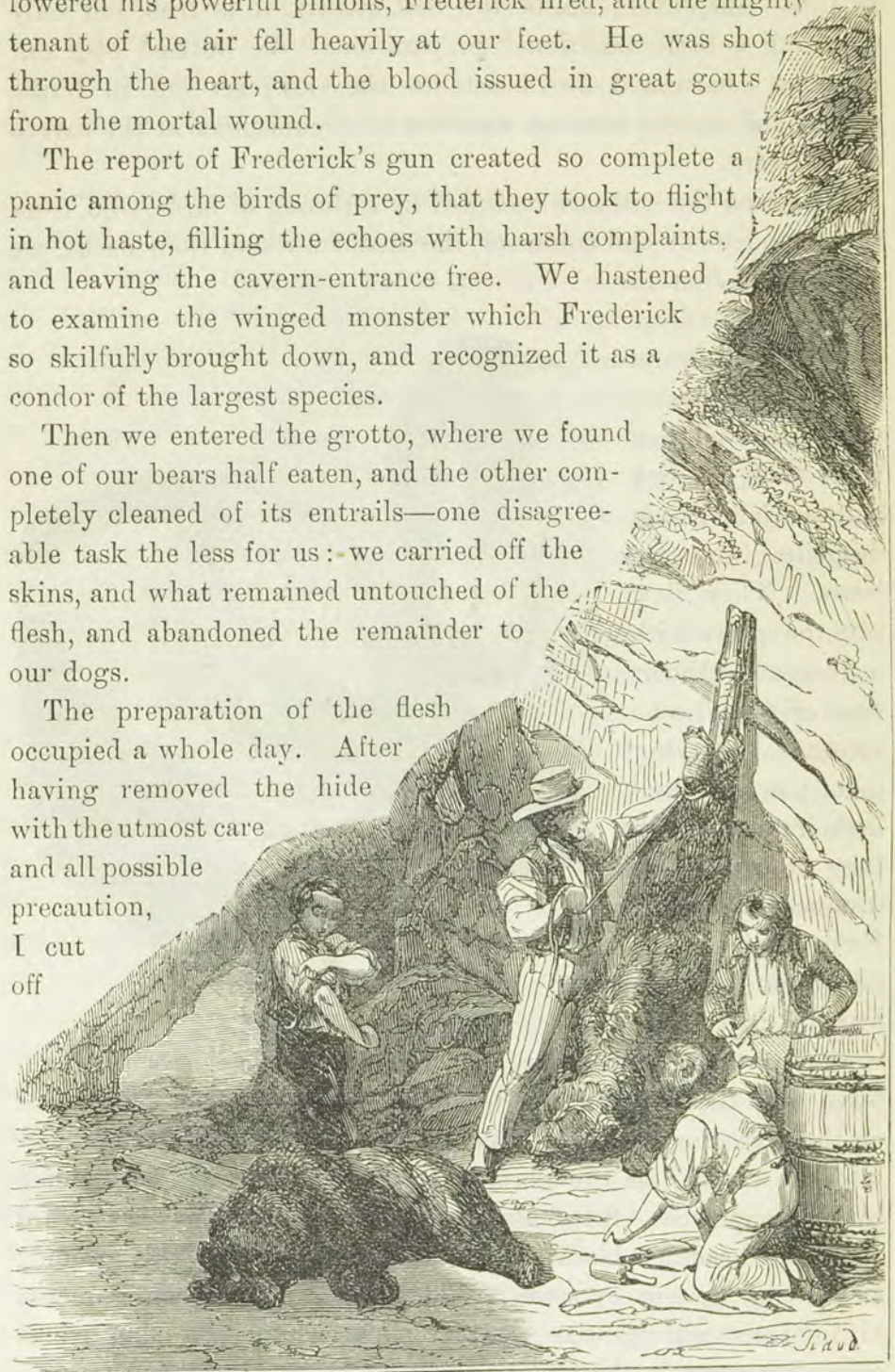


He, too, directed his course towards the cavern; but as he lowered his powerful pinions, Frederick fired, and the mighty tenant of the air fell heavily at our feet. He was shot through the heart, and the blood issued in great gouts from the mortal wound.

The report of Frederick's gun created so complete a panic among the birds of prey, that they took to flight in hot haste, filling the echoes with harsh complaints, and leaving the cavern-entrance free. We hastened to examine the winged monster which Frederick so skilfully brought down, and recognized it as a condor of the largest species.

Then we entered the grotto, where we found one of our bears half eaten, and the other completely cleaned of its entrails—one disagreeable task the less for us:—we carried off the skins, and what remained untouched of the flesh, and abandoned the remainder to our dogs.

The preparation of the flesh occupied a whole day. After having removed the hide with the utmost care and all possible precaution, I cut off





the hams, and then the feet, which I destined to make a dainty of the most exquisite character, according to the received opinion of European gourmands. Afterwards we cut up the rest of the flesh in long strips of about an inch in thickness, after the fashion of the ancient buccaneers, and exposed the whole in a thick smoke. The fat was collected and carefully preserved: my wife set a high value upon it, because, besides the use it would be in culinary operations, she knew that it might be eaten with bread as an excellent substitute for fresh butter.

We obtained about one hundred pounds of fat, including what the peccaries had yielded a few days before: this we stored up in bamboo vessels, which rendered its transport easy. To our dogs we gave the bony carcasses, and they were so well seconded by the birds of prey, which in a few moments gathered by their side, that in an inconceivably short time the two bears were reduced to skeletons so white, and so perfectly cleaned, as to be fitted for figuring in our museum. As for the hides, we washed them in salt water, and rubbed them with sand and ashes; and though our skill as curriers was very limited, we contrived to render them sufficiently supple without having recourse to the process of the Greenlanders, who prepare them, it is said, with their teeth!

I regretted that we were at a considerable distance from the spot where we had discovered the *ravensara*, whose bark and leaves had communicated so delicious an aroma to our peccary-flesh; but among the twigs and bushes collected by the boys I remarked a liana, or creeper, whose fragrance seemed familiar to me, and which proved to be *pepper*. This new addition to our stores I hailed with the liveliest rapture, and when I had convinced myself that I was not mistaken in its properties, we all set to work to collect the precious plant, and soon obtained a good supply both of white pepper and black.

This was, in truth, a treasure; both for our cuisine and for the preservation of numerous articles which the excessive heat of the climate always spoiled, whatever care we took in their preparation. The first application of our new discovery was made to the bears' skins, the hams, and the strips of smoked or *boucaned* flesh.



Next came the task of fitting our gigantic condor for a place in the museum. After stripping it of all its flesh, and powdering the inside of the skin with pounded pepper, we filled it with



PEPPER PLANT (*Piper nigrum*).

cotton and dry moss, deferring to some other time the work of giving the bird a suitable form and attitude.

These labours, however, were of too peaceful a character for my turbulent and restless young fellows. I perceived they were growing weary and dissatisfied from the quarrelsome and morose humour to which they at times gave way; and to remedy the evil, I resolved upon introducing some diversion into the monotony of our daily occupations.

I therefore proposed they should undertake by themselves an excursion into the savannah. The reader will readily suppose that such a proposition was enthusiastically received, and the prospect of full liberty of action, and of being themselves the masters of the caravan, did not count for nothing in the explosion of joy which followed.

Ernest refused to join in the expedition, preferring to remain with his mother and myself. On the other hand, Fritz showed so great a desire to accompany his brothers that I could not refuse him the favour.

Frederick, Rudly, and Fritz then saddled their steeds, which were peacefully grazing on the bank of the stream, and after formally saluting us, plunged gaily into the desert.

It was not without an emotion of pain that I saw them depart alone, abandoned to their own guidance. But I felt how important it was, in our position, to accustom my children at the earliest suitable opportunity to think and act for themselves. Some unforeseen accident might deprive them both of their mother and their father, and it was good they should occasionally



learn to do without our help. I placed full confidence in the prudence and sagacity of Frederick; I was satisfied he would watch over his young brothers; the coolness they had shown under very trying circumstances also reassured me; but I felt the need of some more certain support and consolation. I addressed myself to God, and grew calm, believing that the hand which had restored his sons to Jacob would also be stretched over mine to guide them safely through the desert.

I returned to our tent when I could no longer discern the receding figures of the three cavaliers, and my wife and I resumed our domestic tasks, while Ernest, tranquilly seated on the sand, was engaged in converting the ostrich eggs into useful vessels. We had satisfied ourselves, by putting these eggs into hot water, that the young which they contained had ceased to live. Ernest had bethought himself of an ingenious method for cutting these eggs in half without injuring them. He tied round them a cotton thread well-soaked in vinegar. The action of the acid on the calcareous shell hollowed out a circular line, or groove, which separated it easily into two portions. The pellicle underneath was, however, so stout that it could only be divided with a knife: it had all the elasticity and hardness of parchment.

We gladly turned from this operation to undertake one of a different character. When surveying the interior of the grotto, I had discovered different kinds of mineral products, and among others a stratum of asbestos, a kind of stony filament remarkable for its incombustible qualities; and among this asbestos a splendid block of talc, transparent as glass, which I did not despair of manufacturing one day into windows. Ernest assisted me in this labour with much intelligence, and we succeeded in detaching from the block a superb fragment, about two feet long, and as many thick. My wife, to whom everything that reminded her of Europe gave peculiar gratification, was delighted at this discovery, especially on my explaining to her the intended uses of the fragment, which was easily divided into layers or sheets as thin as paper.

This work occupied us the better part of the day. When evening drew near, we assembled round our hearth, where our



manageress was cooking, with all imaginable care and skill, two of the bears' paws, which had been long soaking in pickle, and whose appetizing odour, as it escaped from the caldron, promised a delicious repast. While waiting the return of our hunters, we engaged in a lively conversation.

Ernest's imagination was full of the marvels of the grotto, and the discovery we had just made did not diminish its value in his eyes.

"We ought," he said, "to turn this cavern into a second habitation, and fortify it *à la* Robinson Crusoe."

"What do you mean by that?"

"Why, you don't want either masonry or cement, but only trees planted in order, and so close to one another, that in time they grow up like an impenetrable wall."

"But while waiting until they grow up, and your wall is ready, how will you defend yourself?"

My objection was evidently "a poser" to the young philosopher, and while he considered how he should meet it, we heard behind us the clatter of hoofs, and loud shouts of joy and triumph: it was our hunters returning from the savannah. They soon arrived, and to spring from their steeds, remove their harness, and fasten them up, was the work of a moment.

Rudly and Fritz each carried on his shoulders a small kid, with its fore-paws tied together, and I could see that Frederick's game-bag was well filled.



KID (*Cupella*).

in his bag a couple of magnificent Angora rabbits, and an obliging

"Capital sport, papa!" cried Rudly, "and, I promise you, Thunder has behaved himself admirably. Oh, you should have seen him galloping across the desert, and raising clouds of dust to mark his progress. Frederick has got



cuckoo, who has introduced us to the finest and best furnished bee-hive I ever saw."

"Rudly has not told you all," said Frederick: "we have made prisoners of a whole herd of antelopes, and forced them to pass into our domain, where we can hunt them at our leisure, capture or tame them, as may suit us best."

"Well," said I, in my turn, "Frederick has not told us, and he forgets what he should put foremost, that God has been pleased to restore to their father three little fellows committed all alone to the hard mercies of the desert. Let us begin, my boys, by thanking Heaven for this new favour."

Then, turning towards Rudly, whose face was all swollen, "What means the sudden plumpness of those cheeks? Come, relate your adventures, for they seem to have been somewhat dangerous."

Frederick began:—

"I will tell you in their order all the events of the day. On leaving you, we took the direction of the Green Valley, and in a narrow gap, where some trees had formed a natural bridge, we crossed to the other side of the stream, and then pushed straight into the savannah. Some time elapsed before anything



THE CUCKOO (*Cuculus canorus*).



ANTELOPE (*Antelope dorcas*).



attracted our attention; our steeds still keeping up a rapid gallop, and the sun as yet not being high enough above the horizon to fatigue them. At length we descried two herds of small quadrupeds, but at too great a distance to distinguish their species. We knew, however, they must either be goats, antelopes, or gazelles; and, therefore, calling back our dogs, we kept them close by our sides, for we have remarked in our hunting expeditions that the wild animals are more afraid of the dogs than of us. We then resolved upon an attempt to make ourselves masters of this game.

"To increase the force of our attack I divided my forces, assigning to Fritz the line which followed the river, the centre to Rudly, and the right wing to myself, our object being to prevent the animals from dispersing over the mountains.

"We effected these movements without disturbing the herds, one of which even crossed the river, and as calmly as if they had



HUNTING THE ANTELOPES.

been alone in the savannah. The other remained immovable, and did not discover our presence until we were close upon them: the foremost then rose from the grass where they had been re-



posing, reared their long necks in the air, and their heads surmounted by small pointed ears. Their fellows imitated their example, and the whole troop were soon upon their feet. But now flight was impossible; we pushed our steeds to the gallop, and let loose our dogs; they seconded us so well that in a few moments the herd was driven across the river, into the defile which separates our territory from the savannah.

"But to have made them prisoners was not enough; we had to prevent them from effecting their escape. For this purpose we thought of several devices, which all, on consideration, proved more or less inconvenient. At length we hit upon this: to stretch across the entrance a long rope, ornamented with numerous rags and other fluttering articles, whose continued motion would sufficiently terrify our captives. We still carried the ostrich plumes in our hats, and these, with some fragments of our handkerchiefs, we furbished up into capital scarecrows."

"Wonderful! Capital!" I exclaimed, perceiving that Frederick paused to see what impression his clever stratagem produced upon me; "capital! But your scarecrow will answer only by day; you will require something else at night. However this may be, did you invent your ingenious method?"

"No; I borrowed it from Levaillant, who has described it in his '*Voyage au Cap de Bonne Espérance*.' And he says it is in this way the Hottentots detain in the vicinity of their huts the antelopes they have caught in the chase."

"Very good!" I exclaimed; "I am delighted that your reading is not lost upon you. You can now understand the importance of committing to memory the lessons which you meet with in good books. When you read Levaillant as an amusement for your leisure, you never thought you would be called upon to carry into practice, in a savannah of the New World, the Hottentot plan of capturing antelopes. But now," added I, "tell me about your rabbits, and especially what you intend doing with them. I suppose you do not destine them for your mother's kitchen-garden; they would commit such ravages that I am sure she would object to their company."

"Certainly; but I think one of the two islands included in our



little empire might receive them as settlers. Shark Island, for instance, would make a magnificent warren, where, without trouble, we should always find a good dish for our daily bill of fare, and fur for our head-coverings; the rat-skins, you know, papa, will not last for ever. It was with the view of founding a colony of rabbits I brought these two strangers home."



RABBITS (*Lepus cuniculus*).

"A good idea; and in that light we give them a cordial welcome. But how did you manage to catch them alive?"

"To my eagle is due the honour of their capture. It was he who, swooping down upon a troop of rabbits that fled before us, fascinated them, as it were, seized them in his talons, and brought them to my feet. The brigand was not content with this: after hunting for me, he hunted for himself, and devoured a third rabbit, while the others disappeared into their burrows."

By this time Rudly had grown impatient of his brother's long recital, and longed to introduce a word or two respecting his own adventures. I therefore called upon him in his turn.

"My turn," he exclaimed; "yes, I think it *is* my turn! Only I will tell my tale faster than does Frederick; like my Thunder, I will go over the ground at a gallop! While Frederick was detained with his rabbits, Fritz and I pushed forward. The dogs followed us, but suddenly darted across the plain, in pursuit of two animals, about the size of a hare, which had



risen from the thick herbage, and taken to flight with incredible rapidity.

"We set our steeds at a gallop to back up the dogs, and pursued the chase for about fifteen minutes. But the two fugitives grew fatigued; they were overtaken, captured, and strangled before our dogs could do them the least injury. And here they are," added Rudly, pointing to the graceful little animals which he and Fritz had carried. "I think they are young fawns."

"And *I* think they are antelopes," interrupted I; "but they will not be the less welcome to us on that account."

"Be it so," replied Rudly; "at all events our chargers did their duty nobly, and I think I may venture to assert that the huntsmen did not misbehave themselves. But this was nothing: we had scarcely resumed our march, before a kind of cuckoo perched right in front of us, with a mocking song which seemed intended to provoke us. It rose as we advanced, and at a little distance recommenced its strain. Fritz, who sees something marvellous in whatever may happen, said, laughing,—

"'Oh, one might think this was some prince enchanted by a fairy sent to guide us.'"

"'Bosh!' I replied; 'I am going to say a word to your enchanted prince,' and

I had already raised my gun, when Frederick made me observe, that as it was loaded with ball, I should probably lose my shot.

"So I lowered my musket, and we resumed our march. After awhile the cuckoo ceased to hop and sing, and we saw that it had



THE HONEY-GUIDE, OR INDICATOR BIRD (*Indicator*).



planted itself above a bees' nest very artistically excavated in the ground.

"On the subject of this unexpected find we held a council of war, discussing the safest plan of making ourselves masters of the treasure. Fritz requested permission to remain in the rear, declaring that his unfortunate encounter with the bees of Falcon's-Nest was too fresh in his recollection; Frederick, as commander-in-chief, declared that he would willingly give his advice, but that it was not for him to carry it into execution. It remained, then, for me to undertake the heroic enterprise. Armed with a match, which I found in my game-bag, and to which I set fire, I attempted to suffocate the bees by flinging it in their midst. But I had hardly carried fire and massacre into the abode of the peaceful insects before a horrid buzzing became audible: out flew the bees, rising in the air like a black cloud; and I was enveloped from head to foot. They assailed me and harassed me with frightful impetuosity; they clung to my hands, my face, and my hair; and it was with great difficulty I regained my steed, threw myself on his back, and galloped away for bare life. Some of my enemies followed me, and you see the honourable marks of the wounds which I received. As my brothers had prudently kept out of the way, they escaped without a scar. For my part," added Rudly, "I could never have believed so small a creature could have inflicted so much suffering."

"Well," said I, "look upon your adventure as a lesson in natural history, and try not to forget it. And now, go to your mother, for I see she is ready to apply some bandages which will relieve your pain."

We ceased conversing, in order to pay due attention to the rabbits and young antelopes. For their easier conveyance to Rock-House, I contrived a pannier or hamper of reeds, covered with a cloth, so that, though deprived of light, they might be able to breathe freely. We were uncertain where to station them; whether we should keep them in the neighbourhood of Rock-House, or abandon them on one of the islands of the coast. The boys would have preferred keeping such graceful animals near their own residence, but considerations of safety made us decide upon removing them to Shark Island.



Meantime, I could not help thinking on what Rudly had told us in reference to the strange bird which had led them to the hive. I knew it must be the honey-bird, or indicator, of zoologists; but, said I to myself, if this country is uninhabited, how could the bird recognize man? How could it know that they are as fond of honey as itself, and, as a reward for its guidance, always share with it the precious spoil? Was not its conduct a proof that we were not the first human beings who had trodden the soil of this apparently desolate island? Was, then, its interior inhabited?

These reflections, which my imagination greatly extended, were all of the highest importance.

I said to myself that the instinct of the bird might be, perhaps, that law of nature which impelled it to obtain the assistance of a being stronger and more skilful than itself in the acquisition of a treasure it desired; but all my reflections led me to the same conclusion, that it was most necessary we should penetrate into the interior with extreme precaution. I resolved, moreover, to erect on the coast a kind of stronghold for our defence, and for this purpose I selected Shark Island. It seemed to me that a solid structure which from thence would command the coast about Rock-House, and which might be mounted with the two cannon we had at our disposal, would offer us a retreat in case of necessity, and permit us to repel successfully an invasion from the interior, if any such were ever attempted.

After we had ministered to the wants of our antelopes, I wished to convince my young sportsmen that we had lost no time during their absence, and I showed them with pride the block of tale we had loosened from the rock. But their admiration was soon effaced by the invitation our good mother addressed to us—an invitation to a supper of peculiar delicacy. The principal dish was a bear's paw! Yet, despite its savoury steams, at first it was very indifferently received, one of us—I do not remember whom—having made us remark its resemblance to a man's hand. Thereupon our laughter-loving Rudly burst out, in a loud voice, with the words of the ogre in the story of "Jack and the Beanstalk:"—

"Fee-fo-fum, Fee-fo-fum,  
I smell the blood of an Englishman."



This sally made us laugh, and gaiety and hunger combined prevailed over prejudice. I attacked the viand, and we all discovered it to be the most delicious meat we had ever tasted. My wife herself did not spare her eulogiums upon this *ragoût*, which, I may add, she had prepared with particular attention.

After supper we lighted our torches and kindled our fires; renewed the supply of combustibles in the curing hut, and repaired to our tent to enjoy a profound and undisturbed repose.

At daybreak I was on the alert, and aroused my sons. Our labours now were almost completed; the bears' meat was smoked, the bamboo vessels filled with fat, and the near approach of the rainy season warned us to return to our rocky home, where there



PALMS (*Phoenix dactylifera*).

was much to be done. I was unwilling to set out until we had made a final excursion into the desert we had just explored, and had ascertained whether a second visit to the ostrich's nest might not be more fortunate than the first. I was desirous also to collect the gum which must have, by this time, exuded from the incisions I had made in the euphorbia on the occasion of our former journey. And it was, therefore, to undertake this new excursion that I aroused at so early an hour my slumbering sons.

Desirous of performing our trip with all possible rapidity, I resolved that we would go "on horseback." Frederick gave up to me the onager, taking the foal for himself; Rudly and little Fritz

mounted their usual steeds. As for Master Ernest, his tastes daily inclined him more and more to repose. He had become the habitual guardian of his mother and our domestic hearth, and he



saw us depart without any sign of reluctance. He took the place of little Fritz in the kitchen, while he, on his part, felt proud at being associated with men in their most daring expeditions!

Accompanied by Turk and Juno, we took the direction of the Green Valley, and traversed the various scenes illustrated by memories of our last excursion;—the place where we had encountered the bears, the turtles' marsh, and the rock where Frederick had discovered the ostriches. To this rock we had given the name of the Arabs' Town, in allusion to the conjectures we had hazarded on the first appearance of the ostriches, whom we had gravely mistaken for a tribe of warlike Bedouins.

Fritz and Rudly put their chargers to the gallop, and I allowed them to indulge their fancy in this respect to the fullest extreme, for the plain was so level they could not get out of sight. I kept Frederick by my side to assist in collecting the red gum, which had exuded from the incisions made in the different plants, and had already coagulated in the sun. I had provided myself with a bamboo jar, in which I stored the little balls of solid resin.

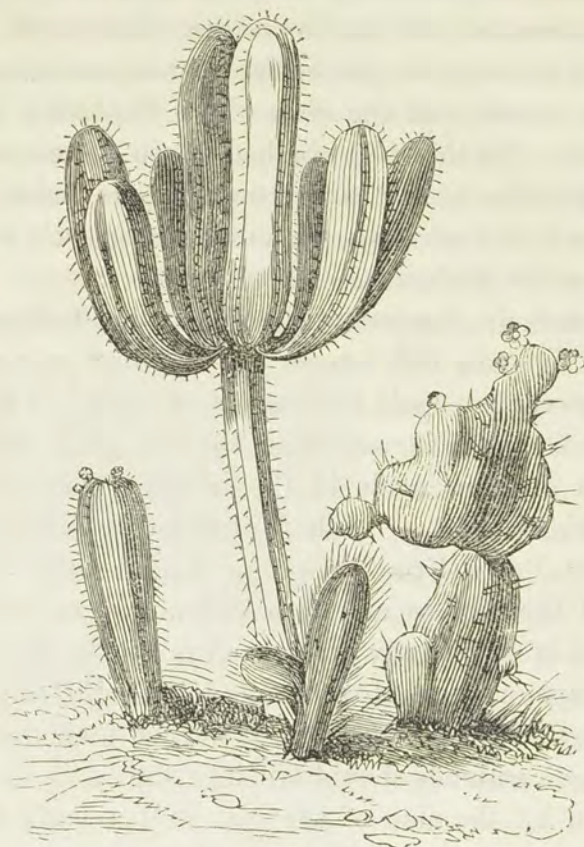
This gum is one of the subtlest and most violent poisons which Nature produces; but it principally grows, and is chiefly used, in the vicinity of the Cape of Good Hope. The inhabitants employ it to poison the springs where the wild beasts quench their thirst; but for fear the domestic animals should fall into the same snare, they usually excavate by the side of the real well a basin into which they conduct the water. Afterwards they cover up the natural watercourse with great stones, and the poisonous plant they throw into the artificial reservoir. They never suffer their flocks to approach a spring until they have carefully examined it; and if they detect any traces of the euphorbia on the sand, or perceive above the water a kind of light mist, which is a sure indication of the presence of the poison, they immediately drive them afar.

All these precautions occasionally fail; but the colonists nevertheless derive some advantage even from their failure; for if it costs them a few head of sheep or oxen, they are more than repaid by finding, on the banks of the streams, tigers and lions, hyænas and antelopes, whose skins become their spoil. The Hottentots enjoy



a further benefit—for they eat the flesh of the animals thus poisoned to death, only casting away the entrails.

Frederick asked why I so carefully collected such a stock of poison.



EUPHORBIA.

"I intend to make use of it," was my reply, "in destroying the apes which infest our quarters. It is a cruel method, no doubt; but they compel us, by their devastations and ravages, to have recourse to it. But we can also employ the euphorbia advantageously in preparing the skins of the birds or quadrupeds we wish to stuff; it will preserve them from corruption and the attacks of insects.

Finally, we can use it, if need be, for making blisters, whose action will be as powerful as that of cantharides. But great as are the advantages I hope to derive from this plant, it must not be the less an object of the most scrupulous precaution; and above all, we must guard against its becoming acclimatized in our vicinity, where the least mistake would entail fatal consequences."

Our two cavaliers had by this time almost disappeared in the savannah, and it was with great difficulty we could still trace their course by the clouds of dust raised by their rapid steeds. They had passed far beyond the ostrich's nest, to which we now directed our steps to ascertain if the eggs had been abandoned,



or if the females we had dispersed had returned to incubate them.

At this very moment four magnificent ostriches suddenly rose from the sand where they had been sitting. Frederick's first care was to get ready his eagle for combat; but to prevent it from repeating the deed of blood in which it had been the actor on our former expedition, he fastened up its beak, and thus rendered it comparatively inoffensive. Our dogs were likewise muzzled, and we halted, that we might not scare the advancing birds. We saw them, with their wings half extended, rush through the air with incredible swiftness. Whether they had not perceived us; whether they had mistaken us, as we remained motionless, for inanimate objects; or whether it was their terror at hearing in their rear the rattling hoofs of my two young scapegraces, who drove them towards us;—certain it is that they came straight in our direction until within pistol-shot.

I had, therefore, abundant leisure to examine them. There were three females and a male—the latter a little in advance of his companions, as if to force a passage and anticipate any danger. The feathers of his tail waved majestically behind him, and I saw that we had before us as superb a prey as heart of man could desire. When I thought the moment of attack had come, I seized my sling, and summoning to the task all my sleight of hand and exactness of eye, I launched it against the male ostrich. But instead of striking him on his legs, as I had intended, the balls of my string wound about his body, and I only succeeded in pressing his wings against his sides. This, however, considerably diminished his chances of safety; yet was not the victory complete, and the terrified bird wheeled abruptly round, and with the aid of his long legs fled rapidly away. His companions did not follow in the same direction, but turned off to the right and the left.

We allowed them to escape, all our attention being concentrated on the male bird whom Frederick and I hotly pursued. He had begun to fatigue our steeds, when fortunately Rudly and Fritz contrived to intercept his retreat.

Frederick then unhooded his eagle, and directed it against the ostrich; whereupon a terrible combat ensued—Rudly and Fritz



harassing him on one side, Frederick and I on the other, while the eagle attacked him with overpowering impetuosity. He felt the latter above his head; he heard the loud beat of his strong wings; and his instinct undoubtedly warned him that above the circle we described around him hovered an enemy whose beak and talons never forgive! The eagle, for his part, was evidently troubled at finding his beak enthralled in ligatures of cotton; he appeared inspired with fury; and his movements were so violent that with one blow of his wing, dealt at the ostrich's head, he made that mighty bird totter like a drunken man. Rudly availed himself of the opportunity to hurl his sling, which he did with so much address that it coiled several times round the ostrich's legs, and brought him to the ground. We raised a shout of triumph. The eagle was recalled and hooded; and we pounced upon the vanquished bird, who was struggling violently, to complete his capture before he broke loose from his bonds. He kicked so vigorously, and offered so furious a resistance, that we hardly knew how to approach him. It occurred to me that if we could deprive him of sight we should probably subdue his frenzy; and, accordingly, we threw over his head my hunting bag, my waistcoat, and everything else that we could spare. I had discovered the secret of his strength, as Delilah did of Samson's. No sooner were his eyes covered than he became calm and obedient, and permitted us to surround him with the ropes and fastenings we judged sufficient to secure us against any further outburst. I first passed around his body a strong broad belt of sea-dog's skin, and on either side I fastened a couple of straps to guide him; I also fastened a stout cord about his legs, loose enough for him to walk, but at the same time not so loose as to permit him to break into a gallop and escape from us.

"Capitally done!" cried Rudly when we had finished our task; "the creature is captured; but how shall we lead it, and, above all, how shall we ever tame such a giant?"

"Wait," answered I; "the most ferocious nature submits to the influence of education. Do you not know that the Indians tame the elephant when fresh from his native forests, and that by a very simple method?"



"What is that method, papa?"

"They place the wild elephant between a couple of tame ones; they deprive him of the use of his trunk by fastening it tightly; and they charge the two tame animals with the duty of instructing their savage companion in mild and obedient manners. A driver armed with a sharp-pointed stick assists them in the task, and, by frequent admonitions, represses the turbulent nature of his pupil."

"A wonder, papa!" shouted Rudly, laughing, "we shall want then a couple of tame ostriches, and I don't think that either Frederick or I will be tall enough to act as substitutes."

"I do not think so either," said I in my turn; "but in default of ostriches we have other auxiliaries who will very well supply their place. The bull and the buffalo, for instance, will produce, I imagine, a very good effect, stationed on either side of our captive; and you and your brother, each armed with a whip, will naturally play the part of driver to perfection, and teach him to keep in rank with the others."

"Yes, yes, that will be delicious, and will answer admirably."

Such was the answer to my proposition.

Without delay I prepared to carry into execution the plan I had suggested. I made the two coursers approach; I arranged my straps; and when everything seemed ready, and the horsemen were in the saddle, each armed with a stout whip, I freed the eyes of the ostrich from their wrappers.

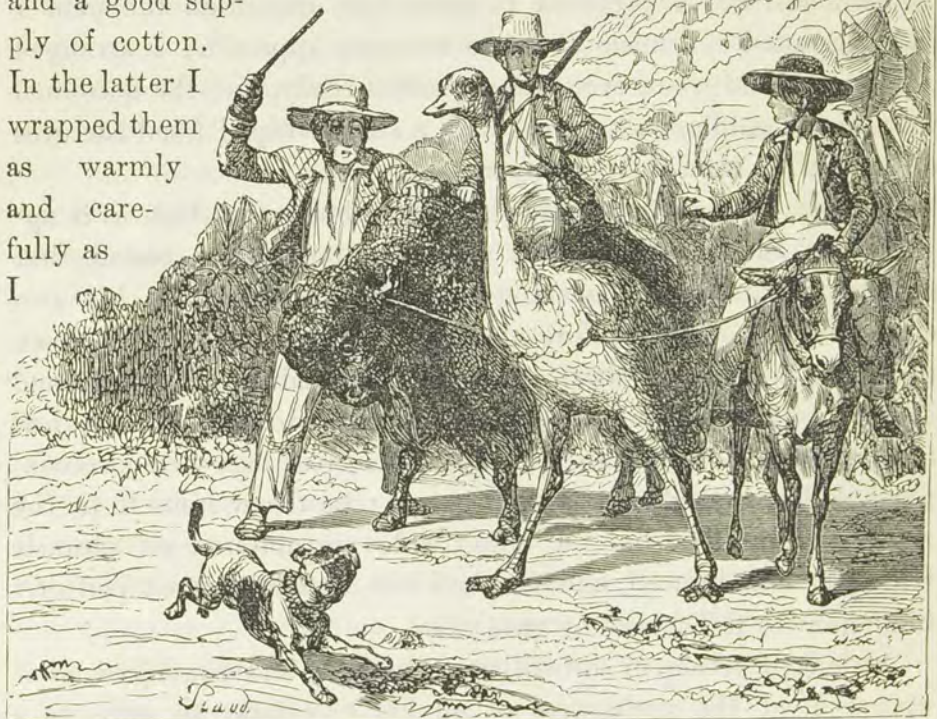
At first he stood perfectly still, and wholly absorbed, as it appeared, in the return of light. Then he rose with a bound; but he had forgotten the fastenings which secured him to his two custodians; he was therefore abruptly checked, and brought down upon his knees. Several times he renewed the attempt, and always with the same result. He essayed to fly; but we had taken care to tie down his wings, and his great legs were also confined, as I have said, to a certain extent; he threw himself to the right, to the left, but on either side encountered an obstacle stronger than himself, and the bull and buffalo seemed perfectly indifferent to the shocks he gave them.

At length, weary of so fruitless a struggle, and convinced, as it appeared, of the uselessness of all his exertions, he came to a



sensible decision; he raised himself upright, and submitting to the neighbourhood of his two companions, set off at a gallop. Rudly and Fritz were in the saddle, and the novel team which they controlled seemed to please them mightily. The air echoed with their merry shouts, which stimulated the frightened ostrich to increased swiftness: they continued at a fierce gallop for about half an hour, when the bull and buffalo, less accustomed than the ostrich to the sands of the desert, forced the latter to moderate his ardour, and adopt a less fiery pace.

While our cavaliers were enjoying this diversion, Frederick and I proceeded to the ostrich's nest. We easily discovered it by a cross made of reeds which we had planted there on our first excursion, and at our approach a female suddenly rose from the sand where she had been sitting upon the eggs. Her presence was a good omen, and I felt assured the eggs must have retained their vital principle. I had taken care to provide myself with a bag, and a good supply of cotton. In the latter I wrapped them as warmly and carefully as I





could, to insure them against any accident on the way, and I deposited six in my bag, leaving the others in their nest, and hoping that the mother, whom we had so unceremoniously disturbed, would not detect the theft we had committed.

We placed the bag containing our frail and precious treasure on the back of the onager, which I immediately mounted, and we set out on our return. Frederick rode the young foal, and Rudly and Fritz marched ahead, escorting the ostrich, whom a series of vigorous applications of the whip gradually accustomed to those civilized habits and manners we had it so much at heart to teach him. We traversed the Green Valley without the occurrence of any notable incident, and arrived in safety at the Bears' Cavern, where Ernest and his mother received us with an astonishment more easily imagined than described.

"Boys, boys," cried my wife, on perceiving the ostrich, "what are we to do with that immense bird? Do you think our supply of provisions so abundant that you must search all over the savannahs for animals to assist us in consuming them? It is said that the ostrich can digest iron! But where shall I find a supply of that metal? Once more I ask you, what are we to do with it?"

"We want it for a post-horse," answered Rudly, "a post-horse, whom we will christen 'Wings of the Wind,' for I can promise you nothing can equal the swiftness of his gallop. For the future, I will only mount this long-legged steed, and as you have no charger of your own, Sir Ernest, I hand over to you my brave Thunder."

I dispelled my good Elizabeth's anxiety, which she always felt on the arrival of each new living captive.

"The ostrich," I remarked, "has not quite so voracious an appetite as you suppose. He is, on the contrary, a very temperate animal, feeding only on fruits and herbage, and he will know very well how to provide for his own wants. But even if we should be obliged to assist him in getting his food, we will take good care to make him earn it."

While I made this brief apology on behalf of the ostrich, Rudly and Fritz were disputing respecting its ownership.



"Rudly pretends," said Fritz, with an air of chagrin, "that the ostrich is his; which is not fair, because he did not capture it by himself alone."

"Well then, let us share it," I replied, "for each of us had something to do with his capture. Frederick shall have the head, because it was his eagle who stunned the animal by striking it with his powerful wing. I claim the body, because it was my sling which first entangled it. Rudly has a right to the legs, which he caught so cleverly in *his* sling; and to you, Master Fritz, we adjudge a feather of the tail, for it was there, I think, you touched the bird, to induce him to rise from the ground where he was crouching."

This division of the victim set my little boys laughing; each abandoned his pretensions, and preferred to make their conquest a common glory.

Ernest had listened to all these discussions with an air of indifferent melancholy.

"Is it my misfortune, then," he said, almost with tears in his eyes, "to be invariably absent when you make such magnificent discoveries?"

"As for that, my boy, you must remember that it was your own wish to remain at home instead of accompanying us on our expedition. But, my dear son, for this I do not blame you; God has endowed each of us with his peculiar tastes and talents, from which he must derive what advantages he can. Thus you have a partiality for study and a sedentary life, while your brothers are more inclined to an active career and those pursuits which demand the exercise of physical strength. Let each distinguish himself in his own line. And you, moreover, have your days of triumph, when you conduct us to the discovery of some new treasure which we owe to your knowledge, and not to accident. If ever an European vessel visits this coast, you will be our interpreter, and with you will the captain communicate."

These words poured balm into the wound which the noisy joy of his brothers had made in poor Ernest's heart, and he was consoled by the reflection that in his own special pursuits he might be useful to us.



It was now too late to think of setting out for our permanent residence that day. I fastened up the ostrich between two young trees, and devoted the remainder of the evening to preparations for our departure, which I fixed for the next morning. We had a host of valuable things to collect, for we wished to lose nothing and to leave nothing behind us.

On the following day we started early. The ostrich had taken his place between the bull and buffalo, being readily guided by the straps attached to his body. He was far from adding to the grace or beauty of our cavalcade, for he incessantly darted to right and left, as if to break the bonds that bound him; but his two acolytes were like two immovable masses, against which all his efforts proved in vain. Frederick mounted the foal, which we had named *Rapid*, and I the onager; Ernest directed the cart, to which we had harnessed the cow. As for my wife, she was seated majestically in the midst of our stores.

Our march was slow, as the reader will easily conjecture, but it had a certain picturesque aspect which pleased us greatly. It was a veritable caravan.

We halted at the entrance of the defile where my sons had suspended the ostrich-plumes to scare the antelopes, and replaced the rope stretched across it by a firm and lofty palisade of bamboos, which would insure us against the invasion of all non-climbing animals. During its erection we made another discovery; that of the vanilla, a climbing plant with long narrow leaves, which I recognized by its brown pods as well as by its balsamic odour: its flexible stems are enriched with white flowers of six petals.

To render our barrier as solid as possible, we interlaced some bundles of thorns on both sides, which made it almost impregnable. We also spread before it a layer of fine sand, that we might detect, from the impressions left in it, the nature of any animal which crossed, or attempted to cross it. These tasks occupied us for many hours, and we did not arrive at the Hermitage until night. We found the curing-hut just as we had left it, and the provision of peccary meat untouched. We kindled our watch-fires, and, after a frugal repast, stretched ourselves on our bags of



cotton, where we enjoyed until day the sweet sleep so needed by our weary frames.

In the morning, we discovered an increase of wealth unsuspected on the previous evening. The roosting-perches in our poultry-yard were occupied by a score of young moor-fowl, sprung from the eggs formerly collected by Rudly, and hatched by our domestic hens. The discovery so delighted my wife, that nothing would satisfy her but to carry off a few couples.



VANILLA (*Vanilla aromatica*).

We resumed our route, and so keen was our desire to see once again our beloved Rock-House, to re-enter the little domain where everything seemed to breathe of peace and prosperity, that we determined to make no further halts on the road. It was not until noon, however, that we reached the desired goal. We were completely prostrate with fatigue; our long journey under a burning sun, and through a white blinding sand, had overwhelmed us.

Accordingly, we could undertake no kind of work until evening; it was with difficulty we mustered energy enough to pay those attentions to the animals they stood in need of.

The day after our arrival at Rock-House my wife began her domestic labours by throwing open the windows, dusting, cleaning, and putting everything in order, displaying, with her two cadets, a truly marvellous activity. Meantime I took the two eldest with me to assist in unpacking and arranging the riches we had brought home with us.

The ostrich had been posted under the trees, with his foot



securely fastened to one of them ; but we now provided him with a more convenient shelter near our residence, between two of the strong bamboo pillars which supported our gallery, and there we strongly bound him until he should be completely tamed.

We afterwards examined our ostrich-eggs, submitting them, like those we had previously gathered, to the hot-water ordeal.

Several of them fell heavily to the bottom ; those we withdrew as utterly hopeless : others stirred on entering the water ; these we took care of as preserving a principle of vitality, which we trusted to develop by the artificial warmth of fire and cotton. I arranged for this purpose a kind of stove, in which I maintained a uniform temperature at the degree indicated on some thermometers as "fowl-heat" (*chaleur de poule*).

Our next task was settling our Angora rabbits on Shark Island. We might have abandoned them to their own devices ; but, anxious to obtain every possible advantage from them, we constructed a burrow, like those which intersect in every direction the warrens of Europe ; not so much for *their* benefit, as to keep them within reach whenever we might want them. We took care, before setting them free in their subterranean galleries, to comb them, and remove all their loose hair ; and at the entrances we fixed some immovable snares, to rid the animals that might get entangled in them of their superfluous wool, which we designed at a suitable opportunity to convert into impervious beavers.

The two antelopes were also transported to Shark Island. It would have pleased us much to have kept these charming creatures near us ; but we were apprehensive they might sustain some injury from our dogs and other animals. It would have been condemning the two timid fawns to a prison wherein they would assuredly have perished. We preferred to save them by removing them to a distance ; but wished at the same time to render their exile as agreeable as was within our power. So we constructed in the islet a kind of shed for their protection, and to the natural products of the soil added those provisions we knew to be most suitable for them.

It was a great pleasure to see these frail and timid creatures bounding gracefully among the tall, thick grasses ; and we never



wearied of admiring their light movements, their elegant forms, their rapid course. The antelope is of a deep brown, in some places approaching black. A long streak of white hair stretches from the neck along the back and tail; but it is almost wholly hidden by the close dark hair which prevails over the entire extent of the spine. Each cheek is marked with two large white spots, and numerous small ones are scattered over its haunches. Its legs are slender; its feet extremely small. Its tail, though very short, is covered with thick hair, extending to the outer part of its thighs. A black moustache garnishes its nose and upper lip. It is the daintiest and most graceful creature imaginable.

The antelope carries on its person a source of wealth, which renders it much sought after by the American hunters—namely, musk. It is said that they adopt a very cruel method of obtaining this fatal treasure. They strike the antelope with heavy sticks, until bumps and contusions are formed on its back, where the blood accumulates; they tie up these contusions, and so tightly that the blood extravasated in that kind of bag or pouch cannot flow out of it. When the bags are dry they fall off the animal of their own accord, and furnish the scented blood which becomes musk, and which Europeans purchase at a high price.

Of all the turtles we had brought from the desert only two remained. These we transported into the Duck's Marsh. We had thought at first of admitting them into the kitchen garden, where they would have done good service against our insect foes; but as my wife feared they would also commit great havoc among her salads, we dismissed them to the mud and reeds of the swamp.

Rudly was intrusted to carry them. No sooner had he reached the marsh than we heard him calling Frederick, and begging him to bring a stick. I supposed the young scapegrace meditated a campaign against its peaceful inhabitants, and that he intended to massacre a few scores of frogs, so that I was greatly astonished to see my two sons return with an enormous eel, which they had found in one of the weirs Ernest had raised before our expedition into the savannah. The other weirs had also answered their purpose; but from the large breaches in their centre we perceived



they must have been visited by fishes strong enough to break through the reeds and rushes of which they were made.

A cordial reception was granted to the eel. The manageress cut off a portion and cooked it for us immediately; the remainder was prepared in the way seamen prepare tunny, and deposited in our bamboo casks.

The vanilla and pepper, as climbing plants, naturally found a place around the bamboo pillars supporting a kind of gallery which we had erected at the entrance to our grotto, and which formed the platform of our pigeonry. I did not value the vanilla for any immediate advantage to be obtained from it; but I thought it might prove useful in seasoning certain productions of our climate, whose over-cold nature might tend to weaken the stomach.

Finally, the casks of fat we had collected, and the cured bears'-meat and peccary-meat, were deposited in our provision stores; the whole now presenting a formidable bulwark, behind which we might successfully defy the assault of famine.

These important labours having been brought to an end, we addressed ourselves to those more immediately concerning the embellishment of our residence or the luxuries of our daily life.

The two bears'-skins were plunged into sea-water; and to prevent the tide from carrying them away, and to defend them against the encroachments of the crabs, we loaded them with heavy stones.

My wife took charge of the young moorfowl we had brought home; being anxious that Master Knips and Rudly's jackal should learn to look upon them as members of our family, should respect them accordingly, and not attempt upon them any of those experiments in animal physiology with which they were too familiar.

The condor was deposited in the museum; but we deferred until some winter day the task of fitting him for the companionship of the boa. We likewise placed in reserve, in the museum, the talc, asbestos, and porcelain clay which we had discovered; but the last three objects were not intended to figure therein as curiosities or as specimens of the mineral kingdom. It was my design to convert the talc into window-panes, the porcelain into all kinds of utensils, and the asbestos into incombustible wicks for



the reflecting lamp which we had suspended from our rocky roof.

Such works as these, however, were conveniently deferred until the rainy season, whose tedium they would serve to lighten.

I also deposited the euphorbium gum in the museum, carefully wrapping it up in paper, on which I had written in large letters the ominous word *poison*, to prevent the fatal consequences that might result from any rash meddling with a substance so dangerous.

The skins of the rats slain by Ernest infected us with their strong odour of musk. I therefore made them into a package; and, remembering what I had read of sailors hoisting the *assa-fœtida*—a peculiarly unpleasant resin—which they were importing from Asia, to the masthead, so as to relieve themselves from its stench, I placed our rat-skins in the open air, just under the gallery, that we might be free from all annoyance.

These various occupations consumed a couple of days. Rudly, always fond of change, was delighted by their diverse character; Ernest, on the other hand, who had but little inclination for an active life, did not relish these constant goings and comings. He even said that he should consider himself much happier if dreaming at will under the tranquil shade of some noble tree, or closely following up some highly interesting lecture, than in transporting and putting in order what we were pleased to call our treasures. I endeavoured to correct what was false in the reasoning of both my sons. I reminded Rudly that life ought not wholly to resemble a magic lantern, in which different objects rapidly and incessantly succeed one another; and that we must learn at times to bring a certain amount of constancy and energy to bear upon the uniformity of our occupations. As for Ernest, I bade him observe that a life of inaction would suffer the noblest faculties of the intellect to grow benumbed and dead in a shameful sleep; and that in such a case we could neither be useful to ourselves nor to others.

Meanwhile I meditated upon a project which, by calling into requisition all our arms, would not allow the philosopher to be more indolent than his brothers.



It was my object before the rains came on, to put into proper order a large space of ground for the reception of the seeds we had previously entrusted to the soil without order or method. The enterprise was difficult, and we comprehended all the force of the Divine decree, which condemned man to win his bread by the sweat of his brow. We called to our assistance the strength and goodwill of our beasts of burden; but the sun was so scorching that their sufferings under the yoke compelled our pity. We were only able to work four hours daily; two in the morning, and two in the evening. Nevertheless, in spite of every difficulty, we contrived to till in tolerable fashion a couple of acres, which would furnish us with an ample supply of maize, cassava, and potatoes.

But to what groans, what complaints, I was forced to listen during the progress of our heavy task! Self-love, that natural stimulus of human idleness, came, however, to the succour and encouragement of my sons, and Ernest himself put on a tolerably good countenance until his labours were completed.

"Ha, ha!" cried Rudly, "how good this bread will be! with what zest we shall devour it! We shall have fairly earned it."

I pretended not to understand; I redoubled my energy and ardour; and my example produced a greater effect on my young family than all the dissertations I might have delivered on constancy and the value of perseverance.

We occupied the intervals of our painful toil by beginning the education of our ostrich. This was no less difficult than novel an enterprise; but I had somewhere read that it was possible, by dint of great patience, to overcome the savage character of this remarkable bird, and we resolved to attempt it.

Our pupil made his *début* by plunging into a paroxysm of rage, stamping his feet, and aiming blows at us with his head and bill: but we found it answer well in return to treat him like Frederick's eagle—namely, to stupify him with tobacco, whose narcotic fumes exercised such an influence on his faculties that ere long we saw the grand and majestic bird balance himself with difficulty, totter on his long legs, and finally fall prone on the earth without strength or movement. We had frequent recourse to this discipline; then, by degrees, we lengthened the cords which fastened his feet to the



bamboos, and soon allowed him sufficient latitude to lie down when he pleased, to rise at his leisure, and to move round and round the posts. We provided also for his comfort; making up a good litter of dry reeds, and placing daily before him some vessels filled with sweet nuts, rice, maize, and guavas; in a word, we took care to supply him with everything we thought likely to please his appetite.

For the first three days all our cares met with the most ungracious response, and the choice viands put before him were regarded with the greatest contempt. Our handsome prisoner would not eat, and clung so obstinately to his determination that we began to feel alarmed for the consequences. Fortunately, my wife conceived the idea of a stratagem which extricated us from our embarrassment; this was to force into the animal's beak some small balls of maize and butter. At first the ostrich grimaced most abominably; but when she tasted the "*forced* meat balls" she was thus compelled to swallow, she formed so favourable an opinion of our cooking, that we had thenceforth no difficulty in making her eat; she emptied the bowls of rice and maize with a very satisfactory relish. The guavas especially met with her approbation. This first step in advance pleased us mightily, and we accepted it as a good omen of the success of our educational system.

And, in fact, her natural savagery disappeared daily. She permitted us to approach without saluting us by a volley of blows, and after awhile we thought we could venture to release her from her post, and attempt a gentle promenade in the neighbourhood. We placed her anew between the buffalo and bull, and put her through all the various exercises of the *manège*; teaching her to trot, to gallop, to stop suddenly, to trot again, to move at a regular pace—and the like. I will not say that the poor bird received her first lesson with all the grace in the world; but the whip and the pipe, particularly the pipe, proved of great assistance to us in our capacity of *ostrich-breakers*. A puff of tobacco smoke, well-directed, effectually quelled the outbreaks of independence and the fits of obstinacy in which our savage pupil occasionally indulged.

By the end of the month, the training was complete. So successful had it proved that I began seriously to think of some means



of deriving a more useful and more direct advantage from our novel conquest. It was my desire to associate her with our domestic animals, to subject her like them to regular movements, to make her halt or march according to our need. The first thing to find was a bit; but how invent a bit for a bird's beak? I had never seen such an article, and I confess my imagination left me plunged for some considerable time in an ecstasy of embarrassment. At length I hit upon a plan.

I had remarked that the absence of light exercised a direct action upon the ostrich; that it suddenly stopped short in the darkness, and only consented to move on again when its sight was restored. This discovery suggested to me an entirely new kind of bridle. With a piece of sealskin I made a sort of hood, in imitation of the one we used for our eagle. It completely covered her head, and came close down upon her neck. On each side I made an opening for an eyehole, placing before each a small tortoise-shell, which, by means of a spring of whalebone, skilfully adapted, was made to open and shut. Some cords in connection with these springs and tortoise-shells enabled us to shroud our steed in darkness, or restore her to daylight, at our pleasure.

When the two shells were open, the ostrich galloped straight ahead; if we closed one, she turned aside, going in the direction of the eye which was still open to the light; if, on the contrary, we allowed both eyelids to drop, she "pulled up" suddenly. The best trained horse could not obey its driver with more precision than did our ostrich under her hood.

We were much encouraged by this success, and as human vanity counts for something in all our actions, we must needs decorate the hood with all the ornaments we had at our disposal. Consequently, we crowned it with two snow-white feathers, the remains of the tail of our first ostrich, and embellished it all about with gay bits of ribbon; so that our courser had really a very handsome appearance when, running at full speed, her head set in motion the plumes and streamers that decked it.

My children would with this have been perfectly contented; but for me I wanted something more than the fruitless amusement to be derived from the equipment of our handsome captive. The



ostrich is a strong robust animal, capable of enduring prolonged fatigue. My object was to make ours serve alternately to carry burdens and to draw them; it was vigorous enough for both these



duties; and also to be useful as a steed. I set to work, accordingly, on the preparation of different kinds of harness. I need say nothing about the contrivances which did duty in the rougher work; but the saddle and girth, and other necessities for equestrianism,



formed a masterpiece of ingenuity! And so thoroughly did I understand my system of straps and bridles, that I have not the slightest doubt that, in Caffraria, the land of ostriches, I could easily have obtained a patent for the invention, and the pompous title of "Saddler to his Majesty."\*

But however great the merit of my invention, it was not very readily appreciated by the ostrich. It was with especial difficulty I prevailed upon her to undertake the rôle of post-horse; she found exceedingly little satisfaction in that mode of exercise. But I knew that in the matter of education patience and perseverance are the two first elements of success. I would not suffer myself to be discouraged; and after numerous more or less troublesome experiments, we had the satisfaction of seeing our new courser submit with tolerable grace to her saddle, and gallop between Tent-Town and Falcon's Nest to the general satisfaction. She accomplished the distance in a third of the time that our swiftest horses would have occupied.

After the animal's education was finished, the question of ownership arose with all its difficulties. Rudly had abated none of his pretensions; Fritz and his brothers, on their part, were not the least disposed to abandon their right; so that I found myself compelled to interpose my paternal authority and terminate their contention. Rudly was lighter and nimbler than his elder brothers; on the other hand, he was stronger than Fritz, who might, however, have contended with him for the prize of superior agility. These two considerations seemed to me to militate considerably in his favour, and I adjudged to him possession of the animal; but on one condition, that everybody should have a right to her, and that she should contribute rather to the general good than to the sole amusement of her new proprietor.

Master Rudly was overjoyed at this decision, notwithstanding the restrictions which clogged it; the others submitted while endeavouring to compensate themselves for the disappointment by launching a few innocent sarcasms at the fortunate owner, which in no wise discomposed him. Delighted with his triumph, he

\* At the time this book was written, the Cape of Good Hope belonged to the Dutch government. It did not become a British possession until 1800, when it was captured by Sir Home Popham.



shook aside the pleasantries with which he was overwhelmed, just as a traveller-flings off the flakes of snow that have gathered upon his cloak; and replied to them by spurring on his steed, and making her manœuvre skilfully in the eyes of his jokers.

Meanwhile, the artificial incubation of the ostrich's eggs, which we had wrapped up in cotton and submitted to the heat of a stove, had almost succeeded; that is to say, out of six eggs we had hatched three. The pullets they brought forth were the drollest creatures imaginable; they resembled geese mounted upon stilts, and tottered forward in the most awkward fashion. The life which they enjoyed did not seem complete. One of the three died soon after emerging from its shell; the two others survived, and we applied ourselves to supply, by all kinds of attentions and forethought, those maternal cares which animals need as much as men, and which our pullets could not obtain. Maize, sweet nuts, boiled rice, milk, cassava—we supplied them profusely with all the riches and dainties at our disposal.

