

# Wh the World's Peaceful Whar for Prosperity Case Ammunition is Always Used by the Great Armies of the Fields 



## COURIER <br> "A MESSENGER OF IMPORTANCE"

THIS CASE COURIER embodies all that is implied in this definition. To farmers and threshermen; to those interested in road building machinery and in automobiles; to you who live close to the channels of trade and to you removed from the daily contact with the markets of the world, we send this short message that you may keep closely in touch with the activities of this company, whose products your family has known for generations.

Conditions-ways of doing things-are changing rapidly. Not long ago the chief power on the average farm was "elbow grease." Then the one traction engine in the neighborhood belonged to the threshing outfit, and it stood idle most of the year except during the threshing season. If one had suggested at that time that this engine be used for plowing in the spring and fall, for hauling, or for one of the "thousand-and-one" uses for power on the farm, his suggestion would have been unheeded. Now it is not so. Every one knows that idle machinery is waste. From the days of "elbow grease" to these of the tractor and the tractor gang plow, all along the line methods are changing. In result farm profits are increasing, and with these profits have come automobiles. With automobiles are coming good roads.

Keeping just ahead of this procession is CASE, offering to the machinery buying public, products which for generations, in fact since 1842, have set the pace of progress.

Every farmer is interested in the last word from CASE for the reason that it gives him reliable information on the most recent successful application of improvements in the farm power world. Many send for our catalogs year after year, long before they can buy, only to post themselves on the latest developments in the lines which interest them. Then when they buy, they buy intelligently. They buy CASE machinery.

This booklet tells you only briefly about each kind of machine bearing our name. Our separate catalogs describe in detail their designs and methods of construction, with complete specifications and full information.

They are handsome books, too, with lots of illustrations. We will gladly send a copy if you will only ask us on the enclosed post card.

Keep in step with CASE.


## CASE STEAM TRACTORS

THE FIRST general application of motive power was through the use of steam. Since the day when Watt noticed the cover on the family teapot riding uneasily, down through the years when Robert Fulton's ingenuity harnessed this energy to make it do man's work on the water, to this very day, steam has been the fundamental source of power. There are, of course, some localities where its use is not practical. There we find worthy substitutes. For general use, however, it is still unsurpassed. During the centuries that it has served man its action has been carefully studied, and now its application has become so universal that steam engines have reached the maximum simplicity and efficiency.

For years CASE Steam Engines have been acknowledged the preëminent farm power. These engines are built in sizes to meet the needs of every farmer, from the one who thinks in terms of quarter-sections to the one who farms intensively. From the 110 horse-power to the 30 , these machines throughout the farms of the world have added materially to the profits of their users.

Which one of these, the $30-40-50-65-80-110$, fills your needs?
Our catalog describes in detail their design, their materials and their construction. It illustrates them thoroughly. It gives their specifications and prices. You are interested in steam engines. You will then find it worth reading. May we send you a copy ?


## CASE 60 GAS AND OIL TRACTOR

THERE are some localities where the scarcity of water and the cost of coal have necessitated the use of a less expensive fuel and the development of another kind of power than steam. The internal combustion engine-the gas engine-has met this need. Some have failed, and with them their owners. But do not judge the internal combustion engine as a power, by its failures. Judge it by its successes. Judge it by the machines put out by such a concern as CASE, whose tractors have to make good. Because of our reputation we must be sure of our product before it goes into the field.

We are in business to stay-to build and to sell machinery that makes for us staunch friends and moderate profit from our investment.

It was several years after gas tractors had been put upon the market by some manufacturers that we felt that we, or anyone else, had developed a tractor worthy of our name and reputation. Not that we were slow, as over twenty years ago we began experimenting with this form of power. It was only the following of our policy-"Better be safe than sorry." We build to satisfy our customers. A contented customer we know is a great asset.

In offering this powerful 60 Gas and Oil Tractor we back it by our confidence in this machine to do all that we claim for it. If it will do your work, we will tell you so; if it will not, we will be equally frank.

Are you interested in Gas Tractors?
J.I. CASE THRESHING MACHINE COMPANY, inc., RACINE,WIS., U.S.A.


## CASE 40 GAS AND OIL TRACTOR

THIS tractor is designed for work on the average farm. It is built to drive $28 \times 50$-inch threshing machines, to pull four or six plows, depending on the soil, and to do general work in proportion.

We had occasion recently to prove to a man that this tractor, despite the fact that it weighs more than another tractor, properly considered, is really lighter. This may sound strange, but it is true. In absolute pounds this 40 weighs more than the other one ( 14,000 pounds against 12,500 pounds). But this is not the standard by which to judge. Weight should be based on pounds per horse-power developed, or pounds per plow pulled. Figuring on this basis, this 14,000 pound tractor is lighter than the one weighing 12,500 , because it pulls six plows and develops 42 horse-power, while the other pulls only five plows and develops only 35 horse-power. Thus it weighs $2,3331 / 3$ pounds per plow pulled (work done) compared with 2,500 of the "lighter" machine, and 333 pounds per horse-power against 357 per horse-power. Such distinctions as this are not always brought to light in the purchase of machinery. It is, however, the only fair way to answer such questions as this.

For simplicity, safety, accessibility, ease of manipulation, and efficiency in operation, we believe that we can give you information to show that this tractor has no competitors in its class. It's a big statement, but it's just as true as it is big.


## CASE 25 GAS TRACTOR

THIS is the smallest Gas Tractor which we build. The illustration here, shows its compactness and cleanness of line. The appearance of this tractor indicates the hand of a master designer; its performance demonstrates the hand of a master builder. This is the size tractor that is creating a lot of interest in the mind of the farming public. We know of no better way to praise this small CASE machine than to compare it with the host of those who would compete with it. You have only to watch the others, to listen to them, to see their work, to be convinced that they are poor economy; that the wise buyer insists on such as this CASE tractor, whose excellent design, efficient operation, and all around value make it the leader in the field of farm power. Of course it costs somewhat more, but the dollar-for-dollar value which you get in this tractor far exceeds that of those that are cheaper. In this question of price you are up against the same condition as that of weight discussed on the previous page. Better by far to buy one good article than several imitations!

This tractor will pull four plows under average conditions, and do other work in like proportion. As a general purpose power plant on the smaller farm, these coming years will see it awarded even more than in the past, the blue ribbons of excellence.

Our catalog on Gas Tractors is full of valuable information and illustrations of the various parts of CASE Gas Tractors. Do you want one?


CASE PORTABLE AND SKID ENGINES

IS it a Portable or Skid Engine that you are thinking of buying? CASE Portables are built in sizes from 18 horse-power to 80 . They are built in our own shops, and receive the same thorough care and attention that is devoted to our largest tractor. They are thoroughly tested before leaving our factory. In our laboratory every bit of raw material that goes into CASE machines is tested by physical and chemical analyses. Our own chemists are daily rejecting stuff that is unfit for CASE standard-not strictly up to our specifications. Thus you are protected at the very beginning. Our finished products must pass the eagle-eye inspection of a corps of men whose jobs it is to be sure that the CASE standard is maintained in every part, small and large.
For driving small threshing machines, wood saws, grinders, corn shellers, etc., and all such jobs to be done at different parts of the farm, these Portables are wizards of efficiency.
CASE Skid Engines are built in sizes, Simple $18-30-65$ and 110 horsepower; Compounded 40 50 and 80 . Tell us your needs and we can undoubtedly cite instances of the most cconomical operation of these Skid Engines in work similar to that you have to do.

J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE, WIS.,U.S.A.

## CASE

 FOUR WHEEL STEEL ENGINE TENDER

FOR your threshing or road building outfit, you must have a water tank. Here is a CASE tank that has a capacity of 12 barrels, or 378 gallons. We also make a 16 -barrel tank, that holds 504 gallons. This tank, or tender, is of No. 12 gauge steel. The fuel hopper sides are of steel, with three braces on the sides.

With pump and sprinkling device the usefulness of this tank is not confined to the hauling of water to the tractor, but, like all other CASE products, its general purpose feature makes it an all round necessity for any farm.

## CASE GASOLINE TENDER

A
ND for your Gas Tractor equipment we make a 16 -barrel tank, of galvanized sheet steel, with seams joined with tinned rivets. These are spaced closely, and soldered, to be sure that the joints are leak-
 proof. The rivet heads on the inside too are soldered. A funnel is built into the tank, for convenience in filling. The contents are drained off by means of a valve located at the rear. The pump built for this tank has a capacity of 50 gallons in three and one-half minutes.
J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE,WIS., U.S.A.


## CASE STEEL

## THRESHING MACHINES

EVERYONE will admit that for results produced; for fast, clean, economical threshing; for work that is satisfactory year after year, the CASE machines have justly earned the splendid reputation that they have gained throughout the world.
Then, too, these machines are practically proof against fire and weather. One Sunday last July, one of the men on a farm in Nebraska was smoking in the barn, with the usual result. The farmer's loss from this fire was only partly covered by insurance; but there stood his CASE separator, towering above the mass of charred ruins, almost untouched; in spots a little burned from the flames, a little smoked, the belts and racks gone; but the machine-the investment-practically as good as new.

What would have been left of a wooden machine?
This is what the wise farmer is realizing more and more each year. CASE threshing machinery is your best insurance against loss by fire.

And the same holds true of the weathering of this machine. We know of some that have been caught in floods; some that have gone through cyclones; some that have stood out all winter, and yet were right on the job when needed.

Besides being built with these factors of safety, CASE separators produce for the farmer and thresherman the very best results.

Let us tell you more of these, your only wise purchase in the field of threshing machines. We are getting near the bottom, and we must be brief, but our catalog will tell vou the story from start to finish.

Want one?


## CASE <br> GEARLESS <br> WIND STACKER

THIS Stacker consists of a large steel hopper, built on an angle of about 50 degrees, which receives the straw from the straw rack, a fan which drives the straw into the chute and onto the stack. This Stacker is driven with a straight belt direct from the cylinder. It builds a perfect stack without requiring the moving of the machine. When it is necessary to move the machine the Stacker folds easily and quickly. The complete mechanism of this Stacker is described in the catalog, together with information on the CASE-SATTLEY Attached Stacker and the Common Folding Stacker.

## CASE STEEL FEEDERS

THESE Feeders are built for use on CASE machines only. By using this Feeder, the efficiency of your threshing machine is increased in a single season more than enough to pay for itself. The next chance you have, watch it handle, without a murmur, the great quantities of grain that are thrown into it. Its design and construction, together with that of Spokane Feeders, Extension Feeder Carriers, etc., etc., are carefully given in our Threshing Machinery Catalog. If you want, we will send you a copy.

J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE, WIS., U.S. A.


## CASE GRAIN HANDLING DEVICES

THESE attachments are made all of steel and malleable iron, and are accurate and reliable in the work which they do and record. Briefly described, they are as follows:
No. 1 Automatic Grain Register is furnished with a conveyor to deliver grain on either side of the machine, and may be equipped with bagging spout or two wagon loading spouts.

No. 2 Register is used where field threshing is common and crops extensive. The grain is generally delivered in high wagon boxes, loose or in bags, and hauled direct to the elevator.

No. 4 Bagger. This machine does not weigh the grain; it simply delivers it into the bags on the ground, and keeps count of them.


It may be used on either side of the machine.

No. 5 Loader
 has a high elevator and a long delivery spout, to carry the grain to either side of the thresher.

No. 6 Loader, being low, is suitable for bagging the grain on the ground or running it into wagons.

These attachments are necessary for the mutual welfare and protection of the grain grower and thresherman, as their accuracy is acknowledged and their records unquestioned.

J. I. CASE THRESHING MACHINE COMPANY, iNC., RACINE, WIS.,U.S.A.


## CASE CORN SHELLER AND CASE HUSKER-SHREDDER

IF you are considering a husker or corn sheller, will you advise us ? We will then send you printed matter which describes minutely the construction and operation of these machines that have been found by many farmers to add so materially to their yearly sources of revenue.

A Husker-Shredder will increase your income two ways; first by doing additional work in the fall and early winter, and second by keeping busy your power that otherwise might be idle. The CASE Husker-Shredder is built not only to separate and clean the grain and reduce the stalks, blades and husks to stover,
 but it is built with great precaution for the safety of the operator.

The safety and protection of those who work in and around moving parts should always be a first thought in the successful design of any machine. Safety First was started years ago by us in our motto-"Better be safe than sorry'".

## CASE BALING PRESSES

REGARDLESS of the size of your farm you will find it very much to your profit to own and operate a baling press-horse-power if your farm is small, belt power if large. In the first place it reduces the storage space required for
 hay, and in the second it reduces the time required for handling this feed; and in the third, if you want to sell your hay it commands a higher price baled because city markets absolutely demand baled hay. We have just issued a new catalog on CASE Baling Presses, which shows them in detail-the $14 \times 18$ inches, with a capacity of $31 / 2$ to 5 tons per hour, and the $17 \times 22$ nch, with a capacity of 4 to 6 tons per hour; and our Sweep Power Baling Press with a capacity of $1 \frac{1}{2}$ to $21 / 2$ tons per hour. In this catalog we have further described one of the latest CASE labor saving devices, he CASE Hay Fork, an attachment that saves you the labor of two men. It costs you less than you would have to pay these men for one month's work. The attachment consists of a harpoon-fork and winding drum, with a cone clutch and operating gear.

If you want to save money, you want a CASE Hay Fork Attachment.

J. I. CASE THRESHING MACHINE COMPANY, INC., RACINE,WIS., U.S.A.


## CASE ROAD-BUILDING EQUIPMENT

THERE is no farmer who does not feel the bad effects of bad roads and the good effects of good roads. If not already here, the day is very close at hand when your community will be called upon to do its share in making its highways passable at all seasons of the year. If you are a county official you will be held responsible for the expenditure of this appropriation for the most efficient road machinery. If you are a taxpayer you have a right to know that the taxes which you have paid for road work are spent most judiciously. In other words, everybody wants to know of the efficiency of the various types of road machinery.

The CASE line of Road-Building Equipment is complete. Foremost in this line is the CASE Ten Ton Steam Road Roller, which has produced such excellent results because of its simplicity, ease of handling, and economy of operation. In road building it is necessary that the operator have a clear view of his work ahead and a ready response to the slightest turn of his wheel. These are essential features of the CASE Road Roller, which has been most popular in country work because most of the culverts and bridges will not stand with safety, a heavier roller.

This machine is more than a roller. Many times in road building you need belt power for driving a rock crusher or concrete mixer. These power needs are at your immediate disposal in the CASE Roller.

J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE,WIS., U.S.A.


## CASE ROAD BUILDING EQUIPMENT

THE CASE line of Road-Building Equipment is complete, and consists of Rock Crushers, Elevators, Screens and Bins, Graders, Drags, Scrapers, Road Building Wagons, Scarifiers, Barrows, Plows, etc., etc., all built to CASE standard. You know the security and satisfaction that this carries to you purchasers.

Our Graders, for example, are designed particularly for the working of dirt roads. There no longer is need of delaying your road improvements until you can have the more expensive type of modern roads, because with a CASE Grader and a CASE Steam or Gas Tractor you have an outfit that will keep your dirt roads in excellent shape at all seasons.

By the way, have you seen our Steering Device, which permits a tractor to pull two graders, one on each side of the road? By this means your time cost is split in two. Figure this economy in real money.

This and the other labor saving devices of the grader are described and illustrated in full, together with the points of our other lines of road building machinery in, what we are told is, the handsomest road machinery catalog yet issued.

If you are a public office holder, your official capacity demands a copy. If not, your interest in the question should stir you to write for one.

J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE, WIS.,U.S.A.


## CASE-RACINE TRACTOR GANG PLOWS

WE know your needs in a tractor gang plow, because we have followed this problem, from the experiences of the plowman, from the point of view of the tractor in its relation to the efficiency of the plow, and from that of the factory that produces efficient plows. Here are some of the things you need, some of the things featured in the CASE-RACINE Tractor Gang Plow. In no other plow do you find all of these elements.

