

HERTZLER & ZOOK CO.

MANUFACTURERS
OF
WOOD SAWING
MACHINERY
AND
FARM
IMPLEMENTS



Catalog No. 14-1919

BELLEVILLE,

PENN'A.

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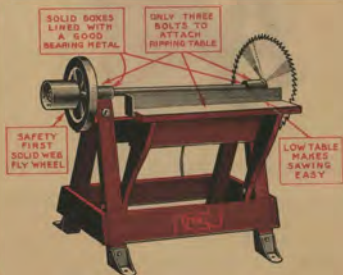
Exceptional Values

In Wood Sawing Machinery

We place this colored section here in order to especially direct your attention to some of the exceptional values in the H. & Z. Line of Wood Saws.

After years of work in various sections of the country these particular outfits have shown by their records that they can be depended upon in any emergency. The sizes and proportions are just suited for all around work just as it comes, and when it comes standing up under severe stress and heavy duty, these numbers have proved their dependability so often that we do not hesitate to put them up against any sawing rig in the world for the kind of work for which we recommend them.

All of these rigs are covered by our "Square Deal" Guarantee which is the most liberal guarantee ever given with a saw outfit. So, you cannot go wrong in taking one of the outfits if you want a rig that will do lots of work, at little cost and continue to make money for you years after it has paid for itself.



No. 1 Saw Frame with 35 Pound Fly Wheel

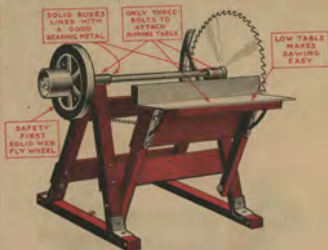
This is undoubtedly one of the greatest all around small rigs ever offered for sawing purposes. When a 16 in. cordwood blade is used it may be run with 1 H. P. engine, but we recommend 2 H. P. and upward with which it will cut wood as fast as any one man wants to handle the wood. The low table makes sawing easy and insures a big capacity; the solid boxes lined with high grade babbitt metal reduces friction and vibration to minimum and insures long wear and years of service. Outfit is quickly changed over for ripping work by simply unscrewing 3 bolts and attaching ripping table and blade.

If you want a small rig suitable for all round work which is a big value for its cost, why not decide to have one that gives you as much as this little rig?

Full particulars, dimensions and prices on this outfit will be found on page 5.

The H & Z Line of Wood

Our line of Sawing Outfits provides the largest assortment of sizes and designs offered anywhere in the country and there is no ordinary need in saw outfits which can not be filled from our stock. But of all the designs and sizes made by us the outfit shown on this page has been found to be the most universally popular for custom and contract work. We have outfits like the one illustrated on this page serving their owners in practically every timber section of the country and the universal verdict is that this particular saw is the best money maker ever hooked up to an engine.



No. 4 Saw Frame With 56 Pound Fly Wheel

This wood saw frame is built expressly for custom or contract work in sawing pole and cordwood when large quantities of wood are to be handled. Requires three horse power and upward to operate and when hooked up with this amount of power there is not an outfit in the country which can surpass it for capacity.

By the insertion of 3 bolts and a rip saw, the No. 2 ripping or shingle table may be added to the machine and when rigged for this work capacity is likewise exceedingly large.

This saw frame gives you speed in work, so why have an outfit which can't stand crowding? It enables ripping work in a moments time for changing machine, so why not do both kinds of work with one machine?

It's low table makes sawing easy and insures fast work: so why have a machine that is inconvenient, when time means money as it does in custom or contract sawing?

If you are looking for a sawing outfit with enormous capacity which does not waste power and makes money fast in custom and contract work, this is the one you want.

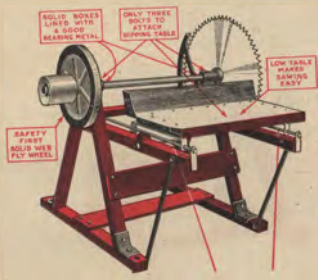
See specifications, full description and prices of this saw frame on page 5.

Saws--Greatest in the World

In portable sawing outfits it is necessary to keep the weight of the outfit down as much as possible, yet the success of a **rolling** table depends upon the table being sufficiently heavy to hold itself down. These two factors can not be embodied in the same outfit—a sacrifice in weight to secure lightness for portability means a loss in efficiency by reason of the loss of weight in the Rolling type of table.

Therefore we have designed our saws of this class with a **sliding** arrangement for the table with which it is impossible for the table to bind or catch. At the same time the need for excessive weight needed in the rolling type is avoided and highest efficiency is thereby maintained without sacrificing any of the advantages of portability.

For hard, continuous, everyday duty and fast work—the kind of duty demanded of a money maker—we can not recommend this outfit too strongly as we feel there is nothing on the market which equals it in this respect.



No. 11 Sliding Table Saw Frame with 56 Pound Fly Wheel

This saw frame has proved a big favorite for all work where this type of machine is desired. The advantages of our **sliding** over the light Rolling types of tables is clearly shown in the illustration. This table construction is positive in action and slides freely yet holds table rigidly and eliminates all possibility of binding or running the saw into the steel table spoiling both sawing nothing of the danger involved which is the common objection to the rolling type.

The low table also insures easy operation as the saw blade helps pull in the wood which makes this outfit one of the best and easiest machines to operate on the market.

You do not want a machine that is frequently binding and catching; then why use the rolling table when the H. & Z. type of sliding table does away with such trouble?

If you want a machine easy in operation, fast in work, economical in power and dependable in every day service,—this H. & Z. sliding table type will prove to be the very machine you are looking for.

Full details, specifications and prices for this machine will be found on page 10.

Power Savers, Money Makers-All

There has always been considerable demand for a saw frame of the tilting table type for cordwood and pole sawing exclusively. Wherever such an outfit is used we have found that the demands made upon the machines for volume of work, were very heavy and therefore the machine to give the best results must be designed for fast work and built strong and rigid so as to stand up under severe service.

For this class of work we recommend the outfit shown on this page because it has been designed solely with the idea of doing fast work and lots of it in straight cordwood or pole sawing. This machine will be found particularly adaptable for pole and cordwood sawing.



No. 1605 Tilting Table Saw Frame with 70 pound Fly Wheel

This machine will handle poles any length and wood may be brought in from either side. Ripping attachment cannot be used with this machine.

This outfit is built along the same general lines followed in constructing all H. & Z. saw frames; the fly wheel weighs 70 pounds which gives ample weight to insure fast sawing and smooth running in the heaviest kind of duty. The boxes are lined with highest grade babbitt metal which reduces friction and insures full value in work done from power delivered to the machine.

If you have lots of pole wood or cordwood cutting to do this is the machine to get. It has a big capacity and will stand up under the severest kind of service just the same for you as it has for others in all sections of the country.

You want to be sure your sawing investment will be a success—then why experiment with other outfits when you know this tilting table frame is a "Tried and Proven" outfit which we back with our reputation to prove successful and satisfactory in every way?

Full details, prices and specifications will be found on pages 12-14.

THE GREATEST LINE OF WOOD SAW- ING MACHINERY IN THE WORLD.

No. 1

Is one of the greatest little saw frames offered to the trade. One horse power and upward will run it. Mandrel 1 5-16 in. by 41 in. long with arbor for saw blade having 1 1-4 in. hole.

Pulley 5 in. by 5 in. takes saw blade up to and including 22 in. Shipping wt. 100 lbs.

Cash with
Price for frame less Order
blade \$10.00

Price as shown a-
bove with 16 in.
blade filed and set

ready for work	13.12
18 in. blade	13.60
20 in. blade	14.28
22 in. blade	15.18



No. 1 with 35 lb. Fly Wheel

Shipping wt. 135 lbs.

Cash with
Order

Frame less blade	\$12.25
With 16 in. blade filed and set	15.37
18 in.	15.85
20 in.	16.53
22 in.	17.43



No. 1 Saw Frame with Ripping table and Rip Saw at- tached

This table and frame will carry rip saws up to and including 20 in. A trial of this machine will convince you.

When ripping tables are used it requires a saw blade for ripping. No one should attempt to do ripping with a cordwood saw blade, or saw cordwood with a rip saw.

Price for ripping table
only for No. 1 frame

as shown \$ 2.50



We are arranging to ship all our saw frames knocked down and crated in a neat substantial crate in order to eliminate brakages and damages, as well as to reduce the freight rates.

Any frames that are knocked down are supplied with a checking slip and a cut to show just how it should be properly set up.

When you wish to buy both Engine saw and belting, do not overlook our **special offer** on the combinations as we recommend them on pages 43 and 44.

The No. 2 Wood Saw



This wood saw is designed similar to No. 1 with the exception that it is heavier, has a steel extension table, is built for heavier service, and requires two H. P. and upward to run it, and carries saws ranging in size from 20 inches to 28 inches inclusive. Will cut round wood nine to eleven inches thick.

This is one of our standard machines, and is built in such a manner as to permit putting on our ripping attachment which is one of the greatest features of the machines and is fully explained on page 18.

Mandrel—The Mandrel is one and seven-sixteenths inches in diameter and forty-nine inches long, fitted for a saw having a one and three-eighths inch arbor hole.

Boxes—The Boxes are of ample size and provided with a large oil cup lined with a high grade of bearing metal.

Pulley—It has a six inch Pulley. Shipping weight, 190 lbs.

	Cash with Order	Cash with Order
Price of frame without blade; otherwise as shown above	\$14.75	24 in. Cordwood blade
With		26 in. Cordwood blade
20 in. Cordwood blade	19.03	28 in. Cordwood blade
22 in. Cordwood blade	19.93	

In making up your order for shafting, boxes, hangers, belting, pulleys, clutches, etc., don't fail to carefully check out prices on another page of this catalog, as they are strictly factory prices.

The No. 2 Wood Saw with Fly Wheel

Shipping weight, 240 lbs.

Price of No. 2 wood **Cash with**
saw with 56-lb. fly **Order**
wheel as shown in
cut, without blade \$18.00

With

20 in. blade	22.28
22 in. blade	23.18
24 in. blade	24.20
26 in. blade	25.30
28 in. blade	26.35

Shipping weight, 240 lbs.



This Cut shows our No. 2 Saw Frame as it Appears with Ripping Table and Rip Saw Attached

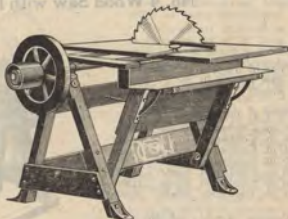
For full particulars of this attachment see Index.

Price for ripping table only for No. 2 frame as shown \$3.80.

When ripping tables are used it requires a saw blade for ripping. No one should ever attempt to do ripping with a cordwood saw blade, or saw cordwood with a rip saw.

To get the price of above machine with all attachments add the price of the ripping table and the price of any size ripping saw you wish (26 in. or smaller) to the machine you want.

All blades filed and set ready for work.



We further wish to impress on the minds of our farmer friends the fact that the ripping table attachment is the greatest feature of the wood sawing machines, as most of our farmers having gasoline engines first do their cordwood sawing, then they remove the cordwood blade, attach the ripping table which enables them to do all kinds of ripping of lumber such as making roofing lath, palings, pickets, crate lumber out of refuse that would otherwise be wasted and lost. Again, for hewing or pointing posts it has no equal and can be used in this way. twelve months in the year. **WHY NOT** order one right now to try out, and if it don't please you, return it at our expense.

Remember we make the **BEST** and **Largest** assortment of **Wood Sawing Machinery** in the world.

No. 4 Wood Saw



This wood saw is built expressly for doing custom or contract work and for sawing pole and cordwood where large quantities of wood are to be handled; the capacity of the machine is very great; the power required is three H. P. and upward; carries cord wood saws up to and including thirty two in.; rip saws up to and including 26 in. Is one of our standard machines.

Mandrel—The Mandrel is one and seven-sixteenths inches in diameter and forty-nine inches long, fitted for a saw having a one and three-eighths inch arbor hole.

Boxes—The Boxes are of ample size and provided with a large oil cup, lined with a high grade of bearing metal.

Pulley—It has a six by six pulley.

Cash with

Shipping Weight, 200 lbs. Price Cash with
of frame without blade; other-
wise as shown above \$15.00
Price as shown above with
20 in. Blade 19.28
22 in. Blade 20.18

	Order
24 in. Blade	\$21.20
26 in. Blade	22.30
28 in. Blade	23.35
30 in. Blade	24.55
32 in. Blade	25.80

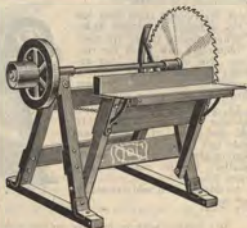
No. 4 Wood Saw with Fly Wheel

Price of No. 4 wood Cash with
saw with 56-lb. fly Order
wheel: \$18.25

Price as shown with:

20 in. Cordwood Blade	\$22.53
22 in. Cordwood Blade	23.43
24 in. Cordwood Blade	24.45
26 in. Cordwood Blade	25.50
28 in. Cordwood Blade	26.60
30 in. Cordwood Blade	27.80
32 in. Cordwood Blade	29.00

Shipping weight, 256 lbs.



A FEW SUGGESTIONS FOR SAWING POLES WITH THE ABOVE FRAME

Poles may be sawed with the above machine without the flywheel interfering by driving two stakes in the ground a little back of the alignment of the machine; to the left of the operator spike a pole on top of the stakes making a tressle so as to be higher than the table leaving the poles rest on the tressle at one end the other end to rest on the saw table at the point of the saw slightly angling the pole thus enabling you to saw pole wood without interfering with the fly wheel. This will apply to any of the single shaft machines.

This Cut shows our No. 4 Saw Frame as it Appears with Ripping Table and Rip Saw Attached

For full particulars of its attachments, consult index for shingle tables.

Price for ripping table only for No. 4 frame ... \$3.80.

When ripping tables are used it requires a saw blade for ripping. No one should ever attempt to do ripping with a cordwood saw blade, or saw cordwood with a rip saw.

To get the price of above machines with all attachments, add the price of ripping tables and the price of any size ripping saw you wish (26 in. or smaller) to the machine you want. All blades filed and set ready for work.



The No. 5 Wood Saw

This saw is the strongest, best constructed and most popular saw frame in the country, suitable for sawing cordwood and long poles of every description.



The mandrel is 17-16 in. in diameter by 49 in. long, with 13-8 in. arbor and 6x6 pulley. Boxes are of ample size and lined with a high grade of babbit metal. The center pulley is hung on a heavy bracket with a steel pin and is made so that it will not get out of alignment. The fly wheel weighs 70 lbs. and is perfectly balanced to insure smooth running. The cast iron guard is made adjustable to fit any size saw blade from 20 in. to 32 in. inclusive. Machines are all made right handed unless otherwise ordered.

Shipping weight, 320 lbs. Cash with

Price of frame without blade: Order

otherwise as shown above ... \$26.25

Price as shown above with:

20 in. Cordwood Blade 30.53

22 in. Cordwood Blade 31.43

No. 5 machine.

Price for ripping table only for No. 5 frame

When ripping tables are used, it requires a saw blade for ripping. No one should ever attempt to do ripping with a cordwood saw blade, or saw cordwood with a rip saw.

To get the price of above machine with all attachments, add the price of the ripping table and the price of any size ripping saw you wish (26 in. or smaller) to the price of the machine you want.

Cash with

Order

24 in. Cordwood Blade \$32.45

26 in. Cordwood Blade 33.55

28 in. Cordwood Blade 34.60

30 in. Cordwood Blade 35.80

32 in. Cordwood Blade 37.05

No. 10 Sliding Table Saw Frame

This cut shows our No. 10 sliding table saw frame which is made of selected lumber, is well built and has a cold rolled steel mandrel and the boxes are lined with a good grade of bearing metal.

This machine has the many good features of the Hertzler & Zook line of saws. Namely: the table is low, thus having the saw blade help pull the wood in, making it one of the best and easiest machines to operate on the market.

This machine is built in two styles and will carry saw blades up to and including 32 inches. Ripping device can also be attached. Ripping device will swing rip saws up to 26 in. inclusive.

The mandrel is 49 in. long, 1 7/16 in. in diameter with 1 3/8 in. arbor and 6x6 Pulley.



Price of above machine less	Cash with Order
saw blade	\$16.25
Price of machine with:	
20 in. Cordwood Blade	20.53
22 in. Cordwood Blade	21.43

	Cash with Order
24 in. Cordwood Blade	\$22.45
26 in. Cordwood Blade	23.55
28 in. Cordwood Blade	24.66
30 in. Cordwood Blade	25.80
32 in. Cordwood Blade	27.05
Weight of above machine 187 lbs.	

No. 11 Sliding Table Saw Frame

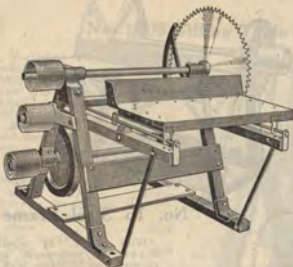


This cut shows our No. 11 sliding table saw frame and is the same as our No. 10 with the exception that it has a 56 lb. fly wheel. This machine is a favorite where a sliding or rolling table is preferred and is far superior to any rolling table machine as it is impossible for the table to do any binding or catching. This machine will swing saws up to and including 32 inches diameter. Our ripping device can also be attached and will swing rip saw blades up to and including 26 inches.

Price of above machine with-	Cash with Order
out saw blade	\$19.50

Price of machine with:	Cash with Order
20 in. Cordwood Blade	\$23.78
22 in. Cordwood Blade	24.68
24 in. Cordwood Blade	25.70

	Cash with Order
26 in. Cordwood Blade	\$26.80
28 in. Cordwood Blade	27.85
30 in. Cordwood Blade	29.05
32 in. Cordwood Blade	30.30



No. 12 Sliding Table Saw Frame

The opposite cut shows our No. 12 sliding table saw frame with a 70 lb. fly wheel mounted underneath the table, and is entirely out of the way for sawing long poles or slab wood. Our ripping device can also be attached to this machine and will swing saws up to and including 26 in. for ripping.

Weight of above machine, 350 lbs.

Price of the above machine	Cash with Order		Cash with Order
less saw blade	\$27.25	24 in. Cordwood Blade	\$33.45
Price as shown above with:		26 in. Cordwood Blade	34.55
20 in. Cordwood Blade	31.53	28 in. Cordwood Blade	35.60
22 in. Cordwood Blade	32.43	30 in. Cordwood Blade	36.80
		32 in. Cordwood Blade	38.05

STEEL FRAME WOOD SAWS

In order to give our customers what they want we are placing this steel frame on the market. We feel it our privilege to give our friends everything they ask for in the wood saw line.

This frame is similar to our No. 4 and No. 5 frames, with the exception it is all built of iron and steel with the exception of 5 pieces of hard wood $1\frac{1}{4} \times 5$ and 6" wide, making it more durable than all steel or all wood.

No. 13 Steel Frame

Price of frame without blade, otherwise as shown above.

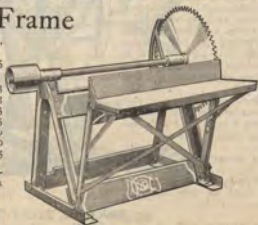
\$19.75

Price as shown above with

20 in. Cordwood Blade	\$24.03
22 in. Cordwood Blade	24.93
24 in. Cordwood Blade	25.93
26 in. Cordwood Blade	27.05
28 in. Cordwood Blade	28.16
30 in. Cordwood Blade	29.30
32 in. Cordwood Blade	30.55

The shingle and ripping table may be attached to this frame.

Shipping Weight, 170 Lbs.



No. 14 Steel Frame

With 56 lb. fly wheel attached as shown, without saw blade. Price \$22.80

Price as shown above, with	
20 in. Cordwood Blade	\$27.08
22 in. Cordwood Blade	27.98
24 in. Cordwood Blade	29.00
26 in. Cordwood Blade	30.10
28 in. Cordwood Blade	31.15
30 in. Cordwood Blade	32.35
32 in. Cordwood Blade	33.60

The shingle and ripping attachment may be attached to this frame. Shipping wt. 220 lbs.

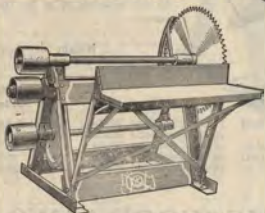


No. 15 Steel Frame

With 70 lb. fly wheel mounted underneath as shown. Price of frame, without blade \$27.00

Price as shown above with	
20 in. blade	\$31.28
22 in. blade	32.18
24 in. blade	33.20
26 in. blade	34.30
28 in. blade	35.35
30 in. blade	36.55
32 in. blade	37.80

The shingle and ripping attachment may be attached to this frame. Shipping wt. 325 lbs.



No. 1604 Tilting Table Saw Frame

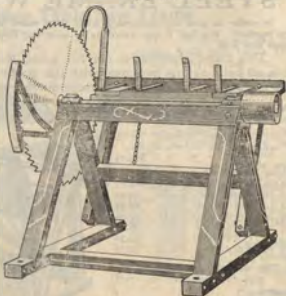
This frame is made of hard wood, thoroughly seasoned, well bolted and braced.

Will swing saw blades up to and including 30 in. Blades are made for cord and pole wood sawing exclusively. The wood may be brought in frame either side.

Mandrel—49 in. long, 1 7/16 in. diameter with 1 3/8 in. arbor and 6 in. by 6 in. Pulley. Shipping wt., 235 lbs.

Cash with
Price as shown less Order
blade \$18.90

Our ripping attachment cannot be used on this frame.



Price as shown with

20 in. Blade	Cash with Order	
22 in. Blade	\$23.18	
24 in. Blade	24.08	
	25.10	

26 in. Blade	Cash with Order	
28 in. Blade	\$26.20	
30 in. Blade	27.25	
	28.45	

No. 1605 Tilting Table Saw Frame

Same as frame No. 1604 with 70 lb. fly wheel added. Wood to be brought in on saw side of frame. Ripping attachment cannot be used on this frame.

Mandrel—49 in. long, 1 7-16 in. diameter with 1 3-8 in. arbor and 6x6 Pulley.

Shipping weight 300 lbs.

Price as shown less blade	Cash with Order
Price as shown with blade	\$22.90

20 in. Cordwood blade	27.18
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22 in. Cordwood blade	28.08
-----------------------	-------

24 in. Cordwood blade	29.10
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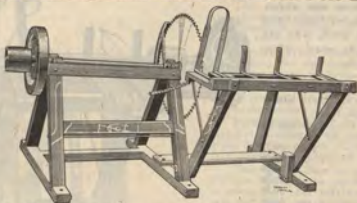
26 in. Cordwood blade	30.20
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28 in. Cordwood blade	31.25
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30 in. Cordwood blade	32.45
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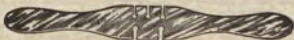
No. 1607 Tilting Table Saw Frame with Pole Extension



Same as No. 1605 but has an extra extension to attach which makes it suitable for sawing long pole wood. Price, less blade \$22.90

STEEL SAW SETS

Just the tool to keep your saw properly set.