The ostrich remained for nearly two months the object of our principal attention; but no sooner were the difficulties of education conquered, and she had taken first rank among our domestic animals, than she met with the fate of all those things which have no longer the charm of novelty; our admiration disappeared, and habit insensibly deprived her of the prestige with which she had at first been surrounded. We returned to our usual occupations, and began to execute a vast variety and amount of work, all of less importance than the laborious and difficult training we had just completed; but all calculated to promote our ease and comfort in our future existence at the grotto of Tent-Town.

We commenced by giving our bears' skins the preparation they stood in need of. I removed with the greatest care any particles of flesh still adhering to them; I rubbed them at intervals with vinegar and a mixture of ashes and grease; and by constantly working and kneading them, contrived to secure the requisite degree of suppleness. And as they were free from all disagreeable odour, they made two of the warmest coverings any one could desire.

For our drinking supplies we had hitherto had only the pure



water of the brooks, some bowls of palm wine, and the barrel of Cape wine which we had saved from the shipwreck. But this wine could not last for ever, and the resource of the palm was very precarious. Accordingly, I resolved to supply these deficiencies by the preparation of an artificial drink. I had frequently heard of the *hydromel* of the Russians; we possessed its foundation in the honey furnished by our bee-hives, and I therefore did not hesitate to attempt its composition. We boiled a large quantity of honey in sufficient water, and having poured the liquid into two casks, I threw into each a cake of sour rye bread, to induce fermentation. We thus obtained an agreeable and slightly acidulated drink, which in winter could not but prove a resource of the highest importance. The two casks first prepared we placed in the cave, or, more correctly speaking, in the hollow which we dignified with that name.

We afterwards made a still choicer drink, by adding some muscado nuts, leaves of ravensara, and a sprinkling of aromatic plants, to the hydromel. This liquid, of more generous quality than our former beverage, was reserved for extraordinary occasions—banquets, the celebration of anniversaries, and the like.

A little discussion arose upon the proper name for this home-made nectar: some would have christened it Cape wine; others preferred the name of Madeira. Our philosopher terminated the difficulty by suggesting that of Muscado wine, which was, indeed, the most appropriate appellation, since the principal ingredient to which it owed its virtues were the muscades brought back to us by our pigeons from their distant excursions.

BEE (*Apis Mellifera*).

BEE-HIVE.



After hydromel came vinegar, which we felt to be an indispensable necessity, requiring it not only for our *cuisine*, but for a variety of other circumstances. My wife received this new product of our industry with marked approbation.

When we had nearly completed our ingathering of provisions, and found ourselves so well stocked that there was no fear of our being surprised by famine before the winter had expired, we were able to address ourselves to objects of lesser importance. While still waiting for the first rains, we began the manufacture of some hats. This was a task as troublesome as it was novel, and undoubtedly we did not display in it the skill and subtlety of the artists who work for the "dandies" of London and Paris; but we were able to console our self-love with the reflection that we had, at all events, succeeded in the object we had proposed to ourselves.

The first question which presented itself was the *form* we ought to give to our hats.

Each person pronounced his opinion; but Necessity, which we had not invited to our council, intruded itself upon us, and compelled us to adopt for our *chefs-d'œuvre* the outline best adapted for our means and appliances. It required to be excessively simple. I carved as best I could a wooden head, which could be divided into two portions, and over it we laid a thick layer of soft and supple paste, composed of rats' hair and isinglass. This, when dry, furnished us with a tolerably accurate mould, and provided us with a kind of skull-cap, of which my readers can easily form an idea.

After all our exertions, the work we turned out was ungraceful enough in appearance. My sons were no more satisfied with it than I was; but the dilapidated condition to which our European coiffures had been reduced, the necessity of obtaining some defence against the solar rays which struck right upon our heads, compelled us to rest contented with the head-gear we had devised.

"Is it a bonnet or a hat? or is it a skull-cap?" asked Master Ernest, laughing. Truly, this was a fine question to submit to the Academy of Tent-Town at its first sittings.

"Hat, bonnet, or night-cap," replied Frederick, "I beg leave to



ask if the nondescript will always retain its present ugly shade. I vote," he added, "for dyeing it of some colour which will infallibly conceal it."

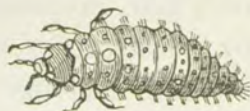
"Good," rejoined Ernest. "And for my part I vote we dye them red, which is the true poetic colour."

"And that of cardinals and learned doctors," said Rudly immediately. "Let us tint the skull-cap red, and it will make a splendid cardinal's cap for Mr. Professor Ernest. Gifted as he is with scientific lore, he cannot halt in his forward course, and I believe he may become cardinal or pope, and aim at all the bonnets."

Our reckless young gentleman's sally made us all laugh. Fritz, however, declared a preference for gray, and Rudly for green, as being the hunter's favourite colour; while Frederick, like a skilful physician, voted for white, because he recollected that this colour was less absorbent of light than any other; whence he concluded that it was most appropriate for a head-covering, whose first recommendation ought to be coolness.

"Capital, capital!" I exclaimed; "your opinions afford me great pleasure; I am only sorry that I cannot pay that attention to them I could have wished. Frederick has given a proof of his talent by voting for white; Rudly, by asking for a hunter's cap, has thought more of ornament than of usefulness. As for Ernest, I do not for one moment suspect him of dreaming of a cardinal's hat, because he voted for red. But, however this may be, red is the colour we must needs adopt, not exactly on account of its doctorial and poetical character, but because it is almost the only one we have at our disposal."

And so I had recourse to cochineal, and was fortunate enough to communicate to our felt a beautiful and brilliant purple tint. Our success as dyers caused our failure as hat-manufacturers to be forgotten. The new head-gear recovered its credit, especially when decorated with a couple of ostrich feathers. Our good manageress wound a strip of galloon about it, which she had discovered among the treasures of her enchanted bag; and



LARVA OF COCHINEAL



COCHINEAL INSECT



the disdain with which the poor felt had been at first regarded was so largely modified, that everybody willingly presented his head to receive its new protection.

But its destination had been settled beforehand; it rightfully belonged to little Fritz, whom an unforeseen incident had deprived of his old hat a few days previously.

Fritz was a handsome lad, with a sweet and amiable countenance; the new cap became him wonderfully; his glossy light hair escaping from it in clustering curls, his child-like face, his blue eyes, and innocent expression, seemed to give him the air of the son of William Tell, as he is represented in our national chronicles at the moment his father put him to the terrible proof. This reminiscence of father-land made the fortune of the new hat. Switzerland! William Tell! These names brought with them such a crowd of associations, they recalled so many thoughts at once pleasing and melancholy, that we could not command our tears.

For a moment we fancied ourselves restored to the shores of our lakes and the foot of our mountains. We discoursed of our dear country for hours. Ernest related the legend of the hero of Switzerland; my wife repeated some of our mountain songs. Imagination, that wonderful fairy! revived before our gaze our chalets, our pines, and our precipices; we forgot for a while the dreary fact that between Switzerland and ourselves stretched upwards of three thousand leagues of sea; and thus we spent one of the happiest evenings we had enjoyed since our shipwreck.

I had made but a single hat; yet I had four sons. The reader will therefore understand that each of them wished to see himself *bonneted* like the youngest. But I was in want of material, and I ordered my boys to collect as great a quantity as possible of rat's hair, preparatory to attempting a hat manufacture. I began by constructing some snares of the kind used in Europe for catching martins and similar animals; they were composed of two strips of iron, so arranged that, at the slightest movement, they acted like a spring, fell back upon themselves, and caught as in a vice the gluttonous creature imprudently beguiled by its appetite to seize the bait with which these snares were furnished. Thus provided, my sons and I commenced the campaign. Instead



of a piece of lard, the bait usually employed in Europe, we conceived the idea of making use of a little fish with which the marshes literally teemed, and to which the rats appeared exceedingly partial. The opening of the campaign was lively enough; the spoils were abundant; and we returned to our grotto with an ample store of rat skins. We had also an excellent opportunity of examining the habits and manners, as well as the structures, of the industrious animals against which we carried on hostilities, and these proved to us a subject of interesting study.

The ondatara is about the size of a small rabbit, but its squat short head resembles that of a water-rat. It has great eyes, round short ears covered with hair both inside and out; its fur is soft, shining, and of a reddish-brown; its tail, flattened at the sides, is clothed in scales. In the general form of their body, and in many of their customs, these animals are very like the beavers. They build up their habitations of dry plants, and particularly of reeds, cementing them together with mud, and arching over them a kind of dome. At the bottom of these abodes they construct numerous tunnels, through which they make their way in quest of food, for they lay up no winter provision. They also excavate various subterranean asylums, whither they retire at the approach of danger.

As these habitations are only intended to last the winter, they



A SWISS SCENE—PINES.



are rebuilt every year; the ondataras commencing their work in time to avail themselves of it before the frost begins. Several families occupy the same house, which, in northern latitudes, is frequently covered eight to ten feet deep with snow or ice. You may fancy, therefore, that until the return of spring they lead a very dull and melancholy life. In the summer they wander about in couples, feeding voraciously upon herbs and roots; they then grow exceedingly fat, and acquire that strong odour of musk which has procured them the name of musk-rats.

Between the musk-rat and the beaver exist, as I have said, many points of similarity; their pyramidal huts so closely resemble those which are found in the neighbourhood of the Canadian lakes, that my sons and myself were naturally led to discourse about the beaver. We recalled all we had read concerning that industrious animal, and, during our peaceful attempts at hat-manufacturing, it received all the honours of our admiration and eulogy.

And, in truth, there are few creatures in the animal world which approximate to man so nearly; there are few which feel more keenly the need of social fellowship, or in which instinct produces results more justly deserving of being compared with the marvels of human industry.

The beaver is generally from three to four feet in length; and



BEAVER (*Castor Fiber*).

his whole body, with the exception of his tail, is clothed in a thick fine fur, an inch long, which admirably preserves the animal's natural warmth. His head is nearly square in shape; his ears are round and very short; he has little eyes; and his mouth is armed in front with four strong and sharp incisor teeth, two in either jaw. These are the instruments he employs in sawing,

fellings, and dragging trees. His fore-feet serve as hands, and he uses them with an address equal, at least, to that of the squirrel. The fingers are well separated, well divided, and armed with long



pointed nails, while those of the hind-paws are connected by a strong membrane; they act as fins, and can be expanded, like those of the duck. The fore-paws being shorter than the hind, the beaver always walks with his head down and his back arched. His senses, especially that of smell, are very keen; he cannot endure uncleanness or unpleasant odours; his tail is very remarkable, and singularly well adapted for the use he makes of it—it is long, somewhat flat, covered with scales, garnished with muscles, and continuously anointed with oil and fat, which prevent it from absorbing humidity.

The beavers are, perhaps, the only extant example, like an ancient monument, of that intelligence of the brute creation which, though infinitely inferior from the first to the intellect of man, supposes mutual projects and relative views; projects which, having for their basis the social welfare, and for their objects the construction of a dike, the building of a city, the foundation of a republic, suppose also some means of understanding one another and of acting in concert.

An individual, considered by himself and as he leaves the hands of nature, is but a sterile being, whose industry is limited to the simple usage of his senses.

Man himself, in a condition of pure barbarism, deprived of the light and of all the aids of society, produces nothing, achieves nothing. The beaver, single and isolated, far from displaying any marked superiority over other animals, appears, on the contrary, inferior to many of them in purely individual qualities; his genius and his talents become conspicuous only when he is a member of a community. Moreover, these animals only care to build, or, at least, are never met with except in desert countries, in regions which are but scantily inhabited by savages, and where they are not disturbed by the close proximity of man.

There are beavers in Languedoc and in some of the islands of the Rhone. They are found in greater numbers in the northern provinces of Europe; but as all these countries are inhabited by man, the beavers there, like other animals, are dispersed, solitary, fugitive, or concealed in subterranean retreats.

The beaver is an animal of considerable mildness, peaceableness,



and familiarity; a little sad, not to say plaintive; without passion, violence, or vehement appetites; refraining from active movement; indulging in no vigorous exertion, yet seriously occupied with the desire of liberty, and gnawing from time to time the gates of his prison, though without fury; for the rest, he shows a great indifference to all attempts to cajole him, does not willingly attach himself to his keeper, and if he does not seek to injure never cares to please.

He seems inferior to the dog in those relative qualities which might bring him near to man; seems made neither to serve, to command, nor even to mingle with any other species than his own. His instinct, shut up in itself, is only displayed in all its subtlety when he lives and labours with his kind. Alone, he shows very little personal industry; he cannot even defend himself very successfully, though, when attacked, he bites cruelly.

It is in June and July that the beavers begin to reassemble on social labours bent; from all quarters they flock towards the banks of stream or lake, and soon collect in a body two or three hundred strong. If the waters always remain at the same level, as is the case with those of lakes, they build no dike; but if they are running waters, subject to increase or diminution, they construct a dam so as to keep them at the same uniform height. This dam or causeway is frequently 80 to 100 feet in length, by 10 or 12 feet in thickness at the base.

To throw up their great engineering work they select that part of the river which is tolerably shallow; and if on the bank they find a great tree projecting over the water, they begin by felling it as the foundation of their construction. For this purpose they seat themselves all around it, and incessantly gnaw away at the bark and timber, to whose taste they are very partial, preferring the fresh bark and tender wood to all ordinary aliment. They nibble also at the foot of the tree, and with no other implements than their teeth, in an incredibly short time cut through it, so that it falls right across the stream.

As soon as this tree, which is frequently as big and round as a man, is in its place, some of the beavers undertake to strip and prune its branches, so as to make it everywhere smooth and regular.



Others, meanwhile, traverse the river bank, cut pieces of timber of different sizes, sawing and placing them to serve for piles, and carry them in their teeth to the place where they are wanted. Here they plant them firmly in the ground, and wattling a quantity of branches between and about them, soon build up a stout and impenetrable fence. To prevent the water from flowing through the interstices they fill them up with clay, which they knead and flatten with their fore-feet, and afterwards beat with their tails, which serves as a trowel. The position of the causeway is worthy of notice: the piles, which are all of the same height, are planted vertically above the point of descent of the water; but the whole work, on the contrary, is sloped on the side which has to sustain the rush, so that while the causeway will measure twelve feet in width at its base, it is not more than two or three feet thick at its summit. Thus, it not only possesses the requisite solidity, but also the most suitable form for retaining the water, preventing it from effecting its escape, enduring its pressure, and breaking the violence of its efforts.

When the beavers have toiled all in a body to construct this great public work, whose peculiar object is to maintain the waters always at the same level, they labour in companies at the erection of their private dwelling-places—these are cabins, huts, or, rather, little houses built in the water on platforms of piles, close to the edge of their pond, with two openings, one for egress towards the land and the other towards the water. The form of these edifices is nearly always oval or round; they are from four to five and even ten feet in diameter; while some are two or three stories high. The walls are two feet thick, and the edifice is crowned with a dome-shaped roof. It is wholly impenetrable to rains, and successfully defies the most impetuous winds. The various materials employed in its construction are wood, stone, and sandy soil; the partitions are encrusted with a kind of stucco, applied by the aid of their tails, and with such neatness and consistency that you might take it for the work of a skilful mason. Each cabin contains a store-room, filled with a supply of bark and soft wood for winter provender. The inhabitants of each hut enjoy all things in common, and never pillage their neighbours. The smallest



edifices are tenanted by two to six beavers, and the largest by as many as eighteen or twenty, nearly always in equal proportion of males and females. Communities formed of twenty to twenty-five cabins have been met with by travellers.



A COLONY OF BEAVERS.

But however numerous the republic, its tranquillity is never disturbed. Friends among themselves, says Buffon, if they have their enemies without, they are sagacious enough to avoid them; they give each other warning by beating with their tails upon the water, and the sound echoes afar through the dome of every habitation. Each individual immediately takes his decision, either to plunge into the lake or conceal himself in his burrow.

The duration of life of these animals cannot be very protracted, and probably does not exceed fifteen to twenty years. However this may be, each couple, in its little fortress, lives in unbroken concord. They never forsake one another. If they go abroad, it is to seek for fresh bark.



Beaver-hunting generally takes place in the winter, because it is only in this season the fur is perfectly good. They are either shot, or caught in snares baited with fresh soft wood, or assailed in their cabins during the prevalence of the ice. They take to flight beneath the water, and as they cannot remain there long, they come up to breathe at openings made in the ice, and are then killed with blows from an axe. The hunters sometimes fill up the openings with hair that they may not be seen by the beavers, and then seize them adroitly by the hind-paw.

If the hunters, by thus destroying the beaver-huts, capture a very great number, the republic is too weakened to re-establish itself again. Those who have escaped death or captivity disperse abroad; their genius, crushed by terror, expands no more; they hide themselves and their talents in a burrow, occupy themselves only with the most pressing wants, exercise but their individual faculties, and lose, without hope of recovery, the social qualities for which man admires them.

The trade in beaver-skins was formerly an important item in the resources of Canada. The Red Indians still attire themselves in beaver-skins, and wear them in winter, with the hair inwards. These are the skins which, absorbing the sweat of the savages, are called *fat castor*. The hatters mix the hair with that of other skins which have undergone no such preparation—the *dry castor*—so as to give the latter more body and suppleness.

As the reader has seen, our dissertations on the beaver were prolonged to a considerable extent; but, besides the well-deserved admiration attaching to the laborious and ingenious animal, the subject was one of a very suitable character for a hat-manufactory. We had resumed our attempts: to shave the skins, to full or cleanse the hair, to convert it with a certain quantity of isinglass into a supple and solid tissue, to stretch it over the wooden blocks, to fashion it into caps, then little by little to add the rims, and gradually to shape them into a proper spherical form, was, for upwards of ten days, the occupation of the whole family.

The cochineal, which we had no reason for economizing, furnished us abundantly with a beautiful and brilliant red tint, and gave our head-gear a sufficiently strange appearance. A spectator,



seeing us march gravely along the shore, as was our custom on the conclusion of our daily labours, would certainly have taken us for four dignitaries of the Court of Rome. We had left to Fritz the exclusive privilege of the plume, which the borders we had contrived to give our caps had advantageously replaced.

Our success in the hat-manufacture encouraged us to attempt other experiments: we were absolutely deficient in solid utensils and in those which my wife required for kitchen uses. We therefore passed from the hatter's art to that of the potter.

I knew a little of pottery, but what most embarrassed me was the mode of preparing the earth before using it. We had recourse, however, to the system of tests and experiments which had always served us so well, and at the outset established our workshop in a corner of the grotto.

I built up a kiln with compartments excavated in the interior, intended to receive the different utensils which I projected, and which would require to be baked. I likewise contrived a labyrinth of earthen tubes destined to conduct the heat and secure an uniform amount of solidity in all the objects of my fabrication. These preliminaries occupied a considerable time, for I had to rely rather upon my invention than my memory.

When they were completed, I began to make ready the material. I caused my sons to collect a certain quantity of porcelain earth; it was a kind of very white and very fine sand which we had found, as already related, near the rocks, in our expedition to the Savannah. I commissioned my sons to cleanse this earth of all foreign admixture; a precaution which appeared to me indispensable, lest, in kneading, I might tear my hands with any fragments of flint mingled with it.

I afterwards mixed a certain quantity of talc which we had found under the bed of asbestos or amianthus; this substance, I fancied, would render the paste firmer and more solid. Having worked it thoroughly, I allowed it to dry a little before making use of it, and while I finished the measure or mould on which the potter spreads his clay.

The wheel of a gun-carriage, placed horizontally on a pivot, and surmounted by another wheel or round table, which, united to



the one below by an axis, rotated with it, served my purposes admirably: after a few essays, I succeeded in turning several utensils upon this machine, such as dishes, plates, and a few pans; I made also some bowls, and cups, and saucers.

These articles I exposed to a glowing fire; many broke into pieces, but I saved fully a half of my handiwork; and these were all of the finest grain and the most perfect transparency. My wife's joy at these additions to her *cuisine* was indescribable; and, as a reward, she promised us a variety of dainty dishes, whose preparation she had hitherto been unable to attempt for want of suitable vessels.

Having satisfied our most pressing needs, we allowed ourselves to think of luxuries; and our porcelain cups, despite of their transparency, appeared to us much too naked. Rudly would fain have seen some of those delightful floral ornaments which embellish the ware of Dresden, or Chelsea, or Wedgwood, and refresh the eye with their cunning combinations of vivid and variegated colours. But painting upon porcelain was an art of luxury demanding an amount of special acquirement in which we utterly failed. We were constrained to renounce all idea of adorning our pottery with flowers; but I supplied their want, to the best of my ability, by the following device.



We had saved from the wreck several chests full of collars and bracelets in glass beads intended for barter with the savages of America; I crushed them with a hammer, and when they were reduced to powder, mixed them with my porcelain paste; the mixture gave my ware a fine effect of different shades, while rows of pearls embedded in the paste while it was still soft, added to it a surprising beauty. Next to the utensils wrought upon the wheel, came those which are best made by moulding. I manu-



factured all kinds of wooden moulds, which we afterwards split in two, and by this means we fashioned some vases, not to be compared, undoubtedly, with the products of China or Sèvres, but not without a certain degree of merit. We had cups, and fruit-dishes, and saucers, enriched all over with flutings and various ornaments. My wife and sons proudly displayed them on the planks which supplied the place of a *buffet* in our kitchen. For my own part, I was contented with seeing my sons centre all their glory in proving adequate to their own wants, and in counting as a great victory every advantage gained over necessity by their perseverance.







## CHAPTER XI.

Screened by deep boughs on either hand.  
MATTHEW ARNOLD.



MEANWHILE the wet season rapidly drew near, and we were soon compelled to give up our daily excursions.

The rains and winds recommenced as in previous years; the sky which had so long been bright and cloudless, was covered with dense black clouds, and terrific storms heralded the approach of winter. We closed the entrance to our grotto, and began the regular work which we had set apart for this season of the year.

The potter's wheel was almost constantly in motion. We attained to still greater perfection in the fabrication of our porcelain, and undertook the manufacture of various utensils which, by patience and courage, we wrought to a successful issue. We had preserved the shells of those ostrich eggs which had not been incubated, and Ernest divided them into two equal parts by a thread dipped in vinegar. These halves were converted into elegant cups. I turned some wooden feet, which I fitted to them, and thus we provided ourselves with handsome drinking-cups and vases for the reception of flowers in the summer time.

The condor, which we had been obliged to neglect at first, was definitively stuffed. We made use of our euphorbia to protect its skin from insects; we inserted a couple of porcelain eyes, and after long discussions, settled upon the place it should occupy in our museum, and the attitude it ought to assume.



At length it was duly raised, with head elevated and wings extended; its curved beak, its neck half bare of feathers, and its large and solid claws, indicated the robber of the air. This bird, whose sweep of wings was immense, in connection with the boa over which he dominated, gave already an imposing aspect to our nascent museum.

Yet, of all the instruments which we had at our disposal, the English turning-wheel was without contradiction the one which rendered us the greatest services; and my wife made such frequent demands upon my industry that she converted me perforce into a tolerably good workman.

But all these labours occupied *me* rather than my young family, and I feared lest the inactivity to which I saw them reduced should degenerate into sloth, and in time produce weariness, for we had scarcely reached the middle of the rainy season. Ernest, it is true, found in his books a means of employing his time; but his brothers, less partial to study and science, only entered the library when there was no other place where they could remain. I felt the necessity of finding for them an occupation which should keep up their habits of industry, and which would be more to their taste than reading. I sought in vain, when Frederick himself fortunately came to my assistance.

"We have," he said to me, on one occasion, "in the person of the ostrich, a superb postal equipage for traversing the roads of our kingdom; we have substantial vehicles for the transport of provisions; we have a shallop and a periagua which rock majestically in the Bay of Safety; but one thing is wanting—a craft which shall skim the surface of the water, as the ostrich flies over



the sand which it hardly seems to touch; a light bark to carry us in the twinkling of an eye from one end to the other of our empire, by skirting its coast or ascending its streams. I have read somewhere that the Greenlanders construct a species of wherry of the kind I mean,



which they call a cajack. Why should not we also build a cajack? We have contrived a periagua—why should not we, civilized Europeans, succeed in constructing what these rude and simple savages achieve?”

I warmly welcomed, as you will suppose, my son's proposition. Elizabeth, who still preserved against the sea and its caprices a leaven of the old rancour, did not appear favourably inclined towards the cajack, and the idea that it would furnish us with a new temptation was sufficient to indispose her against it. We were compelled to recur to all the arguments which our imagination suggested; but our reasonings and demonstrations did not convince the good mother—when she could not confute us, she remained silent. According to her, the periagua and the pinnacle were two chances of shipwreck quite sufficient for the colony, and she could not conceive that any necessity existed for increasing the number.

The tempest which had flung us upon the coast of our present abode was ever present to her thoughts; and though three years had passed, she still exhibited every mark of terror and anxiety when she spoke to us of all the dangers which had assailed us upon the sea—that “perfidious element,” as she loved to call it.

Nevertheless, as the construction of the cajack involved at least one object which it was important for us not to neglect—that of occupying my children—we immediately set to work, promising the good mother a masterpiece whose grace and lightness should conquer the prejudice she displayed against it.

The cajack, the only boat in use among the Greenlanders, is a kind of shell-shaped canoe, consisting of a few pieces of whalebone and a seal's skin. It is an extremely light craft, and the navigator who has propelled her over lake or river easily carries it upon his shoulders when he reaches the shore. The Greenlanders bring to bear upon its management an almost incredible skill and audacity; they accomplish in it protracted voyages, and hunt the seal, the sea-dog, and all the ocean-monsters which frequent the coasts they inhabit. Whether the sea be calm or stormy, whether his cajack floats on the waves like a tiny feather, or is carried swiftly onwards by the rolling surge, the Greenlanders know neither fear nor danger; with his legs crossed at the bottom of his



canoe, his hands supplied with pliant oars, he knows he incurs no peril of shipwreck. The Greenlander in his cajack is like the centaur; he is man identified with the thing that carries him.



THE SEAL (*Phoca*).

The Greenlander does not boast of his civilization nor of his artistic acquirements. His cajack, therefore, is not a masterpiece of construction; its outline is not very graceful, and even its arrangement lacks adaptation to its navigator's wants. We thought we could improve upon it; we had already given too many proofs of industrial genius to accept implicitly and without demur from the hands of a savage people an invention which the European intellect might, without any very great exertions, notably ameliorate. Our cajack, then, was to borrow from that of the Greenlanders only its lightness and suppleness.

The materials which we made use of were whalebone, bamboos, Spanish reeds, and sea-dogs' skins. Two arched bones of the whale, united at either end, and kept apart in the middle by a piece of bamboo, placed transversally, joined the two sides of the



boat. Some other bones, skilfully interwoven with flexible reeds, and a quantity of moss cemented by several layers of pitch, completed the carcass. The first artistic touch which we gave to it was a provision for the rowers remaining seated; in the Greenland cajacks he is constrained to sit on his haunches, with his legs crossed, tailor-wise, or to extend them horizontally in the bottom of the boat—both positions being equally inconvenient and unfavourable, inasmuch as they deprive the rower of the greater portion of his strength.



I shall say nothing of its external embellishments, nor of the more elongated and consequently more graceful form which it received. At all events, this combination of reeds, bamboos, and whales' bones proved as a whole so light and so elastic, that if allowed to fall upon the ground it rebounded from it like a balloon, and when we launched it, we found that, loaded and all, it scarcely drew two inches of water. The completion of this *chef-d'œuvre* occupied us for upwards of a month, but our labours were so successful that the workmen anticipated from them the most marvellous results.

As soon as the carcass was finished, and the interior coated with moss and gum-elastic, we busied ourselves upon the external covering. For this purpose I selected a couple of entire sea-dogs' skins; that is, skins without any lateral opening. I clothed our boat with these by forcing each end of it right into the skins until the latter met about the middle, where they were fastened together by



a skilfully wrought seam, except at the place left for the rower. It is needless to say that before using these skins I had made them undergo a preparation to render them supple, and as easy to work as the softest leather employed by European saddlers. I likewise took care to coat the seam with a thick layer of gum-elastic to prevent the water from penetrating. Out of a couple of bamboos I fashioned the paddles, one of which was furnished, at its extremity, with a well-filled bladder, so as to lend the navigator a point of resistance if any necessity arose. In the fore-part I contrived a place to receive a mast and sail, in case we afterwards decided upon hoisting one.

Thus our resources received a new augmentation, and our fleet was increased by an additional vessel. Frederick—as suggestor of the cajak, as the eldest of the boys, as the most skilful and practised oarsman—put forward what he considered to be indisputable claims to the new property. They were willingly acknowledged; the real dangers which beset all expeditions by sea having little temptation for Ernest and Rudly. Frederick, therefore, was formally recognized as owner of the new craft.

An important thing still remained to complete the equipment of our Greenland boat; namely, the fitting garb of him who was to manœuvre it. I had often heard men speak of an apparatus—familiar enough, indeed, to all inhabitants of sea-port towns—which envelops an individual in, as it were, a stratum of air, so as to render him lighter than the volume of liquid which his body displaces. I gave my sons a description of this apparatus; I spoke to them of the hood which covers the swimmer's head, and terminates in a tube destined to furnish the latter with the amount of air he requires for respiration under the water. My description, and especially the idea of the tube doing duty as an air-chimney, long occupied the minds of my young people, and they had no rest, and accorded me none, until I had requested the assistance of their mother in the construction of a similar machine. As it was a means of sustaining their energy and cheerfulness until the close of the rainy season, I hastened to adopt it.

With my good Elizabeth our wishes were as laws, and she proceeded, with the utmost willingness, to accomplish what we



required of her skill. She set to work, and plied her needle so deftly, that in a very few days Frederick's diving costume was complete. It consisted of a vest covered back and front with the skin of a whale's gut, hermetically sealed and sewn on every side, so that it was impossible for the air admitted by the tube to escape. This tube, which was flexible, and terminated with a pipe and screw, enabled the centaur to fill or empty at pleasure the bladders in which he was, as it were, enclosed.

Meanwhile, the winter glided by almost imperceptibly; with these industrial experiments, reading and the study of languages were agreeably alternated; so that the dark days before the coming of the spring were pleasantly shortened, and rendered light and useful.

The winter in every respect resembled the same season in preceding years. It began with violent storms; which were succeeded by continual rains for about two months and a half. Then came another series of furious tempests, as if to announce the speedy advent of the spring.

Gradually the sun reappeared, the wind ceased, the sea recovered its tranquillity, the green sward emerged from the sheets of water which for three months had covered it; Nature was regenerated. We quitted the grotto, glad to resume our out-door life; and





with indescribable pleasure once more rejoiced in the pure air of the coast, the grand trees of Falcon's Nest, and all that rich and vigorous vegetation which the Creator seemed to have spread around us as if in anticipation of our desires and wants.

The diver's dress being the last of our successes, Frederick undertook to favour us with a dramatic presentation of the centaur. Consequently, on a beautiful sunny afternoon, he solemnly donned his jacket, which fitted accurately round his neck and was fastened at the waist by a buckle; his head he covered with his waterproof hood, which fitted no less exactly than the vest, and was provided in the front with two eye-holes of thin tale, and terminated on the top in a hollow reedy tube, which admitted the air into the interior. On first seeing him in his new equipment, our laughter was prodigious; but Frederick was exceedingly proud of it, entered the water with the utmost gravity, and made his way towards Shark Island, whither we arrived as quickly as himself, thanks to the rapidity of the periagua. The swimmer came ashore, and shook himself like a Newfoundland dog after his bath; we released him from the hood that confined his head; but the experiment had proved so successful, the diver's garb was so felicitous an achievement, that everybody wished to possess one. The good mother promised her sons they should soon be satisfied, and we then began to explore our island, which we had not visited for four months. We were eager, therefore, to ascertain what had become, during the winter, of the new colonists we had established.

Our first visit was to the antelopes. They took flight at our approach; but we saw with much pleasure that they had done full justice to the supplies of rice and maize, mingled with salt, which we had prepared for them, for the straw and moss were well trodden in the sheds we had erected. We removed the stock of reeds intended for their litter, and furnished them with fresh provisions; and then, not to banish them longer than could be helped from a spot in which they apparently took so much pleasure, we quitted it and spread ourselves over the island. My sons collected an abundant treasure of shells, corals, and other curiosities suitable for the decoration of our museum. My wife, who



took little heed of branches of coral, made a new discovery; it was of a marine plant, of which she would not tell us at the time either the name or properties, but contented herself with collecting a considerable quantity, which she deposited at the bottom of the periagua. On our return home she mixed it with other leaves which she picked in Safety Bay, and she shut up the whole in our store-room with a peculiarly mysterious air.

Her conduct astonished us. "Why, Elizabeth!" said I, laughing, "you must surely be hiding away an inestimable treasure; from the care you are taking of it, one would be tempted to guess it was tobacco, and that you are locking it up lest we should discover and make use of it."

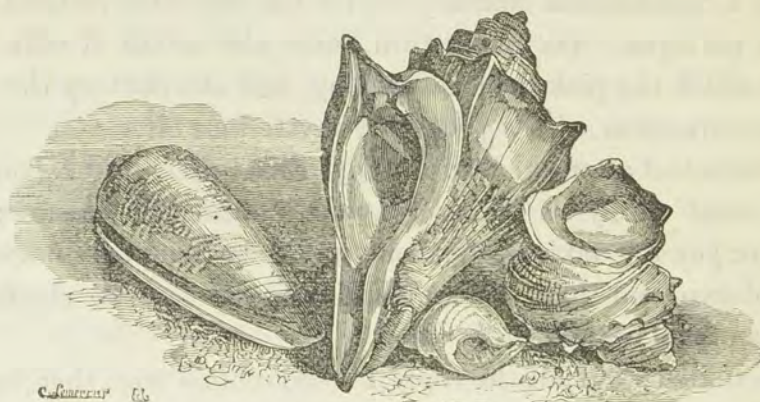
She smiled; but all the reply I could obtain was, that by-and-by I should know the name and qualities of the mysterious plant, which, she assured me, I should be the first to praise. This information was not very satisfying; however, I resigned myself to exercise my patience, and no more was said about the discovery.

The earth was still so damp that we could not resume our longer expeditions. We profited by the last days we were forced to spend under the roof of our grotto to range in a suitable manner upon the tables of our museum the shells, corals, and animal and mineral curiosities we had collected in Shark Island. This occupation was particularly agreeable to Ernest, who had it at heart to merit his name of "philosopher," and justify his appointment as librarian and curator of the museum of Tent-Town. He had prosecuted his studies with unremitting ardour during the wet season, and he now explained to us with much timidity the formation of coral. He told us how it sometimes forms, in the midst of the ocean-waves, numerous islands which seem due to subterranean convulsions. He also lectured us upon the polypes; in fine, he let no opportunity slip by of playing "the professor;" and it is but just to acknowledge that we listened to his dissertations with much pleasure.

"Shell-fish," said he, "form one of the most difficult branches of natural history, and, up to the present time, one of the least investigated. One might say that science has recoiled before these marvels of creation, and that, while prompt to enregister the phe-



nomena which are revealed in the existence of other organized beings, her scrutinizing eye has lacked skill to seize the secret of the life which animates the thick envelopes we call *conches* or *shells*.



“ Naturalists distinguish four classes of shells:—first, those of a single piece, which are called *univalves*; second, those which consist of two pieces of unequal size, and frequently of a different nature—one being smooth and used as an *operculum*—these are *operculated shells*; third, we call those in which the two pieces are nearly equal, *bivalves*; and fourth, those which are formed by the assemblage of several pieces, generally of different dimensions, we name *multivalves*.

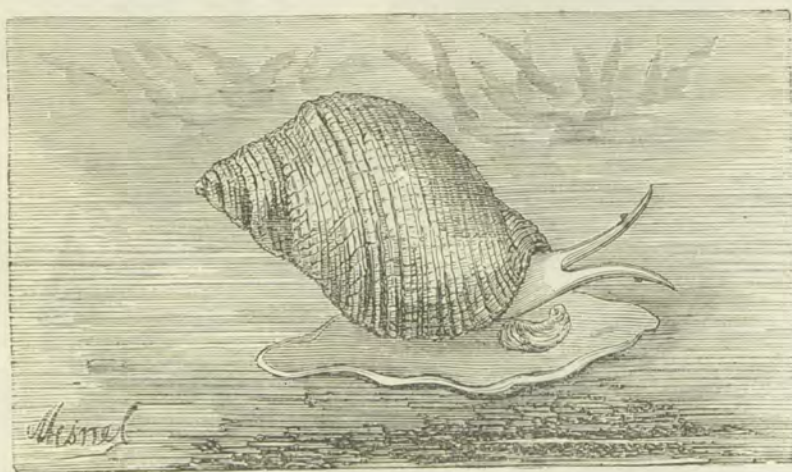
“ Shells have been employed by different nations for very diverse purposes.



“ Those which are known as *Guinea money*, or *cowries*, are really used for money in Guinea, and even in the Cape Verde Isles,



Loando, Senegal, Bengal, and some of the Philippine Islands. At Bengal they are also made into necklaces, collars, bracelets, and other decorations for the person. In Egypt and Africa the ladies convert them into earrings. The Greeks manufactured with them a kind of *fard*. The inhabitants of Tyre formerly extracted from the *murex* \* a beautiful purple colour, of which they made use in



MUREX—THE PURPLE OF THE DYERS.

dyeing. The Turks and Levantines adorn with cowries the harness of their steeds, and embellish their vases with them in a singularly skilful manner. In the island of Santa Marta shells are employed to ornament the mats of junk and palm with which the walls are covered. From the *burgandine* (?) a beautiful mother-of-pearl, known in commerce as *burgandine*, is extracted; the lapidaries

\* "The *purpura*, or purple, of the ancients was not, as is generally thought, a vermillion red, but rather a very deep violet, which at a later period came to have various shades of red. The secret of its preparation was only known to the Phœnicians, that being most esteemed which came from Tyre. An English traveller, Mr. Wilde, has discovered on the eastern shores of the Mediterranean, near the ruins of Tyre, a certain number of circular excavations in the solid rock. In these excavations he found a great number of broken shells of *murex trunculus*. It is probable that they had been bruised in great masses by the Tyrian workmen for the manufacture of the purple dye. Many shells of the same species are found actually living on the same coast at the present time.

"Aristotle, in his writings, dwells upon the purple. He says that this dye is taken from two flesh-eating molluscs inhabiting the sea which washes the Phœnician coast. According to the description given by the celebrated Greek philosopher, one of these animals had a very large shell, consisting of seven turns of the spiral, studded with spines, and terminating in a strong beak; the other had a shell much smaller. Aristotle named the last animal *buccinum*. It is thought that the last species is recognized in the *purpura capillus*, which abounds in the channel. Réaumur and Duhamel obtained, in fact, a purple colour from this species, which they applied to some stuffs, and found



encrust it with gold, and fashion it into very delicate jewels. From the *comes* are made those sculptured ornaments called cameos. The pearl oyster yields one of the most beautiful of gems, which in size and lustre almost rival the diamond. Industrious persons contrive to arrange very graceful bouquets of shells, which are frequently



PEARL OYSTER (*Margaritifera avicula*).

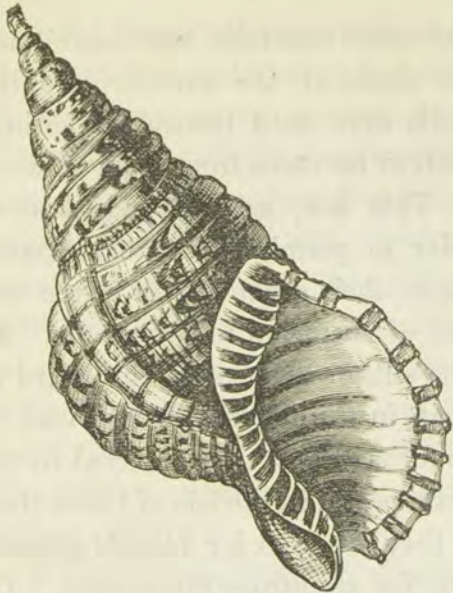
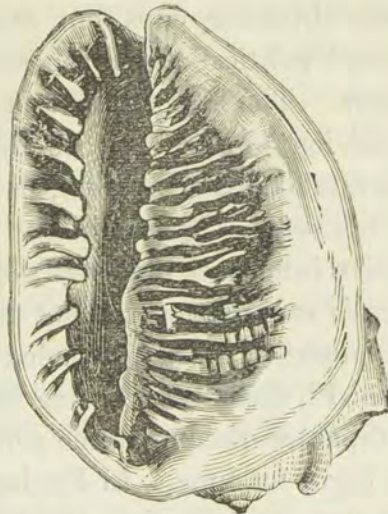
arranged and selected with so much skill, and with such attention to a just combination of colours, as completely to deceive the eye.

that it resisted the strongest lye. The genus *murex* is supposed to have been the first species indicated by Aristotle.

"Up to the present time the production of the purple remains a mystery. It was long thought this fine dye was furnished by the stomach, liver, and kidneys; but M. Lacaze Duthiers has demonstrated that the organ which secretes it is found on the lower surface of the mantle, between the intestines and the respiratory organs, where it forms a sort of fascia, or small band. The colouring matter, as it is extracted from the animal, is yellowish; exposed to the light, it becomes golden yellow, then green, finally taking a fine violet tint. While these transformations are in progress, a peculiarly pungent odour is disengaged, which strongly reminds one of that of assafoetida. That portion of the matter which has not passed into the violet tint is soluble in water; when it has taken that tint it becomes insoluble. The appearance of the colour seems provoked rather by the influence of the sun's rays than by the action of the air. The matter attains its final colour, in short, in proportion to the power of the sun's rays.

"It is a question, how far the colour evolved under the solar rays remains indelible. It is known that the contrary is the case with the colouring matter of the cochineal insect, which changes very quickly when exposed to the sun. It is probably the remarkable resistance it opposes to the rays of the sun which recommended it to the ancients. The patricians of Rome, and the rich citizens of Greece and Asia Minor, loved to watch the magical reflections of the sun on the glorious colour which ornamented their mantles."—  
THE OCEAN WORLD.



TRUMPET SHELL (*Triton*).HELMET SHELL (*Cassis*).

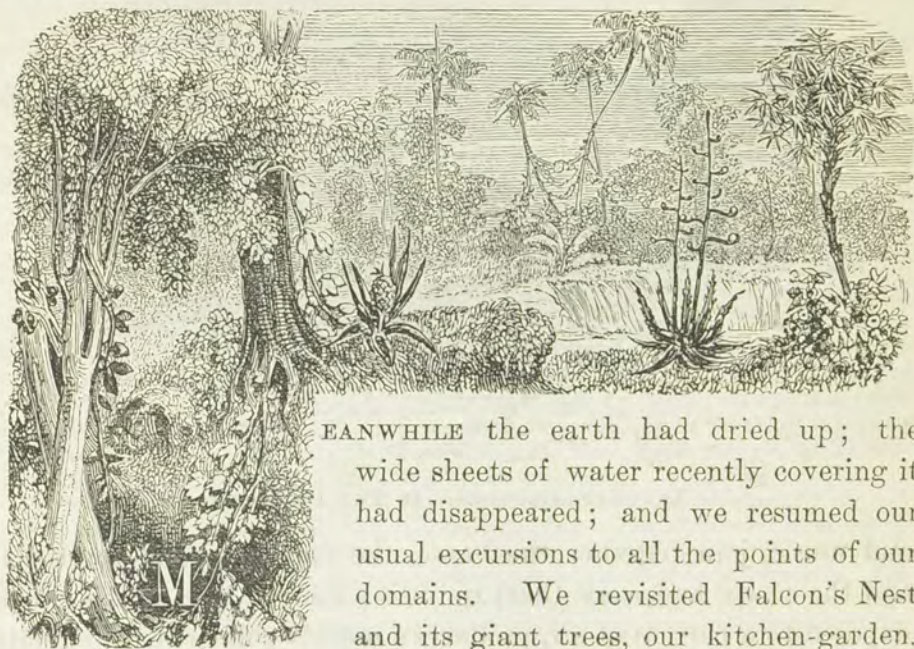
“ Among the Romans, the shells named *buccinum* served for military trumpets; they were the same kind as those which the Dutch now call trumpet-shells. The savages, who are always partial to dance

NAUTILUS (*Argonauta*)—IN TWO POSITIONS.

and music, join together the *toune*, the *buccinum*, the *porcelain*, and the *cassis*, and work them up into a kind of lyre, which, when exposed to a current of air, produces a melody sufficient to regulate



their movements in dancing. In some countries the inhabitants make drinking cups out of the shells of the nautili. In the ancient political assemblages shells were used instead of voting-papers. The law of ostracism derived its name from a Greek word signifying 'oyster' or 'shell.' This law, as everybody knows, was established at Athens, in order to permit of the banishment for ten years of those citizens whom their great wealth or too extensive influences rendered objects of suspicion to the people. In Corsica stuffs are woven out of the silk of the *byssus*, the beard of the mussel. It is pretended that in China, in the province of Kiam-Fi, shells, after having been for a certain time interred in the earth, are worked up in the porcelain paste; in the isle of Ciana they are burnt for lime. In England they are used for blanching wax, and also, as in Sardinia and Sicily, for manuring the ground. Of several kinds of molluscs the flesh is eaten; notably, mussels, oysters, cockles, whelks, periwinkles. The Romans of the later empire, who were excellent judges in gastronomical matters, always admitted them into their bills of fare. One of their writers has even been at the pains to place on record a description of the manner in which they fattened their favourite shell-fish, so as to render them more agreeable to the taste."



MEANWHILE the earth had dried up; the wide sheets of water recently covering it had disappeared; and we resumed our usual excursions to all the points of our domains. We revisited Falcon's Nest and its giant trees, our kitchen-garden.



the rocky corner which served as a forcing-house; every place, in a word, where our industry had left some traces of our residence.

One evening, when we had returned from Falcon's Nest more fatigued than usual, the heat having been excessive, my wife offered us, on our arrival, a great dish full of a kind of transparent jelly, most delicious in taste and odour: it was a mixture of sweetness, aromatic flavour, and an agreeable acidity; and after having eaten a few spoonfuls, we felt ourselves immediately restored and refreshed. Whether from the keenness of our appetite, or the real excellence of the new dish, we were induced to declare unanimously that we had never eaten anything so really delicious. We exhausted ourselves in conjecturing its nature; my wife laughed, and said nothing.

"It is ambrosia," said Professor Ernest.

"It is—it is—" said Ernest, and stopped short, scratching his head.

"It is—it is, gentlemen," replied their mother, smiling, "the residuum of the marine plant which I collected on our voyage to Shark Island, and afterwards locked away; that plant, you know, to which at first you gave so indifferent a reception."

"Can it be true?" I answered, with admiration. "How did you recognize, how did you know the plant? I do not remember to have met with its name in any of my books."

"Acknowledge, then, your inferiority!" rejoined my wife, with all the authority her valuable discovery necessarily gave her. "We poor women appear to you, lords of the creation! fit only to sew shirts, and cook, and brew; and you are hugely astonished when they happen to suggest some just or felicitous idea which your science would have passed by indifferently. Ah, my learned friends, your knowledge is for once at fault! Here is a discovery worth half-a-dozen of some of *your* discoveries, and made by a woman—a poor woman!"

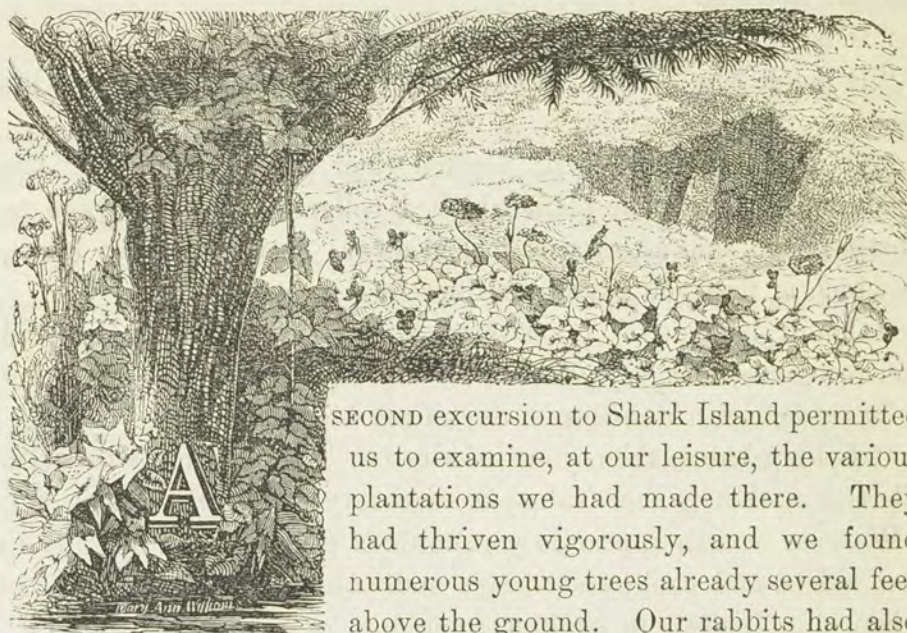
"Ah, it is true; we are conquered, and we humble ourselves before our conqueror. But what," said I, "gave you the idea of extracting from this marine plant a jelly so delicious?"

"At first, I had no conception of it, I must own, but I was assisted by the inspiration of memory. The Dutch lady who was



our companion on board our unfortunate vessel, and who had resided for some time in Cape Colony, once told me that the inhabitants collected on the sea-shore a species of weed (alga), which they carefully washed and then dried in the sun. They cooked it with sugar and citron, and thus obtained a capital jelly. Instead of sugar, I have used the juice of our canes; and instead of citron, the leaves of the raversara, some bits of vanilla, and a few drops of hydromel, and I think I must have succeeded tolerably well, since the dish found so much favour with you."

We thanked our good manageress for this new proof of her generous forethought, and paid her all due honour; for to remember well is almost to invent.



SECOND excursion to Shark Island permitted us to examine, at our leisure, the various plantations we had made there. They had thriven vigorously, and we found numerous young trees already several feet above the ground. Our rabbits had also prospered: the family had increased to an extent which really astonished us, and we saw them in the distance nibbling among the algæ on the sea-shore, a circumstance which reassured us as to the safety of our plantations.

These marine herbs had, I found, a saccharine taste and slight odour of violet. I perceived they were not identical with those my wife had discovered, but I thought I recognized in them the *fucus saccharinus* from which the inhabitants of Iceland extract their sugar. Our rabbits, indeed, could not but wax fat on so agree-



able a nourishment. However, as at our approach these little animals had taken refuge among the rocks, we resolved, in order to place them at our disposal, to construct a warren—that is, an enclosure shut in with stones and thorns, into which they could be driven.

We also made a descent upon Whale Island. The plantations which we had made there had perfectly succeeded. Thus everything prospered around us; our maritime possessions, no less than our territories on the mainland, offered the most delightful spectacle to the eyes of landowners: abundance, wealth, and a thriving vegetation, the sure promise of a happy harvest. We halted an instant to survey, from the summit of the rock which bordered the islet, this earth so well prepared; the thought of the treasures it was maturing for us led us to raise our hearts in thanksgiving towards God, and we blessed His holy name with a profound sentiment of gratitude for the mercy He had extended towards us. We then returned to the shore, whither we were recalled by the labours of the season.

One day while I was busy in the interior of our grotto, three of my sons disappeared without a word; they carried with them their provisions, arms, and traps. From their taking the traps I readily guessed the object of their expedition; it was a rat-hunt, and my merry lads had set out simply to procure the materials necessary for a new hat manufacture. I wished them a pleasant journey and good luck, and troubled myself no more about the matter.

Ernest, always a stay-at-home, had not made one of the party; he remained shut up in his library, while his mother was engaged in her customary household cares. I resolved to imitate my three young adventurers, and to set forth on a solitary excursion. I was in want of some heavy pieces of wood for crushing the corn we expected to gather at harvest time; but I did not wish to fell any timber near our house, lest we should expose it to the winds. Moreover, I should have been sorry to cut down a single one of those trees which formed so beautiful an addition to the landscape. I went straight to the stable, but all our steeds had disappeared except the buffalo, with which I was forced to be content. I harnessed it to the sledge, and we started in the direction of the Jackal



river. I took with me Folb and Braun; the faithful Juno remained by the side of Ernest and her mistress; as for Turk, he had set out in the morning, along with his young masters.

In going towards the brook, it was my intention to visit *en route* our plantations of manioc and potatoes, which stretched along its further bank. I had not seen, for four months, this ground which we had so carefully prepared, and I was curious to judge of the action of the rains upon it. I expected to find an abundant growth, and the most radiant anticipations of the future harvest. But what were my surprise and regret to find the plantation completely ravaged! The stems and leaves which had risen above the earth had been broken and crushed under foot; the roots were scattered about the ground; in a word, the scene was one of the completest desolation imaginable, instead of the spectacle of smiling plenty I had imaged to myself. At first I thought my sons might, by direction of their mother, have been gathering in the crops; but I was not long able to cherish so consolatory an



idea. From the foot-marks discernible I became convinced that the work of mischief had been wrought by some rooting and grubbing animals. The problem, therefore, reduced itself to this; were the authors of the ravage wild boars or the offspring of our own sow, whose unsociable disposition still kept her apart from our community?

Whichever they might be, I cursed them from my heart. What, said I—with feelings of discouragement—among all the riches which a beneficent nature has accumulated on this coast, must these wicked animals

choose precisely those which have cost us so much toil, and on which all our hopes reposed?



Meanwhile, my two companions, Folb and Braun, who understood nothing at all of the philosophical reverie in which I was plunged, started in quest of the spoilers, and were not long before they drove into my presence a whole herd, at whose head I recognized our old sow, grunting forth her dissatisfaction. I was so irritated by the scene of ravage before my eyes, that, by an almost instinctive movement, I raised my gun, and with a single charge brought down a couple of young pigs, which paid the penalty of the general transgression. The others immediately took to flight.

I called back my dogs, who had departed in pursuit, and kept them by my side, abandoning to their jaws the heads of the two victims. Decapitation had seemed to me the simplest and most expeditious method of bleeding them. Then I placed the carcasses on the sledge, and set to work to mark the trees best suited to my need; after which I returned to Tent-Town, much less delighted with my sport than saddened by the devastation which had led to it.

The labour which man undertakes to gain a certain object is nothing in comparison with the grief he feels on seeing himself deprived of the fruit of his toil. I was in the position of the farmer who has spent whole months in ploughing and seeding his ground, and whom a sudden storm deprives of all his hoped-for reward.

I described to my wife the scene of ravage I had visited; it deeply afflicted her, and she could scarcely bear to look at the two young pigs I had brought home. At length, however, I induced her to regard them as a capture of some value, and to transport them to her kitchen to undergo the necessary preparations before figuring at table. Ernest assisted his mother, and they promised to have the smaller one ready for our evening repast. The loin was placed on the spit, and a dish of potatoes placed underneath received the succulent gravy escaping from it.