1. Each plow is drawn by a powerful spring attached to a rigid frame; thus, when the point of the share comes in contact with an obstruction, the spring yields and absorbs the shock.
2. As the bottom halts, the gauge wheel is automatically cranked forward and down, raising the plow bottom. As soon as the plow bottom is released, the tension from the spring is released and the bottom goes back to its normal position.
3. By our Automatic Dodge the bottom is raised over and to the side of any obstacle encountered, thus missing what otherwise would have injured it.
4. When the obstruction is passed, and the pressure is released, the Side Tension Spring forces the bottom back to its normal position, and its work is resumed as usual.

Then, such things as the Beam Hitch and the Cast Break Pin, the Automatic Lift, the construction of the gear wheels, levers, etc., all have a direct bearing on the real value of your plow. These features we illustrate in detail in our Power Plowing Catalog.
J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE, WIS.,U.S.A.


## CASE CARS

FOR 1915 you are going to be able to buy automobiles for almost any price that you want to pay. We want, however, to remind you that in motor cars you cannot be governed alone by appearance or specifications. There are many cars that look just as good on paper as some at higher prices, and many are inclined to say: "What is the use of paying $\$ 1350$ for a Case 25, for instance, when I can buy for $\$ 100$ or $\$ 200$ less?"

Again we say-"Better be safe than sorry."
CASE cars are built of that material that experience has demonstrated to be the very best for each part. They are built by a company whose reputation for honest production and honest sales is nation wide. With these cars you take no chances. They may cost you a little more at the outset than some that seem to be just as good. But if you distribute your cost over the length of the life of your car, you will find that CASE cars are wise economy. Buy a CASE car and you are assured that you have made the wisest investment.

Our new catalog is ready for you. It tells you in detail just what you want to know about these cars, and why.
J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE,WIS., U.S.A.


## CASE SHIPPING FACILITIES

LOOK on page 46 for the list of our branch houses. Remember that at each one of these distributing points we keep a stock of repairs and supplies for quick shipment.

Think what this means! With this extensive organization for service you users of CASE machinery have for your convenience, facilities to produce the quickest action. If you need some part for one of your machines during the busy season, it means money in your pocket to be able to get it in the least possible time. Every minute lost by unnecessary delay is money wasted.

To be "right on the job" when service is required is the function of this department in each one of our many branches. You do not have to send to some distant point for your parts or supplies. A CASE branch is surely within easy reach.

This feature is only one of the many that make for the complete satisfaction of CASE customers.
"Better be safe than sorry." If you buy a tractor or a monkey wrench, you will surely be pleased if you buy of CASE.
J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE, WIS.,U.S.A.

## CASE ENDLESS CANVAS BELTS.

On account of so many cheap imitations of the Standard Brands of stitched Canvas Belting, we have decided to furnish, under our own brand, the CASE THRESHER BELT. These belts are made according to specifications, by one of the oldest and most reliable manufacturers of this class of goods. A special width of high grade cotton duck is woven for each width of belt, thus giving two selvage edges and insuring a true, even-running belt.

A superior quality of high test cord is used in stitching; the rows are perfectly straight the full length of the belt with double rows on each adge, Insuring a smooth, even surface and increased traction power.

By an improved method of drassing our belts, they are rendered proof against water, steam or oil, and are not affected by heat or cold, retaining their flexibility under all conditions.

Particular attention is given to the splicing of these belts.



Endless belts require three feet to make the splice, therefore these belts will measure three feet short. Each belt fully guaranteed.

Any belt claimed defective must be returned to Racine, Wisconsin, for inspection, freight prepaid, within sixty days after first being used by the operator.

Any belt claimed defective must be returned to Racine, Wisconsin, for inspection, freight stances, be allowed as defective.

## CANVAS BELTING FROM THE ROLL.

This is the same grade of belting as is used for the "Case Endless Belts," and we have endeavored to make the price as low as consistent with the quality of the belt.

The following widths only will be furnished:
 Per Foot . . \$0.09
6-ply
Per Foot. .
$.75 . .90$

## ENDLESS RUBBER BELTS.

The LION BRAND of rubber belting is the most popular. Being constructed of heavy belt duck and the best rubber, insures superior wearing qualities.
Cipher.



## RCBBER BELTING FROM THE ROLL.

This class of belting can be used in all kinds of weather, and on account of its smooth metallic surface the contact between the pulley and the belting is mora perfect, thus obtaining the maximum power.


## LEATHER BELTING.



Only one grade of leather belting is carried in stock by us, and that is the same as used on all Case machinery. It is of the best quality of oak-tanned, 16 ounces to the square foot.

|  | $11 / 2 \mathrm{in}$. | 2 in | $2 \% \mathrm{in}$. | 3 in . | 4 in. | 5 in. | 6 in. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Per Foot | \$\$0.13 | . 15 | .25 | . 30 | . 35 | . 50 | . 60 |

## LEATHER COVERING FOR PULLEYS.

Sold in the following widths only:

| Per Foot | $\begin{array}{r} 214 \mathrm{in} . \\ . \$ 0.16 \end{array}$ | $\begin{gathered} 4 \cdot 1 / 4 \mathrm{in} . \\ . \mathbf{3 0} \end{gathered}$ | $\begin{array}{r} 51 / 4 \\ .35 . \\ \hline \end{array}$ | $6^{3} / \mathbf{4 5} \text { in }$ | $8 \operatorname{in}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |

[^0]CASE WATERPROOF BELT DRESSING．


Cipher．
Gaseous．．．．．．．． 5 lb．can．
Is especially adapted for use on stitched canvas and leather belts，and if thoroughly ap－ plied renders them soft，pli－ able and water proof；pre－ vents slipping and greatiy in－ creases their driving power and durability．

Price．

CUT RAWHIDE LACING．


The＂Case Special＂brand of cut rawhide lacing is warranted in every way a first－ class lace leather．

Put up in bundles of 100 feet，cut full length of hide． Cipher．Price．
Gnostic ．Width $5-16$ in．，per 100 ft ．．$\$ 1.55$
Goad ．．．．Width $3-8$ in．，per $100 \mathrm{ft} . .1 .85$
Gobbet ．．Width $1-2$ in．，per 100 ft. ． $\mathbf{2} .30$

## UNIVERSAL BELT FASTENERS．

（Pat．Applied For）
For leather，rubber or can－ vas belting．No cutting of belt；easily applied；use ham－ mer only．Fut up in pack－ ages containing assorted sizes． Gobble．．．．Price，per box of fifty ．．．$\$ 1.30$

## CLOUT NAILS．

This is a style of nail that is difficult to obtain from local hardware stores，and in－ asmuch as it is in common use on all threshing outfits，we carry the following sizes for the convenience of our customers： $3 / 1 / 8,1,11 / 4,11 / 4$ and $11 / 2$ inch． Price，per 1 b. ．．．．．．．．．．．．．．．．．． 80.15

## NAILS FOR COVERING PULLEYS．

We have made especially for this our－ pose a $3 / 4$ inch oval head，double annealed lining nail．
Irice ．．．．．．．．．．．．．．．．．．per lb．，\＄\％．15

CHAIN BELTING．
Malleable and Stee Chain Belting and At． tachment Links．

Cipher．


S－5．A－2－55 S－1． Gash．．．No． 32 ．．．．．Per link，\＄0．01 Gashed．．．No． 32 Steel．．．．Per link，．01 Gasify．．．No． 3 ．．．．．．．Per link， Gassy．．．．No 4\％．．．．．．Per link， Gastric．．．No． 45 ．．．．．．．．Per link， Gastric．．．No．．No． 38 W゙．Steel．Per link， Gather．．．No． 51 Steel．．．Per link． Gathering No．52 ．．．．．．Per link， Gatudy．．．No，s？steel ．．Per link， Gauged．．No． 55 Kteper ．．Per link， Gauging．．No．55 Steel ．．Perlink， Gobang．No． 62 Gobar．．．No． 62 w．Steel．．．．．．．．
 Gauze．．．S－5 ．．．．．．．．．Per link， Gavel．．．．K－1－35 ．．．．．．Per link， Gemara．．K－1－45 ，．．．．．Fer link， Gemmate．K－1－5：…．．．．Per link， Gemmule．A－9－亏す，户írht．Per link， Glucase．A－․ 5 s，Left ．．．Per link， Glucina．． 07 \％．．．．．．．．Per linfl． Gobioid．． 88 Steel．．．．．．Eer link，

## SEPARATOR ROPES．

These ropes are made from the best crucible cast steel wire and are com－ posed of six strands（nine－ teen wires each），hemp center and are fitted with thimbles and hooks as shown in cut．

They have proven to be a very useful article for the thresherman in getting out of bad places along the road，or in case of fire，to remove the separator quickly． Cipher．
Gerusia．．．．．Size $8 / 8 \mathrm{in} . x 60 \mathrm{ft} . . . . . \$ 7.75$

## WIRE HOISTING ROPE．



This rope is made expressly for light hoisting and threshing $p$ u $r$－ poses．It has hemp
centers and six strands of nineteen wires each．
Cipher．
Cipher．．．．5－16 inch．．．．Per foot，\＄0．05 Geryonia ．．．3－8 inch．．．．Per foot，． 07 Gain ．．．．．．．1－2 inch．．．．．Per foot，． 08

## MANLLA ROPE．

We furnish genuine Manlla Rope at the following prices：
$5-16$ in．diam．Manila Rope，per ft．$\$ 0.01$ $5-8$ in．diam．Manila Rope，per ft．．03 $3-4$ in．diam．Manila Rope，per ft．．04 7－8 in．diam．Manila Rope，per ft．．05 $\begin{array}{lllll}1- & \text { in．diam．Manila Rope，per } & \text { ft．．OG } \\ 3-16 & \text { in．diam．Sisal } & \text { Rope，per ft．．O1 }\end{array}$

## WIRE ROPE CLAMP．

From the illustration you will observe the peculiar shape of these clamps which insures a strong and substantial fastening． Size ．．．．．．．． $3 / 8$ in． $1 / 2$ in． $5 / 8$ in Price ．．．．．\＄0．10 ． 15 ． 15


## STEEL CABLE CHAIN．

 the best mild steel and constructed of short，straight links．The sizes given indicate the diam－ eter of rods from which chain is made and not the size of link．
$\begin{array}{llllll}\text { Size } \ldots \ldots .3 / 16 & 5 / 16 & 7 / 16 & 1 / 2 & 5 / 8\end{array}$


## CONNECTING OR REPAIR LINK

Made to withstand the same strain as a chain with the sama size links． Attach the repair link， rivet together and the job is done．Carry a supply in your tool box and their value will soon be appreciated．
$\begin{array}{llll}\text { size } \cdots \cdots \cdots \cdot . .5 / 16 & 7 / 16 & 1 / 2 \quad 5 / 8\end{array}$ Price，each ．．．．\＄0．15 ．15 ．15 ． 20

## KING SEAT SPRING．



Strong，Economical， Durable．One pair holds up 1，000 lbs． The ordinary $11 / 9 x$ $2 \times 26$ flat elliptic spring goes flat with weight of 650 pounds． Only four bolts re－ quired to apply a set of King Seat Springs． 18 parts less than flat seat spring． Cipher．
Glauclum ．．．．．．．Per pair
Price．

## CASE TANK PUMP.

THE NEW CASE TANK PUMP is a radical departure and a great improvement over any tank pump heretofore offered. By removing one nut all of the va!ves are readily accessible. The pump is very compact and neat in appearance. Owing to the lever arrangement. the pressure on the rod is all exerted in a horizontal direction and the stuffing box and plunger are not worn out by vertical pressure. The clearance space being small, the pump will "pick up" water to a than will the ordinary pump.
Greğal. . . . . Price for pump. . . . . . . . $\$ 8.00$
*NO'TE-Purchasers of these goods from our branch at Portland, Spokane, San Francisco Oklahoma City, Houston, Amarillo, Dallas, Billings, Sheridan, Salt Lake City or Denver will be charged freight from Racine in addition to these prices.

## WIRE-LINED SUCTION HOSE.



## CANVAS COVERED SUCTION HOSE



Constructed of a special grade of rubber on a spiral of heavy flat galvanized wire and covered with a waterproof woven jacket. While the first cost is somewhat more than wire-lined hose, the additional service obtained therefrom more than offsets the increase in price.

Grotto
Ground
20 ft . length, $2 \mathrm{in} . . \$ 1 \mathbf{1 . 0 0}$

## HARD RUBBER SUCTION HOSE.

We furnish only the 1 -inch diameter size in the following lengths:
$10,15,20,25,30,35,40$ and 50 ft
Price per foot ................... $\$ 30.30$

## DISCHARGE HOSE FOR TANK PUMPS.

$10,15, \quad 20,25,30,35,40$ and 50 ft . lengths, 1 inch inside diameter.
Price per foot

## SPRINKLING HOSE FOR ENGINE.

With Nozzle and Couplings.
Graphic . . . 10 ft . length, $1 / 2$ inch. $\$ 81.75$ Gordian .... 15 ft . Iength, $1!2$ inch.. 2.50


HOSE CLAMPS.

| Cipher. | Size |  | Price. |
| :---: | :---: | :---: | :---: |
| Gore | 3/4 | inch | \$0.10 |
| Gorge | 1 | inch. | . 10 |
| Gorgeous | $11 /$ | inch. | .15 |
| Gorgon | 1 1/2 | inch . | .15 |
| Goring | 2 | inch. | .20 |

## ROTARY PCMP FOR KEROSENE AND

 GASOLINE.This pump is remarkably easy to operate and its capacity is only limited by the size of the hose.

Shipped regularly with hose attachment, but hose is not sent unless ordered. Suction and discharge are 1 14 inch, and hose connection 3 inch.
Cipher.
Price.
Goral


CASE TANK PCMP STRAINER.
When taking water from ponds or sloughs the suction is from the top.

When pumping from a tank it may be placed suction side down so that practically all the water may be sucked up. Cleaned by simply taking off a thumb nut.
Cipher. Price.
Gorilla . . . . . 2 inch . . $\$ 1.35$
STRAINERS FOR HOSE OR PIPE.
Cipher.
Group

$8 / 4 \mathrm{in}$. pipe. $\$ 0$
Gabbro Gabbroi Gabelle .. Gabionade $11 / 2$
$1 / 4$ in. pipe
in. pipe. $11 /$ in. hose $1 / 4$ in. hose.



## UNIVERSAL HOSE CLAMP.

Admitted by engineers to be the best clamp on the market. You will say so yourself after using one.
Cipher.
Grater . . . . . . . . . $3^{\text {size. }}$ in. . . . . . . . $\mathbf{8 0 . 2 0}$ Graticule ........ 1 in......... . . 20
 Gratuitous

## IMPIROVED SILO AND TANK LUG.

The ordi-
nary lug is closed in front a $n$ d
open in the back ming a pocket for at this which will soon rust out the rod in fopoint. The improved lug being open in front and accessible for painting overcomes this difficulty.

Price. Size of Rod. Price.

$$
\begin{aligned}
& 1 / 2 \text { in....SSO. } 15 \text { in }^{7 / 8} \text { in..... } 30.35
\end{aligned}
$$

Springs extra, per pair . . . . . . . $\$ \mathbf{8 0 . 3 0}$

## UNIVERSAL COCPLING.



The simplest, strongest and best coupling on the market for silo and tank bands. A fastener that can be readily attached without the necessity of absolute accuracy in measurements. Has a holding strength equal to the band.

The coupling for round bands requires thread at one end only. For flat bands, one bolt is used.

Insert the end of the band past the pin so that band fits the tank, drive in the pirn, turn up the nut and the job is done.


[^1]
## THE IMPROVED MARSH STEAM PUMP.



These pumps are equipped with a patent self-governing steam valve, which automatically regulates the speed of the piston under any conditions. They never run too fast to take suction; or should the water supply give out when throttle is wide open, no injury can occur to the moving parts

Each pump carefully tested before shipment and is properly packed and ready to connect.

| , |  | Gallons | Horse- | In. Floor | Lbs. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cipher. | Size | Per Hour. | power. | Space. | Weight. | Price |
| Gaddan | B | 200 | 30 | $7 \times 12$ | 40 | \$1.3.00 |
| Gaddish | BB | 400 | 60 | $8 \times 16$ | 75 | 18.50 |
| Gadling | C | 500 | 75 | $10 \times 22$ | 145 | 31.00 |


#### Abstract

*NOTE-Purchasers of thase goods from our branch at Portland, Spokane, San Fran cisco, Oklahoma City, Houston, Amarillo, Dallas, Billings, Sheridan, Salt Lake City or Denver will be charged freight from Racine in addition to these prices.


