

HERTZLER & ZOOK CO.



Catalog No. 17

BELLEVILLE

PENNSYLVANIA

U. S. A.

1922

OUR GUARANTEE

We guarantee that each article listed in this catalog shall be exactly as represented, and that all shipments will be made with the distinct understanding and agreement that every purchaser has the privilege of returning any article which for any reason whatever is not satisfactory, provided we are notified as soon as the customer has had an opportunity to examine such article and **give it a fair trial**. We further guarantee that in any such case we will give the necessary shipping instructions for the return of the article; promptly refund the purchase price and pay the freight both ways.

Our policy is to give every purchaser a "SQUARE DEAL," and as a guarantee that he will get it we have deposited a bond for \$10,000.00 with the Belleville National Bank, of Belleville, Pa.

HERTZLER & ZOOK CO.

Belleville, Pa.

Please ship to

Date of this order _____

197

Make Remittances Payable to
HERTZLER & ZOOK CO.

Enclose please find

Name	
(Ms. Mrs. or Miss, write name very plainly; always write name the same way)	
Post Office	State
Street Address	
Box No. or R. F. D.	
Shipping Point	County
On what railroad is your shipping point?	
HOW TO BE SHIPPED See Rules in Catalogue	
Mail Freight Express Mail Insured Registered Express (See page 28.)	Mail Spec. Prepaid Express (See page 28.)
(Make a mark under the heading selected)	
Is there a freight agent at your railroad station?	Order your Mail Shipments Insured and allow 5c for each \$5.00 in value
If there is no freight agent at your shipping point, you must send money to prepay the freight charges. If there is an agent you can pay the freight when shipment reaches you. It is only necessary when there is no agent at your station. The charges will be the same.	

(3) how much money you send.

Give Number or
name of catalogue
from which this or-
der was selected.

Read the introductory pages of catalogue for information about how to send money, how to ship, etc.

If this Order Blank is not large enough for your order, use another sheet of blank paper, following this style.

More order sheets will be sent upon request.

Be sure to read about Freight Rates.

DO NOT FORGET TO GIVE SIZES AND NUMBER

[illegible]

This \$10,000.00 Legally Executed Bond
Backs Our Guarantee

Belleville, Pa.

Sept. 19, 1921

To Hertzler & Zook Co. Customers—

This is to certify that the Hertzler & Zook Company, a corporation organized under the laws of Pennsylvania, engaged in the manufacture and sale of Hertzler & Zook machinery, has deposited in this bank an approved Bond in the sum of Ten Thousand (\$10,000.00) Dollars to secure the execution of the guarantee set forth in their catalog to purchasers of goods from said corporation.

(Signed)

BELLEVILLE NATIONAL BANK

REFERENCES

In addition to the \$10,000.00 Bank Bond which backs our Guarantee we refer you to any Bank in Mifflin County, Pennsylvania, Dunn & Bradstreets Commercial Agencies and our numerous satisfied Customers in every State in the Union, Canada and South America.

30 Days Free Trial

You have the privilege of trying any article for Thirty Days. If at the end of that time you are not satisfied we agree to take back your purchase, refund your money and pay all transportation charges.

IMPORTANT

It is difficult under present conditions to make prices that will hold for any length of time.

We aim at all times to give our customers the best prices available and in order to do this we ask our customers to accompany their orders with the prices as given in the catalog and in case of a price reduction the overpayment will be refunded or placed to your credit for appliance on future orders.

Get our quotations on

FEED MILLS

We have various sizes and the prices are right.

GENERAL INFORMATION

PRICES—All Prices in this Catalog are subject to change without notice.

TERMS—Cash With Order subject to our Guarantee.

REMITTANCES—Send Remittances by Check, Post Office or Express Money Order, Registered Mail, Bank Draft or Certified Check made payable to our order.

ORDERS—When possible use one of our printed order blanks found in our Catalog. Always give the Catalog Number of each article and state the size wanted if the article is furnished in more than one size. State clearly to what point shipment is to be made and whether goods are to go forward by freight, express or parcel post. In case there is no freight agent at your shipping point, it will be necessary to prepay the freight and you shall include in your remittance an amount sufficient to cover the freight charges. Any amount you send in excess of the actual freight charge will be returned to you. Write your order plainly, be sure to sign your name giving correct post office address, street and number or rural route, express office and freight station. Use a separate sheet of paper if you wish to refer to any matter not concerning your order. Your order is handled in one department and your inquiry or correspondence in another.

RETURNED GOODS—Before returning any goods we would ask that you take the matter up with us, in order that we may send you the necessary shipping tags, shipping instructions, etc. Do not in any case ship goods to us until after you have received instructions from us to do so. Some of our articles are shipped from other factories, and we do not want them returned to Belleville. We will give full instructions for returning any article which fails to please you. Our only reason for asking you to write is that we may give you such shipping instructions as are necessary to avoid delay and save useless expense.

SPECIAL

WOOD WORKING MACHINERY

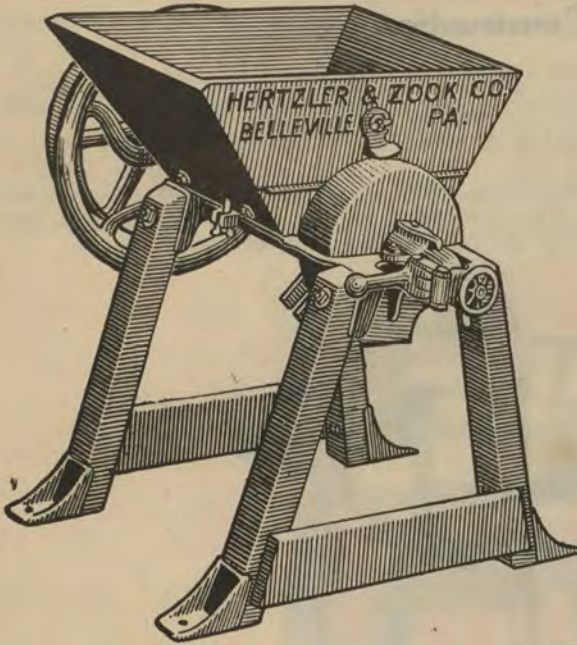
We have a Complete Line of Single and Combination Woodworking Machinery. Get our Special Catalog on this Line. We can save you money on Hollow Chisel Mortising and Boring Machines, Planers and Jointers and all machines in this line. Before purchasing get our Special Catalog. There is a machine in our Line to meet your requirements.

THE HERTZLER & ZOOK FEED GRINDER AND EAR CORN CRUSHER

WILL CRUSH AND GRIND EAR CORN AND ALL GRAINS FOR EVERY FARM USE.

The progressive farmer will tell you his feed mill is one of the best paying investments he ever made.

This mill will grind ear corn, shelled corn, wheat, oats, barley, rye and all kinds of grain, either separately or mixed. The following description shows it to be well made and a splendid value for the price.



ONE PIECE CAST IRON FRAME keeps all working parts perfectly in line. Long bearings lined with wear-resisting babbit metal. (All cast iron parts used on our mill are made in our own foundry).

WOODEN PIN BREAK—SAFETY FIRST.

In case some foreign article gets between the plates it will break this pin, instead of ruining the plates. The pin can be made and replaced in a few minutes.

BALL BEARING END THRUST.

We use ball bearings to take care of the grinding plate pressure.

SPIRAL COB CRUSHER is fitted on the main shaft.

It reduces the cob to small pieces before it reaches the plates.

CONVENIENT FEED REGULATOR.

We equip our mills with a feed regulator by which the feed can be adjusted to get the

best results from the power available. **GRINDING PLATES** are of hard cast iron made in a pattern designed to do the best work. We do not claim our plates to be self-sharpening, but if there is such a thing as a self-sharpening plate, ours are as much so as any on the market. A convenient adjustment is provided by which they can be set in any position from far apart, as when cracking corn, to the close adjustment required to make very fine chop, or corn meal. This adjustment can be made while the mill is running. **HOPPER OF AMPLE SIZE** is made of the best wood obtainable for the purpose. The legs are strong and fitted with foot castings which have holes in them by which the mill can be fastened to the floor.