Towards evening, and just as we began to feel some anxiety respecting the absence of our travellers, Rudly made his appearance in the distance. He soon arrived on his ostrich, galloping along at a tremendous speed, which his two brothers were wholly unable to imitate. Moreover, he was entirely free from burthens;



for he pretended that his steed was not adapted to receive any other load than the cavalier she bore upon her back. Fritz and Frederick each carried on their crupper a bag well filled with game; in a word, the whole result of their day's sport, which had been very fortunate, for they brought back with them four of the animals we had christened "the billed beast," twenty ondataras, an ape, a kangaroo, and two new varieties of musk-animals which they had encountered in the marshes. One was the *musk-beaver*, differing from the ondatara only in its snout, which is elongated into a trunk; the other I took to be the *tolay* of Buffon.

Fritz also deposited at our feet a bundle of a kind of thistle, with curved prickles—the teazel—which we saw would be exceedingly useful to us in working the hair of our felt and woollen stuffs. Meanwhile, each was burning to relate the details of his expedition; but, according to his custom, Rudly commenced.



"In the first place," cried he, "honour, all honour to my steed! honour to my long-legged horse! honour to the hippogriff! justly may we say of her that she is as light as the wind, and runs as swiftly as the tempest. She carries me onward with such rapidity that most of the time I am compelled to close my eyes, and it is with the greatest difficulty I contrive to breathe. The principal thing now required to make my horsemanship secure and comfortable is a mask with glass eyeholes. You will make one for me, will you not, my father? I must have one."



"Ah, sir cavalier, I am very, very sorry, but I will not make you a mask."

"And why not?"

"For two reasons: the first is, that instead of soliciting it you command it, and seem to have forgotten that in addressing your father, 'I must' is never an appropriate phrase. The second is, that instead of having recourse to the industry of others you should learn to depend upon yourself. When a man does not work out anything which is within reach of his strength, he should be censured for his idleness. Consequently, if you want a mask, you must make it for yourself."

"You are right, my good father," replied Rudly, stretching out his hand; "pardon my rudeness, I beg of you; I will use every effort to correct myself."

"That is well," rejoined Frederick; "every one for himself. And this very principle we have been putting in practice since the morning; we called upon no one to prepare a dinner for us in the midst of the desert. But, dear father, what say you to the multitude of skins we have brought you home?"

"I receive them with all the favour they deserve; but I could have wished my young huntsmen had not thought it necessary to gain them by an escapade, leaving their parents in a state of keen anxiety, as they did do, and—"

"Well, now," cried Frederick, "that is also true; and we remembered it when we were about three miles away from home; but, I assure you, it shall not happen again."

The frankness of this confession disarmed my anger, and I reproached myself for prolonging the uneasiness from which I saw my good boys suffered. I hastened to divert the conversation into a different channel, by requesting them to release their steeds from their harness and the loads under which they staggered.

While they were thus occupied, and were installing the patient animals in their stables, where racks full of fresh fodder awaited them, our good mother bethought herself of her young cavaliers, gave the roast a last turn, and we were all soon seated around the table.

"I' faith," said Fritz, delightfully inhaling the fragrance which



rose from the succulent pork, "here is a banquet which appeals to us at least as pleasantly as the barbarian dinner we have so often sat down to! And I must here acknowledge that I am conscious of possessing little taste for the nomadic life and its bills of fare, in which frugality is at once the virtue of the guest and the seasoning of the viands."

"A miracle!" cried the good mother, laughing; "I am enchanted at having divined the tastes of my little Fritz."

And then she seized the opportunity to indicate, with comic emphasis, the various treasures under which the table literally groaned. By the side of the young sucking-pig was a bowl of the freshest salad ever seen, and facing it, a large basin of that excellent Hottentot jelly we had so keenly relished on our last journey to Falcon's Nest. For dessert we had different kinds of fruits, a kind of fritter of guava apples fried in butter, and some sticks of cinnamon prepared in a syrup of sugar; a bottle of Cape wine and another of hydromel completed our luxurious repast, which, far from having a savage character, shone with all the delicacies of civilization.

During the meal each one related his adventures. Frederick described to us their entrance into the valley of the marsh, their attack upon the ondataras, and their ensnaring the proboscidean beavers with the bait of a little fish to which those animals are very partial. "Finally," added he, "it was owing to this circumstance that the 'billed beasts' fell into a trap which was never intended for them. Afterwards we fished on our own account, and gave variety to our dinner by a dish of ginseng cooked among the ashes."

"Ah, that was very fine, truly!" cried Rudly, always somewhat of a boaster; "fish and rats! rats and fish! *My* courser hunts far nobler game, and to him we owe this handsome kangaroo—a prey fit for a king."

"Yes," added Fritz, "and a prey much easier to catch, since it tranquilly awaits the approach of the hunter, browsing among the sweet grass; and moreover, as yet has not learned to fly at the smell of gunpowder."

"For my part," answered Frederick, "I bring back only a



plant, but perhaps it is worth more than a kangaroo. Remark, I beg of you, the arrangement and disposition of these spikes; observe how their points are bent back upon themselves, like hooks; will they not furnish us with excellent instruments in the fabrication of our hats, to comb and smooth out the hair?"

"Oh, no nonsense about your thistles," replied Rudly, "my



THE KANGAROO (*Macropus giganteus*).

game is worth far more than they are! And it is to my brave jackal we owe the prize."

We had thus before us all the results of our adventurers' expedition. The rats received but little attention; we knew them too well to spend much time in examining them. The *castor moschatus* had the honour of a much closer inspection; but the



kangaroo was, before all, the object of Master Ernest's special study. It was only the second animal of his kind we had seen since our shipwreck.

"The kangaroo," he informed us, "is one of the most curious animals of the Australian mainland. He is sometimes nine feet in length from the tip of the snout to the extremity of the tail, and occasionally weighs as much as fifty pounds. His hair is short and soft, and of a reddish gray, which is lighter on the sides and under the belly. He has a small elongated head, large straight ears, and a nose furnished with moustaches; his neck and shoulders are small; he increases gradually in size towards the haunches and lower part of the belly. The fore-legs of the largest kangaroos do not exceed eighteen inches in length. The animal makes use of them in excavating his burrow, and in carrying his food to his mouth. He moves entirely on his hind-limbs, making extraordinary jumps of from seven to eight feet in height. Each foot is divided into three toes, of which the middle one considerably exceeds the others in length and strength. The interior is of a remarkable structure. On examining it closely, you find that it is really divided in the middle, and even across the great toe, in such a manner that they appear to have been separated by a cutting instrument.

"The kangaroo's tail is long, thick at the base, and terminates in a point. He makes use of it as a defensive weapon, and deals with it such tremendous blows that they will break a man's leg."

Each of our young adventurers had, meanwhile, a thousand details to relate to us; even our little Fritz, who, novice as he was, would fain have persuaded us that his *début* had been distinguished by marvels of prowess. I allowed them all to expatiate unchecked, and set myself to examine the products of their day's chase, and to calculate what advantage we might derive from them. Frederick's thistle, which I recognized as the fuller's teazel, I considered a valuable acquisition; it was one implement the more added to our industrial resources. My young people had also taken care to cut some shoots of cinnamon and sweet apples, which our manageress received with marked satisfaction, and on the following morning formally planted in the kitchen-garden.



I was much pleased with this instance of forethought, and rejoiced that some considerations of the morrow had already entered their youthful brains, and inspired them with acts of prudence beyond their age.

We had afterwards to discuss the easiest and most expeditious method of skinning the kangaroo, and for this purpose I invented a machine, which at first excited the laughter of my sons.

We had found, on board the wreck, among the surgical instruments, a large syringe. This I took, and in the sides of the tube fitted a couple of valves destined to discharge the functions of a pneumatic machine; and, without saying a word to my sons, who had watched my operations with comical astonishment, I ordered them to fasten the kangaroo by his hind-legs to the branches of a tree, so that his chest should be about on a level with my own. When the animal was properly hoisted, I made a small incision in his skin, and courageously armed myself with my syringe.

Here the gravity of my sons utterly gave way, and they discharged at the instrument a rolling fire of quips and jokes such as it is very frequently the object of.

All this time, however, I carefully preserved my usual seriousness.

"Wait a moment," said I to the young jesters, "and you shall judge my work from its results."



FULLER'S TEASEL (*Dipsacus fullonum*).



So speaking, I fitted the tube to the opening I had made in the skin, and began to set the instrument in motion. Gradually the hide of the animal expanded, and in a few moments the kangaroo was a shapeless mass.



"And now to work!" I cried to my astounded lads; "strike this swollen vessel, or bladder, with your sticks, and then strip off the skin, for the operation is more than half completed."



And, in fact, one incision along the whole length of the belly proved sufficient; a few trials, and the skin was easily removed.

"Well, my young joker," said I to Rudly, "do you now comprehend the efficacy of the process?"

"I see the miracle," answered he; "but do not understand its cause."

"Listen, then. You must know that the skin of animals is only attached to their flesh by a combination of exceedingly slender and delicate fibres and vesicles. These fibres are of a very elastic character; but they will not distend beyond certain limits without breaking, and thus severing the bonds which unite the skin and the flesh. This has been precisely the action of my syringe on the kangaroo. By insinuating between skin and flesh a certain volume of air, I just raised the skin, then distended it, and, finally, broke the fibres and vesicles; hence the facility with which the animal was flayed."

"Oh, truly," replied Rudly, "one ought to be almost a magician to work these wonders!"

"Not at all; one need only exercise his reason and memory. What I have just done every village butcher can do, and much more successfully and more skilfully than I."

We now undertook and carried out a variety of domestic work intended to surround our modest and peaceable existence with all the conveniences of a life of ease and comfort. Were we in want of any new implement? Straightway I set to work; and with the exception of a few spoiled pieces of wood and iron, which I considered the usual penalty of an apprenticeship, our attempts in general met with tolerable success.

One day I bethought myself of selecting, in the whale's carcass, from the white and solid bones which composed the monster's spine, some mortars for grinding our grain. I found six, and planted them as firmly as possible on great blocks of wood which I transported into the kitchen. My wife *handselled* them with the product of our rice crop. Her sons assisted; and it was not a spectacle without interest to see this careful housekeeper teaching her children how to provide against the necessities of a bad season.



The mortars, it is true, did not work very quickly; but they answered tolerably well, and that sufficed. It was for ourselves, moreover, that we toiled; we had not to satisfy any exigency; we had not to endure the contumely of any tyrannical master living on the profits of our labour; we had no market to provide for; and, consequently, we could bestow on our domestic occupations all the time that was requisite for their proper performance.

Our moorfowl and the ostrich waited assiduously upon the boys while they were occupied in pounding the rice, and not a grain escaped from the mortars but it was immediately swallowed up by one of these aborigines. The ostrich especially, from the height of his long legs, stretching forth his flexible neck and picking up the rice among the fowls, was, indeed, the most original spectacle conceivable, and truly picturesque. Thus life and movement teemed around us; our domestic animals, which daily grew more tame, and the activity of my sons, all combined to give to the residence of Tent-town the appearance of a prosperous and abundant farm.

Meanwhile, I had not failed to perceive that the barley we had sown before the winter had arrived at maturity. It was not five months since we had entrusted it to the ground: this precocity filled us with joy, for it gave us the certainty of two harvests every year.

We found ourselves thus with all the labours of the colony on our arms: the herring shoals would soon be on the coast; the sea-dogs' chase would follow immediately; while, on the other hand, my good Elizabeth bewailed in a most lamentable fashion the manifold cares which would succeed the curing and salting business; there was the manioc to be gathered; the potatoes



BARLEY (*Hordeum*).



would have to be dug up, sorted, and packed away;—in fact, a thousand things would require attention, and the year was not long enough for all.

I quieted my good housewife as best I could; I assured her that the manioc, when ripe, might remain in the ground uninjured; and as for the potatoes, I told her we need not fear any damage to them in warm and sandy soils, where they would never throw out those tubers and excrescences which are the terror of our European farmers.

I decided that we would begin our agricultural labours with the corn, which I esteemed the most precious of our resources; but as it was important to complete the harvest with the least possible delay, and needful to proportion the fatigue it would entail upon us to the relative strength of my workmen, I resolved, in gathering the harvest, to pursue the Italian rather than the Swiss method. We should gain by it both as respected a shorter time and far less weariness.

I began by preparing in the front of the grotto a sufficiently wide space of ground to serve as a threshing-floor. This I watered at regular intervals with the residuum of our stalls and stables; afterwards, with great solid clubs, we repeatedly beat down the ground we had thus made damp. When the sun had absorbed all the humidity with which we had impregnated it, we repeated the process, and so continued until we had obtained a smooth, solid, and compact surface, without chink or crevice, and equally impenetrable to water and the rays of the sun. I had learned in Switzerland this way of preparing the ground; it is adopted by the farmers of our mountains in laying out the threshing-floors of their granges.

As soon as this work was completed, I yoked together the bull and buffalo to the famous osier basket which, under the pompous name of the palanquin, had been the instrument of a cruel mystification of poor Ernest. Rudly and Frederick did not fail to remind our philosopher of the pitiful scene, and to invite him to place himself again between the two beasts of burden. But the professor was not one of those who are twice caught in the same snare, and the cattle stalked calmly forward to the field we had marked out for reaping.



Before we commenced our labours, my wife inquired where we hoped to find the bands for binding up the corn into sheaves, and my boys, on their part, demanded from me a supply of scythes.



"We need nothing of the kind," I answered; "we are going to gather our crops in the Italian style; and Italians, natural enemies to all needless exertion, dispense with scythes as too heavy to handle, and with bands as too troublesome to weave."

"In that case," rejoined Frederick, "how are we to bind up the sheaves and carry them to our barns?"

"Oh, the Italians find no difficulty in this: in the first place, they don't make any sheaves; and, in the second, as they thresh the grain on the place where they cut it, they do not experience any embarrassment in carrying it home."

"Then, in my opinion, a harvest *à l'Italienne* will be a very comical affair."

"Of that you can soon judge."

At the same time I gathered in my left hand as many stalks as it would hold, and, clasping them firmly, cut them down at about



six inches from the top. This first handful I cast into the pannier of the two beasts, and, turning towards Frederick,—

“See,” said I, laughing, “the first act of an Italian harvest.”

My boys thought it an admirable process, and in a very short time the field presented only an uneven surface, bristling with decapitated straw, and a few forgotten ears rising here and there among it.

“Well, for my part,” said my wife, casting a glance of pity over the ravaged field, “I must confess I do not approve of reaping *à l’Italienne*. Why, the heart of a true Swiss woman would ache with anguish to see the remains of this depredation, and the lost ears which you have left among the straw.”

“Not so fast, good wife,” said I, laughing; “you are in too great a hurry to condemn my new method. Slothful as he is, the Italian does not make such a mess as you suppose of his harvest; and what he does not eat, he drinks.”

“Oh, as for that, it is an enigma which I do not understand.”

“You are right, my dear wife; but it is sometimes good, by the employment of enigmas, to make the mind reflect upon things it would otherwise forget; however, my present riddle is easily explained: the Italian drinks that part of his crop which he does not eat, but with this simple difference—it is not in the same form. Italy is a country as little favourable to the breeding of cattle as it is rich and fertile in all kinds of agricultural products. Grass, pasture, herbage, hay, are all extremely rare. The Italian compensates for this scarcity by converting the remains of his crop into fodder.”

“How does he do this?”

“He allows the decapitated straw to remain untouched for several weeks. The fresh air which necessarily circulates among the stalks promotes the growth of the herbage, and when the latter has obtained the same height as the straw, so as to form with it a kind of solid mass, it is then he plies his scythe, and collects for his cattle a precious fodder, which he owes as much to his intelligence as to the bounty of nature. The ears left here and there among the straw are now eagerly devoured by his cow, who returns for them in milk the equivalent of her master’s



thoughtful generosity. It is in this sense that the Italian drinks that portion of his harvest which he does not eat."

"Capital," answered my wife; "but if the Italian gives his straw to his cattle for food, with what does he make their litter?"

"They do without; the Italian soil is mild and clement, and nourishes none of that injurious dampness which in our less fortunate climate renders it dangerous for the cattle to lie on the naked earth. But do not let us stray from the end we have proposed to ourselves. After having reaped *à l'Italienne*, we must thresh the grain and separate the ears *à l'Italienne*. Gentlemen, let us return to the grotto, and there get ready your steeds, for their services will be required."

We immediately quitted the field which we had just reaped; and the quiet palanquin-bearers started for the grotto. On our arrival, I directed Ernest and his mother to scatter the ears all over our new threshing-floor, while my three couriers saddled their steeds, and held themselves ready to mount at the first signal I should give them. They had never seen such preparations for threshing grain; and looking upon it as a rural fête, inaugurated it with shouts of joyous laughter.

"Ah, on my word," cried Rudly, "my steed is about to practise a trade to which he was not accustomed in the deserts of the savannah."

"Threshing grain on horseback! What an idea!"

"Reaping and mowing on the gallop!" shouted a third.

And pleasantries and jokes poured in from all quarters. The innovation which I had introduced had at least the advantage of furnishing my family with a theme for pleasant laughter.

Meanwhile I preserved the indifferent air proper to a man who can boast of having put forward a new idea, and to all their raileries I opposed an appearance of the profoundest belief in the infallibility of my new mode of procedure.

When I thought the threshing-floor sufficiently strewed, I exclaimed,—

"To the saddle, troopers; to the saddle, and away!"

And I pointed out to them that they had nothing to do but gallop a few times over the ears of corn.



I leave the reader to imagine the merry scene that was then enacted; the bull, the onager, and the ostrich rivalled one another in swiftness; my wife, Ernest, and myself, each armed with a wooden rake, assiduously gathered up in rows the grain trodden out by the animals' hoofs.

All was going on admirably when two incidents, which I had not foreseen, occurred to revive to some extent the ironical *verve* of my wife, who had not been sincerely converted to the Italian method. The bull forgot himself to the extent of satisfying his natural wants in the very middle of our treasure; then, stopping short, he and the onager stretched their large long tongues over the corn which they had threshed, and helped themselves very freely to it.

"Halloa!" cried Frederick, aghast at the bull's forgetfulness, "is this also included in the Italian method?"

"And are we to look upon the rations which these gentlemen have appropriated," said his mother, with a slightly satirical air, "as a part of the Italian economy?"

I felt called upon to reply without delay to the shafts thus directed against me.

"As for the incongruous behaviour of the bull," I said, "it is one of those misfortunes which one cannot guard against, but at which, however, we can easily laugh; the hot climate under whose influence we are suffering will easily supply a remedy. As for the want of self-restraint with which my good Elizabeth so seriously reproaches these poor animals, it is, I think, capable of being justified; and, for my own part, I pardon them purely and simply in consideration of this verse of holy writ: 'The ox shall be fed with the product of the millstone he shall have turned.'"

The aptness of my quotation re-established immediately the high repute of the Italian method, which two unforeseen circumstances had nearly involved in irretrievable disgrace.

The threshing of our corn completed, we had to arrange for the separation of the chaff and dust with which it was adulterated. This operation was necessarily the most difficult and laborious of all. We placed the barley upon a fine sieve, and with wooden shovels turned it over and over so as to set free the lighter and



more worthless portions. But this was not effected without great annoyance to our eyes, nose, and mouth. The unfortunate workmen sneezed in the most melancholy manner, and so violently, that we were obliged to take the work in turns, and relieve each other at very short intervals. Towards the close, we bethought ourselves of the cap I had used to shelter myself from the bees. He whose turn it was to sift the grain, clapped it on his head, and found it extremely serviceable.

The feathered denizens of our poultry-yard, who had remained at a distance while our steeds performed at a gallop their functions as threshers, recovered their assurance, and in the twinkling of an eye we saw ourselves surrounded by a legion of clucking and pecking myrmidons, who spread themselves all over our heap, to levy in detail the tithe the bull and the onager had measured by a single stroke of their tongue.

"Let them alone," I said to my sons; "what they steal from us here we shall recover elsewhere. and if the pile of barley diminishes, our chickens will be the fatter."

But my recommendation was uttered too late, and my wife, who had no relish for the new principles of domestic economy I had laid down, had already dispersed the freebooters by a few energetic blows.

In these different occupations we spent several days. Before storing away our crop, we wished to ascertain its exact amount. We found ourselves rich enough to defy famine for a considerable period; we had more than sixty bushels of barley, eighty of wheat, and upwards of a hundred of maize. The latter grain had yielded best; whence I concluded that the soil was more favourable to its growth than to the barley, wheat, and other European cereals of which we had sown an equal quantity, and at the same time, but whose produce was considerably less.

We did not prepare the maize in the same manner as the barley; we dried the ears separately, and then detached the grain by beating them with thin flexible laths. With its leaves, which are suppler and more elastic than straw, we restuffed our beds. My wife burned a great quantity of the stalks, and from the alkaline quality of the ashes found them very useful in washing our linen.



Meanwhile I did not lose sight of my project of obtaining a second crop before the end of the fine season; and as soon as we had stored away our grain, we began to clear the ground of the stubble we had left standing. This task took precedence of every other.

But scarcely had we commenced it, ere from the middle of the field rose a swarm of quails and partridges much larger than those of Europe. They had been attracted to the spot by the few ears we had overlooked. As we had not expected such a *rencontre*, they succeeded in escaping us, with the exception of one unlucky quail, which Frederick knocked down with a stone. But the presence of these birds after the harvest was a precious augury for succeeding years; and it seemed we might confidently rely that the field we sowed with wheat or maize would infallibly provide us, two or three days afterwards, with numerous heads of game.

As soon as the ground was cleared, I sowed it anew; but remembering the principle of rotation of crops adopted in Europe to prevent exhaustion of the soil, I changed the character of the sowing, and for my second crops sowed the barley and oats I had collected in the preceding year before the rainy season.

Our field labours had scarcely terminated when the herring-bank appeared in the neighbourhood of Safety Bay. But we did not now depend so much on their arrival, our stock of winter provisions being abundant and various. We therefore contented ourselves with curing a couple of barrels full—the first of salted, and the second of smoked herrings. We caught also some other fish alive, and deposited them in the reservoirs we had constructed in Jackal River, where we could find them whenever they were wanted.

The sea-dogs had next their turn; my pneumatic syringe answered admirably, and, thanks to this invention, the skinning of these animals was effected without much difficulty or delay. Skin, and gut, and bladder—we utilized the whole. Experience had made us tolerably skilful in the art of preparing these various treasures and turning them to advantage; we began to execute all these operations with considerable adroitness. It was not until this period that we gave the “finishing touches” to our cajack; we set about it in earnest, and provided it with an ample stock of bladders



and skins filled with air, so as to render it extremely light, and float it on the very surface of the waves. This labour ended, we began to talk of testing the qualities of our new boat. To Frederick naturally belonged the first honours of the craft he had suggested.

We determined that the trial of the cajack should be made a festival. Everybody agreed to patronize it with his presence; and when Master Frederick was invested in the maritime costume already spoken of, we formally authorized him to take his place in his novel craft. I have omitted to state that to its keel were attached a couple of little castors—the remains of a double pulley removed from the wrecked vessel—so that, at need, it might serve as a vehicle for locomotion on land as well as for the purpose of navigation at sea. This advantage enabled my lads to surround the ceremony with all requisite pomp.

Frederick seated himself on his bench, as proud as Neptune or any other ocean-deity setting out on the liquid element for some distant voyage. The cajack in form was not unlike those vast shells the poets have represented as the chariots of the sea-gods. The gravity of the hero, who held in his hand an oar in lieu of a trident; the exertions of his brothers, who, while propelling the cajack in the rear, lustily sounded the marine conches, which, like Neptune's tritons, they had converted into trumpets;—all this presented a picture as animated as it was romantic. I laughed heartily at it; but my good Elizabeth, still cherishing her old hatred against the ocean, could not conceal the tears which filled her eyes when she thought of the dangers her eldest son was going to confront in a skiff so frail and insignificant. To comfort her anxious heart, I unmoored the periagua, and held it in readiness to fly to the assistance of the Greenland navigator, if this should become necessary, before he incurred any real peril.

Every precaution having been taken, "To the sea! to the sea!" I shouted to Frederick; and "To the sea! to the sea!" my merry lads repeated. In a moment the cajack glided over the water with inconceivable rapidity. The surface of the bay was beautifully smooth and calm; and soon the Greenlander began to balance himself gaily on the waves. We saw him, like a skilful joustier, execute at his pleasure a series of evolutions, each more skilful and



more daring than the preceding. Sometimes he darted like an arrow straight out of sight; then he suddenly returned, and with marvellous swiftness came towards us. At other times he disappeared in a cloud of foam, to the great terror of his mother; then we saw him, a short distance off, emerge anew with head above the waves, and raising his oar aloft to show us that he knew how to triumph over danger.

As the reader will suppose, the skill and daring of our young navigator provoked our warm and repeated encouragements. On his part, he burned to show himself worthy of our applause; and not content with skimming the smooth surface of the bay, turned his frail craft in the direction of Jackal River, and endeavoured to make head against the current; but it was far stronger than he was, and drove him out to sea for so considerable a distance that we soon lost sight of him completely.

To jump into the periagua, and fly to the succour of the poor Greenlander, was the work of a moment.

Rudly and Ernest accompanied me, and we left Fritz on the shore by the side of his mother, who abandoned herself to all the terrors maternal love, under such circumstances, might well inspire. The wheel of the periagua seemed to us to move much too slowly, so that, while I continued to turn it, each of my sons took in hand an oar. We scarcely skimmed the surface of the waters, but could discern no trace of our Greenlander; our shouts met with no response but the echoes of the cliffs, and our aching gaze was lost all around in the foamy waves which rolled against the horizon! I felt my heart contract, and had not the courage to confess to my sons the anxiety which consumed me, when suddenly, in the direction of a rock almost level with the water, I caught sight of a cloud of smoke. I put my hand to my pulse, and counted four beats before the smoke was followed by a report.

Then I regained my courage.

"He is safe!" I cried; "he is safe! Frederick is yonder—in the direction of the smoke—and in less than a quarter of an hour we will have rejoined him."

I immediately fired a pistol. It was answered by a second discharge in the same direction as the first.



Ernest pulled out his watch ; we began to row with redoubled ardour ; and ten minutes had scarcely elapsed before we could clearly distinguish Frederick ; at the end of fifteen, we were by his side.

We found the young hero of the sea posted among a group of rocks on a level with the waves ; before him lay extended a walrus, or sea-cow, which was pouring out its life-blood from two fatal harpoon wounds.

I began by addressing my son with the reproaches his imprudence deserved.

"My good father," he replied, "it was the current which carried me away in spite of myself. My oars proved too light to contend with the impetuous flood of Jackal River, and I found myself, almost without having perceived it, suddenly driven to a great distance from the shore ; for I could neither discern the coast-line nor the sail of the periagua. But I had no time to feel afraid ; my thoughts were almost immediately diverted by a herd of walruses, which passed nearly under my nose ! To cast the harpoon and strike one of these animals was the affair of a second ; but the wound I had inflicted was not mortal, and instead of diminishing his strength, seemed, on the contrary, to reinvigorate him. The track of blood which undulated in his rear, and the air-bladder which kept afloat the cord of the harpoon, served to indicate his



movements. I redoubled my exertions, and was fortunate enough to get sufficiently near him to launch a second harpoon at his side. This proved decisive, and the monster, after a few useless struggles, stretched himself on the rock where he is still lying. I called to mind Rudly's mishap with the tail of the boa, and to obviate any



similar accident, completed my conquest with a couple of pistol-shots—the reports of which you heard.”

“You have done,” said I, “a truly heroical deed, and the combat from which you have issued conqueror was not unattended with danger. The walrus is a formidable monster; instead of flying before you—as, fortunately, he *did* do—he might have turned upon your fragile skiff, and Heaven knows what would have become of you, my poor boy, if he had only applied his long sharp teeth to the thin sides of your leather shell! But, God be praised, you are saved—which I value more than the capture of half a score of these marine monsters. Nor are they of much value in themselves, for I do not know what use we shall make of the one you have slain, despite the hugeness of his bulk.”



THE WALRUS, OR MORSE (*Trichechus rosmarus*).

“At least,” replied Frederick, “if we can make no use of his body, I shall preserve his head. When I have properly prepared it, I will fasten it to the prow of my cajack, where his long glittering tusks will have a fine effect! And I shall christen my craft with the sonorous and pompous name of—

THE WALRUS!”

“Be it so: the tusks of the creature are almost the only part worth preservation. They possess the whiteness and almost the durability of ivory. But make haste with your operations, for the horizon is growing cloudy, and everything threatens an approaching storm.”



"This head will be a magnificent ornament for the prow of your canoe," said Rudly.

"Yes," rejoined Ernest, "to infect us with a fine and delightful odour of stale fish!"

"Don't disturb yourself, professor," answered the navigator; "don't disturb yourself; I know a method of preparing my walrus's head, so that it shall not smell any more than the stuffed animals in the Museum of Zurich."

Frederick then set to work.

"I thought," said Ernest to me, while his brother was thus engaged, "that seals, walruses, and all such animals only inhabited the waters of the North. How, then, do we meet them in these warm latitudes?"

"Undoubtedly," I replied, "these amphibia principally belong to the Northern Seas; but their presence in a Tropical climate is a phenomenon which explains itself. A tempest, or a convulsion of the abysses of the ocean, would suffice to transport them hither. Moreover, a species called the dugong is found in the latitude of the Cape of Good Hope; and perhaps it is a dugong which Frederick has captured. The differences between them are very slight, and nearly all the species feed on the same kind of food—namely, the marine herbs and shells which they contrive, with their long teeth, to loosen from the rocks."

Frederick had by this time finished his task, and while we stopped to cut from the sides and back of the monster a few strips of his stout hide, he profited by the opportunity to request me to add three very useful things to the equipment of his cajack:—

1st, A compass, with which to direct his course, in case he should be driven off the coast by a storm;

2nd, A lance; and,

3rd, A hatchet, that he might be suitably armed for attack or defence.

I considered these demands very reasonable, and as we had more than one sea-compass among our marine instruments, I promised my son he should have one to fix on the fore-part of his little skiff, so that he might properly guide it in all weathers. As for the hatchet and spear he also required from me, I the more willingly



acceded to the request because these two weapons would spare our warlike munitions, and because they were better suited for boarding than a pistol, or any other fire-arm.

I wished to take Frederick and his cajack on board our periagua to return to Tent-town; but he refused, and would fain precede us, as scout, that he might be the first to announce to his mother his safety and our return. I allowed him to have his own way; and though we set out together, he soon forged ahead of us.

While we were quietly rowing homeward, Ernest, who must always have the last word on everything, inquired of me how I had been able to calculate so exactly the distance which separated us from his brother.

"By a very simple method," answered I; "a few facts, known to all persons initiated, however slightly, in the phenomena of nature, sufficed to guide me. It is known that light traverses space with extreme rapidity, and that it breaks upon the eye of man with almost instantaneous splendour; so that it has been calculated to accomplish a distance of 320,000 yards (?) in a second. Sound, on the contrary, is transmitted much more slowly, for in the same period of time it does not travel more than 1440 feet.

"Now, I knew that my pulse, like every healthy and vigorous man, beats regularly sixty times in a minute. I counted four beats between our first glimpse of the smoke and our hearing the report; whence I concluded that we must be about 5760 feet distant from Frederick, or a little more than a mile; it was thus I was enabled to tell you with so much certainty that it would take us a quarter of an hour to overtake your brother. You will understand," I added, "that unforeseen atmospheric circumstances, the wind and the rain, will sometimes interfere with these calculations, but the difference will not be very important."

"Another secret of nature of which I knew nothing," remarked my little professor, in a tone which showed his gratification at thoroughly understanding me. "But," he continued almost immediately, "can we also determine from whence the celestial light proceeds, and the time it occupies to reach us?"

"Assuredly, yes. Astronomy knows with mathematical exactness the distance which separates our globe from the sun and the



other stars which illuminate it. It can prove to you, for example, that the sun's rays take eight minutes to arrive at our earth, and that those of Sirius require no less than half-a-dozen years. While, if an inhabitant of that great star discharged a cannon, we should not hear the report until six thousand years afterwards."

"Your example, papa, almost dizzies the brain!"

"What, then, would be your confusion if I applied my calculation to all the fixed stars, which are thousands of times farther off from us than Sirius? It is there, my boy, in yonder immense Book, in that sublime accumulation of marvels, that you must learn to recognize the sovereign Author of all things. It is especially in presence of this majestic concord of grand harmonies that the littleness of man is felt, and that he should humble himself to the dust; for all these stars, scattered like gold-dust over the vault of heaven, are perhaps so many inhabited worlds, compared with which our globe must appear but as a grain of sand in space."

Meanwhile the progress of the storm had been more rapid than I had expected; we were not half-way home when the dense black clouds, massed on the horizon, suddenly descended in torrents of rain. Wind, and lightning, and raging sea! All nature seemed confounded in the horrible disorder. Frederick was too far distant from us to rejoin us in the periagua, and I regretted extremely that I had not made him come on board, according to my first intention. But it was no use to think of such a thing; the rain fell so heavily that we could not even discern him. I ordered Ernest and Rudly to put on their swimming apparatus; for we took care never to set out on an expedition unprovided with these useful articles. I also bade them cling tightly to the fastenings of the periagua, that they might not be washed overboard by the waves. With panic-stricken soul I turned towards Heaven that prayerful gaze which Heaven always comprehends, and patiently awaited the issue of the storm, endeavouring to resign myself to the Divine will.

The tempest increased, and with it my anxiety increased; the waves rose mountains high. Sometimes a gust of wind raised us on their awful crest; a moment afterwards we saw an immense chasm yawn before us, in which our frail bark was swallowed up



without leaving any trace of her course. Our sails and oars were equally useless, and every moment we feared the periagua would break in twain.

But the duration of the storm was in inverse proportion to its fury: it lasted but for a few minutes, and the waves subsided into tranquillity as if by enchantment. The wind fell; though some black lowering clouds still hovered over our heads, and kept alive our anxiety. The periagua had nobly behaved herself during the squall; she had suffered no damage, notwithstanding the violent billows that had dashed against her sides, and made her whirl round and round on the angry waters like a feather.

Our first emotion was that of gratitude. We thanked the merciful Father who had once more saved us; but all anxiety was not yet over; Frederick and his cajack were ever present to my mind. His boat was so slight! The waves had been so furious! All that I could do was to turn myself once more towards the Lord, and implore him to grant me the strength I should stand in need of to support a blow whose full extent I durst not trust myself to contemplate.

We plied our oars with redoubled strength; I took charge of the winch which set in motion the mechanical wings of the boat, and ere long we arrived off Safety Bay. We pushed without delay into our well-known anchorage, and the first objects which presented themselves to our gaze were Frederick, Fritz, and their mother, all three kneeling upon the shore. They had first poured out their thanks to God for Frederick's safety, and afterwards had joined in earnest prayer for our preservation and speedy return. The reader may easily conceive how great was the agony of my good Elizabeth; the heart of the wife and mother was torn with anxiety, and but for her sincere trust in God she must have succumbed.

We leaped ashore in the midst of joyous shouts, and were speedily clasped in the embraces of our beloved ones. My wife had not strength to utter a single word of reproach, though we had been guilty of so gross an imprudence. The gratitude with which she was animated towards God, who had restored us to her safe and sound, absorbed her wholly.



Having joined in mutual devotion, we retired into our apartments to change for dry habiliments the clothes we wore, which the rain and sea-water had completely soaked.

"At length," said Frederick, who was the first to speak, "we are once more at home! Well, I must own that it seems to me rather difficult to say how we have got here; yet I felt no fear—as soon as I was satisfied my canoe could not be capsized I grew calm, and if a billow came upon me, held my breath until the wave had passed, when I found myself in the same position as before; I had got quit of it with no greater damage than a few mouthfuls of salt-water, which I spat out immediately afterwards. But as far as the end of my navigation is concerned, it was assuredly not my paddles brought me ashore; a stronger hand than mine sustained my cajak on the waves—the hand of God," added the young man, in a tone of deep sincerity, which I gladly recognized.

"What a day this has been, papa!" continued Frederick, still pale with terror; "was it not an awful storm?"

"As for me," rejoined Rudly, "I have not been so skilful as Frederick, but have swallowed a magnificent allowance of sea-water; and I can promise you it is the most detestable drink that ever passed down human throat!"

"That was your own fault, or nearly so," replied his elder brother, "and happened because you opened your jaws to their full extent when the wave came. What you ought to have done was, to have kept your lips close shut, and even, if need were, to have bitten them, so that the water could not have entered."

"I don't pretend to know exactly what I ought to have done, but I could never have gone through such a manœuvre while occupied in watching Ernest, who never opened his mouth, but made in revenge the strangest grimaces fear ever suggested."

"Ah, indeed!" replied our professor, somewhat bitterly. "I am delighted at having been able to amuse Master Rudly at a moment when amusement was not a thing very easily obtained. And however contorted may have been my countenance—whatever may have been my terror—I do not think I caused much embarrassment by my complaints, or by any manifestations of fear."



"That is true," I interrupted; "and if Ernest was afraid, he knew how to keep his thoughts and feelings to himself; he recollected that a danger is rendered greater and more embarrassing than it really is, if we give way to all the fruitless exclamations which fear so frequently inspires."

"No good can be gained," remarked the mother, "by attempting now to estimate the degree of alarm each one of us experienced. One thing is certain—that we were fully justified in our alarm, whatever may be the opinion of our little boastful Rudly. And for my part, I freely acknowledge that I must have sunk beneath the burden of my anxiety if I had not entrusted my spirit to the hands of our Saviour."

"And thus you chose the better part, pious and excellent woman! Now," I added, "that the danger is past, and we may cast a look behind, let us congratulate ourselves on the solidity of our equipment. Our bark-built periagua made head against the storm like a ship of the line, and however wild might be the sea, I would not hesitate to push off in her to the relief of a vessel in distress."

"Undoubtedly," cried Frederick, "your praise of the periagua is well deserved, and I willingly grant her the patent of *solidity* which you claim for her; but my cajack should also share in the honours of the day, for though twice or thrice submerged, nothing has given way in her frail structure; so that I would not be the last to accompany you, my father. Nevertheless it would perhaps be better not to go out to assist the ships, since for that purpose we should have to venture out into the open."

"Ah, well," said Rudly, laughing, "what fine life-boat men you would make! The shipwrecked must take care to be cast away in calm weather and a smooth sea."

"Why," added Frederick, pursuing his idea,—“why should we not erect in Shark Island a kind of fort, where we might fire at need a signal-gun? The echoes would be repeated through wind and rain; the poor creatures in distress would reply to us, and then we might hasten to their rescue.”

"Yes, yes; and then we should see the face of man again!" replied my young people, trembling with joy, and carried away by



that strong secret instinct of sociability which binds together all the members of the human race;—"men on this coast! men like ourselves! Oh, what happiness it would be!"

"Assuredly, all this would be very delightful if I had the enchanted cap of Prince Fortunatus at my disposal, and could quietly take a cannon under each arm, just as the bird in the old fairy tale transported elephants and rhinoceroses in his beak above the rocks. Otherwise, I do not exactly see how I am to mount a piece of ordnance on the projected fortress in Shark Island. Ah! gentlemen, your imaginations are nimble, and it is truly marvellous to see with what happy felicity they override every difficulty. *Pesta!* you propose to construct a fort in the sea, and to mount its battlements with cannon,—and how? By the strength of a man, assisted by four youths and a woman—the latter undoubtedly a good housekeeper, but a complete novice in military engineering!"

"But it appears to me," said my wife, in a slightly ironical tone, "that instead of pouring out so many complaints, you ought rather to approve of Frederick's projects, for all the difficulties contrived for you by the imagination of your sons are so many triumphs prepared to crown you with laurel!"

"Good! good!" answered I, laughing; "but, if you please, we will adjourn for the present this last triumph you are kind enough to design for me, and will occupy ourselves in securing our boats."

This work we immediately began; the periagua was drawn up on the sand, the cajack was stowed away in the grotto, and the head of the sea-horse, and the strips we had cut of his hide, were transported to our workshop, to undergo the requisite preparation before they were converted into ornaments for the cajack.

The rain, meanwhile, had been so heavy that the Jackal River had suddenly overflowed, and its waters spreading over the fields, had so much damaged some of our buildings as to render necessary their immediate repair.

While we were occupied in surveying the extent of the mischief, chance led us to a new discovery—namely, of some little pears, about the size of an olive or a small plum, scattered all over the sand. Their appearance was so tempting that my children attacked them immediately, but scarcely had they touched them with their



teeth ere they flung them away in disgust: Master Knips, who had also tasted them, showed himself equally emphatic in his disapproval. In my turn, I was anxious to know what this new fruit might really be, and recognized with much satisfaction that it was that of the clove,—a new culinary treasure to be ranked side by side with the pepper, the cinnamon, and the other spices which already figured in our ragoûts.



CLOVES  
(*Caryophyllus aromaticus*).

The clove grows in the Molucca Islands, which lie nearly under the Equator, and in form and size it resembles our European laurel. Its trunk is about eighteen inches in diameter, is hard, branched, and clothed with a bark like that of the olive. Its branches, which extend horizontally to a considerable distance, are of a bright red colour, and abundantly provided with alternate leaves like those of the laurel, full of ribs, and with somewhat wavy edges; the leaves are borne on a stalk, about an inch in length; the flowers grow in tufts at the extremity of the branches; they are rose-shaped, with four blue petals, and of a very pungent odour.

In the middle of the flower clusters a number of purplish stamens; the calyx is cylindrical, divided into four parts at its summit; of the colour of soot, and aromatic in flavour. After the flower has dried, it changes into a fruit of the shape of an olive or an ovoid, having but one green capsule—which at first is whitish, afterwards reddish, and then a blackish-brown—containing a hard oblong almond, marked by a furrow or groove throughout its entire length.

If left upon the tree, it does not fall spontaneously until the following year: although its aromatic virtue may be slight, it may still serve for planting; and in the space of eight or nine years the nut grows into a great fruit-producing tree.

The Dutch are accustomed to preserve the fresh cloves with sugar, and on sea-voyages they eat them after meals to assist digestion, and as an anti-scorbutic.

The nuts are gathered before the leaves expand. The season lasts from October until February; the picking is done by hand. Those which remain on the upper boughs are brought down by



long rods, and received in linen cloths spread upon the ground beneath the tree. Sometimes they are allowed to drop, after the grass has been cleared away with exceeding care. When first gathered, the cloves are of a reddish-brown colour, but they turn black on drying. They are also exposed on screens to the smoke of great fires for a few days, and thus, it is said, acquire the colour which they have when imported. None know better how to turn the clove to advantage than the Dutch settlers of Ternate, who were at one time its sole cultivators, and supplied all the world with this valuable spice. The clove, the cinnamon, and the nutmeg compose the circle in which, to a very large extent, all their commercial and industrial activity still revolves.

In the neighbourhood of Falcon's Nest we carried out a series of works intended to guard against fresh ravages, in case another hurricane should visit our shores. During this labour, we were visited, off the mouth of the Jackal River, by a superb company of salmon. We caught a certain quantity, which we salted and smoked, and cured according to the ordinary method. We kept a few in reserve, and as it were *at anchor*—so that we could find them when wanted—by passing a stout cord through their mouth and ears; just in the same fashion as the fishermen treat the sturgeons which they would fain take alive up the Danube to Vienna.

"What!" said Fritz, with an air of simple astonishment, "is not the salmon a salt-water fish in this country? This is the second time we have found it in a fresh-water river."

"Little one," replied Ernest, *professorially*, "the salmon belongs as much to the ocean as to the rivers which flow into it. It is a superb fish, and its red and tender flesh is worth all the trouble we take to secure it.

"Its head, as you see, is sharp and small, in comparison with its large body. Its mouth is of a tolerable capacity; the upper jaw is more elongated when the mouth is closed; its nostrils are pierced with two holes, rather nearer the eyes than the snout. Its eyes, situated at the side of the head, are round, with a silvery iris, slightly tinged with green, and its eyeball is black.

"The total length of the salmon is between twenty-eight and



thirty inches. Some very curious anatomical observations have been made upon its entrails. The localities where this fish abounds are the Baltic and the estuaries which empty their waters into that sea. The peculiar characteristic which distinguishes it from all other fish is its constant struggle with the current of the rivers; it leaps with great agility, and often springs across really considerable spaces. Its principal enemy is the leech, which torments and exhausts it by incessant attacks. Hence result, in a certain degree, the agility and impetuosity it throws into its leaps.

"The salmon may be regarded as one of the largest river-fishes known to naturalists; it sometimes equals the thunny in size. Individuals weighing thirty and forty pounds are often caught. Its skin is somewhat thick; its flesh, on the under-parts, is mingled with fat, and especially on the belly. This flesh, before being cooked, is of a whitish tint, and acquires its fine red colour through the action of the heat or the salt."

Here Rudly interrupted the lecture by some ill-timed jest: he accused the professor of being quite as much of a cook as a man of science; but the latter contented himself with a smile, and replied, in a tone of profound disdain,—

"I pity those simpletons who, being unable to rise to the height of science, console themselves by disparaging it."

Meanwhile we had resumed the peaceable course of our domestic occupations, when, one clear calm night, I was suddenly aroused by a chorus of howls and cries, as if all the jackals of the country, and the bears or tigers of the savannah, had invaded our domains in a body. I rose in alarm, and arming myself with a fowling-piece, moved towards the gate of the grotto, which we had been accustomed to leave open, to admit the fresh air during the night. Frederick had already anticipated me; I found him half-dressed, and preparing also to confront the danger.

"What can it be, father?" he said, in an anxious voice; "can it be a new invasion of jackals?"

I dissembled the real fear which I experienced, and endeavoured to reassure my son by suggesting that probably our pigs had thought proper to pay us a nocturnal visit. I had no idea I was speaking so near the truth.



We set forth, and behold! we found our dogs and Rudly's jackal engaged in combat with two or three boars of prodigious size and strength; a life of liberty in the fields had answered wonderfully well with our old sow and her lineage.

Our first proceeding was to indulge in hearty laughter; then we sought to recall our dogs, but it was no easy task. They had fastened on the ears of the unfortunate pigs, and our summons and menaces were equally powerless to make them let go. We were obliged to force open their jaws with our hands before we could put a stop to the battle; the pigs, released from the constraint they had suffered, never stopped for advice or warning, and were soon in full flight for the Jackal River, by which they had entered into our territories.

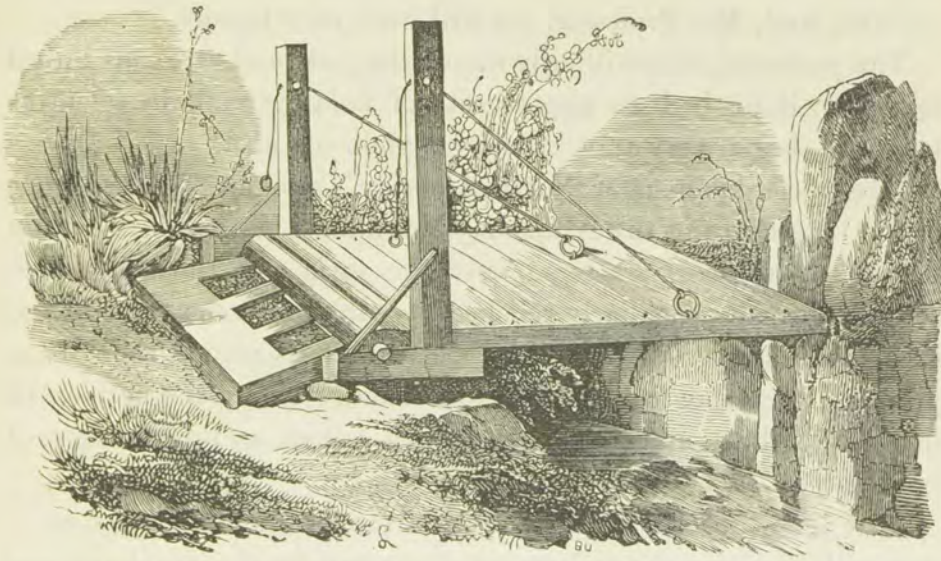
At first I ascribed this invasion to some negligence on our part, thinking that the pigs must have found Family Bridge accessible, and that we had forgotten to remove its planks. But I was mistaken: all the planks had been carried away, and the audacious acorn-eaters had very skilfully crossed the pass on the posts which formed the framework of the bridge.

This incident convinced me that Family Bridge no longer sufficed for our security. Instead of acting as a barrier, it really furnished a means of entrance into our domains. For a long time I had cherished the idea of a drawbridge; the moment for carrying it out seemed now to have arrived. Certes, a drawbridge was no small work to undertake; but after building a couple of ships, after attempting and successfully completing twenty other enterprises which bore witness to our intelligence and skill in the art of carpentry, I felt that the construction of a bridge ought not to dismay us.

I knew something of swing-bridges; but as I had neither screw nor winch—as, moreover, any work of that class would have presented difficulties against which my science would, perhaps, have been wrecked, I fixed on the simplest of all drawbridges: between two upright posts I constructed an easily-moved platform, and by means of two ropes, a lever, and a counterpoise, whose force and different actions I mutually combined, I attained the object I had proposed to myself, and we were soon provided with a bridge which



could be raised or lowered without any great expenditure of strength. This would be sufficient to ensure us against any incursion of animals, though the Jackal River was neither wide enough nor deep enough to oppose any real obstacle to a more serious attack. However this might be, we had not the less embellished



our territories with a new *chef d'œuvre*, and my boys executed a thousand gymnastic exercises around the posts of the draw-bridge, which they raised and lowered until tired of the nine days' wonder.

Then it met with the fate of every novelty; admiration is so quickly exhausted! And if they still clomb to the top of the posts, it was simply to have the pleasure of seeing from that elevation the antelopes and gazelles which bounded over the plains of Falcon's-Nest.

"How light and nimble," said Rudly, "are these graceful animals! They scarcely skim the ground. What a pity we cannot tame them, or at least get near them without their starting off immediately, like a cloud of dust before the wind! It would be so pleasant to see them come and quench their thirst in the brook while we were working on its bank!"

"To gain this end," said Ernest, "we must imitate the inhabitants of Georgia in their mode of attracting the buffalo."



"Tush!" cried Rudly, "can you not, professor, draw your examples from some place a little nearer home?"

"For the world of thought," replied the professor, gravely, "distance does not exist; and it would be better, perhaps, to know how the Georgians attract their buffaloes, than to reject the process without consideration because Georgia is too far off!"

"Oh, well, Mr. Professor, we will hear your lecture."

The professor, who willingly forgot the jests and sarcasms rained upon him if he had an opportunity of holding forth in scientific language, began very tranquilly to explain his idea.

"In the savannahs of North America," said he, "on the slope of the long chain of the Alleghany Mountains, are found at certain points beds of marl scattered over the surface of the soil, which contain the salts peculiarly relished by wild and domestic animals; the buffaloes especially crowd in great numbers around these baits prepared for them by Nature's own hand. There the natives lie in wait for them, and there they join in a chase as productive as it is valuable.

"In default of the saline marl and the natural bait, we may, if you will," continued our lecturer, "prepare for the antelopes and gazelles a kind of artificial bait, which these graceful animals will assuredly patronize. For this purpose we need only mix together some porcelain clay and salt."

"Agreed! agreed!" shouted all the boys unanimously; "long live Professor Ernest, head-master in the academy of Tent-town, doctor, librarian, curate of the museum, naturalist, &c. &c. &c."

To arrange an excursion, and to solicit permission, was the affair of a second; and my young headstrong lads promised themselves so much pleasure from it, that I had not the courage to contradict them.

"Thanks, thanks, thanks, papa!" was the general exclamation; "an excursion is a great deal more amusing than bridge-building."

"I will go and make some pemmican," said Frederick; "we have enough bear's meat left for the purpose."

"And I," said Rudly, with a mysteriousness very unusual to him, "will take a couple of pigeons with me. I intend to do something with them; but *what* is my secret."



"And I," added little Fritz, "will look to the harness; and if Frederick will listen to me, we will take the cajack with us; it will glide splendidly over the surface of the lake, and we may succeed, perhaps, in catching some black swans. Ah, that would be a noble capture! A pair of black swans would have a fine effect in our basin at Falcon's-Nest."

The weather was pure and serene; and all things promised my young adventurers a delightful and most enjoyable excursion.

Frederick repaired to his mother, whom he found busily engaged in her kitchen-garden. He saluted her with all the grace of an accomplished cavalier, and asked her if she would give him a few slices of bear's meat to make some pemmican.

"Tell me, in the first place," replied his mother, "what is pemmican?"

"A provision well known and much esteemed in North America. It is almost the sole food of the Canadian trappers. It is composed of the flesh of a bear or a deer, macerated and pounded until it is reduced to a very small compass."

"And what is the cause of your sudden Canadian tastes? The dish, I think, cannot be calculated to prove particularly agreeable to an epicure's palate! Bear's flesh, macerated and pounded, must produce a curious article."

"Ah, mother, our tastes originate in an excursion we are going to make towards the savannah, and the pemmican is to be our travelling provision."

"What!" exclaimed our good mother, in a tone of subdued irritation, "another excursion resolved upon in my absence! Ah, young gentleman, you have found a capital way of anticipating all my objections."

Frederick then exercised all his address to persuade his mother that she had not been excluded from the council; and flattered her so successfully that the young rogue soon returned with the supply of bear's flesh which he was in want of. The manufacture of the pemmican commenced immediately, under Frederick's orders and direction.

The flesh was pounded, kneaded, and afterwards seasoned with salt and spices, and after two days' work had lost half its original



volume. I tasted the viand, on which Frederick pronounced a pompous eulogium; it did not appear to me absolutely bad.

The young adventurers then gathered the bags, panniers, and all the utensils which were likely to be useful. Even our old sledge came in for a turn; it was taken off the cannon-wheels on which it had been mounted, and crammed full of baggage. The cajack, the provisions, the powder and shot, the bow and arrows—nothing was forgotten; a supply of rice and salt was also taken, and twenty other articles which I had omitted. A caravan about to plunge into the deserts of Arabia could not have made greater or more complete preparations.

The morning of departure arrived. Everybody was up before daybreak. Rudly, without saying a word, stole into the dove-cote, and took from it several pairs of European pigeons. They belonged to the kind called *demi-becs*. These have a ring of red round their eyes, and are included in the family which Buffon has named *Columbæ turcicæ*.

“Well,” said I to the young adventurer, as he placed with great care his timid and frightened pigeons in their basket, “it appears that you gentlemen do not intend to be contented with your Canadian viands, and are taking due precautions in consequence; but I fear you have made a very poor choice, and that the flesh of these old pigeons won’t be much better than the pemmican.”

The young rascal eyed me laughingly, and made no answer to my remark. Only, just as they were about to start, I saw him whispering mysteriously with Ernest; but they were so secret in all their arrangements, that I was compelled to remain contented in my ignorance, with the certainty that they were preparing for me some surprise.

At length they set out; their mother repeated to them several times her advice to be prudent; we embraced them, and they soon disappeared in a cloud of dust, with their steeds and the sledge. Ernest remained at home with his mother and me; I took him to assist me in the construction of a machine which I had long meditated, and which my wife urgently solicited me to undertake;—a sugar-pressing mill to extract from the canes the juice they contained. We set to work without the loss of a moment. The



machine, composed of three upright cylinders, differed little from ordinary crushing-mills, except that I so planned it as to render it capable of being worked by our animals, and to dispense with our own labour.