## WATERS' GOVERNORS.

The method of adjusting the speed of the Governor to the requirements of the engine is very convenient. The valves and seats are of composition, which does not rust or corrode.

The valve is hollow, the steam from three of the openings being discharged through it. On account of this manner of constructing the valve the steam is permitted to enter freely, and thereby the required pressure is obtained in the cylinder without any unnecessary wire-drawing or loss of effect due to insufficient area and contracted passages.

The Valve Seats, which are four in number, are all in one casting, which fits the iron body at the ends only, thus providing perfectly for free expansion and contraction.

Being constructed in this manner, they can never get out of line, or lose their relative distance one from another. The arrangement admits of the seat being easily renewed, if ever necessary.

This Governor has screw side and flange base.
Cipher.
Price
Gallate ............Size $11 / 4$ in.; opening $11 / 4$ in.; weight 26 lbs.......... 919.00 Galliard ..........Size $1 / 1 / 2$ in.; opening 2 in.; welght $361 / 2$ lbs.......... 23.00


## NEW JUDSON GOVERNOR. SPECIALLY MADE FOR USE ON CASE ENGINES.

: The New Judson is a slow-speed Governor, still its velocity is high enough to regulate closer than any throttling Governor on the market. This Governor is equipped with the new mitre gear speeder, used solely on this style of Governor. The Governor stem and valve stem are entirely separate from one another. The speed may be increased or diminished by a hand wheel connected to the mitre gear, which raises or lowers the valve without changing tha tension of either spring or adding the least friction to any of the running parts of the Governor.

The speed adjustment is a feature of the New Judson, as it completely overcomes all lost motion between the ball and the valve and working through mitre gears, it is impossible for the speed to be changed in any way other than manipulating the hand wheel of speeder.



## PENBERTHY INJECTORS.



| Cipher | Style Pipe Conn. |
| :---: | :---: |
| Genipap | AA, 12 -in. |
| Genitival | .B, $3_{4}-\mathrm{in}$. |
| Gelatinize | . BB, 3/4-in. |
| Gliacell | BB, No. 330 |
| High | $9 / 4 \mathrm{in}$. |
| Genitor | C, 3321 -in. |
| Genizah | $11 / 4-\mathrm{in}$. |

Propersize for Price. 18 H . P. engine. $\mathbf{\$} \mathbf{6 . 7 5}$ 30 to 36 H. P. engine. $\mathbf{8 . 5 0}$ 45 to 75 H. P. engine. $\mathbf{1 0 . 0 0}$ 45 to 75 H . P . used on englnes after $24277 \quad \mathbf{1 0 . 0 0}$ 75 to $110 \mathrm{H} . \mathrm{P}$. engine $150 \mathrm{H} . \mathrm{P}$. engine.
22.00 22.00


AUTOMATIC QUALITIES.-The "Penberthy" Injector is perfectly automatic, if the current of water ba suddenly broken by any cause, such as a sudden jar or jolt in the case of a traction engine, the Injector will pick up the water and again establish the current to the boiler without the least attention from attendant.

## PENBERTHY EJECTOR OR STEAM JET PUMP.

## Lifts 20 feet on 25 pounds steam and over.

"It would be difficult to enumerate all the uses to which this Jet Pump is adapted, but when we say that ANYTHING AND EVERYTHING in the nature of a liquid (if not too thick), can be transported from one level to another or horizontally almost any distance, we have about covered the ground."


## CASE EJECTOR OR STEAM JET PUMP.

Easily adaptable for many uses. Lifts 15 to 30 feet, depending on the steam pressure and temperature of liquid. $\quad 3 / 4$-in. pipe connection, $2-i n$. suction and delivery.
Cipher: Grab, price.
.86 .00


## SEAMLESS COLD DRAWN STEEL BOILER TUBES.



Wrought iron tubes are rolled to shape and then welded; the small tubes being butt welded; the larger ones lap welded. (See illustration showing difficulty experienced with Butt Welded Iron Tubes.)

In our tubes there is no seam, as they are drawn to shape from soft ingots of steel. They are all of uniform thickness and there is no liability
 in the case of a welded seain.

| Cipher. | $\begin{aligned} & \text { Diam. } \\ & \text { Inches. } \end{aligned}$ | Length, Inches. | Price, Each. | Cipher | Diam. <br> Inches | Length, Inches. | Price Each. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gapesect | 1 \% ${ }^{\text {d }}$ | 67 | \$1.35 | Gardant | 2 | $961 / 2$ | \$1.70 |
| Gapeworm | 2 | 66 | 1.15 | Gardener | 2 | $100^{1 / 2}$ | 1.75 |
| Garble | 2 | 72 | 1.35 | Gardening | $21 / 2$ | 72 | 1.65 |
| Garbling | 2 | 77 | 1.40 | Gardyloo | 2 1/2 | 92 | 1.95 |
| Garboard | $\stackrel{2}{2}$ | $841 / 2$ | 1.45 | Gareth | $21 / 1$ | 96 | 2.05 |
| Garbure. | 2 | 9 C | 1.60 | Garfish | $21 / 2$ | 102 | 2.15 |

COPPER FERRULE FOR BOLLER TUBES.
This Ferrule is $1 / 16$ inch thick, seamless, and made of pure sheet copper.



THE CASE REGISTER AND STEEL BOX.
This is our own special design and build. lt is oval in shape and the sides are made of No. 1 s steel, with $3 / 16$ inch Empire steel rod around the top, and has heavy wood bottom. The tally box nas lock and key. One-half or one bushel measures can be used in this box.
Cipher.
Ghetto


We Furnish Repairs for Injectors and Ejectors. Price List Mailed on Application.

## CASE OIL PUMP.



The simplicity of the pump at once appeals to engineers and mechanics. Easily attached. Once adjusted. is always ready for use. When the engine starts lubrication begins; when it stops lubrication ceases. Temperature has no effect on either pump or valve, so that the required amount of oil is supplied under any condition of weather. Improper lubrication always means considerable annovance, and is apt to lead to expensive delays and repairs.

The only part exposed is the ratchet arm. All other parts work in the oil itself. The reservoir is fitted with a screen to strain the oll before entering. The cover is tightly fitted and locked by a thumb screw. By opening the valve of "bleeder test"' the amount of feed can be readily ascertained.


## MADISON-KIPP OIL PUMP.

For ofling the valves and cylinders of steam engines; adapted to all classes, but especlally recommended for those working out of doors. Can be attached to any convenient part of the engine frame, motion being taken from the valve motion. Starts and stops with the engine, re-
 quiring no attention further than to fill with oil. Holds two quarts of oil and will carry many times the strain of actual service. In ordering mention size of engine.
Cipher.
Grape-Price
$\mathbf{\$ 1 0 . 5 0}$


## PLUNGER OIL CAN

Can be depended on in all kinds of weather.

Manufactured from drawn steel, fitted with a plunger which forces oil through spout and prevents it from becoming clogged.

Will outlast ten of the ordinary spring bottom cans. Cipher-Gracility. Price.....65c

## TIN OIL CAN.

They are substantially made with solid connection, and for threshermen who desire an inexpensive can, we believe our prices will be found very attractive. Cipher. Size. Price. Generative. . . Pint $\mathbf{8 0 . 3 5}$ Generatrix. . . .Quart
0.35
.45

,
-


MOWING MACHINE OILER.
With 4 inch Straight Spout. Capacity, One Pint.
Cipher.
Price.
Genesiac
.$\$ 0.15$

## THE "SWIFT" SINGLE CONNECTION SIGHT FEED LUBRICATOR.



This Lubricator is designed for use on Portable and Traction Engines, where it is desirable to attach with only one connection to Steam Pipe. The body of the Lubricator is all cast in one piece, so there are no joints for leakage, and every cup is tested on Steam Pipe before shipment and warranted in the most positive terms to give the highest satisfaction in every particular, when properly attached and operated. These Lubricators will feed any oil, no matter how heavy, and the feed will not chill in zero weather in the most exposed position. The cup is also provided with an index, which notifies the engineer when cup needs refilling. The Sight Feed Glass can be instantly replaced while engine is running.


Class $\mathbf{F}$.
HAND CYLINDER OIL PUMP.


## We Furnish Repairs for Oil Pumps and Lubricators.

Price List Mailed on Application.


## SLIDE TOP GLASS OHL CUP.

Cipher. Dia, Glass. Conn. Price.
Garment . . $11 / 2$ in. $1 / 4$ in. \$0.55 Grapery .. 2 in. 3/8 in. .65
GLASS FOR OIL CUP .15

PLAIN OIL CUP. Screw Top.
 Dia. Conn. Price. Generality... $1^{5 / 8}$ in. $1 / 8 \mathrm{in}$. .25


## PLAIN OIL CUP.

## Spring Top.

Cipher. Dia. Conn. Price. Generate. $11 / 4 \mathrm{in}$. $1 / 4$ in. $\$ \mathbf{\$ 0 . 5 0}$

## DRIVE OIL CUP.

Cipher.
Size. Shank. Price. Generating .... $5 / 8 \mathrm{in} . \quad 1 / 2 \mathrm{in}$. $\mathbf{8 0 . 1 5}$ Goglet .......

## CASE SPRING GREASE CUP.



A first-class cast brass, highly finlshed, Compression Cup. It is provided with a leather packed plunger. The spring and plunger are conveniently controlled by a thumb nut, which is provided with an automatic lock arrangement to prevent its jarring from position on stem. The feed can be regulated.

| Cipher | Dia. | Conn. | P |
| :---: | :---: | :---: | :---: |
| Genethilac | $11 / 4 \mathrm{in}$. | $1 / 4 \mathrm{in}$. | 80 |
| Genetical | in. | $3 / 8 \mathrm{in}$. | 1.3 |

## COMPRESSION GREASE CUPS. <br> Polished Brass. <br> Cipher. Capac. Conn. Price. Genetic . . 1 oz. $1 / 4$ in. $\$ 0.30$ <br> Geneva . . 2 oz . $1 / 4$ in. . 40 <br> 

COMPRESSION GREASE CUPS.

## Pressed Steel

| Cipher. | Capacity. | Conn. | Price. |
| :---: | :---: | :---: | :---: |
| Genevan | 2/3 oz. | 1/4 in. Male | \$0.15 |
| Geniality | 1 oz. | 1/4 in. Male | .15 |
| Going | oz. | 1/4 in. Male | . 20 |
| Gonidial | oz. | $3{ }^{3}$ in. Male | . 20 |
| Gowk | oz. | $3 / 8 \mathrm{in}$. Female | .20 |
| Goitrous | $.31 / 2 \mathrm{oz}$. | $1 . \mathrm{in}$. Female | . 20 |
| Genially | $.31 / 2 \mathrm{oz}$. | $1 / 2 \mathrm{in}$. Male | .20 |

## RATCHET GREASE CUPS.

Pressed Steel.

| r. | Capac. | Conn. | Price. |
| :---: | :---: | :---: | :---: |
| Gown | 1/2 oz. | 1/4 in. | \$0.15 |
| Gowpen | oz. | $1 / \mathrm{ln}$. | .20 |
| Goyle. | oz. | $3 / 8 \mathrm{in}$. | . 30 |

$\frac{\square}{4}$
PIN OILER GREASE CUP.
Cipher. Capacity. Conn. Price. Garboil .... 3 oz . $1 / 4 \mathrm{in}$. $\$ 0.80$

## BRASS RELIEF VALVES.

This valve is designed with a slotted side outlet: is simple in construction, yet thoroughly reliable. It has full relicving capacity, and is guaranteed in every respect.
Garrya $3 / 4$ in. pipe con. $175 \mathrm{lbs} . . \$ 1.35$ Guodly $3 / 4$ in. pipe con. 200 lbs. 1.35

## STEAM GAUGE.

This gattge is the same as we use on Case engines, and we.consider it to be the best gauge on the market for use on traction engines. It has a japanned case nickeled rim, black dial with white figures.

We also carry the double spring gauge for customers who desire this style.
Cipher.
Price.
Garish... With siphon $1 / 4 \times 1 / 4$ for Case
engines prior to No.
20328 .............. $\$ 4.00$
Garlic.... Double spring gauge with siphon
5.25

## BRASS STEAM GAUGE SIPHONS.

- No steam gauge should be used without a siphon between gauge and the boiler to protect the movement from expansion by heat and to secure water in the spring of the gauge when in use.
Cipher.
$3 / 4 \mathrm{x}{ }^{3 / 8}$ inch pipe connection
with stop cock for $\mathrm{D} . \mathrm{S}$.
gauge $. \ldots . . . . . . . . . \$ 1.60$

Gaper. . With stop cock $1 / 4$ inch pipe connection
.1 .00

POP SAFETY VALVE.

雷The material used in the construction of these valves is the best non-corrosive steam metal.

Each ralve is carefully tested and adjusted before leaving the factory.


Side Outlet.

Cipher. Pipe Conn. Price.
Gibus . . . .. $1^{1 / 4}$-in. 140 pounds. . . $\$ 3.50$
Gigantean ... $11 / 2-1 n .140$ pounds. . . 5.00
side outlet.
Giggish . . . . $11 / 4$-in. 140 pounds . . . 5.00
Gossan ..... $11 / 1$-in. 150 pounds. . . 5.00
Giglet ..... $11 / 2$-in. 140 pounds. . . 7.25
Gilbert .....2 -in. 140 pounds. ... 9.75
Gossipry ....2 -in. 150 pounds.... 9.75
Gilder . ..... 2 -in. 160 pounds,
Extra Heavy
11.00

## CHIME WHISTLES.

$\frac{8}{8}$
The sounds given forth from this whistle, whila being more acute and piercing than the common whistle, have not the harsh and disagreeable qualities of the latter and can be heard at a greater distance. The bell may be raised or lowered to suit varying steam pressures.
Cipher. Diam. Bell. Pipe Conn. Each.
Garniture . . . . . 3 in. 1 in. $\$ 6.75$
Garnished ...... $4 \mathrm{in} . \quad 1 \mathrm{in} . \quad 10.50$

## PLAIN WHISTLES.

This is a neat, strong, serviceable whistle and especially adapted to use on traction engines. It has a very fine tone.
Cipher. Dia. Bell. Pipe Con. Each. Garnishee $21 / 2 \mathrm{in}$. $8 / 4 \mathrm{in}$. $\$ 4.00$ Garran. 3 in. 1 in. 4.75 Garret. . $31 / 2$ in. 1 in. 6.75

## GLASS WATER GAUGE.

The "Case" Water Gauges are made extra heavy, of best steam metal. All gauges are guaranteed mechanically correct. The self-cleaning device on thls water gauge is a very important feature, effectually preventing gauge from becoming clogged or limed up.

NOTE.-In ordering water gauges, must give shop number of engine, otherwise not responsible for error in shipment.

Cipher. Gamester Garrote
Gammer mer Garrulity Gammon Garrulous Gaming Gambling
$\qquad$ $\ldots . .^{1 / 2}$ in. connection. Price. ..p2.00 $\ldots 0^{4}$ in. connection. . . 2.75 ...Upper half, $1 / 2$ in. con... . $\mathbf{S O}$ .. Upper half, $3 / 1$ in. con. . . 1.00 ... Lower half, $1 / 2 \mathrm{in}$. con.... 1.00 . . Lower half, 3 in. con. . . 1.35 Gambing . . Rubber Gaskets. . Pe er doz. 10

## SAFEGUARD GAUGE.

This water gauge is a certain protection against accidents and injuries due to the breaking of the water glass, automatically shutting off steam and water instantly.
Solid construction throughout and can be used with safety on very high steam pressures. Fitted with $3 / 4$ in. glass. This pauge meets the reguirements of the Canadian
 government.