You will find this whole mill well designed and strongly made so as to give efficient service for many years. It is fitted with a heavy balance wheel, which insures the mill running evenly and will overcome the effect of slight variations of speed in the engine. We recommend the 139 machine for the small farmer who has a light engine, and the 139-A for the large farmer with a good sized engine—see specifications below. Considering the price at which we offer these mills they are an exceptionally good buy.

		Plates	Pulley	H. P.	Speed	Capacity	Wt.	Price
139	H & Z Feed Grinder	8"	14" x 4"	2 to 5	300-500	5-25	200 lbs.	\$29.50
139—A	H & Z Feed Grinder	9"	14" x 6"	6 to 12	300-600	20-45	335 lbs.	42.50

THE GREATEST HAND AND BELT POWER CUTTER ON THE MARKET

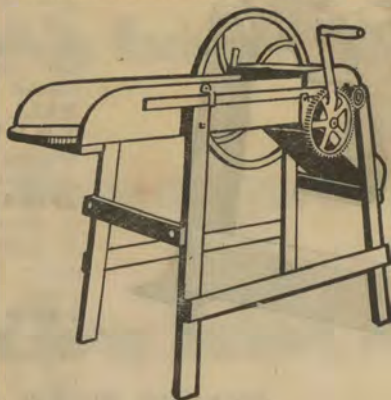
Has the Good Features of the Larger Machines, Having an 11 inch Tempered Tool Steel Knife, a Large Throat

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 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.



The Feed .

Price each	\$21.25
Power Pulley extra	2.50

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.

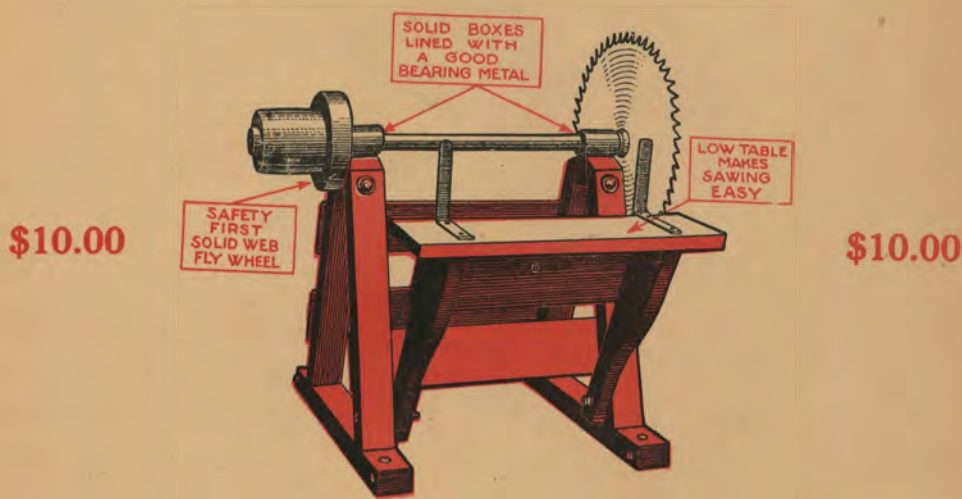
Price	\$5.90
-------------	--------

Exceptional Values

In Wood Sawing Machinery

We consider the wood saws illustrated and described in this color section to be of exceptional value for the money. They are good sturdy all around machines. There is one of them suited to your particular needs.

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 to 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.



No. 01 Saw Frame With 19 Pound Fly Wheel

The latest addition to our already complete line of wood saw frames. Just the frame you want for your own use. Made for sawing cord, pole or limb wood. Requires from one and one half to two horse power to operate.

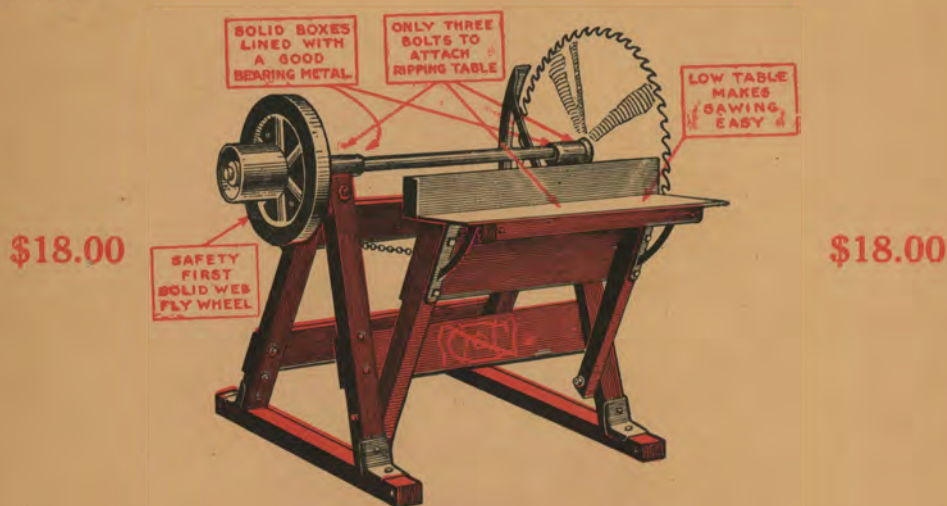
The frame is good quality hard wood, put together securely and finished in a durable manner, and will carry up to and including a 22 in. blade.

This is undoubtedly one of the greatest small rigs offered for sawing purposes. It will give you big value for the money.

For prices and full particulars see page 13.

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 moment's 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.

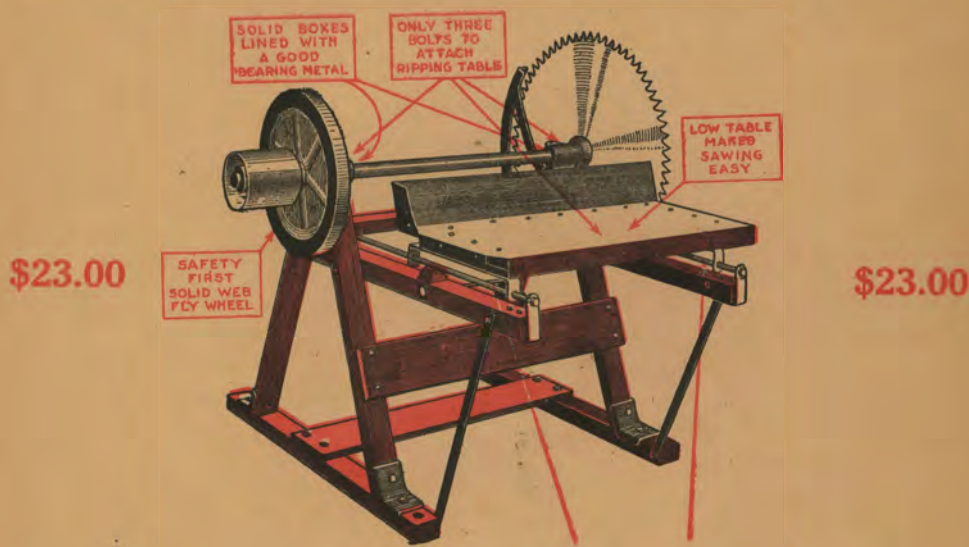
See specifications, full description and prices of this saw frame on page 17.

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 saying 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?