Our task naturally led us to talk of the manufacture of sugar.

"A few more improvements," said Ernest, laughing, "and we shall soon have at Tent-town a complete sugar-refinery."

"Wait awhile," answered I; "between a refinery and our mechanical crushing-mill there exists a wide interval, and I do not think we shall succeed very readily in bridging it over. For the manufacture of sugar, workshops, utensils, and a mass of materials are required, which our scanty means forbid us to think of."

"So I should think," answered the professor; "though, to tell the truth, I have but very imperfect notions about sugar and the processes by which the sweet thick juice we extract from these canes is converted into a white and solid matter, crystallized, pure, and shining."

This phrase, in Ernest's mouth, was equivalent to a formal request that I would recall to mind all the facts I knew about sugar, and make it the subject of a detailed dissertation. I did not allow my little professor to remain long unsatisfied.



"SUGAR," I began, "comes from the plant you know of, the sugar-cane, on which we have just been exercising our industrial capacity."

"The sugar-cane is easily cultivated and propagated; it is only necessary to lay the canes in the furrows, and from each knot springs a shoot, which soon becomes the stock of a new stem. In from nine to ten months it arrives at maturity. It is then cut; the leaves are thrown aside, and the canes crushed under rollers of very hard wood; the liquor which flows forth, and is called the 'honey of the cane,' is—sugar."



"The first thing now to be done with the honey of the cane is to boil it: this operation ought to be instantaneous; at the end of twenty-four hours it grows rather sharp, and soon afterwards is changed into vinegar.



A SUGAR PLANTATION.

"It is boiled for a whole day, water being poured into it from time to time, and the seething mass being skimmed; the froth thus obtained is used for fattening animals. Still further to cleanse the sugar, it is mixed with a strong ley of wood-ashes and quicklime, and again skimmed continually; afterwards, the liquor is strained through a cloth.

"The residuum, in some places, serves as food for swine; in others, it is diluted with water, allowed to ferment, and made into wine. The liquor is boiled anew; the ebullition is kept down by dropping in a few spoonfuls of oil, for the smallest quantity of acid would prevent the sugar from crystallizing and acquiring a solid consistency.

"While still warm the liquor is poured into earthen moulds, shaped like hollow cones, rounded at the two extremities and



open at either end—the little aperture at the apex being stopped up with wood, straw, or linen. All the processes which take place in the preparation and refining of sugar tend to free the essence from a honey-like sugar which would injure its whiteness, firmness, and the fineness and glitter of its grain. The little aperture, then, is opened to permit the honey-like sugar to flow through; while over the upper part of the mould is poured a clear paste made of white clayey earth. The water takes up the glutinous substance of the earth, and percolates through the body of the sugar, washing the small grains, and purifying them of their honied juice.

“After forty days, the sugar is sufficiently dry and solid; it has acquired a reddish-brown colour, and is then called *clayed red sugar* (*sucré terre rouge*). If it is of a gray-whitish colour, and in friable morsels, it is named *muscovado*—this is the material of which all the other kinds of sugar are made. When the muscovado has undergone afresh nearly all the operations I have just described, it is still further purified, and becomes *cassonada*, the best of which is white and dry, and has an odour of violet. Cassonada, purified in the same manner, either by the whites of eggs or by bullock’s blood, yields the refined sugar, or *sugar royal*, so named on account of its purity and shining grain.

“This sugar, when very dry, produces, on being struck by the finger, a kind of sound; and, if struck or rubbed in the darkness with a knife, gives forth a phosphoric gleam.

“Twelve hundred pounds of refined sugar will not yield more than six hundred pounds of sugar royal.

“The honied liquor which distils through the moulds does not grow thicker than honey; which is the reason it is called ‘honey of sugar,’ ‘remel,’ and, more commonly, ‘*mélasse*,’ or ‘molasses.’ Sugar-candy is simply sugar melted several times and then crystallized; it is both white and red. In Holland a very extensive commerce is carried on in all kinds of sugars—especially those of the East Indies, Brazil, Barbadoes, Antigua, Saint Domingo, Martinique, and Surinam. Brazil sugar is not so white as that of Barbadoes, Jamaica, and St. Domingo, and is thicker and more oily.”



While we were engaged in tranquil dissertations, our young adventurers pursued their journey, marching in the direction of the savannah. The occupations of the first few days were afterwards described by themselves in the following language:—

They had traversed the intervening space between Family Bridge and the country which we had christened Woodland or



Hermitage, where they intended to pass the remainder of the day, when, on approaching the farm, they suddenly heard in the distance a succession of sounds like the accents of the human voice. It was a kind of prolonged laughter, but with something sinister in its tone. The animals halted with every sign of alarm, the dogs began to howl, and the ostrich, most terrified of all, flew in the direction of the Swan Lake, with a rapidity which the voice and exertions of its rider were powerless to control.

The same accents continued to make themselves heard, and the bull and onager showing signs of agitation, Frederick and his brother were obliged to spring to the ground.

"There must be some ferocious animal yonder," said Frederick to his brother; "our steeds will take to flight if we don't contrive to fasten them up; and, judging from their terror, the animal



must be a lion or a tiger, or some similar beast. Go a few steps forward, while I tie up the bull and onager; and if you catch sight of anything, return to me in all haste, and then we will decide on what steps we had better take. If it must be so, we



will remount our chargers, and fly as fast as we can; unfortunately, Rudly has taken the opposite direction."

Fritz immediately seized his gun, thrust a couple of pistols into his belt, called Folb and Braun to his side, and began to walk



very quietly in the direction whence, at intervals, the extraordinary laughter prevailed.

He had not gone more than thirty paces, stooping, and walking with the utmost caution, when he discovered through the wood an enormous hyæna, which, having worried one of our sheep, was on the point of devouring it; the blood trickled from its lips, and it uttered a kind of yelp of savage joy, like a half-choked burst of laughter.

The appearance of the little hunter did not disturb the monster in his hideous repast, and while rolling his flaming eyeballs, he continued to tear his prey; Fritz, however, wanted neither courage nor presence of mind. He placed himself behind a tree, took aim at the animal, and fired two barrels—and with so much good luck that he shattered the hyæna's fore-paws, and pierced the hyæna's chest. The dogs then intervened—their terror changed to rage—and a most terrible combat arose between them and the hyæna, whose double wound had augmented his ferocity. The air was rent with confused howlings, barkings, and horrible cries; blood flowed; our dogs pressed in upon the enemy, but received numerous severe wounds.

Frederick, having fastened up the onager and the bull to a tree, ran up at the sound of the double report, just as the two dogs flung themselves on the baffled monster. He would fain have terminated the struggle with a single shot, but this was impossible, for to have hit the hyæna would have been to hit the dogs. So the two lads were constrained to look on, and await the natural issue of the fray. Folb seized the hyæna by the throat, and Braun by the muzzle; and with steadfast grasp they clung to him, until his strength was exhausted, and he fell lifeless to the ground. My sons uttered a joyous shout, and hastened to recall their brave and sturdy dogs; they dressed the wounds they had received, anointing them with hydromel and bear's-fat which they had taken with them to eat.

Soon afterwards, Rudly returned. He had extricated himself with difficulty from the middle of the rice-field into which the ostrich had run for refuge, and had had to use the greatest exertions before that frightened creature could be induced to retrace his steps.



On seeing the monster which his brothers had courageously conquered during his absence, Rudly gave full reins to his admiration, though he had not shared in the achievement.

In fact, the hyæna, with his tawny mane, bristling with coarse black hair, his paws armed with sharp nails, his muzzle elongated like that of a wolf, his eyes small, round, and red, is one of those beasts of prey which possess a more than ordinary degree of ferocity.

The hyæna is nearly of the size of a wild boar, but his body is shorter and more compact; he has a very square and short head; his ears are long, straight, and narrow; and his legs, especially the hind ones, are of great length; his eyes are placed like those of a dog; the hair of his body is long; the mane of a dull grayish hue, mixed with a little black and yellow in transversal waves.

Of all quadrupeds he is perhaps the only one which has only four toes on the hind as well as the fore feet.

This wild and solitary animal inhabits the mountain-caves, the recesses of the rocks, and the dens which he excavates under the earth. Nothing can subdue his natural ferocity, and though taken young, he cannot be tamed. He lives by prey like the wolf, but is stronger and much more courageous; he sometimes attacks men, flings himself upon the cattle, follows in the track of the flocks, and breaks open under cover of night the doors of the stalls and stables; his eyes glow like coals of fire in the darkness, and it is pretended that he can see better by night than by day. The hyæna defends himself against the lion: he fears not the panther, and provokes the lynx. When prey fails him, he digs up the earth with his claws, and feeds on the corpses of men and the carcasses of animals. He is found in nearly all the warm latitudes of Asia and Africa.

The capture of this animal was, undoubtedly, one of the most heroic actions which we had performed since our settlement on the island.

When my sons had conducted their caravan to Woodland, where they intended to establish themselves temporarily, they re-



THE SPOTTED HYÆNA (*Hyæna crocuta*).

turned for their spoil, and transported it to Woodland in their sledge. The whole of the following day was devoted to skinning the animal, and putting the skin through the first process requisite for its preservation.



WHILE our three boys were thus engaged, my wife, Ernest, and myself were seated peaceably under the domed roof of our grotto.

"Where are my brothers?" said Ernest; "I predict that ere long we shall have news of them."

"Why do you think so?" answered his mother.

"Who knows? I believe in dreams," answered he, laughing, "and I dreamed—"



"Pshaw! your dreams are a fine authority!"

While they were thus merrily chatting, a bird, whose species we could not distinguish on account of the growing darkness, glided through the open doorway of the pigeon-house.

"Shut the door! shut the door!" cried Ernest, "and to-morrow morning we shall see who our new guest is. Who knows?—he is perhaps a courier from New Holland, with despatches under his wing from Sydney and Port Jackson, in whose neighbourhood you think our island lies."

"What wild fancy is this? Post, despatches, news, courier—what whim has seized you this evening, Ernest?"

"Oh, nothing, nothing," he replied, in a tone and with an air of indifference; "it was just the arrival of yonder pigeon re-



CARRIER PIGEON (*Columba tabellaria*).

mind me of what I had read of the ancient Greeks and Romans, who corresponded—did they not?—by means of traveller-pigeons. Is it not a real fact?" added Ernest.



"Undoubtedly," answered I. "Of all the denizens of the world of air, there is not one who can compare with the pigeon for travelling great distances. The bird is essentially a traveller. Besides those pigeons which are trained to the office of courier, naturalists speak of a particular species which willingly accomplishes the passage from the Alleghany Mountains to the Scottish Highlands. The history of these pigeons is exceedingly curious; but instead of relating it from memory, I will read it to you as described in a French work I have been lately reading."

I fetched the book I spoke of from the captain's library, and read as follows:—

## THE CARRIER PIGEON.



Of this species of pigeon some of our naturalists have given the name of *Columba migratoria*—that is, "travelling pigeon;" and its habits fully justify this appellation, though it is not sufficiently characteristic. Sometimes dwelling near the Gulf of Mexico, and sometimes visiting the shores of Hudson's Bay, it traverses in its excursions upwards of seven hundred leagues, measured on the meridian; its range, however, in longitude, is not so extensive, and it never passes beyond the great chain of the Rocky Mountains, its western limits.

A few more adventurous individuals, or, perhaps, not more adventurous, but accidentally driven beyond the regions they usually frequent, wing their way across the ocean even to the coast of Scotland. Their power of flight and range of vision are extraordinary: from the great elevation they attain in the air, they detect on the trees below the fruits which form their food—the berries of the juniper and the *airelle*—and when they halt in their course, it is not for any empty purpose.

As they fly in numerous compact flocks, in such multitudes that they sometimes obscure the light of the sun, their swiftness can be calculated by the same means as that of the clouds; and it is asserted that they do not accomplish less than five-and-twenty



leagues per hour. If human industry could make these rapid couriers subservient to its needs, telegraphs \* would become nearly useless—a message could be transmitted from Zurich to Berlin in half a day.



These birds are admirably fitted for their long voyages by the form and structure of their body. Their wings are proportionally longer than in any other species of the same genus; their broad forked tail acts as a rudder, and is adapted to the extent and force of their wings.

As to the colours of their plumage, and their distribution, a very great difference is noticeable between the two sexes; the modest exterior of the female contrasting with the brilliant decoration of the male as vividly as that of ordinary domestic hens compares with the resplendent plumage of the cock. If these carrier pigeons could be accustomed to the sedentary life of the dove-cote and the pigeon-house, they would form another ornament for country dwellings. The male is not only much handsomer, but also much larger than his mate; from the beak to the extremity of the tail he measures nearly two feet in length; his head is of a slaty blue; the wings and upper part of the body are blue, besprinkled with black and brown spots; the breast is of the colour of a reddish nut; the neck is embellished with the most

\* This was written before the introduction of the electric telegraph, which has placed the lightning at man's service, and far outstrips the speed of any bird.



brilliant hues—gold, emerald, purple, a glowing scarlet, displaying themselves in all their lustre; the belly is a pure white; the legs and feet are of a fine red, while a broad streak of shining black traverses the entire length of the tail.

The distinctive and dominant characteristic of this species appears to be a warm love of society. You meet with no isolated individuals; in remote excursions no stragglers fall behind; their troops cover an immense space when they set forth to seek in the forests a place which will furnish them with their subsistence. An eminent author has estimated at some hundreds of millions one of these winged legions which he encountered on the banks of the Ohio; and his calculation, far from being exaggerated, descends, perhaps, very much below the actual reality.

In truth, this cloud of birds extended over an area of about seven thousand five hundred feet, and as its passage did not occupy less than three hours, it must have measured in length fully seventy-five leagues, or 450,000 yards. Now, if we allow but two birds to each cubic yard, the band must have been composed of one thousand two hundred millions (1,200,000,000) of birds; but so dense was the army, that it actually cast a shadow on the earth.

The clang of all the moving pinions was astounding and drowsily monotonous.

It should be observed that these immense movable columns are formed by the re-union of a very great number of distinct troops—distinct, but all having a common aim, and executing the same manœuvres in the same localities. They have also the singular habit of selecting one identical roosting-place at the rendezvous where they arrive in the evening, sometimes from a great distance—and which they quit in the morning to seek for food. The forest which receives these travellers into its bosom is but ill repaid for its hospitality; for they swoop down on the trees so impetuously, and in such great numbers, that the strongest branches are broken, and give way beneath their burden. It is as if a violent storm had struck that part of the forest with repeated blows.

A calculation has been made of the nourishment daily consumed by a legion of pigeons, reducing each individual to a very moderate



ration, for they eat frequently and eat heartily. It is difficult to accept the result of this calculation, that one of these winged peoples, established in the depths of the forest, would consume four or five times as much as the most populous of the European capitals, without taking any account of the actual weight of their food. It is not astonishing, however, that at the glimmer of dawn this population should disperse to put under contribution an area equivalent to that of several Swiss cantons.

Some divisions of the great army fly to a considerable distance in quest of spoil, and are consequently delayed until late, but this circumstance does not prevent them from returning regularly to their usual roost. This place of repose has been selected with prudence, and with all possible secrecy, afar from the ordinary abodes of the natural enemies of these peaceable-minded birds; but no precautions will suffice against their most dangerous foes, the American settlers.

Immediately that a pigeon's roosting-spot has been discovered, preparations are hastily made for an expedition of some duration, and which will occupy everybody. Besides the indispensable provisions, munitions, and arms, empty barrels are transported in light carts, besides a quantity of salt, and some household utensils. The whole family sets out on the march, taking with them their domestic animals. When the hunters are all assembled, they concert among themselves certain signals of warning and guidance, establish a kind of police for the general safety and common interest, and the campaign opens.

The fusillade commences in the evening, and lasts as long as its victims are discernible. Early in the morning, and after the birds have departed, the marksmen—or, should we say, murderers?—proceed to gather their spoils, though often anticipated, to some extent, by the voracious animals of the country, both birds and quadrupeds.

During the day enormous heaps of dead pigeons impose an onerous task on the persons charged with plucking, preparing, and storing them. However, the harvest is not yet complete; a portion is left to the gleaners; that is, to the pigs, which, as long as the campaign lasts, live only on pigeons, and rapidly fatten on such



delicious fare. If the expedition is not at too great a distance from the towns, their markets are abundantly supplied with this game, which the most fastidious epicures do not despise. At New York we have seen a vessel entirely loaded with this novel kind of merchandize; and the feathered cargo has found a ready and advantageous sale.

The life of the unfortunate pigeons is, therefore, a succession of perils and fatigues. When attacked in their resting-places, they are just entering upon the breeding and training of a new generation, and during this period they are compelled to seek a permanent domicile, to abandon their remote expeditions; but the different societies, though subdivided, are not dissolved, and their nests, placed as close as possible to one another, cover all the trees of an extensive forest. In the State of Kentucky, one of these establishments has been found to cover a space of more than a league in breadth, and more than sixteen leagues in length. All the nests are simultaneously occupied at the beginning of April; towards the end of May the little ones begin to fly, and the whole host commences its long migrations.

Each couple has, it is said, three broods in a year, and very frequently three nests to construct. As soon as their breeding-places are discovered, which is not difficult, man prepares his agencies of destruction; the hunters arrive in the forest a few days before the usual epoch of the departure of the host; armed with hatchets, and carrying with them, as in their former expedition, all their household, and all that is necessary for an encampment of several days. The trees are felled, and all the nests constructed among their foliage simultaneously drop. The despairing cries of the victims, the noise of the falling trees, the loud clang of wings—as the fathers and mothers hover about their unfortunate progeniture until compelled by famine to quit the spot—the redoubled strokes of the hatchets, and the warning shouts of the woodcutters, combine in one deafening carnival.

The young pigeons are at this time very fat, and the American settlers have learned from the natives how this fat may be turned to advantage; they collect it, melt it, and preserve it in pots, with which they take care to supply themselves. One great tree,



loaded with nests and young birds, will sometimes suffice to furnish a family with a provision of fat for several months.

The carrier pigeons of America can only cling to their traditional habits in the immense forests of the interior, beyond the



Alleghany Mountains; the bands which venture eastward of this chain encounter a greater number of enemies on their passage, without finding such secure asylums. When hunger compels them to stoop down on the cultivated plains, they fall victims to a weapon even more fatal than the fowling-piece; the peasants spread their nets, and at a single stroke frequently capture several hundred prisoners. All the village rushes to the chase, and the sound of musketry only ceases when the winged host has passed out of range. Pigeons are then eaten at every repast, without the uniformity of the bill of fare appearing to fatigue or displease; but the Americans have long ceased to be condemned to such a monotony of viands. The time is past when the chase of passenger pigeons could be regarded as productive. As population has increased in



the interior of the continent, these birds have found themselves restricted to a much narrower area ; they have been unable to keep up their societies ; and as their range grows more and more limited, their numbers will more and more diminish ; they will be compelled to change their manners—now-a-days so interesting and remarkable—and to live in the American forests like the ring-doves in those of Europe, confounded with other species of the same genus, and exciting no particular curiosity.

Here I paused. Ernest chatted for some time longer, and made several apt remarks on the migratory instinct of the pigeons whose history I had been relating. But in his remarks, and in every word he uttered, a kind of reserve was evident, which I found myself unable to penetrate. I addressed to him several questions.

"To-morrow ! to-morrow !" was the only answer he made us ; and we were not long in retiring to rest.

Next day, Ernest was up and about before me, and had paid his visit to the pigeon-house, before it had even occurred to me that some great secret was there concealed. I said nothing to him about it, and when, after the first tasks of the day were completed, I announced that breakfast was ready, Ernest made his appearance, holding in his hand a paper folded and sealed like an official despatch, which he presented to us with a profound bow, saying,—

"Noble and gracious sovereigns of this domain :

"You will be pleased to excuse, in your great bounty, your postmaster of Tent-town for the unfortunate delay which has occurred in the transmission of despatches from Sydney, Port Jackson, and all the coast of New Holland. The packet-boat has been delayed, and only arrived at a late hour yesterday evening. This is the reason we could not deliver until now the letters which it brought for you."

His mother and myself could not refrain from laughing at this burlesque exordium.

"Well, sir," answered I, willing to carry on the jest, "how fare our subjects of Sydney, Port Jackson, and New Holland ? Mr. Secretary, we charge you to open our despatches, and read them to us and our loving spouse."



At these words, Ernest unfolded in all its amplitude the paper which he held, and in as loud and sonorous a tone as possible read as follows :—

" THE GOVERNOR-GENERAL OF NEW SOUTH WALES to the GOVERNOR OF TENT-TOWN, FALCON'S-NEST, WOODLANDS, THE FIELD OF THE SUGAR-CANES, and the Territories thereto contiguous, sends GREETING,—

" NOBLE AND FAITHFUL ALLY,—We learn with displeasure that thirty men, whom we suppose to be subjects of yours, have set out to establish themselves in the Desert; a step which cannot fail to inflict great injury on the large and small game of the province. We have also been apprised that numerous terrific hyænas, as frightful as they are pernicious, have traversed the limits of our demesnes, and committed extensive depredations among the domestic animals of our people. Consequently we invite you, on the one hand, to recall your famished hunters, and on the other to take the necessary measures for expelling these hyænas and all beasts of prey, and exterminating them throughout the whole extent of your government, or at least restraining them within suitable boundaries.

" Upon this, I pray God, your Excellency, that he will take you into his holy keeping.

" Done at Sydney-Cove, Port Jackson, on the 12th of the month, and in the 34th year of the Colony.

" Signed by the Governor,

" PHILIP PHILIPSON."



ERNEST stopped, laughing, as if to judge of the effect this extraordinary missive had produced upon us. General Philipson did not perplex me much; but there was such an air of consistency and *vraisemblance* about the jest, that my curiosity was vividly excited. My son enjoyed my embarrassment, but as he performed a somersault to express his delight, after the usual manner of children, another paper dropped out of his pocket. I was on the point of seizing and opening it, when he checked me, saying,—

" Another despatch! This comes from Woodlands; perhaps it will be less pompous than the official letter of General Philipson; but, perhaps, it will also be of a more truthful character. Listen, then, to the despatch from Woodlands."

" For pity's sake, explain this prolonged enigma. Did your



brother leave a letter with you before setting out, and request you not to hand it to me until to-day? But this hyæna, what is the truth about it? Has Ernest discovered any indications of the presence of that ferocious animal? Can he have conceived the rash project of attacking the monster, without making me acquainted with it?"

"No; this is a letter from Frederick," answered Ernest, "which my pigeon, yesterday evening, brought to me under its wing."

"Ah, blessings on you, my little professor," cried his mother, embracing him; "blessings on you, for so happy and excellent an idea!—But this hyæna—read quick, Ernest, read to us your brother's letter."

"I will read it this time," said he, "without altering a word."

FREDERICK'S LETTER.

"BELOVED PARENTS, AND YOU, MY DEAR ERNEST,—

"I have to tell you that on our arrival in the district of Woodlands, we have been welcomed by an hyæna of great size and handsome aspect, who has devoured several of our sheep, and undoubtedly more than one wild goat.

"Fritz has given signal proof of his skill and intrepidity; to him alone belongs the honour of having brought the monster low, and we are now happily delivered from all apprehension of his ravages. We have spent nearly the whole day in preparing his skin, which is very beautiful, and will prove very useful to us.

"Pemmican is, beyond all question, the most detestable food with which any poor travellers were ever cursed.

"Farewell: we embrace all three of you in tender affection.

"FREDERICK."

"A genuine hunter's letter!" I exclaimed; "but how could this hyæna have penetrated into our territories? Can our palisade have been again overthrown? This thought torments me singularly."

"My poor children!" said their mother, her eyes swimming with tears; "may God watch over them, and restore them to me safe and sound! Had we not better start immediately to their assistance? Or will you wait a little longer?"

"The latter appears to me the better course," remarked Ernest,



"for I have no doubt we shall receive this evening another letter, with fuller details, which will assist us in coming to a decision."

And, in truth, after dinner, a new pigeon entered the pigeon-house. Ernest, who was on the watch, lost not a moment in shutting up the pigeon-house, and removing from beneath the wing of the aerial traveller the despatch which he brought. Then he rejoined us with radiant face. The telegram run as follows:—

"The night has passed quietly  
Weather fine.  
Voyage upon the lake in the cajack.  
Capture of fine black swans.  
Several new animals discovered.  
Appearance and sudden flight of an aquatic beast, whose  
genus is wholly unknown to us.  
To-morrow at Prospect Hill.  
Take care of yourselves.

Your sons,—

FREDERICK, RUDLY, and FRITZ."

"This is truly a telegraphic despatch," said I, laughing; "it is so concise; our hunters find it easier, I fancy, to handle a gun than to turn a phrase. Not the less does their missive set my mind at ease; if they have had a good night, the hyæna killed by Fritz was the only one in the country."

My wife was also more composed, and we agreed to delay a little before setting out to rejoin our sons. Their letter was, indeed, an exact summary of all that they had done and achieved since their departure; but it was so concise that I had need of the ulterior explanations which they gave us *vivâ voce* to comprehend thoroughly its various particulars. I continue here the narrative which I obtained from my sons at a later date.





THE EXPEDITION TO WOODLANDS. BY FREDERICK, FRITZ, AND  
RUDLY.



LIBERATED from the dangerous neighbourhood of the hyæna, they had undertaken to explore the Swans' Marsh, and to submit it to a general *battue*. For this purpose Frederick had taken his cajack, and his brothers followed him, keeping as near the edge as possible.

The black swans proved a precious treasure to our hunters; so they immediately paid their attentions to those beautiful and graceful animals. A springle of iron wire attached to a bamboo was the implement by which they hoped to catch these birds and draw them to the shore; but they only caught three young cygnets in this fashion; the old ones were too strong, and defended themselves valiantly with great blows of their wings.

After the swans, a bird of a new species attracted the cupidity of our young sportsmen; to judge by its majestic port and noble motion it was the king of the marsh; its head was adorned with a crown, and bridled itself like a creature conscious of a lofty dignity and a recognized authority. This noble exterior excited Frederick's admiration, and the beautiful bird received the lasso without suspicion; it was hauled ashore; its paws and wings were tied; and it was deposited by the side of the young swans.

While my three sons were thus occupied around their magnificent prey—which Ernest afterwards declared to be the royal heron—an extraordinary animal suddenly emerged from the reedy depths, and passing near them, gave them a start of surprise and alarm.

This animal was about the size of a colt, but in form nearly resembled the rhinoceros; but it had not on its nose the horn or tusk which distinguishes the latter; its upper lip projected strangely, and all its body was of a brown colour. My three hunters were no very eminent naturalists, but this did not prevent them from christening the strange beast which they now saw for



the first time, and they decided, for want of a better name, that it was the tapir or *anta* of America.

The tapir is an animal found in Guiana and Brazil. The form of its body is not unlike that of a pig; its upper jaw terminates in a curved proboscis, inclining downwards; its mouth bristles with four great teeth; its eyes are small, its ears round and pendent, its tail short, pyramidal, and hairless. Its legs resemble those of the wild boar; its fore-feet are garnished with four blackish claws; its hind-feet have but three.

The hair of the tapir is short, and spotted with white in the animal's early years; afterwards it acquires a dark uniform brown colour.

The tapir is a *swimming* quadruped, and dives with great agility. It will pass under water for a very considerable distance, and by this means often eludes the hunter's pursuit.

It is an amphibious animal; some naturalists assert that it sleeps all day under the water, and takes advantage of the night to seek its food in the forests.

Its name of *anta* was first bestowed upon it by the Portuguese. The American natives are very partial to its flesh, which they think equal to beef in taste and nutritiousness: they also utilize its skin, employing it to cover their shields, after stretching it thoroughly, and drying it in the sun.

Frederick, it is true, did not possess all these details respecting the animal in question, but he was equally anxious to pursue it in his cajack: it swam with such rapidity, however, that my son was compelled to renounce the enterprise.

During this time, Rudly and Fritz had started for the hut with their black cygnets and beautiful royal bird, which even in its bonds preserved something of the dignity of its rank. On their way they fell in with a company of cranes which flew above their heads, clapping their wings and uttering loud cries; they made a superb booty without having recourse to their guns, and using only their bows. They were provided with long arrows, terminating in a triangular head, which owed their efficacy to the strings besmeared with glue waving round the shaft. These, as the dart hurtled through the air, adhered to the wings and feet of birds



untouched by the iron, so that not infrequently a single arrow brought to the ground a twofold prize. By these ingenious means they also caught a couple of fine birds, named *Numidian maidens* (*demoiselles de Numidie*), which were included in the flight of cranes.



SHOOTING CRANES.

Frederick, on rejoining his brothers, was somewhat piqued at the sight of their unexpected spoil; while he also felt somewhat ashamed of his failure against the monster of the marsh. He burned to retrieve his honour and repair the check his reputation as a skilful hunter had sustained. Calling his dogs to his side, and accompanied by his eagle, he made for the guava-tree grove; in less than a quarter of an hour his dogs started a covey of the



finest birds he had ever seen: they belonged to the pheasant family. Frederick let loose his eagle, and while the latter pursued one of the fugitives, another, seemingly petrified by fear, fell into Frederick's hands; and he also caught a second, which had concealed itself under a bush. This was a magnificent specimen; his tail was upwards of two feet long, and among its brilliant feathers were two very narrow plumes, which, winding in the middle, displayed the richest colours of gold, green, and brown, and terminated in a spot of black velvet. By the description of this bird given in Fritz's letter, Professor Ernest recognized immediately the Bird of Paradise, the *Manu code* of Buffon—the richest, most elegant, and most beautiful of all the birds which frequent the coast of New Holland.

And when, on his brothers' return home, the young naturalist was able to convince himself of the accuracy of his conjecture, he cried, in a transport of enthusiasm,—

“This, then, is the beautiful denizen of air whose life has originated so many fables! Everything about him, even his name, was for a long time involved in error. Some imagined that, issuing from the garden of Eden, he had found no place worthy of receiving him for a moment, and that he only reposed in the pleasant shade of the terrestrial Paradise. Others asserted that he was without feet; and that a bird without feet, of necessity, could only exist for perpetual flight. So they declared that he flew even while asleep; and, what was still more admirable, that the female, laying her eggs in the air, hatched them in her flight, except for the few moments that she suspended herself to a branch of a tree by means of the large thread-like feathers which decorate so felicitously her plumage.

“The food of the Bird of Paradise was appropriate to his almost immaterial constitution; he lived, said our fable-mongers, on aerial substances, perfumes, and vapours, or rather upon the dew, which might fitly nourish the celestial bird.

“So mysterious a being could not fail to be endowed with marvellous qualities: the man fortunate enough to possess a single individual of this genus, and to preserve him with the veneration due to sacred objects, would obtain the favours of Heaven, would escape,



or be easily cured of, every malady. The hunters therefore devoted themselves eagerly to his pursuit, and studied the best means of capturing him. The Bird of Paradise in this way became the staple of a very lucrative speculation.



BIRD OF PARADISE (*Paradisea apoda*).

“These absurdities were accredited,” continued our professor, “for several centuries; but Science, whose torch dissipates the clouds of error, science has swept away the prestige which surrounded the Bird of Paradise; for fable and marvel it has substituted the truth. Natural history has fathomed the mystery; adieu henceforth to the poetical fantasies, the brilliant dreams of the imagination. It has been ascertained that the Bird of Paradise has two feet, that it lives upon solid food, and in contemplating its beautiful plumage man has found nothing which he does not find in other birds, except a greater splendour, a more glowing



brilliancy, a richer lustre in the colours which paint with so many lights and shades its wings, its neck, and the long threads of its waving tail.

"The flight of the Bird of Paradise is very graceful, and may be compared to that of the swallow, though he soars much higher in the air, and is accustomed to perch himself on the crests of lofty trees. His actual size is that of the jay; but his plumes are so arranged as to increase the apparent dimensions of his body.

"The feathers which encircle the base of his beak are of a beautiful velvety black, changing into a deep green; the same colour spreads over the cheeks and throat, across the yellow which covers the head and hinder part of the neck, and the lustrous metallic green of the fore part; the remainder of his plumage is a deep chestnut on the belly and a light chestnut on the back. The elongated feathers are arranged in series, and the largest are not less than eighteen inches long. The tail-filaments are two feet nine inches in length. Those of the female are much shorter; and in this species of bird, as in all others, the appearance of the male is very dazzling and sumptuous, while the female is contented with a more modest garb."

This dissertation on the Bird of Paradise led to many others, in which all the honours were borne off by the professor. I was myself astonished at the aptitude which this lad displayed for his favourite study, and the facility with which he threaded his way through a frequently perplexing labyrinth of classifications, distinctions of families, genera, and species, which encumber the study of natural history with no imaginary difficulties.

The secretary-bird, the humming-bird, the parroquets—in a word, all the feathered races—all the families of rich and magnificent aerial sprites which soar among the clouds of the new world, came in for an eulogium, a description, or, at least, a word of remembrance from our young "man of science."

But I must return to the narrative of the Woodlands expedition.

Our hunters, by so many deeds of prowess, had acquired a vigor



ous appetite; and frugal as was their repast, they did full justice to it. The cold peccary meat, the guavas, the cinnamon-fruit, the potatoes roasted in wood-embers, all these provisions were devoured with genuine gusto; except, indeed, the pemmican, from which so much was expected, but which was despised, and pronounced unworthy of its reputation; it was abandoned to the dogs—the usual method of getting rid of anything that found no favour in our eyes.

Before evening, our young explorers, with the view of deriving some advantage from their journey, filled a sack with ripe rice, and also collected a good supply of cotton, which they proposed to carry with them on the following day to Prospect Hill—the goal of a new excursion projected by their restless ardour.

Frederick had provided him with a quantity of euphorbia gum, to give the apes a new lesson; he was therefore looking out for some cocoa-nuts, which, divided in two, might serve as cups, and some palm-wine for a bait. My young people hit upon a plan which would preclude the necessity of their climbing to the lofty palm-trees around them; they marked out those which seemed most heavily laden with fruit, and, in the manner of the Caribs, who fell a tree to secure its spoil, cut down a couple of superb palms, and were thus provided at one and the same time with plenty of wine, cocoa-nuts, and two superb palm-cabbages.

When they related to me this incident of their journey, I blamed them severely for having recourse to such a device, and forbade them ever again to employ it. The palm was one of the finest trees in our island, as well as one of the most precious vegetable treasures we possessed; to squander it away at the outset was to deprive us of a most valuable resource, for the young plants do not shoot so promptly as the old trees fall under the axe. My sons, however, assured me that they had planted more than ten cocoas in the ground to replace one day the trees which they had felled.

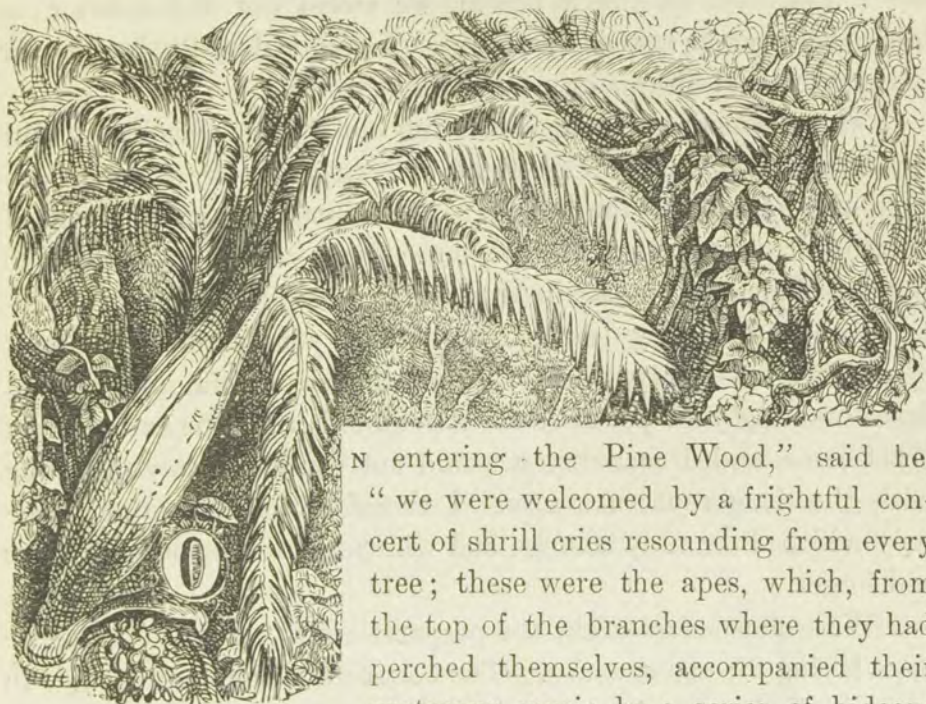
My sons quitted Woodlands, but events of a far more important nature awaited them at Prospect Hill, towards which they next directed their steps.

I shall now leave Frederick to speak in his own person, and



reproduce the principal points of the narrative which he gave us on his return.

## FREDERICK'S NARRATIVE.



“On entering the Pine Wood,” said he, “we were welcomed by a frightful concert of shrill cries resounding from every tree; these were the apes, which, from the top of the branches where they had perched themselves, accompanied their grotesque music by a series of hideous grimaces. From grimaces they resorted to projectiles, and we speedily found ourselves assailed by a shower of pine-apples, which could not have failed to injure us greatly had we not chastised the accursed tribe by a few discharges of musketry.

“Such a reception did but intensify my hostile feelings towards the apes, and strengthened me to adopt the project of punishment I had for some time meditated.

“On the threshold of the wood we met with a kind of millet, whose stalks were eight to ten feet in height; I recognized it immediately by its brown and reddish grain as the *doura*, or negro millet. This field of millet extended to a great distance; but at different places we observed a number of the stalks broken at the head, as if they had been smitten by hail. From thence we perceived our residence at Prospect Hill, and, despite of the distance, could see that it was wofully dilapidated. We hastened our steps, and as we drew near became convinced that the apes had preceded



us. Our plantations were sadly ravaged. Our little cabin was devastated, and what was worse, infected by the filth those villanous animals had scattered everywhere about. With a bundle of the millet, tied up like a broom, we swept out the interior; a large shell served instead of shovel. I cannot describe to you our indignation and disappointment at the spectacle.

"The afternoon we spent in clearing out a place where we might spread our couches for the night without any fear of an attack from the animals of the desert. And already in my thoughts I settled our employment for the morrow; it was to be devoted to the punishment of the accursed monkey race.

"I ought here, my dear parents, to ask your pardon for a fault of which I was guilty, in carrying off the euphorbia gum without first obtaining your permission. I required it for the execution of my scheme, and I feared you would not consent to my meddling with the dangerous substance. I therefore determined on a larceny which I humbly confess, and which I entreat you to forgive and forget.

"We began before night the preparations of the great snare we were laying for our enemies. The cocoa-nuts, the gourds, and, in a word, all the utensils we could collect, were put into requisition. We filled them with rice, palm-wine, guavas, and other delicacies; to each dish I added a portion of the poisonous gum; then we spread them about the forest, and retired to await the issue. It was nearly night; we could not therefore think of undertaking any other task until the next day.

"We were just on the point of stretching our weary limbs on our bags of cotton, when suddenly a great light arose on the horizon which we mistook at first for a ship on fire. Immediately we ran from the hut, and hurriedly made towards the summit of Cape Disappointment; the fire then assumed to our eyes a regular outline. It was a mass of fire, perfectly circular, which issued from the waves and gradually soared above their surface. It was the moon rising upon the horizon.

"Assuredly, the spectacle was one of the most marvellous I have ever seen. The sea was calm, or at least its waves rippled gently, and with a soft murmur at the foot of the promontory; the wind



had sunk into a light fresh breeze; all nature seemed to prelude the wonders of the night, and raise to the Creator a hymn of glory and gratitude. Though we had been deceived in our expectation, and instead of a vessel at sea had found only the moon in the firmament, our hearts so rejoiced in the beauty of the scene before us, that we could not breathe a word of complaint at the disappointment. We preserved for some minutes a devout silence; our souls rose towards the Lord of All, and we returned Him our humble thanks for the marvels wrought by His mighty Hand, and incessantly displayed to the admiration of men.

"However, this sweet, calm mood of contemplation was ere long disturbed by the strangest sounds, which appeared to us all the more terrific from their contrast with the deep silence of the night. Howls, and roarings, and groans, and shrieks—in fine, a thousand discordant and confused cries seemed to issue from the sand-bank that extends from the foot of the promontory even into the sea; and yet we could distinguish nothing either on the waters or the shore.

"To these formidable noises our dogs responded by prolonged howls; Rudly's jackal seemed to have recovered all the shrillness of its wild cry in replying to this new Babel; other jackals joined in it with sympathetic yelps; in the direction of the savannah we could hear the piercing neigh of a wild horse;—but what caused us the profoundest terror was a sound rising above all other sounds, like the hoarse and terrible roar of a tiger or a lion. This strange concert lasted for about a quarter of an hour. We hesitated to descend, when suddenly we heard the gallop of a horse speeding far away into the night, and made haste to regain our hut with the certainty that the neighbourhood was haunted by an hippopotamus, an elephant, a lion, or a tiger, or, at all events, some fierce beast of prey.

"We found everything tranquil around our hut; but scarcely had we laid, to use a common expression, our heads upon our pillows, before a concert of quite a different description began in the forest of pines. At first a solo, it soon expanded into a *trille* of harsh, shrill voices, which seemed to descend from every tree, but in modulations so extended as not only to rend our ears, but





A PINE FOREST.

almost to split open the very rocks. Occasionally the music ceased, but only to be resumed with increased fury. It lasted for about four hours; after which all was silence.

"It is needless to say that we spent a very poor night; the maintenance of our fires—the thought that an hippopotamus or a tiger might be prowling within a few feet of us—the continual barking of our dogs, whom we had tied up to the posts of our hut to prevent them from inopportunely attacking the apes—prevented



us from enjoying any sleep. It was not until towards morning, when tranquillity was re-established, that we obtained an hour or two's repose. At sunrise we were on the alert, eager to see the result of the night's fracas, in which we never doubted that the nocturnal musicians had borne a part. We found them all asleep upon the ground, but sleeping the sleep which has no end. Yes; Messieurs the apes, after having greedily poisoned themselves by swallowing our rice and palm-wine, had regaled us all night with their death-song.

"The earth was strewn with dead bodies, for the euphoria had produced a terrible effect. We flung them into the sea, and also the utensils which had contained the poison; thereupon we returned to our hut, where we were glad enough to rest awhile after the hideous and disgusting task that had occupied us during the morning.

"It was then that Rudly composed his famous letter, which you have not, perhaps, received. Here it is—written in a strain of the loftiest poesy.

## RUDLY'S LETTER.

"PROSPECT HILL, the 11th, 12th, or 13th inst.

"The caravanseray of Prospect Hill has been cleansed, and rendered inhabitable.

"The labour has cost us the sweat of our brows; but the guilty ones have paid for it with their blood.

"Nemesis has filled the cup of vengeance with deadly poison, and Ocean now bears upon its billows the corpses of the traitors.

"The sun in all his splendour assists at our preparations for departure; he will meet with us again this evening in the defile of the savannah.

"*Valete.*—Farewell!"

The reading of this piece of semi-burlesque terminated Frederick's narrative, or at least involved us in so many and such long digressions that I find myself obliged to resume my son's recital, and to acquaint my readers with the impression this enigmatical letter produced upon us, as well as with the events that followed, until we rejoined our young and daring explorers.

We had, in fact, received Rudly's letter; with its mythological images of Nemesis and poisoned cups, it contained some things



we could not understand. What were the corpses borne upon the billows of Ocean?

Another despatch, received later in the afternoon, brought our anxiety to a climax. It ran as follows:—

“The palisade of the defile leading into the savannah is broken down.

“The sugar-canes have been irretrievably destroyed. We notice in the sand broad and deep impressions, like those of an elephant’s foot, and smaller ones resembling those of a horse’s hoof.

“Come quickly to our assistance, dear parents. Much requires to be done here to ensure the safety of our colony. Above all things, do not lose a moment.”

The reader can imagine our anxiety after perusing this last despatch.

I saddled the onager without a moment’s delay; and leaving Ernest and his mother at the grotto, with instructions to join us next day at the defile, set out immediately. Between my sons and myself intervened a distance of six leagues; I traversed it in three hours, and reached the defile before night.

My children were much surprised at seeing me arrive with so much promptitude, and received me with transports of joy. The sugar-canes I found hopelessly destroyed, and those which had not been trodden to the ground had been stripped of their foliage by an animal which I concluded must be an elephant, because it would tax all the skill of that intelligent beast to gather from the long stem the thin narrow leaves enveloping it. The large posts we had erected with so much difficulty to form a barrier at the mouth of the defile, were plucked up, broken, and scattered about like so many reeds; the trees all around had been deprived of their bark; the bamboos had been no better treated than the sugar-canes; and in the entire plantation was not left a single young or tender shoot—all had been carefully picked.

I examined attentively the footprints in the sand, and convinced myself that they could only have been left by an elephant; the smaller impressions which I remarked at various points might be those of an hippopotamus. I retraced my steps, to ascertain whether any other ferocious beast had introduced himself into our



territory by this pass, but could distinguish nothing except the traces of an animal like a wolf or a dog, which I supposed might be those of the hyæna killed by Fritz; but as there were no signs of its having returned, I felt at ease.

All around our hut we now collected a quantity of dry branches, and having amassed an abundant quantity, we kindled our watch-fires at the approach of night. We shared with one another the labour of watching them and keeping them alive; but nothing disturbed us until daybreak.

That evening, the subject of our conversation was, very naturally, elephants; and my young hunters were very desirous of knowing what kind of enemy they were about to confront. We gathered around the fire, and I endeavoured to condense in as few words as possible all I knew in reference to the monstrous animal towards which our attention was directed.

"The elephant," said I, "is one of the most singular of quadrupeds, as regards the conformation of several parts of his body. Considering this animal relatively to our usual standard of harmonious proportions, he is certainly ill-made; his body is thick and short, his limbs are stiff and unwieldy, his feet round and twisted; his monstrous head is covered with a very hard skin, and the cranium, especially in the front, is seven inches thick; his ears droop on either side like motionless leaves; his trunk, his tusks, his hoofs are all as ungraceful to the eye as they are necessary to the animal.

"The warm countries of Africa and Asia are the principal habitat of the elephant; the elephants of India are much larger, and, consequently, stronger than those of Africa.

"When the elephant is indued in his hide and flesh, his hind-legs appear much shorter than his fore, because they are less disengaged from the mass of the body; these legs are more like those of man than of the majority of quadrupeds, inasmuch as the heel lies flat on the ground, and the foot is very short. The sole is furnished with a ring (*come*) of bone, hard, solid, and an inch in thickness: there is reason to believe that it varies in form in different individuals. The strength of the elephant's legs is proportioned to his heavy bulk, so that he travels with speed, and



can easily overtake at his usual pace a man when running. He also swims very well, owing to the great volume of water which his body displaces, and also to the manner in which his belly is inflated by veins that increase its size. Some authors have



THE ELEPHANT (*Elephas*).

asserted that, owing to the rigidity of his limbs, he cannot rise when he has once assumed a recumbent position. This is purely a fable: the elephant lies down and rises again with the utmost ease.

"The most admirable organ, and the most characteristic, of the elephant is his trunk, in which we remark certain movements and usages found in no other animal; its structure is likewise very singular.

"It is of great length, and the animal shortens or elongates it at



pleasure. It is wrinkled, full of nerves, hollow like a tube, and exceedingly flexible in every direction; at its extremity it widens like a vase, and forms a sort of ledge or rim, of which the lower portion is thicker than the sides; this ledge is lengthened in the upper part, and accordingly resembles the tip of a finger. At the bottom of this cup-like appendage are two holes, the nostrils; it is by means of this rim, or ledge, the elephant does all those things which man can do with his hand.

“When he applies to any object the edges of the extremity of his trunk, simultaneously drawing in his breath, the object remains glued to the trunk, and follows its various movements; it is thus that he easily lifts the heaviest objects, even if their weight amounts to a couple of hundred pounds.

“His neck is so short that he cannot lower his head to the ground and browse on the herbage, or drink readily when he is athirst; he soaks the end of his trunk in the water, and by an aspiration fills its cavity; then he bends it so as to pour its contents down his throat.

“When he is in want of food, he plucks up the grass with his trunk and passes it to his mouth. In fact, it serves not only instead of a hand, but as a vigorous arm; and with this organ he tears up the trees, and breaks the branches, to clear a passage through the forests. The water with which he fills it he can propel to a considerable distance, and in any direction.

“The mouth of the elephant is the lowest part of his head; it is armed with only eight teeth—four in the upper, and four in the lower jaw. As his trunk and these eight teeth would be but a poor defence, nature has provided him with two others, projecting from the upper jaw, and of immense strength. They are several feet in length, and slightly curved upwards; with these the animal attacks his enemies, or defends himself against them. The female is armed with tusks like the male; they are hollow at their origin, and for about half their length; the rest, up to the point, is solid. These tusks form the ivory of commerce.

“Very small are the eyes of the elephant; his eyelids are furnished with eye-lashes—a peculiarity which he possesses in common with man, the ape, the ostrich and the great vulture. His



body is covered with a skin or hide of singularly wrinkled aspect ; this adds to the ungainliness of his appearance, and the more so that in places it is garnished with bristles like those of the wild boar. They abound particularly on the convex portion of the trunk, the eyelids, and the tail, which bristles with them throughout its entire length, and terminates in a tolerably long tuft. The Indians ascribe numerous imaginary virtues to these bristles ; the Africans, both men and women, make use of them in their personal ornaments.

“ The elephant, in a wild state, lives upon herbs, grasses, fruits, and even on the boughs of trees, eating their tender wood. In August and September they make an incursion into the rice and maize fields, and commit great havoc. The Africans protect their plantations with rows of fires, whose brightness terrifies the elephant. Though a voracious eater, he can remain seven or eight days without food. Their drink is water, which they are careful to disturb before drinking, like the camel.

“ The wild elephant sometimes breaks into and devastates the tobacco fields. If the plant should be young and watery, it does him no harm ; but if it is quite, or nearly, ripe, it intoxicates him, and he then abandons himself to the most ridiculous contortions. When, unfortunately for him, the dose is a little too strong, he falls asleep, and the niggers easily revenge themselves for the damage done by his trunk and heavy hoofs.

“ The elephant is endowed with singular instinct and docility. It is said to be susceptible of attachment, of affection, and of gratitude, even so as to pine away with sorrow for the loss of its keeper. It is easily tamed, and taught so many difficult exercises, that one is surprised a beast of such bulk and unwieldiness can acquire the skill and nimbleness requisite for their due performance.”

My sons now addressed to me a legion of questions, to which I hastened to reply as best I could, and the discussion thus begun contributed to while away the long hours of the night.

Next day, after dinner, arrived Ernest and his mother ; together with the cart, the cow, the foal, and the whole collection of utensils necessary for an encampment of, probably, some duration.



We accordingly established ourselves, and set to work on the construction of a palisade, or, more correctly speaking, a rampart, of greater solidity and defensive strength than our previous fortifications. I will spare my readers the details of this wearisome task; it occupied us for upwards of a month, and left us no time for any other labour. My good Elizabeth lent us her assistance, and inspired her sons by her example with a perseverance and an ardour very unusual at their age.

We enjoyed, however, some relief from this difficult toil; my wife took charge of household affairs, and the cattle; I collected a stock of porcelain clay; Frederick made some voyages in his canoe; while his brother, prowling about our habitation, every day discovered something useful.

The fortification with which we had closed up the defile did not satisfy our apprehensions, and we resolved to construct a species of retreat suitable for our residence when we visited this part of the country. We had not enough hands to attempt the erection of a regular fort, without reference to our very limited knowledge of the science of architecture. We drew, therefore, upon our recollections, and Frederick fortunately called to mind that the Kamtschatdales constructed economical dwellings which might fitly answer our purpose.

The country-houses of the Kamtschatdales are composed of four solid posts planted firmly in the ground, and of a greater or lesser elevation. On their summits, they lay in different directions a sufficient number of planks and beams, so as to form a platform at about fifteen or twenty feet above the ground. The walls are built up of reeds and grasses interwoven, and the roof is made of bark and boughs.

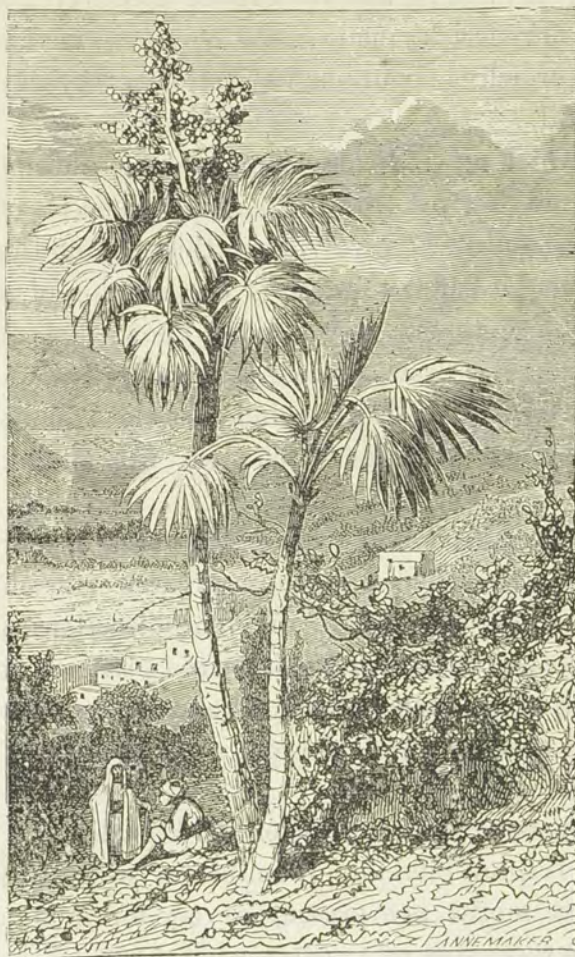
This kind of edifice does not require any scientific knowledge of the builder's art; in this respect, therefore, it eminently suited us; and while such a fortress might not present a very formidable aspect, it would suffice nevertheless as a covert whence we might repel with musketry any of the denizens of the savannah who might be tempted to attack us.

Instead of posts, which we might have found some difficulty in burying sufficiently deep in the earth, we selected four trees, whose



position at right angles, and distance from one another, corresponded admirably with the four corner pillars of the Kamtschatdale edifice. We did not cut them down into trunks, but made use of their branches as a support for the flooring. They resembled in general character the European plane, and were embellished with several feet of vanilla, which clambered up their trunks, but which an elephant's intelligent trunk had plundered of its fruit.

We wove the walls and partitions of our castle in the air out of



TALIPOT PALM (*Corypha umbrellifera*)

split bamboos and reeds, and covered them with talipot leaves, which are impervious to the rain.

