THE

MEDICAL PROPERTIES

OF THE

ST. CATHARINES

MINERAL WATERS.

E. W. STEPHENSON, PROPRIETOR.

ST. CATHARINES:
H. F. LEAVENWORTH'S "HERALD" POWER PRESS.

1864.

MINERAL WATERS

OF

ST. CATHARINES, CANADA WEST.

THE remedial value of Mineral waters in the treatment of many types of chronic disease, is at the present day fully recognized in this quarter of the globe, and the history of ages the most remote evinces that it has always been highly appreciated in the old world. The practice of resorting to baths, and potations of natural springs for curative purposes, is both sanctioned and recommended by the Medical Profession at large. Artificial imitations of Waters beyond our reach have also been enrolled among the medicinal agents of our time.

Since the number of visitors to the St. Catharines well has increased steadily every year, and the reputation of the Spa is well established, it is thought that a brief account of the nature and properties of the waters may prove acceptable to Medical Practitioners and invalids.

SAINT CATHARINES, upon the line of the Great Western Railway of Canada, eleven miles West of Suspension Bridge, Niagara Falls, is a beautiful and flourishing town, situated about three miles from Lake Ontario, upon that portion of land which separates the two Lakes, Erie and Ontario. It is easily accessible from all directions, by Railway or Steamboat; distant from Buffalo, N. Y., forty-two miles, by Buffalo and Lake Huron and Welland Railroads; thirty-six miles from Hamilton, via Great Western, and forty miles from Toronto by Port Dalhousie or Niagara Steamer. St. Catharines numbers above 7,000 inhabitants. With an unrivalled water-power at command, and facilities for shipping productions, both by water and rail, of the highest order, it promises to become at some future day the Manchester of its region.

A combination of favorable circumstances, in climate and locality, together with the indisputable efficacy of the waters, have enabled this place, in an unprecedented short space of time, to attain a high rank among the watering-places of America.

THE SEASON

Extends from the first of May to the last days of November. The proprietor of the "Stephenson House" has completed arrangements to enable invalids to use the waters within the building throughout the winter months. A comfortable bathing apartment has been fitted up in the first story of the hotel, and the services of efficient bath attendants and rubbers have been secured. An extensive verandah and long well-lighted halls will permit a sufficient amount of exercise in cold or stormy weather.

THE HOTEL.

The "Stephenson House" may now claim a favorable comparison with any similar establishment upon this continent. In construction, proportions, and general commodiousness, it will be found to afford every requisite for the accommodation of all classes of visitors.

THE BATHS.

The thermal establishment originally constructed to furnish baths for 200 persons daily, has recently been more than doubled in extent, and a variety of douches and vapor baths, after the latest and most approved models, have been introduced. All the important and useful appliances for the employment of water in disease, usually adopted at Hydropathic Institutions, are also provided.

THE WELL

Is an Artesian boring, about 600 feet deep, into corniferous limestone, capable of yielding 30,000 gallons per diem. The water is pumped up by a steam engine into reservoirs upon the summit of the bank. In one of these it is heated by a simple contrivance, without injury to its composition, and then distributed by pipes to the "Cabinets" in the bath-house.

CHEMICAL COMPOSITION.

The silurian rocks of Canada afford a great number of mineral waters, reducible into three principal classes—the saline, the sulphurous, and the acid. The first of those divisions, to which this spring belongs, holds generally in solution Alkaline Chlorides, Chlorides, Iodides, and Bromides of Calcium, and Magnesium, and Sulphates of the Alkaline earths. The following analysis, by Professor Croft, of Toronto University, was effected in the summer of 1853:—

Sulphate of Lime	2.3977
Chloride of Calcium	14.8544
Chloride of Magnesium	3.3977
Iodide of do.	0.0044
Bromide of do.	A trace.
Chloride of Potassium	0.3555
Chloride of Sodium	29.8034
Chloride of Ammonium, Silicic Acid,	A trace.
	50.6075
Loss	1.0670
	51.6745

This analysis establishes a similarity approaching to identity of composition with some of the most important and fashionable German Spas, those of Kreuznach, the muriated saline waters of Wiesbaden and Kissengen, and the waters of Salins, in the Jura, France. In the source of these waters we may discover the cause of the complete and thorough solution and blending of their constituents, so as to produce a perfect and homogeneous whole; they are filtered through miles of solid rock, subjected to additional atmospheric pressure, and stored up for ages in the chasms and caves in which they originally accumulate. These circumstances may account for the fact now very generally admitted, that no solutions artificially prepared will produce equal medicinal effects.