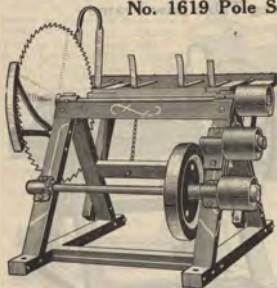
Saw sets like the above, Price each \$ 2.00

ROUND EDGE MILL FILES

Just the file for properly filing your saw.

Size	inches	8	10	12	14
Price	each	\$.25	.30	.40	.60

No. 1619 Pole Saw Frame

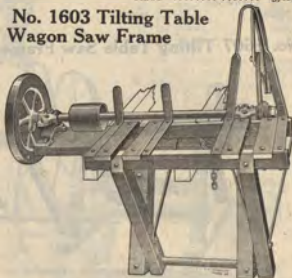


Made for pole or cord wood sawing expressly. Ripping attachment can not be used on this frame. 70 lb. fly wheel, which is underneath the frame out of the way of poles. Mandrel, 49 in. long, 1 7-16 in. diameter, 1 3-8 in. arbor, and 6x6 pulley. Shipping wt., 400 lbs.

	Cash with
Price as shown less blade	Order
Price as shown with 20 in. Cordwood blade	\$27.50
22 in. Cordwood blade	31.78
24 in. Cordwood blade	32.68
26 in. Cordwood blade	33.70
28 in. Cordwood blade	34.80
30 in. Cordwood blade	35.85
	37.05

This frame is well built of good material. Interchangeable to fit almost any wagon. Mandrel, 49 inches long, 1 7-16 diameter, 1 3-8 arbor, with 6x6 pulley. 70 lb. fly wheel. Shipping wt., 235 lbs.

No. 1603 Tilting Table Wagon Saw Frame



	Cash with
Price as shown less blade	Order
With 20 in. blade	\$22.50
22 in. blade	26.78
24 in. blade	27.68
26 in. blade	28.70
28 in. blade	29.80
30 in. blade	30.85
	32.05

EXPRESSIONS MADE BY HARDWARE DEALERS OVER THE COUNTRY

"Yes, farmers are just beginning to get rid of the cross-cut saws and adopt more modern ways; this is where the circular saw comes in."

"I don't know why people have the impression that farmers don't buy good tools. It is a great deal cheaper to buy a first-class tool that will run true, than a cheap one that can not be depended upon. I think that the circular saw that is put before the public with a reliable guarantee is the saw that will get the trade."

"Regarding circular saws in place of the old cross-cut, will say now for the last five years there is not a farmer in this locality that has sawed up their winter wood by hand, but with a gasoline engine and circular saw. We have five or more such rigs in this neighborhood which do nothing else from December until March and charging 60 to 75 cents per hour and \$2.00 to \$3.00 for set job."



With friction feed. Positive and effective, yet very simple; will not stick or get out of order, the operator having full control of the machine. It is well balanced and runs very nicely and steadily, has three different strokes, unless otherwise ordered. Each machine is furnished complete with a drive pulley 24 x 6 inches, log truck, power rolls, stumbling rod with two universal couplings, 16 foot track and one saw 5 feet 6 inches.

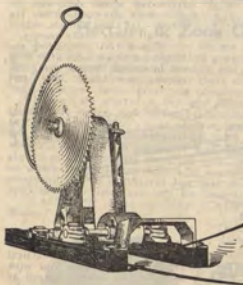
Speed recommended, 125 to 175 strokes per minute. Weight, 1300 lbs.

Capacity, from 30 to 40 cords per day, depending on material, power and speed.

Two to four H. P. will operate machine to good advantage. More power will give greater capacity.

Price complete with 5 ft. 6 in. saw and tight pulley	\$827.50
Same as above described, with tight and loose pulley	135.00
Same as above with one saw and pulley, less power feed	119.00
Extra blades 5 ft. 6 in. long for drag saws	6.00

The Number Three Wood Saw



This saw is built for lumber, shingle and stave manufacturers. Built for heavy work such as cutting off billets, shingle blocks, etc.

Mandrel—The Mandrel is 21 inches long, fitted for 1½ inch saw arbor, will carry saw up to 36 inches in diameter.

Boxes—The Boxes are adjustable, of ample size and lined with a high grade of bearing metal.

Pulley—Mandrel Pulley is cast to the mandrel, making it all one piece and of great tensile strength. It is 7½ by 7 inch face, turned and balanced.

This Wood Saw is inter-changeable and can be made to cut toward the belt or away from the belt by reversing the saw and lever and moving the stationary shaft at the slot holes so as to cause the belt to be tight while making the cut and loose when not in use, as it is when it cuts toward the belt.

The swinging frame ranges in length from 24 to 48 inches, to suit the requirements of the work.

Shipping weight, 410 lbs.

Price as shown above without blade		Cash With Order
Price as shown above with:		\$35.00
28 in. Cordwood Blade	43.35	
30 in. Cordwood Blade	44.35	
32 in. Cordwood Blade	44.80	
34 in. Cordwood Blade	47.15	
All blades filed and set.		

RIPPING TABLES OR ATTACHMENTS

A number of our circular saw frames are designed in such a manner so as to attach a ripping table at a very small additional cost, enabling our customers to derive the same benefits that would otherwise cost from \$12.00 to \$30.00 at least. By using this attachment you have the benefit of two machines at practically the cost of one. The cut opposite shows the table, which only requires a few moments and three bolts to attach, making your

wood saw an indispensable outfit for sawing crate lumber, pickets, hewing wire fence posts, plaster and roofing laths, etc.

The No. 1 table will fit No. 1 frame only and will swing any size rip saw up to and including 20 in. with a $1\frac{1}{4}$ in. hole. Price \$2.50

The No. 2 will fit all the saw frames made to take ripping table, and will swing saws up to and including 26 in. with $1\frac{1}{4}$ in. holes. Price \$3.80

SHINGLE SAWING TABLES—\$6.00

TABLE FOR SAWING SHINGLES

When this attachment is used on the Hertzler & Zook Wood Saws from five to ten thousand shingles can be sawed per day. The timber is first cut to length of shingle, then the table is attached, the blocks squared on three sides, then by the use of block holder



the shingles are sawed.



Fig A

shows the use of the block holders while sawing shingles. To properly locate the steel gauge, you place the block holder in position (before starting the saw), measuring the distance of the thickness of the shingle from the saw, then fasten steel gauge with screws. After gauge and block holders are adjusted, the minor adjustments can be made by adjusting pins.

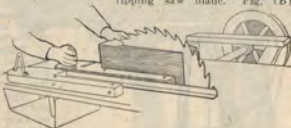


Fig B

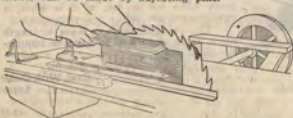


Fig C

Owing to the continual growing demand of the shingle tables, we will endeavor to give a few brief sketches to show how you can convert the trees you would otherwise realize only firewood prices for into a first class shingle, which is at all times ready money.

Figure (A) is squaring the blocks on three sides after it is cut in shingle length, using the ripping saw blade. Fig. (B)

Fig. (C) shows how any shingles may be edged off square. This makes a practical attachment. In case you wish to make box boards instead of shingles, it may be done by the adjustment pins, and the use of only one block holder.

Our ripping table for sawing shingles is made something similar to our No. 2 ripping table only it is longer and larger. It is adapted to do general ripping, as it can be used just as

well for ripping as sawing shingles. Where our other table is on, suitable for ripping lumber, as it is not long enough to saw shingles. It requires two block-holders to make a complete machine.

Price of No. 2 Shingle table with two block holders \$6.00

Hertzler & Zook Circular Saws

CORD-WOOD SAWS—GUARANTEED



When you are considering the purchasing of a cordwood saw, you want a blade that will give you entire satisfaction in every way. You desire a saw that is peculiarly and especially suited for just its class of work. You want the saw guaranteed to satisfy in every particular—a saw that has the right kind of temper even in the very points of the teeth. You want the teeth to hold their edge and not crumble. You want a hard, yet tough temper. You want the teeth not to split and you do not want to constantly be delayed and annoyed by sharpening the teeth every hour or so. You want a saw that will cut green wood, dry wood, frozen wood, hard wood, soft wood, knotty limbs, in fact, all kinds of wood, and stand right up and do the work day after day. The only thing on your part being to keep the teeth well sharpened and the throats or gullets well rounded and free from sharp corners so as to freely discharge the saw dust. The H. & Z. cordwood saw will do all the above. The saws are broadly and liberally guaranteed, are hand set and filed, ready for use, so you can begin cutting as soon as you put the saw on the arbor. Instructions sent free with each saw giving valuable information as to care of saws and how to file properly and give long life to saw. The saws listed below are carried in stock. Always give size of arbor hole.

CAUTION—In filing or gumming a cordwood or rip saw, great care should be taken that no sharp corners are filed or gummed in the gullet. If, this is done, it will cause any make of blade to crack and your doing so cancels our warranty.

Diameter, in.	16	18	20	22	24	26	28	30	32	34	36
1 1/4 in. hole	\$3.12	\$3.60	\$4.28	\$5.18	\$6.20	\$7.30	\$8.35	\$9.55	\$10.80	\$12.15	\$13.95
1 1/2 in. hole	3.12	3.60	4.28	5.18							

Hertzler & Zook Guaranteed Rip Saws

For rough ripping of lumber for use as crating, for work on a farm, such as ripping material for posts, pickets and general rough ripping, the Hertzler and Zook Rip Saws are in great favor and demand, and give satisfaction. The saws are hand set and hand filed, ready for use, so that there will be no delay occasioned by your first having to sharpen same before you commence work.

If saws are wanted in any way different from the list below they must be made specially to order, and cannot be furnished at stock prices as given, on account of cost in making one at a time. If you must have a special saw, tell us what you wish and we will quote you best possible price. We will not make to order, saws that are unreasonably light in gauge, or with dangerously small mandrel holes. Be sure to always give the size of the arbor hole. For work in a carpenter shop, planing mill, or where the customer intends to use the saw day in and day out as a commercial proposition, then a different saw than what we list herewith is recommended. The saws herewith listed are only for general use.

CAUTION: Read carefully "CAUTION" as set forth under "Cordwood Saw Blades."



Rip Saw Blade

Diam., Inches	Gauge	Arbor Hole In.	Shipping wt. about	Price Each
10	16	1 1/4	2 1/2 lbs.	\$2.15
12	15	1 1/4 and 1 1/2	4 lbs.	2.86
14	14	1 1/4 and 1 1/2	6 lbs.	3.43
16	14	1 1/4 and 1 1/2	8 lbs.	4.21
18	13	1 1/4 and 1 1/2	8 lbs.	5.18
20	13	1 1/4 and 1 1/2	11 lbs.	6.15
22	12	1 1/4	14 lbs.	7.45
24	11	1 1/4	18 lbs.	8.74
26	11	1 1/4	20 lbs.	10.36
28	10	1 1/4	25 lbs.	11.98
30	10	1 1/4	31 lbs.	13.60
32	10	1 1/4	36 lbs.	15.55
34	9	1 1/4	43 lbs.	17.45
36	9	1 1/4	47 lbs.	20.05

Set and Sharpened—Ready for Use—Guaranteed

WOOD SAW PARTS



These sets are ready to ship and we can furnish either plain, flat-bottom boxes or our regular pattern, as used on our Nos. 1 to 7 frames.

Price of the No. 1 with 35-lb. fly wheel, 5 x 5 pulley, $1\frac{3}{4}$ in. arbor and plain, flat boxes	\$9.75
Price of No. 1 with 35-lb. fly wheel, 5 x 5 pulley, $1\frac{3}{4}$ in. arbor with our own style of boxes, as used on our machines	10.00
Price of the No. 2 with 56-lb. fly wheel, 6 x 6 pulley, $1\frac{3}{4}$ in. arbor with plain, flat boxes	11.00
Price of the No. 2 with 56-lb. fly wheel, 6 x 6 pulley, $1\frac{3}{4}$ in. arbor with our own style of boxes, as used on our machines	11.25

No. B1-2 Mandrel Set with
C. I. Yoke $1\frac{3}{16}$ in. Mandrel
49 in. long $1\frac{3}{4}$ in. arbor with
6 x 6 Pulley 56 lb. fly wheel.
Price \$12.50



PRICE-LIST ON PARTS OF OUR WOOD SAW MANDRELS

No. 1, 41 in. long, $1\frac{3}{16}$ in. diameter, $1\frac{3}{4}$ in. arbor	\$3.00
Nos. 2 and 5, 49 in. long, $1\frac{3}{16}$ in. diam., $1\frac{3}{4}$ in. arbor	4.00
For fly wheel for Nos. 5 and 7, $1\frac{3}{16}$ in. diameter	2.75
Mandrel for 1604, 1605, 1619 and 1607	4.00
1603 Mandrel	4.25

BOXES

Flat boxes for all frames, per pair	\$2.00
Our regular boxes for No. 1 frame, per pair	2.25
Our regular boxes for Nos. 2, 4, 5, 6 and 7, per pair	2.75
Cast iron yoke with boxes for Nos. 1604, 5, 7 and 1619	3.75

PULLEYS

No. 1, 5 in. x 5 in. x $1\frac{3}{16}$ in.	\$2.00
Nos. 2-4-5-10-11-12-13-14-15, 6 in. x 6 in. x $1\frac{3}{16}$ in.	2.50
Idler for No. 5-12-15 and 1619, 6 in. x 6 in. Special	2.75

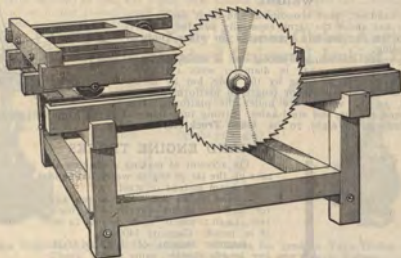
FLY WHEELS

No. 1-35 lbs., $1\frac{3}{16}$ in. bore, 13 in. diameter	\$2.85
No. 2-56 lbs., $1\frac{3}{16}$ in. bore, 17 in. diameter	4.75
Nos. 5-12-15 and 1619-70 lbs., $1\frac{3}{16}$ in. bore, 17 in. diameter	6.20
90 lbs.—Special, $1\frac{3}{16}$ in. bore, 17 in. diameter	6.90
125 lbs.—Special, $1\frac{3}{16}$ in. bore, 17 in. diameter	9.50

TABLES, ETC.

Steel swing table complete for Nos. 4-5-6 and 7 frames	\$6.00
Saw guards, Nos. 4-5-6 and 7	.35
Idler Pulley castings for No. 5	1.50
Gauge for No. 1 Ripping Table	.50
Gauge for No. 2 Ripping Table and larger	.85
Foot Castings for Nos. 1 and 2. Price each	.30
Foot Castings for bottom sill No. 4, Price each	.30
Mandrel washers or Flanges, all sizes	.50

THE H & Z HEAVY SERVICE ROLLER TABLE CUT-OFF MACHINE



The Frame

The frame is built of heavy, seasoned hard-wood, is securely mortised and bolted together.

The Table

The table is of the heavy, roller type. The rollers are of large diameter, and of the V-grooved type, to fit the V-shaped iron track. The grooves are machined into the rollers and thus is assured a high degree of accuracy for the machine. The front side of the carriage extends up and answers as a gauge against which to lay the stock, thus squaring the work. A mitre may be cut by clamping or fastening a gauge on the table to suit the special requirements of the degree of mitre desired.

The Mandrel

The mandrel is $1\frac{1}{8}$ inches in diameter, cold rolled steel shaft, running the full length of the machine. It has an arbor for saw having a $1\frac{1}{4}$ inch hole. It is made of the best available material on a special, high-grade machine, with the best of skilled workmanship.

The Mandrel Boxes

The mandrel boxes are three in number, and are placed on the three heavy cross pieces which form a part of the main frame and are lined with a high grade of bearing metal.

The Pulley

The pulley is six inches in diameter and has a six-inch face. It is of cast iron and is bored for a $1\frac{1}{4}$ inch shaft.

The Saw Blade

The saw is of the cord-wood blade-type and may be of any size from 16 inches up to and including 32 inches.

While this machine is built to fill requirements of accuracy, and may be used as above described, it may also be used for sawing slab, pole, or cord wood, and has the many good features of the H & Z line of Wood-sawing machinery.

No. 9 Shipping weight, 600 lbs. Price \$60.00

Engine Truck

FOR ENGINES NOT EXCEEDING 450 LBS. IN WEIGHT

The handiest, most economical and most useful little truck for use about the farm, especially adapted to portable gasoline engines and serviceable for other kinds of light hauling.

It is made exceedingly strong and is easily handled.

Wheels are iron, 12" in diameter with 1 5/8" wide tires. Platform is 36" long by 16" wide, but by laying boards on top, any width or length of platform may be obtained, as the wheels are under the platform. Has strong hand tongue, and steel axles. Strong turn table, allowing front wheels to turn under platform. Weight, 70 lbs. Hand Truck No. 1L. Price \$5.85



HAND ENGINE TRUCKS

On account of making a cushion to take up the jar of engine we recommend wood beam instead of steel.

These trucks are made strong and for service. Front wheels 12 in. high, rear, 14 in.; top of wood beams 14 in., 28 in. tread. Capacity 1400 lbs.

Regular lengths of sills, 5 1/2 feet; any length shorter, same price.

No. 2H. Price as shown \$14.50

Shipping weight, 175 lbs.



ENGINE AND SAW TRUCKS



Engines and saw trucks, for complete description and illustration see page 42.

For the energetic man this truck increases the value of our Gas Engine and Saw Outfit to him 100%—increases his earning power, the thing every man wants to do. You can soon reimburse yourself with the price paid for the machine by getting out and securing some wood sawing work. Most everyone has wood to saw, the energetic man can soon build up a nice business with one of our outfits.

Capacity	1200 lbs.
Front wheels	24" x 3"
Rear wheels	30" x 3"
With chain brake and shafts, as shown above. No. 1200. Price	\$50.00
With chain brake pole, double tree and yoke. No. 1200. Price	50.00

How to Order Pipe Valves and Fittings

The size of pipe is determined by its inside diameter (not outside) and the size of pipe fitting is determined by the size of pipe it will take. Example: A 1-inch elbow will fit a pipe measuring 1 inch inside diameter. The opening in the fitting or valve will be large enough to take the 1-inch pipe (inside diameter) and the opening of the particular size fitting (1-inch) will measure about $1\frac{1}{4}$ inch. This applies to all engine fittings such as valves, air cocks, oil cups, etc.

Jenkins Type Standard Kelly & Jones Globe, Angle and Check Valve With Standard Universal Jenkins Disc



These valves are the high grade K. & J. Brass Valves and are made for high pressure work.

Size inch	Price each (globe or angle)
$\frac{1}{4}$	\$1.35
$\frac{3}{8}$	1.55
$\frac{1}{2}$	2.00
$\frac{3}{4}$	2.75
1	3.50
$1\frac{1}{2}$	5.00
$1\frac{1}{2}$	6.85
2	10.95



Jenkins Type K. & J. Disc Horizontal Check Valve



Size	Price each
$\frac{1}{4}$	\$1.35
$\frac{3}{8}$	1.55
$\frac{1}{2}$	2.00
$\frac{3}{4}$	2.75
1	3.50
$1\frac{1}{2}$	5.00
$1\frac{1}{2}$	6.85
2	10.95

Discs for Jenkins Type Globe, Angle, and Check Valves



Size	Price each
$\frac{1}{4}$	.05
$\frac{3}{8}$	.06
$\frac{1}{2}$	.07
$\frac{3}{4}$	.09
1	.10
$1\frac{1}{2}$	.15
$1\frac{1}{2}$	.19
2	.27

"UNIVERSAL" STOP AND WASTE COCKS



The Best Stop and Waste Cock Made

The "Universal" Stop and Stop and Waste Cock is so constructed that it can be instantly changed from right to left, and vice versa, by simply reversing position of handle when Cock is open.

The combination Tee and Lever Handle is cast in one piece. When Tee Handle is desired, the lever can be easily broken off by a slight blow from a hammer.

Size, in.	$\frac{1}{8}$	$\frac{1}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price each	\$1.50	\$2.25	\$3.40	\$5.50	\$8.00	\$14.35

Plain High-Grade Compression Bibs

Highly Finished in Brass and Nickel

Fig. 345 Fig. 346

Plain Hose end

Size	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$
Price each				
Brass Finish	1.20	1.93	1.40	2.20
Nickel Finish	1.45	2.50	1.65	2.70



Fig. 345 Plain

Fig. 346 Hose End

Malleable Iron Pipe Fittings

Elbows—Galvanized

Size	Price each
3/4	\$.06
1	.07
1 1/2	.09
2	.13
2 1/2	.10
3	.17
4	.24
6	.57
8	.83



45° Elbows—Galvanized

Size	Price each
3/4	\$.07
1	.09
1 1/2	.13
2	.22
2 1/2	.31
3	.57
4	.78
6	1.14



Street Elbows—Galvanized

Size	Price each
3/4	.07
1	.08
1 1/2	.16
2	.24
2 1/2	.30
3	.47
4	.75
6	1.04



Plain Tees—Galvanized

Size	Price each
3/4	.09
1	.13
1 1/2	.17
2	.20
2 1/2	.30
3	.49
4	.65
6	1.01



Plain Crosses—Galvanized

Size	Price each
3/4	.13
1	.24
1 1/2	.33
2	.46
2 1/2	.47
3	.73
4	1.12



Reducing Couplings—Galvanized

Size	Price each
3/4	.09
1	.09
1 1/2	.13
2	.19
2 1/2	.24
3	.34
4	.55



Bushing—Largest Size—Cast Iron

Size	Price each
3/4	.05
1	.05
1 1/2	.09
2	.08
2 1/2	.09
3	.12
4	.18



Couplings—Malleable

Size	Price each
3/4	.08
1	.08
1 1/2	.10
2	.16
2 1/2	.29
3	.36
4	.62
6	.88
8	1.38



Mal Caps—Galvanized

Size	Price each
3/4	.05
1	.10
1 1/2	.10
2	.19
2 1/2	.21
3	.29
4	.59



Cast Iron Plugs—Black

Size	Price each
3/4	.03
1	.03
1 1/2	.03
2	.04
2 1/2	.05
3	.07
4	.09
6	.13
8	.24
10	.33



Penn High Grade Malleable Ground Joint Unions For High Pressure

These unions are well made of the best grade malleable iron and brass and the ground ball joint permits of a perfect connection regardless of pipe alignment. The inserted brass ring is firmly forced into the malleable iron and can not be dislodged.

Size	3/4	1	1 1/2	2	2 1/2	3	4	6	8
Price Black	.21	.21	.28	.35	.42	.56	.84	1.12	1.40
Price, Galv.	.40	.40	.54	.70	.85	1.10	1.60	2.16	2.70





Fuse or Safety Plugs

Extra long size,	$\frac{1}{2}$	$\frac{3}{4}$
Price each	.60	.75

Galvanized Wrought Nipples

THREADED RIGHT HAND



Fig. 128 Close Length, Inches

Fig. 128A Long

Fig. 129 Short Prices

Close	Short	Long	Long	Long	Long	Size Inches	Close or Short	Long
$\frac{3}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{3}{4}$	.04	.06
$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{2}$	.04	.06
1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{3}{4}$	.04	.06
$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{2}$	.05	.07
$1\frac{3}{4}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$\frac{3}{4}$	.06	.09
$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	1	.08	.13
$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{4}$	.11	.17
$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{2}$	.13	.20
2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	2	.18	.27

Standard Steam, Gas and Water Pipe

Our standard black and galvanized wrought pipe is of the very best quality. Due to the variation of prices, we solicit your inquiries and are in a position to save you considerable money on pipe, especially so on mill shipments direct to you.