Goose . . . . . . . . . . . 3/4 in. . . . . . . . . 83.50
Gradate . . ....Upper half. . ........... $\mathbf{1 . 7 0}$
Gradatory ... Lower half. ............ 1.70
Graded .......Guard rod............. 10
Gradin …... Gasket . . . . . . Per doz. . 20

## GENUINE SCOTCH GLASS TUBES.

Cipher.
Price.
Garrupa . 8 in. Glass Tube, $5 / \mathrm{in}$. . \$0.15 Gamut $\cdots 10$ in. Glass Tube, 5 in.. 15 Gander. .12 in. Glass Tube, 5 in.. . 15 Gonion $\because 7_{1 / 2} \mathrm{in}$. Glass Tube, $3 / 4-\mathrm{in}, \mathrm{D}$

## GLOBE AND ANGLE VALVES.



These Valves are made from best heavy steam metal and we consider them to be the simplest and best steam valves on the market. When worn in the seat they can be made as good as new by regrinding.

## GLOBE VALVES.

Cipher. ipe Conn.

Price.
Graphical . $3 / 4$ in. 100 lbs pressure. . \$0.65
Graphics ..1 in. 100 lbs. pressure.. 1.00 Galloway .. $1 / 4$ in. 175 lbs pressure. . 1.40 Gallows ... $3 / 8$ in. 175 lbs pressure.. $\mathbf{. 4 5}$ Gatch .... $1 / 2$ in. 175 lbs. pressure. . . 55 Galore .... $3 / 4$ in. 175 lbs. pressure.. 1.00 Gateage ...1 in. 175 lbs. pressure.. 1.35

GLOBE VALVES EXTRA HEAVY.


| Cipher. | ANGLE VALVES. <br> Pipe Conn. <br> Price. |  |
| :---: | :---: | :---: |
| Gaucho | $1 / 4$ in. Brass body . \$0.40 |  |
| Gallant | . $3 / 4$ in. Brass body . .45 |  |
| Greeted | $1 / 2$ in. Brass body . .55 |  |
| Gauger | $9 / 4$ in. Brass body . 1.00 |  |
| Gau | in Brass body 1.35 | Ins |

## ANGLE VALVES EXTRA HEAVY.

Grappling . . . . $1 / 4 \mathrm{in}$. Brass body . . . $\$ 0.80$ Grapta . . . . . $3 / 8$ in. Brass body . . . . 95
Graptolite ... $1 / 2$ in. Brass body . . . 1.10
Grasping . . . $3 / 4$ in. Brass body . . . 1.35
Graspless . . . . 1 in. Iron body. . . . 2.00
Gallipot . . . . $11 / 4$ in. Iron body.... $\mathbf{2 . 1 5}$
Gaulish . . . . $11 / 2$ in. Iron body . . . $\mathbf{3 . 0 0}$
Gaum . . . . . . 2 in. Iron body . . . . 4.00
Gaunt . . . . . . $21 / 2 \mathrm{in}$ in. Iron body . . . . $\mathbf{6 . 0 0}$
Gaura $21 / 2$ in. Iron body, Flange base. 6.50
Grass . . . $21 / 2$ in. Iron body, Yoked. 9.00 Gauss ....3 in. Iron body, Flanged. 14.00
Gaussage. . 3 in., Gate flanged, O. S.
and yoke, semi-steel. . . . . . . . . . $\mathbf{\Sigma 1 . 0 0}$

## SWINGING CHECK VALVE.

This Check Valve has the Patent Rotating Disc, which works frecly, never sticking, and can easily be reground without removing valve from line of pipe. These valves are reliable, tight, and are thoroughly tested.


| Cipher. | Pipe Conn. | Price. |
| :---: | :---: | :---: |
| Gassing | 1/2 | \$1.35 |
| Gastritis | $3 / 4$-in | 1.35 |
| Gastropod | -in | 2.60 |
| Gastrula | $11 / 4$-in | 3.00 |
| Gata | $11 / 2-\mathrm{in}$ | 4.00 | set at any desired opening. It is constructed of few parts. The discs being loose, and provided with ball and socket bearings, wear evenly and make a tight joint. Used on Case Engines prior to 1902. Cipher.

Price.
Gasometry . . 2-in. Valve, iron body . . $\$ \mathbf{9 . 5 0}$ Gasoscope .. 2 -in. Valve, brass body . . 12.00 Gasserian . $21 / 2$-in. Valve, iron body . . 12.00

## PLAIN CHECK VALVES.

The action of this valve is quick and positive. It does not leak, stifk nor hammer. Cipher. Pipe Conn. Price. Gait . . . . . $\xi_{1}$-in . . . . $\$ \mathbf{1 . 0 0}$



| Cipher. $\quad$ Pipe Con. | Price. |
| :--- | ---: | ---: |
| Geaster . . $1 / 2-$ in. . . . | $\mathbf{8 0 . 8 0}$ |

Geaster . . . 1/2-in . . . . . . 80.80

STRAIGHT WAY STEAM COCK.
Gliadin ...
Glib.. $.1^{3 / 4}$-in. conn. $\boldsymbol{\$ 1} 1.15$
-in. conn., Glib ..... 1 -in. conn., heavy.... 1.65
Glibbery . . 1 1/4-in. conn..
heavy . . . . 2.50


THREE WAY STEAM COCK.
Glidder . . . . . $8 / 4$-in. pipe conn. . . . $\$ 2.00$

## COMPRESSION GAUGE COCKS.



Cipher. Pipe Conn. Price. Gazetteer . . 3/8 -in... $\$ 0.70$ Galled ....5/8-in... .70 Gazogene . . $3 / 1$-in.. . 1.00

## PRIMING CUP.

Cipher. Pipe Conn. Price.
Gouty . . . . $1 / 2$-in. . . . . 80.80

## SAFETY PLUG FOR CROWN SHEET.

This Plug is made of brass and filled with "Banca Tin."
Cipher.
Price.
Gargoyle . $8 / 4$-inch pipe
.890 .70


We offer this style of Jack Screw made from selected stock and with a machinesteel screw, at the following prices:


## CASE LIFTING JACKS.

This type of jack is especially adapted for heavy
 work, the rack being made from forged steel and the teeth machine cut. The pawls are all drop forged from open hearth high carbon steel and the


[^2]We furnish repairs of jacks. Price list mailed on application.

## SEPARATOR CANVAS COVERS.

All our Covers are made from extra heavy close woven cotton duck, having double lock-stitch seams every twenty-eight inches, making a strong and serviceable cover.

In comparing our prices with others, kindly bear in mind that the COVERS furnished by us are fitted with 12 brass eyelets and tie ropes, where others have from four to eight eyelets and no ropes. Our covers are so made that the seams are crosswise in place of
 lengthwise, and, for this reason, more impervious to water. The $5 \times 8$ foot flaps on our covers protect the feeder, which is not provided for in other covers.

Cipher.
Price.
Gestatory . ............. Cover $16 \times 261 / 2$ feet, with flap $5 \times 8$ feet............. 815.50 Gestical ................Cover $18 \times 26 \frac{1 / 2}{}$ feet, with flap $5 \times 8$ feet.............. 17.00 Gesticular . ............. Cover $20 \times 26 \frac{1 / 2}{}$ feet, with flap $5 \times 8$ feet. ............ . 18.50 Gestion...........Special 12 oz. Cover, $20 \times 261 / 2$ feet, with flap $5 \times 8$ feet. . . . . . . . 26.00

TENTS.


Made from an extra quality of duck. All necessary poles, stakes and guys are furnished to make tents complete in every respect.

Where threshermen supply complete crews for operating their machinery these tents make convenient quarters.

Size of tent, $9 \frac{1}{2} \times 12 \mathrm{ft}$., with 3 foot side walls. $71 / 2 \mathrm{ft}$. center.
Cipher.
Price.
Gestural
$\$ 15.50$

## THE GREGORY AUTOMATIC BELT GUIDE.

The best automatic belt
 guide made, because of its positive adjustment, simplicity, lightness and durability. When the belt travels to one side out of line of the cylinder pulley, the edge of the belt comes in contact with the governing lever, causing enough friction to make it move forward with the belt. The cogs at the lower end of the lever cause the pulley to turn at the proper angle to carry the belt in the same direction, as the belt is always incllned to run square across the pulley. No matter how much the wind swings the belt It will, by touching the governor levers, cause the pulley to turn on the pivot enough to keep the belt square on the cylinder pulley.

Made of malleable iron, which makes it very light and almost indestructible. Cipher.

Price.
Getting ....For 12 Bar Separator . . 812.00 Ghazal ....For 20 Bar Separator. . 12.00

## THE SARGENT GLOVE.



Made of chrome $t$ anned leather, water and heat-proof and will not crack. The inside of the thumb is a part of the palm of the glove, all cut from one piece of stock. The base of the thumb is double stitched and laced stoutly with a leather thong. No rivets or inseams to hurt the hand. The best engineer's glove on the market.
Price, per pair, half sizes, 7 to $10 \ldots 81.35$
Do not fail to give size wanted, when ordering.

## ACETYLENE GAS HEADLIGHT.

## For Use on Traction Engines, Automobiles, Launches, Etc.

This Headlight is mounted on a pivoted bracket with chains extending Dack to the engineer's platform, which gives him full control of the lamp as he an throw the light from right
 to left at will, lighting up the road ahead of him to a distance of 300 feet or more, and enabling him to locate bad places, turn corners, etc.

The lamp and generator are mounted on the same bracket which makes it very convenient to attach to an engine and also to light.

The cost of operating them is less than one cent per hour, therefore it is the cheapest headlight on the market to use, for the amount of light produced.
Cipher-Glycosine .........Each, 820.00

## TRACTION ENGINE HEADLIGHT,



This is the C. T. Ham Mfg. Co. Headlight, which is especially adapted for use on traction engines. The draft is so arranged that the flame will not smoke or blow out in high wind, nor jar out on rough roads.

CASE-21 $9 / 4$ in. $x 12$ in. $x$ $91 / 2 \mathrm{in}$.

REFLECTOR-Made of copper and silver plated, 10 in. diameter, $33 / 4$ in, deep.

BURNER-Regular locomotive pattern.
Cipher.
Price.
Glue

## ROLIER TUBE EXPANDER.



This expander has a sniid body and is rade With great care irom the best material. It will answer for any thickness of tube sheet, which makes it one of the most conveniont Expanders manufactured for threshermen's use.


## CASE SECTIONAL TUBE ENPANDER.

We are prepared to
furnish this style Expander for $7-16$ inch flue sheet only.
Cipher. *Size. Price.
Geodesist $. . . . .11 / 2$ inches. . . . . . . $8 \mathbf{S . 0 0}$
Geodetic
Geodetic ..... 1 3/4 inches........ 3.00
Geodetical . . . . 2 inches. . . . . . . . 3.25
Geodic . . . . . . . 212 inches. . . . . . . . 4.25
Geogeny ...... 3 inches........ 6.50
*Outside diameter of tubes.

CASE IDEAL SELF FEED TUBE CUTTER

t By the use of this tool old tubes can be quickly removed from boilers with the least possible delay. It can also be used to cut off the ends of new tubes, which is a decided advantage, as the cut is made in such a way that the end of the tube is left ready for beading.
Cipher, Geodesic

## EXTENSION FOR TUBE CUTTER.

Where boilers are equipped with a smoke box we can furnish a 19 inch extension as per illustration. Cipher.

Price.
Geodesical . . . . 85.25


## BOILER TOOLS.



The tools illustrated herewith measure about 9 inches in length, are hand-forged and made from specially prepared steel Chisels, Calking Tool and Punch. Each. .55c Beading Tool . . . . . . . . . . . . . Each. .SOe

## MACHINISTS' BALL PEIN HAMMER.



Cast steet, nicely finished. $11 / 4$ ibs. . . . . . . $\$ 0.5 \%$ $13 / 4 \mathrm{lbs}$.
.70

## CASE-EAGLE TCBE SCRAPER.

The latest and without question the best scraper that has appeared on the market. The blades are made from a special grade of cast steel and are self sharpening. The peculiarity of construction and the material used eliminates all possibility of drawing the temper from the steel, a common complaint on spring scrapers. Also the fact that no bolts or rivets are used in assembling, insures a scraper that is practically indestructible.

| Cipher. | Tube Diameter. | Price. |
| :---: | :---: | :---: |
| Geognost | $13 / 4$ in | \$80.90 |
| Geognostic | $2{ }^{2}$ inches. | .10 |
| Geognosy | $21 / 2 \mathrm{in}$ | 1.10 |

## CASE SPECLAL TUBE SCRAPER.



The only doubleheaded steel Flue Scraper on the market
Cleaner can be easily adjusted while in flue to the full extent of the wearing range of the scraping knives.


We believe our fles are equal to any on the market. They are made from crucible steel and carefully tempered.

Mill Half Round Round Flat
Bastard. Bastard. Bastard. Bastard.

| 8 inch..$\$ 0.15$ | $\$ 0.30$ | $\$ 0.15$ | $\$ 0.20$ |
| ---: | ---: | ---: | ---: |
| 12 inch.. | .20 | $.8 \%$ | .20 |
| 14 inch | .30 | .40 | .30 |
| $\mathbf{3 0}$ |  |  |  |

## FILE HANDLES.

The CASE indestructible file handle is made of aluminum with an inserted wood plug for holding the file.

Made in two sizes.
Cipher.


Gingerly $\cdots$....No. 1. For small files. . . So.15

## HACK SAW FRAMES.



Made of extra strong steel and nickel plated. So constructed that the saw may be set to cut in either or four directions. Cipher. Price.
Germanist. 10 in. frame with 1 blade. 80.80
Extra blades, each.............

BABBITT LADLE.


Cipher.
Price.
Fressed steel with 6 in. bowl
$\$ 0.50$
Geropigia. . Drop forged of extra heavy mild steel, 8 inch bowl. Each
2.00

## EXPERT'S TOOL GRIP AND TOOLS.



An assortment of expert's tools, arranged conveniently in a strong and substantial grip. The tools are first-ciass In every respect. The grip is made from an extra hravy quality of vulcanized fibre, and all trimmings are of brass, which not only makes a very handsome grip, but one that will stand the hard usage to which they are generally subjected.

CONTENTS OF GRIP-1 $1 / 4 \mathrm{lb}$. ball pein hammer, No. 2 automatic wrench, 2 inch roller expander, set side crank trams, round nose chisel, beading tool, caulking tool, cold chisel, $1 / 2$ inch cape chisel, $3 \%$ cape chisel, center punch, $1 / 2$ inch drift pin, key puling pliers, $1 / 4,3 / 4$, $5 / 2$ and $3 / 4$ inch pipe tap, $3 / 8$ and $1 / 2$ inch hand tap, $1 / 4$ $5 / 16,3 / 8,7 / 16,1 / 2,5 / 8,3 / 4$ inch bit stock drills, ratchet brace. 10 inch hack saw and blade, Wonder chain drill, pair 6 inch nickel plated pliers, speed indicator, file handle, pair snip shears, 3 inch cut, Science of Successful Threshing.
Cipher.
Price.
Germanism. . . . . Price of grip, complete with tools. . . . . . . . . . . . . . . . . . . . . . . . . $8 \mathbf{8 6 6 . 0 0}$
Price of grip only.............
10.50

ROGERS' BELT PUNCH.


Cuts any size hole from $1-16$ to $3 / 8$ inch. Only 3 inches in length, it can be carried in the vest pocket. It will be appreciated by anyone working around belts, harnesses, etc.

To use the punch, extend the blade to the size hole desired, push straight through leather up to handle, turn one-half around and take out core.
Cipher.
Price.
Gerontic
$\$ \mathbf{\$ 0 . 7 0}$

## KNIFE GAUGE LACE CUTTER.



Fits any pocket knife. Can be carried in vest pocket. Quickly attached and is adjustable from one-eighth to five-eighths inches. Indispensable to threshermen, mill men, mechanics, farmers, etc.
Cipher.
Price.
Germicide
$\mathbf{8 0 . 3 5}$

## KEY PULLING PLIERS.

Designed especlally for removing keys from pulleys. They are so constructed that their structed that their point of contact is on the inside in place of the outside as in the case of the ordinary pliers or pinchers on the market. This feature makes it possible to remove the keys without any danger of cutting them off.
Gerbil
Price, $\$ 1.75$

## COMBINATION PLIERS.



## POCKET RULE.



A genuine boxwood rule with arch joint and brass bound, 1 inch wide and marked Sth, 10 ths, 12 ths and $16 t h s$. Not the cheapest rule, but one that will give good service at a reasonable price.
Cipher.
Price.
Germanize
.$\$ 0.45$
SOLID STEEL TRY SQUARE.