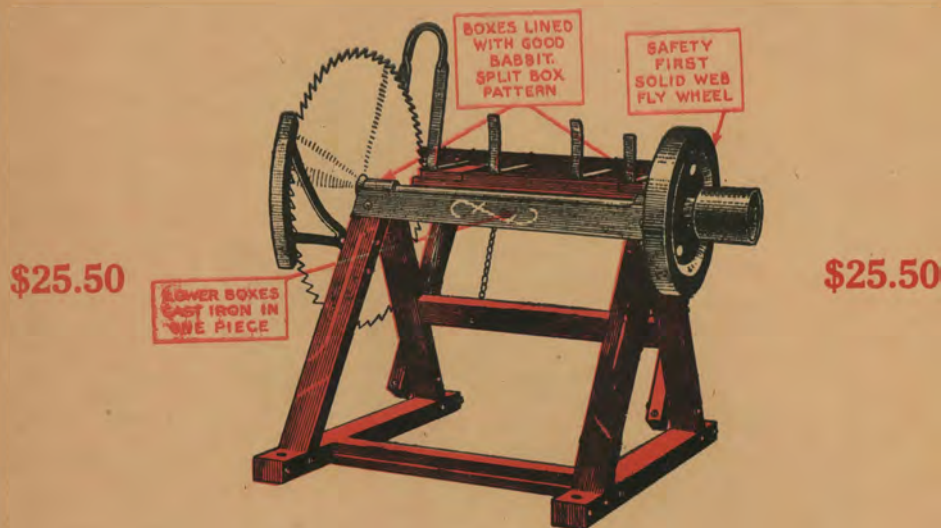
If you want a machine easy in operation, fast in work, economical in power and dependable in every day service,—this H. & Z. sliding table type will prove to be the very machine you are looking for.

Full details, specifications and prices for this machine will be found on page 19.

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.

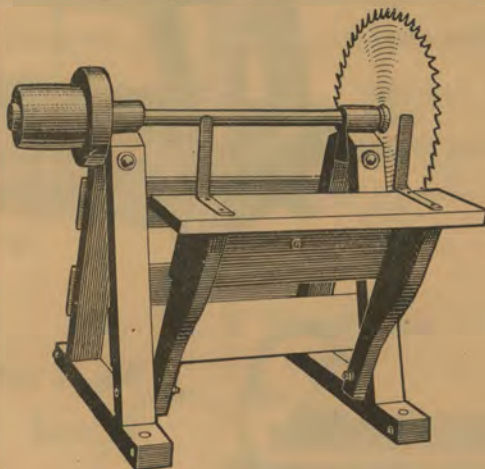
If you have lots of pole wood or cordwood cutting to do this is the machine to do it. It has a big capacity and will stand up under the severest kind of service just the same for you as it has for others in all sections of the country.

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 21-22.

THE GREATEST LINE OF WOOD SAWING MACHINERY IN THE WORLD

No. 01



The latest addition to our already complete line of wood saw frames. Just the frame you want for your own use. Made for sawing cord, pole or limb wood. Requires from one and one half to two horse power to operate.

The frame is good quality hard wood, put together securely and finished in a durable manner, and will carry up to and including a 22 in. blade. Does not carry ripping or shingle table.

MANDREL—Cold rolled steel 1 5-16 in. diameter, 35 in. long. Fitted to carry a blade with 1-4 in. arbor.

FLY WHEEL—19 lbs. in weight and 8 in. diameter.

PULLEY—5 in. face, 5 in. diameter.

BOXES—Safety solid type, lined with good babbit.

Price as shown with fly wheel, less blade	\$10.00
“ “ “ “ “ “ and 18 in. blade	13.00
“ “ “ “ “ “ and 20 in. blade	13.85
“ “ “ “ “ “ and 22 in. blade	14.25

No. 1

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

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

Cash with Order

Price for frame less blade \$13.60

Price as shown above with 16 in. blade filed and set ready for work 16.10

18 in. blade 16.60

20 in. blade 17.45

22 in. blade 15.85



No. 1 with 35 lb. Fly Wheel

Cash with Order

Shipping wt. 135 lbs.

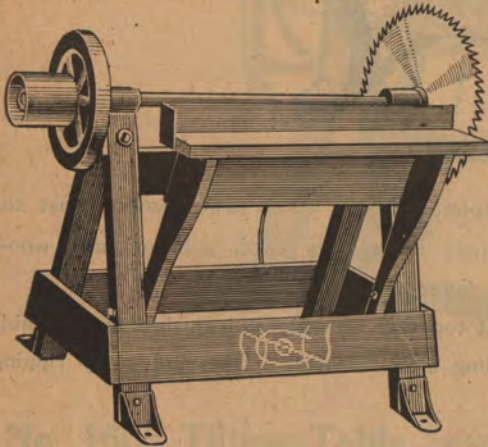
Frame less blade \$14.60

With 16 in. blade filed and set 17.10

18 in. blade 17.60

20 in. blade 18.45

22 in. blade 16.85



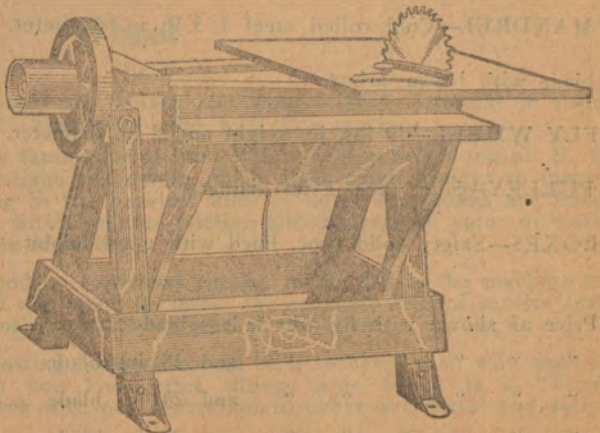
No. 1 Saw Frame with Ripping table and Rip Saw attached

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

as shown \$3.50

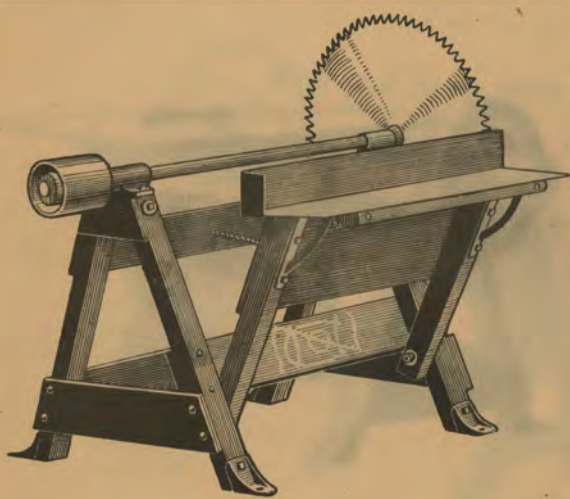


We can furnish either right or left hand machines at the same price. Unless otherwise specified we always ship right hand machines—with the blade to the right of the operator.

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

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 30 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 26.

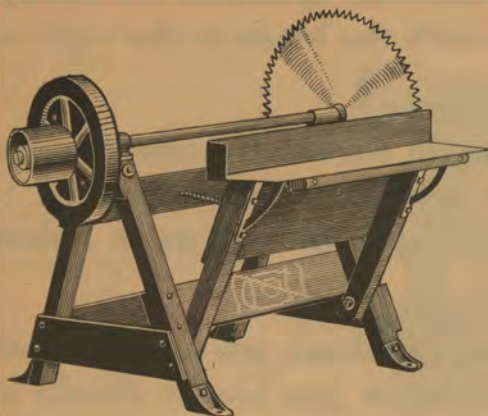
Mandrel—The Mandrel is one and seven-sixteenths inches in diameter and forty-nine inches long, fitted for a saw having a one and three-eighths inch arbor hole.

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		Order Cash	
Price of frame without blade;			
otherwise as shown above	\$17.00	24 in. Cordwood blade	21.80
With 20 in. Cordwood blade	20.85	26 in. Cordwood blade	22.65
22 in. Cordwood blade	21.25	28 in. Cordwood blade	23.45
		30 in. Cordwood blade	24.30

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	21.85
22 in. blade	22.25
24 in. blade	22.80
26 in. blade	23.65
28 in. blade	24.45
30 in. blade	25.30

Shipping weight, 240 lbs.