Compression Gauge Cocks



$\frac{3}{4}$ inch, each ... \$.60
 $\frac{1}{2}$ inch, each65

Water Gauges



Drip Cocks



$\frac{3}{4}$ inch \$.25
 $\frac{1}{2}$ inch30
 $\frac{3}{8}$ inch35

Air Cock, Bent Nose



$\frac{3}{4}$ inch \$.40
 $\frac{1}{2}$ inch45
 $\frac{3}{8}$ inch50

Solid brass body, complete with $\frac{1}{2}$ inch connection, 2 guards \$2.00
 Upper valve for gauge 1.10
 Lower valve for gauge, with drip cock 1.35
 Brass rods for gauge, each .12

POP SAFETY VALVES

When you buy a Safety Valve for your engine you want one that is reliable—one that you can depend upon. We can conscientiously recommend and guarantee our Pop Valve to fill the bill in every respect.

1 inch, for 5 to 10 H. P. Engines	\$7.00
1½ inch, for 10 to 20 H. P. Engines	8.00
1½ inch, for 20 to 30 H. P. Engines	10.00
2 inch, for 30 to 40 H. P. Engines	15.00

STEAM GAUGES

These gauges are well and carefully made and are designed for all classes of service where it is desired to indicate pressure accurately. The double spring gauge is best suited for traction engines, or any service where the jar is severe.

Single Spring Gauge without siphon, 3½ inch dial \$2.90

Single Spring Gauge without siphon, 5 inch dial \$3.30

Single Spring Gauge with brass siphon, with cock, 3½ inch dial \$4.68

Single Spring Gauge, with brass siphon, with cock, 5 inch dial \$6.30

Double Spring Gauge, without siphon, 4½ inch dial \$4.45

Double Spring Gauge, without siphon, 5 inch dial \$5.45

Double Spring Gauge, with brass siphon, with cock, 4½ inch dial 6.50

Double Spring Gauge, with brass siphon, with cock, 5 inch dial 6.50

Brass Siphons for Steam Gauges, straight 1.15

Brass Siphons for Steam Gauges, elbow 1.25



AUTOMATIC COMPRESSION GREASE CUPS BRASS

These Grease Cups are made heavy and strong, nicely finished, and are adapted for use on all classes of bearings where grease is used as a lubricant.

Number	1	2	3
Diameter	inches 1½	2	2½
Height over all	inches 3½	4½	4½
Pipe Thread	inches ¾	¾	¾
Capacity	ounces ¾	1½	2
Finished	each 00c	1.10	1.50

PLAIN SPRING GREASE CUPS

This is a simple grease compression cup, with a spring attachment to prevent the cup from jarring off. First designed for automobile use, but it is equally as well adapted to all machinery subject to excessive vibration.

Size	00	0	1	2
Outside diameter ... inches	1	1½	1½	2
Shank pipe thread, inches	¾	¾	¾	¾
Capacity grease ... ounces	¾	¾	1	2
Price	each 25c	30c	35c	40c



SINGLE BELL CHIME WHISTLES

Solid brass, nicely finished, producing three distinct, harmonious and musical sounds, which can be heard at a great distance.

2 in. bell, $\frac{1}{4}$ in. pipe connection	\$ 7.00
2½ in. bell, $\frac{3}{4}$ in. pipe connection	9.00
3 in. bell, 1 in. pipe connection	11.00
4 in. bell, 1 in. pipe connection	18.00
5 in. bell, 1¼ in. pipe connection	28.00

Plain Whistles

2½ in. bell, $\frac{3}{4}$ in. pipe connection	\$ 5.85
3 in. bell, 1 in. pipe connection	7.65
3½ in. bell, 1 in. pipe connection	10.35
4 in. bell, 1¼ in. pipe connection	13.50
5 in. bell, 1½ in. pipe connection	20.25



Chime

Plain

SPECIAL HIGH GRADE DRY CELL BATTERIES

With high amperage, for engine ignition purposes.

Price, each 50c.



UNITED STATES INJECTOR



No. 1, 4 to 8 H. P., $\frac{3}{8}$ inch pipe connection	\$6.00
No. 2, 8 to 16 H. P., $\frac{1}{2}$ inch pipe connection	7.20
No. 3, 15 to 20 H. P., $\frac{1}{2}$ inch pipe connection	8.00
No. 4, 20 to 30 H. P., $\frac{3}{4}$ inch pipe connection	10.00
No. 5, 30 to 40 H. P., $\frac{3}{4}$ inch pipe connection	12.00
No. 6, 40 to 60 H. P., 1 inch pipe connection	15.00

ALL BRASS STRAINERS

iron pipe by the use of a short piece of Iron pipe threads, suitable for hose or pipe or nipple.

Pipe sizes, in.	$\frac{1}{2}$	$\frac{3}{4}$	1	1¼	2
Price, each	.45	.50	.55	.60	1.00



THE "SWIFT" SINGLE CONNECTION SIGHT FEED LUBRICATOR



This Lubricator is designed for use where it is desirable to attach with only one connection to the steam pipe. It is so constructed that it will feed any oil, no matter how heavy, even in exposed conditions in cold weather. Owing to the reliability of lubricators of this class under these conditions, more of them are used on threshing engines in cold climates than all other makes combined.

The ease with which this style of lubricator can be connected and disconnected has helped to make it a favorite with all classes of the trade. It is designed to be connected to the steam pipe between the throttle valve of the engine or pump and the boiler, thus insuring a steady pressure on the lubricator. Many thousands of these lubricators are in use, not only upon threshing engines, but also on all kinds of portable and stationary engines, steam pumps, etc., both in the United States and foreign countries.

Class F, capacity $\frac{1}{2}$ pint	$\frac{3}{8}$ inch pipe connection.	
Class F, capacity $\frac{1}{2}$ pint	$\frac{1}{2}$ inch pipe connection.	
Class F, capacity 1 pint	$\frac{1}{2}$ inch pipe connection.	9.00

We carry in stock a full line of repairs for the Swift Lubricators

Highest Grade Steam Boiler Tubes

Price cut, ready to length for your boiler on application. Get our prices before ordering.

PACKINGS FOR STEAM ENGINES

Crendall's Spiral Piston we carry in 3-16 in., 1-4 in., 5-16 in., 3-8 in., 7-16 in., 1-2 in.		
in. Price, any size, per lb.		\$1.25
Rubber Sheet Packing, will cut any quantity across 36 in. sheet; thickness, 3-32 in.		
in. Price, per lb.		\$.75
Asbestos Sheet Packing, 3-32 in. thick with wire inserted, cut any size across 36 in. sheet. Price, per lb.		
		\$2.00

WESTCALL ADJUSTABLE S WRENCHES

STILSON WRENCHES



These wrenches have been extensively used and widely advertised among threshermen. They are drop forged from bar steel and are interchangeable in all their parts.

They do not lock upon the pipe, but release their hold readily; they grip the pipe firmly without lost motion; they do not crush the pipe nor slip. The movable jaw and the nut are made with a round top and bottom thread, guaranteed not to strip or burr.

8 in. takes pipe from $\frac{1}{4}$ to $\frac{1}{2}$ in.	\$1.80	PARTS FOR STILSON WRENCHES	
10 in. takes pipe from $\frac{3}{8}$ to $\frac{1}{2}$ in.	2.00		
14 in. takes pipe from $\frac{1}{2}$ to $1\frac{1}{2}$ in.	2.80	Size, inch	8 10 14 18 24
18 in. takes pipe from $\frac{3}{4}$ to 2 in.	4.00	Extra Jaws, each \$	.40 .40 .50 .65 1.00
24 in. takes pipe from $\frac{1}{2}$ to $2\frac{1}{2}$ in.	5.50	Extra Nuts, each	.15 .15 .20 .25 .35

WESTCALL ADJUSTABLE S WRENCHES

6 in. opens to $\frac{1}{4}$ in.	Price, each	\$1.90
8 in. opens to 1 in.	Price, each	1.10
10 in. opens to $1\frac{1}{2}$ in.	Price, each	1.30
12 in. opens to $1\frac{3}{4}$ in.	Price, each	1.50

The "Westcall" Wrench is acknowledged to be the most convenient and most useful Wrench for general use, and can be used in many places inaccessible with the Monkey Wrench. These wrenches are made of first-class material, are strong and durable. Handle, malleable iron; jaw, forged steel.



ANVIL AND VISE COMBINED

No. 24—Anvil and Vise combined, with jaws for holding pipe; jaws are 3 in. wide; opens 5 in.; weighs 24 lbs. The base is of cast-iron and is intended only for medium or light work.



Each \$1.75

IMPROVED COMBINATION ANVIL, VISE AND DRILL



No. 25—A strong, substantial combination, the draw-bar being made of steel T-rail, will not break, and provided with a steel handle. It is easily and quickly manipulated, no screws or bolts to take out, capable of a wide range of work. Width of jaw, $3\frac{1}{2}$ in.; will open 6 in.; depth of throat, $5\frac{1}{2}$ in.; total height, $8\frac{1}{2}$ in.; weight 44 lbs. Chuck fitted for drill bits with square

Shanks. Each (without drill bits) \$4.50

Smoke Stack and Guys

(For Elbow in Stack, add cost for 8 feet of Stack)

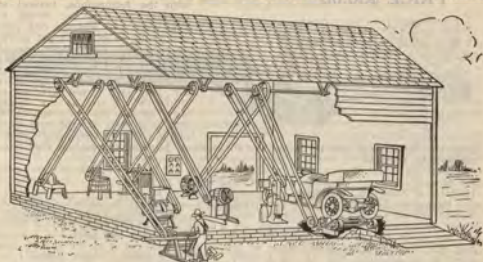
Diameter of Stack, inches	
No. 16 Iron, per foot	
" 14 " " "	
" 12 " " "	
" 10 " " "	
Galvanized Wire Rope for Guys, per foot	
Damper in Stack	
Umbrella Top for Stack	

PRICES ON APPLICATION

STEAM ENGINES AND BOILERS

Write us stating just what you are interested in, and the purpose you want to use it for, and we will mail you special valuable information and prices. Hertzler and Zook Co., Power Dept., Belleville, Pa.

How to Reduce Labor and Make Farm Life a Pleasure



This cut will show you how to hitch up your automobile, and how to make the hard and disagreeable jobs on the farm a pleasure.

The above illustration will at least give an idea as to how you can do many of the disagreeable jobs on your farm, and do them well with pleasure, by the use of the **AUTO JACK**.

The above machines, reading from left to right, are as follows:

1st—The Hertzler & Zook Wood Saw, the one that leads the world today.

2nd—A grindstone.

3rd—The Hertzler & Zook Improved Burr Mill, for grinding feed.

4th—Wash Machine.

5th—Churn.

6th—Corn Sheller.

7th—Cream Separator.

8th—The Auto Jack, that drives it all and enables you to convert power from your auto to the different machines.

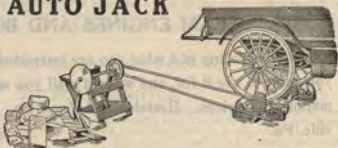
9th—The Dynamo, which makes the electric light to light all your different buildings.

In as much as we have never heard of any of our customers having the slightest accident in anyway with the Auto Jack, nor have we in any of our tests, yet we recommend safety first and always, and recommend that a scantling, pipe, or bar be put between the spokes of the two front wheels, so in case, for any reason the auto may go straight forward the bar will answer as a brake.

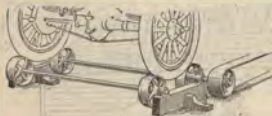
The Auto Jack can be used successfully portably and may be used at any place, but when placed in the building where the machine is located as shown in above illustration, it can be put to use without stopping the motors and by the aid of 3x4" scantlings nailed on the floor, making guides for the front wheels, which enables you always to locate at the same and proper place.

This cut shows our late design Auto Jack in use with a delivery truck. A glance at the cut will show its great value. It is impossible to give an exact rating of just how much power may be developed, as very much depends on the conditions. In an actual brake test made in our factory, with a 30 H. P. Touring Car, $7\frac{1}{2}$ actual horse power was developed on the belt with the intermediate speed gear.

AUTO JACK



PRICE \$30.00



This cut shows the Jack in use with the Automobile. Instead of blocking up the one wheel of your auto and wearing out your differential in order to get power on your belt you simply run on the Auto Jack and you are ready for business without running any chances of injuring a high price car. This Jack is not injurious to either car or tire as the weight each wheel has to support is divided in two. It will only be a matter of a very short time

until the farmer will get all his power for sawing, grinding, threshing, etc., from the auto or truck.

Note what Mr. Hooley says the auto jack does for him; it will do just as much for you.

Hertzler & Zook Co., Belleville, Pa.

Dear Sirs: The Auto Jack I purchased years ago has given perfect satisfaction. Would not be without one for sawing wood as I had a small steam engine before I got your Auto Jack, and now I can saw a large quantity of wood while I would get my steam engine ready. With my 14 H. P. Auto Buggy and your No. 1 Wood Saw and Auto Jack we sawed wood as fast as two men got it to the saw. I have tried it on my feed mill and it is very satisfactory power. Yours truly, J. B. Hooley, Reedsville, Pa.

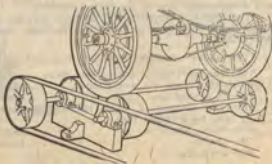
When ordering, state whether you want it for an Auto or Truck or both, and we will give you pulleys best suited to your work. It will also help us if we know what machines you wish to run with it.

Price, with high grade babbitt bearing, shipping weight, 200 lbs.

\$30.00

Price on Jack with a high grade of roller bearings enclosed in dust proof casings finished in highest grade of workmanship, shipping suitable for heavy Touring Cars, shipping weight, 255 lbs.

\$60.00



OUR TROUGH DEPARTMENT



Our troughs are all made in our own factory and our prices are based on actual cost of material and labor and just one small profit. We cut the pudding right in two and give our farmer friends a big half.

FLAT TOP, ROUND-CORNERED, HEAVY GALVANIZED STEEL STOCK TROUGHS

With Cast Iron Heads and Flat Bottoms

31—19 in. top, 13 in. bottom, 12 in. deep		32—25 in. top, 18 in. bottom, 16 in. deep	
4 feet long	\$ 9.42	5 feet long	\$18.00
5 feet long	11.56	6 feet long	20.00
6 feet long	13.16	8 feet long	24.00
8 feet long	16.28	10 feet long	30.00
10 feet long	18.76	12 feet long	33.00
12 feet long	22.60		

CAST IRON HOG TROUGHS

Prices are within reach of all



No. 32

proved these conditions, and are of the highest standard, made of cast iron well braced with wrought iron cross bars and guaranteed by us not to burst from freezing. Send us your order today. If your own good judgment doesn't tell you they are the best you have ever used or seen, advise us and we will give shipping directions for you to return them. Here it is all up to your own judgment. These troughs are furnished in the following lengths:

Three ft., 4 ft., 5 ft., 6 ft., 7 ft. and 8 ft. Size of trough, 12" top, 2" bottom, 6" deep. No. 33—price \$4.00 per foot for any of the above lengths.

Weight of these troughs run 16 lbs. and 17 lbs. per foot. The above named price is only the actual price of castings.

CAST IRON POULTRY TROUGHS

Made in our own foundry and sold direct to you. The price we ask is cost of material and only one small profit, no middleman's profit. These troughs have all the advantages a poultry trough can have. They will not upset nor spill the contents, neither will they break by freezing. To remove any ice, invert and pour warm water on and your trough is empty and clean.



No. 34—Size, 9 in. long, 5½ in. wide, 1¾ in. deep.

Each \$.25 Per dozen \$2.50

No. 35—Size, 16 in. long, 5¼ in. wide, 1¾ in. deep.

Each \$.60 Per dozen 6.75

No. 36—Size, 29 in. long, 7 in. wide, 3 in. deep.

Each \$1.25 Per dozen 12.00

THE HERTZLER & ZOOK GRIT CRUSHER



A heavy cast iron mortar with extra heavy removable perforated bottom, made to give long service. Granite, limestone or boulders readily reduced to proper grit size.

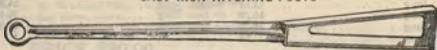
Poultrymen have long felt the need of a strong, reliable grit crusher. Here it is, a half-hour's work will crush enough grit to supply a large flock several weeks. You can gather the material for nothing. Ready prepared grit is expensive owing to heavy freight charges. With a Hertzler & Zook Grit Crusher you can give poultry grit every day. It means better health, more eggs, thriffter fowls.

The mortar is 16 inches in diameter, 10 inches high, weight 50 pounds.

Order one for your poultry yard today. If you are not pleased, you can return it, and we will return your money, and besides, pay freight both ways. You are taking no chances. Neither are we, for if you try it we know you will like it.

No. 39—Price..... \$3.50

CAST IRON HITCHING POSTS



Strong, Durable, Handsome, Cheap.

Never Rots or Pulls up.

The Best is Not too Good for the American People.

Is made neat and very strong.

No. 23—Price..... \$3.50

HITCHING-WEIGHTS



Solid iron, nicely finished and painted hitching-weights.

No. 24, weighs 18 pounds..... \$1.05

No. 25, weighs 40 pounds..... 2.40

SASH WEIGHTS

Cast iron sash weights, eastern patterns, all sizes

Lead sash weights, all sizes to specifications.

Price on Application

Grate Bars

We carry a large stock of Grate Bars for all different styles and types of boilers. Write us at once, giving us the size of fire box, stating whether round or square, "Straight Bar" or "Zigzag" Bars are wanted and we will name you a price that will get your order.



Chilled Face High Grade Iron Anvils

Has smooth face highly chilled anvil so as to prevent denting.

Weight, lbs.,	20	50	70	100
Price	\$1.20	\$3.00	\$4.20	\$6.00

Champion Post Drills

**No. 88 BALL-BEARING
SELF-FEED DRILL.**



**No. 90 BALL-BEARING
SELF-FEED DRILL.**



**No. 92 BALL-BEARING
DRILL.**



Three Gears. Two Speeds. Crank turns in same direction on both the speeds. Back gears with double journal bearings. All ground out of the solid metal. Drills to center of 16-inch circle. Spindle 1 1/4 inches in diameter, with an up-and-down run of 3 1/2 inches. Bored for 1 1/2-in. shank bits. If specially ordered, 41-64 in. Drills holes up to 1 1/4 in.

No. 88 Champion self-feed blacksmith post drill ball bearings; wt. 130 lbs. Price \$15.75

No. 90 has one speed and is back-gear. All bearings are ground out of the solid metal. Slotted lathe-turned table like all higher priced drills. Drills to center of 14 1/2 inch circle. Spindle 1 1/8 inches in diameter, with up-and-down run of 3 inches. Bored for 1-2 in. straight shank bits. If specially ordered, 41-64 inch. Drills holes up to 1 inch.

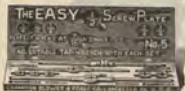
No. 90—Champion self-feed post drill with ball bearings; weight 100 lbs. Price \$11.75

No. 92 has hand feed, without fly wheel or back gearing. Drills to center of 12-inch circle. Spindle 7/8 inch in diameter, with up-and-down run of 3 inches. Bored for 1-2 inch straight shank bits. If specially ordered 41-64 inch.

No. 92—Champion hand-feed post drill with ball bearings; weight 65 pounds.

Price \$7.25

THE CHAMPION "EASY" SCREW PLATE WITH TAP WRENCH



"Easy" Sets are now furnished with two stocks. Every set is furnished with the Celebrated Electric Adjustable Tap Wrench. All our taps are machine-relieved.

No. 5b, Plate Complete in Box. Two stocks, 15 1/2 and 23 inches. Cutting 100, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1 inch. weight 20 pounds .. \$17.00

Unless otherwise ordered, we will send all screw plates 5/16 oversize V thread. Can supply screw plates with exact sizes V, U. S. Standard or Franklin Institute A. L. A. M. and Whitworth form or thread, at regular price, when ordered.

Lancaster Geared Blacksmith Blower



No. 40 Champion Lancaster Geared Blower is a well-built direct - driven Blacksmith Blower, which has been built to meet the demand for a cheap Blacksmith Blower.

This Blower is supplied with the Champion Adjustable Nozzle Tuyere Iron. It is smooth-running; crank turns either way to make the blast, and goes out with our recommendation.

No. 40—Champion Lancaster Geared Direct-driven Blacksmith Blower, with Fan 12 ins. in diameter, Tuyere Iron and Piping complete; weight 110 lbs. Each, \$26.50

The Champion Lancaster Geared Agriculture Forge

The Champion Lancaster Geared Agricultural Forges are well built, direct drive forges, and are good blast producers. All gears are supplied with bushed journal bearings, built to run smoothly and noiselessly. All gears are enclosed in dust proof casing and crank turns in either direction.



No. 45 Champion Lancaster Geared Direct-Drive Agricultural Forge. Hearth 22 in. in diameter, fan 10 in., with shield. weight 115 lbs. \$19.50



No. 43 Champion Lancaster Geared Direct-Drive Agricultural Forge. Hearth 23x35 in., height 30 in., fan 12 in., with half hood, weight 170 lbs. \$29.00

Champion Agricultural Lever and Crank Forges

Champion Agricultural Lever and Crank Forges are good, well built forges for farmers use, or where light odd jobs are to be done.



No. 150 Champion Agricultural Lever Forge with shield, hearth 18 in., height 30 in., fan 8 in., weight 80 lbs. ... \$9.45

No. 151 Champion Agricultural Lever Forge, same as No. 150, with half hood, weight 85 lbs. \$10.25



No. 152 Champion Agricultural Crank Forge with shield, hearth 18 in., height 30 in., fan 8 in., weight 75 lbs. ... \$9.50

No. 153 Champion Agricultural Crank Forge, same as No. 152, with half hood, weight 80 lbs. \$10.50

Farm and Warehouse Bag Truck

The Favorite Bag Truck is made for service, has $\frac{5}{8}$ in. wheels, cast iron base. Shipping wt. 22 lbs. Price \$ 2.50



Range Stoves

It is actually claimed by people who use this grate that they have saved from 25 to 50 per cent. of wood when this grate is properly used. The proper way to use it is to tip up the coal grate and lay this grate on the tips, which will bring the wood up—making the fire box shallow, thus saving wood. Grates are 6 or 7 inches wide and 18 inches long. Can be made to fit any stove by breaking off as many bars as required to fit stove.

055. 6" wide, 18" long, wt. 9 lb. \$1.00
55. 7" wide, 18" long, wt. 12 lb. 1.25



Heavy Service Boxes

Made of gray iron babbitted and reamed. Not to be compared with the light boxes that are on the market.