The talipot is a species of palm; its leaves develop to a very considerable size, so that a single one will afford shelter to half a score of men. They possess the advantage, moreover, of presenting to the rain a thick and compact tissue, through which it cannot make its way. Its discovery thus supplied us with an assortment of light tiles in harmony with the solidity of our construction, which otherwise we should

have found it very difficult with the industrial resources at our disposal to have provided.

Meanwhile, the upper branches, of which we had not despoiled



our trees, fell gracefully around the aerial cabin, the whole forming a kind of canopied cradle closely resembling our residence at Falcon's Nest. We contemplated our handiwork with much gratification, and the verdurousness which crowned it gave it so charming an air that, despite the loopholes we had opened up in it, we could not resign ourselves to look upon it as a military edifice.

To ascend to the first story of this habitation, we devised a very simple means. A beam stretching from the platform to the ground, was notched at regular intervals so as to furnish resting-places for the hands and feet; for greater safety we arranged a rope and pulley at the bottom of the beam, that we might raise or lower it at will.

Frederick and Rudly promised themselves marvels from this new fortress, which dominated at once over the wall we had first constructed, and the savannah which spread far away to the distant horizon. We could also trace the winding course of the great river, like a silver thread in the middle of the desert, and by means of our telescopes could distinguish the herds of buffaloes or other animals which came to quench their thirst in the flowing waters.

"Any savages who come hither," said one, "will receive our shots without knowing from whence they are directed."

"And the elephants, and the hippopotamuses!" exclaimed another; "ah, gentlemen of the wilderness, lords of the desert, sovereigns of the waste, I beseech you by all means to pay a speedy visit to our domains!"

Meanwhile, until the savages and the hippopotami appeared, our aerial fortress served as an asylum for the peaceful animals we had captured since our departure from Tent-town. The royal heron took to it kindly, and so did the black swans; the aquatic birds, who dabbled all day in the neighbouring brook, thrived so well under our care that they evidently had ceased to regret the freshness of their native lake; the Bird of Paradise was the only creature who suffered—he felt himself so confined in the narrow area we had allotted to him that I was constrained to amputate his beautiful tail, which gave the poor bird an aspect as disgraceful as it was ridiculous. I hoped, however, this loss would not be irre-

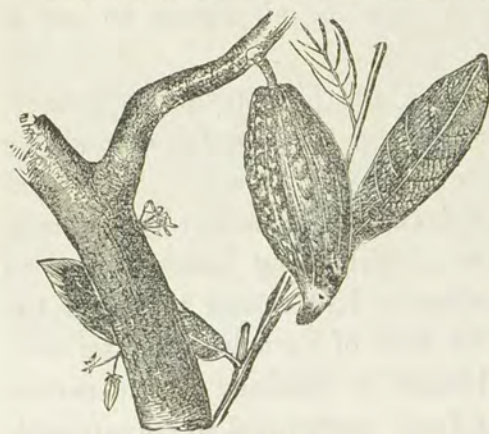


parable, and trusted that after the moulting season he would re-appear in all his pristine splendour.

We had now again sufficient leisure to prosecute our explorations, which were rewarded, as usual, by several important discoveries. One day, when Frederick amused himself in re-ascending in his cajack the great river of the savannah, he found among the vegetables on its banks several unknown shrubs, of which he brought back to us a few specimens. Some were garnished with long clusters of fruits of a beautiful bright green, shaded at the extremity by a tint of violet, and shaped like a large gerkin; others, loaded with a multitude of tiny flowers, bore a good-sized fruit, not unlike a cucumber in appearance. Frederick collected several roots of the former; and of the branches of the latter he made a bundle, which he fastened to the stern of his cajack, and towed down the stream.

When I came to examine these seeming gerkins and cucumbers, I recognized immediately two of the most precious productions of the Tropics: the larger I identified with the fruits of the cacao, from which chocolate is obtained; the smaller and more useful, for in many American countries they form the principal food of the negro, were those of the banana. We eagerly tasted these much-extolled articles, but their flavour did not answer our expectations.

The cacao-beans are found in the midst of a kind of glutinous pith, not unlike thick cream in appearance, but very unlike it in taste, for the pith is flavourless, while the beans themselves are insupportably bitter. As for the bananas, though we relished them a little better, their smell seemed to us to resemble that of over-ripe pears, and their after-taste was by no means agreeable.



CACAO POD.

"It is very curious," said I, laughing, "that this fruit—I speak of the banana, for the



other requires much preparation to render it palatable—though bearing so high a repute, should appear to us of such inferior quality; probably, this too requires some dressing or cooking to secure our approbation.”

The unlucky experiment of the cacao, however, did not discomfit my sons; they were all well acquainted with chocolate, and fully understood what a boon to our epicurean tastes the new discovery might be made to afford.

“Never mind the banana,” they cried; “stick to the cacao. Make us some chocolate, papa! chocolate for ever!”

“Very good, gentlemen,” I answered, with far less enthusiasm than they displayed; “but before rejoicing in anticipation of a dainty which as yet we do not happen to possess. it would be more logical if you made yourself acquainted with the plant which is to supply it, and the process by which the bitter fruit of the cacao is converted into savoury chocolate. Come, let us hear whether any one of you can give us a few details respecting the origin and mode of preparation of this exquisite viand.”

For a minute or two my words were followed by a dead silence. Then our learned professor took up the theme.

“The cacao,” said he, “is a tree of moderate girth and stature, varying slightly according to the nature of the soil in which it grows. Its wood is porous, and very light. Its leaves are about nine inches long by four broad; those which fall are succeeded by



BANANA  
(*Musa sapientum*).



others, so that the tree is never bare; it is always enriched with a multitude of extremely small rosebud-like flowers, but these are thicker at the two solstices than at any other time. Its fruits, when mature, are of the size and have the figure of a cucumber pointed at the lower extremity, but their surface is furrowed like the sides of a melon. They grow along the stem and the mother-branches, unlike the majority of European fruits.



A TROPICAL FOREST.

“The cacao is the staple of a very considerable trade in South America; its cultivation is, therefore, very carefully prosecuted. The trees are planted at intervals of twelve to fifteen feet, so that they may thrive the more vigorously, and great attention



is paid to their protection from the winds. They are exceedingly partial to low and damp localities, in the midst of woods where a site for them has been cleared out by burning. As they spring wholly from seed, the young plants require to be properly shaded.

"When the cacao is thought to be ripe, the most adroit negroes are selected for the task of gathering the fruit. With small switches they knock down the ripe pods, taking good heed not to touch those which have not reached maturity, or the blossoms. In months of plenty, they continue harvesting for a whole fortnight; in less abundant seasons, they gather from month to month. All the fruit thus collected is left in a heap for four days; if the grains remained longer in their pods, they would germinate; therefore, when the planters of Martinico wished to dispatch a supply of seed to the neighbouring islands, they were very careful not to begin picking until the ship which was to take them on board was ready to sail, and they were landed immediately on her arrival in port. On the morning of the fifth day, the kernels are extracted from the husks, and arranged in a heap on a platform covered with leaves of the *balisier*; similar leaves are laid over them, and kept down with planks, so as to induce in the cacao a slight degree of fermentation, and the grains thus prepared are imported into Europe.

"The Americans, before the arrival of the Spaniards, brewed a liquor with the cacao melted in hot water, seasoned with pimento, coloured with *rocou*, and mixed with boiled maize to increase the quantity. These strange compounds gave the brewage so peculiar and so harsh a flavour, that a Spanish soldier said he could never have accustomed himself to it, if want of wine had not reduced him to the alternative of drinking either *it* or pure water. The Indians called the beverage *chocolatl*, and we have preserved the name. The Spaniards sought to correct its disagreeableness; they added to the cacao paste various Oriental spices, and some of the indigenous drugs; but of all these ingredients only sugar, cinnamon, and vanilla are now made use of.

"The cacao nibs are stripped of their rind by exposure to a strong heat; they are then roasted in a vessel over a gentle fire.



and a paste is thus obtained, which is mixed with nearly its own weight of sugar."

"See, now, the value of science!" interrupted Rudly; "I eat chocolate, certainly, as well as any person: well, I have never thought of making myself acquainted with its origin or manufacture. From my cup to my mouth! It never entered my mind that it had to make any other voyage. So I humble myself most willingly before Professor Ernest, and vote him the first cup of chocolate that issues from the factories of Tent-town."

"Agreed, agreed!" was the general shout; and the professor's triumph was accomplished amidst a prolonged burst of laughter.

The banana afterwards became the subject of an interesting disquisition.

"Is it not strange," said I, tasting anew the insipid plant of the cacao and a slice of the sweet sickly banana, "that these fruits, so valued in the New World, should be so little to our taste? In the colonies a great regale is made of the cream of the cacao, by mixing it, it is true, with sugar and cinnamon. Just so with the banana, unworthy as it appears to us of its renown; for, according to a writer who has admirably described the marvels of Nature and the wise gifts of Providence, the banana alone would have supplied all the wants of the First Man. It furnishes a most wholesome food in its farinaceous, succulent, sugary, unctuous, aromatic fruits, in size about the diameter of the mouth, and grouped together like the fingers of the human hand; a single cluster is a sufficient burden for one man. In aspect it is like a magnificent parasol, whose top, extended, and somewhat lofty, is agreeably relieved by stripes of long, broad, satiny, and emerald leaves.

"These leaves droop at their extremities, and form, by their graceful curves, a charming cradle, impenetrable to sun and rain. As, when fresh, they are very supple, the Indians make them into all kinds of vessels; they cover their cabins with them, and by drying the stem draw from it a kind of thread; the negroes use them as shrouds for the bodies of their dead;—and thus the banana alone furnishes man with food, lodging, utensils, clothes, and a cerement.



"Nor is this all: this beautiful plant, which in our European hothouses produces fruit only once in every three years, under the Equator yields it annually, after which the stem withers; but it is surrounded by a dozen offshoots of various sizes, which bear successively, in such wise that at all times, and in fact every month, one of them is ripening, like the monthly burden of the cocoa-nut tree. Such is the case with the banana when growing on the border of a tropical stream, its natural habitat.

"There are numerous species of banana trees of different sizes, from one no taller than a child to that which measures double a man's stature; and of bananas, from a fruit no thicker than your thumb to that which is as thick as a robust Herculean arm. In the Mauritius flourish dwarf banana trees, and there are giant banana trees, indigenous to Madagascar, with long curving fruits which are called *bull's-horns*. A man can easily gather them by scaling the tall trunk, where the stems of old leaves form convenient stepping-places. A single banana will make a good meal, and a single cluster a day's provision.

"Bananas differ greatly in flavour: the dwarf species has a strong taste of saffron; the common, or banana-fig, is unctuous, sugary, and farinaceous; it is as solid as fresh butter in winter, and consequently, as teeth are not needed to bite it, makes a capital food for infants and the aged. It has also some other, and not less special, characteristics; although only covered by a thin rind, it is never touched by birds or insects until properly ripe; and if collected before it quite attains maturity, it will ripen perfectly indoors, and may be preserved a month in all its goodness.

"Bananas are met with throughout the Torrid Zone, in Africa, Asia, and the two Americas, the islands of the Asiatic and American seas, and even in the remotest islands of the great Southern Ocean. With justice, therefore, have voyagers designated it the King of Vegetables, because they have observed that between the two Tropics an infinite number of human beings live almost wholly upon bananas.

"In India, it is under its delightful shade, and by means of its fruits, incessantly reproduced upon its numerous off-shoots, that the Brahmin prolongs for a century and upwards his life of seclu.



sion and meditative tranquillity. A banana-tree, flourishing on the bank of a limpid stream, supplies his every want.\*

"I presume," added I, when I had exhausted all the information with which my reading had furnished me on the subject of the banana, "that the fruits of this tree, not being thoroughly ripe, have lost, as far as we are concerned, some of their valuable qualities, or perhaps their immersion in sea-water has affected their taste. However this may be, I think we have made a valuable acquisition, which we must endeavour to turn to advantage."

During this long discourse, my wife had cut open several bananas, seeking in vain for some seeds or pips with which to enrich her collection of useful plants in the kitchen-garden. I pointed out to her another peculiarity of the banana, that it contains no seeds; the mode of reproduction of this singular plant being solely by the shoots it throws off, which, if planted in a rich, deep, and humid soil, readily take root. As for the seeds of the cacao, which my wife was also desirous of sowing in her garden, she was compelled to renounce the idea, on an observation of Master Ernest's that the cacao-bean would not germinate unless committed to the ground directly it was plucked.

Consequently it was resolved that Frederick, next day, should embark on board his cajack, and go in quest of the elements necessary for the reproduction of these two useful plants. My wife, like a prudent housewife, never lost sight of her kitchen-garden, nor met with an useful vegetable which she did not immediately attempt to cultivate therein.



On the following day Frederick embarked; he pulled up against the stream while we were occupied with our preparations for departure, and fearing that his cajack would not hold the cargo he expected to gather, towed after him a kind of reed-hurdle, which he had constructed with his own hands. He would have been ashamed, he said, to have embarked only in pursuit of a few cacao-

\* Bernardin de St. Pierre



plants and bananas. An adventurer like him looked for a far more valuable booty. He was absent the whole day; but when in the evening he re-appeared, it was with cajak and hurdle so overloaded that they were half sunk, and all the articles upon them had the advantage of making the voyage in a state of perpetual immersion.

"Bravo! bravo!" exclaimed his brothers, as they saw him arrive enveloped in a forest of green bushes. They threw themselves upon the spoil, which Fritz and Ernest began to haul towards the hut, with as much happiness and contentment as if they had drawn upon shore the galleon loaded with Acapulco silver captured by the celebrated Anson. Meanwhile, Rudly had received from his brother another burden; it was a wet bag, which, from the movements of the canvas, evidently contained some living object. The boy retired a few paces; then, casting a furtive glance on the contents of the mysterious bag, "Good!" he exclaimed, "Frederick has given me a commission;" and without communicating his discovery to any one, he carefully concealed his bag at a corner of the shore where the copse was thickest.

Frederick was the last to arrive; he held in his hand a superb bird, whose feet he had taken care to tie, as well as its head and wings, and which he presented to us as the most precious part of the day's spoil.

It was the sultan-cock of Buffon, the king of all water-fowl, by the beauty of its form and the splendour of its plumage. I knew it by its long red feet, its beautiful feathers, in which green blended with the richest violet, and especially by the scarlet spot upon its forehead. My wife was desirous of introducing it immediately to the society of our poultry-yard; and as, though somewhat wild, it was a very gentle animal, it soon grew tame and made friends with our fowls, though the latter sometimes seemed jealous of the beauty of the new-comer.

Frederick related to us the details of his expedition. He informed us, that as he ascended the river he was astonished at the new aspect its shores presented, at the grandeur of the dense forests which bordered it, and the prodigious elevation of the mountains which rose in the horizon. He met with several families of Indian



fowls, pintados, and peacocks, whose clucking and various cries filled the scene with animation. As he proceeded the landscape changed, and herds of elephants—twenty or thirty in number—gathered upon the bank. Some descended into the water, where they held themselves immovable; or, as if in sport, launched jets of water with their trunks high up into the air, allowing the cooling spray to fall like rain upon their massive backs. Others tranquilly feasted on great bundles of grass, which they plucked and bound together with all the skill of a human hand. Finally, tigers and panthers came hastening down to the river to quench their devouring thirst, while others, supinely indolent in the sun—their magnificent hide contrasting agreeably with the carpet of verdure on which they were reclined—seemed the kings of these deserts. None of these animals, however, appeared to notice our young voyager.

“I felt very little and very weak,” said Frederick, “when I found myself thus face to face with such terrible enemies. My gun, my cartridges, and my skill were, indeed, a very poor resource. I did not hesitate a moment, therefore, in wheeling round, and flying with all the speed I could communicate to my paddles. But I had scarcely begun to turn my cajack, when suddenly, at about twice the range of an ordinary musket, I saw the water boiling, and from the foam emerged a long large jaw, armed with the most beautiful array I have ever seen of formidable teeth; this jaw opened wide, and turned directly towards me. How I found strength to escape I know not, I was so terrified by this last apparition. I acquired, I assure you, a lesson in natural history worth any other, and I am willing to believe I profited so much by it that I shall not need its repetition.”

“What animal, then, was this,” inquired Fritz, “with yawning jaw and terrible teeth, which Frederick saw on the surface of the water?”

“It was probably an alligator,” said Ernest; “or, if you prefer a more familiar name, a crocodile.”

“A crocodile! the animal formerly adored by the Egyptians as a god?”

“Precisely,” replied the professor, enchanted with the oppor-





tunity  
of display-  
ing his know-  
ledge; "the crocodile belongs  
to the great Saurian family, of which  
it is the largest and strongest mem-  
ber. Some writers believe it to be the animal referred to by Job  
under the name of leviathan

"The crocodile, which, in the West Indies, is also called the  
cayman, is a very voracious monster. It springs from a tolerably



small egg, and yet it grows to a length of eighteen to twenty feet : it is clothed with a hard scaly skin, of a dull bronze colour, mixed with spots of white and green ; it has the snout of a pig ; its mouth



CROCODILE (*Alligator Niloticus*).

opens right back to its ears, and its jaws are garnished with a great number of long, hard, white, and pointed canine teeth, which fit exactly into one another ; its eyes resemble a pig's ; they are placed in safety under their bony orbit ; its feet are armed with trenchant claws ; its tail is round, and as long as the rest of its body.

“ Crocodiles are found in the Gan-

ges, the Nile, the Niger, and in several great American rivers. Those preserved in the European museums are usually brought from Egypt, where they abound ; they dwell in the rivers and the mud, motionless and almost hidden, keeping vigilant watch for the heedless prey ; they feed upon fish, but are very partial to human flesh.

“ The crocodile is caught with an iron hook, for its hide is so hard as to be impervious to darts, and even to bullets. Specimens have been met with full thirty feet in length.”

Frederick's narrative gave me cause for meditation. It was clear that the environs were peopled by fierce and terrible animals, and that we had done well in effectually barring the defile through which such dangerous neighbours might have intruded into our territories.



We now completed our preparations for departure, and decided upon quitting the defile at daybreak, and making our way to Tent-town. Frederick asked permission to make the voyage by water in his cajack, returning home by following up the coast, and doubling Cape Disappointment. To this proposal I consented, the more willingly that the skill Frederick had acquired in the management of his cajack left me no further uneasiness on his account; and, moreover, I was by no means sorry to obtain some exact information relative to this promontory, which we had never yet succeeded in doubling.

We all set out at the same time, and accomplished our voyages with equal good fortune. The navigator, in doubling the cape, made two new discoveries. Among the brushwood which festooned the face of the cliffs he observed a bush covered with very fragrant flowers of a rosy hue; its leaves were long and narrow, its stems spiny. Another plant, whose flowers were much smaller, white, and very numerous, had the appearance as well as the foliage of a myrtle. He brought a branch of each shrub, and in one my wife recognized the caper, whose flower-buds are preserved in vinegar; while the second seemed to me a kind of tea-plant, and was accordingly received with special distinction.

In truth, the somewhat dubious hope which we cherished, that sooner or later a ship would sight our shores, and carry us back to our native country, induced us to collect all that the island presented of the precious or the useful, so as to put us in a condition to negotiate with the strangers for payment of our passage, if any opportunity offered for quitting our solitude.

It was for this reason we yearly collected supplies of cotton beyond our wants; of fruits, which we dried or preserved; of aromatics and spices, such as pepper, vanilla, cinnamon, cloves, and even nutmegs, which our blue pigeons brought every season from remote islands, and of which we skilfully relieved their crops when they returned to the pigeon-house. The reader will therefore understand that the discovery of the tea-shrub was regarded by me as one of the most important we had made for this purpose.

While examining the branch loaded with leaves and flowers which Frederick had brought us as a specimen of this valuable



plant, I related to my sons all the facts I could remember in reference to the history of tea:—

“This shrub,” I said, “which grows in China and Japan, as well as in some districts of the Himalaya, is cultivated with especial care, and vast quantities are now annually imported to England, France, and the United States.



TEA-PLANT (*Thea viridis*).

“The fields in which the best kinds are grown are divided into compartments like a large garden, intersected by canals of running water, and by winding paths, which are carefully swept each morning. The labourers who are engaged to pick the choicest tea, which is composed of the first leaves before they are fully unfolded, detached from the extremities of the smallest branches, are required to perform their work with gloved hands, to abstain from eating fish and certain other viands, and, finally, to bathe twice a-day, lest any impurity should pollute the precious cup, over which the grand purveyor of the Court watches with scrupulous fidelity, surrounded by guards and attendants.

“In China, and in India also, the collection and preparation of the leaves of the tea-plant are made by women’s hands. Towards May, mothers, and children, and female slaves, issue from their humble dwellings, and visit the plants at all hours of the day to pick the leaves the moment they are developed. In the evening they collect the day’s crop, and heap up the leaves on plates of



polished iron warmed to various degrees of temperature. They turn them continually with the hand until they begin to shrivel: after which they spread them out on reed-mats, air them, cool them, and put them to dry alternately.

"These different operations are four times repeated, and as the leaves are replaced in the iron dishes, the women are more and more attentive to roll them with the hand into the form which is so familiar to us. When they are thoroughly dry, they are stored up in porcelain vessels with a long neck, which are hermetically sealed; or, more commonly, in chests lined with tinfoil, which are again enclosed in small varnished cases.

"The consumption of tea shows every year a remarkable increase. Formerly, Europe, when its usage was not so general as it is in our time, consumed from eight to ten millions of pounds yearly; now, the total has more than quadrupled; and it seems that once the use of tea has been introduced into any country, it is never relinquished. The English, the Dutch, and all the Northern nations consume a very extensive amount; but, perhaps, it is most largely employed in the United States."

These details excited a lively interest in the minds of my young hearers, and it was agreed that, in the following year, we should gather a crop of the tea growing within our territories, and organize a methodical system of preparing it, to the end that we might obtain, both for our own use and our future projects, a resource as precious as it was advantageous.

Rudly arrived at the drawbridge nearly half an hour before the rest of the caravan; the long legs of his ostrich always out-distancing our other steeds. His first care was to hasten to the Duck's Marsh, where, in a suitable place, he deposited the mysterious bag he had carried with him.

In due time we reached our habitation, which we re-entered with all the tranquillity of good proprietors returning, after a lengthened absence, to their own estate. Frederick arrived some time after us.

When everything was unpacked and stowed in its proper place, we occupied ourselves in assigning to our new tenants their proper positions in our domestic economy, for we did not think it advis-



able to leave them, as strangers, to feed at discretion upon our stores of provender.

The heath-fowl, the Canada hens, and the cranes (one of which



THE CRANE (*Grues*).

had its right wing slightly injured), were confined in the two neighbouring islets. To the royal heron, the sultan-cock, the black swans, and the elegant Numidian was next allotted the Duck's Marsh, on account of the beauty of their form and the richness of their plumage; our old poultry shared with the birds the privi-

lege of remaining in our own neighbourhood, and even of coming to pick up the crumbs of our repast.

These matters occupied us for a good part of the day, and as we were waiting for the supper-hour to hear Frederick's description of his voyage round Cape Disappointment, we were suddenly surprised to hear a hoarse and horrible roaring, like the growl of distant thunder, and, sometimes, like a burst of rage. These strange noises appeared to proceed from the Duck's Marsh. Our dogs began to bark, the bull and buffalo in their stable were terribly frightened, and I rose immediately to go in search of the cause of this novel concert.

"Rudly," I cried, "bring me my gun, and let us find out the musician who is so disagreeably disturbing us. And you, Frederick,



can you remain immovable when some new peril, perhaps, is threatening us?"

Frederick smiled, and signed to me to resume my seat. He told me, while Rudly was away looking for my gun, that he knew very well the cause of the disturbance. "It is the croaking of two monstrous frogs which Rudly has himself deposited among the reeds of the marsh on purpose to give you a fright."

"Capital!" said I; "let us all rise, and when he returns, do not forget to show marks of the most complete alarm; if I am not deceived, the joker will be caught in his own snare."



THE JAGUAR (*Felis concolor*).

Rudly, who, in fact, had not guessed the cause of this frightful clamour, now made his appearance with a couple of guns.

"That is well," I remarked; "you have conducted yourself like a brave lad, and have felt that in the presence of danger you could not do better than place yourself at any side."



Rudly did not answer; but turning towards Ernest, who feigned the greatest anxiety,—

“Well,” said he, “do you know what animal it is?”

“Yes; and intend to march straight upon it; we can just catch sight of it among the reeds.”

“What do you call it?”

“A jaguar.”

“A jaguar?” cried Rudly.

“A jaguar,” repeated Ernest.

“And what *is* a jaguar?”

“A jaguar,” replied our professor, “is the American tiger, and the most splendidly attired of all the animals of the New World. Its skin is superb. Naturalists call it *felis concolor*; it has—”

“It has—it has—” interrupted the poltroon, whom the mere word *tiger* had sufficiently satisfied; “it has all the qualities you like; but as for myself, I declare that I won’t join in a tiger-hunt.”

Uttering these words, he flew to the grotto as fast as his legs could carry him, and rushed headlong into it, without paying any attention to our repeated shouts. In a minute he appeared, all pale and trembling, in the outer gallery.

We then made towards him, laughing uproariously, and Ernest began to explain to the timid fugitive how he himself had been the original cause of his own terror.

“It all proceeds from your mysterious bag,” said he; “the noise you heard was that of your two frogs—these were the jaguar, the splendidly-attired tiger, the *felis concolor*, before which you so unceremoniously took flight! On my word, a jaguar would have to run hard to overtake you, Rudly; I don’t think *you* need be afraid of any such monsters!”

This little incident broke up the monotony of our daily life, and Rudly was the evening’s amusement; he was named the Knight of the Jaguar, the Hero of the Frogs, and was repaid all the jokes and jibes he loved on occasion to hurl at his brothers.

A few days afterwards, when we had completely recovered



from our fatigues, my wife reminded me of Falcon's-Nest, and its castle in the air, which we had almost forgotten since the discovery of the cavern of salt.

"It is wrong of us," said she, "to allow that pretty and attractive habitation, which is not even finished, to fall into decay. If Tent-Town furnishes us a safe and solid residence during the rainy season, we ought not to forget that Falcon's-Nest, with its gigantic branches and laughing verdure, is the pleasantest summer abode we can possibly find."

My wife was right; and I promised her that in a few days we would pay a visit to our neglected retreat. And after having put everything in order at Tent-Town, we accordingly quitted the shore, and removed to our old home. We did our best to bring it to perfection, and embellished it with great care, resorting to all the arts and sciences in which experience had made us proficient. We completed the work of equalizing the curved roots from whose centre emerged the trunk of our aerial dwelling: the terrace we had built up on the roots themselves was relaid with a mixture of pitch, clay, and resin; the staircase by which we ascended was also solidly repaired. As for our sleeping apartment, we substituted a roof of bark for the tent of sail-cloth which had previously sheltered us; all around we erected balconies and trellis-work, until the whole structure assumed a complete, agreeable, and even elegant appearance—very unlike the unshapely and ill-constructed bird's-nest it had hitherto resembled.

These ornamental works, however, were but a prelude to labours of a more considerable and far more difficult character.

Frederick had not renounced his idea of fortifying Shark Island, and of converting this advanced point into a kind of outwork, intended to protect the coast, and command the approach to the bay.

He tormented me so constantly, and developed before me so many plans and projects, that I found it impossible to resist him, and we at length undertook the enterprise so long meditated. The reader will easily imagine how many obstacles we had to overcome, and the difficulties a man and four lads were called upon to meet in



transporting a couple of cannon to the island, and mounting them on a platform upwards of fifty feet in height.

It was not until after many failures that we devised a kind of weighing-machine for the transport of the two guns—at first to the shallop, and afterwards to the place intended for their reception. On the platform of our rocky redoubt I had arranged a capstan and tackle; and to reduce the labours as much as possible both for myself and my young workmen, I had fastened to its base a cable furnished with knots throughout its entire length, in such a manner as to serve us for a ladder when wanted. This capstan proved very useful; we fastened the two guns, in succession, by strong ropes; set in motion the winch and pulleys, and after more than a day's hard work hauled them up to the summit of the rock, where we planted them with their "grinning jaws" directed seawards. We afterwards constructed a watch-tower of bamboo and timber in the rear of our artillery; and on the crest of the little structure fixed a flag, which could be hoisted or lowered at will by means of a small pulley and running cord.

This fortification cost us several months of toil, and proved to be the most difficult and laborious enterprise we had undertaken; but the able engineers who raise a lighthouse on a wave-worn rock are not prouder of their success than were we when the last stone of our edifice was laid in its place.

The flag, on being hoisted, was welcomed with loud and joyous shouts, and economical as we were of our military munitions, we saluted it with six guns, whose echoes resounded far away over the mighty ocean.







## CHAPTER XII.

So manifold, all pleasing in their kind,  
All healthful are the employs of rural life.  
COWPER.



ERTAINLY it is with an emotion of terror I cast my glance on the mass of sheets of paper I have gradually filled, and which every day accumulates at the corner of my table.

However great may be the pleasure I feel in relating, even in the minutest details, each adventure of my family, I cannot put aside the thought—I may say the fear—that the reader will consider my journal too long and too monotonous, with its narrative of events, uniform and unimportant, recurring every day with very trifling variations. Consequently, in the interest of those who patiently peruse these pages, I shall considerably abridge the conclusion of my story.

Ten years had rolled by since we had first landed on this coast; those which succeeded presented very little difference in the nature of the tasks that occupied our time. In truth, there was always the same succession of labours: our fields to sow, our crops to garner, our cattle to feed, our domains to keep in order—such was the cycle in which our existence uniformly revolved. It suffices me, therefore, that the object I proposed to myself in committing this journal to paper should be clearly demonstrated, and that it should teach my readers—if it ever find any—how a young man may grow strong in the life of an active, pious, and united family;



and how he may prepare himself for the due discharge of the duties Chance—or, rather, Providence—may impose upon him.

Providence had willed that the scene of our disaster should be one of the places most favoured by His gifts. We daily returned Him our humble thanks for all His goodness; and I remarked with pleasure that the use of the mercies lavished around us by the Almighty did not diminish in my children their feelings of gratitude towards the Divine Author of all good.

The ten years we had spent might justly be considered as the years of conquest and establishment. We had constructed a couple of habitations; we had enclosed our domains within impassable barriers; and the wall with which we had blocked up the pass of the Savannah protected us from the invasion of any of the dangerous animals living in the outer desert. With lofty mountains on one side and the sea on the other, that corner of the island which we had selected for our abode was always safe and tranquil. We knew, moreover, enough of the ground, and had explored it sufficiently often in every direction, to be convinced that it concealed no source of actual peril. There remained, consequently, no other labours than those of embellishment and enrichment to be undertaken and executed.

Our principal dwelling-places were pretty, convenient, and, before all, very healthy. Tent-Town offered us a secure asylum, both for ourselves and our stores, during the winter season; while Falcon's-Nest was our summer residence, our rural villa; Woodlands, Prospect Hill, and even the block-house posted for the defence of the defile, resembled those quiet farm-steads which the traveller wandering among our mountains never approaches without receiving the frankest and most cordial hospitality. My good Elizabeth often pleased herself with dwelling on this resemblance, and with a tender sentiment which will be fully understood by all who have had the misfortune to be torn from their native country, she loved to recall Switzerland and its mountains, and, turning towards the gigantic masses that bounded the horizon in the direction of the Savannah,—“Dost thou not see,” she would at times exclaim, “the glorious Alps and their snowy summits? Yonder trees, which balance their green crests in the clouds, are the firs of



the Black Forest; and there, behind the farm, stretches Lake Constance, with its calm translucent mirror." I, too, shared in these tender illusions.

The memory of our native land never dies; the love of the soil on which we were born and where we enjoyed our first happinesses, the thought of the spot to which all our early recollections knit us, can never be forgotten; they survive the lapse of years, and infuse a something of its ancient warmth into the chilled breast of Age.

Of all our treasures, the bees, perhaps, had prospered most largely. I had acquired, through habit, the necessary skill for profiting by these ingenious insects; they multiplied of themselves, and we had no other trouble than to prepare yearly, after the rainy season, new hives for the reception of the new-comers. We were consequently able to use the honey according to our wants, without any apprehension that the inestimable resource would ever fail us.



A SWARM OF BEES.

In truth, the prodigious quantity of hives which surrounded us attracted numbers of the birds called *Mérops*, or Bee-eaters, who regard these insects as a regal dainty. We were at first charmed by their beauty and the splendour of their plumage, but were soon



compelled to wage war against them to prevent the entire devastation of our hives. We spread snares and bird-lime, in which, it is true, more than one poor bee was also captured; but by this means we made prisoners of numerous brilliantly-coloured birds, to the great embellishment of our natural history museum.

In the study of the latter science we found an agreeable recreation for our leisure. In our library we possessed several excellent works to guide our researches in its various branches; and Nature, daily revealing to our eyes new marvels, excited us to fresh observations. The bees especially—their intelligence, their sagacity, their ardent industry, and, finally, their curious habits—attracted the most frequently our attention; the spirit of man is overwhelmed in penetrating the secret of an intelligence whose effects attain so extraordinary a development in an organism of such frailty, and it is especially in the presence of this admirable spectacle that he exclaims:—

“The Lord is not only great because He has suspended in the firmament the luminous spheres which lighten us by day and night, and because He has peopled the desert with terrible animals; but it is particularly in seemingly trivial objects that His greatness is most conspicuous. The bee alone would suffice to prove the existence of the Supreme Being—the existence of an intelligent Providence, whose hand has carefully endowed all His creatures with the most precious treasures. The bee in his hive is no less wonderful than the lion which roars in the forests; than the whale, that immense monster, whose every movement agitates, even to their depths, the billows of ocean.”

Our pigeon-house had also thriven, but had grown too confined; and we had been obliged to supplement it by suspending to the branches of the banyan at Falcon's-Nest a number of baskets in which our ring-doves passed the night. These ambulating pigeons were protected from the rain by a screen of leaves.

We gave the last finishing touches also to the gallery which extended along the front of Tent-Town; and it acquired an elegant and picturesque character from a roof inclining against the rock, and resting on fourteen columns of bamboo. The gallery was sup-



ported by substantial posts, and terminated at either end by a sort of arbour, surrounded with trellis-work, which afforded support to a variety of graceful climbing-plants. A spring which bubbled out clearly in the centre of the gallery fell into a basin of tortoise-shell, and diffused all around a delightful freshness; another spring flowed away at one extremity, through a series of bamboo canes, to water the kitchen-garden. Sweet-smelling plants were arranged at the base of each of the columns supporting the gallery, but the vanilla and the pepper were almost the only ones which proved successful, and these climbed up to the very roof. We had wished to experiment with the vine, but the heat of the climate was unfavourable to it, and most of the indigenous plants which we had simultaneously sown were dried up.

Notwithstanding this slight failure, the gallery at Tent-Town was an equally agreeable resort, a place of rest where we all loved to assemble after our labours and enjoy the cool evening air. The two bowers which terminated the gallery and served as a shelter for a couple of fountains had each a small roof, pointed in the centre and raised at the angles, so that, with their bamboo trellises, they resembled Chinese pavilions; we ascended by three steps, which, as well as the gallery itself, we had paved with large squares of a kind of stone, so soft on being quarried as to yield readily to the chisel, but acquiring, upon exposure to the air, a remarkable degree of hardness.

The environs of our abode were equally rich and attractive; our plantations had proved a complete success; between the grotto and the bay a host of trees and shrubs, planted in pleasing confusion, gave to the scene the aspect of a real English garden. Even Shark Island, which was visible out at sea, was no longer a bank of barren sand; we had covered it with palms, pines, and other lofty trees; while masses of mangroves, mingled with the dense reeds that spread over its shores, defended the soil against the encroachments of the waves. On the summit of the reef was visible a pretty belvidere, surmounted by a flag which waved gaily in the wind, and helped to relieve the uniformity of the landscape.

Animated and full of motion was the foreground of this maritime picture, for both the shore and the waters were crowded with



all kinds of aquatic birds; swans, clothed in the livery of mourning, mingled with geese white as the snow; troops of gaily-coloured ducks joined in an infinite variety of amusing pastimes; at intervals there rose from among the reeds the royal heron, its



head crowned with a silvery tuft; and the gay Numidian, with its beautiful robe of feathers lustrous as satin, also haunted this neighbourhood, and might frequently be seen in chase of the frogs or other inhabitants of the morass.

Further off, that is to say, under the lofty trees and on the grassy knolls which carpeted the ground, save where it was broken up by winding paths, the tall ostriches promenaded gravely, until some sudden caprice or some mischievous act on the part of the companions of their domesticity made them break into a rapid trot, and scurry away with their white wings extended; the cranes, and turkeys, and bustards made our acquaintance more willingly; the



beautiful manura lived on excellent terms with our poultry, but the Canadians and the moorfowl separated from the "common herd," and preferred to make their nests among the tall thick herbage on the other side of Family Bridge: as for the beautiful blue pigeons of the Moluccas, though their principal establishment was at Falcon's-Nest, they constantly came to coo on the roof of our gallery, and, as if to divert us, displayed before our admiring gaze all the richness of their plumage; in fine, we were so surrounded on every side by graceful and beautiful objects that we frequently compared our abode to the earthly Paradise.

The place, formerly so arid and desolate, was no longer recognizable, and, thanks to our labours and our cares, had become an equally secure and agreeable residence. Its boundary on the right was Jackal River, whose steep abrupt banks were covered with thorny palms, aloes, karatas, banyans, and other bristling plants, between which at intervals flourished the wild citron and the orange; the whole forming an enclosure so formidable and so dense that a mouse could not have penetrated it. On the left were inaccessible rocks, among which lay the crystal grotto we had not yet utilized, and whither we only retired as an asylum from the scorching heat of the summer noons. Opposite it spread the smiling sea, with a long line of coast stretching away westward; but the Duck's Marsh separated us so completely from the latter that we had not deemed it needful to raise any defensive walls in this direction. The croakings of the horrible frogs with which Rudly had peopled the marsh rendered its approaches sufficiently unpleasant, but we nevertheless supported these noisy concerts without any very great impatience, since my wife had formed the idea of converting these aquatic musicians into an occasional fricassee, and thus adding another dainty to our very comprehensive bill of fare. In our rear, the mass of cliff wherein we had excavated our dwelling-place was so lofty and so steep that we had nothing to dread from a rearward attack; the only passage, therefore, by which we could issue from our little Elysium was Family Bridge, over the Jackal River. This was always raised, and, the better to assure its defence, we had placed there a couple of six-pounders: two similar guns, raised behind a rampart of stone, protected the entrance of the bay, while



two mortars and some other small pieces of cannon armed our ship, the celebrated pinnace.

All the area between the grotto and the brook was planted and cultivated as garden-ground. A palisade of bamboos intermingled with spring plants surrounded it, and also added to our security at those points where the rocky barrier was weakest. This palisade ran in a straight line from our residence to Jackal River; in the interior of the triangle were arranged a small field of corn, a plantation of cotton, another of sugar-canes, some plants of cochineal, a certain number of culinary herbs and vegetables—the whole in small quantities, just for the purpose of having them close at hand; lastly, my wife's kitchen-garden, and a small orchard of European fruit-trees. These different plantations were watered by canals and tubes of bamboo, which brought the water from the brook, and distributed it over every part of the soil.

Our European trees had been less fortunate than our vines; they had grown with an almost incredible rapidity and power of vegetation; but their fruits had lost their savour, and, whether it was owing to the soil or the climate I cannot say, were not the fruits of our own country; the apples and pears had grown hard and sour, while the plums and apricots were no more than an indigestible kernel encased in a thin and tasteless covering of pulp. But for this failure we were a hundredfold compensated by the indigenous productions: the ananas, figs, guavas, oranges, and citrons, which alone among the European trees had been successfully acclimatized, converted the angle of the island which we inhabited into an earthly Paradise, as I have already called it, where all the riches of vegetation seemed to be accumulated.

But this very abundance of fruits was attended with a certain inconvenience, arising from the presence of a multitude of birds and pilferers of every kind, which we were compelled to hunt and ensnare by all possible means.

Our bird-lime and wire-traps proved of great assistance to us, and frequently there fell into our hands a variety of animals which did not inhabit our part of the island, but only visited it when certain kinds of fruit were ripe; as, for example, the great Canadian squirrel, remarkable for its beautiful tufted tail and reddish



lustrous hair, came when our nuts began to mature; more than one beautiful ara, and other paroquets, of brilliant colours, perched, uttering a thousand discordant cries, on the branches of our almond-trees; numerous families of blue jays, wood-peckers, purple black-birds, and yellow loriot, to say nothing of sparrows, thrushes, and other more common robbers, threw themselves as if in rivalry on our cherries, plums, figs, and grapes. Besides these birds of day, we were infested with nocturnal visitors, and had great difficulty in dislodging from our taller trees quite a brood of bats of large size and hideous aspect, which seemed desirous of establishing their quarters among them.

While our trees were still young and their fruits precious to us, we devised all sorts of snares for the capture, or of scarecrows for the terror, of our plunderers; but the winged tribes seemed to laugh at our efforts, and we were compelled to have recourse to gunpowder. At a later date, when our gardens and orchards were in full bearing, we had so large a supply of fruit that we allowed the feathered gluttons to share the treasure with us, considering that a genial nature had given the increase as well for their benefit as ours.

But it was not in the fruit-season alone we were visited by crowds of stranger-birds; the time of blossoming seemed equally attractive; but the latter brought to us some guests whose arrival we always welcomed warmly—that of the humming-birds, or *colubris*; nothing was more delightful than to see these charming creatures fluttering about the blossomy branches with graceful and incredibly rapid movements, and sparkling in the sun like winged jewels. It was also a source of great amusement to watch the quarrels of these tiny, but naturally quick and wrathful animals, either among themselves or with much larger and stronger birds, whom they attacked with boldness, and often succeeded in expelling from the limited domain they claimed for their own behoof; at times they might be seen venting their little fury on the flower which had deceived their expectations, either because an insect or some other eater of honey had anticipated them, or because the sun had already dried up its nectar; in their rage they would pluck out the stamens of the flower, and rend in pieces its petals.



as if to avenge themselves on their hapless victim. These dramatic scenes diverted us greatly, and we sought, not, indeed, to tame our little visitors, but to attract them to become residents in our neighbourhood; fragments of honeycomb we disposed about the branches,



(HUMMING-BIRDS (*Trochilidae*).

and planted the flowers which they loved best around our habitation.

Our cares, after awhile, were fully rewarded; several couples suspended their tiny, circular, and cotton-lined nests to the perfumed twigs of the vanilla-plants, which wound about the columns of our gallery; probably they were induced to dwell there by the neighbourhood of the orange-trees, and the cinnamon and pepper plants, whose perfume is a powerful attraction for these charming birds.

As I have said, our spices had prospered marvellously; the nutmeg, with which our Molucca pigeons had in the first place supplied us, was in full bearing; it had spread over several feet of ground, mingled with bananas, almost at the very entrance of our habitation; and when, in the evening, we took our rest in the



portico after our day's labours, the pungent and balsamic odour of these shrubs added to the charm of the twilight tranquillity. It is true that the nutmeg also attracted numerous troops of Birds of Paradise—well worthy of the name from the beauty of their resplendent plumage, but rendered odious by their voracity and discordant cries; however, after having ensnared a few of the most magnificent, we found an easy method of driving away the others by disposing among the nutmeg-trees a few stuffed birds of prey, whose sight was in itself sufficient to terrify them.



BIRD OF PARADISE (*Paradisca apoda*).

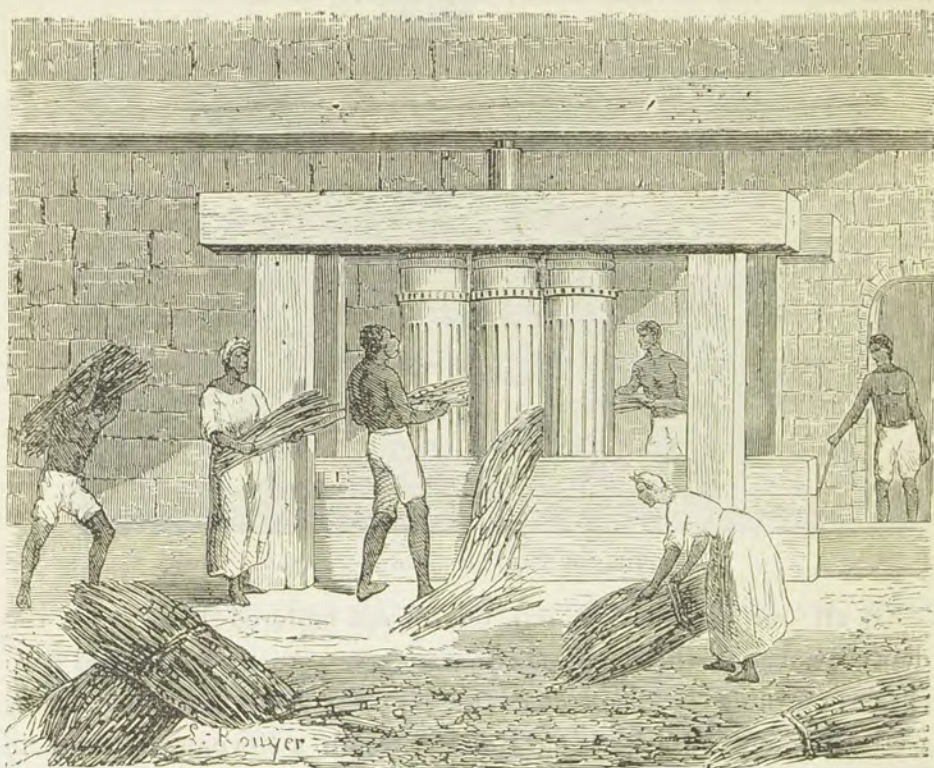
Of all our plantations, our olive-trees suffered least from the depredations of these various marauders. As we possessed two species of olives, we collected the larger and fleshier before they were ripe, and after passing them through a sieve, as is done in Provence, we preserved them with a mixture of salt and spices; the others we allowed to ripen until quite black, and then extracted their valuable oil.

We were desirous also of extending and bringing to perfection our industrial resources. As we collected yearly a great quantity of nuts, almonds, and kernels (*pignons*), I substituted for the pestle and mortar of the kitchen a simple and easily-worked crushing-mill, which provided us with as much oil as we could use, without fatiguing us excessively by working it.

The manufacture of sugar was also the object of special atten-



tion. We were already in this matter in the path of progress; we continued to advance towards perfection. We did not succeed, it is true, in crystallizing the sugar as is done in the refineries, but we arrived at a very satisfactory result. Among the wreck of the vessel we had collected various utensils intended for a sugar-factory, including the metal cylinders indispensable for a sugar-pressing mill, three great caldrons for boiling the juice of the canes, shovels for stirring it, and great strainers for purifying it; the mill was



SUGAR-MILL.

established under a perpendicular screw, which, rotating on itself, was also in communication with the cylinders; the whole was set in motion by means of a lever passed horizontally into the screw, and to which one of our beasts of burden was harnessed; a few hours' work daily sufficed to provide us with the quantity of sugar necessary for our yearly consumption.

Another machine of the same kind we made to answer three purposes—to bruise in a speedier and less fatiguing manner our



supplies of hemp, instead of beating it as we had previously done ; afterwards to crush our olives, and extract the oil more easily ; and, finally, to pound the cacao or other substances of the same nature. The bottom of this mill was formed of a large hollow stone, with a neck through which the juice or oils might flow ; this stone had a rim about nine inches high, and beneath it was a furnace which we heated when necessary.

At first we established our mills in the open air, between the Herring Promontory and our drawbridge ; but, afterwards, we enclosed them in roofed huts, and so obtained a commodious workshop, where we could toil under shelter, even in the rainy season.

Whale Island was not neglected ; like Shark Island, we embellished it with plantations. This place, however, was appropriated to our coarser occupations, and all such labours as were attended with unpleasant smells ; as, for instance, fish-curing, fat-melting, tanning, and candle-making. The workshop for these various processes was built under a projecting rock, and sheltered equally from sun and rain.

We divided our cares between these establishments, without neglecting the attendance of the more remote, which we called our *colonies*. At Woodlands, we gradually transformed the morass into an immense rice-field, which fully repaid us for our toil by its extraordinary crops. We also made some cinnamon-plantations in the neighbourhood, and obtained from them a profitable return by careful cultivation.

Prospect Hill had next its turn, and there we laid out a regular cotton-plantation ; we visited it annually, especially at the season that the capers flowered, and then brought back a good stock of caper-buds, which my wife pickled in aromatized vinegar. Some time after the rainy season, and when the tea-shrub put forth its first leaves, we went to gather the crop ; and returning home, my wife and youngest son set to work to dry it, roll it, and finally pack it into our porcelain vessels with as much care as the Chinese themselves could have displayed in preparing this precious article.

Before the winter came upon us, we took care to cut our sugar-canes, then in full maturity ; we picked also the dourra or negro



millet, which was of the greatest value as a food for our poultry. In all these distant expeditions we made use of our periagua, and carried back in it our booty : we therefore returned home by sea, and visited, *en route*, our maritime possessions, Shark and Whale Islands.

At intervals, we made an excursion to the fort at the mouth of the defile, to see if any elephant or beast of prey had penetrated into our possessions, or been caught in the snares which we had laid for this purpose in the neighbourhood. Frederick then ascended the river in his cajack, returning loaded with supplies of cacao, bananas, and ginger, while we also stocked our vehicle with the products of our harvesting and our hunts, and with porcelain clay for the completion of our domestic utensils.

As in the woods bordering on the defile Frederick had once encountered some traces of birds which, by their figure and their peculiar clucking, he had conjectured to belong to the family of Turkeys, we resolved, one day, to organize a grand hunt after the fashion of the Cape colonists. With this view we erected a great platform, or flooring, of timbers laid one upon another—the said timbers consisting of the gigantic bamboos described in a previous page ; our edifice gradually assumed the shape of an immense trap, such as children make with stems of elder to catch small birds ; each side was ten feet long by six feet high ; a gate of trellis-work occupied the place of the trap in this kind of snare ; the top was also covered with a light lattice of bamboo. To draw the birds into this great cage, we dug a deep trench, which, like a military mine, terminated in the centre of the edifice ; this trench we covered over with planks, earth, and turf, and at the outer entrance and in the subterranean passage we strewed a quantity of millet and other small grain ; then we withdrew. The turkeys and various kinds of fowls rushed headlong on the bait, and the more they found to eat the further they penetrated into the passage, until, having reached its extremity, they discovered themselves caught in the cage ; for, as the entrance of the mine, on this side, was masked by a quantity of leafy boughs through which the birds had passed without taking any notice, they could not again detect the place of exit. Accordingly they flew about in a panic of consternation on every side ; they struck their heads against the trellis ; but all in



vain, for we hastened to open the gate, introduce ourselves into the enclosure, and seize upon our prisoners.

It was thus we captured, on our different excursions, sometimes at the mouth of the defile, and sometimes in the neighbourhood of the sugar-plantations, a superb species of fowls, which enabled us by interbreeding to bring to perfection the races we had brought from Europe.

These birds were clothed in a magnificent plumage; the cock, in appearance and mien, resembled the turkey, but was higher on his feet, so that he easily picked from the edge of our table the grain or bread we placed there for his especial benefit.

Changes had also taken place in the *personnel* of our domestic animals; the families of Turk and Juno were regularly increased every year by a certain number of pups, which, notwithstanding the brilliant qualities they indicated, we were compelled to drown; for we should have been infallibly devoured by our servants had we preserved them all. To every rule, however, there is an exception, and at Rudly's urgent entreaty that at least one member might be added to the canine family, I permitted a young whelp to be saved; to which the name of *Coco* was given, because, said Rudly, it contained the sonorous vowel *O*, and would echo wonderfully well through the forest-glades.

The female buffalo and the cow likewise presented us yearly with an offshoot of their race; but we reared only another calf and another heifer, and these we trained to draw and carry, like their father. The cow we named *Blonde*, because she was of a pale yellow colour; and the bull *Thunder*, in reference to his formidable roar. We had also two young donkeys, male and female, which we designated respectively *Arrow* and *Alert*, on account of their rapidity of movement.

Our swine did not grow more sociable. The sow we had brought with us into the island had long departed this life, but had bequeathed to her posterity such a spirit of savage independence that all our efforts could not overcome it. Our other cattle had multiplied in the same proportion, so that we could kill them from time to time without any fear of destroying the race; we allowed a few individuals to roam the woods, where they returned to their



primitive condition of barbarism; they also increased very rapidly, and furnished us frequently with excellent game.

The Angora rabbits had peopled Shark Island in so prodigious a manner that we were compelled to destroy them by scores for want of sufficient food. We had an abundant supply of felt for our hat manufacture, and were forced from time to time to proceed to a decimating operation, in which our dogs delighted hugely; but the flesh of these rabbits always retained an odour of musk, which made them, as far as we were concerned, a very disagreeable dish. As for the antelopes, on which we lavished our tenderest cares, we were wholly unable to tame them thoroughly until we removed a couple to our yard or court at Tent-Town; they multiplied slowly, and the somewhat ungenial climate of Shark Island, where they were confined, killed off several every year.



SUCH is a general survey of the condition of our colony ten years after our arrival on the coast. Our resources had wonderfully augmented; our strength and industry had made great progress; abundance reigned all around us, and most of the dangers we had to apprehend were foreseen and provided for; that corner of the island which we inhabited was as familiarly known to us as an English gentleman knows his estate; we presented, in a word, the picture of the most perfect felicity; we resembled the family of the First Man happily restored to the pure delights of Eden—except for the great void we felt within ourselves, and the yearning after the society of our kind. In the midst of all our riches and abundance, something was still wanting; the companionship of man, our brother, for which companionship we felt Providence had created us.

For ten long years we had discovered neither on sea nor land the most trivial indication of humanity. Many and many a time we bent our gaze on the distant view of ocean, and withdrew it, disappointed. Thus was engendered in all our minds a painful and



melancholy sentiment, to which, however, no one gave expression; but the desire to recover the fellowship of our race was so strong in us that we would have given up all we possessed to compass it. We patiently collected supplies of the many precious things our island contained, in the hope they might some day become the staple of a beneficial commerce. In our magazines we collected cocoa, spices, cotton, ostrich-feathers, nutmegs, and everything else which we hoped to have an opportunity, at some future time, of selling to an European ship. We had need of this idea; it was our strength and our future; it inspired us with courage, and saved us from *ennui*, which too often produces despair.

We all preserved our health, and during these ten years had experienced no other maladies than an occasional attack of fever, and other slight indispositions.

My sons were no longer children: Frederick had sprung up into a strong and vigorous young man; he was not very tall, but exercise had well developed his limbs. He was twenty-five years old.

Ernest was twenty-three.

Rudly was twenty.

Fritz was eighteen.

Ernest, though well-built, was not so strong as his elder brother; but his thoughtful intellect had ripened; his reasoning faculties had come to the aid of his studious inclinations, and to a certain extent he had overcome his indolence. In a word, he was an able and thoroughly educated person, with a solid healthy judgment, and undoubtedly he was the boast of his family.

Rudly had changed but little. At twenty he was as imprudent as at ten he was wild; but he excelled in all physical exercises.