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

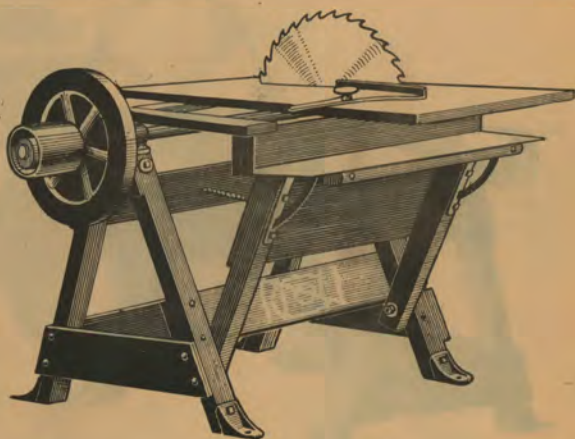
For full particulars of this attachment see Index.

Price for ripping table only for No. 2 frame as shown \$5.70

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.

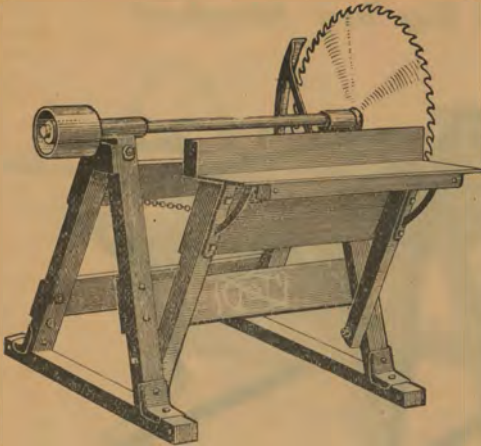
All blades filed and set ready for work.



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-eights 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

Order

Shipping Weight, 200 lbs. Price Cash with	
of frame without blade; other-	Order
wise as shown above	\$17.00
as shown above with	
20 in. blade	20.85
22 in. blade	21.25

24 in. blade	\$21.80
26 in. blade	22.65
28 in. blade	23.45
30 in. blade	24.30
32 in. blade	25.50

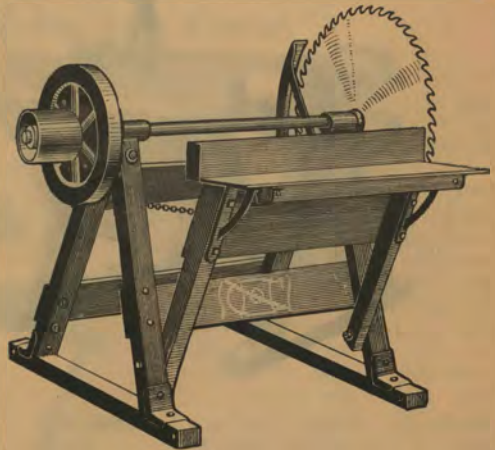
No. 4 Wood Saw with Fly Wheel

Price of No. 4 wood saw with 56-lb. fly wheel Cash with Order \$18.00

Price as shown with:

20 in. Cordwood Blade	21.85
22 in. Cordwood Blade	22.25
24 in. Cordwood Blade	22.80
26 in. Cordwood Blade	23.65
28 in. Cordwood Blade	24.45
30 in. Cordwood Blade	25.30
32 in. Cordwood Blade	26.50

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.

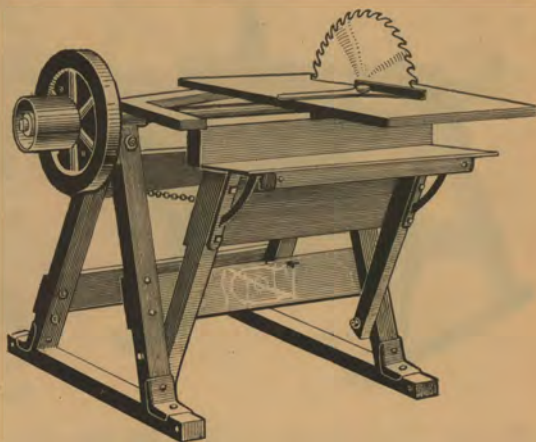
This Cut shows our No. 4 Saw Frame as it Appears with Ripping Table and Rip Saw Attached

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

Price for ripping table only for No. 4 frame \$5.70

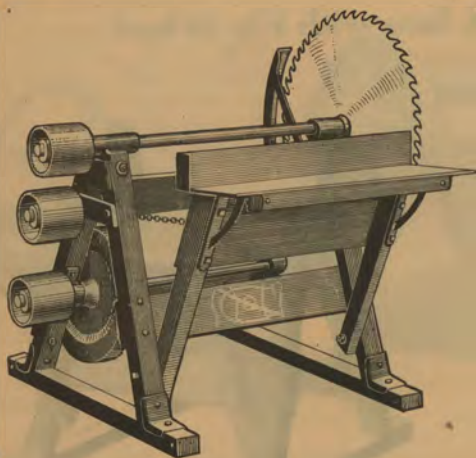
When ripping tables are used it requires a saw blade for ripping. No one should ever attempt to do ripping with a cordwood saw blade, or saw cordwood with a rip saw.

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.

Cash with
Order

Shipping weight, 320 lbs. Cash with

Price of frame without blade: Order

otherwise as shown above \$31.50

as shown above with:

20 in. Cordwood Blade 35.35

22 in. Cordwood Blade 35.75

24 in. Cordwood Blade \$36.30

26 in. Cordwood Blade 37.15

28 in. Cordwood Blade 37.95

30 in. Cordwood Blade 38.80

32 in. Cordwood Blade 40.00

Our standard or shingles ripping table attachment can be attached to the above No. 5 machine.

Price for ripping table only for No. 5 frame \$5.70

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.

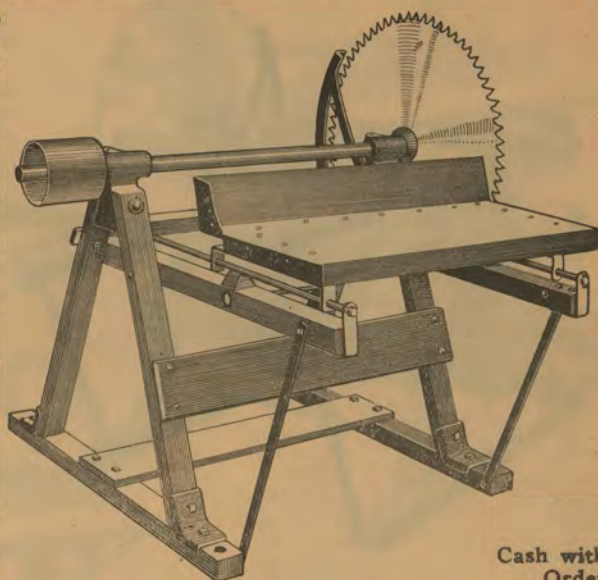
No. 10 Sliding Table Saw Frame

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.

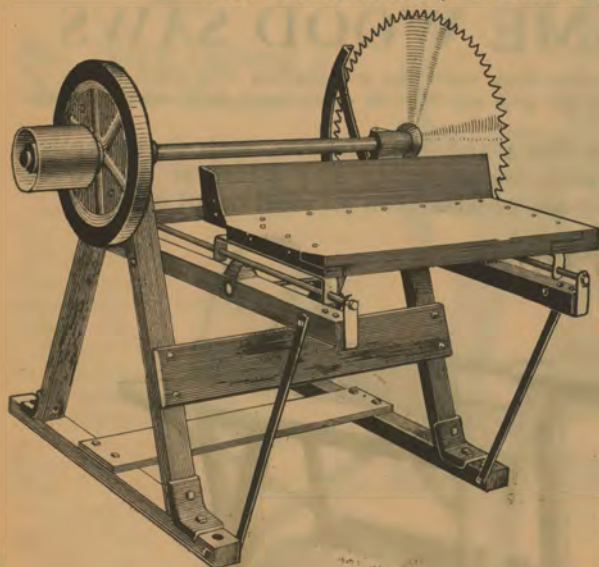
The mandrel is 49 in. long, 1 7-16 in. in diameter with 1 3-8 in. arbor and 6x6 Pulley.