An article of this kind is indispensable where belting is used. A square cut assists very materially in making a substantial splice. Cipher. Size. Price. Germinant . . 6 inch . . $\$ 0.40$

## MARKING AWLS.

Indispensable around machinery.
Especially handy for lacing belts.
Cipher.
Priee.
Germinate . . . . Length, 7 inches . . . $\$ 0.15$

## DRIVE PUNCHES.



A straight punch made from tool steel. Cipher.

Price.
Germinator
80.15

## SCREW DRIVER.



A substantial and well made implement screw driver.
Cipher.
Price.
Germanium. . . Length, $41 / 2$ inches. . . 80.15

## POCKET LEVELS.



Not the ordinary cheap kind usually found on the market, but is substantially made and accurate. It is six inches in length, nickel plated and with proved level glass.
Cipher.
Price.
Gesmeria
$\$ 0.70$



## 

These drills have shank $5 / 8$ in. $x \quad 3 / 4$ in. and $11 / 2$ inches long.
Diameter.. $1 / 4 \quad 5 / 16$ 3 6 Price, each \$1.00 1.05 1.15 1.20 1.25 1.34 1.40 1.4\% 1.50 1.60 2.00

BIT STOCK DRILLS FOR METAL OR WOOD.
$\begin{array}{lccccccccccccc}\text { Size... } & 1 / 4 & 5 / 16 & 3 / 8 & 7 / 16 & 1 / 2 & 9 / 16 & 5 / 8 & 11 / 16 & 3 / 4 & 13 / 16 & 7 / 8 & 15 / 16 & 1 \\ \text { l'rice. } & \mathbf{8 0 . 2 5} & .25 & .35 & .40 & .45 & .60 & .70 & .75 & .80 & .85 & .95 & 1.05 & 1.20\end{array}$ THE WONDER DRILL.


This drill is equipped with a universai chuck and will hold 1/16 to i, inch round shank and bit stock drills. A three foot chain is fastened at one end of the feed and loops into the other end, thus holding the drill to articles of various sizes. Operated with any ordinary bit brace. Equipped with ball bearings, it cuts very easily and makes a very simple yet useful article for your tool grip.
Cipher. Geomorphic

Price.
$\qquad$

## RATCHET BIT BRACE

Equipped with steel jaws, and accurately fitted socket; strong and substantially made, with nickel plated finish.


Cipher.
Size.
Price.
Geometrize . ...10 in. sweep...... $\$ 1.35$

## RATCHET.



Particularly adapted for use around heavy machinery. It will drive a drill in any position where it is possible to move the handle.
Cipher.
Price.
Geolatry
. $\$ \mathbf{6 . 0 0}$

## SPRING GAUGE GLASS CUTTER.



Simplest and best tool for eutting g!ass tubes.

## STAY-BOLT TAPS.



Length, 24 inches. 12 thread. Cipher.

Price.
Geologic ....... $7 / 8$ inch....S 9.00 Geologist . . . . . . . $15 / 16$ inch . . . . 10.50 Geologize . . . .... 1 inch.... 10.50

STAY BOLTS.


Length, 24 inches. $1 \supseteq$ thread.
Cipher. Price.
Geomancer . . .... $7 / 5$ inch....S1.35
Geomantic ........ $155^{\prime} 16$ inch.... 1.35 Geometric ........ 1 inch.... 1.35

## FURNACE SCOOPS.

Especially adapted for use With traction and portable engines having narrow dire doors.

Size, 11 inches wide, 15 inches long.
Cipher.
Price.
Geographer
$\mathbf{\$ 0 . 9 0}$

STRAW FORKS.


This Straw Fork is without doubt the most convenient fork on the market for use with straw burning engines.
Cipher.
Price.
Geographic
$\$ 1.20$

## UNIVERSAL PACKING HOOK.

The only tool on the market for packing a valve or removing the old packing. It has also proven to be a very handy tool for a humdred other uses.
Cipher.
Price.
Grassing
$\$ 0.20$

## STILLSON WRENCHES.

All steel pipe
 wrenches with double spring and drop forged faws; unequaled for strength and durability.

Price.
Cipher.
$\begin{aligned} & \text { Gilia } \\ & \text { Giller }\end{aligned} . . . . . .$. ...Size 8 inches 14 inches
.$\$ 1.00$
Giller ....... Size 14 inches....... 1.35
Gilling ......Size 24 inches....... 2.65

## COMBINATION WRENCH.

These wrenches have all the good qualities of gas pipe wrenches as well as being a first class nut
 wrench. The mawrenches is the very best.

We handle two sizes of this style wrench; 12 inch for $1 / 4$ to $11 / 2$ inch pipe and 15 inch for $1 / 4$ to 2 inch pipe. Cipher.

Price.
Graft . . . . . . . . . . 12 inches. . . . . . . . S1.70
Goemys ........ 15 inches.
2.75

## AUTOMATIC WRENCHES.



These wrenches operate on an entirely different principle from that of any other wrench. The jaws grip automatically without adjustment and the power is transmitted tangently to the pipe. All the power goes to turn the pipe. They are drop forged of highest grade steel. It must be seen to be appreciated.

Price.
Geostatic ....No. 1, length 10 in . . . $\$ 1.00$ Geotaxis ....No. 2, length $12 \mathrm{in} . . .11 .35$ Geothermal "., No. 3, length 18 in.... 1.80

## CASE POCKET WRENCH.

Manufactured from special steel, forged and tempered in oil. Length 7 in. Nickel plated.
Geothermic. . Price, $\$ 0.50$


## MONKEY WRENCH.



Length, 10 in ch wood handle. Geonoma. Price, $\mathbf{8 0 . 4 0}$

## THE CASE ADJUSTARLE RATCHET CYLINDER WRENCH.

This is the only ratchet cylinder wrench on the market with an ADJUST$A B L E$ HEAD. A feature that permits its use in places where other wrenches cannot be used. In simplicity of construction, strength and durability it cannot be excelled.

State size of chuck
 wanted, also for square or hexagun nut. Cipher.

Price. Geophagy. Wrench with one chuck. . \$3.OM Extra chucks, each. .35

COMBINATION VISE.


Fon general purposes you will find this a very serviceable vise. It is well designed and all vital parts reinforced. Equipped with a swivel base, and jaws milled from high grade tool
steel.
Widath of jaw, 3 m in.
Pipe capacity, $1 / 3$ in. to $21 / 2$ in.
Glaze ................ Price, each 88.75
PIPE STOCK AND DIES.
These stocks are manufactured from the best grades of malleable iron, equipped with removable
 handles.

The dies are made from a special grade of steel.
Germanious. . . Price for No. 1 stock
with $1 / 4,9 / 8,1 / 2,4 / 4$ and 1 inch dies. $\$ 5.00$ Extra Dies. each ................ . 75

## PIPE VISE.



From the illustration will be observed the simplicity of this style of vise; being made from malleable iron, it is light, yet very durable. For the price we belleve it to be the best on the market

We furnish this vise, holding pipe $1 / 8$ inch to 2 inch diameter.
Geophilous ................ Price, $\$ 1.70$

## THREE-WHEEL PIPE CUTTER.

A simple yet
durable Cutter.
The wheels are made from the best Tool Steel,
 carefully machined
and hardened in oil to give toughness. Geophila...No. 1 cuts pipe $1 / 8$ to 1
inch, each......... $\$ 1.50$
Extra wheels, each.............. . 15

## SNIP SHEARS.



Drop forged with steel laid blades. There are cast iron shears on the market at cheaper prices, but we would not recommend them. Our shears are about 12 inches in length and have a 3 inch cut.
Gest . . . . . . . . .

## STARRETT HIGH SPEED INDICATOR.

May be run at highest speed without heating; equipped with a rubber tip which not only
 removes the jar but produces a stronger frictional contact between the shaft and the instrument. The working parts of this instrument are encased, and the dial plate has two rows of figures, reading, right or left as the shaft may run. By a pressure and twist with the thumb the plate is loosened, when the 0 mark may be instantly moved to agree with the starting point.
Gerontine
Jrice * BA:

## PACKING

## SHEET RCBBER.

The sheet rubber furnished by us has cloth on both sides of the rubber, and is especially adapted for hand hole gaskets. The cloth covering prevents the rubber from adhering to the sides of the boiler and makes it an easy matter to remove the hand hole plates without destroying the gasket.
Price, per lb., $1 / 16$ in. thick. . . . . . . $\$ \mathbf{\$ 0 . 3 0}$
Price, per lb., I/S in. thick........ . $\mathbf{3 0}$

## GENUINE RAINBOW PACKING.



Packs any kind of steam, air or hot water joint and lasts longer than any other packing in use.
Price, $1 / 16$ in. per lb. $\$ 1.10$ Price, $1 / \mathrm{s}$ in. per lb. 1.10

## IKEMP PACKING.

We carry in stock a large amount of the best quality of long fibre Italian Hemp Packing which we are prepared to furnish at the following attractive prices:
Price, per lb. . . . . . . . $\$ 80.30$


## MALLEABLE

 SLAT FASTENERS.

Price per pound (22 complete fasteners) as shown by cut. Gobbling ... . . 80.35

## COTTON

## WASTE.

Fancy colored waste put up in small bales especially for the convenience of engineers a $n d$ threshermen. 25 to 30 lbs. in a bale.
Per pound. \$0.12


For packing pistons, valve
 rods, pumps, etc., we recommend the use of our Oval Gum Core Packing. It will not blow out under the highest pressure. It does not become hard and makes an absolutely tight joint. We use this packing in the construction of our well-known CASE Engines. We carry in stock the following sizes of this packing: $1 / 4,3 / 8$ and $1 / 2$ inch. Price, per lb
$\mathbf{\$ 0 . 4 0}$

## ASBESTOS WICK PACKING.

For packing valves, water gauges, gauge cocks, etc., asbestos wick packing is considered far superior to any other packing on the market. If so desired, the strands can be easily separated. Price, per 1b. . . . . . . . $\$ 80.40$



Cipher. No.
Gestate 1482-EX. Gestation 1483-EX.

## HAND HOLE GASKETS.

Made from the best quality of 4-ply rubber packing. Only the sizes given on illustration are stocked.

|  | Size. | Price. |
| :--- | ---: | ---: |
| $27 / 8 \times 4$ | $\$ 0.07$ |  |
| $25 / 16 \times 39 / 16$ | .07 |  |

## BABBITT METAL.


"Case Suecial" babbitt metal is used by us for separator cylinder shaft boxes and main or crank shaft engine boxes. "C"' is used by us for all other boxes or journals on our machines.
Cipher.
Price.
Gerundial . . Case Special . . . Per lb., $\mathbf{8 0 . 5 0}$
Gerundive . . 'C'" Grade. . . . . . Per Ib., . 18

## CASE BOILER COMPOUND.

In some sections of the country it is almost impossible to obtain soft water in sullicient quantities for use in steam boilers. For this reason it is absolutely nectssary that some compound be used in the water to prevent incrustations, otherwise surious injury to boilers will result.

Afier special investigation on the part of our chemist, we have to offer a compound that prevents the deposit of scale in boilers by converting the impurities into phosphates. These do not settle, as the boiling water keeps them in suspension, consequently no scale is formed

I!RECTIONS: Dissolve the proper amount of compound in two or three gallons of hot water and feed into boiler through suction of pump or injector. Cipher.

Garkl.. . . . . . . . . . . . . . . . . . . . Price for 23 lb . pail
82.75

## CASE HARD OIL.

The melting point of $t h i s$ Hard Oll is not less than 150 degrees Fahrenheit. It will not freeze, clog or gum, and is a sure praventive of hot boxes. A cheap, solid oil is a very poor investment for a thresherman, and we do not care to furnish the cheaper grades to our customers.

## Cipher.



## ACCOUNT BOOKS.

Mailed, postpaid, upon receipt of 10 cents in stamps.


## CASE CYLINDER OIL

The selection of this particular oil was made only after a careful analysis.

Operators have long appreciated the value of a high-grade cylinder oil for the successful operation of steam engines. Nothing is more troublesome of annoying to an engineer than poor oil. It not only affects the proper lubrication, but frequently is the cause of priming and long and expensive delays for repairs.

To facilitate distribution and for convenience in handling, we have put up this oil in one and five-gallon cans.
Cipher.
Price.
Geniculate . . . . . . . 1 gal. can. . . . . 980.60
Genip . . . . ...... 5 gal. can.
3.00


## CASE READY MIXED PAINTS.

These paints are put up by ourselves, and contain only the purest and best material that can be obtained. All paint is ground by special machinery and the ingredients used prevent the paint from settling to the botom of the can in a solid state. Only the following colors are furnished by us: Permanent red . . . . . . . . . . . . . . . . . . . . . . . . . . . . Price per gallon. . . \$2.60 Olive green . . . . . . . . . . . . . . . . . . . . . . . . . . . Price per gallon . . . $\mathbf{2}$. 60 Maroon . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Price per gallon . . . $\mathbf{2 . 6 0}$
Raven black . . . . . . . . . . . . . . . . . . . . . . . . . . . Price per gallon . . . 2.00

## ENGINEER'S INSTRUCTION BOOK.

## THE BEST BOOK EVER WRITTEN ABOUT RUNNING STEAM ENGINESTRACTION, PORTABLE AND STATIONARY.

Easily understood, practical instruction that will enable anyone to quickly become a first-class engineer is contained in the latest, revised and enlarged edition of the YOUNG ENGINEFR'S GUIDE, a 254 page book, illustrated. Teaches how to run, care for and repair steam engines, boilers, pumps, etc.; also contains all questions usually asked of applicants for engineers' licenses, with full answers. Rules, Formulas, Tables and Workshop Recipes of great value to every engineer.
By mail
. Cloth, \$1.00; Leather, \$1.25


## ALUMINUM SOLE SHOES.



The most sensible work shoe for the farmer or anybody engaged in rough labor or who is required to work in water or damp places.

Mud does not stick to it and it will not rust.


A shoe with a practically indestructible bot-
tom. The aluminum undergoing a special hardening process combines the maximum durability and the minimum weight.

The leather pieces on bar and heel are the only wearing parts on the sole. These you can easily replace yourself.

Great care is also taken in the making of the upper. It is made of the best oil grain leather treated to make it waterproof. Every seam is soft and pliable and a hairfelt insole makes a soft cushion support. The shoe is made with a bar across the sole, the gentle curve of the rocker from bar to toe enables you to walk natural and easy instead of flat-footed as one might imagine. Made for boys as well as men.
We carry at Racine only, all sizes in the following height uppers:
6 -Inch upper, any size
10 -Inch upper, any size. 5.00

12 -Inch upper, any size 6.00

16-Inch upper, any size. 7.00

Add postal charges to your remittance, Shoes come under the five-pound rate.


## PIPE FITTINGS.

 Union Elbow, Male Sleeve, 4 inch, 3ic. Union, Male and Female, $x_{4}$ inch, ede. Cross, $3 / 4 \times 3 \times 1 \times 1 \times 8$ inch, 13 Bc .

## EXTRA HEAVY FITTINGS.

Coupling, 1 inch, 20c. Elbow, $3 / 4$ inch, 23c; 1 inch, 32c: 2 inch, 80c. Reducing Elbow, $1 x^{3 / 4}$ inch, $32 \mathrm{c} ; 11 / 4 \mathrm{x}^{3 / 4}$ inch, $40 c ; 21 / 2 \times 1$ inch, $\$ 1.00 ; 45^{\circ}$ Elbow, 1 inch, 32c. Street Elbow, 1 inch, $21 c$. Union Elbow, Male Sleeve, 1 inch, 90c. Union Elbow, Female Sleeve.