For shaft in.	1	1 3-16	1 1-4	1 7-16	1 1-2	1 11-16	1 15-16	2 1-16
Price each	\$.75	\$.80	\$.85	\$ 1.10	\$ 1.10	\$ 1.35	\$ 1.75	\$ 2.00

E356 Special Adjustable Hanger

Made especially for cream separator and wash room purpose. It can be used as shown in cut or may be inverted and ranges in length from 6 in. to 8 in. The box is of double ball type. Nothing better on the market for lining up and keeping in line at any price. Made for $1\frac{1}{8}$ in. shaft only. Price each \$2.25



Fig 235

No. 209 Solid Drop Hanger

Specially well adapted for the chop mill and work shed being lined with heavy lining of babbitt metal, solid and simple. Has hard grease oiler. Does not spill or drop oil on the floor making fire risk greater. Has 9 in. drop made for any size shafting from $1\frac{1}{8}$ to $1\frac{1}{2}$ in. Give size shafting when ordering. Wt. 18 lbs. Price \$3.00



No. 210 Adjustable Drop Hanger

Having 14 to 16 inch Drop	Size of Shaft.	Price.
	$1\frac{1}{8}$ in.	\$ 3.50
	$1\frac{3}{8}$ in.	4.00
	$1\frac{1}{2}$ in.	4.50
	$1\frac{5}{8}$ in.	6.00



SOLID SAFETY COLLAR FINISHED ALL OVER WITH COUNTERSUNK SET SCREW HEADS



Inches.	Price.
1 1/16	\$30
1	.35
1 3/16	.35
1 1/2	.45
1 7/8	.50
1 15/16	.60
1 11/16	.70
1 13/16	.75
1 15/16	.85

LINE SHAFTING

SMOOTH, FINISHED TO SIZE, POLISHED COLD ROLLED STEEL SHAFTING
 In 20 Ft. Lengths, or Less; Cut to Order. No Charge for Cutting

Sizes, inches	3-4	1	1 3-16	1 7-16	1 11-16	1 15-16	2 3-16	2 7-16
Price, per ft.	\$.14	.26	.38	.55	.65	.90	1.10	1.32

COMPRESSION SHAFT COUPLINGS
 For coupling shafting together. No key required

Sizes	3-4 in.	1 in.	1 3-16 in.	1 7-16 in.	1 11-16 in.	1 15-16 in.	2 3-16 in.
Price each	\$3.00	\$3.60	\$3.80	\$4.40	\$4.50	\$5.25	\$6.50



Price per lb.	\$33
We also carry in stock, a grade of babbitt metal known as No. 4	
Price per lb.	\$30

CANVAS AND LEATHER BELTING

Stitched Canvas Belting



Our Stitched Canvas Belting is unaffected by atmospheric changes, uninjured by water or steam, and may be subjected to a degree of heat ruinous to other belting. It is, therefore, the best belting for outdoor use and for wet, damp or hot places. Made of special long fibre cotton duck, carefully stitched, and thoroughly stretched. Saturated in oil. Painted Red. Always remains flexible. Quality guaranteed.

SPECIAL ENDLESS BELTS—If belts are wanted endless, always allow the price of 7 feet extra to cover cost of lap and the labor. Usual delay, two to three weeks, to make endless at factory. Orders for endless belts are taken with the understanding that said special belts shall not be subject to cancelation after work has been begun.

Four-Ply Red Stitched Canvas Belting				Five-Ply Red Stitched Canvas Belting			
Width	Per foot	Width	Per foot	Width	Per foot	Width	Per foot
1 1/4 in.	15c.	6 in.	53c.	3 in.	36c.	8 in.	85c.
2 in.	20c.	7 in.	60c.	4 in.	47c.	9 in.	95c.
2 1/2 in.	24c.	8 in.	68c.	5 in.	57c.	10 in.	\$1.02
3 in.	29c.	9 in.	72c.	6 in.	66c.	12 in.	1.29
3 1/2 in.	33c.	10 in.	81c.	7 in.	75c.	14 in.	1.45
4 in.	37c.	12 in.	\$1.03				
5 in.	45c.						

ENDLESS THRESHER BELTS

RED STITCHED CANVAS

Our Stitched Canvas Thresher Belts are made from especially prepared heavy cotton duck, thoroughly stretched, and sewed from end to end under heavy tension, making a very strong yet pliable fabric. Not affected by water, heat, steam or atmospheric changes and fully guaranteed under fair usage.



Width	4 Ply				
	50 ft. Length	75 ft. Length	100 ft. Length	125 ft. Length	150 ft. Length
5"	\$24.50	\$35.50	\$47.00		
6"	28.50	41.50	55.00	\$68.00	\$81.00
7"	32.50	47.50	62.50	77.50	92.50
8"	36.50	53.50	70.50	87.50	104.00



Lace Leather

Our lacing is nothing but the highest quality. Rawhide Cut Lace Leather in bundles containing 100 feet. Suitable lengths for lacing belts. We do not sell less than a full bundle. $\frac{1}{4}$ inch, \$2.50; $\frac{3}{8}$ inch, \$4.50; $\frac{1}{2}$ inch, \$5.00; $\frac{5}{8}$ inch, \$6.50.

GOOD QUALITY LEATHER BELTING

Cut from a good selection of side stock and is oak tanned by the long-time process. Is a high grade leather belt for use on farm machinery, Thresher, Saws, Planer, etc., where a good grade of belting is required.

Width	Price per ft.	
1"	.15	3"
1 1/2"	.22	3 1/2"
2"	.30	4"
2 1/2"	.36	5"
		6"
		.40
		.50
		.60
		.75
		.90

BELT DRESSING

This is a preparation carefully compounded exclusively from vegetable fibres best known for their preservative and adhesive qualities. It positively contains no chemicals, prevents absolutely all slippage, keeps Belts soft and pliable, relieves all strain on shafting, insures against hot bearings and all waste of Belt power, and will add materially to the life of a Belt. We guarantee its efficiency for Leather, Canvas and all kinds of Belting, Ropes and Cables. For convenience of the trade EASE-ON is put up in Bar and Paste form as follows. Put up in 1 lb. Bars and 5 lb. Screw-Top Tin Cans Trade Mark Reg. U. S. Pat. Office. Price per bar, 30c. Per 5 lb. can, \$1.50.

ATLANTIC CUP GREASE—Only the very best grade carried in stock. Put up in 10 lb. cans with tight lid and bale. Price, per 10 lb. can, \$1.50.

HIGH GRADE LUBRICATING OILS FOR ALMOST EVERY PURPOSE—

Special high grade oils at exceptionally low prices. Shipping weights of oils run about as follows: bbl., 400 lbs.; 1-2 bbl., 250 lbs.; 5 gal. cans, 40 lbs. No extra charge for cans or barrels.

H. & Z. RUDDY ENGINE

Barrels, per Gal.	\$.45
1/2 Barrels, per Gal.	.45
5 Gal. Can, per Can	3.50

HIGHEST GRADE STEAM CYLINDER OIL

Barrels, per Gal.	\$.55
1/2 Barrels, per Gal.	.55
5 Gal. Can, per can	3.50

PRAIRIE HARVESTER OIL

Barrel, per Gal.	\$.45
1/2 Barrel, per Gal.	.45
5 Gal. Can, per Can	3.00

POLARINE AUTOMOBILE AND GAS ENGINE OIL

Barrels, per Gal.	\$.65
1/2 Barrels, per Gal.	.65
5 Gal. Can, per Can	4.00
Motor oil medium and heavy above prices.	



UNIVERSAL WOOD SPLIT PULLEY

With Interchangeable Bushing

Furnished complete with bushings and guaranteed to run perfectly true on the shaft.

Wood split pulleys do not require either key seat or set screws. They fit to the shaft by compression and will pull equally as heavy a load as an iron or any other kind of a pulley without slipping.

We recommend the use of wood split pulleys in all dry places.

PRICE OF UNIVERSAL WOOD SPLIT PULLEYS

Diam.	Face										
	3	4	5	6	7-8	9-10	11-12	13-14	15-16		
3-4"	\$2.18	\$2.26	\$2.42	\$2.57	\$2.92	\$3.20	\$3.47				
5"	2.18	2.30	2.49	2.65	3.04	3.38	3.55				
6"	2.26	2.34	2.53	2.73	3.12	3.47	3.90				
7"	2.30	2.42	2.61	2.81	3.12	3.66	4.06	4.52			
8"	2.34	2.42	2.65	2.62	3.38	3.82	4.29	4.75			
9"	2.42	2.53	2.80	3.04	3.55	4.06	4.56	5.07			
10"	2.53	2.65	2.92	3.20	3.74	4.29	4.84	5.38	5.92		
11"	2.73	2.88	3.20	3.47	4.13	4.75	5.38	6.00	6.63	7.33	
12"	2.92	3.12	3.47	3.83	4.52	5.22	5.92	6.63	7.33	8.03	
13"		3.38	3.74	4.13	4.91	5.69	6.47	7.25	8.03	8.74	
14"		3.53	4.01	4.45	5.30	6.16	7.02	7.87	8.74	9.44	
15"		3.82	4.30	4.75	5.69	6.63	7.57	8.50	9.44	10.14	
16"		4.06	4.56	5.07	6.08	7.10	8.11	9.12	10.14	10.84	
17"		4.29	4.84	5.38	6.86	7.64	8.65	9.75	10.84	11.54	
18"		4.52	5.11	5.69	7.10	8.03	9.20	10.37	11.54	12.25	
19"		4.76	5.38	6.00	7.25	8.50	9.75	11.00	12.25	12.95	
20"		4.99	5.66	6.32	7.64	8.97	10.20	11.62	12.95	13.65	
22"		5.46	6.20	6.94	8.42	9.90	11.38	12.87	14.35	15.05	
24"		6.00	6.86	7.72	9.43	11.15	12.87	14.60	16.30	17.00	
26"		6.55	7.53	8.50	10.45	12.40	14.25	16.30	18.45	19.15	
28"		7.10	8.19	9.28	11.46	13.65	15.83	18.02	20.20	20.90	
30"		7.64	8.85	10.06	12.48	14.90	17.31	19.73	22.15	22.85	
32"		8.19	9.51	10.84	13.41	16.15	18.79	21.45	24.10	24.80	
34"		8.81	10.25	11.70	14.58	17.40	20.35	23.24	26.13	26.83	
36"		9.43	11.00	12.55	15.68	18.79	21.91	25.05	28.16	28.86	

STANDARD MACHINE MOULDED IRON PULLEYS

They are bored, turned and balanced, with key seat or set screws. If bore is special size or is large in comparison with size of pulley or if both key-seated and set-screwed, an extra charge will be made.

Diam.	3	4	5	6	8	10	12	14	16
4"		2 00	2 00						
5"		2 00	2 00	3 00					
6"	2 25	2 50	2 85	3 20	4 05				
7"	2 70	2 75	3 10	3 50	4 40				
8"	2 15	3 00	3 40	3 80	4 75				
9"	2 90	3 25	3 67	4 10	5 10				
10"	3 10	3 50	3 95	4 40	5 45				
12"	3 60	4 05	4 55	5 10	6 30				
14"	4 05	4 65	5 10	5 75	7 20				
16"	4 65	5 20	5 80	6 50	8 20				
18"	5 20	5 85	6 60	7 40	9 30				
20"	5 75	6 65	7 55	8 50	10 45	12 70			
22"	6 35	7 40	8 45	9 50	11 55	13 85			
24"	7 05	8 20	9 35	10 50	12 80	15 20			
26"	7 75	9 00	10 35	11 50	14 05	16 70			
28"	8 55	9 95	11 35	12 75	15 55	18 50			
30"	9 40	10 90	12 45	14 00	17 15	20 35			
32"	10 30	11 90	13 55	15 20	18 60	22 15			
34"	11 35	12 95	14 70	16 50	20 35	24 15			
36"	12 40	14 20	16 05	18 05	22 10	24 15			

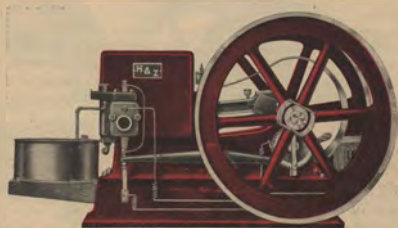
H & Z

Engines

For Farm And Shop

The need of farm and shop power is growing greater each year, and under present conditions it is imperative that every farmer have power with which to reduce the cost of production, and materially increase his capacity for production as well as his profits. We save you on first cost—sell you an engine that will do your work and as represented.

2 to 12 H-P, All Styles



BIGGEST ENGINE VALUE EVER OFFERED AT THE PRICE

Our H. & Z. Engine is built of materials that will stand wear, and the simplicity and ease of operation makes it valuable to the man who has never run an engine. Simple, powerful, easy to understand, the H. & Z. Engine is years ahead of the old-style, rumbersome kind, and has many features not found on other engines. Look at the long, full-length bed, the vertical valves actuated by a strong lever working in connection with the cam gear. Note the suction feed and the large water hopper. The semi-steel cylinder is made separate from base, easily replaced at moderate cost in case of accident. Every engine supplied with strong I-beam connecting rod, with oil shield and guard. Speed regulation a part of the engine, and easy-starting spark shift lever.

The economy in fuel with this engine is one of its greatest features, and it is accomplished through perfect governor action, either with battery ignition or magneto. The engine automatically "cuts out" when the maximum speed to which the engine is regulated has been attained. Both fuel and battery "cut out" at the same time, creating a big saving in a day's run. And the prices we are able to quote can hardly fail to save you \$15 to \$75 according to size engine selected. We want you to try one suitable for your requirements—let us prove to you on your own work that the H. & Z. is all we claim for it, and that we can save you a lot of money now, and in running cost hereafter. The best proof is a trial on your own work.

All Parts Proving Defective Will Be Replaced Free At Factory During the Life Of The Engine. For size specifications and prices on engines see pages 34 and 35. Prices on Combination outfit pages 43 and 44.

H & Z Engines

For Farm
and Shop

Built in Standard Sizes, 2, 3, 4, 6, 8, and 12 H-P., with liberal surplus 25 to 50 per cent more than actual rating. This extra measure of power costs you nothing—makes your engine worth more.

Special Features

H. & Z. Engines have automatically cut gears, noiseless and non-wearing. The fuel mixer automatically heats the fuel as it enters the cylinder, securing greater expansion of the gases, consequently more power from the fuel. Four piston rings of special ring material, and fitted into accurately cut grooves, provide for perfect compression. The valve action is positive and the valves self-seating—no friction as in horizontal valves, consequently no wear.

Ignition is through jump spark system—the same as in use on all high-grade, high-power engines. There is no wear on jump spark—no contact required—just a spark plug. The passing fuel keeps the points of the spark plug clean and firing takes place at the point where fuel is most inflammable.

Fly-wheels are nicely balanced, solid hubs, keyed on to the shaft, and no holes are bored in spokes for pulley. Our pulleys are keyed on. Pulley can be put on either or both sides of the engine—an added advantage. Engines are shipped fully equipped—ready to run when supplied with fuel oil and water. Let us have your order on the following guarantee.

GUARANTEE

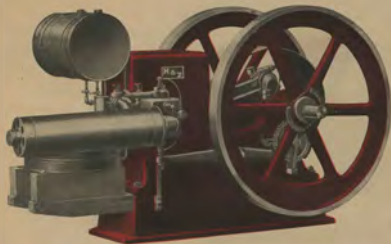
We guarantee every H. & Z. Engine to be made of the best materials, tested by competent workmen, and to be without defects. Should any part prove defective, we will replace same **FREE OF CHARGE**, upon its return to factory **During The Life Of The Engine**. That every engine can be used as a gas engine or liquid fuel engine at once or at any future time, by merely exchanging intake connections. That every engine is capable of pulling its full actual horse-power with a liberal surplus, and that it will run steadily and prove reliable if properly handled.

Hertzler & Zook Co.

H & Z Engines

For Farm
and Shop

The H. & Z. Special Model Kerosene Engine is built to take advantage of the use of cheap fuels and is not a make-shift. The governing principle in the use of kerosene, or like fuels, is HEAT applied before fuel is taken into the cylinder of the engine.



Sizes:

2

to

12 H-P.

OUR SPECIAL MODEL KEROSENE ENGINE SAVES ONE-HALF ON FUEL

You can get about twice as much power out of kerosene—as present fuel prices. In other words kerosene costs you about **one-half**, but the power developed per gallon being nearly the same, you cut your fuel bills in two by using the lamp oil.

The H. & Z. Kerosene Engine is started on gasoline, has a combination fuel tank and two fuel pipe lines. When you start the engine you use gasoline for its volatility and quicker vaporization. Kerosene is then turned on, and the engine is operating on the cheapest fuel that can now be obtained.

Special Features of the H. & Z. Special Kerosene Engine, are practically the same as our H. & Z. Gasoline Engine. But in addition we provide a genuine built-in kerosene vaporizer and clean water feed from separate tank, consequently costs a little more than the gasoline engine. Another special point is that kerosene passes from the fuel tank into a reservoir which is controlled by an automatic feed, which allows only a uniform amount of fuel to be taken into the engine, and this amount is pre-heated by the waste exhaust so that full vaporization and expansion into gas is obtained before firing, thus giving greatest possible amount of power. Contrast this with engines having continuous feed and you will readily see the big fuel saving and greater utility of the H. & Z. It heats its own fuel from the waste exhaust. We guarantee our Kerosene Engine just as we do our gasoline engine, and our prices will save you money.

Read the Guarantee on page 38

H & Z Engines

**For Farm
and Shop**

Built to stand the load, balance perfectly. Can be used as Stationary Engine by slipping bolts and placing skids on foundation. An engine you can take to your work, pump, churn, wash, run separator, etc.



Sizes:

2, 3 and 4 H-P.

**Kerosene
or Gasoline**

THE HANDY FARM ENGINE

For handy power wherever you want it, at the house, barn, or in the shop. The truck is strong and durable, built with wide metal wheels having re-enforced hubs. The engines are our regular kerosene or gasoline mounted as shown. Trucks have steel axles, amply large to carry the engine at any work. Front axle has swivel joint. In operating with truck it is only necessary to block wheels so as to hold drive belt tight, and that wheels cannot slip. Engines on this style of truck should be selected for the amount of power needed, just as in picking out an engine for any other kind of work. It is better to have too much power than not enough, but not necessary to have a 30 H-P. engine for a 4 H-P. job. It pays to ascertain first how much power will be needed—then if you provide a little extra you can be sure that you will be able to take care of your work. For operating pump with ordinary pump jack a 2 H-P. is large enough, and this will run churn, separator, washing machine, grind stone, corn sheller, grain grader and similar machinery. For cutting and grinding ensilages, etc. larger engines are recommended.

You Take It To The Work

H & Z *Engines*

**For Farm or
Portable Use**

We specially recommend our 6, 8 and 12 H-P. Portables for the various kinds of work on the farm, according to the size of the machines to be driven. We supply either Gasoline or Kerosene equipped portables as shown, complete and ready for business. Perfectly balanced and properly set at the factory. Equipped with chain-brake.

**6 to 12 H-P.
Kerosene or
Gasoline**

**Fully
Equipped
Ready
To Run**



A RIG YOU WILL BE PROUD TO OWN

Engines are mounted on heavy steel beams, doubly braced to both axles. The front axle is of the swivel type and is made so that one wheel will ride over an obstruction without throwing the engine out of level. Rear axle is of the bridge type, arranged to carry the weight nearer the wheels to prevent springing of axle. Steel wheels have staggered spokes and extra strong hubs with long bearings. The steel seat is mounted on water hopper.

As engines have special tap for running water, barrel or tank for cooling is easily added. Engine can be made stationary by slipping the bolts and placing on foundation. As it stands, this is a grand rig for the average size farm, easily portable, and easily handled. Note that we furnish steel or wood trucks just as you prefer. The enclosed low prices on this handsome outfit, as compared to local price will save you a lot of money.

We Make Prompt Shipment

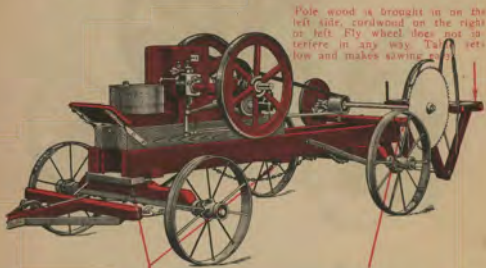
H & Z Engines

Saw Rig
3-in-one

OUR COMPLETE POLE AND CORD WOOD SAWING OUTFIT

Why buy three engines when you can have one that will do all your work—sawing, grinding, or ensilage cutting? With this outfit you can have a portable by taking off the saw table and saw, or a stationary by removing four belts and placing engine on foundation. You can remove the saw by removing four bolts, and attach some other machine.

SIZES: 3, 4, and 6, H-P. COMPLETE AND READY TO RUN



Pole wood is brought in on the left side, cordwood on the right or left. Fly wheel does not interfere in any way. Table sets low and makes sawing easy.

Four bolts loosen this engine from the wagon.

Four bolts remove this wood saw frame.

A MONEY-MAKER FOR ANY ENERGETIC MAN

Using kerosene, an able-bodied man with the usual help can make this outfit pay all expenses and its cost in a short time. The rig is self-contained, has belt and belt tightener, swinging saw table. Truck has oil shield and saw guard, and saw furnished is of highest quality, set and ground ready for business.

The outfit is complete, comes to you as shown with full equipment, including tongue, and foot rest. Prompt shipment to any part of the country. Saw blade and frame are detached in shipping to prevent damage, and to get lower freight rate. This is just the rig for a handy man who wants to make money, or who can use a 3-in-one outfit on the farm. See low prices for immediate delivery.

Note—We reserve the right to change our construction and equipment from the description and specifications given in this book, whenever, in our judgment, any change may be an improvement, and so be of added advantage to the buyer.

SIMPLEST MACHINE ON THE MARKET

Will Pay For Itself In 30 Days If You Have The Work

SPECIAL OFFERS ON COMBINATION OUTFITS

In order that our customers may be given full benefit of our wide experience in combining saw outfits and other machines to engine units we list below certain combinations which we strongly recommend. If a customer abides by the recommendations given here he will find that the outfit will be dependable in every particular, will do better work, save money in upkeep and in the long run have a great deal more profit for himself from the outfit.

Many buyers make a fatal mistake—some in getting too much power for the outfit, others by trying to drive too big a machine with a small engine. Therefore, if the recommendations that we make here are followed the customer is certain to be on the side of safety and profit.

These combinations priced as they are, you will see, give the customer an advantage and we hope that the amount saved by buying these specials as we recommend them will warrant every customer availing himself of the benefit of our years of experience.