Fritz was tall and robust; his character, without being distinguished by any salient trait, seemed to preserve a mean between his brothers. He was reflective, though without Ernest's profundity; he was skilful in athletic exercises, without attaining the masterly address of Rudly and Frederick. Finally, my sons were good and honourable youths, in whom the religious sentiment, which I had earnestly laboured to cultivate, was frequently manifested in a manner as spontaneous as it was affecting.



My dear Elizabeth had not aged to any great extent.

As for myself, my locks were white as snow, or, to speak more accurately, very few of them remained; the heat of the climate, and perhaps my excessive fatigues in the early days of our residence on the coast, had thinned them very rapidly; however, I felt myself still strong and vigorous, though I was no longer the young and enterprising man who, ten years before, had commenced the establishment of the little colony which, under God's blessing, had so marvellously prospered.

But, in all the changes which took place, one sad and bitter idea was ever present to my mind. I foresaw for my children a gloomy and desolate future, and often, with my eyes bent upon the ocean, I poured out my soul before my God.



"O Father," I would say, "Thou didst save us from the perils of shipwreck, Thou didst rescue us from the jaws of death, Thou hast filled up the cup of blessing even to overflowing; be pleased in Thy exquisite goodness to complete Thy work, and suffer not those to perish in the solitude whom Thy hand hast preserved."

The reader will easily understand that with the developments which had taken place my young family was not so easy to guide as during the first years of our sojourn on the coast. My sons sometimes experienced a longing after liberty, which led them to absent themselves frequently for whole days at a time; they traversed the forest-depths, they scaled the summits of the lofty



rocks ; but if, when they returned in the evening, overcome by fatigue, I meditated a reprimand, they had always so many curious things to relate of their discoveries and adventures that I had not the heart to grumble !

Frederick one day absented himself in a manner which caused us the most lively anxiety. He had taken with him a supply of provisions, and, as if his hungering after adventure could not be satisfied by inland excursions, he had equipped his canoe, and launched himself on the open sea.

He started at break of day, and night came without our perceiving any signs of his return. My wife's disquietude was extreme. I unmoored the periagua, and we immediately set out for Shark Island. There, on the summit of the fort which our labour had erected, we hoisted our signal-flag, and afterwards fired an alarm-gun. A few minutes later, and we discovered a black point on the horizon, gradually separating itself from the world of waters, which still glowed in the many-coloured radiance of the setting sun ; a telescope soon revealed to us our dear adventurer.

He advanced to us slowly, and striking the sea with his oars, as if the Greenland boat were loaded with a double cargo.

"Fire !" cried Ernest, in a tone of command ; and Rudly, in his capacity of officer of the coast-guard, discharged a cannon : we gave a general *hurrah*, and descended in all haste to regain our periagua and meet Frederick on the shore of the bay, whither he was directing his course.

On our arrival, we perceived the cause of the young navigator's slowness of progress. The prow of his cajack, which he had decorated with the head of the walrus and its ivory tusks, was loaded with various articles, while a great shaggy head, more like an inflated bladder than the head of an animal, and a bag, which he likewise towed, kept his little skiff sunk up to the gunwale in the water.

We received the voyager with open arms.

"It seems," said I, "my dear Frederick, that you have had a lucky day ; but, whatever may be your booty, it is not worth your return home safe and sound ; blessed be God, who has restored you uninjured to your mother's arms !"



"Yes, indeed," replied Frederick; "blessed be God! for, besides the spoils you see yonder, I believe I have made a discovery which in itself is more precious than all the treasures of the sea, and which will stimulate us to new excursions."

These words, which he uttered in a half-whisper, singularly excited my curiosity; but I gave no expression to it at first, as all pressed around the voyager, plying him with questions, and scarcely giving him time to breathe. When we had unfastened the bag—filled with large oysters, as, at a first glance, I conjectured—and the marine animal which served as a counterpoise to its weight, my boys began to drag the little boat, with its pilot still seated within it, towards our habitation, making the air ring with joyous shouts. My wife and I followed.

Afterwards they returned, with a barrow, for the remainder of the cargo, and this disposed of, we all seated ourselves under the gallery, and prepared to enjoy Frederick's account of his expedition.

He began by begging us to excuse his little escapade: as we were wholly unacquainted with the eastern part of the country which we inhabited, he had set forth with an intention of exploring it, and not for the mere purpose of seeking those adventures and perilous hazards which occasionally relieved the monotony of our occupations—too peacefully uniform in their nature for the activity of a young man of twenty-five.

#### FREDERICK'S NARRATIVE.



I HAD long made all my arrangements for this expedition," he continued, after his mother, by an embrace, and I, by a sign with my head, had assured him of our forgiveness; "I had stored my cajack with provisions, and with two bottles, one of hydromel, and the other of fresh water; on the after-deck I had fitted up a mariner's compass; a harpoon, a boat-hook, and a fishing-net were disposed in their proper places, on the right hand side of my canoe; a gun,



and an anchor, with its cable coiled up, on the left; I had also a pair of pistols in my belt, and a game-bag stuffed with munitions at my side; I found a place for my eagle, which I wished to take as my companion; and I awaited with impatience the moment when I could depart unknown to you, dear parents, for I feared my mother's tender reproaches.

"This morning, before daybreak, I rose very softly, and hastened, according to custom, to the sea-shore. The weather was so beautiful, the wave so calm, that I could not resist the temptation to avail myself of so favourable a conjuncture. I seized upon a good stout hatchet, leaped into the cajack, and suffered the current of the Jackal River to carry me out to sea, in the direction of the reef on which our noble vessel was wrecked.

"There I saw, as I passed, and at no great depth, a quantity of iron bars, cannon, and shot, which we may, perhaps, one day recover, when we have hit upon some means of diving for them. I afterwards directed my course, diagonally, towards the western coast, steering through a multitude of rocks of every shape, which, like the ruins of a shattered promontory, rose above the liquid surface or were concealed by the foamy waves. A host of sea-birds have built their nests in this exposed situation, and flutter about the scene, uttering the most piercing cries. Wherever the rocks presented a clear surface might be seen numerous large marine animals—some, stretched in the sun, were loudly roaring, while others amused themselves with awkward pastimes. Sea-lions were among them, and sea-bears, sea-elephants, and all kinds of seals, and especially walruses, which, anchored to the rocks by their curved tusks, suffered the lower portions of their body to hang suspended in the sea. This latter species must have established their general rendezvous in the place I speak of, for I remarked, as I skirted the coast, heaps of their bones and ivory teeth; we have only to go thither to procure for our museum, whenever we choose, a perfect and beautifully white skeleton."

"Oh, that would be charming!" exclaimed Frederick's auditors; "we will collect the tusks to make ivory handles for our knives, and even tools!"

Fritz, whose reflective mind always suggested an appropriate



remark, then inquired of me the uses of the enormous curved teeth or tusks with which certain animals were provided, inasmuch as they were evidently not fitted either to bite or graze.

"Such," I replied, "is not the object of all kinds of teeth; some are weapons of attack or defence, as in the case of the elephant, rhinoceros, walrus, and narwhal; others, like the snout of the boar, or the curved trunk of the seal, or the tusk of the *babyrroussa*, are the tools with which Nature has endowed those animals, either for digging up the tubercles and roots that form their food, for detaching shell-fish from the ocean-rocks, or for hooking themselves on to the branches of the trees whose foliage they devour; the hippopotamus alone has teeth so strong and various that one knows not for what purpose he employs them, since he is frugivorous. However, the tusks of the hippopotamus and walrus being less porous than those of the elephant, the ivory yielded by them is most esteemed, because it is less likely to turn yellow; wherefore dentists use it in the manufacture of artificial teeth."

Frederick then resumed his narrative:—

"



I MUST confess that when I found myself in the midst of all these monsters, I did not feel very much at ease; I endeavoured to glide unperceived through the openings in the reefs, and was fortunate enough not to encounter any animal inclined to dispute my passage; yet fully an hour and a half elapsed before I escaped from this unpleasant neighbourhood. Then I passed before a magnificent rocky portico which Nature seemed to have taken a pleasure in constructing of the severest and most imposing architecture; it resembled the arch of a gigantic bridge, under which the sea flowed as in a canal, while on either side the rock rose like a perpendicular wall from the watery depths. I did not hesitate to venture into this gloomy ocean-ravine, at whose extremity a feeble gleam of light indicated the existence of an



opening; delicious was the coolness, while all around and about me fluttered clouds of sea-swallows which had niced their nests in the rocks, and which filled the air with their shrill cries, as if they would fain have forbidden my approach; but their daring neither weakened my courage nor lessened my curiosity. I moored my skiff to a corner-stone of the marine-cavern, and applied myself to examine tranquilly its wonders as well as its inhabitants.

"These birds appeared to me about as big as wrens; their breast is dazzlingly white, their wings are of a clear gray, their



EDIBLE NESTS (of the *Collocalia esculenta*)

back and the feathers of their tail of a lustrous jet: it seemed to me that their nests, myriads of which were built about the arch and sides of the cavern, consisted, like those of other birds, of



feathers, dry leaves, and blades of grass; but the singular circumstance is, that each of them was placed on a kind of support resembling an elongated spoon without a handle, glued to the rock, and apparently composed of a kind of smooth gray-coloured wax.

"As some of these nests were empty I removed them, and after attentively examining them, I perceived they were made of a solid substance like isinglass; I procured a small supply, which I carefully packed up with the débris of other nests and dry herbs, and placed in the fore-part of my boat, in the head of the walrus, for your inspection. Tell me, father, do you think it will be of any service?"

"Assuredly," I answered; "a capital article of commerce would these swallows' nests be, if we were in communication with China, where they fetch their weight in gold, for they are eaten by millions, and regarded as a special delicacy."

Here I was interrupted by my wife and sons, who loudly gave expression to their disgust at the idea of eating birds' nests. I made them understand that it was no question of eating the hay and feathers which lined their nests, but only the outer crust, which is carefully cleaned, and when cooked with spices, makes a kind of transparent, savoury, and agreeable jelly. The word "jelly" reminding my wife of what she had achieved with a substance which at first sight seemed by no means well adapted for conversion into a delicacy, she speedily recovered from her prejudice, and agreed that, with a suitable preparation and seasoning, Frederick's discovery might be turned to advantage.

"Have not men," I added, "conceived the idea of turning sharks' fins into a dainty of the most exquisite character! What do we not owe to human necessity or gluttony! Come, my dear wife, you must serve up to us some of these nests, that we may have an opportunity of judging if they are really worthy of their renown."

"Willingly," replied our good housekeeper; "though I am completely ignorant of this transcendent mode of cookery. I think, however, I can contrive to make you a jelly, provided you will thoroughly cleanse for me these little cakes, which appear tolerably dirty."



Little Fritz, who was still the cook's assistant, assured his mother that this should be his first occupation on the following day. Then, turning towards me, he said,—

“But, father, where do the swallows obtain the glutinous matter of which they make the supports of their nests?”

“That, as yet,” I replied, “is not positively known. It was formerly pretended that the foam of the seas which this little bird (the *Collocalia esculenta*) collects with his beak, he employed to glue his nest to the rock. When dried, the substance I speak of assumes the appearance of wax, or rather of isinglass; and some authorities assert that it is the produce of a kind of mollusc on which the sea-swallow feeds, and of which, after having swallowed it, he disgorges the gelatinous part, either to construct his nest or feed his young. The latter opinion appears to me the better founded, because this substance possesses the nutritive qualities of animal matter. But a truce to our discussion, and let us hear the conclusion of our adventurous voyager's narrative.”

“I advanced boldly,” he resumed, “through the tranquil waters which bathed this gloomy pass, and on emerging from it found myself in a magnificent bay whose low and fertile shores skirted a savannah of immense extent. Graceful clumps of trees of every species relieved the uniformity; to the right rose enormous masses of rocks, of which the one I had just traversed was only a prolongation; to the left flowed a calm and limpid river, and beyond this river extended a great morass, which was bounded by a dense forest of cedars.

“While I followed up in my skiff the sinuosities of the coast, I perceived at the bottom of the transparent waters, on a pebbly bed, numerous shoals, so to speak, of large shell-fish resembling oysters, which are called, I believe, bivalves. Here, then, I said to myself, is a far more succulent edible than the little oysters of Safety Bay; I must taste them, and if they are good, I'll carry home a supply to Tent-Town. Immediately I detached a few with my boat-hook, collected them in a net, and threw them on the shore without leaving my canoe, because I wished to complete my cargo at one loading. On returning to the shore with a fresh supply, I found



that the first oysters were open, and that the heat of the sun had already begun to corrupt them; however, I opened one or two of those I had just brought, but instead of the white fat oyster on which I had hoped to regale myself, I found only a hard, leathery, tasteless viand. In attempting to detach the animal from the shell, whose interior was, I may add, lined with dazzling mother-of-pearl, I felt under my knife some hard round bodies, like peas; I extracted them from the flesh of the oyster, and found these little heads so pretty that I amused myself in cleaning out all the shells and stowed away the pearls—for such I take them to be—in a small box which I had about me. Do you think not, papa," added Frederick, as he presented them to me, "that they are really pearls?"

"Let us see, let us see, Frederick," exclaimed his brothers, throwing themselves on the box at the risk of spilling all its contents; "oh, what a treasure! How they shine! How brilliant and regular they are!"

I took the box in my turn.

"They are indeed pearls!" I cried, "and Oriental pearls of the greatest beauty! Thou hast truly discovered a treasure, my son; it is true, it will be less useful to us than thy salanganes' nests, since we possess no means of turning it to advantage; yet its discovery may one day have for us advantageous results; we will not neglect it, and will visit the bay you have so well described. Meanwhile, go on with your narrative."



"AFTER having recruited my strength," resumed Frederick, "with a hearty lunch, I continued my voyage along the coast, which I found to be broken up into a number of little creeks, clothed in blossoms and verdure. In due time I reached the mouth of the river, whose tranquil waters flowed almost noiselessly into the bay; its surface, covered with aquatic plants, resembled a verdurous meadow, where divers kinds of birds were flying, and, among others, a species which, mounted on large legs, stalked forward at a rapid pace.

"This river I named the St. John, because it reminded me of



the great river of that name in Florida, as far as I could judge from my recollections of what I had read. After renewing my supply of fresh water, I directed my course towards the other promontory which terminates the bay, and stands opposite to the one I had cleared by passing through the arched tunnel in its sides. This bay, which I do not hesitate to designate *Pearl Bay*, mea-



AQUATIC PLANTS (*Fuci and Algæ*).

asures about two leagues across from one point to the other, and is separated from the open sea by a chain of reefs extending in a straight line. There is but one convenient entrance, which lies a little to the west; everywhere else the entire bay is fortified by reefs and sand-banks, forming a natural harbour, which needs only the neighbourhood of a town to render it perfect.

“ I attempted to pass out by the passage which I had so recently discovered, but the tide began to rise, and for the time I was compelled to renounce my project; I therefore proceeded along the rocks



as far as the promontory, but it had no opening like the other, and I was obliged to land. For on every side I saw the heads of marine animals, which, apparently about the size of a calf, rose above the waters, plunged, and dived, and pursued one another in sport, and I feared they might upset me in their joyous pastimes; consequently, I fastened my cajack to a piece of rock, took my eagle and my weapons, and prepared to strike the first of the creatures which should approach the shore. I was desirous of bringing home one of them for your inspection. Owing to their rotundity, I can only compare them to a valise well-filled and swollen to the utmost; the skin being covered with a short thick hair, I conjectured it might be useful. A company of these comedians soon approached the corner where I had concealed myself. I let loose my eagle, which immediately attacked the largest, and speedily blinded it. Then I leaped from rock to rock, until I reached the place where the poor animal was struggling under the

cruel talons of its enemy, killed it with a blow from my boat-hook, and drew it to my cajack. All its companions had disappeared as if by magic.

"Straightway, I began to disembowel the animal, whose weight was too great for my frail skiff; but while I was thus engaged, a prodigious quantity of sea-birds assailed me on every side: gulls, and frigate-birds, sea-



WANDERING ALBATROSS (*Diomedea exulans*).

swallows and other species, approached me with so much audacity that, in a fit of impatience, I let drive at them left and right, and



by good luck knocked down a great bird of extraordinary strength. It was, I fancy, an albatross.

"Meanwhile, having driven off these importunate visitors, I finished my task. I fastened my sea-otter, for such, I think, is the animal's name, to the rear of the canoe, by the side of my bag of oysters, and began to think of home. The ebb was now running out; I made for the entrance into the bay among the rocks; cleared it without accident; speedily regained the well-known waters; descried our flag waving in the distance, and heard the cannon of the redoubt welcoming my re-appearance."



AFTER the conclusion of Frederick's animated recital, and during the absence of my wife and sons on a visit of inspection to the cajack—the former to examine the new viands recommended to her culinary talents, and the others to handle the pearl oysters—Frederick and I remained for some time alone. He had reserved for our private conference the most important part of his narrative, and now confided to me a secret for my consideration before he divulged it to the rest.

"I have to tell you," he said, "a singular circumstance of my voyage. On examining the albatross which I had struck down with my boat-hook, judge of my surprise when I found a cloth about one of its paws. I unbound it and read in good English these words—

"SAVE THE POOR CASTAWAY ON THE SMOKING ROCK."

"My emotions on making this discovery it is impossible to describe. Again and again I re-read the words, as if to assure myself that my eyes had not deceived me. Oh, Heaven, I cried, grant that this may be true! Afterwards, I endeavoured to account for the presence of a human being among these cliffs, but the history of our own shipwreck was a convincing proof of its possibility; from that moment, to seek along the coast or out at sea the smoking rock,—to save the sufferer, my fellow-creature, my



brother, became my only thought ; but though I gazed around on every side, my glances were lost in the unfathomable space.

"Then a lucky idea occurred to me—namely, to rebind about the foot of the albatross the original cloth, and to tie round the other foot a new piece of linen, on which I wrote in English :—

"‘TRUST IN GOD ; ASSISTANCE IS AT HAND.’

"If, I said to myself, the bird returns to him who sent it abroad, he will read my answer ; if, on the other hand, the messenger shall only fly near the unfortunate, without stopping, he will perceive the second cloth ; and this alone will inspire him with hope and confidence, for, unquestionably, he will understand that his bird has fallen in with men.

"I plucked a feather from the wing of the bird ; fashioned it into some degree of shape with my knife, and dipping it in the blood of the sea-otter, wrote, on a small strip torn from my handkerchief, the short sentence I have already repeated to you. The albatross had only been stunned by the blow, and I revived it by administering a few drops of hydromel. Then attaching my missive to its foot, I sent it on its journey, offering my prayers and entreaties to God that it might return safely to him who had sent it.

"At first it rose in a straight line above my head, as if to reconnoitre the locality towards which it would fain direct its course ; then flying westward, it plied its wings with such rapidity that I soon lost sight of it, and was compelled to renounce all hopes of following it in my cajack.

"Now, father," continued Frederick, with generous emotion, "what think you of this event ? If we were at length to discover a human being ! a new friend ! for we shall go in search of the stranger, shall we not, my father ? Oh yes, we will go ! What joy, what happiness ! But ah, what despair if we do not succeed in the enterprise ! Thus, my father, you recognize the alternations of fear and hope which induced me to keep the secret of this strange rencontre from my mother and brothers, and confide it only to you ; we must spare them the anxieties of a hope which, after all, may be deceived."

These last words my son uttered in a tone of the deepest melancholy



"I am well pleased with you," answered I; "you have acted with much prudence; you have done well in resisting the first impulse of your heart, which led you to carry assistance to a suffering fellow-creature.

"You would have plunged us all into a mortal agony, if night had come on before your return home.

"As for the incident you have described, it is, undoubtedly, extraordinary; nevertheless we must not too sanguinely build our hopes upon it. The albatross is a wandering bird, which in a very brief time traverses immense distances. It is possible, also, that the message which it carried was written long ago; and even supposing that it was of recent date, it may well be that the poor wretch who wrote it is at such a distance from our island that any attempt to discover him will be fruitless. But let us keep the secret between us, and I will reflect on the best means of rescuing the unfortunate, if he exists, without awakening fresh anxieties in the bosoms of our beloved ones."

These cold and commonplace words were dictated by my desire to subdue the kind of excitement which fired the young imagination of my son, and to prevent him from rashly plunging into some dangerous enterprise; for I was not unaware that pirates hidden in some creek or bay frequently employed these false signals to entrap the unwary navigators. I therefore bade my son be calm, and promised to consult with him on a feasible project. We then hastened to rejoin the rest of the family, whom we found still occupied by the glittering pearls.



"BEHOLD," said Professor Ernest, "here lies at our feet a fortune! Europe pays in weight of gold for the beautiful gems which the Orient sends her: in 1804, the English Government sold to a speculator, for upwards of 3,000,000 francs, the right of fishing, for a single season, the oyster-beds of the Ceylon coast.



"The pearl fishery commences in the month of March, and employs a great number of boats. The Orientals who prosecute it import into their transactions a great deal of mystery, and never undertake it until they have performed all kinds of ablutions, and said all kinds of prayers, which in their belief ensure the infallible success of the enterprise they meditate. They set out at night; for it is essential, they say, to have cast anchor in the latitude of the bank about to be fished before the sun rises.



PEARL DIVERS.

"Nevertheless, the fishers do not commence their operations until seven o'clock in the morning—that is, when the heat permits



the divers to enter the water. And this is how they set to work:—

“With oars, and spars, and pieces of wood, they construct a kind of light scaffolding, which projects on either side of the boat, and to which they suspend a stone shaped like a sugar-loaf. This stone, called the diver’s stone, is lowered about five feet into the water. The cord supporting it is connected with a kind of stirrup, intended for the diver’s foot. The diver places his foot firmly in it, and remains standing erect for a few moments, until a net shaped like a pannier is thrown out to him; in this he places his other foot, holding in his hand a rope suspended from the scaffolding.

“These preparations completed, he closes his nostrils with one hand to prevent the water from choking him; then he gives a smart pull to the rope connected with the stone, and descends into the water. On reaching the bottom, he draws his foot out of his stirrup; immediately the stone rises, and the boatmen above hook it on anew to the scaffolding. The diver then collects his spoils, removing the oysters from their beds with a small iron pincer, and gathering them into his net with all possible speed.

“Generally, the whole time spent under water does not exceed a minute and a half.

“If he is skilful, he will collect as many as one hundred and fifty oysters in this brief interval.

“As soon as his task is finished he gives notice to the boatmen above by pulling the cord attached to the pannier. They immediately draw it up; but the diver mounts to the surface before his booty, and waits, disporting around the boat, until it is again his turn to dive. A diver’s stone ordinarily occupies a couple of men.

“The natives of Ceylon and the Coromandel coast are eager pursuers of this particular fishery; and, painful as it seems, the men employed in it speak of it only as an agreeable recreation. They toil in the manner I have described for at least six hours, without uttering a single complaint; and if they ever groan, it is because the oyster-bank is badly supplied.

“After the fishery, the oysters are heaped up in spacious inclosures, where they are watched with much care for about ten days:



that is, until they corrupt, and the pearls can be extracted. When they have reached a suitable condition, they are thrown into a reservoir full of sea-water: there they are left for about twelve hours. Then they are opened and washed, and the shells pass into the hands of the 'clippers,' who detach the pearls with small pincers."

After this explanation had been supplied by Professor Ernest, we all made our remarks on the beauty, size, and number of the pearls found in the shells which Frederick had brought home.

In reply to some questions of Fritz, who wished to know if all the pearls were of this brilliant and agreeable "water," I added to Ernest's account the information that the beauty of the pearls depended on the purity of the bed whence the shells were taken: in muddy waters, it is said, they are dull, but on sand or gravel very clear and shining. They also change their *nuance* according to the locality: those found in the Gulf of California are of an orange yellow; those on the African coast are smoother and nearly black; some, much esteemed among the Arabs, are of a greenish colour. In Scotland, as in Lorraine, a species of large mussel furnishes pearls; but these are of a bluish tint and irregular shape."

"And how, then," inquired Fritz, "are pearls formed?"

"For a long time their formation was looked upon as marvellous. They were attributed to a kind of dew which fell from heaven; and perhaps you will remember the graceful apologue of the drop of water which bewailed its fate in falling into the ocean and being swallowed by an oyster, but afterwards became one of the most beautiful of Orient pearls, and adorned the crown of the great King of Persia.

"In this tale there is nothing true but the moral.

"As for the real origin of pearls, naturalists have discovered that the substance is identical with that which lines the shell of the oyster itself; and that, at first a viscous liquor, it agglomerates and hardens in the body of the animal when any intrusive substance arrests its secretion. It has also been remarked that in wounded oysters pearls are generally found, and especially in those which have been pierced by a small marine worm. Perfor-



ating the hard shell of the pearl-oyster, it extracts the poor animal by suction: the latter, in defence, covers the hole with a nacreous substance, which becomes as hard as the shell, and acquires considerable brilliancy.

"I may add that the pearl-oyster also invests with this nacre the grains of sand or other foreign bodies which occasionally force their way between the valves; and the fishermen in this way multiply the pearls by piercing the shells, or inserting tiny pebbles when they find them open."



After the pearls, we took up the sea-swallows' nests as a subject of discussion; but the sea-otter, before all things, excited the attention of our young naturalists.

"What an ugly animal! and what thin moustaches sprout on either side of its snout!" cried Fritz, examining it. "And this you call an otter?"

"Yes," replied Ernest, quite delighted to launch out in his professorial strain, "it is, in truth, a sea-otter—one of the most innocent animals which the ocean nourishes, and endowed with a multitude of good qualities, especially with an ardent maternal love, so that she dies of hunger when deprived of her offspring. If attacked, she makes no resistance, but seeks to save herself by flight. Often this means proves unsuccessful: then she growls like a cat, whose grimaces she imitates; she stretches herself on her side, covers her face with her fore-paws, as if to prepare for the blows she expects, and thus confronts her death. But should she be fortunate enough to effect her escape, the moment she



is out of danger she rears herself on the waves, and indulges in a thousand tricks, as if in mockery of the enemy whose efforts she has foiled.



THE SEA-OTTER (*Lutra marina*).

“The sea-otter, however, is not to be despised in her character of ‘game :’ not only does her skin provide an excellent fur, but her flesh also is much esteemed, and is described as quite as good as mutton.”

We next bestowed our attention on some other less important articles which Frederick had brought back with him ; and when the first enthusiasm had somewhat subsided—

“My dear wife,” said I, suddenly assuming an unwonted air of gravity, “and you, my sons, this day is one of the epochs which mark out the history of a family. Frederick is no longer a child : for some time, and especially in his last excursion, he has conducted himself with so much courage and prudence, that I now formally resign my parental authority over him, and declare before all of you that henceforth I hold him free from subordination ; that I consider him a Man, and, as a friend, called to aid me by his counsels and energies in the administration of our little colony.”

This unexpected harangue was followed by a moment’s silence. Frederick himself, to whom I had given no inkling of my design, could with difficulty conceal his embarrassment ; while his mother, with tears streaming down her cheeks, clasped him in a fond embrace.

After a minute or two of emotion, Ernest exclaimed :

“This is the Roman ceremony, my dear Frederick, of the *toga virilis*. You are now, in truth, a man—a *man*—A MAN!—and take care never again to thrust your freed feet into the little slippers of infancy.”

In this family scene, however, there mingled such an element of seriousness and gravity, that none felt inclined to smile at Ernest’s attempted pleasantry.



The secret which Frederick had confided to me I revealed to no one, not even to my wife; for I had not decided what steps should be taken to follow it up. In fact, I confess that it caused me no slight embarrassment.



THE pearls, however, were an object too important for any one to forget; and on the following morning my sons pressed me to dispatch them to the bay, that they might conduct a fishery *en regle* of these precious bagatelles.

"Softly, gentlemen," said I. "Before one goes out to ride, one must equip one's horse; and if you would have your enterprise succeed, you must furnish yourselves with the tools indispensable to its success. Let every one of you invent something useful for the expedition; of which not only do I approve, but I will gladly take part in it."

My proposal was warmly applauded.

Immediately everybody set to work, and our quarters became a scene of unexampled activity. I myself cast at the forge a couple of great rakes and two small iron grapnels. The former I furnished with long and solid handles of wood and rings of iron, that they might be fixed to the keel of our shallop, and so dragged over the bed or bank tenanted by the pearl oysters; the little crooks or grapnels were to detach those passed over by the rakes. Ernest fabricated, after a design of his own, a kind of scraper, with chisels, set in motion by a cord, and intended for the removal of the nests of the sea-swallows from their rock, as we were desirous of procuring a supply of them. Rudly constructed a very light ladder by boring holes at regular intervals in a stout bamboo stem, and passing through these holes a number of spokes of cane, about eighteen inches long—the whole resembling a paroquet's climbing-pole: and that a person might the more readily climb up it, he had fixed at the top an iron hook, by which the ladder could be suspended, and at the bottom an iron point, to fix it firmly in the rocks at need. Fritz, very skilful in net-making, mended up



our old ones, and made some new and stronger ones, with which to garnish our crooks, and to receive the oysters we might gather.

All this time Frederick laboured silently on his cajack, endeavouring to fit it to carry another rower. I alone understood his motive in doing so, and read in my son's soul the hope which inspired his generous toil. I rejoiced in it, but durst say nothing to encourage it.

We did not neglect the provisions required for the voyage. Two hams were cooked, and some cassava loaves baked; we also took a supply of wheaten bread, rice, nuts, almonds, and other dried fruits, besides a cask of fresh water and a keg of hydromel. The whole was put on board the shallop, with such instruments as we supposed likely to be of service.

A whole day was spent in equipping our boat. On the morrow a fresh and favourable wind and a gently agitated sea invited us to depart. Fritz and his mother were charged with the duty of watching the coast; and, gaily hoisting our sail, we fired them a salute, starting in the midst of prayers and good wishes for our happy return.

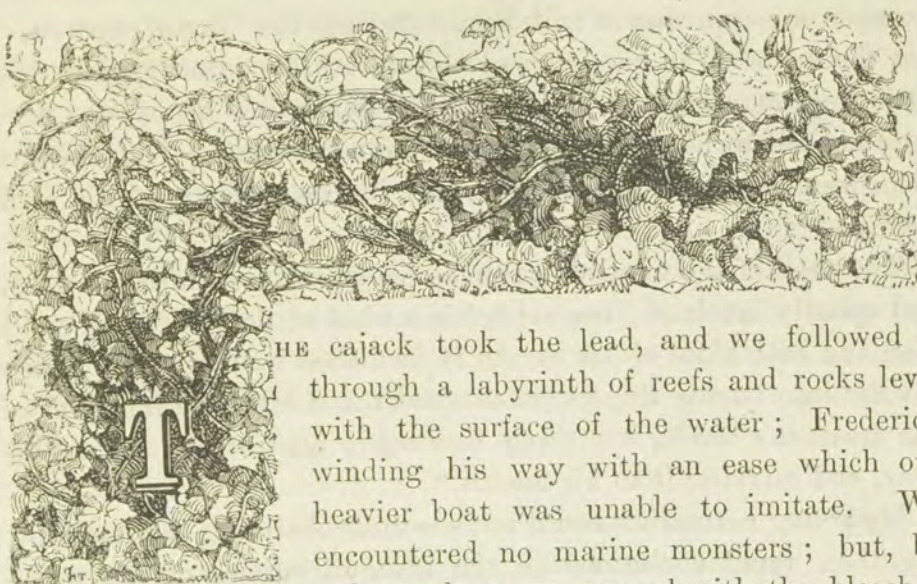
We were accompanied by some of our servants: the youthful Knips, a successor to Frederick's ancient pupil—for the good old trickster was dead—and Rudly's jackal, whom a domesticated life had not prevented from becoming a strong and vigorous animal, had found places in our shallop. We had also taken Juno, Braun, and Folb, as three faithful followers, not to be daunted by any danger. In fact, the climate of the island had answered so admirably with them, and in their life of freedom and continual exercise their strength had so notably increased, that we frequently compared them to those dogs of noble race which Porus of old gave to Alexander, and which did not fear to measure themselves with lions and elephants.

Rudly arranged with Frederick to occupy the second place in his cajack. Ernest and I took charge of the shallop, with all the provisions and animals it had on board.





## EXPEDITION TO PEARL BAY.



THE cajack took the lead, and we followed it through a labyrinth of reefs and rocks level with the surface of the water; Frederick winding his way with an ease which our heavier boat was unable to imitate. We encountered no marine monsters; but, by way of compensation, the rocks were covered with the bleached bones and tusks of walruses, bears, and sea-horses. Ernest made us stop several times—at the risk of dashing against the surf-beaten crags—that we might select, among the débris of these monsters, some curiosities for our museum.

The sea was calm, and shone like a resplendent mirror, and over the sunny waves glided, like fairy boats, whole flotillas of the *nautilus papyrus*—the name given to a kind of univalve shell-fish, made like a tiny gondola with a raised poop. The old story ran that the animal inhabiting it taught men the art of navigation.

The most that can be said, however, is, that the form of the shell is not unlike that of a ship, and that the animal seems to steer himself through the waves as a pilot steers his vessel.

When the nautilus wishes to swim, he raises his two arms, and extends like a sail the thin light membrane fastened between them; two others he dips into the sea, and uses as oars; another serves him instead of rudder. He only takes so much water into his shell as is necessary to ballast it, and enable him to advance with as much safety as swiftness; but at the outbreak of a storm, or on the approach of an enemy, he takes in his sail, lays up his oars, and fills his shell with water sufficient to enable him to sink



rapidly. He turns his back keel upwards when he wishes to re-ascend to the surface, and by means of certain portions, which he expands or compresses at will, he can traverse the "liquid expanse;" but the moment he has attained the surface, he adroitly rights his little ship, empties it of its ballast, and expanding his canvas, permits himself to be carried wherever the wind wills. The nautilus is a constant navigator, who is at once his own pilot and his own craft.

The shell of the nautilus is thin as paper, white as milk, striated, and spirally involved; the animal is a kind of polypus, with eight feet, and both sides of his mouth is furnished with a fringe, which divides into twenty fingers (so to speak), and fulfil the functions of the creature's hands, stretching forward or contracting, seizing his prey, and carrying it to his mouth.\*

My young naturalists could not see these charming shells executing their rapid evolutions on the tranquil surface of the waves without feeling a desire to pursue them; by means of the nets which we carried with us, we had soon captured half-a-dozen of

\* This graceful little animal has been described with much picturesque vigour by the poet Montgomery:—

"Light as a flake of foam upon the wind,  
Keel-upward from the deep emerged a shell,  
Shaped like the moon ere half her horn is filled;  
Fraught with young life, it righted as it rose,  
And moved at will along the yielding water.  
The native pilot of this little bark  
Put out a tier of oars on either side,  
Spread to the wafting breeze a twofold sail,  
And mounted up and glided down the billow  
In happy freedom, pleased to feel the air,  
And wander in the luxury of light.  
With all the dead creation, in that hour,  
To me appeared this lonely Nautilus,  
My fellow-being, like myself, alive.  
Entranced in contemplation, vague yet sweet,  
I watched its vagrant course and rippling wake,  
Till I forgot the sun amidst the heavens.  
"It closed, sunk, dwindled to a point, then nothing:  
While the last bubble crowned the dimpling eddy,  
Through which mine eyes still giddily pursued it,  
A joyous creature vaulted through the air—  
The aspiring fish that fain would be a bird,  
On long, light wings, that flung a diamond-shower  
Of dew-drops round its evanescent form,  
Sprung into light, and instantly descended."

*The Pelican Island.*



them; they were quickly disembowelled, and carefully placed in a basket to serve as an ornament for our museum.

It was not long before we reached the promontory, behind which, according to Frederick, we should enter Pearl Bay. This promontory, in addition to the passage tunnelled in its flanks, presented, as a mass, an imposing and extraordinary appearance of well-shaped alcoves, arches, and aspiring pyramids; in a word, it resembled the façade of one of those old Gothic cathedrals embellished by the capricious fancy of mediæval artists, with the sole difference that its proportions were colossal, that its flooring was not of marble but the sea, and that its columns, instead of resting upon the earth, had their bases beneath the waves. One might have said it was a temple elevated to the Eternal in the midst of immensity.

We passed beneath the vault: it was gloomy; for, like a Gothic pane, the daylight entered it only at rare intervals, through the fissures in the rock, or through some natural windows which had been opened up by the loosening of one crag from another.

We rowed several times around this curious edifice, but met with no traces of living beings. The bones of ocean-monsters were scattered here and there at the foot of the rocks, and proved that they had at one time served as a retreat for some of those terrible animals with which we had not hitherto been compelled to measure ourselves, but whose teeth and extraordinary size led us to think of them as very formidable enemies.

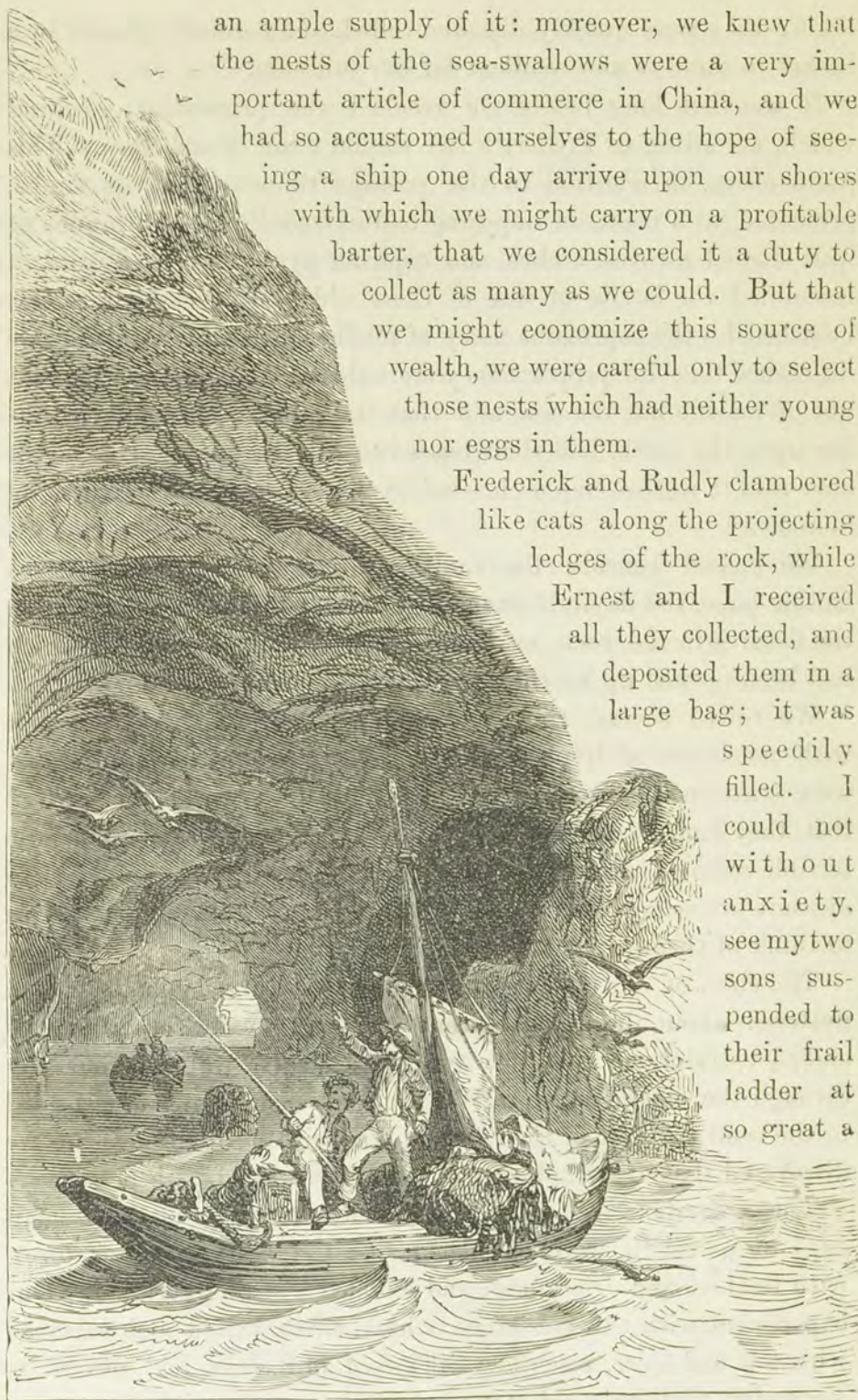
The clash of our oars frightened the peaceful salanganes, which fluttered about bewildered from one end to the other of the arched corridor, so that it was with difficulty we made our way through the winged legions. When our eyes had grown accustomed to the semi-twilight of the place, it was with no little pleasure we discovered that every hollow and niche were filled with nests.

These, similar in shape to, and not less transparent than, small cups of porcelain, were garnished, like the nests of other birds, with feathers and dried moss, and exhaled a strong perfume. Our experiment with this substance, which, when boiled and seasoned with salt and spice, resembles calf's-foot in flavour, had proved so successful, that we could not neglect the opportunity of securing



an ample supply of it: moreover, we knew that the nests of the sea-swallows were a very important article of commerce in China, and we had so accustomed ourselves to the hope of seeing a ship one day arrive upon our shores with which we might carry on a profitable barter, that we considered it a duty to collect as many as we could. But that we might economize this source of wealth, we were careful only to select those nests which had neither young nor eggs in them.

Frederick and Rudly clambered like cats along the projecting ledges of the rock, while Ernest and I received all they collected, and deposited them in a large bag; it was speedily filled. I could not without anxiety, see my two sons suspended to their frail ladder at so great a





height above the watery abyss, and fearing they might be too fatigued, I bade them discontinue their harvesting. After recruiting our energies with some food, we prepared to cross the gloomy defile. Before going further, however, I wished Ernest and Rudly to finish cleansing a quantity of nests which they had detached from the lower part of the rocky walls.

"In truth," exclaimed Master Ernest, suddenly—the work by no means interesting his professorship—"when I reflect a little, I can scarcely comprehend the degree of faith with which we accumulate here this dirty provision, to sell it to a ship which perhaps will never touch our coast. Ten years have already passed—"

"Hope, my son," I replied, "is one of the greatest benefits Heaven has bestowed upon man here below; she is the daughter of Courage and the sister of Activity;

for the courageous man never despairs, and the hopeful ever labours to attain the goal of his desires. The philosophy of the slothful may whisper that the success of our cares is dubious; nevertheless, let us always maintain a cheerful and industrious spirit, confiding in the goodness of our heavenly Father."





I then gave the order for departure.

Frederick had assured me that the waters we had entered were navigable, and that by following up the gloomy tunnel we should arrive more safely and more quickly in the great bay. And, in fact, the tide having risen, we were borne onward with great rapidity to the other extremity of the cavern without finding ourselves once compelled to resort to our oars; we admired at our ease the magnificence of this extraordinary passage, discovering grottoes and caverns, both on the right and left, which were lost in shadow, and extended, perhaps, to a vast depth. The vault sometimes revealed to us several cupolas lighted from above, and long ogives enriched by a thousand festoons of stone or of stalactites; sometimes great, coved ceilings, enriched with coffers and roses, like those of a Greek temple; just as if, after several essays, the great universal Architect had there laid down the foundations of his sanctuary, and afterwards abandoned it.

On emerging from the tunnel we found ourselves, as Frederick had prepared us to expect, in a bay of enchanting beauty. We dropped anchor for some time. The waves were so still and clear that we could see the fishes moving to and fro at a great depth. I recognized the white fish, whose shining scales supply the material of which false pearls are made: I pointed it out to my sons; but the expression "false pearls" which I employed brought on an interesting discussion.

My children, unaccustomed to the conventional value imposed by civilized societies on certain articles, could not comprehend why the pearl found in a shell should be more esteemed than that produced by a fish, when the lustre and beauty of the latter often equals those of the former.

"It is less the object in itself," said I, "which men pay for, than for the difficulty of procuring it. A pearl would be little prized if it could be procured in all the rivers of Europe; its value centres in its origin."

"Ah yes," said Ernest; "that is what we call *pretium affectionis*."

We laughed a little at the professor and his Latin, and, while conversing, arrived at the reef where Frederick had carried on his



abundant fishery of pearl-oysters. The coast presented a very picturesque appearance, with its forests stretching far away to the horizon, lofty mountains soaring above the clouds, and everywhere the bloom and profusion of a Tropical vegetation. A majestic river poured its waters into the bay, and we could see it rolling its silver floods from afar through a noble extent of verdant pasturage. Everything invited us to disembark, and promised a place of agreeable repose. We sprang gaily upon the sand; our dogs followed us; but Master Knips, more timid, could not make up his mind to cross the narrow belt of water between him and the earth.

Twenty times he reared himself on his hind feet in the act of springing, and twenty times recoiled, as if all ocean lay before him!

At last we took pity upon him, and drew tight the mooring-rope of the boat, on which he adventured himself with much grace and lightness. Thereupon we all made off to the river, and quenched our thirst at leisure; Knips and the dogs did more—they took a thorough bath, according to the salutary habit they had contracted every time they came upon a suitable current of water.

The day was too far advanced for us to begin our oyster-fishery: we supped tranquilly on slices of ham, roasted potatoes, and cakes of cassava; and we kindled along the coast a line of fires, to burn all night, and keep at a distance any prowling beast of prey. After this, leaving our dogs ashore, we withdrew on board our shallop: Master Knips was installed at the mast-head as a watchman; we stretched the sail above our heads for a tent, and enveloped ourselves in our bear-skins, as a protection against the nocturnal damps.

Nothing disturbed our sleep, except the noisy concert with which some jackals insisted upon regaling us for about an hour in the evening, and to which Rudly's pupil replied with a persistency that almost rent our ears.

We rose with the sun, and, after a frugal breakfast, began the labours of the day by fishing for pearls; and what with the rakes, and grapnels, and harpoons we had prepared, and the abundance of the spoil, a very short time was sufficient to provide us with a



capital stock of oysters. We could easily have augmented it, but our cupidity was satisfied; and, besides, we wished to have something more than pearls to offer to the European vessel we were always expecting. The results of our fishery we piled up in a great heap on the shore, that the sun might open the precious shells without affecting their contents.

During the day we alighted upon a very precious saline herb—the herb used in the manufacture of soda. I caused my sons to collect a tolerable quantity, for my chemical knowledge, imperfect as it was, suggested to me a means of rendering the plant useful in the manufacture of soap, as well as for other purposes.

Towards evening, the coast appeared to us so beautiful, and the vegetation clothing it so rich and so full of life, that we found it impossible to conquer our desire of exploring a little wood which resounded with the cries of turkeys and other feathered denizens. Each of us took one of our faithful comrades, and struck out a path for himself. Ernest, attended by Folb, was the first to enter the wood; Rudly quickly followed; while Frederick and I stopped to fill our game-bags with ammunition.

A few minutes afterwards we heard a report, and the voice of Rudly rose in a doleful shout, followed by a second discharge. Frederick immediately unhooded his eagle; I loaded my gun; and we ran in the direction whence the sounds proceeded—our footsteps quickened by shouts of “Help! help! I am dead. Come hither! Come, and save me!”

The poor boy exaggerated somewhat both the danger and the position in which he found himself: he was not dead, he was not even wounded; but he was confronted by a kind of wild pig, armed with tusks like those of a boar, which had assailed him so rudely that at first he gave himself up for lost. And, despite his twenty years, Rudly retained much of the poltroonery and fanfaronade of his infancy.

His brothers hastened immediately to his aid; and a couple of pistol-shots, at ten paces, delivered the unfortunate adventurer from his terrible enemy. We did not spare him our sarcasms and pleasantries in return for the groans and cries with which he had terrified us.



However, as the awful fright he had experienced might be attended with serious consequences, I made him swallow a glassful of Canary wine, and after having bathed the contusions on his head and back with the same liquid, we carried him to the shallop, laid him down on a cotton mattress, and soon had the satisfaction of seeing him sound asleep.

"Now," said I to Ernest, "let me know what happened, for I do not yet understand the affair."

"I had made my way into the wood," said Ernest, "along with Folb, when the brave dog, scenting the game, started off from my side, and rushed in pursuit of a boar which went growling and grunting through the copse, and stopped not until he came to its confines, when he began sharpening his tusks against the trees with a frightful noise.

"At this moment Rudly entered the wood; his jackal, which had also smelt the wild pig, rushed upon the latter in a fury, while Folb attacked him in the rear. I approached the scene of action by slipping from tree to tree, so as to get within gun-shot of the beast. The jackal, having approached too near his enemy, re-



ceived a furious blow of the foot, which sent him rolling twenty yards and more. Rudly then came out into the open, and fired at the boar, but missed him; the furious animal immediately turned on his new assailant, and started in pursuit of Rudly, who, seized with a panic of terror, flew with all the swiftness of a Hottentot.

"Undoubtedly, in a few moments he would have been out of



the monster's reach, if, as he ran, the root of a tree had not tripped him up. He fell. Immediately I fired, but with no better fortune than my brother.

"The boar meanwhile had overtaken Rudly, whom he began to trample upon, and attack with his great head and snout. Happily he had no time to do him any serious injury, for Braun and Juno making their appearance, seized the ferocious animal by either ear, and held him so firm, that notwithstanding his furious efforts he could not disengage himself from their teeth. It was then that Frederick's noble eagle, like the genius in a fairy tale, pounced down on the foaming and raging animal, and blinded him with repeated thrusts of his beak; while Frederick, advancing, fired a pistol down his throat and slew him. The boar, in expiring, fell back upon Rudly, who had not been able to raise himself; I accordingly ran up, and assisted in disengaging him from the enormous mass; he rose, as you know, groaning loudly; but as soon as he had convinced himself that he was not wounded, I left Frederick to lead him up to you, and remained by the dead boar. It was with some surprise I found Master Knips regaling himself on some black-looking tubers he had discovered there. I picked up a few, put them into my game bag, and here they are."

The young naturalist thereupon handed me half-a-dozen tubers,



TRUFFLES (*Tuber cibarium*).

not unlike potatoes, but with a very pungent odour; I opened and tasted one; it proved to be a most delicious truffle; the substance was fragrant, brittle, and delicate, and streaked with white.

"It would seem," I said to my son, congratulating him on his discovery, "that the boar, which is by nature very partial to truffles, was engaged in digging up some

for his supper, and that he broke into a rage because disturbed in this operation. At all events, the discovery is not to be



despised, and your mother will be specially pleased with it, because it will provide her with a new means of seasoning our dishes, which the gourmands of Europe would envy."

I was then asked for some details in reference to so singular a production, for it was wholly unlike a vegetable.

"Naturalists," I replied, "agree in considering the truffle to be a kind of mushroom; it grows without roots to fix it to the earth, and without leaves or branches to reveal its presence above ground. In fact, it would never be found if it did not betray its hiding-place by the perfume it exhales; a perfume, however, which passes undetected by our feeble senses, and compels us, in order to recognize it, to invoke the assistance of animals more favoured in the olfactory organs than we are. These animals are pigs and dogs; the former do not confine themselves to discovering and disinterring the truffles, but also banquet eagerly upon them. It is for this reason an iron ring is inserted in the snout, preventing them from devouring the dainties they unearth. Dogs, on the contrary, are satisfied with indicating, by scratching the surface of the ground, the place where this precious tuber lies concealed."

"But," inquired Ernest, "is there no more scientific mode of detecting the presence of truffles in the soil?"

"A tolerably certain sign is the number of little green flies always hovering about the dry turfy sward where truffles generally flourish. These flies spring from the worms which feed upon the truffles; and they, in their turn, deposit their eggs upon the truffles; the form and species of these insects, however, I am unable to describe to you.

"Truffles are found in almost all parts of the world, but especially in temperate climates. France and Piedmont furnish, it is said, a prodigious quantity, whose flesh and perfume are particularly admired by connoisseurs.

"The truffle is round, of an irregular form, with a black or gray exterior surface, bristling with tuberculous asperities; its substance, within, is a firm, compact flesh, traversed by numerous small veins of brown intermingled with quasi-white threads; it is ranked, along with the mushroom, in the Cryptogams. The secret of the reproduction of truffles was long unknown, but is said to



have been recently discovered. If this be true, and every gardener can thenceforth multiply at pleasure the tuber whose rarity was at least one half of its merit, it is all over with the truffle and its glory—the halo will have vanished with which Europe has invested the heritage of *gourmandise* bequeathed to it by the ancient Roman empire.”

While we had thus discoursed night came on, and we had to think of rest: we lighted our watch-fires, took a slight repast, and retired to our shallop. We could have wished to have had the dogs at our side, but they lingered near the boar, on which they had made an ample repast, and it was too late for us to go in search of them. We lay down under our sail, which served as a tent, and were soon sleeping as peacefully as we could have done in the grotto of Tent-Town.

Our first care at daybreak was the preparation of the boar which Rudly had discovered. We left the unfortunate hunter a little affected by the previous day's alarm, and accompanied by our dogs, who had rejoined us, set out for the stricken animal. We found an enormous mass of flesh, whose form, partly resembling the buffalo and partly the boar, realized one of the most hideous organizations it is possible to imagine, and which might assuredly have made front against the lion himself. The head especially was of a tremendous size

While we were examining its gigantic proportions, Frederick exclaimed, “Parbleu! we may easily supply the place of the Westphalian hams which are no more! This fellow here has singularly well-developed thighs and shoulders.”

“For my part,” cried Ernest, “I hold to the head; it is an object, as poor Rudly very justly asserted, fit to grace our museum. But before we set to work to eulogize all the various parts of the animal, it will be as well, perhaps, to think of some means of transporting them on board our boat.”

“As for that,” said Frederick, “if my father will leave it to me, the job will neither be long nor difficult.”

“Willingly; but I fear that the flesh of this old African is no better than that of an old European boar. Consequently my opinion is, that instead of fatiguing ourselves with dragging about



this enormous carcass, of which our dogs have already eaten a good share, we shall do much better to cut it up here, and only carry away those pieces which are worth the trouble."

My sons were of my opinion, and we immediately set to work to remove the boar's head and legs. A few branches of trees made excellent sledges, which we drew along in company with our dogs, and thus we all regained the shore with an abundant provision. We had some difficulty in making our dogs, and still more our jackal, understand that they were to confine themselves to the task of dragging the burden imposed upon them, and not to diminish it by a too near approach; but an active surveillance, added to some well-applied strokes of a switch, enforced our warnings in a sufficiently satisfactory manner.

While we were engaged in loading our sledges with the meat we thought worth carrying away, chance led us to a discovery far more precious for us than a few pounds of boar's flesh. On the boughs we were making use of, Ernest remarked a kind of nut; he opened one, but instead of a kernel, it contained a fine deep yellow cotton, which I recognized as the veritable substance of which *nankeen* is made.

Nankeen owes its name to a province in China which grows this kind of cotton in abundance, and its well-known colour is native to it.

We collected a large quantity of the precious nuts, and carefully dug up a couple of young trees for transplantation to Tent-Town.