		Cash with	
Price of above machine less		Order	
saw blade		\$22.00	
Price of machine with:			
20 in. Cordwood Blade		25.85	24 in. Cordwood Blade
22 in. Cordwood Blade		26.25	26 in. Cordwood Blade
			28 in. Cordwood Blade
			30 in. Cordwood Blade
			32 in. Cordwood Blade
			Weight of above machine 187 lbs.

Cash with
Order

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-
out saw blade

Shipping weight, 250 lbs.

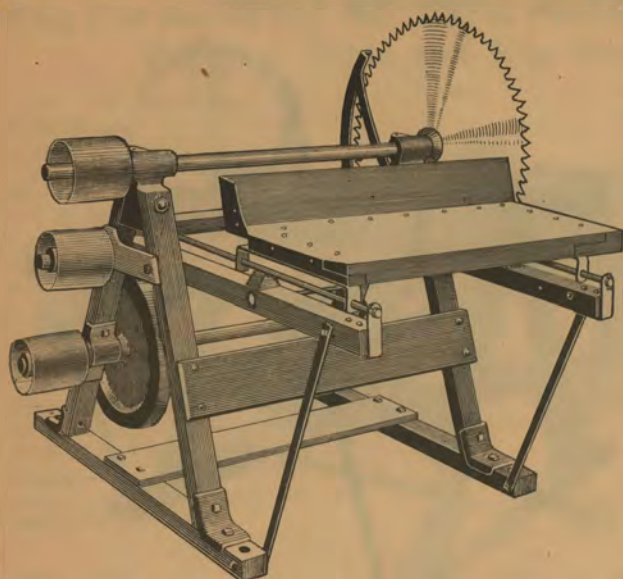
		Cash with	
Price of machine with:		Order	
20 in. Cordwood Blade		\$26.85	26 in. Cordwood Blade
22 in. Cordwood Blade		27.25	28 in. Cordwood Blade
24 in. Cordwood Blade		27.80	30 in. Cordwood Blade
			32 in. Cordwood Blade

Cash with
Order

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.

Shipping weight of above machine, 350 lbs.



		Cash with		Cash with	
Price of above machine		Order		Order	
less saw blade		\$37.25	24 in. Cordwood Blade	\$42.05	
			26 in. Cordwood Blade	42.90	
20 in. Cordwood Blade		41.10	28 in. Cordwood Blade	43.70	
22 in. Cordwood Blade		41.50	30 in. Cordwood Blade	44.55	
			32 in. Cordwood Blade	45.75	

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

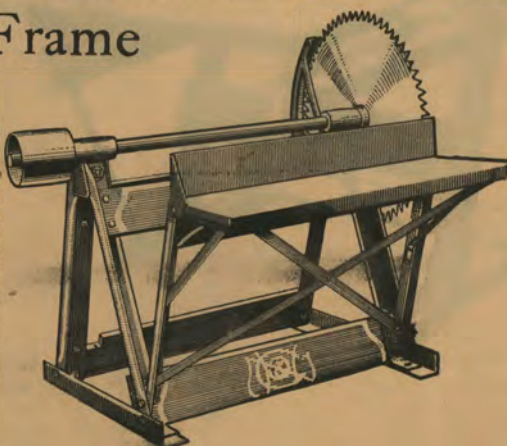
Price of frame without blade,
otherwise as shown above.

\$22.80

Price as shown above with	
20 in. Cordwood Blade	\$26.65
22 in. Cordwood Blade	27.05
24 in. Cordwood Blade	27.60
26 in. Cordwood Blade	28.45
28 in. Cordwood Blade	29.25
30 in. Cordwood Blade	30.10
32 in. Cordwood Blade	32.30

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

Shipping weight, 170 lbs.



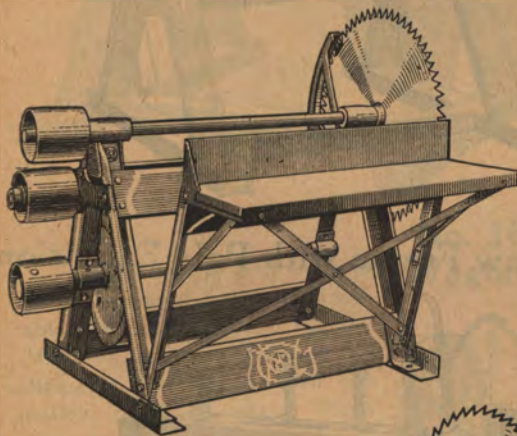
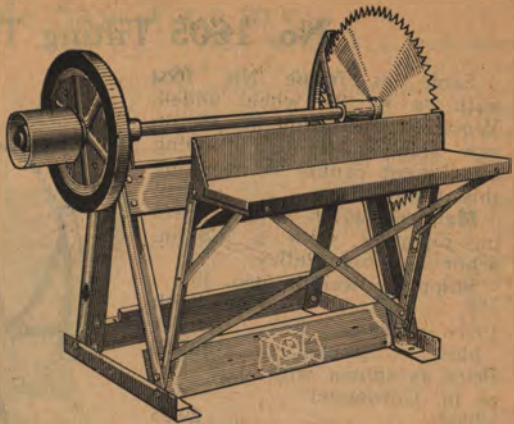
No. 14 Steel Frame

With 56 lb. fly wheel attached as shown, without saw blade. Price \$23.80

Price as shown above with

20 in. Cordwood Blade	\$27.65
22 in. Cordwood Blade	28.05
24 in. Cordwood Blade	28.60
26 in. Cordwood Blade	29.45
28 in. Cordwood Blade	30.25
30 in. Cordwood Blade	31.10
32 in. Cordwood Blade	32.30

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 \$31.90

Price as shown above with

20 in. blade	\$35.75
22 in. blade	36.15
24 in. blade	36.70
26 in. blade	37.55
28 in. blade	38.35
30 in. blade	39.20
32 in. blade	40.40

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

No. 1604 Tilting Table Saw Frame

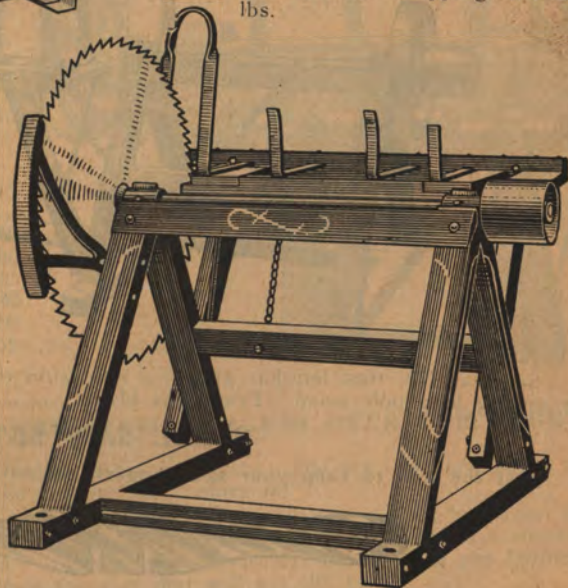
This frame is made of hard wood, thoroughly seasoned, well bolted and braced.

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 \$24.50

Our ripping attachment cannot be used on this frame.