Gasoline Engine Sawing Outfits

Outfit No. SG-2120—Consists of 2 horse power H. & Z. stationary gasoline engine with magneto; No. 1 saw frame with fly wheel and 20 inch cordwood blade, filed and set, and 35 feet of 4 inch, 4 ply, stitched canvas belt. Wt. 555 lbs. Price complete \$95.00

Outfit No. SG-2120-R16—Same as SG-2120 except ripping table and 16 inch blade for same as included as part of outfit. Wt. 600 lbs. Price complete \$101.75

Outfit No. SG-3122—Consists of 3 horse power H. & Z. stationary gasoline engine with magneto; No. 1 saw frame with fly wheel and 22 inch cordwood blade filed and set, and 35 feet, 4 inch, 4 ply, stitched canvas belt. Shipping wt. 750 lbs. Price complete \$120.00

Outfit No. SG-3122-R20—Same as SG-3122 except ripping table with 20 inch blade is included as part of outfit. Shipping wt. 800 lbs. Price complete \$128.65

Outfit No. SG-3226—Consists of 3 horse power H. & Z. stationary gasoline engine with magneto; No. 2 saw frame with fly wheel and 26 inch cordwood blade filed and set, and 35 feet, 5 inch, 4 ply, stitched canvas belt. Shipping wt. 840 lbs. Price complete \$127.75

Outfit No. SG-3226-R22—Same as SG-3226 except ripping table with 22 inch blade is included in outfit. Shipping wt. 900 lbs. Price complete \$138.50

Outfit No. SG-4430—Consists of 4 horse power H. & Z. stationary gasoline engine with magneto; No. 4 saw frame with fly wheel and 30 inch cordwood blade, filed and set, and 35 feet, 6 inch, 4 ply, stitched canvas belt. Shipping wt. 875 lbs. Price complete \$164.45

Outfit No. SG-4430-SR24—Same as No. SG-4430 except shingle ripping table with 24 inch blade is included as part of outfit. (Shingle ripping table will do everything a ripping table will and in addition permit of sawing shingles.) Shipping wt. 930 lbs. Price complete \$178.95

Outfit No. SG-6432—Consists of 6 horse power H. & Z. stationary gasoline engine with magneto; No. 4 saw frame with fly wheel and 32 inch cordwood blade filed and set, and 35 feet of 6 inch, 4 ply, stitched canvas belt. Shipping wt. 1400 lbs. Price complete \$208.00

Outfit No. SG-6432-SR26—Same as No. SG-6432 except shingle ripping table with 26 inch blade included as part of outfit. (Shingle ripping table will do everything a ripping table will and in addition permit of sawing shingles.) Shipping wt. 1460 lbs. Price complete \$224.00

With Trucks

Any of the gasoline outfits shown above can be had with trucks, which makes the engine unit a portable proposition. For outfits numbered SG-2120, SG-2120-R16, we recommend the small hand truck shown on page 20 of this catalogue. For numbers SG-3122, SG-3122-R20, SG-3226 and SG-3226-R22 we recommend the large hand truck shown on page 20 of the catalogue. For outfits numbered SG-4430, SG-4430-SR24, SG-6432 and SG-6432-SR26 we recommend the horse power truck shown on page 20.

The outfit will be shipped in separate units in order to save freight. Prices of above combinations with trucks are same as shown above with the price of truck as shown on pages mentioned above, added.

Kerosene Engine Sawing Outfits

Outfit No. SK-4430—Consists of 4 horse power H. & Z. stationary kerosene engine with magneto; No. 4 saw frame with fly wheel and 30 inch cordwood blade filed and set, and 35 feet, 6 inch, 4 ply, stitched canvas belt. Shipping wt. 875 lbs. Price complete \$185.00

Outfit No. SK-4430-SR24—Same as SK-4430 except shingle ripping table with 24 inch blade included as part of outfit. (Shingle ripping table will do everything a ripping table will and in addition permit of sawing shingles.) Shipping wt. 930 lbs. Price complete \$194.50

Outfit No. SK-6432—Consists of 6 horse power H. & Z. stationary kerosene engine with magneto; No. 4 saw frame with fly wheel, 32 inch cordwood blade filed and set, and 35 feet of 6 inch, 4 ply, stitched canvas belt. Shipping wt. 1400 lbs. Price complete \$225.00

Outfit No. SK-6432-SR26—Same as SK-6432 except shingle ripping table with 26 inch blade included as part of outfit. (Shingle ripping table will do everything a ripping table will and in addition permit of sawing shingles.) Shipping wt. 1460 lbs. Price complete \$235.00

Kerosene Outfits With Trucks

All the kerosene outfits listed above can be had with trucks, which make the engine a portable proposition. For any of the four kerosene outfits listed above we recommend our light power trucks (1200 pounds capacity) shown on page 20.

To secure trucks with the above combinations add list price of trucks to the above prices and specify same when ordering.

Mills in Combination With Engines

Outfit No. SG-6139—Consists of 6 horse power H. & Z. stationary gasoline engine with magneto; No. 139 feed mill with fly wheel and 35 feet of 4 inch, 4 ply, stitched canvas belt. Shipping wt. 1300 lbs. Price complete \$185.00

Outfit No. SK-6139—Consists of 6 horse power H. & Z. kerosene engine with magneto; No. 139 feed mill with fly wheel and 35 feet of 5 inch, 4 ply, stitched canvas belt. Shipping wt. 1300 lbs. Price complete \$208.75

Outfit No. SG-8139-A—Consists of 8 horse power H. & Z. stationary gasoline engine with magneto; No. 139-A feed mill with fly wheel and 35 feet of 5 inch, 4 ply, stitched canvas belt. Shipping wt. 1755 lbs. Price complete \$255.50

Outfit No. SK-8139-A—Consists of 8 horse power H. & Z. stationary kerosene engine with magneto; No. 139-A feed mill with fly wheel and 35 feet of 6 inch, 4 ply, stitched canvas belt. Shipping wt. 1755 lbs. Price complete \$272.50

See mill No. 139 on page 66.

Shredders in Combination With Engines

Outfit No. SG-4155—Consists of 4 horse power H. & Z. stationary gasoline engine with magneto; No. 155, 14 inch fodder shredder and 35 feet of 5 inch, 4 ply, stitched canvas belt. Shipping wt. 1435 lbs. Price complete \$185.00

Outfit No. SG-8155—Consists of 8 horse power H. & Z. stationary gasoline engine with magneto; No. 155, 14 inch fodder shredder and 35 feet of 6 inch, 4 ply, stitched canvas belt. Shipping wt. 1735 lbs. Price complete \$285.00

Outfit No. SK-4155—Consists of 4 horse power H. & Z. stationary kerosene engine with magneto; No. 155, 14 inch fodder shredder and 35 feet of 5 inch, 4 ply, stitched canvas belt. Shipping wt. 1435 lbs. Price complete \$196.50

Outfit No. SK-8155—Consists of 8 horse power H. & Z. stationary kerosene engine with magneto; No. 155, 14 inch fodder shredder and 35 feet of 6 inch, 4 ply, stitched canvas belt. Shipping wt. 1735 lbs. Price complete \$297.50

See shredder No. 155 on page 53.

STATIONARY ENGINES

SIZE AND SPECIFICATIONS

All dimensions are expressed in inches

H-P.	Bore of Cylinder	Stroke Cylinder	Diam. Fly Wheel	Min. Speed R. P. M.	Plain Pulley	Weight Pounds Stationary	Weight Pounds Portable	Floor Space Sub-base	Floor Space on Skids
2	4	5	18	500	6x6	390	450	26x41	26x54
3	4½	6	24	450	8x6	600	680	30x48	30x60
4	5½	7	28	420	10x8	800	890	34x56	34x68
6	6	8	32	395	12x8	1100	1700	37x64	37x76
8	6½	9	36	375	14x6	1400	2000	39x68	39x78
12	7½	12	40	360	16x8	1900	2500	42x74	42x90
16	9	14	50	325	18x8	3300	4300	52x92	*
22	10½	14	52	295	20x8	3600	4550	52x96	*

* 16 H-P. and 22 H-P. are furnished to place on foundation without skids.

See pages 37-39.

H-P	Gasoline Gas and Naphtha Fuel Price	Kerosene and distillate for Fuel Price	If Oscillating Magneto is wanted add	Diam. of Engine Shaft Inches	Speed Min. Max.
2	\$ 52.50	\$ 63.50	\$ 15.00	1¼	500 590
3	78.00	91.00	15.00	1½	450 520
4	110.00	125.00	15.00	1¾	420 480
6	158.00	175.00	16.00	1½	395 445
8	216.00	235.00	16.00	2½	375 420
12	315.00	342.00	16.00	2½	360 400
16	500.00	540.00	16.00	3½	325 325
22	625.00	675.00	16.00	3½	295 295

HAND PORTABLE ENGINES

See page 40

Size of Engines	Gasoline Gas and Naphtha Fuel Price	Kerosene and distillate for Fuel Price	If Oscillating Magneto is wanted add
2 Horse Power	\$ 61.00	\$ 71.00	\$ 15.00
3 Horse Power	92.00	102.50	15.00
4 Horse Power	132.00	147.50	15.00

HORSE (STEEL WHEEL TRUCK) PORTABLE ENGINES

See page 41.

Size of Engines	Gasoline Gas and Naphtha Fuel Price	Kerosene and distillate for Fuel Price	If Oscillating Magneto is wanted add
6 Horse Power	\$225.00	\$247.00	\$ 16.00
8 Horse Power	303.00	325.00	16.00
12 Horse Power	414.00	440.00	16.00
16 Horse Power	646.00	685.00	16.00
22 Horse Power	790.00	836.00	16.00

PORTABLE SAW RIG WITH STEEL TRUCK AND FRAME

See page 42.

BLADE AND FLY WHEEL

Size of Engines	Size of Blade	Gasoline Gas and Naphtha Fuel Price	Kerosene and distillate for Fuel Price	If Oscillating Magneto is wanted add	Shipping Weight
3 H-P	24"	\$175.00	\$190.00	\$15.00	1400
4 H-P	28"	225.00	240.00	15.00	1550
6 H-P	30"	266.00	275.00	15.00	1850

LOWEST NET PRICES ON FRICTION CLUTCH PULLEYS

Select the Number and Size to Suit the Engine you Order

	8x6	10x6			
No. 0—For the 2 and 3 H-P Engines	\$14.70	\$15.50			
	10x6	12x6	14x6	16x6	18x6
No. 1—For the 4 and 6 H-P Engines	\$16.50	\$18.00	\$19.00	\$21.00	\$25.00
	14x8	16x8	18x8	20x8	22x8
No. 2—For the 8 and 12 H-P Engines	\$25.90	\$28.75	\$30.10	\$31.80	\$36.00
	18x10	20x10	22x10	26x10	30x10
No. 3—For the 16 and 22 H-P Engines	\$37.50	\$40.25	\$42.25	\$45.95	\$51.50

HOW TO FIGURE CORRECT SIZE PLAIN OR CLUTCH PULLEY: Take

the diameter (in inches) of the pulley listed in our catalog as regularly furnished (see catalog page 36); multiply that diameter by the average speed of the engine; then divide by the speed at which you wish to run your machine or line shaft and the answer will be the diameter (in inches) of the pulley you should order for your machine or your line shaft.

The above is the best and quickest way to figure speeds, but if you already have your machinery then take the diameter (in inches) of the pulley you have on your machine or line shaft and multiply by the speed of your machine or line shaft; take that amount and divide by average speed of the engine and the answer is the diameter (expressed in inches) of the pulley you should order with your engine.

PRICE LIST PLAIN IRON PULLEYS FOR GAS ENGINES

H & Z Engines are regularly equipped with pulleys of sizes listed in engine catalog, but if an additional pulley or a different size is required, it can be furnished at the additional net cost difference. That is, you pay this list price for the different pulley, and we allow you this list price for your regular engine pulley and you pay only the difference between the two. All pulleys listed below are for single belt.

Size	Price	Size	Price	Size	Price	Size	Price	Size	Price
4x4	\$2.00	10x6	\$4.40	14x6	\$5.75	18x6	\$7.40	26x10	\$16.75
6x6	3.20	10x8	5.45	14x8	7.20	18x8	9.30	28x10	18.50
8x8	4.25	12x8	6.30	16x8	8.20	22x8	11.55		
8x6	3.80	12x6	5.70	16x6	6.50	20x8	10.45	30x10	20.35

THE NEW HIGH-TENSION INDUCTOR-TYPE OSCILLATING MAGNETO

WILL LAST A LIFE TIME

Worth Double Its Cost to You

It is worth double its cost to you. If you were paying \$25 or \$50 for this magneto you would still be making a good investment. It adds to the quality of the Engine. All our engines are easy to start, whether on battery or magneto, but with this oscillator you do not need batteries, you save buying them, you avoid expensive repair parts, and you get the spark from a machine that operates on the simplest form known. Just think! Only a slight rotation of the shaft—snap goes the trigger—and a big hot spark results. No turning, no wearing, a life-long spark-generating outfit. Consider the long time it will be used, and what it will do, and what it will save and you will find it the best investment you have ever made.

Note: We recommend that you order your engine with the new high-tension inductor type oscillator-magneto; have it shipped with your engine in place of batteries, because it will save you buying batteries again, making your engine a complete self-contained plant within itself, always ready to run without the annoyance, expense or inconvenience that might be caused when batteries wear out.

Inductor-Type Oscillating Magneto

For 2, 3 and 4 H-P	\$15.00
For 6, 8, 12, 16 and 22 H-P	16.00

THE I. X. L. YARD HYDRANT

SUCCESSORS TO D. F. LUSE Mfg. Co.

Two motions are necessary in opening and closing the "I. X. L." Fig. 1 represents the hydrant closed and the exhaust open, and without the frost casing. When opening to draw water the lever or handle is pushed down towards the spout, when it enters the slot in the top and may be moved sideways to obtain the desired stream; closing, the lever need only be shoved back to the end of the slot, and released, when the pressure of the water, assisted by a small spring, throws the handle up and the second or self-closing occurs.

THE "I. X. L." VALVE

Fig. 2 is the water box or valve and water chamber, cut in two, showing the heavy rubber valve closed up against the valve seat, with the exhaust open, and the top packing raised out of the recess at the top or neck of the valve chamber, opening the slot.

Fig. 3 is the valve and water chamber showing the exhaust closed with the top packing in the recess and the heavy rubber valve at the bottom away from the valve seat so the water may freely pass over the top of same in the direction shown by the arrows.



Fig. 2



Fig. 4

Fig. 4 shows the top of the ground casing a few inches out of the ground with the top plates laid aside and the hydrant removed.



Fig. 3

FIVE INTERESTING POINTS OF THE "I. X. L."

The leading features of this hydrant are as follows, viz:

- 1st. Exhaust slot is closed off completely by the first or downward motion of the lever (Fig. 3) so no water can waste at the bottom of hydrant when drawing a full or partial flow.
- 2nd. The shut-off is always positive; when the lever is released the rubber valve comes up against the valve seat immediately (Fig. 2) so solid that no water can possibly escape.
- 3rd. The valve is made of the very best rubber, one and one-fourth inches in diameter and seven-eighths of an inch high.
- 4th. The hydrant is placed in a wood casing, top of casing shown in Fig. 4. In case of repairs or the removal of any obstruction from the water chamber, the top plates being taken off the hydrant can be screwed off at the bottom and slipped out of the casing and again returned without any digging out of same.
- 5th. Again, this casing also prevents the frost from raising the hydrant and breaking the connection below on end of pipe which is often the case unless there is a lead connection on end of pipe to connect with, which expense is saved by this casing. The plates on top of Fig. 4 are so arranged that they hold the hydrant nicely in place yet allow the casing to slip up and down on hydrant.

Price of Hydrant (less Casing), each \$6.00

Grinding Attachment

for Hertzler & Zook Wood Saws

THIS ATTACHMENT CAN BE USED ON ALL OF THE HERTZLER & ZOOK WOOD SAWS EXCEPT NOS. 3 AND 8

It will accommodate 12-in diameter stones by 1/4 inch thick or any size thinner

By adding this attachment to your saw you have the benefit of a grinding machine that would otherwise cost you no less than \$10.00, saying nothing of the room for storage and the inconvenience of setting it up when grinding is to be done. This attachment will pay for itself

in less than one year's time in keeping the plow and implements' shares sharpened, not counting the loss of time nor the tools and other grinding and filing you will save.

The H. & Z. saw frames are all bored before leaving the factory so that any one can readily attach a grinding attachment.

Fig. 175 shows how it is possible to grind mower sections clear up in the corner as well as for gumming saws and for general tool grinding purpose. The attachment is adjustable in every way enabling the operator to duplicate bevel work on exactly the same bevel.

Weight, 25 lbs. Price, less wheel \$4.00

AMERICAN GRINDING WHEELS

These wheels are not to be classed with emery wheels as they are far superior for tool grinding or saw gumming or any other purpose where a high grade stone is wanted.

Good stones are hard to get. If you state purpose stone is to be used for we can sometimes save time by substituting other sizes we have in stock.

NOTE. — When ordering wheels please give diameter, thickness, size of hole (or state what number of Hertzler & Zook machine it is to be used on), shape of face and purpose or class of work. We will always select a wheel best adapted for your work. A 10x3/4 wheel weighs 5 1/4 lbs.

Fig. 175

Thickness of wheels (in inches)	3/4	3/4	1/2	1/2	1	1 1/2
Diameter (in inches)	10	\$2.16	\$2.20	\$2.35	\$2.80	\$3.37
Diameter (in inches)	12	2.66	2.70	2.75	3.30	3.90
						4.50

HUNTINGDON EMERY WHEEL DRESSER.

For truing, shaping and removing glaze from emery wheels while running at full speed.

Weight 1 1/2 pounds

Price with two sets of cutters 60c. Extra cutters, per dozen sets .. 1.00

CAST IRON POST MAULS



Has 3-foot handle, standard size and weight.
Shipping weight, lbs. 10 13 16 18 20
Price, each 60c 72c 85c 95c 1.20

FELLOE OILERS

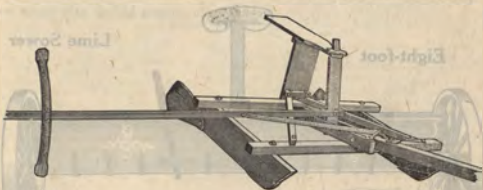
Solid Cast Iron Oil Troughs. Every person wanting to prevent his tires from coming loose should have one.

Shipping weight, 13 lbs. Each \$1.30



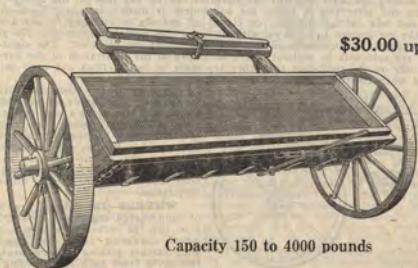
HERTZLER AND ZOOK MARKER

A simple and inexpensive tool adapted especially for marking off corn rows and also very desirable for any crop planted in rows. In fact you can make your field almost as perfect as a checker board. The runners have grey iron points, are amply



long to insure straight rows, having shoe on rear enabling the operator to make a wide or narrow furrow. Has a seat provided in center enabling the operator to make straight rows and do it with ease. Has a variable gauge to use on either side adjustable to the width of row desired, and when not in use will stand straight up and the way firmly fastened by the special latch, provided for the purpose. Shipping wt. 125 lbs. Price \$10.00

Low Down Force Feed Lime Sower



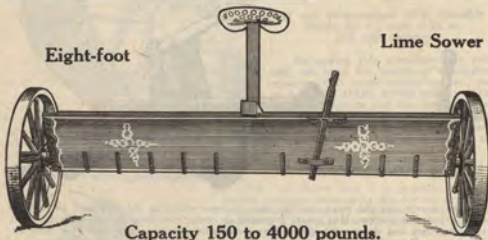
\$30.00 up

Capacity 150 to 4000 pounds

This cut shows our 5-foot overall spreader for vineyard use, also 5-foot hopper. Simple, strong and durable. This sower or broad caster is strongly built of good material and workmanship and sold absolutely on its merits that if it does not sow (Commercial fertilizer, Hydrated Lime, Pulverized or ground lime, Ground Lime rock, Plaster Ashes, Cotton seed meal, etc.) to your entire satisfaction you can return it at our expense as per our guarantee.

In order to supply the long looked for spreader for vineyard purpose, we make this spreader in two sizes, 5-foot overall and 5-foot hopper.

No. 83.	3 ft. 7 in., capacity 5 bu., 375 lbs., with shafts, no screen	\$30.00
No. 84.	3 ft. 7 in., capacity 5 bu., 400 lbs., with shafts and screen	31.40
No. 85.	5 feet, capacity 7 bu., 400 lbs., with shafts, no screen	38.00
No. 86.	5 feet, capacity 7 bu., 425 lbs., with shafts and screen	38.00



Capacity 150 to 4000 lbs. This sower or broad caster is strongly built of good material, is simple in construction and is made to last, and is one of the best paying investments any farmer or gardener can make. The above illustration shows the rear view, showing the lever whereby the operator can set the flow to the desired amt. per acre and after this is found the adjustment is made permanent by a thumb screw and lock casting and may be closed off entirely or changed to any amount under the set amount to be sown without losing the former adjustment. No gears, clutches, chains, sprockets, or in fact anything to get out of order. The eight-foot sowers are sold with or without screen as shown in the illustration of the five-foot sower only on the eight-foot sizes they are made in two sections and need only to be used when obstructions are found in that which is to be sown.



This cut shows the simplicity of the sower. The heads of the hopper are of cast iron being a part of the end bearing through which the agitator shaft runs and upon which the weight is carried. Braces run from these heads to the double-tree bolt in the tongue relieving the strain from the body and is shown in the following illustration.

WHEELS—The wheels are made of hand shaved and driven spokes, 3 in. iron tire, 34 inches in diameter, each wheel consisting of a cast iron hub with ratchet making a permanent, direct drive from each end avoiding any missing or skipping.

This illustration shows very distinctly the inside of the hopper as well as the impossibility of any bridging or choking. The agitator consists of eight iron bars well locked together by four interior hubs with lock wedges and washers.

BOTTOM—The bottom consists of heavy sheet steel with a number of holes very close together enabling the operator to sow perfectly any quantity within the limit of capacity of the sower.

THE BEST METHOD TO DISTRIBUTE LIME OR COMMERCIAL FERTILIZER

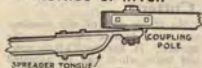
It has been proven that a smaller quantity of lime, properly and more frequently distributed and quickly mixed into the surface of the soil, is more effective and costs less money than the old methods of application.



In the above illustration we show our latest method of applying lime and fertilizer. This method has been thoroughly tried out and approved as being the best way to apply lime. As you will see from the above illustration, the wagon is loaded with lime, or the material to be applied, and instead of hauling it to the field and putting it on heaps, and then loading into the sower, we simply have arranged a short tongue with a hitch to the coupling pole or axle of the wagon, then with a driver,

and one man to keep the sower full as it moves across the field, the contents of the wagon are shoveled into the sower, and it is evenly distributed until the load is on the field. Then, by uncoupling, the sower may be left in the field until another load is secured, and the operation is repeated. This enables the sower to keep lime in the shelter until sown, and is not subject

METHOD OF HITCH



to the heavy losses frequently experienced by the lime getting wet just before it is applied and thereby losing much of its value.

No.	Length	Capacity	Ship Wt.		
87SH	8 ft.	11 bu.	430 lbs.	less seat and screen with short hitch for back of wagon	\$40.00
87	8 ft.	11 bu.	450 lbs.	Less seat, double tree, yoke, and screen	40.00
Doubletree and yoke					2.50
Screens					2.00

One Hole Corn Sheller

Known to be the most prominent sheller on the market. It meets the full requirements and needs of the average farmer. It is well built, runs easy and does first class work. Frame work is made of hard wood strongly bolted together making a firm, well-made sheller. Balance wheel is of large diameter and heavy, making it easy running. Has adjustment spring so as to be adjusted to shell any size ears. The grain spout is on fly wheel side out of the way of the cobs and operator. The screen is so provided as to drop the dust underneath the sheller making clean work, both from cob and cleans the corn from dust.