 40e; $1 \frac{1}{2} \times 11 / 2 \times 1 \times 1$ inch, 60c; $2 \times 1 / 2 \times 3 \times 1 / 4$ inch, 00c; $2 \frac{1}{2} \times 1 / 2 \times 1 \times 1$ inch, $\$ 1.00$.

## THE RACINE ROTARY HARROW.



Attachment for plows enables you to harrow while you plow-and for best results get the Harrow with the Curved Blade.

One trip over your fields instead of two or three! A more productive soil-more bushels to the acre! Your ground put into condition for planting at exactly the right time!

Cast iron fittings are unfit for steam uses. We offer only the malleable. Sizes of pipe fittings are determined by the size of the pipe over which they fit: thus $1 / 4$ inch elbows fit over pipe that is $1 / 4$ inch inside diameter.

> That's, what it means to "harrow while you plow."

This machine is so low in price-and its work so thoroughly effectire-that it pays for itself-many times over-in one season.

The cutting blades of the Racine Rotary Harrow are curved. They cut throughout their full length-not simply at the point. They are clog-proof, self-cleaning, and positively will not wind. They bury the trash and litter well under the soil, instead of dragging it around to the surface, as do ordinary blades.

This simple attiachment is practically indestructible, and is guaranteed to work perfectly in any soil where a plow will work.

It requires no watching. Takes care of itself under all conditions. Adds but very little to the draft of the plow-and harrows and smooths the ground more thoroughly than the best disc-harrow ever built.

## Price List of Racine Rotary Harrow Attachment.

## Cipher.

 Glaux. . . . Two hottom gang attachment, weight 100 lus. . . . . . . . . . . . . Each. 11.50


* NoTE-gurchasers of these goods from branch houses will le charged freight from
Racine in adition to these prices.


## SOLID PRESSED STEEL DRAG SCRAPERS.



THE BOWL is pressed from a solid plate of high carbon scraper steel with smooth, hard surface, that scours perfectly in any kind of soil.

The Corners-The corners, sides and back are formed on a gradual curve, allowing the earth to run back readily, and making the scraper easy to fill to its
 greatest capacity.

The Sides-The sides at the front are not sheared off, as with all other makes of scrapers, hut are carried up on a line with the top. This prevents the scraper fom spilling dirt on the haul.

The Clange-This stye scraper is mad. of steel as heavy in gauge as that used by any competitor and has the advantage of a flange profecting around the upper edge of the bowl which makes it 25 per cent stiffer than a scrapor of the same gauge without flange.

The Thick Center-By a method of stamping exclusively our own, the full thickness of the steel in the scraper is preserved at the point of greatest wear. Every other make of drag scraper is stretched thin at the center in the process of stamping.

THE BAIL is of solid forged steel, amply strong and durable to withstand the greatest strain.

THE SWIVEL, of heavy forged steel, turns freely in a reinforced socket, thus permitting the scraper to be dumped sidewise if desired.

THE HOOKS and HANDLE SOCKETS are of heavy steel, securely riveted in place.
THE RUNNERS of specially hardened steel are fastened firmly to the scraper.
THE HANDLES made of the best quality of hardwood, are tapered to fit rigidly in the sockets.

When ordering, be sure to state what kind of handles and size of scraper wanted.
Cipher.
Price.

| No. 1-Gloriole <br> No. 2-Glossa <br> No. 3-Glossal |
| :---: |
|  |  |
|  |

With runners
With runners
With runners

| 100 pounds <br> 90 Each, <br> Eathds Each, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## CONCRETE AND MORTAR BARROWS.



Concrete workers have long sought a barrow that will carry a full load of concrete or mortar without slopping or wasting material on the haul. This style of barrow was designed especially to meet such requiremente. They have deep riveted trays, angle steel legs and braces and metal tipped extension handles. The width of the tray is only 22 inches which makes it desirable for use in restricted spaces in building construction.

Capacity, $4 \mathrm{cu} . \mathrm{ft}$; weight, 70 lbs.
Cipher.
Price.
Glossoid
Each, \$6.75

## PRESSED STEEL TRAY CONCRETE BARROWS.

While this
style of barrow was designed particularly for handling concrete and cement, they are equally sultable for other purposes. They are thoroughly well built of the best quality of material. The lege ir. of heavy angle steel with angle steel cross braces. An additional $V$-shaped brace extends from the handles at each side and is bolted to the ancle cross braces. They are also equipped with metal tipped extension handles for forward dump.

Capacity, 4 cu. ft.; weight, 65 lbs.
Clpher.


Glossy
Each, \$8.50

## CONTRACTOR'S SOLID PRESSED STEEL

 DIRT BARROWS.The tray is pressed from 15 gauge steel. It has wired edge and is free $f r$ o m seams ard riv tits. Axle runs in malleable

iron boxing. It ors wanting a cheap barrow.

Capacity, $31 / 2$ cu. ft.; weight, 55 lbs. Glosser. . . . . . Price. . . . . . . Each, \$5.7.75

## SOLID PRESSED STEEL TRAY

 BARROWS.

Afavorite with building and paving contractors. T h. construction of this barrow is the same as the dirt barrow except that it is equipped with angle steel legs and braces.

Capacity, $31 / 2$ cu. ft.; weight, 60 lbs .
Glossic. . . . . . Price. . . . . . . Each, $\$ \mathbf{\$} .25$

## THE PANAMA BARROW.

This is a substantial, 1 o wpriced barrow for farm, $g$ arden and general pur-
poses. The tray is prossed from a single sheet of is gauge steel. The frame is well made of selected wood, and the leg braces extend $11 p$ and form a support for the front of the tray.

Capacity, 3 cu. ft.; weight, 40 lbs.
Glossiths. . . . . . Price. . . . . . Each, $\$ \mathbf{5} .000$

## CASE RADIATOR COMPOUND.

Leaks in radiators, water jackets, etc., quickly and permanently repaired by the use of this compound.

Does not in any way interfere with the water circulation, in fact it is an aid because it also removes rust, lime, etc. Get a can and be prepared for emergency.

| Cipher | Price |
| :---: | :---: |
| Granulite-16 Pint | \$1.00 |
| Granulose-1 Pint | 1.25 |
| Granza-1 Quart | 2. |

CASE BAR BUMPER.


A high grade bumper in every respect. Capable of taking up the shock in case of accident without damaging the bumper itself or the car.

Easily attached to any car, no mechanic necessary to install.

Bar is $11 / 4$ inches round and well nickeled, fittings are black.
Cipher-Gradine. Price. . . . . . . . . $\$ 7.50$

## CASE CHANNEL BUMPER.



Simplest and strongest bumper made and the price is such that no car owner can afford to be without one.

The arms are adjustable to any car and are made of the best material.

The springs are incased.
Channel is two inch stock nickel plated.
Best bumper produced regardless of price. Cipher. Graffito
$\$ 10.00$

## AUTOMOBILE COVERS.



These covers were designed especially to meet the demand of such owners of automobiles as are unable to find suitable quarters for their cars so they will be free from dust and dampness. They are made from a selected quality of tan drill and of sufficient size to cover the largest touring car with top in place.
Gleba
. Each, \$14.00

## FOLDING CHAIR.

> A very comfortable chair with padded seal and back. The frame is rigid and durable, made of steel and finely japanned. Fopds sufficiently small to be carried under rear seat. Can be used between the seats of any five-passenger car.
> Cipher-Gotra. Price, $\mathbf{\$ 2 . 0 0}$

## AUTO TRUNK RACKS.



Solid, Staunch and Durable.

They are made of bar steel throughout. They are heavily riveted, thoroughly braced and will not spring or break under any load that can be carried on them.

They are of the double fold type and when not in use offer no unsightly obstruction on the car.
Cipher.
Glycerite. . . . . . . . . . . Price on application

## NEVER-OUT. LICENSE PAD HOLDERS.



Tail bracket


Radiator bracket
Rear-Fits any tall lamp bracket, so that light shines directly on pad. Price. . 80.65

Front-Fits any radiator cap. Complete with bolts and wing nuts. Price. . . $\$ 0.65$

## CASE MOTOR DRIVEN HORN.

A large well finished $h$ orn which emits a strong penetrating warning signal.

Handy to operate and never fails to respond to a touch of the button.
Cipher-Granger

. Price \$9.こ5

## CASE SPECIAL VIBRATOR HORN.

The Case Special
 Electric Horn is somewhat smaller than the Case but is operated the same and produces the same sharp signal. The immence quantity of these horns hat we handle enables us to sell at this remarkable price.
Cipher-Granitic .......... Price $\$ 2.75$

THREE TONE CHIME.


No doubt the best mechanically operated chime of this style. Three musical notes that remain harmoniously blended whether blown softly or with full volume. Will pass government inspection for launch work and under favorable conditions can be heard for miles. Chime $21 / 4$ in. diameter, 14 in . length. In ordering state size of exhaust pipe.
Glucosic...Price complete with valve
and pedal
$\$ 7.50$

RAYFIELD STRAINER TRAP.


Probably fifty per cent of all so called Carburetor trouble is caused by dirt and water in the gasoline.

Stop the trouble before it reaches the Carburetor by using the RAYFIELD Strainer Trap.

It is simple, easy to install and keep clean. It can be attached to any car. Cipher.
Gubbins . . ....Price, each, with con-
nections
$\$ 2.75$


## AUTO CLOCK.

Key wind.
An eight-day key wind clock with 2 $1 / /^{\prime \prime}$ silver dial, black nickel case with bright nickel rim. A very satisfactory time keeper and an ornament to your car.
Cipher-Granolith.
Price . . . . . . .\$6.50

## AUTO CLOCK.

Rim wind
A neat attractive and reliable eightday clock. Rim wind and rim set, flange type, silver dial, black nickel case with bright nickel rim.
Cipher.
Granitize-2" dial.
Price . ..... $\$ 88.00$


## CASE VOLT-AMMETER.

0-35 Amperes, 0-11 Volts.


This instrument is made on an entirely new principle. Having the smallest possible number of working parts it is least liable to get out of order. Each instrument in a chamois leather case.
Cipher.
Growler . . . . Price . . . $\$ \mathbf{\$ 2 . 0 0}$

## THE SCHEBLER CARBURETOR

MODEL L.


The Schebler Carburetor is too well known to require a detailed description. They occupy very little space and can usually be mounted where others can not be used. The Model L has several features which makes it attractive either for automobiles or motor boats.
Cipher.
Glutition.... Price $11 / 4$ in...Each, $\$ 16.00$

## AUTOMOBILE TIRES



GOODYEAR. GOODYEAR TIRE.
Regular $32 \times 4$ Casing.
Cipher-Grammar.
Regular $34 \times 4$ Casing.
Cipher--Glyphic.
Regular $36 \times 4$ Casing.
Cipher-Grunt.
Regular $35 x+1 / 5 \quad$ Casing.
Ciphrr-Gramophone.
Regular $37 \times 41 / 2$ Casing.
Cipher-Granatum
Regular $32 \times 4$ Inner Tube.
Cipher-Grandam.
Regular $34 x 4$ Inner Tube.
Cipher-Glyptic.
Regular $36 \times 4$ Inner Tube. Cipher-Giaco.
Regular $35 \times 41 / 2$ Inner Tube.
Cipher-Grandee.
Regular $37 \times 41 / 2$ Inner Tube.
Cipher-Grandiose.

## Prices on Casings and Tubes current consumers' list.

TIRE COVERS.

[^3]
## ANTI-SKID TIRE CHAINS.



Made of the best material it is possible to obtain. Side Chain is Sherardized and Rustrroof, Cross Chains are made of specially drawn Wire, Case hardened. Is sufliciently hard to stand the wear; yet it is not so brittle that it will crack when coming in contact with stones or iron street car tracks. All Chains are closely inspected before leaving works. This means that we are able to give you Chains that are perfect in every way.
Grama . . . .Size, $32 \times 4$, price per pair. 88.00 Glareola ...Size, $34 \times 4$, price per pair. 9.25 Grubby . . . Size, $36 \times 4$, price per pair. 10.00 Gramercy size, $35 x+1$, , price per pair. 10.50 Goe! ....Size, $37 \times 4 \frac{1}{2}$, price per palr. 11.50

## QUICK REPAIR GUM.

Take a plece between thumb and fingers and knead it to the proper consistency. Stuff it into the cut; give it an hour to harden and the trouble is fixed. It is there to stay.

2 oz. cans.
Price, each.... $\$ 0.55$

## RAWHIDE TIRE BAND.

They are made in a way to fit closely against tires from end to end of Band, the lacing allows for adjustment.


Price, plain. . \$0.65
No. 1, 3 inch tire.
No. $2,31 / 2 \times 4$ inch
No. 2, $4^{31 / 2 \times 5}$ inch tire.
.88

TIRE SHOE.


An inside shoe ready for instant use. Blowouts can be repaired In five minutes so that the tire will run hundreds of miles without further attention.
For $21 / 2$ to 3 inch tires. Price.... $\$ 1.00$ For $31 / 2$ to $\mathbf{4}$ inch tires. Price..... $\mathbf{1 . 3 0}$ CEMENT.

ACID CURE SOLUTION.


## ASSORTED RUBBER PATCHES.

1 dozen assorted rubber patches, used with the Acid Cure Solution.
Price, per package
.80 .90

## TIRE TAPE.



This tire tape is of special quality and suitable width. Is wrapped in tin foil and put up in serew top tin boxes, 1 inch width. Gloat . . . . Per box . . 80.35

## TIRE POWDER.

The finest quality of prepared French chalk for dusting the inside of tires to prevent the tube sticking to the case. Price, per tin .80 .20


## MAYO SPARK PLUG PUMP.



## TIRE TESTER.

If properly used will do more to prevent blow-outs and other tire trouble than any other device on the market. Quickly at tached to the air valve of your inner tube. You can tell at once whether you have sufficient air in your tube or not. More
 damage and rim cutting is done through lack of air in tire than anything else.
Price, each
.$\$ 1.45$

PRESSURE GAUGE VALVE.


An accurate and reliable pressure gauge contalned Nothing to attach or detach. Pump action is made in the ordinary manner and as the pressure in the tires increases the central portion of the valve rises, exposing the scale. When the proper pressure is reached it is only necessary to detach the pump, replace the cap and screw down the valve cover. This forces the gauge back to its original position.
Price, each
.81 .30

TIRE LEVER.


Drop-forged tire levers universally used. The tool ts 11 inches long.
Price, each .............
TIRE TOOL.
A small conveni-
 assist in prying the tire from the rim.
assist in prying the tire from the rim.
Price, each . . . . . . . . . . . . . . . $\$ 0.80$ Price, each

## TIRE FORK.

[^4]

## COMPOUND PUMP.

A double cylinder compound pump that is quick acting. simple and powerful. Delivers a large volume of air, with the least possible amount of effort. Special feature of this pump is the ease with which it is taken apart for replacing plungers or cup leathers.
Cipher.
Glum,
Price, without gauge. . . $\$ 3.25$ Guerdon.
Price, with gauge . . . . 5.00

## PUMP CONNECTION.

Instantaneous in adjustment. Absolutely air tight and fits in valve. Made of cold rolled steel and must not be confused with the cheap imitations made of brass castings. It is attached to the valve by simply pressing it on, and removed just as simply by pulling it off. Glump...Price, each, nickel steel. . . 80.20

## PCMP TUBING.

High Pressure Pump Tubing made especially for pumps, and very strong. 5 -ply rubber.
$1 / 4$ in. inside diameter, per ft...... $\mathbf{8 0 . 1 3}$

## FOUR IN ONE VALVE TOOL.

A very handy lit-
tle tool for removing tire valves, recutting threads, inside and outside, and for removing rough surfaces from top of valve.
 Cipher-Grow 1
. . . . Price, $\mathbf{8 0 . 3 5}$


## VALVE PARTS:

No. 1 Caps. . . Each, \$0.0:
No. 2 Cap Washers. . . $011 / 2$
No. 4 Inside, com-
plete
.15

MOORE TIRE SAVING JACKS.