Price as shown with

20 in. blade	Cash with Order \$28.35
22 in. blade	28.75
24 in. blade	29.30

26 in. blade	Cash with Order \$30.15
28 in. blade	30.95
30 in. blade	31.80

No. 1605 Tilting Table Saw Frame

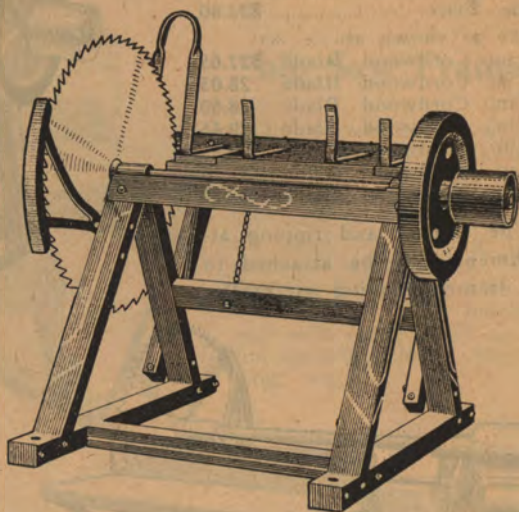
Same as frame No. 1604 with 70 lb. fly wheel added. Wood to be brought in on saw side of frame. Ripping attachment cannot be used on this frame.

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

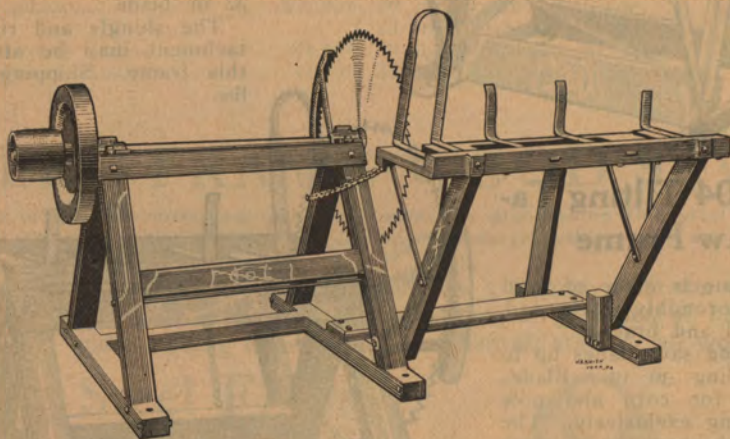
Shipping weight 300 lbs.

Price as shown less	Cash with
blade	Order
	\$25.50

Price as shown with	
20 in. Cordwood	
blade	29.35
22 in. Cordwood	
blade	29.75
24 in. Cordwood	
blade	30.30
26 in. Cordwood	
blade	31.15
28 in. Cordwood	
blade	31.95
30 in. Cordwood	
blade	32.80



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 \$27.00

STEEL SAW SETS

Just the tool to keep your saw properly set.



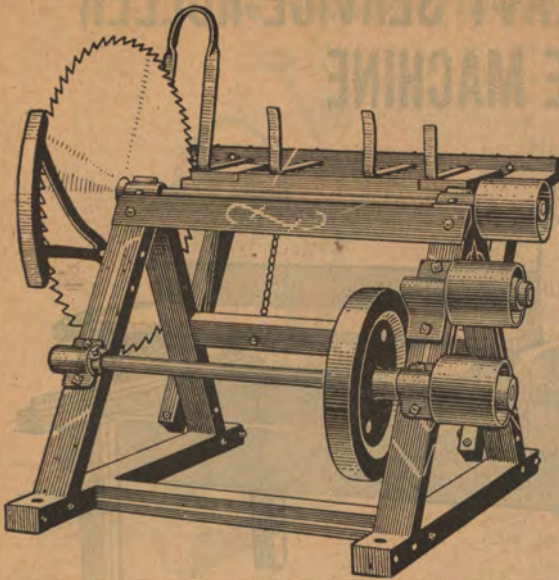
Saw sets like the above. Price each \$2.00

ROUND EDGE MILL FILES

Just the file for properly filing your saw.

Size	inches	8	10	12	14
Price	each	\$.25	.35	.45	.60

No. 1619 Pole Saw Frame

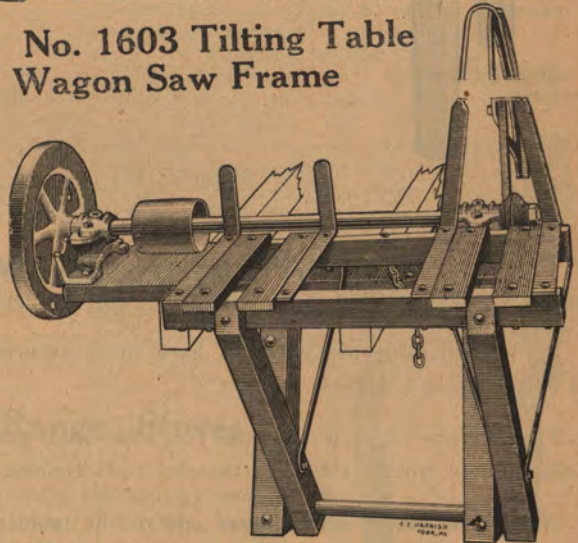


Made for pole or cord wood sawing expressly. Ripping attachment can not be used on this frame. 70 lb. fly wheel, which is underneath the frame out of the way of poles. Mandrel, 49 in. long, 1 7-16 in. diameter, 1 3-8 in. arbor, and 6x6 pulley. Shipping wt., 400 lbs

	Cash with Order
Price as shown less blade	\$33.50
Price as shown with 20 in. Cordwood blade	37.35
22 in. Cordwood blade	37.75
24 in. Cordwood blade	38.30
26 in. Cordwood blade	39.15
28 in. Cordwood blade	39.95
30 in. Cordwood blade	40.80

This frame is well built of good material. Interchangeable to fit almost any wagon. Mandrel, 40 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 Order
Price as shown less blade	\$23.75
With 20 in. blade	27.60
22 in. blade	28.00
24 in. blade	28.55
26 in. blade	29.40
28 in. blade	30.20
30 in. blade	31.05

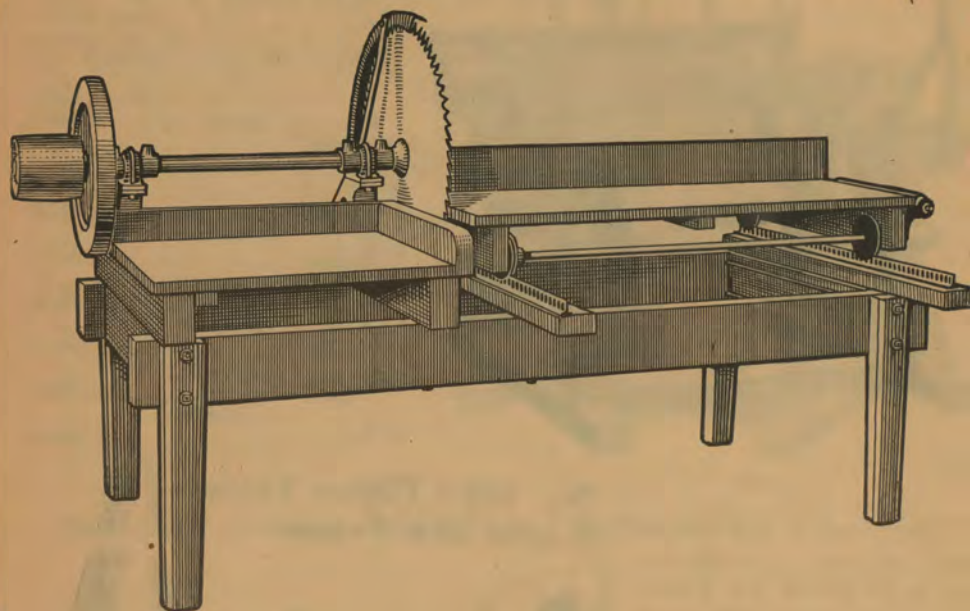
EXPRESSIONS MADE BY HARDWARE DEALERS OVER THE COUNTRY

"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 his 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."