Shipping wt. 115 lbs. Price\$9.25
With Feed Table\$10.00

Two Hole Corn Sheller

This sheller is well built of good material neatly finished in a workman like manner. Has a large capacity and runs easily. This sheller



may be run by hand but is more frequently used in connection with a small gasoline engine.

It is built to meet the demand of those who desire larger capacity than found in the one hole sheller.

Has a large diameter fly wheel with $17\frac{1}{2} \times 3\frac{1}{2}$ in. face pulley. No belts or sprocket chains to get out of order. The rub irons and springs can be adjusted to the different size of corn ears so as to do perfect clean, shelling from the cob. The double screen shaker separates the grain from the cobs as well as screens the dirt from the corn. In fact a perfect machine from start to finish. Capacity 20 to 30 bu. per hour. Shipping weight 200 lbs.

Price\$20.75
With Feed Table21.50

Hand Lever Feed Cutter



No 26 is one of the simplest and most durable cutters on the market. It has an 11-inch steel laid knife which can be adjusted to take up all wear, thus giving a perfect shear cut at all times. It has a slide gauge plate by which the length of the cut can be gauged to suit the requirement.

These cutters are knocked down for shipment to secure low freight rates. Wt. 50 lbs.

Price\$3.25

The Greatest Hand and Belt Power Cutter on the Market

Has the Good Features of the Larger Machines, Having an 11 inch Tempered Tool Steel Knife, a Large Throat

This cutter can be used by hand power or by belt with the small Gasoline engine. One bolt will remove the handle and by adding the belt pulley on the fly wheel shaft—, you have a light power cutter that will cut from 150 to 400 lbs of dry fodder and from 300 to 800 lbs of green fodder.

Construction

It is well built of good material and workmanship; has a large throat which insures large capacity. The knife makes three cuts to one turn of the crank. The length of the cut is adjustable from $\frac{3}{8}$ to $1\frac{1}{2}$ " in length.



The Feed

The lower feed roll is smooth and moves continually, while the upper roll is rough and in connection with lower roll feeds the fodder to the desired length of cut then holds it firmly while the knife cuts it off. Shipping Wt. Knocked down 160 lbs.

Price each	\$15.00
Power Pulley extra	2.50

Cast Stone Boat Heads—\$4.25

This stone boat head is a single heavy casting. Has shoulder to fit ends of three 10-inch planks and holes to fasten them with bolts. There are six holes for bottom boards and four for side strips.

Attach bottom boards, bolt them fast, attach side strips and end piece and stone boat is complete. Get a boat casting, and make your own stone boat and save freight charges. No. W19, wt. 75 lbs. Price



\$4.25

Papac Ensilage Cutters

Your Gas Engine Will Operate the Papac Successfully

The Papac is by far the lightest running machine of its kind made. It will cut and elevate ensilage successfully with the power necessary to get other blower cutters up to speed. This feature makes it especially well adapted for use in connection with small gasoline engines ranging in size from 3 to 8 horse power. We call particular attention to this fact, as moderate filling of the silo in an individual way has many advantages and is fast replacing the old method of doing the work in a few hours with great bustle and expense, only to find in a few days that one-fourth of the capacity of the silo was lost thru settling, while enough corn remained in the field to refill.

The Most Durable Cutter Made

The Papac is the most durable cutter that can be bought—many are still doing perfect work after years of hard service. The Papac costs little if any more than other cutters, yet it saves you money as no other cutter can. The few dollars you might possibly save by buying a cheaper make would soon be eaten up in additional cost of power, time, labor and repairs. It is far more economical and satisfactory to start right—with a Papac. A perfect blower cutter cannot be made with a wooden frame. Such a frame will warp as it is affected by the rain, wind and sunshine. Besides this, wood or riveted frames are not rigid at the joints and become more or less diamond-shaped from the pull of the belt which makes it impossible to keep the knives at the proper distance from the shear plate. The result is apt to be that either the corn is "broomed" off instead of being cut evenly and uniformly or the knives run into the shear plate and are spoiled. Even as little variation as one-sixteenth of an inch will greatly diminish the capacity of the cutter and increase the power required to operate it. The one-piece semi-steel frame in the Papac Cutter cannot warp or twist and as all five main bearings are cast in the frame the alignment of the cutting mechanism is permanent.

Easy to Set Up and Take Down

The Papac, when located, is ready for business as soon as the pipe is set up. The feed table does not have to be removed or propped up out of the way. There is nothing to remove or put together but the pipe. No other cutter can be set up and taken down so quickly.

10 Inch Papec Ensilage Cutter Mounted



The correct size for the man with a small gas or kerosene engine developing as little as 3 h. p.

The style "R" 10 two knife Cutter is an excellent size for individual work.

The 10 inch Cutter can also be furnished with the regular Four Wheel Mount.

Specifications for 10 and 13 Inch Cutters

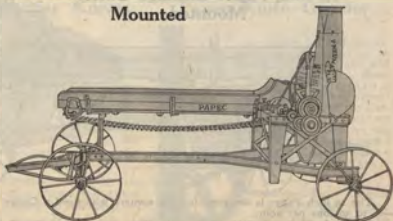
	"R" 10 with two straight knives	"N" 13 with two straight knives
Tons per Hour $\frac{1}{2}$ " Cut	2 to 5	5 to 10
Horse Power, Steam	3 to 4	4 to 6
Horse Power, Gasoline	3 to 6	6 to 10
Lengths of Cut	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1"	$\frac{1}{4}$, $\frac{1}{2}$, 1"
Revolutions per minute	600 to 700	600 to 700
Width of Throat	10"	13"
Raise of Feed Roller	3 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "
Size of Regular Pulley	10 x 6	10 x 6
Other diameters can furnish	8, 12, 14, 16 & 18"	8, 12, 14, 16 & 18"
Diameter of Main Shaft	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "
Shipping Weight, Not Mounted	875 lbs.	1080 lbs.
Shipping Weight, Mounted on 2 Wheels	940 lbs.	
Shipping Weight, Mounted on 4 Wheels	1010 lbs.	1350 lbs.
Code Word, Not Mounted	Reach	Nurse
Code Word, Mounted on 2 Wheels	Regal	
Code Word, Mounted on 4 Wheels	Razor	Nabob
Price, Mounted on legs	\$161	\$215
Price, Mounted on 2 wheels	\$179	
Price, Mounted on 4 wheels	\$196	\$254

Note.—Above prices include self-feed Table, 30' pipe elbow for top of pipe and an extra set of cutting knives.

13 Inch Papec Ensilage Cutter Mounted

This size machine can be furnished with either 2 or 3 knives as ordered.

The style "N" 13 two knife Cutter is adapted for individual or small company work.



The 16 inch Papec has sufficient capacity to meet the needs of nearly any silo owner or group of silo owners.

The style "L" 16 Cutter, made with either two or three knives as wanted, is a popular size for general work.

16 Inch Papec Ensilage Cutter Mounted



Specifications for 16 and 19 Inch Cutters

	"L" 16 Cutter	"K" 19 Cutter
Tons per hours, $\frac{1}{2}$ " Cut	12 to 20	20 to 30
Horse Power, Steam	10 to 12	14 to 18
Horse Power, Gasoline	14 to 20	20 to 30
Lengths of Cut	$\frac{1}{4}$, $\frac{1}{2}$ & 1"	$\frac{1}{4}$, $\frac{1}{2}$ & 1"
Revolutions per minute	600 to 700	600 to 700
Diameter of Main Shaft	2"	2 $\frac{1}{4}$ "
Width of Throat	16"	19"
Raise of Feed Roller	4 $\frac{3}{4}$ "	6"
Size of Regular Pulley	12 x 8	14 x 8
Other diameters can furnish	10, 14, 16 & 18"	12, 16 & 18"
Shipping Weight, Mounted	1750 lbs.	2550 lbs.
Shipping Weight, Not Mounted	1500 lbs.	
Code Word, Mounted	Lath	Knight
Code Word, Not Mounted	Leaf	
Price, 2 straight knives on legs	\$264	
Price, 3 straight knives on legs	\$279	
Price, 2 straight knives mounted	\$309	
Price, 3 straight knives mounted	\$323	\$465
Price, 6 straight knives mounted		\$514

Note.—Above prices include self-feed table, 30 feet of pipe, elbow for top of pipe and an extra set of cutting knives.

Note.—When the 19 inch Cutter is equipped with six knives, the length of cut are one-half those listed above. The Code Word for the 19 inch Cutter with six knives is "King."

19 Inch Papec Ensilage Cutter Mounted



The 19 inch Papec is designed for silo owners who need a Cutter of big capacity—20 to 30 tons per hour.

The style "K" 19 Cutter, made with either three or six knives as wanted, is a Cutter of practically unlimited capacity.

Papec Curved Pipe



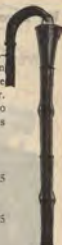
Curved pipe is used where it is not possible to place the Cutter close to the silo. It is furnished in three foot lengths at a slight extra cost.

Price on 3' lg. for K 19	\$3.50	Code
Price on 3' lg. for all others	\$4.50	Gloss Kite

Papec Distributor

To secure the even distribution of the silage within the silo, we recommend the use of the Papec Distributor. Distributor is made of 20 gauge sheet steel in sections about 3 feet long.

Price, Distributor in 3' lengths, per length	\$2.25
Price, Hopper for Distributor when ordered separately	\$3.25



Papec Semi-Steel Wheel

Papec Cutters are equipped with semi-steel cutting wheels with a heavy $\frac{3}{4}$ " steel tire shrunk on as a further protection. The wheels have no breakable parts and are practically indestructible.



Papec Fans

Six Malleable iron Fans on the Papec Knife wheel insure elevation of the silage in a steady stream instead of bunches. A malleable face plate is riveted on the face of the fan and takes all the wear.

Papec Shredder Knives



Papec Shredder Knives are intended for shredding dry fodder. They are like the regular knives except that their edges are notched or serrated. As the knives are interchangeable with the regular cutting knives a Papec will either cut or shred according to the style of knife used.

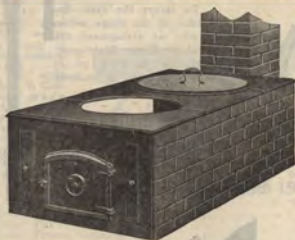
Papec Knife Grinder



A handy little device that can be attached to any Papec Cutter, and will pay for itself in a short time. As it is belted directly to the Cutter, one set of knives can be ground while the others are in use.

Price Knife Grinder complete with Emery Wheel	\$14.00
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We have the Best largest assortment of Cast Iron Furnace Plates or Cookers on the market



Our cast iron furnace plates are superior to many plates on the market. They are made in sections so as to take care of all expansions and contractions. Our plates are 15 inches from the door to first kettle, enabling you to get the best results from the fuel. We furnish the castings only, consisting of top plates with 22 and 24 inch holes, one bushing to fit any smaller size kettle, one cover to cover either hole, cast iron door frame and anchor bolts, etc.

- No. 40, same as above for one kettle only, complete with all castings, etc. Less lid and bushing. Shipping weight 215 lbs. \$13.00
 No. 42—All castings, etc., to make furnace same as above cut. Shipping weight 260 lbs. 20.00

No. 45—Same as shown for one kettle only, complete with all castings. Shipping weight, 220 lbs. \$13.00

No. 48—All castings, etc., to make furnace same as shown Shipping wt. 265 lbs. 20.00



- No. 49—All castings and iron work to make furnace same as shown. Shipping weight, 310 lbs. ... \$24.00



- No. 50—Same as above, with stove pipe collar for pipe instead of flue. Shipping weight, 310 lbs. \$24.25

When coal is to be used for fuel, we furnish grates which are placed in proper place by the mason.

- Six No. 51 required for 1 door furnace, and twelve No. 52 for two door furnace.
 No. 51—Straight bar grates, 3 in. wide, 33 in. long, three bars in one. Wt. 10½ \$1.00 each
 No. 52—Straight bar grates, 3 in. wide, 25 in. long, three bars in one. Wt. 8. .80 each
 Door and Frame Complete \$7.00

WOOD PLANERS

A Line of High Grade

Wood Planers, Matchers and Moulders

This Planer is designated to meet the needs of small shops and those requiring a light but good, strong, durable single-surfacer planer for general work at a low price. It is built throughout of the best grade iron and steel, and the workmanship is first-class. Its simplicity, compactness, and large capacity in proportion to its size have made it very popular, and secured for it a very large sale.

It works either hard or soft wood equally well, and is particularly adapted to planing short stock. The work turned out is first-class and equal to that done by the larger, high priced machines.

The Cutter Head is made from high grade steel and is accurately turned and balanced. All adjustments are quickly and easily made.



It has two Steel Feed Rolls, one in front and one in rear of the cutter head. The feeding in roll being fluted to insure a strong, positive feed. Two speeds of feed are provided for by means of cone pulleys. The feed can be stopped or started instantly by means of a convenient belt tightener. The Bed is very stiff with heavy ribs underneath, and is accurately planed and fitted with two steel idle rolls.

It is built in two sizes to plane up to 16 inches and 20 inches wide, and from $\frac{1}{4}$ inch to 6 inches thick. It is furnished with one pair of planer knives, and with or without countershaft as ordered. No belting is furnished. Feed belts require $13\frac{1}{2}$ feet of $1\frac{1}{2}$ inch belting. Counter shaft 8×4 tight and loose pulleys. Speed 900 R. P. M.

Price, 16 in. machine without countershaft as shown above	Cash With Order
Shipping weight 570 pounds.	\$148.50

Price, 20 in. machine without countershaft as shown above	Cash With Order
Shipping weight 595 pounds.	\$166.50
If countershaft is wanted, add	18.00
Shipping weight 150 pounds.	

We also have a heavier single surfacer that will plane stock 20 in. and 24 in. wide $\frac{1}{4}$ to 8 in. thick. Further description will be given on application.

PONY PLANER OR SURFACER

See cut of Pony Planer on top of next page.

Price, 20 in. complete less countershaft and belting	\$405.00
Shipping weight 1,285 pounds.	

Price, 24 in. complete less countershaft and belting	Cash With Order
Shipping weight 1,475 pounds.	\$450.00
If countershaft is wanted, add	22.50
Shipping weight 215 pounds. For prices on Belting See Page 54.	

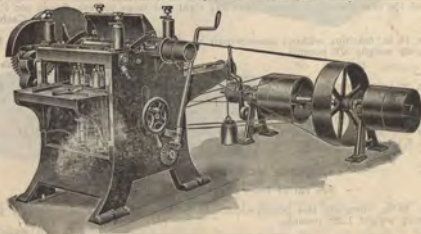


"TRIUMPH" PLANER, MATCHER AND MOLDER

This is a very compact, rigid machine and is designed to economize space and withstand the hardest usage as well as to do the best class of work. There is an entire absence of vibration so common in small planers of this class; hence, the work turned out is uniform and equal in quality to that of large, expensive machines. The workmanship and material throughout are of the highest grade. It is adapted to the use of saw mills and small planing mills having limited room and power where a machine is required for a large variety of work, such as planing and matching, beading, working flooring, ceiling, siding, casing, wainscoting, and a large variety of moulding and trim.

"TRIUMPH" PLANER, MATCHER AND MOULDER

Made in two sizes, 20 inch and 24 inch



View of operating side, showing Matcher Heads, Lever for raising Table and Hand Wheel for adjusting Matcher Heads.

The Main Frame is amply proportioned and strongly ribbed, insuring the greatest strength and stiffness.

The table is cast in one piece and is deep and strong, being heavily ribbed and having arched braces under side. It is planed on top and has raised edges to prevent the material from leading against the side frames. The sides are long and placed far apart, being fitted to the outer edges of the main frame to which they are gibbed, thus securing the greatest rigidity and least possible wear.

The Cylinder is made of special grade steel and is accurately milled on four sides, two of the sides being slotted to carry beading and moulding knives in addition to the regular planing knives, which do not have to be removed when beading and moulding is being worked.

Matcher Spindles are unusually large and run in long babbitted boxes, ample provision being made for thorough lubrication. The matcher frames are also very strong and are carried by $1\frac{1}{4}$ inch round steel guides at top and bottom, provision being made to easily take up any wear or lost motion. One of the matcher spindles is adjustable by means of a hand wheel at the side of the machine and has an eccentric clamp for instantly securing it in any desired position.

Matcher Heads are made of bronze of standard design and will carry matcher, edger or moulding bits $\frac{5}{16}$ inch thick and up to $2\frac{1}{2}$ inches wide. Shimer heads can be used when desired. Moulding knives can also be used on the main cylinder where the cut is not over $\frac{1}{2}$ inch deep.

Chip Breakers A heavy adjustable chip breaker is placed in front of the cylinder, which also acts as a hood. It may be swung back to expose the knives. Each matcher head has a chip breaker, one of which is self-adjusting.

Pressure Bar is adjustable and prevents any vibration of material between the cylinder and matcher heads. This bar and the front chip breaker may be set close to the cylinder for special smooth surfacing and can be set out so as to clear moulding bits when used.

The Feed is simple, powerful and positive, with steel rolls 3 inch diameter, turned from the solid; the top feeding-in roll being fluted. It is driven by a belt from the countershaft, to which a belt tightener is attached so that the operator can stop or start the feed at will. Two rates of feed are provided, namely 35 and 42 feet per minute, and the change from one to the other can be quickly and easily made.

Each planer and matcher is furnished with one set of planer knives, two beading bits, four 2" edging bits, and one set standard matcher bits for 1 inch flooring. Belts are furnished when wanted at extra cost.

The cuts show the machine Double Geared with both top and bottom rolls driven, but it is also furnished Single Geared with the top rolls only driven; see price list.

Specifications	20 in. Mach.	24 in. Mach.
Planes any width up to	20"	24"
Planes any thickness from	$\frac{3}{8}$ " to 6"	$\frac{3}{8}$ " to 6"
Matches up to 2" thick and up to	10" wide	14" wide
Tight and Loose Pulleys (speed 800)	12" to 6"	12" x 6"
Floor space, including countershaft	8' 6" x 6'	8' 6" x 6' 4"
Distance from cylinder to countershaft	5' 6"	5' 6"
Shipping weight	1950	2100
Cylinder Belt 6" wide	14' 9 $\frac{1}{2}$ " long	14' 9 $\frac{1}{2}$ " long
Feed Belt 3" wide	14' 10" long	14' 10" long
Two Matcher Belts 3" wide, each	13' 8" long	13' 8" long
Belts not included, for prices see belt list.		Cash with Order

Price including countershaft with top rolls only driven, 20 in. machine	\$486.00
24 in. machine	531.00
Price including countershaft with top and bottom rolls driven, 20 in. machine	531.00
24 in. machine	575.00

For prices of belting see pages 45 and 46.

Grain Thresher, Separator, And Cleaner

Do Your Own Threshing, When You Want it Done, and the Way You Want It

The following illustration shows our No. 1 grain thresher and cleaner taken apart for storage. There are special castors not shown in illustration to fasten on legs of machine so as to enable owner to store it without heavy lifting or strenuous efforts.

The **CYLINDER** is well built of the large diameter and is the over shoot type making it easy to get to concave as well as the cylinder for any repairs or adjustments.

COMPLETENESS OF MACHINE. When straw carrier and Tailings elevator are attached to this machine it makes a complete outfit and we guarantee it to do as good clean and accurate work as any large machine only less of it.

This thresher is built for use with small power such as tread power and small gasoline engines and in fact, it is a machine that the independent farmer cannot afford to be without and with an average crop can be almost paid for in one season.

The machine is well built using nothing but the best of material throughout.

Size of Cylinder	18" x 20"
Size of Riddles	22"
Size of Trunk	27"

Power required, two horse tread power or three horse power engine and upward. Has a capacity of 10 to 20 bushels wheat and 20 to 40 bushels of oats per hour.

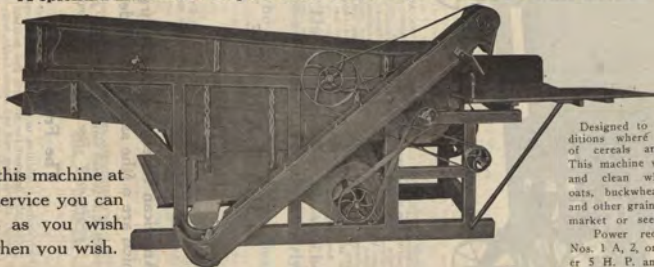


Price of No. 1 machine as shown above, shipping wt. 1000 lbs. \$190.00
Extras for machine if desired.

Straw Stacker, 16 or 18 feet long to work straight with windlass	49.40
Tailings Elevator for No. 1 machine each	22.25
Grain Bagger for No. 1 machine	19.75
Peanut threshing attachment	15.00

Junior American Grain & Peanut Thresher & Separator

A splendid machine to do your own Threshing as well as your neighbor's



With this machine at your service you can thresh as you wish and when you wish.

With extra attachments will thresh and clean peanuts, cow peas, and Soja beans. Threshing peanuts and cow peas 98% of unbroken peanuts and peas were secured. The construction of the machine is unequalled—built for service. All machines have double end shake. This machine is built in three sizes, No. 1-A with 22-in. cylinder, No. 2 with 26-in. cylinder, No. 3 with 26-in. cylinder, also 30-in. cylinder made if specially ordered. Capacity of No. 1 A, threshing wheat, 20 to 30 bushels per hour; No. 2, 25 to 40 bushels per hour; No. 3, 30 to 50 bushels per hour. About double these quantities threshing oats. Furnished with or without trucks, baggers, tailings elevators or straw carriers as desired. Weight 1400 pounds.

Designed to meet conditions where all kinds of cereals are grown. This machine will thresh and clean wheat, rye, oats, buckwheat, barley, and other grain ready for market or seeding.

Power required for Nos. 1 A, 2, or 3 thresher 5 H. P. and upward.

Left-Hand View of the JUNIOR AMERICA Mounted



No. A1-22 in. Cylinder Overshot Grain or Peanut attachment less Elevator	
Stacker or Wagon, Wt. 1200 lbs. Price	\$205 00
No. 2-26 in. Cylinder Overshot Grain or Peanut attachment less Elevator	
Stacker or Wagon, Wt. 1200 lbs. Price	220 00
No. 3-36 in. Cylinder Overshot Grain or Peanut attachment less Elevator	
Stacker or Wagon, Wt. 1400 lbs. Price	260 00
Extra for above machines	
For cyclone draster see page 64.	
Bagger	19 80
Tailings elevator grain or peanut	24 20
Wagon Box elevator	19 80
Straw stacker No. A122 and 224, per ft.	1 92

Straw stacker No. 36, price per ft.	2 28
Drake or Windlass, each	8 00
4-Wheel Truck	42 50
Angle Straw carrier attachment	12 00
Cow pea attachment	22 00
Kaffir corn attachment	22 00
Peanut or Grain attachment, each	38 50
No. 1 Thresher crated for export, including bagger, tailings and 4-wheel truck, weight 2200 cubic measurement 180 feet.	
No. 2. Thresher crated for export, including bagger, tailings and 4-wheel truck, weight 2400, cubic measurement 200 feet.	
No. 3 Thresher, including bagger, tailings, elevators and 4-wheel truck, weight 2800 cubic measurement 230 feet.	