It was with a shudder of disgust Rudly received the head of his terrible enemy, but at first he seemed delighted at the idea of its figuring in our museum; nevertheless, on a remark of Ernest's that it would be very difficult to prepare, and moreover that he had always heard a boar's head spoken of as a favourite dish with epicures, we all resolved that instead of stuffing it we would have it cooked with truffles, after the Otaheitian fashion of serving up peccaries. Consequently my two sons, Frederick and Ernest, began to dig a deep trench; while I undertook the task of cleaning the head and singeing off the bristles, as well as of preparing the hams which it was our object to smoke before carrying them home.

These operations at an end, we placed the head, well stuffed with



truffles, and seasoned with salt, pepper, and nutmeg, in the trench, which Ernest had decked with foliage; we covered it with ashes, earth, and red-hot stones.

While waiting until our supper was ready, we disposed our hams on one side of the fire, fastened all four to a stout branch, and placed the latter across two forked wooden props fixed firmly in the ground. In these various occupations the day was soon spent; evening approached, and we were preparing to disinter our boar's head, whose delicious odour was titillating our olfactory organs, when suddenly a loud deep roar resounded through the glades of the neighbouring wood.

It was the first time we had heard the sounds of so formidable a voice; the rocks repeated them, like the reverberations of a thunder-peal, and we were unable to struggle against a feeling of indescribable terror. On their side, our dogs and the jackal gave utterance to prolonged howls.

"What a diabolical concert!" exclaimed Frederick, seizing his gun; "it surely indicates some coming danger. Light up the fires," said he, while his trained hunter's eye endeavoured to pierce the depths of the forest, "and retire to the shallop; while I, in my cajak, paddle up the river, and gain some idea, if I can, of the nature of the peril which threatens us."

As the plan seemed a good one, I adopted it. We rose immediately, flung upon the fire all the wood we could lay hands upon, and without losing a moment's time, regained our shallop. Frederick sprang into his canoe, and plying his paddles vigorously, soon disappeared in the darkness which was spreading over the scene.

Meanwhile, there was no cessation of the terrible sounds, which, indeed, seemed to draw nearer and nearer. Our dogs had returned to the fire: with unquiet restless glances they turned towards the wood, occasionally howling loudly, and sometimes venting half-choked wailings. Master Knips was more frightened than they were; his mortal apprehension was really painful to see. As for myself, I awaited the issue with tolerable calmness, convinced that within a few gunshots of us prowled some panthers or leopards, attracted to the spot by the remains of the wild boar which we had left in the wood.



We were not long left in a state of doubt, for the light of our fires revealed to us in the obscurity the outlines of a terrible animal. Yes, it was a lion! and a lion incomparably stronger than any one of those I had seen in Europe in the menageries or zoological gardens.



With two or three tremendous bounds, he crossed the space which intervened between the forest and the shore; then he paused, motionless and majestic; next, as if seized with a sudden access of rage, he began to lash his flanks with his tail, and recommenced his roaring with new vigour; on our hams he cast his covetous and furious glances, as well as on our dogs, who prudently held themselves intrenched in the rear of the blazing fire; the glare and crackle of the flames prevented him from approaching, and now he



beat the earth with his heavy paws, now bounded to and fro, as if he would fain have flung himself upon us.

This terrible pantomime lasted for a few minutes; occasionally he ran towards the brook, and cooled in its waters his burning



THE LION'S APPROACH.

jaws, returning each time with increased force, and as if meditating an abrupt and sudden attack. It was with mortal anguish I remarked that he narrowed more and more the semicircles which he executed in this manœuvre; but at length he suddenly stretched himself on the ground, with his head resting on his fore-paws, and fixed upon us his burning and horrible glances, as if he had divined that we were his ancestral enemies. Half-dead with fear and despair, I raised my gun to hazard a shot, but before I could take aim a report was heard—the animal made one prodigious leap, heaved a frightful groan, and fell back upon the ground, where he lay immovable.

“It is Frederick,” murmured my poor Ernest, pale as death; “O Heaven, protect my brother!”

“Yes, it is he,” I cried; “it is our gallant Frederick; and he has



saved us from a frightful danger. But we must hasten to his assistance."

Two strokes of our oars carried us to the beach; but our dogs, on seeing us, inspired by a wonderful instinct, howled with all their might, turning in the direction of the forest. I did not disregard the warning; we cast some more wood upon the fire, and then returned to our asylum. It was time. Scarcely had we gained our boat before a second enemy débouched from the forest; less formidable in appearance than the first, but uttering equally terrible roars. This time our adversary proved to be a lioness, and probably the mate of the superb animal which Frederick had just brought to the ground. We rejoiced that the two had not made their appearance together, for in that case we might not have successfully repulsed a double attack.

The lioness marched straight to the carcass of her mate; she scented it all around, dipped her broad tongue into the blood flowing from his wound, and when convinced that he was dead, appeared seized with a fresh paroxysm of wrath; her roars became more terrible, and from the manifestations of her rage, it was evident she longed to avenge her comrade's death. She lashed her sides with her tail, opened her jaws to all their enormous extent, as if she would whet her teeth for the encounter.

But our hunter was on the spot; and a second shot, less fortunate than his first, though very skilfully aimed, hit her in the shoulder, shattering the bone. The wounded beast rolled on the sand with ever-increasing fury, while our dogs, which seemed to have awaited this favourable moment, pounced upon her, all three simultaneously. It was a repetition of the battle of the bears in the savannah. The obscurity of the night, the formidable roar of the lioness, the howlings of our dogs eager for their prey—all made upon me such an impression, that for a moment I remained paralyzed. Meanwhile Braun and Folb had fastened on the animal's sides, and brave Juno on her throat. One more shot would have sufficed to terminate the combat, but I durst not attempt it for fear of wounding them. I leaped ashore, and advancing straight to the animal, which our dogs pinned to the ground, I stabbed her to the heart with my long hunting-knife. She fell almost immediately, covered



with blood. But this second victory cost us dear: our poor Juno, torn by the lioness's claws, expired almost at the same moment as the lioness.

Frederick, who had been actuated by the same motive as myself, now came up, armed, like me, with his hunting-knife. Together we returned to Ernest and Rudly, whom we found in tears, and who flung themselves into our arms with much emotion. The danger we had incurred had caused them fearful anguish, and they sought to convince themselves by repeated embraces that we were really safe and sound.

Lighting our torches, we directed our steps towards the field of battle, where we found poor Juno with her teeth still convulsively clinging to the lioness's throat. As for the royal couple, they lay majestically prone upon the sand, but we could scarcely repress a sentiment of horror as we gazed on the two enormous beasts, though deprived of all power of doing harm.

"What a frightful throat!" said Ernest, lifting up the lioness's head; "a man might pass down it all alive!"

"And these claws!" cried Rudly; "what gashes they might make in one's flesh!"

"Yes, my friends," I replied, in my turn, "let us thank God in the presence of the danger from which He has saved us; let us thank Him for having, in His wisdom, bestowed upon man the skill and energy to triumph over the violence of such enemies."

"Poor Juno!" said Frederick, releasing the carcass of our old companion from that of the lioness. "She has done for us to-day the same good deed that our old donkey did for us with the boa. Come, Dr. Ernest, here is another subject for an epitaph, and I hope your muse will not fail you."

"Ah, my muse is suffering still from the fright which I have experienced, and her blood is so frozen in her veins, that she could scarcely achieve a couple of rhymes."

"Never mind; go and dream, while we dig the last resting-place of our poor dog, and try to stir up your brain sufficiently to furnish us with an epitaph when we shall procure a stone for her monument."

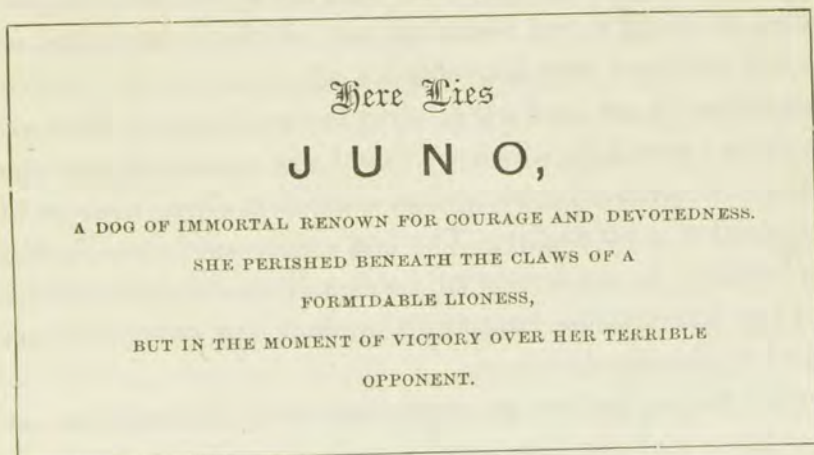
Juno obtained the honour of a burial by torchlight. We dug



for her a grave of several feet in depth; sorrowfully laid her at the bottom; and over her mound raised a smooth and rudely-polished stone. Ernest adorned it with the subjoined inscription, which he read aloud to us in a tone of the deepest pathos.

"I would fain have come out as a poet," said he, "but rhymes have failed me; I have been much too terrified to-night; and Juno must be contented with an epitaph in prose."

*Juno's Epitaph.*



"Capital! capital!" cried Frederick; "it must be owned you have an admirable talent for writing epitaphs, whether in prose or verse."

Rudly, who had no greater respect for poetry than for prose, here remarked that the night would be soon at an end; from which fact he inferred that we had protracted our watch to an unusual extent, and must necessarily feel unusually hungry.

"As far as I am concerned," he said, "I know I could not sleep a wink; my ears still ring with the horrible music of those villainous animals, and I can think of no occupation more agreeable, while waiting for daybreak, than a good repast. Moreover, our roast *à la Tahiti* must have been done twenty times over; I vote we go and examine it."

Rudly's proposal met with general favour, and while I occupied myself in dressing the wounds of Folb and Braun, my sons removed the roasted boar's head from the triple envelope of ashes, charcoal, and earth which encased it. Instead, however, of the



succulent dish they had promised themselves, they found at first nothing but a mass of flesh and bones reduced almost to a cinder. They were about to throw it away in disgust, when I checked them, remarking that it was not always wise to trust to appearances. Removing from the head its scorched and carbonized skin, we found underneath a delicious viand, for the truffles had saturated it with a perfume which every epicure knows how to appreciate when it greets his nostrils.

Having satisfied our appetites, we retired to the *periagua* and prepared to enjoy a few hours' repose, which the troubles of the night had rendered very desirable for all of us.

At sunrise we set to work to strip the two lions of their magnificent skins; a task in which we found our pneumatic machine (as a measure of precaution we always carried it about with us in our expeditions) of great utility. The lion's skin was indescribably rich and splendid. It was wonderfully soft and smooth, with the exception of the mane, whose long and abundant hair stretched from the forehead to the shoulders.

During the operation we conversed with one another on the natural history of the lion; and I endeavoured to combat some of the prejudices my sons entertained in reference to this animal.

"Of all the animal world," I said to them, "few of its members are better known than the lion, and there are few respecting whom more ridiculous fables have been asserted and accredited. He has been christened the King of Animals; he has been endowed with a thousand noble qualities founded on his supposed magnanimity and clemency. This is all erroneous. The lion is neither clement nor magnanimous, but simply a ferocious animal, which flings himself on his prey and devours it, like the tiger and the panther; only, when his appetite is satisfied, he is less greedy—a merit which he shares with a good many other animals!

"This erroneous partiality towards the lion dates from the remotest antiquity. From time immemorial he has been the emblem of nobility and courage; and modern naturalists, as well as ancient, have adjudged to him the sceptre of the animal kingdom.

"The lion," says Buffon, "has an imposing countenance, a steadfast look, a haughty gait, a terrific voice. His size is not exces-



sive, like that of the elephant and rhinoceros; his form is not unwieldy, like that of the hippopotamus or bull; nor too compact, like that of the hyæna and the bear; nor too elongated and deformed by protuberances, like the camel's: but is, on the contrary, so well proportioned and admirably adjusted that the lion's body appears a model of strength and agility; as robust as it is nervous, not overloaded with flesh or fat, and containing nothing superfluous, it is all nerve and muscle.

“ ‘This great muscular force is seen in the prodigious leaps and bounds the lion so easily accomplishes; in the abrupt oscillations of his tail, which is strong enough to overthrow a man; in the facility with which he moves the skin of his face, and especially that of his forehead; and, finally, in the power he possesses of lifting up his mane, which not only bristles, but moves and agitates in every direction when he is enraged.’

“ Undoubtedly there is truth and fidelity in this picture; but a wide gulf intervenes between the movements of the lion's skin on his forehead and his so much vaunted magnanimity; and I confess myself unable to account for the eulogiums which have been lavished on this fortunate quadruped: you have just heard his roar, and have been witnesses of his fury, which is not less terrible than that of the tiger.”

“ Oh, my father,” replied Ernest, smiling, “ it is evidently a favourite design of yours to depose this poor kingly lion from the throne he has occupied for so many centuries. I take his part, and especially do I take it in recollection of our recent victory; for it will be much more glorious if we can one day say, ‘ We have conquered the lion; we have stretched at our feet the king of quadrupeds,’ than humbly to relate that we have slain a tawny-coloured beast!”

Frederick thanked Ernest for the care which he took of our renown, and our conversation ended simultaneously with our process of preparing the lion's skin. Rudly thought that it would make a superb mantle like that of Hercules after his victory in the forest of Nemæa; but we put off to a more convenient opportunity our decision on the use we should make of our two precious acquisitions.





Y this time the sun's heat had converted the pearl-oysters, which had lain piled up on the shore for ten whole days, into a hotbed of corruption, and the infectious odour they exhaled decided us to return without further delay to Tent-Town. Our arrangements did not occupy us long, and we set sail in the morning.

Rudly did not care about resuming his place in Frederick's cajack; he pretended that the paddle exercise was too fatiguing for him, and seated himself beside me in the periagua, where the sail and mechanical oars rendered the work far less laborious.

Frederick set out before us, as if to act as pilot; but after traversing the arched tunnel, and conducting us through the maze of rocks and reefs where otherwise the pinnacle might have been wrecked, he returned, and presented me on the end of his paddle a letter which he had not been able, he said, to deliver sooner, because we were asleep when the post came in.

I willingly played my part in the little comedy my son was bent upon enacting, and gravely taking the despatch which he handed to me, I withdrew under the tent erected on board our shallop to read it attentively.

I had not expected the contents of the letter, and was exceedingly surprised to find that Frederick, far from having forgotten the adventure of the albatross and the smoking rock, informed me in his message that he was going to quit us, and hasten in search of the poor castaway, whom he longed to restore to the society of his kind.

A thousand objections to his romantic project arose in my mind, but when I reappeared on the deck of the pinnacle it was too late; and Frederick was paddling away with a rapidity which scarcely permitted me to waft him a word of farewell. "Return quickly!" I cried; "be prudent!" But these last recommendations were thrown to the winds; and cajack and navigator were soon lost to sight.

The promontory, in whose lofty shadow this incident occurred,



we named *Cape Farewell*. Ardent were the prayers we offered up for the safe return of our young adventurer, and I urged my rowers to redouble their efforts that we might get back to Tent-Town. I knew that my good Elizabeth would be growing very anxious at our protracted absence.

We reached home without accident. The different treasures with which we were loaded were well received; the truffles, the lion-skins, the pearls, the nankeen, became the subjects of a thousand inquiries; but they did not render my wife forgetful of Frederick's absence, and she declared she would gladly have given all our cargo of pearls and truffles to have seen her son return with us. I consoled her by speaking of Frederick's skill and ability; but still my arguments could not wholly stifle the solicitude of a mother, so skilful in foreseeing danger and calculating every hazard.

As yet I had not spoken to my wife of our young man's projects, that I might not inspire her with hopes which, for aught I knew, were doomed to disappointment; but under these new conditions, I felt it to be my duty to acquaint her with the real cause of his absence. I was not mistaken as to the impression my narrative would produce; for no sooner did my excellent wife understand that Frederick's expedition was not dictated by a mere love of adventure, but from the desire to do a good and noble deed, she grew calm, and offered up her prayers for the success of her son's enterprise.

I had undertaken the task of preparing the lions' skins, and with this object had transported them to our tannery in Whale Island. We had also to cleanse, wash, and arrange the provisions we had brought home, and to bestow upon them the care necessary for their preservation.

In these different occupations five days rolled by; all this time we had no news of Frederick, and his mother began to grow uneasy. I proposed to launch the pinnace and undertake a new voyage to Pearl Bay—a proposition which, as my Elizabeth knew it was made entirely on my son's account, she heartily approved. We thought he would return in this direction, and that by making for the bay we should probably meet him.



Without losing any time we equipped the pinnace, and on the following day set sail at early dawn.

The wind was favourable; the sea calm; and we soon gained the latitude of the bay; but just as we were on the point of entering it, an unseen object almost capsized us. The shallop struck against a black floating mass, and was raised half way out of the water by the shock. My wife and sons uttered a cry of alarm, but the boat soon recovered her equilibrium. We then discovered that the obstacle which had so nearly upset us was a marine monster of the family of "Blowers," and almost immediately it propelled into the air two columns of water mixed with blood. I immediately fired off the guns mounted in our pinnace, and a discharge of our artillery did not leave the monster time to overthrow us; which would infallibly have been the case if our first collision had not stunned, and probably wounded him grievously. We were pleased to see that the waves carried his huge floating bulk upon a sand-bank, situated a short distance from the shore. The sea thus flung into our hands the prey we had conquered. It was of enormous size—a cachalot, or sperm whale, at least forty feet in length. To see it stretched upon the sand, you would have taken it to be the wreck of a goodly vessel.

Next to the common whale, none of the Cetacea are more remarkable for their great stature than the cachalots, which even dispute the sovereignty of the waves with leviathan.

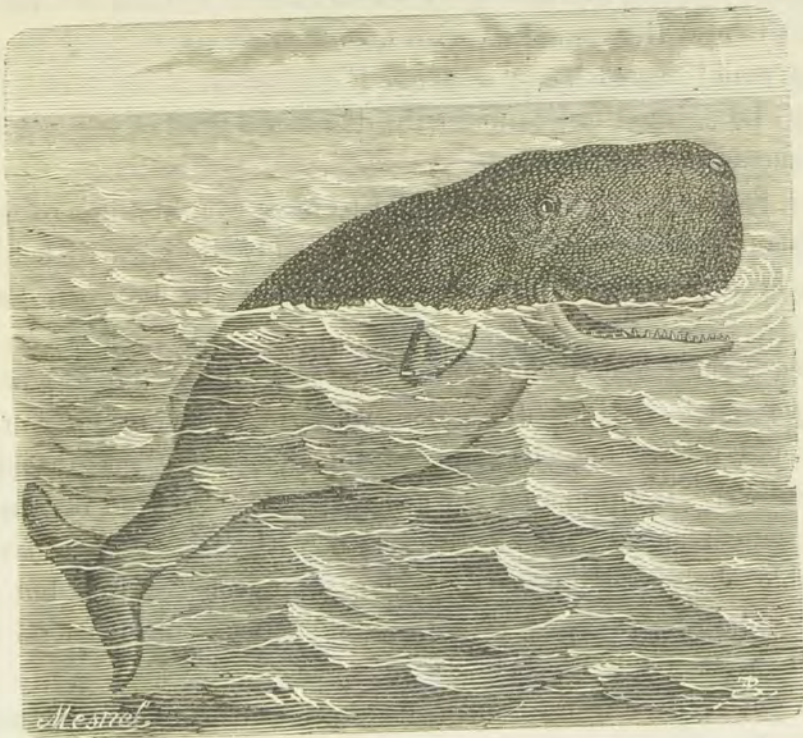
The *cachalots*, moreover, are more courageous, and better armed than the whales. They congregate in numerous herds, frequent nearly every sea, pursue their prey into almost all parts of ocean, commit fell havoc among the shoals of fishes, and even attack the whales with fury.

The bottle-headed *cachalots* sometimes measure as many as seventy or eighty feet in length; they are agile and full of courage; whales, on the contrary, are timid, never voyage in company, and rarely issue from their accustomed retreats.

The cachalots are vagabonds; are found under the equator as well as among the icebergs of the pole; gather into caravans for the purpose of traversing the main, and there is no space of ocean which does not contribute something towards their nourishment.



There are seven species of cachalots. One of the principal distinctive characters of this creature is, the enormous teeth set in the lower jaw, while the upper has only three. It has an obtuse snout, which is of excessive size in proportion to its body. Its head alone



CACHALOT WHALE (*Physeter macrocephalus*).

forms nearly a moiety of its entire bulk. Its tongue is small; but its throat so large, that it admits of the passage not only of fish, but even of an ox, and in the belly of a cachalot has been found, it is said, a shark more than fifteen feet in length!

The cachalot yields less oil than the whale, but this difference is largely compensated by the *spermaceti* of the former. We believe this animal also furnishes the highly-prized perfume known as ambergris, but its true origin is still a matter of doubt.

By the *spermaceti* of the cachalot is meant a shining and semi-transparent substance, composed of very light and long flakes, soft and oily to the touch, inflammable, and soluble in oil. When fresh, this substance is inodorous, and has an agreeable though oleaginous taste. It is made use of in medicine, and



candles also are manufactured of it, which in whiteness equal the purest wax.

While we thus discoursed upon the cachalot, and calmly calculated the value of the new spoil which chance had thrown into our hands, Ernest frightened us with a sudden shout.

"A man!" cried he; "a savage!"

And he pointed out to us in the distance a kind of canoe gliding over the surface of the waves.

The person conducting it seemed to have caught sight of us, for he advanced in our direction; then suddenly disappeared behind a point of rock, as if to inform his fellows of the discovery he had made.

I leave the reader to imagine what terrors filled our minds.

After much anxious discussion, we came to the conclusion that we would fortify ourselves in our pinnace, and therein confront our enemy. We prepared our arms, and raised a kind of rampart with some stems of maize we carried with us, so as to form a tolerable shelter against arrows, for we never doubted but that ahead of us lay a body of savages disposed to give us no very friendly welcome.

We got ready our cannon, loaded our guns and pistols, placed close at hand our boarding-axes, and held ourselves prepared behind our bulwarks to give our assailants a warm reception.

Meanwhile the savage continued his pantomime. We dared not advance, and he himself seemed inspired by a feeling of apprehension.

"We must put an end to this comedy," cried Ernest; "let us hail him through our speaking-trumpet; our savage will, perhaps, be acquainted with a few words out of the five or six languages we have at our disposal."

Ernest's advice seemed to me very reasonable, and seizing the long hollow reed which served us as a speaking-trumpet, I shouted with all the strength of my lungs a few words in Malay. Evidently the Malay was not the native tongue of our savage, for he remained motionless, as if he understood not a word of what I had said.



"Instead of Malay," cried Rudly, "let us speak to the stranger in English."

So saying, he took the reed, and with his clear and powerful voice, gave utterance to two or three of the familiar but not over-polished words known to everybody who has spent a few days on board an English vessel.

I checked him immediately; yet he was more successful than I, for the savage now paddled vigorously towards us, holding in his hand a green branch as an emblem of peace. Rudly laughed like a madman at the success of his stratagem; but what was better



still, as the canoe drew nearer he recognized in its pilot Frederick himself!

"Ha! ha!" shouted he; "what a capital farce! It is Frederick! it is Frederick! Don't you know his cajak, and the walrus-head at its prow? It is Frederick, but he has disguised himself as a savage."

By this time we had all recognized the well-known features of our adventurer, though he was naked to the waist, and his face and all his body were tattooed in white and black after the Carib fashion. We received him with open arms, and his mother could not repress the tears of joy and happiness which poured down her cheeks.

As soon as Frederick was able to extricate himself from our embraces, he was overwhelmed with questions—the best means of obtaining no direct reply.



But when the first transports of our enthusiasm had subsided, I requested my son to answer me in reference to two points only:—

*First*—Had he been successful in securing the object of his expedition?

*Second*—Why had he devised the pantomime which, at the beginning, caused us so much anxiety?

To the first question, put in formal phraseology, Frederick replied, with ill-concealed joy,—

“As for the object of my excursion, I have *achieved it*,”—and the young man grasped me by the hand, while laying a particular emphasis on the latter words.

“So far as concerns my pantomime,” he continued, “it was as genuine as it could be, for I took you to be a company of Malays, or other savages, hovering about the coast. Apprehensive I might encounter some enemies, I had conceived the idea of disguising myself by blackening my face and the exposed portions of my body with a mixture of gunpowder and water. Two reports of cannon which came resounding over the waters served to increase my alarm. I felt afraid of falling into the hands of islanders who might treat me cruelly, as I was but one against many. The few words in Malay which you addressed to me filled me with such terror that I durst not move; and if Rudly had not shouted his English sailor-sayings, it is probable I should be still lying off the Cape, making all kinds of manœuvres in the hope of deceiving you, and that you would be still hovering about in your pinnace, expecting every moment to see a fleet of savages issuing from the shelter of the rocks.”

After we had amused ourselves for awhile with the recollection of our absurd mistake—a mistake wholly caused by our fears, which had prevented us from recognizing one another—Frederick took me apart, and said:—

“I have been successful, my dearest father! The hand of God conducted me to the retreat of the poor shipwrecked woman, for it *was* a woman whose message I so strangely received. I have discovered the Smoking Rock and its inhabitant—the unfortunate



lady who has lived there alone—alone, my father!—and for three years—three years, my father!—in want of everything. She wears the garb of a sailor, and has implored me not to reveal her



sex, except to my mother and yourself; for she is afraid of my brothers—though I sought to reassure her respecting the warm welcome they and all of you would give her.”

“And where is she now?” said I.

“I have brought her with me. She is close at hand—here, in a little island in Pearl Bay. Will you not come and receive her yourself, with my mother and brothers? But, oh! do not say a word to either of them, for I want to enjoy their surprise when they find I have found them a sister—the name which, I hope, she will ere long permit us to bestow upon her.”

I yielded to my son’s desire, and without saying anything to my family, ordered the anchor to be weighed, the sails to be hoisted, and everything prepared for our expedition.

Frederick, as the reader will imagine, was neither the last nor the least active in hastening the preparations for departure; but in the first place he freed himself from his quasi-tattooing and all his savage “belongings.”

The intrepid adventurer, then placing himself in his canoe, acted as our pilot, and directed the course of the pinnace through the rocks with which the coast was fringed. After about an hour’s sailing, he suddenly tacked, and conducted us towards a small shadowy



islet at a short distance from Pearl Bay; here a tongue of land formed a creek so safe and commodious, that we reached the shore with the utmost facility. The trunk of a tree close at hand made a capital mooring-post for our boat. Frederick had already sprung ashore, and we could see him hastening towards a small grove lying a short distance inland. The manœuvres of the pinnace, necessarily, could not be executed as nimbly as those of the cajack, so that we were unable to land until a few minutes after Frederick—whose singular conduct, however, stimulated my companions to an unusual degree of activity.

To leap ashore, and hasten in the direction taken by Frederick, was the affair of a second. We plunged into the depths of the wood which had received him; but had scarcely advanced a score of paces before we found ourselves in front of a hut built in the Hottentot manner, with a huge fire burning merrily, upon which was placed a large shell, instead of gridiron, for cooking some fish.

Frederick had entered the hut, and great was our surprise when, after he had shouted twice or thrice "Hurrah! halloa!" a young and pretty sailor came gliding down a tall and leafy tree, and turning towards us his timid eyes, halted, as if afraid to approach any nearer. It is impossible to describe the mingled sentiments of joy, surprise, and compassion which his appearance excited in our hearts.

It was so long since we had seen any men—ten years!—that society had grown very strange to us, and at first we remained stupefied. Our hearts flew towards the young stranger, but our tongues remained mute.

At length Frederick broke the silence, and taking the young sailor by the hand,—

"Father—mother—and you, my dear brothers," he exclaimed, with an accent full of joy and emotion, "I present to you a friend—a new brother—a new companion in misfortune—Sir Edward Montrose—thrown upon our coast under somewhat similar circumstances to ourselves."

"He is welcome!—welcome!—welcome!" we all responded, simultaneously.

I then advanced to the supposed young man, in whom I had no





THE YOUNG SAILOR.

difficulty in recognizing a female, but I respected the mystery in which she wished to envelop herself. I encouraged him, and assured him that in our family he would find assistance, sympathy, and support; that my wife and I would be his parents, and my sons his brothers.

My wife, with a truly maternal feeling, opened her arms. The pretended sailor flung himself into her warm embrace, and seemed to put himself under her especial protection.



The liveliest joy was diffused through all our little circle. Before troubling our new friend with any questions, we resolved upon having supper. My sons showed the greatest eagerness in arranging everything to celebrate the reunion, which, to them, seemed little short of miraculous. From time to time they plied Frederick with inquiries, who repeated to all the same brief answer:—

“I will tell you the whole story shortly; but for the present let us attend to our new brother.”

Supper was soon ready; a few bottles of our spiced hydromel converted it into a festal banquet. Everybody spoke at once, my sons addressing their new comrade with a liveliness which sometimes embarrassed the timid stranger. My wife took pity upon him, and, as it was getting late, gave the signal to retire, carrying the young sailor on board the shallop, where she wished to make him up such a bed, added my good Elizabeth, as would recompense him for the bad nights he had hitherto experienced.

Then we separated, and my sons kindled on the shore an immense fire to serve as our sentinel during the night.

Naturally, the new-comer became the subject of conversation.

“Parbleu!” exclaimed Fritz, addressing himself to Frederick, “I would like to know what put it into your head to go in search of our new brother. How could you know there was a shipwrecked sailor on the coast?”

Frederick laughed, but made no reply.

“It may be,” resumed Ernest, “that you are gifted, like the Scotch Highlanders, with *second sight*?”

“No,” interrupted Rudly; “I would wager that you wrote Sir Edward a letter, and that you received it by the pigeon post.”

“Well, you are almost right,” answered Frederick.

He then related to his brothers the history of the albatross; spoke to them of his projects and conjectures; but infused into his narrative so much enthusiastic warmth that he quite forgot the part he had undertaken to play, and the mystery in which the young girl was desirous of enshrouding herself. Indeed, he forgot himself so far, that he allowed her true name to escape his lips, and called her—MISS JENNY!





“MISS JENNY! Miss Jenny!” exclaimed his three brothers, simultaneously; “Frederick has betrayed himself! Sir Edward is a girl! Our adopted brother is an amiable sister! Oh, but this is truly delightful!”

The reader will imagine for himself Frederick’s utter embarrassment. Vexed at his imprudence, he endeavoured to recall the word which had slipped from his tongue. But the mystery was solved, and the sailor could no longer conceal herself in her canvas trousers and broad-brimmed hat.

This discovery diverted the current of conversation. Frederick explained to his brothers the motives which had led Miss Jenny to conceal her sex; the doubts which had troubled her relative to the treatment she might receive at the hands of three youths of whose characters and manners she was utterly ignorant. But the young men declared that Miss Jenny would lose nothing by the change, in their eyes; that, on the contrary, they would love her even more dearly as a sister than as a brother; and the night was already far advanced while our sons were still repeating, with many a pleasant smile, the name of MISS JENNY.

Next morning, it was an amusing spectacle enough to see the embarrassed air of respect and diffidence with which they approached the stranger they had, on the previous evening, embraced as a comrade and a brother.

My poor lads knew nothing of the polished manners acquired by mingling in good society, and I must confess in their behaviour towards the young English lady they displayed a good deal of awkwardness.

As for Miss Jenny, she appeared much confused by the discovery of her real sex, and threw herself timidly into my wife’s arms, as if to seek there an asylum.

In a minute or two she recovered herself, and smilingly extended



her hand to each of the young men, asking them gracefully to continue to the sister the friendship they had promised to the brother. This amiable action dissipated at once all the embarrassment my sons had felt. They assured her of their genuine brotherly feelings; mirthfulness was re-established; and we all sat down to the breakfast table. The repast was composed of fruits, cold meats, and chocolate of our own manufacture—the latter was much approved of by our young guest, reminding her of the comforts of her native home.

After breakfast, I proposed to weigh anchor and return to Pearl Bay, where the stranded cachalot offered us a species of wealth we were unwilling to abandon to gulls or vultures. On arriving there, we consulted on the best means of securing the oily substance contained in the skull and dorsal spine of the unwieldy fish. Unfortunately we had no barrels in which to store away the precious product. Miss Jenny extricated us from our difficulty by suggesting a process she had seen employed in India; namely, to collect the half-congealed oil in bags of wetted cloth.

I thought the idea so good that we acted immediately upon it. I caused all our sacks to be collected, and after soaking them thoroughly in sea-water, we furnished the interior with pieces of stick to keep them distended.

These preparations occupied us nearly two hours, but the tide was not yet high enough for us to reach in our vessel the sandbank where lay the cachalot; we therefore took the periagua and Frederick's cajack. We left the two women on board the pinnace, under the guardianship of Turk; and, followed by Folb, Braun, and Jager, in a few minutes reached the point of our destination. The monster was still on dry ground. Our dogs pounced upon it with the utmost eagerness; they rushed behind it, and immediately we heard the most horrible howling mingled with their furious barkings, which forewarned us that something extraordinary had happened. We approached, and saw our brave dogs combating a troop of black wolves which had been engaged on the sides of the cachalot. Two of these parasites already lay dying on the sand; two others were still engaged with Braun and Folb. The remainder, on our appearance, took to flight, and sheltered themselves in the wood. We also caught sight of some jackals scam-



pering away in the distance, which had evidently formed part of the marauding troop.

At this moment, Jager, Rudly's jackal, who had hitherto kept close to his master's side, set off on the track of his "kith and kin," leaping joyously, as if delighted at the meeting, and quickly disappearing from Rudly's sight—the poor youth standing quite confused, and powerless to prevent the escapade.



THE WOLF (*Canis lupus*).

Our dogs, meanwhile, had finished their work; four wolves lay dead upon the sand; but it was not without peril that these courageous animals had engaged their formidable opponents; they were covered with wounds, and Folb's ears were cruelly torn. Rudly devoted himself to washing and dressing their wounds, while Frederick and Fritz assisted me.

The former, after protecting his feet with iron spikes, climbed, like a monkey, up the animal's back, and laid open with great blows of his axe the cachalot's shapeless head. Meanwhile, I held distended near him one of our large bags, into which Frederick, with a spade, shovelled the sperm as into a tub. Fritz then applied himself to coat the exterior of the bag with a mixture of mud and wet sand, which prevented the oily liquid from dripping through. With a little labour we filled all the sacks and bags we had on board the boat, and we then covered them over with pointed reeds, disposed like a *chevaux-de-frise*, to protect them from the sand, and from the attack of the sea-birds, which had begun to gather round the cachalot.

So great a portion of the day had been occupied in this fatiguing labour, that we were constrained to think of returning home. We found, however, that the tide was not high enough to float our boats, if we loaded them with the bags of sperm, which we accordingly resolved to leave until their contents had thoroughly con-



gealed. Then we returned to the leafy islet, which, as the scene of our first *rencontre* with Miss Jenny, we called the Isle of Happy Meeting.

The appearance of our sacks as they stood upright on the sand was very amusing; they might have been justly compared from afar to a row of little Chinamen with pointed hats. This circumstance suggested a thousand jokes; and we landed laughing and talking merrily.

After having related our adventures and shown our four superb wolves, whose thick skins were very valuable, our two house-keepers invited us to take our places at table. They had prepared a banquet of dainties, and enriched it with a new dish, which received our emphatic approbation. It was a sauce, made in the Carib fashion, of the eggs of land-crabs, a great quantity of which frequented the islet.

Afterwards we settled upon our next day's occupations. We had to skin the wolves, and devise some means of removing the bags of sperm to our general magazine. I was not without some anxiety on the latter point, for, as I have hinted, the pinnacle could not, without risk of being stranded, approach near enough to the sand-bank to assist in their disembarkation. Each person threw out a suggestion, but none seemed feasible, when Miss Jenny, who had listened to us quietly, addressed me in caressing tones:—

“If you will entrust me, my father”—for she had already accustomed herself to use this sweet name—“if you will entrust me with the task, while you and my brothers are engaged in your horrible skinning work, I will undertake to bring home the ten bags; and also,” she added, laughing, “if you will only give me a small piece of bear's-skin, I will make a charm which shall entice back my brother Rudly's Jager. I see that Rudly is gloomy at having lost his hunting-companion.”

This proposition was received with a good deal of gentle raillery by my young people—a little piqued that a young maiden without experience should think herself capable of executing a task which seemed to them of the greatest difficulty. They launched all kinds of jests and jibes at their adopted sister, who, without



revealing her secret, endured them very gaily, until at length she took refuge with the mother, already engaged on board ship preparing our mattresses.

The young girl, though carefully refraining from showing it, had been somewhat wounded by the sarcasms directed against her. My wife consoled her as best she could, attributing the unamiable proceedings of her sons to their ignorance of the laws of courtesy, rather than to any ill feeling towards her. The sweet maiden dried her tears, and after tenderly embracing her adopted mother, she began making, with the piece of wolf-skin I had given her, a kind of muzzle for the jackal, which she had undertaken to bring back, nor did she retire to rest until she had completed it.

Next day, almost before we on board the pinnace had risen, and while my sons, who had slept on mats around the bivouac-fire, were still asleep, Miss Jenny prepared for her expedition. She took a bladder full of fresh water, and a basket containing a supply of provisions; descended nimbly the rope-ladder at the side of our vessel; boldly placed herself in Frederick's cajack; unmoored it; and began to manœuvre it with equal grace and address. She speedily made towards the sand-bank; in vain I endeavoured to recall her; the little coquette waved with her hand some signals of friendship, and courageously pursued her route.

So well had she chosen her time, that she arrived at high water; that is, just as the tide was wetting the bottom of the sacks. The adventurous girl leaped on shore, and fastening all the bags by strings to a stout cable with which she had provided herself, she attached the latter to the cajack, and re-embarking in it, towed the bags after her. Their contents having congealed, they floated on the surface like bladders filled with air.

The conquest of the fugitive jackal was a more difficult enterprise. She was compelled to land on the coast, and moor her boat with the aid of a heavy stone. From on board the pinnace I was able with my telescope to follow all her movements; but when she disappeared in the wood, near the little bay, I felt very anxious;—my anxiety, however, was soon appeased, for she was speedily successful in attaining her object. She returned to the shore, seated herself on the grass, began to eat, and flung on either



side some morsels of bread or meat, while frequently calling Jager, whom she knew to be in the neighbourhood, in an amicable tone.

And, in fact, the poor animal, unaccustomed like those of his own race to hunt for his food, was dying with hunger; he therefore gradually drew near his young enchantress. She cast to him some pieces of soaked biscuit, always nearer and nearer to herself; finally, she offered him a dish of fresh water;—and by these baits having drawn him close to her side, she threw his lasso around his neck, deftly muzzled him, and dragged him into the cajack; where, after a little trouble, she contrived to station him in the opening in the fore part of the little skiff, first taking the precaution to bind his hind feet, that he might not effect a second escape. In this position the poor Jager, wholly confused by his misadventure, found himself seated, with the upper part of his body much above the gunwale; but, on approaching the island where we were engaged in various tasks, I perceived the young rogue cover the jackal's head with a large broad-brimmed hat made of reeds, and wrap him up in a piece of cloth, so as to give him the appearance of a little passenger.

Meanwhile, my sons, who had been occupied in stripping the wolves of their furry hides, and who, despite their war of words on the previous evening, began to feel disquieted at the long absence of their adopted sister, proposed to man the pinnace and go in search of her. But this project was dismissed at her reappearance from behind a little promontory which had hitherto concealed her from their view. The appearance of her new companion excited in them the greatest surprise.

"Where can our new sister have been to find out this new brother?" said one.

"Do men spring up in this country like mushrooms?" inquired another.

"Perhaps," added a third, "he is the magician who has assisted her in her magical work."

Frederick alone uttered not a word, but gazed with all his eyes, and, without observing it, advanced straight into the water, in his



anxiety to scrutinize his sister's strange companion. Suddenly he gave a great shout of laughter, clapped his hands, and jumping about in the water with a violence which sprinkled us all over, he cried, as he took Rudly by the shoulders,—

“It is he! It is your rascal Jager! See, the ill-conditioned scamp comes back like a respectable individual, and with an air of the utmost gravity! Ha, ha, ha, ha!”

We all laughed heartily at our young friend's fantastic idea; and she, gracefully springing ashore, set her captive at liberty, and showed us, with ill-concealed triumph, the long train of sacks towing in the rear of her cajak.

We received her with lively expressions of joy and friendship, praising her skill, and the ingenuity she had displayed in carrying out her enterprise. Rudly, restored to good humour by the recovery of his jackal, mingled with his earnest thanks an equally earnest apology for his rudeness on the preceding evening, and all unpleasant feelings disappeared.

It was just noon; we set ourselves down at our well-provided table; after dinner we prepared for our journey to Tent-Town, where we desired to instal our new companion.

We therefore collected all the articles we had with us on shore, and especially our young friend's treasures—namely, all she had saved from the wreck, and the articles she had manufactured with such infinite skill.

Frederick had already constructed for her a chest to contain these various objects; and their examination amused and interested us exceedingly. They included articles of dress and ornament, household utensils, and various things which, during her exile, she had made of the few materials at her disposal—of her own hair she had fabricated a fishing-line, and attached to it hooks of mother-of-pearl; needles she had manufactured out of fish-bones, awls and bodkins out of the beaks of birds; two pretty needle-cases she had contrived—one of pelican's feathers, and the other of a bone of a sea-calf; the sewn-up skin of a young seal served as a water-vessel; a shell for a lamp, and some threads of cotton from an old handkerchief for the wick; besides the lamp there was a shell large enough for a caldron or saucepan; a tortoise-shell, in



which she cooked her food with large red-hot stones; several bladders of fishes; and all kinds of shells for glasses, dishes, and porringers. In some of



PELICAN (*Pelecanus onocrotalus*).

these were remains of her daily food: such as salt, which she collected in the hollows of the rocks along the shore; fishes' eggs; and even small fish, dried and preserved like sardines; little bags of seeds, which the young solitary had picked up, and which were nearly all of anti-scorbutic plants, as, for example, the cochlearia, sorrel, celery, watercress, which flourished on the rocks, thanks to the guano yearly deposited by the sea-birds.

Among the toilet objects belonging to Miss Jenny, we remarked a hat, made of the cormorant's downy pouch, which, expanded in the form of a *capote* by stems made of the feathers of the same bird, sheltered the face and neck from the burning sun; some bags and mats of various sizes woven of reeds or grass; a small vest with sleeves formed of the anterior skin of a sea-calf, the arms passing through the two fore-paws; some other articles of dress, also made of the skins of seals or sea-birds; girdles, stockings, and shoes, likewise of skin sewn double.

Miss Jenny's jewellery was reduced to a very few articles, the chief being a pearl comb, which she had in her hair at the time the shipwreck occurred. She had also some small boxes made of tortoise-shell, containing a few pieces of amber; some pearls of a fine reddish hue, which she had extracted from a shell; and, finally, some pencils made of feathers and hair, with which the young solitary had amused herself painting and writing. I ought not to forget



to mention a small net of strips of seal-skin, containing a selection of rare shells and coral branches which the young solitary had picked up in her wanderings on the shore.

All this bijouterie was stowed away in a large box which Frederick had made of the planks of the boat. Then we placed it in our pinnace, already loaded with the skins of the wolves and the sacks of sperm. The remainder of the day was occupied in the arrangement of our cargo; and during the last meal which we took in the island, Miss Jenny's ingenuity, and the various means she had employed to meet the wants of her exile, furnished us with the subjects of a conversation as interesting as it was animated.

Next day, Miss Jenny presented us with a new proof of her patience and her industry: she fetched from under a bush, whose branches overhung the sea, a large bird which she had fastened there by its paw, and introduced it to us as a skilful fishing companion. It was a cormorant, which the young girl had tamed and trained, in the Chinese fashion, to catch fish.



CORMORANT (*Phalacrocorax carbo*).

She then bade adieu to the coast which had received her, to the trees which had sheltered her during her sojourn in those regions. But we were unwilling to quit them without having bestowed upon them an appellation, and so we christened the cove where Frederick had first landed *Felicity Bay*, in allusion to the happy meeting which we had there enjoyed.

We then set out, steering for Pearl Bay; where, however, we intended only a very brief residence, before returning to Tent-Town. To that beautiful and commodious settlement we were very anxious to introduce our new companion, and to show her all the wonders wrought by our ingenuity and patience.





### CHAPTER XIII.

Moving accidents by flood and field.

SHAKSPEARE



FREDERICK, in his cajack, piloted us into Pearl Bay, and after effecting, without accident, the passage of the reef which formed its outer barrier, we cast anchor at the point of our disembarkation a few days previously. There we found everything in the condition in which we had left it—the table and seats being still reared erect, the roasting trench and fireplace being undisturbed; but the atmosphere was purified; the oysters, consumed by the sun, had lost all their bad odour; the carcasses of the lions and the wild boar were reduced to a heap of whitened bones; the vultures, and all the family of birds of prey—to say nothing of the ferocious animals which the forest concealed—having carried off the very last morsel of flesh.

Everything appeared tranquil along the coast, and we thought we might venture to remain awhile and collect the pearls which the now open oysters offered to our avidity. We erected our tent, put in order the fireplace, and set to work to extract the pearls from their retreats. The work, however, was not very pleasant, and Miss Jenny soon abandoned it; she hastened to rejoin my wife, and asked her if it would not be very agreeable to add a dish of fish to the dinner she was getting ready. Our housekeeper smiled incredulously, and said she knew no means of obtaining a



sufficient supply of fish for seven persons in so short a time as remained before dinner.

"Ah, well," said the young maid, "leave it to me, and I will bring you all the fish you want in half an hour."

She took her cormorant under her arm, and leaped into the cajak, which was lying on the shore; two strokes of her paddles, and she was twenty yards away; then she passed round the cormorant's neck a large copper ring, that, after having captured its prey the bird might be prevented from swallowing it.

Thus prepared, she posted it on the gunwale of the skiff, and remained motionless.

The fishery commenced at once; it was quite amusing to see the feathered angler, with outstretched neck, and eyes fixed on the waves, plunge abruptly into them, and reappear with a silver-scaled fish, a trout, a young salmon, or one of some other species, which he carried in succession to his young mistress. The latter was thus enabled to fulfil her engagement in less than the stipulated time; then she freed her companion from its ring, rewarded him for his trouble with a few small fish, and hastened joyously to present the result of her fishery to her adopted mother, who expressed herself astonished at and delighted by the young girl's address.

The task of collecting the pearls being completed, we put our spoil into a canvas bag, counting upwards of four hundred, including some very large and fine specimens. Our next care was to provide for our supper; my four sons took their fowling-pieces and game-bags, with the intention of shooting a few birds in the Wood of Truffles; Jenny intimated a strong desire to be one of the expedition, and when I observed that the use of fire-arms would be something quite new to her, she assured me, smiling, that the daughter of a colonel and a skilful sportsman could not fail to know how to handle a musket, and that, moreover, we need be under no apprehension about her, as she would not leave her brothers.

I therefore permitted her to join them, though somewhat doubtful, like my sons, of her talents. I had soon cause to acknowledge the folly of my mistrust, and a snipe which she shot on the wing



drew from us all the most unqualified eulogiums. My sons also brought down a few birds, which were immediately cooked for our evening meal.

At first it had been our intention only to touch at this coast, and resume immediately our journey to Tent-Town; but an unforeseen discovery detained us there longer than we had anticipated. Among the stones scattered about the shore, I had noticed a species of rock which, I thought, might be easily converted into lime. This was a discovery far too precious to be neglected; and I accordingly resolved to construct a lime-kiln without delay. It did not take long to carry out my idea; but the calcination of the stone was not so easily effected, and we were even compelled to spend a part of the night beside our kiln.

Meantime, we constructed some barrels with the bark of pine-trees, bound round by strong lianas, the top and bottom being likewise made of bark. To lighten our task, and shorten our weary watching, I requested Frederick to relate to us in a more complete manner than he had already done to me, the particulars of his meeting with our young companion, and the other details of his voyage. Our time could not be more pleasantly employed; and the curiosity of my sons was so strongly excited, that they immediately gathered round Frederick in a circle, while he began, as follows, his interesting story.

#### FREDERICK'S NARRATIVE.



PERHAPS you will remember," said he, "the circumstances under which I quitted you, after having handed to my father the letter in which I informed him of my projected excursion.

"The sea was calm; but I had scarcely passed Pearl Bay before a violent wind arose, which assumed successively all the characteristics of a regular tempest; the waves seemed to threaten the very sky; rain, lightning, thunder, all blended in one horrible chaos. My boat was not strong enough to resist the gale; all I could do was to let it carry me whither



the billows willed, without terrifying myself too much at the violence with which they tossed me about.

"In God I put my trust, and hoped that His hand, extended over me, would rescue me from death as it had done on so many occasions.

"Nor was my hope deceived. After the storm had lasted several hours, the wind subsided, the air became tranquil, and my canoe recovered its equilibrium on the smooth surface of the waters. But I was driven far from the coast familiar to us, and drifted towards a shore entirely new to my gaze: the conformation of the rocks, the colossal peaks, whose summits were lost in the clouds, the vegetation and the animals I perceived along the strand, and the birds which flew above my head, all announced to me, as it were, a New World.

"My first anxiety, in this novel scene, was to detect, if I could,



some smoke wreathing above the mass of cliffs; for, as you know, the Smoking Rock was the constant object of my thoughts; it was the goal of my adventure, and I felt in my heart a profound conviction that that adventure had not been made in vain.

"Nothing, however, could I anywhere discover of the Smoking Rock; but, without losing my courage, I began to row along the coast. Night came on; I spent it on board my cajack, after making a tolerably unsatisfactory supper upon pemmican.

"Next morning I recommenced rowing; the further I advanced



the more did the coast appear to change its aspect. From time to time I passed majestic rivers, which poured their waters into the sea. One of these formed at its mouth an immense bay, and I resolved to ascend it for a few miles. Its banks were adorned with great trees, and the lianas interlacing them seemed like fair garlands of flowers which the wind incessantly waved to and fro above the stream; birds of every species, and even apes and squirrels, sported on these aerial bridges.

"Among the aquatic birds which sailed up and down the river under these arches of verdure, there were some which at my approach suffered themselves to fall into the water as if they had been stricken with lightning; but scarcely had they sounded the depths of the liquid element before they rose again suddenly, and as they stretched towards me their long thin necks, terminating in a small flat head and pointed beak, I thought they must be serpents. But catching sight of the webbed feet of one of those birds, as they clove the water and betook themselves to flight, I recognized it to be the anhinga, or serpent-necked bird, which builds its nest in the water and reposes under the trees.

"Towards mid-day the heat became so insupportable that I found it impossible to resist the desire of seeking a little shade under one of these domes of verdure. I turned round my cajak, and for a brief while made my way up a broad and noble river, landing on one of its banks, with the intention of bringing down a bird; but I had scarcely fired before an enormous mass suddenly rose from the reeds within a few paces of the spot where I was standing, and I had but just time to pick up my bird, regain my cajak, and fly in all haste.

"I then perceived on the surface of the river-waters an hippopotamus with its young, which struggled to gain the bank, terrified undoubtedly by the report of my musket. I pulled down the stream, and striking out to sea, took refuge in the shadow of a rock which stood conspicuous in the centre of the bay.

"I did not make a long sojourn in this retreat, but, after I had recruited my strength a little, I pursued my route. For some time I kept along the coast without landing anywhere. The rivers and the shore were equally defended by inhabitants whose



acquaintance I was by no means desirous of making. I recognized elephants, lions, and panthers; it was, in fact, a kind of re-union of all the ferocious animals of the creation. I also detected troops of antelopes and gazelles; which peaceful and luxurious creatures seemed to have been planted there simply to feed the appetites of the carnivorous tyrants of the coast.



HIPPOPOTAMUS (*Hippopotamus amphibius*).

“After I had voyaged several leagues, the appearance of the coast was again modified; and, as if the beasts of prey had had a certain district marked out for their abode, I no longer saw even a solitary individual. The whole line of shore was peaceful, but desolate; the breeze murmuring through the lianas and the songs of a few inoffensive birds were the only sounds that disturbed the universal tranquillity. Feeling considerably reassured, I resolved to land and find somewhere a place of repose; I moored my canoe as firmly as I was able, and leaped nimbly upon the sand. I was hungry; I lighted a fire, and prepared myself a capital dinner, at the expense of a duck which I had killed, and a dozen or two of oysters.

“While engaged in my culinary preparations, I thought I observed, through the trees of a small wood, a creature which, in its movements, stature, and form, completely resembled man. The



fire did not frighten it; holding itself upright, with a stick in one hand, it advanced towards me without manifesting the slightest hesitation. At this spectacle I experienced an extraordinary emotion of blended joy and fear, for I thought I saw one of my own kind; but this illusion did not last long, and I soon recognized in the strange being which moved in my direction the ape known as the orang-outang.

"At first I willingly suffered it to approach, until finding it was not alone, but followed by a troop I may justly describe as formidable, I fired off a charge of powder, which set them all flying in fear and confusion.

"Night now drew near, and I resolved to spend it upon this coast. I made no fire, from a fear its blaze might bring down upon me the orang-outangs, and I discharged a few more shots to keep all unwelcome visitants at a distance.

"I had occasion to remark, also, under the rocky vault where I established myself for the night, a hideous kind of bird, whose manners and form might well have enabled it to pass for one of the harpies of the ancient fable, and which sucks the blood of the persons it finds asleep—I mean the enormous bat known as the vampire. I fired two or three times, to get rid of such disagreeable neighbours, for several of them were flying about, uttering the most discordant cries. You may be sure I did not sleep very soundly under these circumstances; and every time I awoke, I heard among the bushes which covered the rock an ominous sound of beaks and wings, in testimony that my horrid companions were not far distant.

"I rose at break of day, and gladly took leave of the spot, which I christened Vampire Island.

"The region which next greeted my delighted gaze was of a very different appearance to those I had previously coasted. Its landscapes were made up of long green lawns, shadowed here and there by great clumps of lofty palms; of small reedy lakes, on whose margin elephants sported; of dense tufts of cactuses of all kinds, loaded with flowers and fruits, on which enormous rhinoceroses were feeding, without appearing to dread their dangerous thorns; and of fresh thickets of mimosa, whose tender tops the



gigantic giraffe devoured, as goats might have browsed on a simple bush.

"Never had the work of creation appeared to me so grand or impressive as it was now revealed before my wondering eyes. I admired the wisdom of the Divine Author of all things, who had willed that so many different beings—so many great and terrible animals—should obtain their daily food in this vast solitude; and the thought sustained my courage, and appeared to me a guarantee of the success of my enterprise.

"'Thou wilt not permit, O my God,' I exclaimed, with a sentiment of sincere faith; 'Thou wilt not permit a human being to perish for want of succour, when Thy beneficent hand is extended over all the animals of the desert!'

"And I rowed with redoubled strength and courage, while my eyes, with increased confidence, swept the horizon in every direction in search of the Smoking Rock.

"I resumed my voyage; and, again beguiled by the agreeable and picturesque appearance of a river which poured its waters into a tranquil cove, I resolved to trace its course for a mile or two. The water rippled gently about my oars. Nothing indicated the presence of any formidable danger: there were neither serpents on the banks nor vultures above my head. I was calmly enjoying the freshness of the scene and its infinite loveliness, when suddenly there appeared before me a long throat, armed with strong sharp teeth, and rising slowly above the surface of the waves. It expanded itself to the utmost extent of its elasticity, as if it would fain have swallowed at a single gulp me, my cajack, and my oars.