Rubber tires are a mighty good thing for your automobile to run on-but a mighty poor thing for your car to stand on. The great weight of the ear bearing down at one point soon makes the tire fabric flabby, unable to resist wear-actualiy kills the very life of the rubber.

Moore Jacks solve the problem. They are always ready for use, exceptionally easy to apply and are practically indestructible. Slip the loop over the hub and push down the lever. No strength required.
Cipher.
Gleesome (set 4)..... \$8.50 $36^{\prime \prime}$ wheels and smaller. Grainy (set 4) ......\$10.00 37" wheels and larger.

## JACK.

A ratchet acting screw jack, light, powerful and rapid. The ratchet may be instantly thrown into position to either raise or lower the load. Has all the power of the direct-acting screw jacks, with the advantage and convenience of a lever, moving vertically instead of horizontally. Will pack in less space than any other jack of half its load capacity. Cipher.


Glycerate
. Price, each
.$\$ 2.25$

## SPRING



## COTTERS

125 Assarted
Spring Cotter Pins, ranging from $1 / 16$ in. diameter, $\% / 4$ in. long, in size, and put up in blue enameled metal boxes.

Price per box.
. . . . . . . $\$ 0.15$

## COTTER PIN TOOL.



This tool was especially designed for extracting cotter pins. Price, each
. 80.15


## GALVANIZED SECTIONAL

## FUNNELS.

This style is fitted with fine brass strainer cloth and is jointed so that a chamois skin can be inserted to strain the gasoline.
Cipher-Gliosis.
Diam. Diam. Total
Top. Joint. Height
$10 \frac{1 / 2}{}$ in. 8 in. 13 in.
Price. $\$ 1.65$


## RUBBER ROBES.

These Robes are medium weight material, faced with rubbered cloth insuring against rail or wind. They are very large and will comfortably cover two. First-class material and workmanship.

Price, each, size 48x 72 inches
. $\$ 6.75$

## GOGGLES, Silk Bound.



This Goggle is one of the most popular on the market. It is made of silk, bound with dust proof material and is so constructed as to fit comfortably and closely. Glower


These Goggles are made of fine india Rubber and conform to the shape of the face. Are cool and comfortable and can be washed with soap and water. The lenses oval and curved and can be slipped in and out in a second.
Glucinum.....Price each with extra set amber glasses....\$1.00

Semi-Mask.


A good quality semi-mask goggle of fine wash leather, bound with silk. Aluminum eye cups, with clear, flat oval glasses. A particularly desirabie article for cold weather wear.
Gluconic. . . . . . Price, each . . . . . . $\$ 0.65$
Threshor.


These goggles for use of threshermen Glyconin ...... Price.......Each, \$0.35

## GACNTLET MITTENS.



Black Cape Auto Mitten, with separate index finger and large bell gauntlet, lined with pure lamb's wool.
Glucose.
Price, per pair. \$3.75

## LOCK WASHERS.

## These Lock

 Washers are made especially for automoblle work, are thin, strong and reliable. Assorted sizes, from $1 / 4$ in. to $5 / 8$ in. hole. Price per box.. . . . . . 80.35


## RED HEAD SPARK PLUGS.

The shell or base is substantial but compact, turned from solid steel stock, with solid brass bushing nut to surround the porcelain or mica core. One copper asbestos washer only is used in packing the porcelain into the shell. Cipher. Price. Glee.... $1 / 2$ in. in porcelain
core ...... 50c

## HEL-FI SPARK PLUG.

This plug has four points from which to radiate sparks. The points are not housed as in other plugs, thereby giving the spark free access to the pure mixture of each charge instead of housing burnt gases.
Cipher.
Grafting-Price
$\$ 1.00$


## RAJAH PLUGS.

The feature of this plug is a center terminal which is formed within the porcelain core.

These cores are made of the best imported porcelain and are carefully annealed and treated.

The terminal is a small platinum wire which in action becomes hot enough to burn away all soot and oil deposits. Gleeman, $1 / 2$ in. standard
Grice, each...\$1.30 Goldy $7 / 8$ in. A. L. A. M... 1.30

## MAHER DUPLEX PLUG.

A self cleaning spark plug em bodying a double annular spark gap insuring proper sparking and best results.

Gas in the firing cavity is shot out into the cylinder upon ignition, carrying with it all soot and foreign matter.
Cipher.
Grafted-Price
65 c


## DOUBLE END SPARK PLUG WRENCH.



A solidly and substantially made wrench that is really two wrenches in one. The larger end fits the $A$. L. A. M. or $7 / 8$ inch size plugs, and the smaller end fits $1 / 2$ inch and metric.

Finished in mat nickel with bright nickel-plated lever.
Price, each
$\$ 0.35$

## HANDY OIL GUN.



All-brass, cork plunger, grease and oil gun. Equipped with two spouts, bent and straight.
Price, each, $11 / 2 \times 10$
.$\$ 1.00$

## No. TERMINAL.

To be used on battery connections or other small wire Each . . . . . . . . . . . . $80.011 / 2$


## No. 3 TERMINAL.



A heavy copper terminal for high tension cable.
Price, each . ... $\mathbf{8 0 . 0 4}$

## No. 2 TERMINAL.

A large, stiff terminal with long clips for secondary wire. Has slot for wire to pass through. Price, each . . . .... $\$$


## QUICK ACTION CONNECTO.



Attached or removed without removing thumb nuts from dry batteries. Made of sheet copper with water-proof insulating cover.
Each . . . . . . . . . . . . . . . . . . . . . . \$0.0:

CASE TOOL KITA.


Cipher.-Glider.
List Price $\qquad$ . Each, $\$ 7.00$
This set is comprised of tools that are indispensable. Fully warranted. The case is of heavy duck and the retaining straps double riveted.

## List of Tools.

2 in. Screw Driver. 5 in. Screw Driver.
$3_{4}^{\prime}$ lb. Ball Pein Hammer.
10 in. Stillson Wrench.
5 and 9 in. Mottled Auto Wrench.
Cotter Pin Extractor, Black, with Polished Ends.
6 in. Nickel Plated Combination Pliers
Sin. Mill Bastard File.
8 in. Round Bastard File.
6 in. Slim Taper File.
$S$ in. Drop Forged Wrench.
5,7 and $S$ in. Drop Forged Wrench.
One Piece Soft Copper Wire.
File Handle. $1 / 2$ in. Cold Chisel.
No. 4 Solid Drive Punch.
Box. Assorted Cotters.

## GASOLINE STORAGE AND IUMPING OUTFIT.



Approved by the Underwriters' association.

The tank is made of the best heary, galvanized steel, closely riveted and carefully soldered. Painted with rust-proof paint. Fitted with suction pipe and check valve and two inch filler pipe with vented cap, which has a hinged hasp for locking; also inner tube to allow air to escape when fillIng tank. The pump is made entirely of brass and has a nozzle with hose bibb attachment. Can be locked when not in use.
Capacity. Diameter. Length. 60 Gallons. 25 Inches. 30 Inches. Cipher.
Globoid. . Price of tank and pump
(No pipe) . . . . . . 840.00

## CASE AUTO CELINDER OHE.

We offer Case cylinder oil and recommend it to be the best oil on the market. It has a high fire test; it will not carbonize the cylinders or foul the spark plugs: its viscosity is as great as is consistent with splash lubrication and high speed. There is no economy in, and we strongly advise against the use of cheap oils.


Price 1 gallon cans............ $\boldsymbol{\$}$ o.7.
Price 5 gallon cans . . . . . . . . . . $\mathbf{3 . 5 0}$
Price $1 \%$ barrel
20.00

## TRANSMISSION GREASE.



Case Automolile Transmission Grease is an excellent lubricant. It is free from acid, will not become rancid, is of uniform composition and high efficiency. For winter use, if desired, it can be slightly reduced with Case Auto Cylinder Oil, although for seneral use it wall be lound to answer general needs as it comes from the can.
Price, 5 lb. can
$\$ 0.155$
Irree, 10 fb can
1.25


## AUTO OIL TANKS.

Made of galvanized stee. Depressed so that any oil spilled will drain back into the tank. Fitted with positive action force-pump with small spout to fill small oilers. Pump is detachable.
Cipher.
Capacity.
Diameter.
Price.
Glisk ...... $15 \mathrm{gal} .15 \mathrm{in} . . . . . \$ 5.00$
Glissade .... 30 gal.
22 in . . . . . 5.50


Price.
Cipher.
Glore . . . . . . . . . $30 \mathrm{gal} . . . . . . . . .$.
Gloriette . . . . . . $60 \mathrm{gal} . .$. . . . . . .
$\mathbf{5 . 5 0}$

## METAL POLISH.

For gold, silver, aluminum, brass, copper, steel or nickel. Gives a high and lasting luster and will not mar the highest finish. It works equally well on hot and cold surfaces. Contains no acid and will not injure the hands. Positively cannot corrode any metal. Requires less rubbing than any other polish.
 Put up in screw-top gallon cans. Glazer. . . . . . . Price, per gallon. . . . $\$ 1.3 \mathrm{~J}$

## BODY POLISH.

This is a liquid polish for cleaning and polishing varnished surfaces. It removes mud stains and leaves the surface dry and smooth leaves the surface
with a high lustre.
1 pint can
$\$ 0.35$

## ACTO OIL SOAP.

Made of pure vegetable oils. Absolutely will not injure the finest varnished surface. Retains the high lustre of new varnish and restores old finish to its original gloss.
Cipher.
Gloomy
Each
lb. pail
\$1.3்


## SOCKET WRENCHES,



The Ratchet Socket Wrench consists of the wrench and six size sockets $1 / 4$ to $1 \frac{1}{4}$ in. and the extension with knuckle. You can turn burrs that you cannot turn with any other wrench. Can be used to arive bit or drill. There is a reversible cam and should you for any cause want to remove the burr, just re-
verse the cam and turn off the burr, without removing the wrench There is no burr in any position that you can get the wrench on but what you can turn

Cipher-Glioma...Nickel plated and enclosed in a nice tin chest. \$5. ©O

## SPRING LEAF SPREADFR.



Lubricate your springs properly and get more comfort, less expense and NO SQUEAK.

A most essential tool which separates the leaves for oiling without damage or mar to spring.

Cipher-Grantor
. Price $\$ \mathbf{\$ 1 . 6 0}$

## THE COMBINED VALVE GRINDER, BREAST DRILL AND RATCHET.



Cipher-Glyceryl.

This instrument is different from the ordinary breast drill. By simply changing position of dog the shank can be run to the right or left, or it the right or be used as a ratchet.

When used as a valve grinder the shank moves to the right one-half turn nd reverses while the handle continues in one direction.

The chuck is adapted for round shank as well as taper shank drills.
Price . . . . . . . . . 87.50
Extra cans grinding compound.
Cipher-Glycide. Price

## THE CASE CARBON REMOVER.



## VALVE SPRING REMOVER.



This little tool has more and greater advantages than any valve lifter on the market. It is so compactly arranged that it will pompress the spring however awkwardly it may be situated and enable you to remove the valve without any effort or exertion. Base is of bronze and of neat design. Rack is made of cold rolled steel, accurately cut to mesh with cut gear.

Prlce . . . . . . . . . . . $\$ \mathbf{\$ 2 . 6 5}$

## CASE SPRING REPAIRER.



Will fit any spring, no matter where the break is.

Is made of dropped forged steel, is $16^{1 / 2}$ inches long, and very light in weight. Cures the break, but does not take the springiness from the spring.
Glycerose. . . . . . Price, each .
.82 .50

## NO KEY PADLOCK.

There are eight buttons on each side, any of which may be included in a combination, and, when pressed, the lock will open instantly. Locks like an ordinary spring lock. Can be operated as easily in the dark.

More than $40,000 \mathrm{com}$ binations are possible, and it cannot be opened by anyone not acquainted with the combination. The combination can be changed in a moment.

Being made entirely of brass, it is absolutely rust-proof, strong enough to stand the greatest strain. and embodies no intricate mechanism to got out of order.
Price, cach
$\$ 1.05$


## ALCO DE LUXE BURNER.

The burner is made of genuine German stone. The shank of burner screws into a brass pillar turned from solid hexagon brass. Fits all lamps.
Cipher.
Grouper . . . .Price. . . . \$ $\mathbf{\$ 0 . 4 0}$


## BURNER CLEANER.



Handy little contrivance for cleaning Gas Burners ......... Price, Each $\mathbb{8 0 . 1 5}$

## REBBER LAMP TUBING.



The finest quality $3 / 16$ Red Rubber Tubing, guaranteed to stand 35 to 50 pounds pressure. Packed 50 feet in box. Cipher-Globulite.
Price, per foot $\qquad$


## CALCICM CARBIDE.

We carry the $1 / 2$-inch size carbide in 10 pound cans. This is the size used for all automobile generators.
Cipher.
Glucosine. . 10 lb . can . . $\$ 1.25$

## IGNITION BATTERIES.

Famous for their combination of high amperage and voltage, with long life and absolute uniformity. These features insure a hot, snappy spark, maximum mileage and consistent service. Best in world for auto ignition.

Size 6. cach............ 80.35
Size 7, cach. . . . . . . . . . . $\mathbf{6 0}$
Size S, cach


## COPPER TUBING NIPPLES

## Brazed, Not Soldered.

Reamed out to just $1 / 4$ inch inside diameter.

The Copper Tubing should be soldered into the inside of these Nipples.
Y Connections. Each . . \$0. 11
T Connections. V̌ach.. . 11

## GAS NUBING NIPPLEN.



Brass Nipples for connecting rubber tubing. Made of brass castings about inch in dianter for Rubber Tubing with $3 / 16$ inch hole.

Tee Comnection ... Eitch, ol
$Y$ Connection . ...Each, . $0 \frac{7}{7}$

## RUBBER LAMP CONNECTIONS.

The highest quality red rubber tubing with special reinforced ends that positively will not split. check, loosen or leak, 14 inches long.

Price
$\$ 80.15$


HANDY GAS TANK KEY. Combination Gas Fey and bottle opener. Price, each .......80.15

## GAS BAGS.

These Gas Bags made from pure soft rubber. inserted between $t$ h e generator and the lamp, prevent flaring
 up of the blaze when going over rough roads.
Price, each
.$\$ 0.25$

## TROUBLE LAMP.

This lamp is provided with an electric bulb by which a strong $b$ ea $m$ of light may be thrown upon the point which it is desired to illuminate.
Gleaning. . Price, com-
plete ....S2.00


## HYDROMETER SYRINGE FOR TESTING STORAGE BATTERIES $\$ 1.25$



## ORDER BLANK

An order made out on this blank and mailed to our branch office in your locality insures as prompt attention as if handled by the home office.

## DATED AT

TOWN
state
R. F. D. No.

SHIP BY TO
PARCEL POST. FREIGHT OR EXPRESS

## Enclosed Find \$

FOR THE FOLLOWING:
PIECES $\mid$ SIZE

## SIGNATURE

Goods WILL NOT be sent by parcel post unless sufficient postage accompanies this order. In case more postage is sent than is required, we will return surplus.

## GENERAL INFORMATION

## Repair Parts Price List For Supplies Mailed on Request.

TERMS-The prices quoted in this catalogue are for Cash With Order, from which rule we will make No Exception. Prices are subject to change without notice.

REMITLANCES-Send money by bank draft, registered letter, express or postal money order. Persomal checks may be sent providing exchange for their collection is added. The cost of sending money must be paid by the purchiaser.

GCARANTY-All goods are guaranteed, and we will cheerfully exchange, or refund the purchase price, as the customer may direct, on anything found to be otherwise than as represented.

HOW TO ORDER-Always use our printed form of order blank if possible. State plainly in your order your postoffice address, name of shipping station, and whether you wish goods forwarded by mail, express or freight.

We carry a large stock of supplics at each of our branch houses and customers will save time and transportation charges by ordering from the branch house in their locality. All orders should be directed to the J. I. case Threshing Machine Co., whether sent to a branch house or to the factory at Racine, Wis.