GUARANTEE

This Thresher

will give the owner perfect satisfaction if operated according to directions furnished. If it fails to do so after 30 days trial, we will take the machine back and refund the amount of money paid, together with the freight charges.

The Junior American Thresher comes in three sizes, all of which are of the same general design

but requiring from five to nine horsepower, and threshing from twenty to fifty bushels of wheat per hour, or nearly again as much oats. The machines are well built, durable and particularly adapted to gasoline power. They are very smooth running, easily operated, simple in construction and durable in service.

The Frame

is of hard wood securely bolted, in addition to having a strong mortise and tenon at each joint. The cylinder is especially designed for strength and durability. The cylinder consists of nine bars or beaters placed over end and center heads, tested at the foundry, and all securely riveted together by wrought iron bands, making it a safe cylinder to stand before. The whole cylinder is so well constructed and evenly balanced that when it is running at a speed of 1200 revolutions per minute scarcely any vibration is noticed on the machine.

The Concaves

are constructed along the same lines, and are made slightly hinged so that in case any foreign substance should accidentally be fed into the machine, the concave would rise sufficiently to allow it to pass through without damage to the cylinder. The operator can also adjust the concave to suit different conditions of the grain by simply raising or lowering it by means of a hand-screw found on top of the thresher.

The Straw

is conveyed from the cylinder to the rear of the machine by rakes or kickers suspended on strong crank shafts, directly above the shaker bottom. The "throws" on these cranks are arranged so that only one-third of the rakes have the same position at a time, thus counterbalancing each other, and giving the crankshaft a nice, easy running motion. Through this means a thorough separation is obtained and the grain is allowed to pass down through the perforated shaker bottom to the sieves below.

The Fan

is placed at a point below the sieves, sending the blast up through them, thus lifting the chaff out of the way of the grain, and allowing the grain to pass through very rapidly and with a greater capacity than with larger sieves when the blast is not at such a low point as we place it. The blast is regulated by means of the slides at the ends of fan, and by changing the draft boards. The straw and chaff can be kept separate if owner wishes to use the chaff for feeding. Another important feature in the building of our machine is the care taken to secure a true alignment of parts. This makes each part work in harmony with the other, thus preventing ill-fitting joints and bearings, decreasing friction, limiting wear and utilizing power to its greatest efficiency. The parts are also made interchangeable. Each piece is numbered, so that if broken or worn, its exact duplicate can be secured at once without the inconvenience of having to have the part machined or fitted, all of which make the Thresher a very satisfactory machine to work with. We furnish our machines either with or without mounting trucks, cow pea attachments and stackers, but can be had as extras and are so treated in our price list.

We warrant our Thresher Machines to be well built and to do good work on all kinds of grain, if properly operated

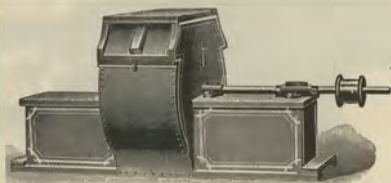
Every farmer who raises grain, soja beans, peanuts, oats

and similar grain should own his own threshing machine. Our Thresher is intended for home use but is large enough to thresh for others. It is made on the same principle as the large grain thresher used in the wheat sections of the North West, and will do just as satisfactory work. It has all the best improvements known to this class of machine, and will turn out just as clean grain as any thresher of larger size. This Thresher will handle any kind of small grain with the regular grain attachment—it will thresh, separate and clean such grains as wheat, rye, oats, barley, buckwheat, and similar grains. By adding some attachments to the machine, you can fit it up so it will thresh soja beans, cow peas and peanuts. If you expect to thresh only peanuts, we send a peanut thresher at prices quoted. While a comparatively light machine for its capacity, it is strongly constructed and very durable. The cash price is figured very close, and is of course the best and cheapest way to buy the machine.

**Disappointment, delay and inconvenience done away with
by owning one of our Threshers**

You are independent and can, with a small force of help, thresh your own crop just at the proper time to save every grain of it. The saving of your grain, time and expense will soon more than save the cost. The Thresher is designed to meet all the requirements of the small or extensive grower of all kinds of small grains, cow peas, beans and peanuts, and if properly handled will give years of satisfactory service. Is equipped in either of these ways—for grain threshing only, for peanuts only, for cow peas only, or a combination of all. By getting the separate attachments you can convert a thresher into any of the above easily and quickly. A complete set of instructions goes out with each machine or can be furnished by us upon request. All parts necessary to the proper equipment packed in the machine.

Cyclone Dust Collector For Threshing Machines



Those who are familiar with the old Cyclone will readily notice the improvements as shown in the cut and as herein explained. The shaft bearings are now all on the outside and on one side of the drum, where they can be oiled to better advantage. The suction boxes are lower and level on top, making easier to step across when obliged to do so. These boxes are also longer and wider, and the openings in the drum larger, giving freer access for the dust to go to the fan, therefore doing the work still more complete.

The drum is now circular in the bottom which the cut does not show. These improvements are worth half the price of the Conveyor. The Conveyor is intended to be attached on top of all kinds of threshing machines and draw the dust through an opening in the deck and blow through a canvas tube out of the barn in either direction regardless of the wind. It has two outlets, one is closed while the other is in use. It keeps the barn very clear of dust.

DIMENSIONS OF THE DUST CONVEYERS

Base full length	Height	width	Fan width	Diam.
32"	23½"	10"		
36"	23½"	10"		
40"	23½"	12"	9¼"	20"
48"	23½"	12"	9¼"	20"
48"	23½"	12"	9¼"	20"

If any of these stock sizes does not suit your requirements, kindly give us the Width of Thresher you have, that is the full width across the top of the Thresher, and any other dimensions that you may want, and we can furnish it to you, within three days after the order is received, as we are prepared to make special sizes at once.

This duster is built to fill the long felt want of the thresherman, is built for wear and is neat and compact, all bearings are lined with a high grade of Babbitt Metal and have large oil cups. The suction boxes are large, thus giving a good suction which makes it the best on the market.

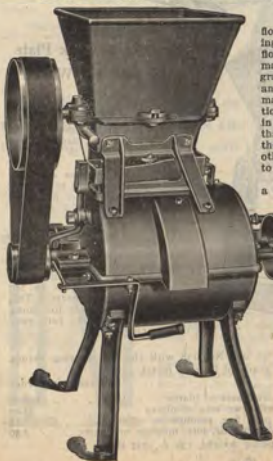
Price complete with 30 ft. Canvas tube	\$16.75
Extra 30 ft. Canvas tube	6.00
Extra 40 ft. Canvas tube	8.00

Valuable Information for the Man Who Wants To Buy a Feed Mill

The Hertzler & Zook line of feed mills is gotten up expressly to fill every requirement of the farmer and stock raiser and since such is the case it has become necessary that we have the iron plate mill and the Burr Mill. There are no iron plate mills made by any manufacturer that will make as floury chop as the Burr Mill will make.

Most of our enterprising farmers want for stock feeding a chop that is not too fine and also wish to grind ear corn as well as shelled grains and for this purpose we can recommend nothing better than the Hertzler & Zook Iron Plate Mill which will make as much and as nice a chop as any plate mill on the market will make. We would be only too glad to ship you one and let you try it out on your own place to prove the statement we make.

The Hertzler & Zook Improved Burr Mill for



This mill will grind
chop and make it:

floury or it will grind it for stock raising or feeding or anything from fine floury chop to cracked corn as well as make the finest kind of corn meal and graham flour. It will grind as much as any other mill with the same size burr, making nice, even chop. The illustration shows the mill with Corn Breaker in hopper. This is the Only Burr Mill that will crush the corn ears and grind them into chop at one operation, or in other words—a breaker is not required to first run the ear corn through.

The mill is made in one size and has a capacity of from 6 to 20 bushels per hour and can be operated with as low as three horse power.

You do not need to be an expert to start and keep this mill in good order as it is built in the best workmanlike manner.

The stone is of the best available in America for the purpose.

It will certainly pay any one feeding Hogs to investigate this mill. Why not send us your order right now and try one out?

\$95.00

Price of mill complete for grinding shelled grain only (weight 500 pounds) **95.00**

Complete for grinding ear corn and shelled grain (weight 580 lbs.)
Price **\$108.00**

The Hertzler and Zook No. 138 Plate Mill

\$23.00 WILL GUY this high grade mill, which is made for grinding ear corn as well as shelled corn and has a capacity of from five to twenty-five bushels per hour, requiring 2 to 3 H. P. to operate. The plates are made of a special composition alloyed for this purpose, has a ball bearing end thrust, quick release, and the bearings are of a good grade of bearing metal. This mill is furnished as shown in the cut.

The frame is cast in one piece and cannot get out of line. The legs and hopper are made of the best selected lumber. Pulley is 14 x 4. Weight, about 175 lbs.

Cash with order
Price of No. 138 mill with 2 pr. plates **\$23.00**
Extra plates, fine, medium or coarse, per set **\$1.75**



Hertzler & Zook Plate Mill with Fly Wheel.

No. 139 shows our mills as they appear with fly wheels, which we always recommend. This style being made in two sizes, No. 139 and No. 139 A.

No. 139 has a capacity of from five to twenty-five bushels per hour and requires from 2 to 3 H. P. to operate.

No. 139 A. has a capacity of from twenty to forty-five bushels per hour, according to the speed and fineness of grinding and requires from six to ten H. P. to operate. This mill is suitable for doing custom work for your neighbors.

These mills are constructed same as our No. 138 with the ball bearing thrust, quick release and bearing with a good grade of bearing metal.

Cash with order

Price of No. 139 as shown above with two sets of plates **\$28.00**
Price of No. 139 A. as shown above with two sets of plates **35.00**
Price of extra plates for No. 139 per pair, fine, medium or coarse **1.75**
Price of extra plates for the No. 139 A per pair, fine, medium or coarse **2.50**
Shipping weight, 139, 200 lbs. Shipping weight, 139 A., 335 lbs.

The Hertzler & Zook Plate Mill With Fly Wheel, Elevator And Bagger

No. 140 shows our elevator and bagger as it is when attached to our No. 139 and 139 A. mills. No mill is complete without this attachment which only costs a trifle.

Cash with order. Price of No. 139 mill with elevator and bagger as shown\$43.40.

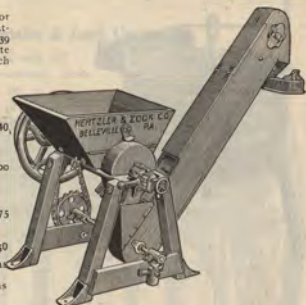
Price of No. 139 A. mill with elevator and bagger as shown..... \$50.00

Extra plates for No. 139 mill per set, fine, medium or coarse\$1.75

Extra plates for No. 139A. A. per set, fine, medium or coarse\$2.50

Shipping weight, 139, as above, with elevator, 280 lbs.

Shipping weight, 139 A., as above with elevator, 410 lbs.



WE SELL A LARGE AMOUNT OF ALL KINDS OF BELTING AND SUPPLIES, WHICH ARE LISTED ON ANOTHER PAGE. SEE OUR PRICES BEFORE PLACING YOUR ORDER, AND YOU WILL GIVE US THE ORDER.

CHAIN HANGING STANCHION



No. 50 Adjustable Cattle Chain Hanging Stanchion.

With these stanchions cattle may have freedom to stand in a natural position. It is securely locked and cannot become unfastened.

The stanchion is made of the best quality of hard wood, nicely finished. Is made four feet high with 7" space between upright bars and can be changed very easily for younger or smaller stock. All stanchions are shipped set 7 inches between bars. All iron work is made of a high grade of wrought iron and steel.

These stanchions should not be compared with the rigid pivot style stanchion sometimes offered at a low price, a stanchion must be hung so the lower end will move freely in any direction about 6 or 8 inches to allow the cow to pitch forward in lying down or getting up and this can be done only with a chain hanging stanchion.

Shipping weight 15 lbs. Price \$1.60

The Hand Lever Washer



The tubs are made from the best cypress wood obtainable. The corrugations inside are cut in the wood, not nailed on. Tubs are drained by a specially designed spigot in the bottom of the tub. The hoops are made of the best galvanizes steel.

Shipping wt., 75 lbs.

Price \$8.40

The Miller Water Motor Washer

This cut shows same machine as above driven by water motor. Is neat and compact sold complete as shown. Shipping wt., 75 lbs.

We are very desirous that every article we sell shall give our customers entire satisfaction, and if your water pressure is less than 30 pounds we would not advise you to buy this or any other water power washer. While it is true that our motor will operate on 20 pounds pressure, quicker and better work could be done with a washboard, and this is true of all similar machines under like conditions. Moreover, our motor is so constructed that it works on a pressure as high as 175 pounds. Because we so plainly state the facts, it is rarely, indeed, that we have any complaints about these washers; but if something should go wrong, it is not necessary to return the entire machine for repairs; send back the motor only, as it can be quickly removed.



Price \$17.50

Ball Bearing wringer 6.50

Hertzler & Zook Grain, Seed and Fertilizer Drills

Manufactured and Sold by

The Hertzler & Zook Company



Fig. 1

Sold from factory direct to the farmer and guaranteed to be satisfactory or all money refunded, giving the farmer the privilege of trying it out on his own farm before the deal is considered closed.

Hoe drill is better in stony ground. It shoves the stones around, it sows properly, while the discs will raise up over the stones and cause imperfect seeding as well as covering. Fertilizer won't clog even though it is moist. No tin spouts to rust out. Will sow either way turn is made at end of field if desired. Any parts easily detachable.

SIMPLICITY OF CONSTRUCTION OF THE HERTZLER & ZOOK

- (A) Note only three gears are required to run the seeding or fertilizer sowing device, others use four to eight.
- (B) Grain Feed on other drills require three to five parts; the "Hertzler & Zook" consists of two highest grade rubber rolls.
- (C) Volume of seed or fertilizer is regulated by a lever.
- (D) Our fertilizer sowing device has three parts; others have more.
- (E) Both wheels drive main shaft; all feeding devices are driven direct from main shaft.
- (F) The only drill having the famous "Greencastle" rubber roll feed.

Price of the Hertzler & Zook Spring Hoe Drill, complete, with Grain, Seed, and Fertilizer Attachments as shown above:

	Cash With Order	Shipping Weight
8 Hoe 8 inches	\$100.00	875 lbs.
9 Hoe 7 inches	106.00	915 lbs.
10 Hoe 8 inches	116.00	1140 lbs.
11 Hoe 7 inches	125.00	1180 lbs.

The 10 and 11 hoe drills will be furnished with tongue, double tree, etc., for either two or three horses; unless otherwise ordered, it will be shipped with tongue, double tree, etc., for two horses.

The Hertzler & Zook Plain Grain and Seed Drill

PRICE

\$80.00

UP



Fig. 157

This drill is built expressly for sowing grain and seeds, alfalfa included, and does not sow Beans, Peas, Corn or fertilizer. In construction, it is the same as the High Grade Hertzler & Zook Drill with the fertilizer sowing device removed. Is fully covered with the regular guarantee. Remember, it is not to be compared with the low price old style pin braker hoe drill, but has the Spring Hoes, Double Tree and Neck Yoke. Is complete for sowing grain.

Price Less Grass Seed Box.

	Cash With Order	Shipping Weight
8 Hoe 8 inches	\$80.00	650 lbs.
10 Hoe 8 inches	90.00	710 lbs.

Extra for grass seeder which can be used front or rear of drill, \$5.30.

Remember, we make in our own factory, and sell direct to the user every year, more goods in our line, than any other concern in the world, selling in the same way. WHY? Because our plan of selling enables us to save money for our customers, and our policy of Satisfaction Guaranteed or Money Refunded relieves them of all risk.

FREIGHT CLASSIFICATION.—Railroads Charge for Freight According to its Classification, and the Classification varies according to the nature and value of the goods. Following is a classification of our line of goods:

ITEMS	CLASS			ITEMS	CLASS		
	East	West	South		East	West	South
Anvils, cast iron	4	4	5	Screw plates	4	4	4
Babbit Metal	3	3	4	Shafting with couplings ..	2	2	2
Blacksmith forges, crated ..	2	2	2	Shafting Couplings & boxes	4	3	5
Boiler tubes	4	4	4	Shafting Hangers	4	3	5
Belting	1	2	2	Shafting Collars	4	3	5
Castings				Stove Grates	4	4	3
Crushers, Grit	2	2	2	Threshing Machines	1	1	1
Drag Saws	2	1	1½	Troughs, Cast	2	2	3
Dust Collectors	1	1	1	Troughs, Stock	1	2	3
Engines, Gasoline, Crated ..	4	4	4	Troughs, Poultry	2	2	3
Engines, Gasoline, Mount- ed on truck	2	2	2	Trucks, Hand	1	3	3
Feed Cutter, hand	2	2	3	Trucks, Two Horse	1	1½	1½
Feed Grinders	2	2	3	Washing Machines	1	1	1
Furnace Plates	4	3	3	Weights, Sash	2	4	6
Grates, Wood	4	4	3	Wood Planers	1	2	1
Grain Drills	3	3	3	Wood Saws, Mounted, K. D.	2	2	2
Hitching Weights	1	1	1	Wood Sawing outfits with engines, K. D.	1	1	1½
Lime Spreaders	4	4	3	Wood Saw Parts	1	1	1
Mandrel Sets	3	3	5	Wood Saw Tables, K. D. ..	1½	1	1½
Oils, Lubricating, Jacket cans	1	1	1	Fodder Shredders, K. D. ..	1	1	1
Oils, Lubricating, Barrels ..	3	3	3	Land Rollers, wood, K. D.	3	3	3
Pulleys, Iron	3	3	3	Tread Power (Auto Jacks) K. D.	1	1	1
Pulleys, Wood	2	2	3	Circular Saws, with frame attachment	3	1	2
Pipe fittings	4	4	4	Corn Shellers, S. U.	3	3	3
Post drills	2	2	2	Bag Trucks, S. U.	3	3	3
Saw Frames, set up	1½	1½	2				
Saw Frames, K. D.	2	2	3				
Saw Blades, on Boards ..	1	1	1				

From	Freight Rates, Per 100 lbs.					
BELLEVILLE	CLASS					
To	1st	2nd	3rd	4th	5th	6th
ALBERTA						
Calgary	\$4.80	\$3.89	\$3.12	\$2.34	\$2.14	
ALABAMA						
Birmingham	2.01	1.73	1.52	1.29	1.06	.86
Montgomery	1.92	1.69	1.90	1.12	1.00	.86
ARKANSAS						
Little Rock	2.62	2.30	1.81	1.37	1.04	.86
BRITISH COL.						
Rosland	5.67	4.76	3.87	2.97	2.61	
Vancouver	5.30	4.71	3.94	3.34	2.84	
COLORADO						
Denver	3.35	2.93	2.26	1.75	1.38	
CALIFORNIA						
Los Angeles	5.36	4.39	3.86	3.28	2.63	
Sacramento	5.36	4.39	3.86	3.28	2.63	
CONNECTICUT						
Hartford	1.02	.89	.71	.56	.46	.37
New Haven	1.01	.89	.71	.56	.46	.37
DELEWARE						
Dover	.95	.81	.69	.51	.42	.35
Wilmington	.75	.64	.57	.38	.33	.27
DIST. OF COL.						
Washington	.81	.68	.60	.42	.36	.29
FLORIDA						
Jacksonville	1.74	1.44	1.22	.93	.73	.64
Tampa	2.38	2.03	1.66	1.33	1.09	.97

From	Freight Rates, Per 100 lbs.					
BELLEVILLE	CLASS					
To	1st	2nd	3rd	4th	5th	6th
GEORGIA						
Atlanta	1.88	1.66	1.47	1.36	1.01	.80
Thomasville	1.88	1.66	1.47	1.36	1.01	.80
IOWA						
Des Moines	1.77	1.61	1.31	.97	.71	
INDIANA						
Indianapolis	1.07	.93	.75	.57	.48	.43
Evansville	1.21	1.05	.85	.63	.53	.45
ILLINOIS						
Springfield	1.24	1.07	.86	.66	.55	.44
Chicago	1.12	.98	.79	.60	.52	.43
IDAHO						
Avery	5.36	4.12	3.72	3.01	2.69	
KENTUCKY						
Frankfort	1.52	1.33	1.22	.83	.73	
Louisville	1.11	.99	.77	.60	.50	
LOUISIANA						
Baton Rouge	1.82	1.50	1.26	1.00	.87	
MAINE						
Augusta	1.14	.99	.82	.63	.52	
Portland	1.02	.90	.71	.50	.40	
MARYLAND						
Baltimore	.84	.71	.62	.48	.39	.33
Cumberland	.84	.71	.62	.48	.39	.33
Hagerstown	.84	.71	.62	.48	.39	.33

From	Freight Rates, Per 100 lbs.					
BELLEVILLE	CLASS					
To	1st	2nd	3rd	4th	5th	6th

MICHIGAN						
MINNESOTA						
Lansing	1.09	.95	.76	.56	.47	.39
Marquette	1.44	1.22	.99	.74	.64	.49
St. Cloud	1.79	1.53	1.22	.89	.74	
St. Paul	1.63	1.42	1.11	.80	.67	
MISSOURI						
Jackson	1.22	1.07	.84	.61	.52	.43
St. Louis	1.22	1.07	.84	.61	.52	.43
MISSISSIPPI						
Jackson	2.06	1.77	1.56	1.33	1.08	.92
MONTANA						
Great Falls	4.47	3.82	3.12	2.43		
MASSACHUSETTS						
Boston	.99	.86	.68	.51	.43	.36
NEW YORK						
Albany	.93	.80	.64	.48	.39	.33
Buffalo	.85	.74	.62	.45	.38	.31
Rochester	.85	.74	.62	.45	.38	.31
Utica	.88	.77	.62	.47	.40	.32
N. CAROLINA						
Asheville	1.86	1.62	1.42	1.16	.97	.81
Raleigh	1.57	1.34	.96	.81	.64	.58
N. DAKOTA						
Bismarck	2.84	2.43	1.93	1.44	1.19	
N. HAMPSHIRE						
Concord	.99	.86	.68	.51	.43	.36
Plymouth	.99	.86	.68	.51	.43	.36
NEBRASKA						
Lincoln	2.10	1.82	1.47	1.04	.82	
N. JERSEY						
Bridgetown	.90	.78	.68	.51	.44	.38
Trenton	.85	.74	.62	.45	.38	.31
OHIO						
Cincinnati	1.02	.88	.71	.53	.44	.37
Columbus	.94	.82	.66	.53	.44	.34
Dayton	.94	.87	.69	.52	.43	.36
Portsmouth	1.02	.88	.71	.53	.44	.37
Toledo	.94	.82	.66	.53	.44	.34
OREGON						
Portland	4.95	4.32	3.57	3.03	2.54	

From	Freight Rates, Per 100 lbs.					
BELLEVILLE	CLASS					
To	1st	2nd	3rd	4th	5th	6th

PENNA.						
Erie	.83	.71	.61	.44	.36	.30
Altoona	.70	.57	.46	.34	.30	.26
Reading	.84	.72	.62	.45	.38	.31
Philadelphia	.84	.72	.62	.45	.38	.31
Lock Haven	.78	.67	.54	.42	.35	.29
Waynesboro	.81	.69	.60	.42	.36	.29
Everich	.77	.66	.54	.40	.36	.29
CANADA						
Quebec	1.13	.98	.78	.56	.46	.35
RHODE ISLAND						
Providence	.99	.86	.68	.51	.43	.36
S. CAROLINA						
Abbeville	2.09	1.80	1.59	1.35	1.11	.91
Columbia	1.84	1.55	1.36	1.14	.92	.73
S. DAKOTA						
Watertown	2.22	1.89	1.51	1.09	.82	
SASKATCHEWAN						
Regina	3.77	3.17	2.48	1.84	1.25	
TEXAS						
Dallas	3.27	2.78	2.13	1.90	1.54	
TENNESSEE						
Chattanooga	1.84	1.58	1.39	1.00	.82	
Nashville	1.52	1.27	.99	.73	.63	
UTAH						
Salt Lake City	5.08	4.37	3.57	2.49		
VERMONT						
Bennington	.99	.86	.68	.51	.43	.36
Montpelier	1.14	.98	.77	.58	.47	.39
VIRGINIA						
Roanoke	1.32	1.14	.97	.65	.57	.47
Portsmouth	1.09	.95	.74	.54	.44	.37
Richmond	1.04	.88	.72	.54	.44	.37
Winchester	.81	.69	.60	.42	.35	.29
WEST VA.						
Parkersburg	.91	.79	.63	.48	.39	.33
Romney	.96	.86	.67	.50	.42	.36
Wheeling	.84	.72	.62	.45	.37	.31
WASHINGTON						
Seattle	4.59	4.23	3.52	2.97	2.52	
WISCONSIN						
Madison	1.52	1.29	1.07	.80	.70	

Many of our customers can save money by having small shipments sent by Parcel Post. The fact of the matter is so far as light weight articles are concerned, our large quality giving, money-saving Hertzler & Zook line is no farther away from you than your mail box. Your post box is your convenient source through which you have full access to our factory when a belt or any part breaks. You can have it promptly from our factory at factory prices. 20 pounds may be sent 150 miles from Belleville for 24c, which includes almost all of Pennsylvania, a part of New York, Maryland, Virginia and West Virginia.