THERAPEUTIC ACTION OF MINERAL WATERS.

The greater number of Mineral Waters produce an excitement which arouses the vitality of the tissues, by communicating to the constitution strength sufficient to effect certain necessary transformations. After the judicious use of Mineral Waters for a few days, what may be designated a thermal fever is set up, marked by sleeplessness or drowsiness, depression of spirits, prostration of strength, loss of appetite, great increase of pre-existing pains, the re-appearance of former distressing symptoms. This condition of the system, managed with prudence and tact, will be gradually dissipated, carrying frequently with it the original disease. After a morbid condition, which has worn out the body and left a sort of languor in the organism, Mineral Waters will be found most useful. Mr. Constantine James says:—"The action of certain Mineral Waters has been compared, with some reason, to that of nitrate of silver. You touch, for instance, the engorged conjunctiva with the stick: the eye becomes red, weeps, its sensibility increases, then it heals. In the same way with the Mineral Water: it acts by determining a substitutive re-action. But if, in place of a simple engorgement of the mucous membrane, you have a disorganization of the eye, the cauterization can only hasten the progress of the disease." When a lesion, therefore, is too profound, we may often substitute, by the imprudent use of Mineral Waters, for a chronic incurable disease, an active state, also incurable, but advancing rapidly to a fatal issue. In order to derive benefit from Mineral Waters, first, the patient must not be too weak for re-action after the *crisis;* secondly, the patient must not be affected with disease of the heart, or large blood-vessels; and lastly, the patient must not be threatened with congestion of the brain, or subject to violent hæmorrhages.

Muriated saline waters are adapted to the treatment of affections of the Mucous Membrane, Chronic Indigestion, Rheumatism, Gout, and Rheumatic or Gouty Neuralgia, Tumors, or Chronic Engorgements of the Viscera, and various Chronic Inflammations of the Uterine system.

SPECIAL APPLICATIONS.

Saline Medicines generally promote the transpositions termed endosmosis and exosmosis; in this way the St. Catharines waters are conducive to the various compositions and decompositions constantly proceeding during life; readily absorbed, they are conveyed by the circulation into every organ and tissue; and by facilitating the excretions, they remove congestions of various internal organs, and exercise a salutary influence in a great variety of disorders. This influence is exerted in a manner intermediate between that of diet and medicine—no artificial combinations of similar ingredients being so congenial to the stomach, so prompt and energetic, but yet so unirritating in their action.

Their taste is intensely saline, and to many persons disagreeable; but all unpleasantness rapidly leaves the palate, there being no *apres-gout.* The Bath, we naturally expect, should act principally by cutaneous

absorption; yet the question of *absorption* of the mineral constituents of any bath is by no means settled, experiments so far having proved unsatisfactory and contradictory. Experience having demonstrated their value, their mode of action cannot be discussed here. It is only in Rheumatism or obstinate skin diseases that baths of very long duration or high temperature are employed, and these are never followed by any permanent want of reaction; on the contrary, the St. Catharines Baths are refreshing and invigorating, leaving after them a delightful, soft and moist condition of the skin. The effects produced by the St. Catharines water, hereafter mentioned, follow the alternate use of baths and drinking, or either alone, occasionally of both combined.

By removing impurities quickly from the principal passages, the St. Catharines water is remedial in local fulness of blood in the liver, spleen and mesenteric glands, and other contents of the abdomen. On this account, in the various diseases consequent upon the fevers of marshy districts, or in malarious poisoning, the eliminative properties of the waters have proved eminently beneficial. In obstruction of that particular function, the origin of so much suffering to females, they are most useful, as long as the reproductive forces are not too much sunk.