ORDERENG FROM IOCIL DEAKERS--Thresher and Automobile Supplies can be ordered through any of our local dealers, who will be pleased to order them for you. Findly bear in mind, however, that the prices quoted herein are for Cash With Order, and you must not be unreasonable enough to expect the local agent to grant you credit on Supplies at these Cash with order prices, as he must settle with us in cash to get the benefit of our cash prices himself. In the event that credit is desired. 10 per cent. additional will be added to the prices quoted harein. It will also be necessary for the local dealer to add actual freight or express charges to these prices unless you order him to have goods shipped in your own name.

TIRANSPORTATION-Freight, express or postage must be paid by the purchaser. Sufficient postage must accompany order. otherwise goods will not be sent by parcel post. We will promptly return surplus postage.

TEIEGRAMS-Customers must prepay telegrams. Use the cipher, but be very careful to spell the word as it is given in the book.

## BRANCH HOUSES

## Wh re Stocks of Machinery, Automobiles, Repairs and Supplies are Carried for Quick Delivery <br> UNITED STATES

California: San 'rancisco.
Colorado: Denver.
Genrgia: Atlanta.
Illimois: Chicago, Peoria, Freeport.
Indiana: Indianapolis.
Iorra: Des Moines, Sioux City,
Mason City, Waterlon.
Kansas: Great Bend, Wichita.
Kentucky: Louisvilie, Lexington.
Massachusetts: Boston.
Michigan: Lansing.
Minmesota: Minneapolis, Duluth, Mankato, Fergus Falls.

## CANADA

Alberta: Calgary, Edmonton. Manitoba: Winmipeg, Brandon. Ontario: Toronto.
Saskatchewan: Regina, Saskatoon.

Missouri: Kansas City, St. Louis. Montana: Billings, Great Falls, Lewistown, Havre, Glasgow. Nebraska: Lincoln.
New York: New York City, Syracuse.
North Carolina: Greensboro.
North Dakota: Fargo, Dickinson, Beach, Bismarck, Williston, Hillsboro, Carrington, Minot, Casselton, Cooperstown, Devils Lake, Grand Forks, Harrey, Rugby.

## FOREIGN

Russia: Odessa.
South America: Buenos Aires, Kosario, Bahia-Blanca, Montevideo.
France: Paris, Bordeaux, Toulouse.

Ohio: Columbus.
Oklahoma: Oklahoma City, Enid. Oregon: Portland.
Pennsylrania: Harrisburg.
South Dakota: Aberdeen, Mitchell, Watertown, Lemmon.
Tennessee: Nashville.
Texas: Amarillo, Dallas, Houston. Utah: Salt Lake City.
Washington: Spokane.
Wisconsin: Madison, Oshkosh, Racine, Milwaukee.
Wyoming: Sheridan.

## FOREIGN AGENCIES

Philippine Islands: Manila.
Mexico: Guadalajara, Monteres. Chili: Valparaiso, Talcabuano, Santiago, Concepcion, Valdivia, Coquimbo.
Hungary: Budapest.
Bulgaria: Widin.

## For Particulars, See Our Nearest Local Dealer or Branch House.

Factory and General Offices
at Racine, Wisconsin, U. S. A.
Local Dealers in Nine Thousand Towns in the United States and Canada

## ORDER BLANK

An order made out on this blank and mailed to our branch office in your locality insures as prompt attention as if handled by the home office.

## DATED AT

TOWN
STATE
R. F. D. No.

## SHIP BY

$\qquad$ To
PARCEL POST, FREIGHT OR EXPRESS

## Enclosed Find \$

FOR THE FOLLOWING:

| Pieces | Size | Description of Articles | Price |  |
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|  |  |  | Dollars | cents |
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## SIGNATURE

CASH MUST BE SENT WITH THIS ORDER in every case; otherwise no attention will be paid to it.
Customers must pay charges for sending money.
Stamps are accepted by us on purchases amounting to $\$ 1.00$ or less. Other forms of remittances are safer, however, and we recommend Express or Postal Money Order.

Goods WILL NOT be sent by parcel post unless sufficient postage accompanies this order. In case more postage is sent than is required, we will return surplus.

## INDEX




## "OLD ABE"

OLD ABE, the famous war eagle of Wisconsin, was captured by Chief Sky, a Chippewa Indian, son and successor of Thunder of Bees, during sugar-making time in 1861 on the Flambeau river.

While on the road, the young Chief sold his precious bird to Daniel McCann of Evil Point, for a bushel of corn. An old veteran with a bias for oratory thus describes the transaction: "And for this paltry sum was a noble bird sold from freedom to captivity; from barbarism to civilization; from the murmur of the pines to the crash of battles; from obscurity to fame."

Daniel McCann carried the eagle to Eau Claire and offered the eagle, now full grown and handsome, to what subsequently became Company "C" of the Eighth, or Eagle Regiment.

The eagle was christened Old Abe in honor of the man on whom were centered the hearts and minds of all the people.
Old Abe was in thirty-six battles. During the engagements he suffered but few slight wounds, and returned home to Madison hale and hearty. In 1880, when the soldiers' reunion, on a vast scale, was being held in Milwaukee, Old Abe attended, sharing the honors of the event with General Grant.

Ja the winter of 1881 a fire started in some old paints and oil stored in the basemev. of the Wisconsin State Capitol, where Old Abe spent his days. On March 26, 18 51 , with a slight tremor Old Abe expired in the arms of his keeper, George Gillis. Like the great Napoleon, Old Abe died out of battle.

Old Abe witnessed the saddest war in history, but today he is known and revered throughout the world as a sign of peace and plenty, the sign of industry. Business men know him because CASE machines bear his picture. Over the main door of the CASE Office is a gigantic bronze of Old Abe.

While you are reading these lines, CASE Threshing Machines in various parts of the earth are separating from the chaff, the grain which makes the bread for both the powerful and the humble. They are being driven by power generated in CASE tractors, burning in some localities coal, in some gasoline and kerosene, in others straw or wood. The threshed grain, grown on land plowed and made ready for seed by gang-plows bearing our name, is being carried over, roads made by CASE road machinery, and in those parts of the world, when the day's work is done, the toilers are resting from their labors, many of them enjoying in their CASE motor cars the quiet restfulness of out of doors.

This is only part of the story of Old Abe. We will send you a copy of this interesting booklet if you want it.
J. I. CASE THRESHING MACHINE COMPANY, inc., RACINE,WIS., U.S.A.


YOU ARE PROTECTED BY OUR WRITTEN WARRANTY

DEERING AND McCORMICK HARROWS ARE BUILT TO GIVE YOU SERVICE

Farmers are buying Mogul kerosene tractors Because they are built to operate on kerosene Because they do operate successfully on kerosene Because the Company guarantees them to operate on kerosene and makes this guarantee a part of the warranty on every order

The Mogul $8-16$ is a practical, all-job tractor. It is suitable for the small farm and will do its share of work on the large one It has won favor with its steady, long-lived, slow-speed motor and its record for economy in drawbar and belt work. It has a simple, safe and strong transmission with gears in a dust proof case running in drive-fuel saving governor-simplest possible cooling syspossible cooling sys out batteries-an oiler that never forgetsit is a pleasure to operate

The Titan 10-20 has made satisfied owners in all sections of the country by the way it furnishes low cost power for all farm work. It is designed and built to meet the conditions on the
farm. It has a simple, two-cylinder, vibrationless motor enclosed


Illust. 2. Titan 10-20-A Three-Plow Kerosene Tractor
from dust and dirt and fitted with the latest mechanical lubricator, magneto, etc.-all parts are readily ac cessible - it has two speeds ahead and one reverse-a chain drive to each rear wheelthe control levers are s especially adapted s all kinds of field or to all kinds of field or -is throttle governed belt work and has adjustabl A 432 G. $11-29-\mathrm{F}$

These disk harrows have all the improvements that years of experience in building and use in the field have developed. Frames are made of strong angle steel rigidly braced to give service under adverse conditions-most of the parts are of steel They have four-wear long-life bearingsadjustable snubbing blocks that hold the gangs level at all cut ting angles-gangs are independent of each other to make it possible to work on hillsides -adjustable steel scrapers keep the disks clean.

These harrows are provided with hard oilers that are easy to fill-levers are convenient-steel clevis hitch that can be adjusted up or down. Tongue truck furnished special

You can get an International disk harrow to suit your wants from 4 feet to 8 feet wide with either 16 or 18 -inch disks.

International spring-tooth harrows have teeth that cannot work loose and that can be set at any desired cutting depth-the tooth bars are of high grade steel to resist the twisting action of the teeth-runner shoes that take the wear off the frame-levers are substantial and easy to reach - riding sulky special equipment -has adjustable hitch-special alfalfa teeth can be supplied. Made in sizes with 15 to 23 teeth- 4 feet 9 inches to 7 feet 3 inches wide.

International peg-tooth harrows are made of all steel that cannot check nor rot-the U-shaped steel tooth bars give greatest possible strength and hold the teeth in the position you place possible strength and hold the teeth in the position you place them by the handy adjustment levers - a long tooth at each corner acts as a runner and saves loading harrow on to wagonequipped with light steel sulky, special.
INTERNATIONAL HARVESTER COMPANY OF CANADA, LIMITED Brandon, Man., Calgary, Alta., Edmonton. Alta., Estevan, Sask. Lethbridge, Alta., North Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg Man. Yorkton, Sask., Hamilton, Ont., London, Ont., Montreal, P. Q. Ottawa, Ont., St. John. N. B,, Quebec, P. Q.

## GIVE EVERY PLANT A SQUARE MEAL

The new Deering and McCormick spreaders have the improvements and features that make them one of the most valuable machines a farmer can buy. They will help you get more returns from the manure because they spread it properly. Properly spreadmeans more than simply throwing the manure on the ground. It means pulverizing the lumps, tearing up the straw and spreading an


Hllust. 4. Spreads the International WayWide and Evenly thin as you may desire.

The wide spread feature has many advantagesthe same area can be covered by traveling a shorter distance-helps to cover all the ground when top dressing-permits use of narrow box, which enables driving spreader directly into stable-wheels always travel on unmanured ground.

International spreaders are also well known because of their high class construction throughoutthey are low down, which saves work-angle steel frame trussed and braced with steel-fifth wheel provides for surface irregularities and permits load to ride evenly-pull is direct from frame of spreader, no excessive tongue lashing-return or endless apron-high steel wheels furnish abundant tractive power-hard oil cups supplied-has wooden roller for crushing lumps and leveling load-gearing protected by steel casespreader keeps working while making turns-has heavy steel axle-has three rates of feed-apron made of well seasoned wood slats which run on iron rollers -beater properly placed-has rear axle roller bear-ings-can be used for spreading lime-made in sizes to suit varying conditions.

## SAVE THE CREAM AND SAVE <br> YOUR STRENGTH



Someone has said that "Headwork lightens Housework." No doubt the statement is true. We will take it for granted that you are anxious to get your heavy houseworkwashing, churning, pumping, etc., done in the easiest and best way.

Has the expense of an engine kept you from using one? A Mogul 1-H. P. kerosene engine will develop 1-H. P. for an hour on about one pint of kerosene. The average cost of kerosene over the country is about eight cents a gallon-one cent a pint. There you have an hour's work for about a cent's worth of fuel.

The United States Year Book, Department of Agriculture, shows that the average price of eggs for the past year on the farm was nearly twenty-four cents per dozen, or about two cents each. There you have it. A Mogul kerosene engine will run your washer or pump, etc., an hour for the price of an egg. Can you afford to do your heavy housework by hand for that small amount? Let a Mogul lighten your housework.

Mogul kerosene engines are made in sizes for every job on the farm. They are stationary, skidded, mounting, portable, hopper or tank-cooled.

Drop us a postal card for catalogue and we will tell you where you can see a Mogul engine.

Do you still set cream in pans and crocks? Then you probably don't realize how much cream you are losing or how much unnecessary work you are doing - you're "just used to it."

Think of the cream separator and what it will do for you! Even if you have only two or three cows, you will soon save enough cream to pay for it. And the 5 or 10 minutes spent in cleaning it you will find quite different from the half hour or more spent cleaning the crocks.

## Let One of These Separators Take the Drudgery Out

of Dairy Work and Put Good Profits In
My how easy it turns! You can stand or sit in a natural position, and once started you scarcely know you're working. Then too, by belting it to one of the engines, shown in this folder, the work can be reduced to practically nothing.

Both of these separators, Lily and Primrose, are well constructed. They are of the disk type of separator - the most efficient and


Mlust. 6. Primrose and Lily am Separators Operal
by hand or engine most durable skimming mechanism known. They are easily cleaned, oil themselves by the spray system, are easy to fill and turn, and they get all the cream. They are sold in four Imp. sizes: No. 1, Capacity 350 lbs. -33.4 Gal. per Hour No. 2, " 450 " 二 $^{42.5}$ " " " " No. 4, " ${ }_{850}^{650}$ " -82.3 " " "
Send for one of our illustrated separator catalogues, and we will tell you where you can see these machines.
The attachments for direct belting are sold as extras.
By belting to a shaft the engine can be used to operate other machines.
Let Us Hear From You-Use the PostCard Enclosed in the Almanac

## THE RIGHT PLOW FOR YOUR NEEDS

Oliver and Hamilton plows are especially designed for Canada. These lines include every desirable style-walking, riding and tractor. They have unusually strong beams and standards and are built throughout to stand Canadian conditions.

Oliver and Hamilton plows have every adjustment found on other plows and many exclusive ones. In addition, these adjustments are more close and exact than those found elsewhere, enabling you do the best work under


Oliver No. 1 Gang.
clearance between the bases to prevent choking do the best work under any conditions. Ask for catalogue and complete information

Save Money by Using a Vessot Feed Grinder
Bigger and bigger the feed grinder stands out on the list of machines the practical farmer cannot afford to do without.
VESSOT GRINDERS have stood the test for thirty years, they have been imitated but never surpassed or equaled. They are built in the largest exclusive in the largest exclusive rinderfactory in Canada.
Perfection, durabil. ity and service are built in Vessot grinders. Light running, each part balanced separately on a taper grinding shaft. They are supplied with brass friction end thrust block, quick lever release and accurately balanced plates.


Vessot grinder plates
They help you get more for your feed are made of special materials which cause them to outlast all others and to do better work in grinding barley, corn, oats, wheat, peas, are being imitated. Look for the "SV" stamp on the grain. The
Vessot oat rollers also have a reputation equal to Vessot grinders.
Vessot grinders are made in the following sizes: Farm grinders $6 \frac{1}{1}$ inches, 8 inches, 9 inches, $9 \frac{1}{4}$ inches, $10 \frac{1}{2}$ inches and 11 inches. Mill grinders 11 inches, 13 inches and 15 inches. $6 \frac{1}{2}$ inch grinders can be run by a $2 \frac{1}{2}$ H. P. Mogul or Titan Engine.


[^0]:    *NOTE-Purchasers of thase goods, from our branch at Portland, Spokane, San Francisco, Oklahoma: City, Houston Amarillo, Dadias, Billings, Sheridan; Salt Lake City or Denver will be charged freight from Racine intaddition to théséprices.

[^1]:    Price list furnished on application.

[^2]:    * NOTE-Purchasers of these goods from our branch at Portland, Spokane, Oklahoma City, Houston, Amarillo, Dallas, Billings, Sheridan, Salt Lake City, or Denver, will be charged freight from Racine in addition to these prices.

[^3]:    Vers substantial and durable. Cut and made to fit tire like a glove. In fact, a button cover equal to any other cover on the market.
    Cipher.
    Glutamic $30 \times 3$
    Glutaric $30 \mathrm{x}=\mathbf{8 2 . 0 0}$
    Graith $\cdots$. $\$ \frac{2}{2} \mathbf{0} 0$
    Glary $\because \times 8 \mathbf{8 0 0}$
    Growth $3 \dot{6} \times 4{ }^{-\$ 200}$
    
    . . . . . . $\mathbf{\$ 2 . 6 5}$
    
    Gndroon. $37 \times 41 / 2$.............. 2.65

[^4]:    For removing and replacing security lugs and tubes in tires. Equipped with rollers which prevent damaging tire while removing.
    Price, each
    
    .80 .65