As the Parcel Post rate card is in about every country home, we will not put it in print. We at all times ship goods the cheapest and best way, unless especially ordered otherwise by customer.

NET CASH REPAIR PRICE LIST

for the HERTZLER & ZOOK Grain, Seed, Fertilizer, Bean, Pea and Corn Drill, Plain Seed Drill. Always give No. and name of part wanted, with price and enough to cover postage. If more is sent it will be returned with the billing. Parcel Post will take many of these parts to your door promptly avoiding delays of going through the different hands.

Cat- ing No.	Name of Parts	Price	Cat- ing No.	Name of Parts	Price
1	1-A-Pivot or Bearing for Fertilizer Disc	25	40	40-A-Bolt for Fertilizer Feed Shaft, 1 1/2" bore	50
2	2-A Gear Wheel	25	41	41-A Bracket Wheel for Grass Seed Shaft, 1 1/2" Teeth 14" bore	40
3	3-A Yoke for Grain Slide	15	42	42-A Bolt with Hose or Shovel Point	15
4	4-A Hinge for Grass Seed Hopper Lid (Left)	15	43	43-A Arm with Pin for No. 42 Gear Wheel (O. S.)	50
5	5-A Hinge for Grass Seed Hopper Lid (Right)	15	44	44-A Pulley for No. 24 Bracket for Chain Tightener	15
6	6-A Hinge for Fertilizer Hopper Lid	15	45	45-A Bracket Wheel on Grain Feed Shaft, 1 1/2" Teeth, 14" bore	40
7	7-A Pinion for Grain Feed Shaft 1 1/2" Teeth 14" inch bore	15	46	46-A Cap on end of Wood Roller to lift Boots (Right)	75
8	8-A Crank for Zigzag Rod	15	47	47-A Latch with Pawl for No. 45A Cap	75
9	9-A Washer for Drag Bar Spring	15	48	48-A Lift Bar latch lug for No. 49 Latch	75
10	10-A Gear Wheel on No. 44-L Arm 4" Teeth 1" bore	15	49	49-A Bracket with Pin for No. 49 Latch	75
11	11-A Lever to move Grass Seed Slide	15	50	50-A Eccentric for No. 43 Cap on end of Wood Roller	75
12	12-A Bracket with Pin for No. 28 Lever	15	51	51-A Lever for No. 47 Link for Fertilizer Slide Bar	75
13	13-A Coupling for Zigzag Bar	15	52	52-A Link between No. 43-A Arm and No. 43 Lever	75
14	14-A Bracket on end of Tongue for Hook Bolt	15	53	53-A Bracket on Wood Roller for Chain for Lifting Boot	75
15	15-A Hook with No. 20 Bottom for Grain Feed Rod	15	54	54-A Bracket with Pin for No. 49 Lever	75
16	16-A Hinge for Fertilizer Hopper Lid (Left)	15	55	55-A Star (with Pin) to Feed Fertilizer	75
17	17-A Hinge for Fertilizer Hopper Lid (Right)	15	56	56-A Star (without Pin) to Feed Fertilizer	75
18	18-A Hinge for Grain Hopper Lid (Left)	15	57	57-A Head for Grain Hopper with No. 42-A Cap for Box (Left)	75
19	19-A Hinge for Grain Hopper Lid (Right)	15	58	58-A Cap for Box on No. 40 Head (Left)	75
20	20-A Bracket for Axle Stub (Right) (O. S.)	15	59	59-A Head for Grain Hopper with No. 43-A Cap for Box (Right)	75
21	21-A Triangle to move Axle	15	60	60-A Cap for Box on No. 51 Head (Right)	75
22	22-A Arm for Oats Agitator	15	61	61-A Frame for Fertilizer Disc (Adjustable)	75
23	23-A Frame on Grain Roller	15	62	62-A Annular Cut-off Gate for Fertilizer	75
24	24-A Gear Wheel on No. 40 Arm, 4" Teeth 1" inch bore	15	63	63-A Bracket on Wood Frame for Zigzag Lever	75
25	25-A Worm for Grain Feed Shaft, 1 1/2" inch square hole	15	64	64-A Head Plate for Fertilizer D	75
26	26-A Bracket on Wood Frame for Drag Bar	15	65	65-A Head Plate for Fertilizer	75
27	27-A Slide (Section) under Grain Hopper with Pin	15	66	66-A Polster for Fertilizer Gauge	75
28	28-A Dial for Acres Register	15	67	67-A Iron or coupling 2 pieces with spring for Gump Tube	75
29	29-A Gear Wheel for Acres Register (Outside)	15	68	68-A Spindle over No. 44 Rod and Fertilizer (at together)	75
30	30-A Gear Wheel for Acres Register (Inside)	15	69	69-A Spindle on Wood Frame for No. 44-L Arm	75
31	31-A Cap for Shaft for Acres Register	15	70	70-A Prime construction casting (Left)	75
32	32-A Link on Post for Drag Bar (Left)	15	71	71-A Box for Zigzag Shaft (Left)	75
33	33-A Link on Post for Drag Bar (Right)	15	72	72-A Box for Zigzag Shaft (Right)	75
34	34-A Bracket on Drag Bar for Spring	15	73	73-A Bush (Bracket) for Spring Wheel (Right and Left)	75
35	35-A Head for Grass Seed Hopper (Left)	15	74	74-A Cap for No. 44 High (Left)	75
36	36-A Head for Grass Seed Hopper (Right)	15	75	75-A Cap for No. 44 High (Right)	75
37	37-A Bracket with Pin for No. 44 Pulley for Chain Tightener	15	76	76-A Arm for No. 44 and No. 42 Gear Wheel	75
38	38-A Gear Wheel for Fertilizer Feed Shaft to move 100 lbs.	15	77	77-A Gear Wheel with Set screw for Drive Axle, 2" Ogs.	75
39	39-A 25 teeth 1/2" bore (Special)	15	78	78-A Arm (Special) for No. 42 Gear Wheel	75
40	40-A Polster for Grass Seed Slide	15	79	79-A Shield over Gearing (Left)	75
41	41-A Sprocket Wheel for Grain Feed Shaft, 8 Teeth 14" Bore	15	80	80-A Shield over Gearing (Right)	75
42	42-A Cap on end of Wood Roller to lift Boots (Left)	15	81	81-A Shield over Gearing (Right)	75
43	43-A Register Plate on Grain Hopper (for Wheat and Oats)	15	82	82-A Head for Acres Register	75
44	44-A Lever for Wheat and Oats Register	15	83	83-A Pin to Seal Wheel	75
45	45-A Stand for Wood Roller to Lift Boots (Right)	15	84	84-A Shimmed Wheel (Special) to Drive Seed Shaft 14" bore	75
46	46-A Stand for Wood Roller to Lift Boots (Left)	15	85	85-A Wrench for 3/4" Nut	75
47	47-A Disc to Feed Fertilizer (some not numbered)	15	86	86-A Bolt Collar Part. Shaft, 1/2" bore	75
48		15	87	87-A Oil Hole Cap	75

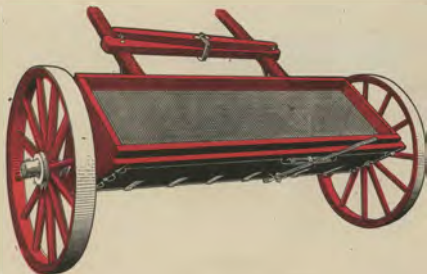
Cast- ing No.	Name of Parts	Price	Cast- ing No.	Name of Parts	Price
624	Washer on Drag Bar	10		Zigzag Bar	15
625	Casting to hold Shift Bar	10		Hopper for Grass Seed (8 Hoe) (Wood only)	1.00
626	Bracket for Seeder Box	15		Hopper for Grass Seed (9 Hoe) (Wood only)	1.00
627	Pawl for Latch for 480 Cais.	10		Hopper for Grass Seed (10 Hoe) (Wood only)	1.25
628	Catg. for Slot in 613	10		Hopper for Grass Seed (11 Hoe) (Wood only)	1.25
629	Swingle Tree Hook	15		Hoe or Shovel for Boot	20
630	Button for Lid	10		Lid for Grass Seed Hopper (8 Hoe)	1.00
631	Collar for Seeder Shaft	10		Lid for Grass Seed Hopper (9 Hoe)	1.00
632	Slide under Grain Hopper	60		Lid for Grass Seed Hopper (10 Hoe)	1.00
633	Slide under Grain Hopper	60		Lid for Grass Seed Hopper (11 Hoe)	1.00
634	28 Tooth Gear, U. S.	1.10		Lever for Zigzag Boots	1.25
635	41 Tooth Gear, U. S.	1.25		Neck Yoke, 10-11 Hoe, 3 Horse yoke, 4 1/2" long, each	75
636	Hub, R. & L.	5.00		Neck Yoke 8-9 Hoe, 2 Horse Yoke, 4 1/2" long, each	75
637	Hub Cap, R. H.	1.50		Plate to hold Fertilizer Slide (Casting)	1.00
638	Hub Cap, L. H.	1.50		Pinion (Bevel) on Fertilizer Shaft to Drive Disc	30
639	Shield	1.75		Roller (Wood) for Chain to Lift Boots (8 Hoe)	1.50
640	Shield, R. H.	1.75		Roller (Wood) for Chain to Lift Boots (9 Hoe)	1.50
641	Shield, L. H.	1.75		Roller (Wood) for Chain to Lift Boots (10 Hoe)	1.75
642	Box for Axle 1 1/4" bore	1.25		Roller (Wood) for Chain to Lift Boots (11 Hoe)	1.50
643	Box for Axle 1 1/2" bore	1.25		Shaft for Bevel Pinion to Drive Fertilizer Disc, (8 and 9 Hoe) 5 1/2" x 1/2"	1.50
644	Box for Axle U. S. 1 1/4" bore	1.25		Shaft for Bevel Pinion to Drive Fertilizer Disc (10 and 11 hoe) 5 1/2" x 1/2"	1.50
645	Box for Axle U. S. 1 1/2" bore	1.25		Shaft to Drive Gum Feeders (Front) (8 Hoe) 5 1/2" x 1/2"	1.50
652A	Arm	1.15		Shaft to Drive Gum Feeders (Rear) (8 Hoe) 5 1/2" x 1/2"	1.25
655	Gear	1.10		Shaft to Drive Gum Feeders (Front) (9 Hoe) 5 1/2" x 1/2"	1.75
656	Bottom for fertilizer on 11 hoe	65		Shaft to Drive Gum Feeders (Rear) (9 Hoe) 5 1/2" x 1/2"	1.50
657	Casting on end of channel from	30		Shaft to Drive Gum Feeders (Front) (10 Hoe) 5 1/2" x 1/2"	1.50
PARTS NOT NUMBERED				Shaft to Drive Gum Feeders (Rear) (10 Hoe) 5 1/2" x 1/2"	1.75
	Acres Register (Complete)	2.25		Shaft to Drive Gum Feeders (Front) (11 Hoe) 5 1/2" x 1/2"	1.00
	Agitator (Wood) for Oats (8 Hoe)	75		Shaft to Drive Gum Feeders (Rear) (11 Hoe) 5 1/2" x 1/2"	1.75
	Agitator (Wood) for Oats (9 Hoe)	80		Shaft for Grass Seeder (8 & 9 Hoe) 5 1/2" x 1/2"	90
	Agitator (Wood) for Oats (10 Hoe)	1.00		Shaft for Grass Seeder (10 & 11 Hoe) 5 1/2" x 1/2"	1.00
	Agitator (Wood) for Oats (11 Hoe)	1.15		Shaft for Coupling for Zigzag Bar (8 & 9 Hoe)	1.75
	Agitator (Iron) for Fertilizer (8 Hoe)	90		Shaft for Coupling for Zigzag Bar (10 & 11 Hoe)	1.85
	Agitator (Iron) for Fertilizer (9 Hoe)	90		Slide for Grass Seeder (8 & 9 Hoe) 1 1/2" x 1/2"	50
	Agitator (Iron) for Fertilizer (10 Hoe)	1.00		Slide for Grass Seeder (10 & 11 hoe) 1 1/2" x 1/2"	50
	Agitator (Iron) for Fertilizer (11 Hoe)	1.15		Slide for Fertilizer (8 Hoe) 1 1/2" x 1/2"	90
	Axle—in ordering axles always give No. on Hub.			Slide for Fertilizer (9 Hoe) 1 1/2" x 1/2"	90
	Axle (Steel) 8 and 9 Hoe 5 11" x 1 1/2"	2.50		Slide for Fertilizer (10 hoe) 1 1/2" x 1/2"	1.00
	Axle (Steel) 10 and 11 Hoe 5 4" x 1 1/2"	1.00		Slide for Fertilizer (11 Hoe) 1 1/2" x 1/2"	1.10
	Axle—Plain drill, same price and size as above.			Slide for Fertilizer (11 Hoe) 1 1/2" x 1/2"	40
	Cap for Timothy Seed Rod	10		Single Tree (8, 9, 10 and 11 Hoe)	75
	Chain to Drive Grass Seed Attachment, 40 No. 3 Links	65		Spring for Brake Bar	1.75
	Chain to Lift Boot, 2 1/4" long	30		Thrippe Tree Complete (10 and 11 Hoe)	8.00
	Chain to Lift Boot, U. S. 11" long	25		Wheel for Truck (with No. 639)	1.00
	Double Tree with Single Trees	2.75		Tongue (8, 9, 10, 11 Hoe) for 2 Horses	6.00
	Feeder for Timothy Seed (Complete) Fit Together	50		Tongue (10 and 11 Hoe) for 2 Horses	1.25
	Gum Grain Feeder (1 1/2" square hole)	30		Whistle Tree for 2 Horses	
	Gum Tube or Spout (Tube only)	40			
	Gum Tube or Spout with No. 670-A Coupling				

Lime Sowers Make Better Crops

The value of lime and other commercial fertilizers as a crop maker is universally conceded. At the same time, the manner in which the lime or fertilizer is applied to the land plays a very important part in the effectiveness of this means of fertilization.

The H. & Z. method of applying such fertilizer by means of lime sowers has proven to be the best method in all sections of the country. The sowers use a smaller quantity of lime and distribute it over the soil so evenly and thoroughly that the best results obtainable are secured with the minimum amount of lime.

There are some very distinctive advantages in the H. & Z. sowers—they are low-down in construction and are constructed so as to work behind a wagon. The lime is shoveled from the wagon box to the hopper of the sower, and the quantity of lime used is sowed uniformly all over the field.



H. & Z. Low-Down Force Feed Lime Sower

This sower was designed particularly for vineyard use and is sold absolutely on its merits to give most satisfactory results. You take it with the guarantee that if it does not sow commercial fertilizer, hydrated lime, or ground lime, ground lime rock, plaster ashes, cotton seed meal, etc. to your entire satisfaction it can be returned at our expense, and your money will be refunded without any questions.

Require Less Fertilizer

Commercial fertilizers cost money but their proper use makes money in increased crops. The machine that will apply fertilizer to the land most thoroughly certainly can be considered a good investment. If you want a means for distributing fertilizer, why not use the H. & Z., which has the advantages of a feed regulator, low-down construction, and even application of fertilizer to soil?



H. & Z. 8 Foot Lime Sower

This outfit is supplied for use where a large acreage is to be covered, and is one of the best paying investments that any farmer or gardner can make. The proper use of this sower with a good commercial fertilizer will soon pay for its cost in increased crops and extra profits.

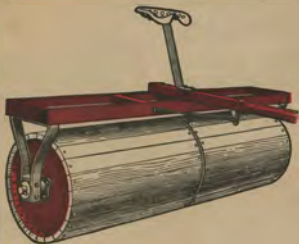
In construction this outfit can be said to be simplicity itself—There are no gears, clutches, chains, etc., to get out of order. There is only one adjustment feature—this regulates the quantity of fertilizer and sows any desired amount to the acre.

This eight foot spreader is constructed the same as the five foot for attachment to the wagon, which is undoubtedly most advantageous when a large amount of work is to be done.

If you want a sower that will get the most out of every pound of fertilizer distributed; if you want a sower that has a large capacity; one easily operated, and one that will prove a good investment—Why consider any except the H. & Z. which combines all these in one machine?

For other particulars, prices, dimensions, etc., see pages 47, 48.

The HERTZLER & ZOOK HARDWOOD, STAVE LAND ROLLER \$37.50



Wt. 500. Price \$37.50. With double-tree and yoke \$40.00

The Staves

are made from two inch selected hard wood concaved inside, rounded to a 13" Radius outside, tongued and grooved and securely bolted to the head.

The Steel Head

The heads are of steel and pressed to shape with a cast-iron bearing of ample size, and can easily be replaced when worn.

The Axle

is 1 3/4" round iron running the full length of the roller.

The Roller

is eight feet in length and built in two sections 26 inches in diameter.

The Frame

is built from selected hard wood in a way so as to form a weight box for weighting the roller, as well as carrying off the few loose stones found in the field while rolling. The frame is connected to roller axle by means of a Heavy Steel Channel hanger clamped firmly to the axle by means of hard wood blocks.

**A Good Serviceable Land Roller at a Very Economic
Price. Satisfaction Guaranteed**

Shipping weight 500 lbs.	
Price less seat and spring	\$35.50
Price with seat and spring	\$37.50
Price with seat and spring, double tree and yoke all complete	\$40.00

TESTIMONIALS

Caledonia, Minn.
Feb. 6, 1917.

Dear Sirs:

I thought that I would write you a few words as I have never said a word to you about the saw I bought of you. It is O. K. and when I want any more I will let you know. Will do all I can in this neighborhood for you in getting orders.

Yours truly,
Ed Augerson.

Chester, N. H.
Jan. 9, 1917.

Dear Sirs:

The wood saw received and with many thanks. You are certainly the best company I have ever dealt with, and will do all in your power to deal straight and honest with your customers.

Sincerely yours,
F. E. Guyett.

Bucyrus, O.
Jan. 30, 1917.

Dear Sirs:

The saw I received from you about a year ago is a dandy, easiest to handle of any saw I ever seen.

E. E. Smith.

Hudson, O.
Dec. 9, 1916.

Dear Sirs:

The number two wood saw we ordered and received this summer can't be beat. We saw large sticks and it goes through without a stop. We wouldn't take \$50 for it now if we couldn't get another.

H. A. Day & Sons.

714 E. St. San Bernardino, Cal.

McConnellsville, O.

Hertzel and Zook Co., Belleville, Pa.
Sirs:

Would say I received the feed Mill all O. K. Am well pleased with it. I received it on Saturday, set it up and ground some ear corn, then some meal and it did fine work, it is all you say, it could not be better.

Yours truly,
C. C. Clawron.

San Bernardino, Cal.
March 8, 1918

Hertzel and Zook Co., Belleville, Pa.

Dear Sirs:

I would be greatly obliged to you if you would send me your 1918 Catalogue as there are many things you carry that I need and would like to deal with you as much as possible. Your Saw and frame is sure a wonder would not take twice the price I paid for it if I could not get another.

Respectfully Yours,
Wm. Worthington.

Fresho, N. Y.
Mar. 31, 1917.

Dear Sirs:

I thought I would write and let you know how I received the wood saw machine. When I went down to the station I found it all O. K. Have sawed fifty cords of wood and think it beat saw I ever used. Please send me your 1917 catalog.

Yours very truly,
Leon H. Bravo.

St. Marys, Ohio.
May 11, 1917.

Gentlemen:

It was two weeks today that I have received the No. 1 saw frame and the two saw blades and ripping table. It all arrived in fine shape.

I put the small 1½ H. P. Fairbanks, Morse Gasoline Engine to it and they certainly worked fine together. I cut more wood the first hour I used it than I would have cut all day by hand. I remain truly your customer and friend.

Leo Macke.

Massena, N. Y.
May 27, 1917.

Gentlemen:

We have received our No. 4 wood saw O. K. and it works fine. Everybody thinks it is just the thing to have on a farm. Thanking you for the prompt attention you paid to the matter, I remain

Yours truly,
Fred Houle.

Galveston, Ind.
Jan. 9, 1917.

Dear Sirs:

I received my No. 2 wood saw. Have sawed part of a day and pulled it with a 2 H. P. Atlas Engine. I am well pleased with it. I always speak a good word for the H. & Z. wood saws.

Yours truly,
Jno. E. Winters.

Limestone, Me.
Mar. 4, 1917.

Dear Sirs:

I received the goods O. K. I am much pleased with the saws as I saved about \$15 by ordering from you.

Yours truly,
Jesse Ward.

Buckman, Hampshire Co., W. Va.
H. and Z. Co., Belleville, Pa.

Sirs:

I delayed writing you until I had tried the saw. have sawed about the driest and hardest wood that grows and it stays on the job in a satisfactory manner. I shall be glad to recommend your saws. I think they are not passed by any. Yours

J. C. Deloplain