NO. 16 H & Z HEAVY SERVICE ROLLER TABLE MACHINE



Shipping Wt. 425 lbs.

This is a very desirable and efficient machine and especially so for heavy work. It is thoroughly reliable, easy running, strong and substantial.

Frame and table are made of hard wood securely bolted together and painted and varnished in a durable manner.

The Rolling table is mounted on cast iron grooved wheels running on iron tracks. These wheels are fitted to steel rods running the entire length of the table.

A roller is placed at the outer end of the table to allow large pieces of lumber to be drawn up to the saw.

SPECIFICATIONS, No. 16 HEAVY SERVICE ROLLER

Outside Dimensions—7'6" long, 3'10" wide.

Table—4' long.

Mandrel—Cold rolled steel 35½" long, 1 7-16" diameter.

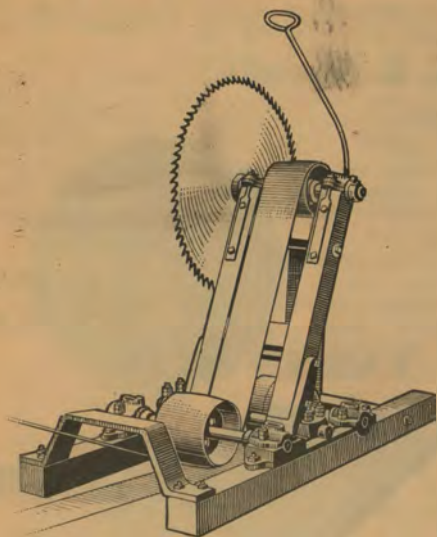
Fly Wheel—17" diameter, weight 70 lbs.

Pulley—6" face, 6" diameter.

Size of Saw Blade—Up to and including thirty inch.

Price less blade	\$36.75	24 in. blade	\$41.55
With		26 in. blade	42.40
20 in. blade	40.60	28 in. blade	43.20
22 in. blade	41.00	30 in. blade	44.05

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 $1\frac{3}{8}$ 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 $7\frac{1}{2}$ 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:	\$46.75
28 in. Cordwood Blade	53.20
30 in. Cordwood Blade	54.05
32 in. Cordwood Blade	55.25
34 in. Cordwood Blade	56.75
All blades filed and set.	

Farm and Warehouse Bag Truck

The Favorite Bag Truck is made for service, has $5\frac{1}{2}$ in. wheels, cast iron base. Shipping weight, 22 lbs. Price

\$4.00



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 lbs. \$1.00
55. 7" wide, 18" long, wt. 12 lbs. 1.25



RIPPING TABLES OR ATTACHMENT'S

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 \$3.50

The No. 2 will fit all the saw frames made to take ripping tables and will swing saws up to and including 26 in. with $1\frac{3}{8}$ in. holes. Price \$5.70

SHINGLE SAWING TABLES—\$7.75

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.

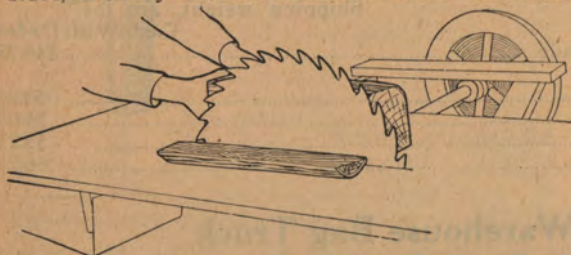


Fig A

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.

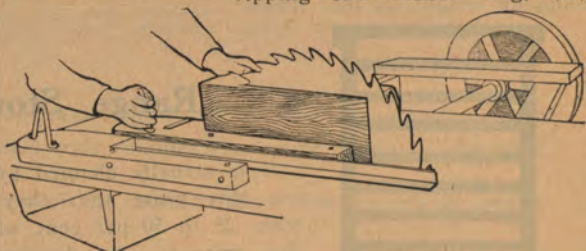


Fig B

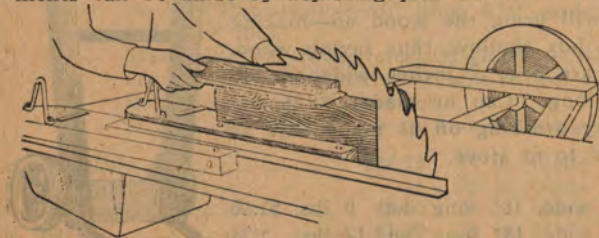


Fig C

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 on 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 only 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 \$7.75

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 3/8 in. hole	\$2.50	\$3.00	\$3.85	\$4.25	\$4.80	\$5.65	\$6.45	\$7.30	\$8.50	\$10.00	\$12.00
1 1/4 in. hole	2.50	3.00	3.85	4.25	4.80						

VALUABLE INFORMATION

General—A saw is a delicate tool. When you stop to think of the thinness of the metal in a saw, and the severe work that a saw performs, you can readily understand what we mean when we say that a saw is a delicate tool.

Setting—In setting saws for cross cutting, the teeth are set alternately right and left. Do not give too much set; set teeth so balance of saw will clear readily; always keep saw well set and filed. A dull saw pulls hard, cuts bad lumber, and will heat and lose its tension and require rehammering. A saw not evenly set will lead, causing the saw to heat.

In cold weather do not attempt to set the teeth before taking out the frost with a warm cloth, putting in a warm room, or putting saw in motion for some time, but without cutting. In cold weather the tempered steel is brittle and very liable to break. If timber is frozen be very sure to keep the saw well sharpened and see that frost is taken out of the blade before attempting to saw.

Filing—A saw filed with square corners in the gullet is liable to crack, for an opportunity is given the sawdust to pack. In filing a bevel on the teeth of a crosscut saw, never extend same down over one third or one half the length of the tooth. Always use a mill file.

Cracking—The gullet should always be kept round so as to assure free and easy discharge of the sawdust. No saw that cracks, due to square corners, will be replaced. Saws are not guaranteed that have been cracked due to the teeth being cut in by a cold chisel or punch, or square corners filed in the gullet.

Gumming—Always see that the gullet is kept well rounded and that the tooth has the proper pitch not too much or too little. Never use an emery wheel for gumming or beveling unless you have had some experience with emery wheels, as an inexperienced filer is liable to case-harden the teeth.

Rounding—Always keep the saw properly rounded, so that each tooth does its

proper share of the cutting. If saw is not rounded, the long teeth have to do so much more work than the shorter ones that the long teeth are liable to break off.

TABLE OF SPEEDS

Saw Dia. Inches	Speeds	Saw Dia. Inches	Speeds
18	2000	28	1285
20	1800	30	1200
22	1636	32	1120
24	1500	34	1050
26	1384	36	1000

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.	\$2.25
12	15	1 1/4 and 1 3/8	4 lbs.	3.00
14	14	1 1/4 and 1 3/8	6 lbs.	3.75
16	14	1 1/4 and 1 3/8	8 lbs.	4.50
18	13	1 1/4 and 1 3/8	8 lbs.	5.50
20	13	1 1/4 and 1 3/8	11 lbs.	6.50
22	12	1 3/8	14 lbs.	8.00
24	11	1 3/8	18 lbs.	9.00
26	11	1 3/8	20 lbs.	10.75
28	10	1 3/8	25 lbs.	12.50
30	10	1 3/8	31 lbs.	14.00
32	10	1 3/8	36 lbs.	16.00
34	9	1 3/8	43 lbs.	18.00
36	9	1 3/8	47 lbs.	20.50

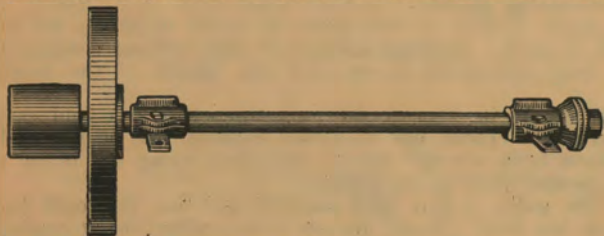
Set and Sharpened—Ready for Use—Guaranteed

We can mail blades up to and including 22".