"Instinctively I measured the capacity of those enormous jaws. I understood the nature of my peril; and without pausing for a moment's reflection—the whole affair could not have lasted a second—I seized one of my oars, and dealt so heavy and well-directed a blow on the monster's snout that it disappeared, stunned: a long track of blood on the surface of the water showed that I had inflicted no trifling wound.

"I did not continue my excursion up the river, for two other monsters of the same kind were already raising their heads to



block up my path. They were alligators, as you will have guessed, and the most terrible species of their genus: fortunately, their voracity is counterpoised by a natural slothfulness, which confines them to the localities where they were born. The alligator waits for its prey, and rarely goes in search of it. All that it knows is to keep itself concealed beneath the waters, and to rise opportunely at the moment some imprudent fisherman passes by the place of its retreat.

"Thus I had escaped a great danger; but another awaited me in the same voyage.

"At a short distance from what I may call *Alligator River*, I remarked, as I coasted along, a small wood whose trees were tenanted by the rarest birds, and birds of the most beautiful plumage. These were lyras (or harp-birds), parakeets, humming-birds, birds of paradise—in a word, a complete gathering of the most splendidly-decorated denizens of the New World. I could not resist the desire of approaching nearer. I landed, moored my cajack to the shore, and ran towards the wood, holding on my wrist my eagle, unhooded. I let him loose, and he returned with a superb parakeet, whose flame-coloured feathers sparkled in the



sun. But while I was busy examining it, I heard behind me a gentle rustling on the gravel. I thought it was probably a tortoise, or some other crustacean, dragging itself along the shore, and turned without any suspicion. It was time. A few paces in my rear stood a great striped tiger, rending into shreds a sail-bag which I happened to have flung on the ground.



"I was struck by a sudden stupor; a mist swam before my eyes; and so completely had terror paralyzed my energies, I could scarcely raise my gun. It would have been all over with me, but that my brave eagle, comprehending my danger, dashed boldly at the tiger's head, checked its leap, and began to dig at its eyes with persistent ardour.

"The succour saved me. It gave me time to discharge a gun into my enemy's flanks, and two pistol-shots fired straight into its open mouth brought it to the ground. But, alas! my victory was



clouded by a most fatal catastrophe. My poor eagle fell at the same moment as its vanquished foe, torn to pieces by the tiger's formidable claws. I picked it up, weeping, and carried it to my cajack, that I might afterwards embalm it, and place it in our museum.

"With sorrowful emotion I quitted this fatal spot; but God's visible providence in rescuing me from a peril whose full extent I could scarcely calculate, diverted my gloomy thoughts, and the warm glow of hope gradually returned. I doubled a small headland; and lo, from the summit of some gray and rugged rocks which lined the shore, I perceived a light whirling column of smoke ascending towards heaven!

"At the sight my heart beat quickly with a lively emotion of joy. All my anticipations were realized. Yonder was the Smok-



ing Rock, and I was about to taste the happiness of saving a fellow-creature.

"Immediately I turned my boat in the direction of the long-desired signal, which at last was revealed to my straining gaze. After carefully threading my way through a labyrinth of rocks, I contrived to make the shore, and reached in safety a kind of elevated platform, where I perceived a human being. It was the first strange face on which my eyes had looked for ten long years. You will remember, I doubt not, your feelings three days ago, when introduced to a new companion of misfortune: such were *my* feelings on this memorable occasion.

"At the noise I made in approaching, the individual, who was engaged in feeding a large fire, arose, perceived me, uttered a cry of joy and surprise; then, joining her hands, she waited, with eyes fixed upon the heavens, until I addressed her: for though she was attired in the dress of a naval officer, her exclamation and the delicacy of her features convinced me she was a woman. I halted, therefore, at about ten yards from her, and recalling to my memory all I knew of English, I said, in a voice choked with emotion,—

"‘I am the liberator sent to you by God: I have received the albatross’s message.’

"Probably I pronounced these words very badly, for at first Miss Jenny did not understand them. I repeated them, and in a few minutes we comprehended each other sufficiently well to exchange a number of questions and replies. Where words failed us, we supplied the deficiency by gesture, look, and tone.

"I spoke to our new sister of the château of Tent-Town, the bay of Falcon’s Nest, our shipwreck, our ten years’ life upon the island, where we had introduced a semi-European civilization; and she, on the other hand, related to me the story of her early years, the catastrophe which had thrown her on a desolate shore, and her existence in the region of the Smoking Rock. And the incidents she narrated will, I assure you, furnish my father with some interesting pages for his journal in the forthcoming winter.

"Thus we became, all at once, brother and sister: community of misfortune supplied the place of the ties of blood.



"Miss Jenny gracefully invited me to supper; after which we retired for the night—I to my cajak moored upon the beach, and she to a resting-place which, from fear of wild animals, she had contrived among the branches of a tree.

"Next morning we accosted each other smiling. Miss Jenny had already prepared our breakfast, which consisted of fruits and broiled fish.

"As soon as our repast was at an end, I persuaded Miss Jenny to take a seat in my cajak, in the fore part of which I had placed all the curious objects the industrious young maiden had manufactured with her own hands.

"We set out; but an accident having occurred to my tiny barque, we were obliged to put in at the island you have named *Felicity Isle*. There I left Miss Jenny, who, before she would present herself to a strange family in male attire, insisted on my obtaining my father's permission.

"I yielded to her scruples, and, having repaired my canoe, made for our usual quarters. It was then I fell in with you; and, mistaking you for piratical savages, enacted the little comedy which caused you a few minutes' uneasiness."

"Capital! capital!" shouted Rudly, when Frederick had concluded his narrative. "But we have now to hear our sister's history."

Frederick was about to begin the tale, to which he had already referred as of peculiar interest, when I checked him, and advised he should first take a little repose.

For his exciting narrative had carried us much further into the night than any one of us could have believed. On looking at my watch, I found it was already past midnight. It is true, every auditor was "wide awake;" but as we should be called upon to execute on the morrow some laborious tasks, which we could not satisfactorily perform after a night spent in listening to such interesting adventures, I thought it advisable to adjourn to another occasion the conclusion so much desired by all. My decision was not very well received; but when my young family were once convinced it was final, they conformed to it, and in a few minutes



every one had retired to his resting-place for the night—some on board the pinnace, and others on the shore.

Next day, when all the family had reassembled at breakfast, our conversation turned on the dangers Frederick had incurred in his heroic enterprise, and the courage he had displayed under circumstances of peculiar difficulty. Hence we were naturally led to speak of the promised narrative of Miss Jenny's adventures; and I was obliged to consent to its being told as a kind of prologue to the day's occupations. We would fain have listened to it from Miss Jenny's own lips; but she was so timid, and at the same time so impetuous, that it was difficult to keep her attention chained to any one subject beyond a few moments. She went and came like a butterfly; now attending to the fire or discharging some domestic duty, and now bestowing a caress on her adopted mother or playing one of her brothers an amusing trick. Frederick was therefore invited to act as her chronicler, and he commenced as follows:—

#### MISS JENNY'S NARRATIVE.



As soon as I had contrived to understand my new sister, I asked her by what series of strange events she had been transported to the desert coast where I had discovered her.

“She informed me that she was born in India, but of English parents. Her father, after having served for some years as major in a British regiment, had obtained the command of an important post in the possessions of Great Britain.

“Governor Montrose (for such was the name of Jenny's father) had had the misfortune to lose his wife a few years after his marriage. This loss had deeply afflicted him, and all his affections had necessarily centred in his only child. Miss Jenny was only seven years old when her mother died. The governor himself undertook the education of his daughter, and in the leisure occa-



sionally left him by the duties of his office, he applied himself to the development in his beloved daughter of the precious qualities with which Nature had endowed her. Not content with enriching her mind with all the knowledge British civilization had naturalized in India; not content with fitting his daughter to shine in the drawing-room, and to become an ornament of the world of fashion, he wished also to make her a strong and robust woman, capable of facing and conquering a danger. Such was Miss Jenny's education up to the age of seventeen; she could handle a gun as well as a needle; she was as thoroughly at home on horseback, galloping over the plains, as in her father's reception-rooms, where her graceful address and elegant manners must, I am sure, have been the theme of universal admiration.

"Governor Montrose, having been promoted to a colonelcy, received orders to return to England with a battalion of his regiment. This circumstance forced him to separate from his daughter, as the rules of discipline did not allow of women on board a ship of the line in time of war; he dispatched her for England, however, almost at the same time as himself, on board another vessel, whose captain was one of his friends, and which would be making the voyage without stopping at any intermediate ports.

"The veteran wept much at parting from his beloved child; he imagined all the dangers of a long and painful voyage; and it was not until he had eagerly recommended Jenny to the watchful care of his friend the captain, that he could resolve upon abandoning to the waves of ocean all that he held dearest in the world.

"The early days of her voyage were most happy; but a terrible tempest then arose, which drove the ship far out of her course, and, after much peril and suffering, flung her upon the reefs which bristle round this very island. It was with great difficulty the crew contrived to get two boats afloat. In the smaller of the two was placed Miss Jenny; the captain took the command of the other. Both were overloaded, and their gunwales were on a level with the waves. A fresh outbreak of the violent hurricane separated them. Miss Jenny lost sight of the shallop which carried



her friend, the captain ; and, after tossing for awhile on the angry billows, the boat in which she herself was placed capsized, and of all on board it only this young and tender maiden reached the shore alive ! The waves bore her, half-fainting, to the foot of the cliff where I afterwards encountered her.



“ After dragging her weary limbs along the shore to a sheltered corner, Miss Jenny fell asleep from sheer exhaustion ; nor did she awake until next day at noon. She then fell into a state of extreme despondency, and for several days she wandered about the shore, the victim of despair, and with no other food than a few birds’ eggs, which she found in the hollows of the rocks.

“ Some sailors’ clothes having been cast ashore, she proceeded to attire herself in a jacket, vest, and trousers, and in one of the pockets she fortunately found a small tinder-box, a knife, and some other useful articles. She immediately gathered a supply of timber, carried it to the highest summit of the cliff, and there kindled



a fire, which she never afterwards suffered to die out, in the hope that some ship at sea might perceive the signal, and come to her assistance.

"You can imagine for yourselves the misery endured by Miss Jenny for the first few weeks of her solitude. She was called upon to contend with the horrors of famine and all the dangers of the desert. How she rejoiced then, in the semi-masculine education which her father had given her! Her sporting habits had developed in her a courage and a resolution above her sex, and she began immediately, with a view to self-preservation, to display that activity and energy she had previously brought to bear only on the pursuit of pleasure.

"She took a calm survey of her position, and then turning towards heaven with a confidence and a resignation full of faith and sincerity, she committed herself to the hands of God, and reposed in His almighty care. She built for herself a hut; she fished, she hunted, she tamed birds—among others the cormorant, whose skill as an angler you have witnessed, and several albatrosses, to which she confided her frail hope of eventual deliverance;—in a word, she lived alone, and with no assistance but what she derived from her own energies, for three years."

Frederick paused; his eyes naturally rested on the heroine of his story, who could ill dissemble the trouble and embarrassment from which she suffered. I put an end to this silent and painful scene by saying:—

"Thus, my child, we see in you a new proof of the great truth, that the hand of God is ever stretched forward to assist the unfortunate. What you have done for three years, a poor Swiss family have done for ten, and the Divine support has failed neither you nor me."

I allowed a short interval for the comments naturally provoked by Miss Jenny's narrative. But as I had previously resolved that this day should be a day of labour, I soon gave the signal, and everybody set to work. The lime-manufacture had succeeded; I submitted several fragments to the ordeal of water, and found them of excellent quality.



I had not forgotten my discovery of the soda plant, and collecting a tolerably large quantity, I burned it, and carefully carried away the ashes to convert them into alkaline salt.

Miss Jenny lent us important assistance throughout our day's toil, and I observed with pleasure that her activity, and the frank gaiety with which she addressed my sons, insensibly put to flight the somewhat unfavourable sentiment one or two of them had at first entertained towards her. I began to hope that she would become for them a veritable sister.

Towards evening, the pinnacle had received on board its entire cargo, and we spoke seriously of our return to Tent-Town.

The poetic descriptions we had given of the salt-grotto, the marvellous things we had related of the aerial castle of Falcon's-Nest, and of the enchanting scenery in whose midst it was reared, had inspired Miss Jenny with an eager curiosity to judge for herself of all these marvels.

We raised anchor next day, at early dawn. The sail of the pinnacle was unfurled to a fresh and favourable wind, and Frederick's cajak, in which Fritz had placed himself by his brother's side, led the way, piloting us through the reefs and sandbanks. When we were off Prospect Hill, I proposed to put ashore for awhile, and make a descent on our farmyard. Frederick and his young brother asked my permission to continue their voyage, that they might prepare for our reception at Tent-Town. To this I consented; they set out; and we landed at the foot of Prospect Hill.

We found the farm in excellent order. Miss Jenny, who for three years had seen no human habitation, could not refrain from a cry of wonder and delight, and my wife, with much pride, showed her the colonies of cocks and hens, and ducks and geese, she had established, and which had prospered so far beyond our warmest hopes.

The young girl joined in the good mother's pleasure with a sincerity and an intelligence which foreshadowed an able house-keeper.

We re-embarked on board our pinnacle, and from Prospect Hill stretched across to Shark Island, where the Angora rabbits yielded us, in passing, an abundant provision of their fine silky hair. From



Shark Island we made straight for the Tent-Town coast, and had hardly come in sight of it before we were saluted with a discharge of ten guns; a compliment on the part of Frederick and Fritz much appreciated by the family. Only Dr. Ernest could not help regretting that the salute, instead of ten guns, had not consisted of an *unequal* number.

"It is wholly contrary to rule," said he, magisterially, "and shows that our artillerists are not well up in the regulations of the service. Otherwise, they would have known that an even number of guns is never fired in a salute."

Our young philosopher was right enough in his remark, but it was not, we must own, a matter of much importance, and I could think of no better way of repairing the error our gunners had committed than by replying with a salvo of eleven guns. Ernest and Rudly undertook this duty, and discharged it in a manner which would have done honour to veteran soldiers.

Soon after the last echoes of our cannon had died away, we saw Fritz and Frederick coming to meet us in their canoe. They received us at the entrance to the bay, as the limits of their territory, and we followed them to the shore; but they landed before us, in order to assist in the general disembarkation.

At the moment Miss Jenny put her foot upon the sand, we all gave utterance to a shout of welcome, and Frederick, approaching her like a gallant chevalier, presented his hand, and led her to the gallery in front of our grotto.

There a novel spectacle awaited us; in the centre of the gallery was placed a table, covered with all the fruits our island produced. Ananas, figs, guavas, oranges, rose in fragrant pyramids, either on broad green leaves or in our calabash dishes. All the vessels of our home-manufacture, cocoa-cups, ostriches' eggs mounted on turned pedestals, urns of painted porcelain; all these were filled with hydromel, Canary wine, and fresh milk, while a great dish of fish, and a roast turkey stuffed with truffles, formed the solid portion of the repast; finally, a double garland of leaves and flowers was suspended above the table, supporting a medallion, on which might be read in large vermilion letters:—

"LONG LIVE MISS JENNY MONTROSE!"



It was a complete festival, and as magnificent a reception as could be devised under the circumstances.

Miss Jenny sat at table between me and my wife, and Ernest and Rudly were seated next; but our artillerists refused to take their places: with a napkin under their arms, they waited upon us, and by the activity they displayed, and their attention in anticipating our wants, endeavoured to invest the little family fête they had improvised with all the attraction of which it was susceptible. The most poetical and high-flown toasts were duly proposed and honoured, and Miss Jenny's name occupied a foremost place in all our discourses of future happiness.

From the dinner-table we passed into the interior of the grotto, where an apartment was provided for our young companion by the side of her adopted mother. Miss Jenny never wearied of admiring what she called our riches, and expressed again and again her astonishment that four youths and one adult could have accomplished so many wonders. We conducted her also into the kitchen-garden, the just pride and the object of the special predilection of my good Elizabeth: we showed her the vineyard, and the hot-house; there was not a corner of our Tent-Town territory which was not pointed out to the young stranger. At length, when we had sufficiently rested ourselves, we undertook a journey *en famille* to Falcon's-Nest. The castle in the tree showed signs of the neglect it had for some time experienced, and we passed a whole week in repairing it and putting it in order.

We next repaired to Woodlands, to gather in our rice and other crops; for the season was rapidly advancing, and some unexpected showers had already warned us of the necessity we were under of storing up our winter supplies. Miss Jenny, during our harvest operations, showed an amount of intelligence and good will which rendered her assistance doubly valuable: in a word, everybody worked with so much earnestness that everything was finished before the rains and winds assumed a decided character, and compelled us to close our gates. Ten years had thoroughly accustomed us to the terrible winters of these countries, and it was with a



feeling of melancholy rather than alarm that we witnessed their arrival. Yet the sea, convulsed to its very depths, the wind, the thunder, the lightning, all combined to increase the horror of a crisis which might almost be taken for a revolution of Nature.

We had reserved for the winter sundry indoor occupations, to which our young companion brought the aid of her skill and patience. Miss Jenny excelled in those labours of the fingers which peculiarly belong to her sex, and showed us how to plait straw, and reed, and grass, of which she wrought a variety of carpets, screens, hangings, curtains, and similar objects.

Of these materials and in this manner we made some light hats for summer wear, and even game-bags, not less suitable for use than agreeable to the eye.

My wife was enchanted with her new daughter, whom a careful and comprehensive education enabled to converse scientifically with Ernest; while, as for the other three brothers, and Frederick especially, they found in Miss Jenny's acquirements a stimulus which prevented them from resting satisfied with mediocrity. Thus her presence infused a new spirit of activity into our hybernal labours, and a harmony and a gaiety in which they had previously been deficient. Jenny had become, for my wife and myself, a fifth child; she was also like a sister to our sons.







## CONCLUSION.

No fairer resting-place a man could find.

MATTHEW ARNOLD.



It is with a thousand different sensations I write this word—*Conclusion*; it recalls to my mind all the emotions that then disturbed it.

God is great! God is good!

Such is the sentiment which prevails in my grateful heart above every other! I have such infinite need to render thanksgivings unto Providence! May

the reader therefore pardon me the confused and broken manner in which I terminate my protracted narrative.

I resume the thread of our adventures.

It was now the end of the rainy season; at least, the storms had grown weaker and occurred at longer intervals; the wind had lost its violence, and the broad azure gleams which broke through the sky's pall of gloomy cloud announced to us that summer was at hand. Our pigeons quitted the pigeonry, and we ourselves were soon able to throw open the door of our grotto, and terminate the seclusion to which we had been condemned for upwards of three months.

Our first cares were devoted to our various estates, which the rains, as usual, had considerably damaged.

First, we put in order the kitchen-garden, and the environs of our grotto; after which we bethought ourselves of our more distant possessions. Frederick and Rudly proposed to make a descent



upon Shark Island, and satisfy themselves that the winter hurricanes had not overthrown our military works. I consented, and they set out in the cajak.

The reader will remember that we had agreed upon various signals by whose means a communication could be maintained between Tent-Town and Shark Battery. A flag hoisted was a sign that all went well in the island; and two guns, fired at a brief interval, indicated that something had been discovered out at sea.

My sons, after having inspected the interior of the fort, and satisfied themselves that no very serious damage had been caused by the hurricanes of winter, addressed themselves to the task of surveying the ocean, with a view of discovering whether anything was visible in the horizon; on the coast they saw more than one tree uprooted, but no sign of a stranded whale or other marine monster. Then they tested the good condition of the guns, by firing off several charges of powder, displaying, in this respect, none of the economy I had urged upon them in the use of our war munitions.

But what was their astonishment, what their emotion, when, at the end of two or three minutes, they heard three reports of a cannon, in the distance, replying to their signals! They knew they were not mistaken, for a faint gleam towards the west had preceded each discharge. At that moment the two brothers grasped each other's hands with mingled feelings of joy, hope, and doubt; and both, in a half-choked voice, exclaimed, "Men! men!" After a brief consultation on what they should do next, they resolved to quit the island immediately, and inform us of the surprising incident.

To leap into the cajak, and put to sea, was the work of a second. The frail skiff scarcely seemed to touch the water, she glided along with such inconceivable swiftness.

We had heard the cannons firing, and our excited curiosity had taken us down to the shore, where we were standing when the two brothers appeared.

"Ho, there! what is the matter?" I shouted as loudly as I was able; but they were so overpowered by the importance of the



news they brought, that at first they could only articulate, "O father! father!" Uttering these words, they threw themselves panting into my arms. Then they exclaimed, "Did you not hear anything?"

"Nothing, except the signal-guns which you have been firing with an utter disregard of economy."

"Did you not hear three guns far away at sea?"

"No, indeed."

"Well, father, *we* heard them, and heard them as plainly as we now hear your voice."

"It was only echo," interrupted Ernest.

Rudly was piqued at the remark, and resumed, in a tone of sharpness,—

"No, truly, doctor, it was *not* echo; we have fired guns frequently enough to be able to judge of the effect of the echo and reverberation you allude to. We clearly heard three guns, and are positive they were fired by some ship or ships now in the neighbourhood of our coasts."

In the voice of the young man there was a truthfulness and a tone of conviction which rendered it impossible for me to reject entirely the idea he had thrown out. The discovery of a ship was a sufficiently grave incident in the history of our lives, and if we longed with all our hearts for the moment that should re-unite between man and us the relations interrupted for so many years, it was necessary that we should meet with prudence and reserve an event whose consequences might be most important.

"If there is really a ship off our shores," said I, "who knows whether it is manned by Europeans or Malay pirates! Who knows as yet whether we should rejoice or mourn at its advent; or whether, instead of making preparations for a festival, we ought not rather to be on the watch, and gird ourselves to defend our possessions and our riches against a troop of brigands?"

These serious considerations checked the impetuous and unreflecting joy with which Frederick and his brother had brought the news that a vessel was cruising in our latitude. My first resolution



was to organize a system of defence, and set a watch that the strangers, whether friends or enemies, might not find us unprepared. We divided the night into watches, which my sons and myself took in turn,—keeping guard under the gallery of the grotto against any surprise, if one were attempted. But the night passed by without any disturbance. In the morning, a storm of wind and rain blew up with unwonted violence, and lasted two whole days and nights without our perceiving any sign of the discovery which had become the object of all our thoughts.

On the third day the sun reappeared. Frederick and Rudly, full of impatience, resolved on returning to Shark Island and signalling anew. I consented, but instead of the cajack we took the periagua, and I accompanied them. My wife, Jenny, Ernest, and Fritz remained in the grotto. On arriving at the fort, we hoisted the flag to satisfy our family that we had safely accomplished our journey; and Rudly, who would never endure any delay, immediately set himself to work to load the guns. He fired twice; then we waited; but the last vibrations of the reports had hardly died away along the rocks before we heard distinctly the discharge of a heavier gun than any of ours, in the direction of Cape Disappointment. This first gun was followed by six others.

Rudly could no longer restrain his joy.

“Men! Men!” cried he, dancing wildly round us. “Men, my father! Are you satisfied now?”

His enthusiasm proved infectious; it communicated itself even to me, and I hoisted immediately both our flags, as a signal more easily discernible in the distance.

We then returned to our family, who awaited us on the shore. They had heard nothing of the seven reports, but had seen our flags waving in the air, and eagerly longed for circumstantial information.

“Well, well,” they all exclaimed at once, “are they Europeans? Englishmen? Is it a merchant vessel, or ship of war?”

We had not much to say in satisfaction of all this impatience; all that we could state as certain was the presence of a vessel upon our shores. It was with difficulty I could make my children



listen to the grave and even gloomy suggestions which my prudence dictated. They would not look upon the arrival of the ship in any other light than that of a fortunate event; and Miss Jenny especially, giving full course to her naïve imagination, assured us that it was certainly her father come in search of her, and that God himself had guided him to our island. The young girl's pious confidence pleased me greatly; I willingly smiled at her anticipations, but could not believe they were likely to be realized.

I gave directions that all things should be put in order in the grotto; my three youngest sons, my wife, and Miss Jenny set out for Falcon's-Nest with our cattle; and I and Frederick equipped the cajack for the purpose of making a reconnaissance. In this separation there was something sorrowful and unaccustomed; my good Elizabeth, whom age rendered less trusting than our children, could not restrain her tears, and over and over again she made us promise to exercise the greatest caution in our projected expedition.

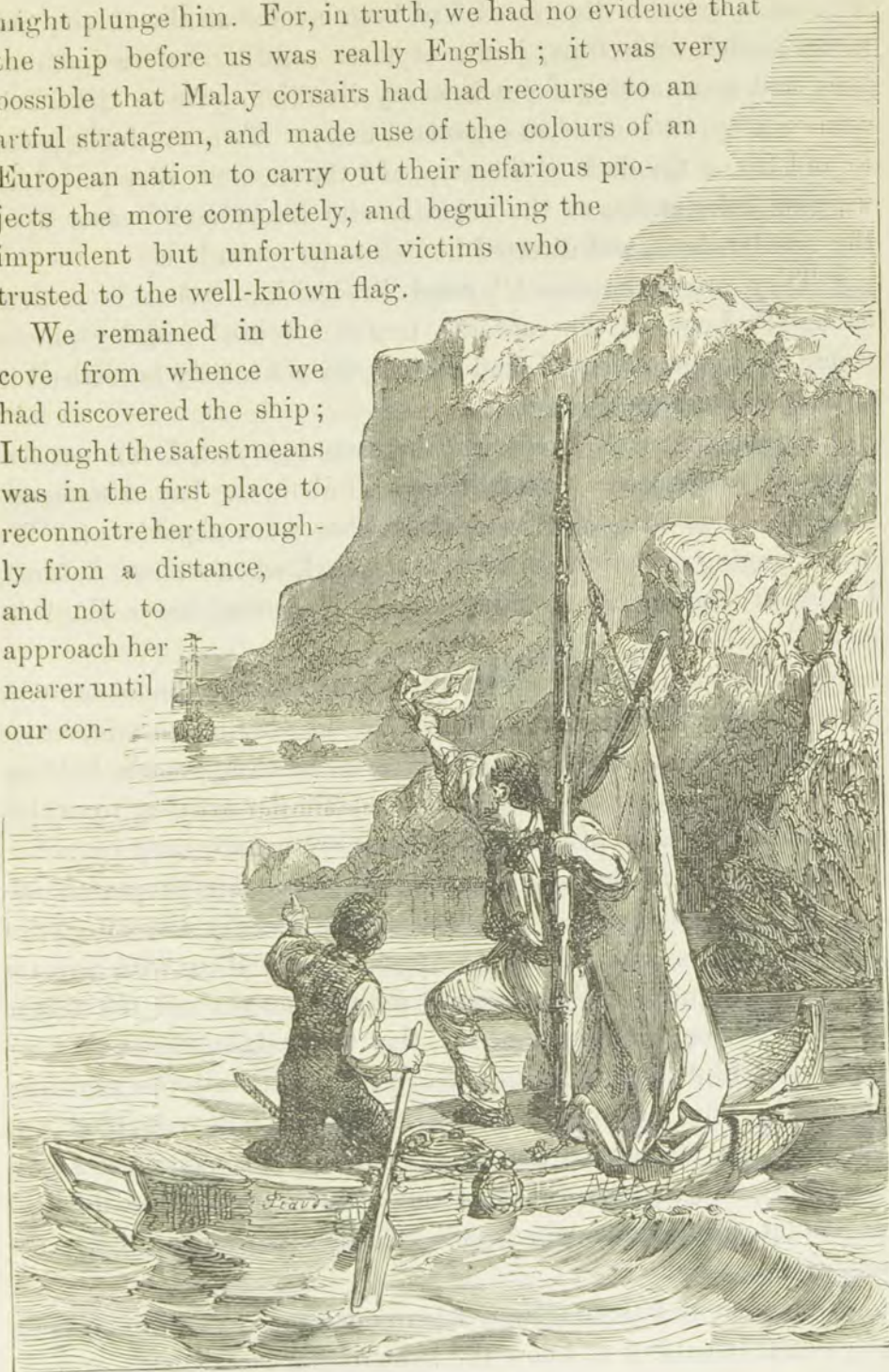
It was nearly noon when we put to sea. At first we followed up the coast-line, but without making any discovery; the waves which rose against the horizon, and which our imagination clothed with all the forms suggested by our hopes, were, for a considerable time, the only sight that greeted us. It was a momentary illusion, which the first breath of wind scattered into foam. Nevertheless, we were so sure of having heard the seven guns, that we did not lose our courage, and continued rowing along the shore, when, suddenly, on doubling the rocky promontory which had previously covered us, we discovered a noble European vessel, reposing majestically on her anchors, with a boat alongside of her, and recognized her, from the flag flying at her stern, as an English ship.

In vain should I attempt to express the emotions which then filled our hearts. We raised our hands and eyes towards heaven, and in this simple action ascended prayer of faith and gratitude to God. Had I been willing to trust Frederick, he would have flung himself into the water and swam to the vessel; but I detained him, representing the danger into which his impetuosity



might plunge him. For, in truth, we had no evidence that the ship before us was really English; it was very possible that Malay corsairs had had recourse to an artful stratagem, and made use of the colours of an European nation to carry out their nefarious projects the more completely, and beguiling the imprudent but unfortunate victims who trusted to the well-known flag.

We remained in the cove from whence we had discovered the ship; I thought the safest means was in the first place to reconnoitre her thoroughly from a distance, and not to approach her nearer until our con-



fidence was re-established.

We could see very clearly all that passed on board the vessel



Two tents, we also discovered, had been erected on the shore; and tables loaded with fruit, joints of meat roasting before immense fires, and men moving about in every direction, gave to the whole scene the appearance of an organized camp. Two sentinels paced to and fro on the deck of the ship, and the moment they perceived us, gave information to the captain, who immediately came upon the quarter-deck, and directed his telescope towards us.

"They are Europeans!" cried Frederick; "that is evident enough! Look at the captain's face and figure! Malay pirates would be copper-coloured, and besides, would hardly be attired in an English uniform."

Though I felt that Frederick's remark was just, I did not feel completely reassured. We still hovered about the bay, manœuvring our canoe with all the dexterity we were capable of. We began singing one of our national songs, and, when we had finished, I shouted through my speaking-tube, "Welcome! brave Englishmen!"

No reply was made, for, as we afterwards learned, the manœuvres of our canoe, and our strange attire, led the English to mistake us for savages. The captain made signs for us to approach, holding out knives, scissors, bead-necklaces, and similar articles, to which the rude inhabitants of uncivilized lands are usually very partial.

We laughed at the mistake, but did not judge proper to advance; we had convinced ourselves of the friendly dispositions of our new-comers, but wished to appear before them with greater pomp and dignity. We therefore shouted once more the magic words, "Welcome, Englishmen!" that they might understand we had recognized them, and then disappeared with all the swiftness we could put into our oars. The joy we felt redoubled our energies; we understood that the morrow would inaugurate a new era for us, and that the limits of our existence would be doubled in extent from the moment our relations with our kind were renewed.

We landed at Falcon's-Nest, where our dear ones awaited us on the shore, impatient to know the issue of our expedition.

Our prudence was approved; Miss Jenny alone, animated with a strong conviction that her father was on board the ship,



could not understand our reserve, and was sorry that we prolonged to the end our little comedy. My wife, on the other hand, specially praised us for not having presented ourselves before strangers in so petty a craft as the cajak.

"That, in truth," said she, laughing, "would have been to give a sorry idea of our forces, and of the importance of our establishment. You must take the handsomest of your boats on such an occasion, that the English captain may not think he has to deal with wretched castaways!"

I could not help smiling at my wife's little vanity: however, it was decided that, next morning, the pinnace should be rigged, and convey all the family, in holiday attire, to the anchorage of the English vessel.

We were on the eve of too great and important an event not to cherish an infinite variety of projects. Each had his own, and all were more fantastic and more extravagant than the others. I, without sharing the enthusiasm of my young companions, was not less pre-occupied, and in a very lively manner, by the probable consequences of the step we were about to take. I could not make up my mind to abandon my patriarchal life—the buildings I had erected—and the establishments which had become dear to me from the thought and labour I had involved; nor did my wife look forward to a fresh voyage except with feelings of excessive repugnance. All our projects, however, were as yet nothing more than dreams; for, in the first place, we had to ascertain the dispositions of the English captain, and the amount of assistance he might be willing to afford us.

We spent a whole day in equipping our shallop, and loading her with presents for the captain: we considered it a point of honour to show him that those whom he had taken for rude savages were not unaccustomed to the refinements of civilization.

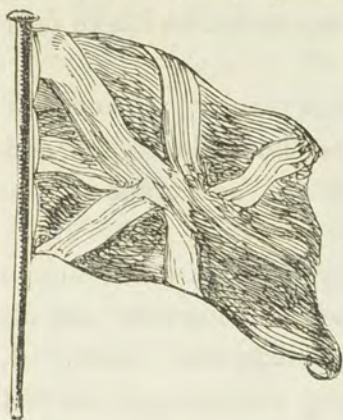
At length the sun rose, and we set sail; the weather was magnificent; we unfurled all our canvas; and Frederick preceded us in his canoe as pilot. My wife and Jenny were attired as sailors; Ernest, Rudly, and Fritz acted as the crew; I, myself, was seated at the helm. We had loaded our cannons and muskets, and, by way of precaution, had arranged on the cabin-deck all our arms of



attack and defence, swords, pikes, axes, and the like. We relied upon the friendly intentions of the English; but, if they deceived us, were prepared to sell our lives very dearly.

As soon as we got near enough to distinguish the vessel clearly, a sudden emotion thrilled through all of us; my sons were silent with expectation and delight.

“Hoist the English flag!” I shouted, with the voice of a Stentor; and in a moment an ensign, resembling the Union Jack which floated from the vessel’s stern, waved from the mast-head of our pinnacle.



If we had become conscious of an extraordinary emotion on approaching an European vessel, the English were not less astonished at seeing a light bark skimming the waves before a favourable wind. Had they been pirates, it is probable that, in this first moment of con-

fusion, we might have taken them at a great disadvantage. But shouts of welcome soon arose on either side, and we exchanged a series of friendly salutes. I joined Frederick in his canoe, and rowed towards the ship to pay our respects to its commander.

He received us with the frankness and cordiality characteristic of English seamen, and conducted us into his cabin, where, over a glass of wine, we cemented our newly-formed alliance.

I related to him, as briefly as possible, the history of our shipwreck, and of our ten years’ residence upon the island. I also spoke to him of Miss Jenny, and asked him if he had ever heard of Colonel Montrose. Not only did our captain know the latter, but it was part of his instructions to cruise in these latitudes, where three years previously the ship *Dorcas*, on board of which the governor’s daughter had sailed, was supposed to have been lost, and to ascertain, if possible, the particulars of her fate. Consequently, he showed the greatest eagerness to see the young maiden, and to bring her acquainted with the good news of which he was the bearer.

He informed us that a hurricane of four days’ duration had



driven him out of his course for Sydney and New South Wales, and had forced him to put in at our island to renew his supplies of wood and water. "You may imagine my astonishment," he said, "when I heard your two signal guns, to which we immediately replied. Next day, fresh firing convinced us that we were not alone upon this shore, but we resolved to wait until some favourable opportunity arose of communicating with the inhabitants. Judge of my surprise to discover here an organized colony—almost a maritime power—whose alliance I solicit, in the name of the sovereign and people of Great Britain."

His concluding words made us laugh heartily, and we cordially clasped the hand which Captain Littleton extended to us.

Meanwhile, the remaining members of my family were on board the pinnace; we took leave of the captain, who, ordering his gig to be manned, speedily followed us, and, in fact, reached our boat nearly as soon as ourselves. There he was received with every demonstration of respect and friendship; Miss Jenny literally jumped with joy at the sight of a countryman, and of a friend who could speak to her of her father.

The captain had on board his vessel an English family, who had suffered greatly from the fatigue of the voyage; it was that of Mr Wolston, a distinguished mechanist, and consisted of four persons—the father, the mother, and two daughters.

My wife begged of Mrs. Wolston to come on shore, and promised her that her family would find at Tent-Town a variety of comforts not to be obtained on board ship. Her invitation was accepted; we took leave of the captain, who would not consent to pass a night away from his crew, and carried with us the Wolston family.

My readers must imagine for themselves the astonishment of the Wolstons when they visited our various establishments, and the pride with which we, on our part, showed them Tent-Town and the grotto of salt, the giant-tree of Falcon's-Nest, Prospect Hill, and all the marvels which were crowded into our narrow territories. In the evening, a frugal repast, animated by the frankest gaiety, re-united the two families under the gallery of the grotto, and my wife took care to arrange, in the interior, the apart-



ments and the beds which were to receive our new hosts for the night.

Next morning Mr. Wolston came to me, and affectionately pressing my hand,—

“My friend,” said he, “I cannot express to you all the admiration which I feel at the wonders you have realized on those shores. The hand of God has been with you, and it is to His mercy you owe the happiness which you appear to enjoy, afar from the strife and tumult of the world—alone with your beloved family—surrounded by all the riches of creation. I have quitted England in search of a place of rest; where can I hope to find a more perfect repose than in this lovely region? If you consent, I shall esteem myself the most fortunate of men in being able to settle down in a corner of your domains.”

Mr. Wolston’s proposal was what I had secretly but ardently desired; I hastened to accept it, and to assure him that, instead of the corner which he so modestly demanded, I was only too ready to assign to him one-half of my patriarchal empire.

“Providence,” I said, “has bestowed upon this spot all its treasures in profuse abundance, and two families—nay, half a hundred—might easily support themselves on its liberality.”

Mr. Wolston then proceeded to inform his wife and daughters of the agreement we had concluded, while I, on my part, conveyed the same intimation to my family; and all the morning was consecrated to the joy and pleasure the good tidings caused.



CONSIDERATIONS of a grave character, however, did not cease to occupy my mind.

The ship now anchored off our shores was the first we had seen for a period of ten years; a similar period might, and probably would elapse, before we were visited by another; it was important, therefore, we should derive all the advantage possible from an opportunity which might justly be called

providential. In other words, ought we to rest satisfied with



allowing Captain Littleton to quit our shores, wishing him simply a successful voyage ?

This question touched the dearest interests of my beloved family.

My wife did not wish to return to Europe ; I myself was too strongly attached to my patriarchal life ; besides, we were both growing old, and fast approaching the age when peril and chance and change cease to be attractive, and all ambitious desires give place to a yearning after repose and tranquillity. But, on the other hand, our children were young ; life for them was only beginning ; and I did not consider myself justified in depriving them, from a feeling of selfish affection, of the advantages to be derived from coming in contact with civilized society. Miss Jenny, too, now she had learned that her father was in England, could not conceal her anxiety to return to him. I regretted the departure of this amiable young lady, and yet it was impossible for me to detain her. Finally, I resolved to discuss the matter with my children, and ascertain their inclinations. I spoke to them of civilized Europe, of the resources of every kind offered by refined society, and asked them whether they would rather embark with Captain Littleton, or see themselves doomed to spend all their lives upon our island.

Rudly and Ernest expressed a strong desire to remain : Ernest, the man of science, had no need of the world while he could wrap himself up in his beloved studies ; and Rudly, the sportsman, found the territory of Falcon's-Nest wide enough for his hunting proclivities.

Frederick at first made no reply, but I saw from his deep blushes that he wished to depart. I encouraged him to speak ; he then confessed that he very much wished to see Europe again ; and his young brother, whom from habit we still called "little Fritz," informed us that he would very willingly accompany him.

As for Miss Jenny, it was needless to question her ; the young girl, for three days, had dreamed only of England.

Thus was the family of the aged pastor dismembered ; two of our sons were about to quit us, and when we should see them



again was uncertain. My good Elizabeth yielded reluctantly to the necessity; she was a mother; she sacrificed herself to the future of her sons, and for all her objection shed bitter tears.

Mr. Wolston, on his part, likewise sundered his family; retaining with him but one of his daughters, while the other continued her route to New Holland.

These family arrangements were painful; but as soon as they were decided upon, I hastened to bring them before the captain of the *Unicorn*, without whose consent they could not be carried into execution.

The captain agreed with sincere pleasure to receive on board our three passengers.

"I give up to you three persons," he remarked; "Mr. and Mrs. Wolston, and one of their daughters; I take three in their places; so that my quota remains unaltered."

The *Unicorn* remained at anchor another week, which we employed in preparing the cargo that was to make the fortune of our voyagers on their arrival in Europe. All the treasures we had collected—pearls, ivory, spices, furs, and other rare products—were packed up and sent on board the ship, which we likewise provided with fresh supplies of fruit, and fresh and salt meats.

On the eve of the day of parting, and after exhausting in one final conversation—not the grief with which our hearts were overwhelmed at the thought of a separation which, alas! might be eternal, but all that my restless affection and experience could suggest as calculated to enlighten and warn my sons respecting the perils of their new career—I placed in Frederick's hands the manuscript containing the story of our shipwreck and our establishment on these desert coasts; I gave him express injunctions to publish it at the earliest opportunity; and this desire on my part, free from all feelings of vanity or love of renown, had no other object or hope than that the work might prove of utility, by furnishing the young with lessons of morality, from the patience, courage, and perseverance a Christian family, in humble resignation to the will of Providence, had exhibited for upwards of ten years under



very remarkable conditions. May a father's heart, some day, derive encouragement from the manner in which we supported our many sorrows—sorrows of no ordinary kind! And, above all, may the young learn from this narrative of our labours and our enterprises of what high value a varied knowledge, however acquired, may prove to him who possesses it, and who has not allowed himself to be diverted from the pursuit of information by the absurd question: "Of what use will this be to me?"

I have not written this plain story as elegantly as a man of letters would have written it, and all my remarks may not be theoretically correct; because we were placed in a wholly exceptional position, and were compelled to do what we could with the resources at our disposal. But it seems to me three things proved of special importance to us in our manifold enterprises: first, an implicit submission to the will of God; second, a determined resolution, which did not flinch before any difficulty; and, lastly, a constant exercise of all the intelligence, strength, and sagacity with which Nature had endowed us.

None of us slept on that last memorable night.

At daybreak, a gun from the ship summoned every one on board. We conducted our children to the shore, where they received our last blessings, our last farewells; then they embarked aboard the vessel; the anchors were raised, the sails unfurled, the flag hoisted at the mainmast-head, and a fresh wind bore afar from us our children!

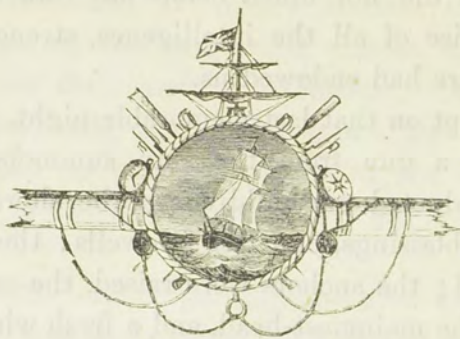
I will not attempt to paint my dear Elizabeth's sorrow; it was a mother's grief, silent but profound: as long as she could perceive the ship which carried away her children, she remained upon the shore, to weep and pray. My sons, Rudly and Ernest, wept also as the sails of the vessel disappeared. As for myself, concealing in my heart the bitter anguish I suffered, and affecting a courage which I did not really feel, I took my wife by the hand, and led her from the mournful scene: we re-entered our abode—oh, how desolate, how melancholy it looked!

I am hastily writing this closing page, while the captain's boat is detained on shore by some final arrangements. In an hour it



will convey these last lines, containing my last blessings, to my beloved sons. May God be with them and us!

Farewell, Europe! Farewell, dear native land, which I shall never see again! May thy inhabitants be ever happy, pious, and free!





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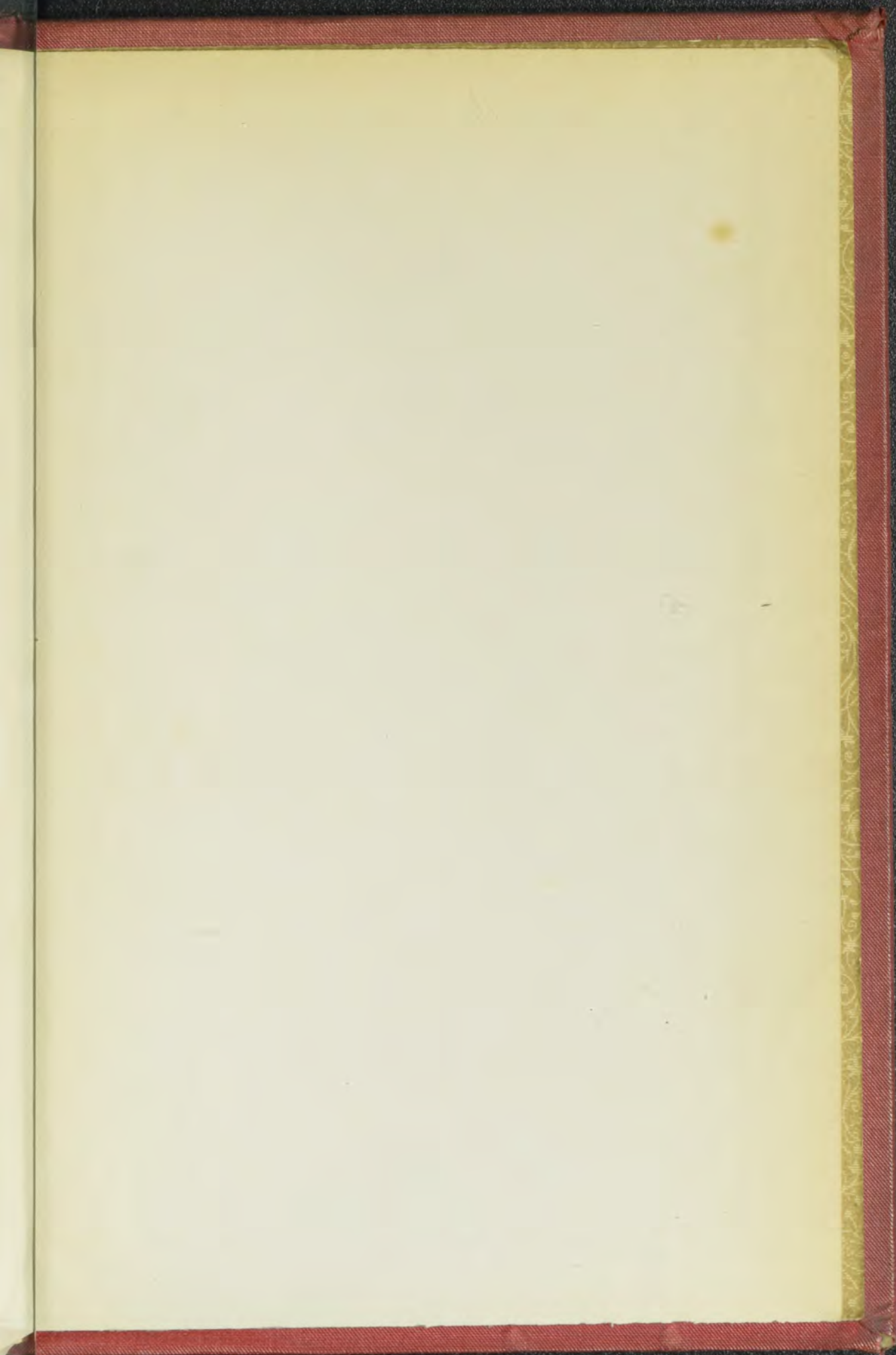
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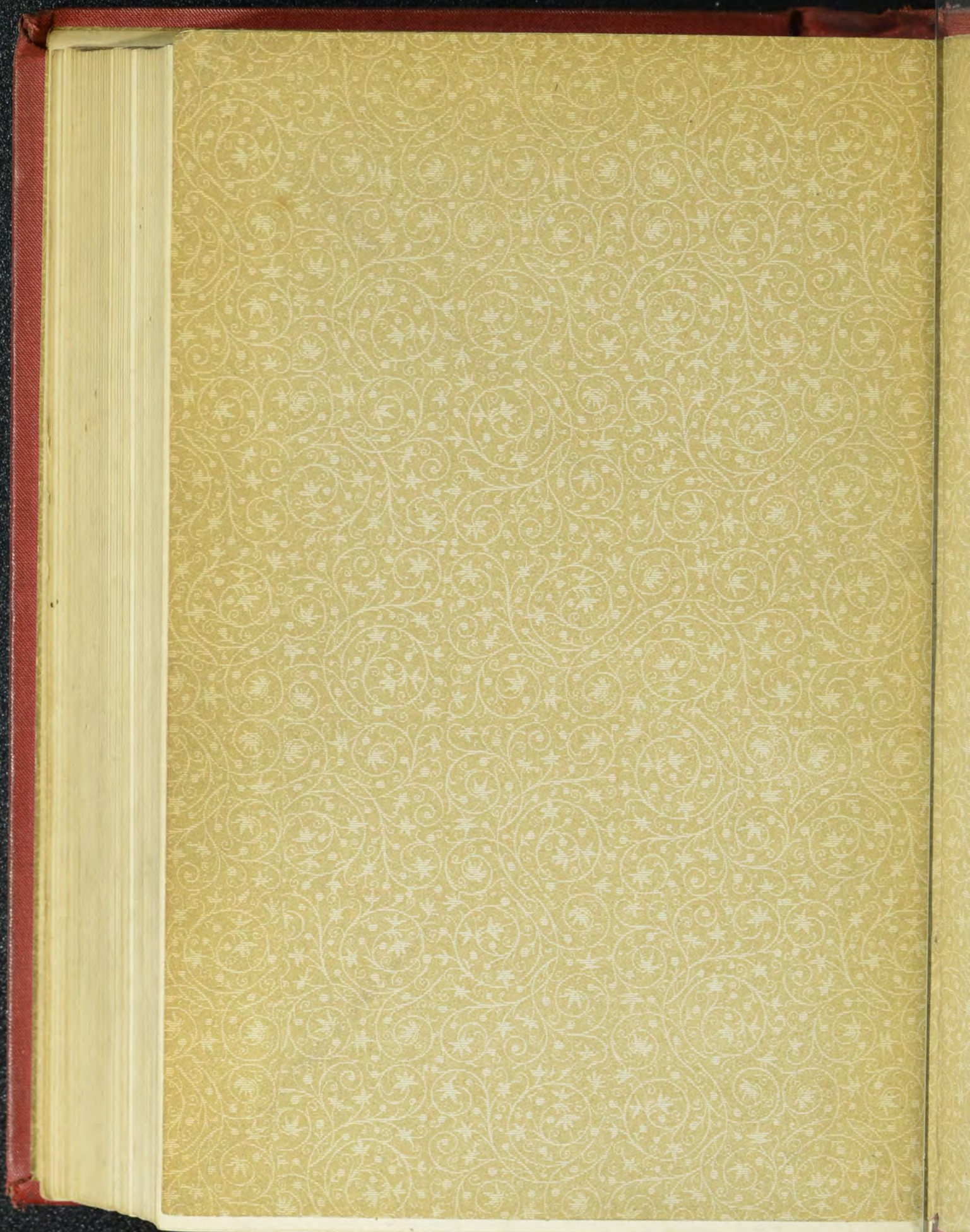
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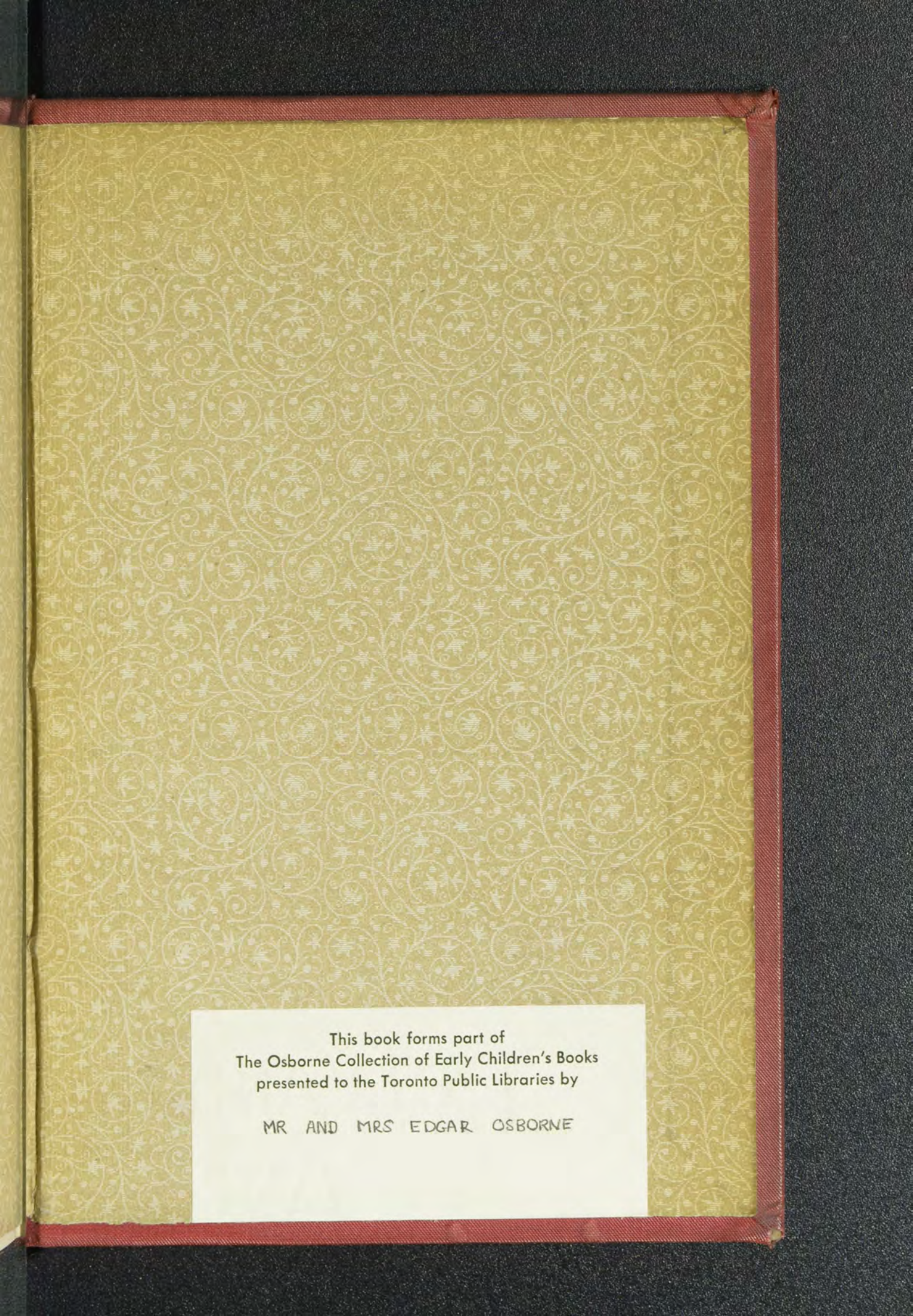












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