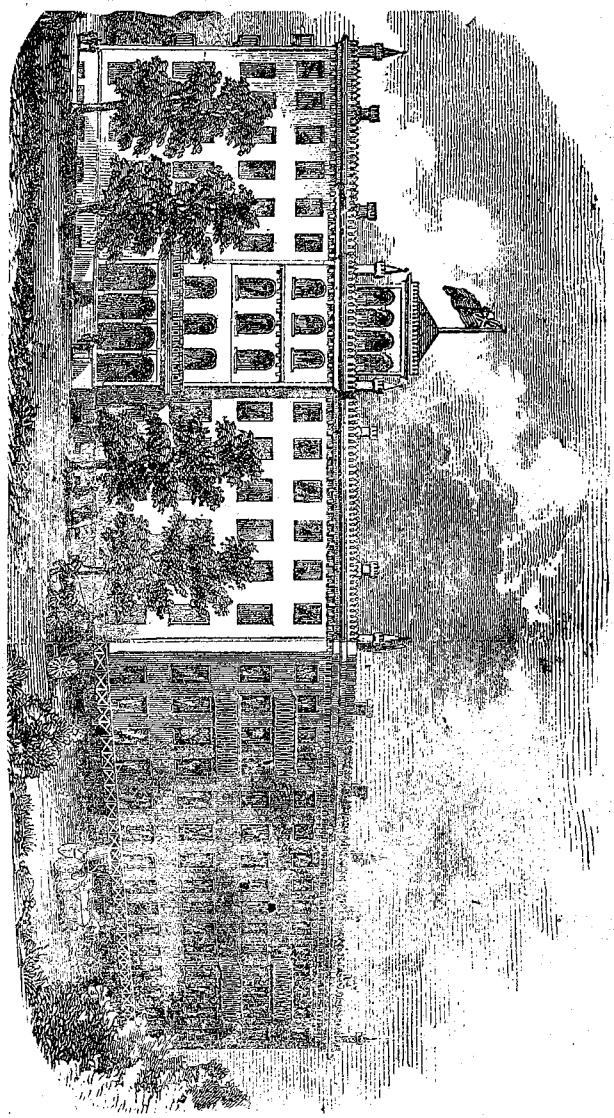
In the treatment of Gout and Rheumatism in all its forms, the St. Catharines water has acquired a well-merited celebrity. Neuralgia, arising from the presence of the morbific matter in the circulation, which gives rise to those diseases, or from exposure to miasma, has been very generally promptly cured.

THE CONCENTRATED WATER.

This mother water resembles much the mutter lauge supplied by the salt-works as Kreuznach. It is one of the most certain diureties discovered; externally, it is also a mild and efficacious counter-irritant. The bath, and cautious internal use of this prepared water, is used in all diseases springing from a scrofulous origin. In many cases of glandular and cutaneous affections, scrofulous joints, and maladies of the eyes, nose or ears, a course of this water has produced a total change in the appearance, and restoration to health.

In conclusion, invalids must not be discouraged if these happy results do not follow as promptly as they may have been led to expect. Occasionally these waters, as well as all the remedies it has been permitted to man to adapt to the relief of his physical sufferings will fail; often their influence is only felt after ceasing from their employment; and sometimes in obstinate cases, the full benefit can only be derived by their judicious continuance for a number of years. The free use of the water, either internally or as a bath, immediately after the fatigues of a long journey, is positively unsafe. Drinking should always be commenced with in small quantities, and, when possible, under the direction of a Physician. Believing that Mineral Waters offer useful resources to medicine, this effort has been conscientiously made to submit briefly the claims of a Watering-place already popular, to the notice of those engaged in the search for relief of their own infirmities or those of others.

ST. CATHARINES.



STEPHENSON HOUSE.

CANADA MINERAL SPRINGS.

CANADA WEST.