Mandrel Sets

Mandrel sets sold complete only as listed.

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.



arbor with plain, flat boxes

Price of the No. 2 with 56 lb. fly wheel, 6x6 pulley, 1 3/8 in arbor with our own style of boxes, as used on our machines

Price of the No. 1 with 35-lb. fly wheel, 5x5 pulley, 1 1/4 in. arbor and plain, flat boxes

----- \$10.50

Price of No. 1 with 35 lb. fly wheel, 5x5 pulley, 1 1/4 in. arbor with our own style of boxes, as used on our machines

Price of the No. 2 with 56 lb. fly wheel, 6x6 pulley, 1 3/8 in.

----- 14.25

14.50

Mandrel Sets (Continued)

No. B1-2 Mandrel Set with
C. I. Yoke $1\frac{7}{16}$ in. Mandrel
49 in. long $1\frac{3}{8}$ in. arbor with
6 x 6 Pulley 56 lb. fly wheel
Price \$16.00



Wood Saw Machine Parts

PRICE-LIST ON PARTS OF OUR WOOD SAW MACHINES MANDRELS

No. 1, 41 in. long, $1\frac{5}{16}$ in. diameter, $1\frac{1}{4}$ in. arbor	\$3.25
Nos. 2 and 5, 49 in. long, $1\frac{7}{16}$ in. diam., $1\frac{3}{8}$ in. arbor	4.25
For fly wheel for Nos. 5 and 7, $1\frac{7}{16}$ in. diameter	3.00
Mandrel for 1604, 1605, 1619 and 1607	4.00
1603 Mandrel	4.25
Mandrel for No. 16 Machine	4.00
Mandrel for No. 01 Machine	2.75

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
Boxes for No. 16, per pair	3.75

PULLEYS

Nos. 1 and 01, 5 in. x 5 in. x $1\frac{5}{16}$ in.	\$2.25
Nos. 2—4—5—10—11—12—13—14—15—16, 6 in. x 6 in. x $1\frac{7}{16}$ in.	2.75
Idler for Nos. 5—12—15 and 1619, 6 in. x 6 in. Special	2.75

FLY WHEELS

No. 01—19 lbs.	\$1.50
No. 1—35 lbs., $1\frac{5}{16}$ in. bore, 13 in. diameter	3.50
No. 2—56 lbs., $1\frac{7}{16}$ in. bore, 17 in. diameter	5.25
Nos. 5—12—15 and 1619—70 lbs., $1\frac{7}{16}$ in. bore, 17 in. diameter	7.00
90 lbs.—Special, $1\frac{7}{16}$ in. bore, 17 in. diameter	9.00
125 lbs.—Special, $1\frac{7}{16}$ in. bore, 17 in. diameter	11.00

TABLES, ETC.

Steel swing table complete for Nos. 4—5—6 and 7 frames	\$7.00
Saw guards, Nos. 4—5—6 and 7	.75
Idler Pulley castings for No. 5	1.75
Gauge for No. 1 Ripping Table	.75
Gauge for No. 2 Ripping Table and larger	1.00
Foot Castings for Nos. 1 and 2. Price each	.40
Foot Castings for bottom sill No. 4, Price each	.40
Mandrel washers or Flanges, all sizes	1.00
Saw Guard, No. 16	1.50

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 $1\frac{1}{8}$ " 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 \$6.00



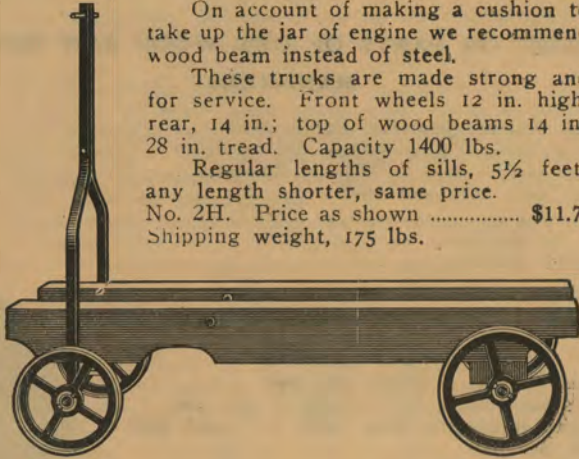
HAND ENGINE TRUCKS

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

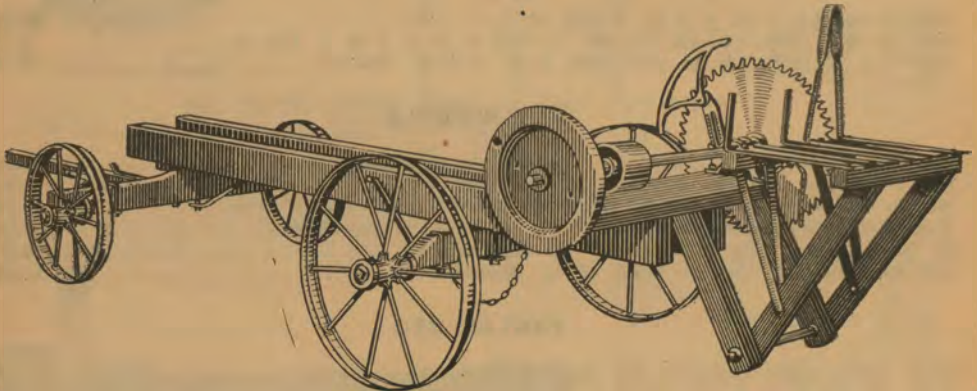
These trucks are made strong and for service. Front wheels 12 in. high; rear, 14 in.; top of wood beams 14 in., 28 in. tread. Capacity 1400 lbs.

Regular lengths of sills, $5\frac{1}{2}$ feet; any length shorter, same price.

No. 2H. Price as shown \$11.75
Shipping weight, 175 lbs.



ENGINE AND SAW TRUCKS

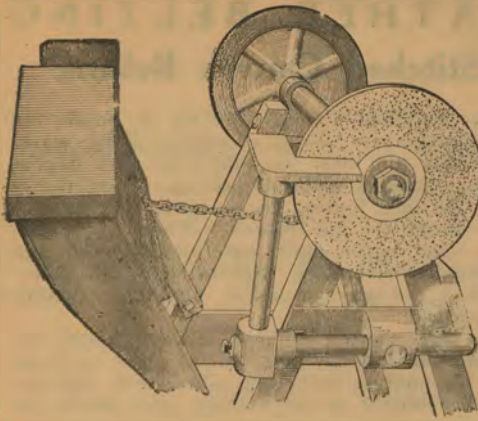


The above illustration shows our Engine and saw Truck mounted with one of our No. 1603 Saw Frames. Truck and saw frame sold separately if desired

Capacity	1200 lbs.
Front wheels	24" x 3"
Rear wheels	30" x 3"
With chain brake and shafts, as shown above. No. 1200. Price	\$52.75
With chain brake pole, double tree and yoke. No. 1200. Price	\$2.75
Price of Saw Frame, less blade	23.75

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 $\frac{1}{4}$ 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, saving 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 purposes. 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

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 & A $10 \times \frac{3}{4}$ wheel



Fig. 175

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 $10 \times \frac{3}{4}$ wheel weighs $5 \frac{1}{4}$ lbs.

Thickness of wheels (in inches)	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	
Diameter (in inches)	10	\$1.60	\$2.16	\$2.20	\$2.75	\$3.32	\$3.95
Diameter (in inches)	12	1.85	2.65	2.67	3.45	4.19	4.95

HUNTINGDON EMERY WHEEL DRESSER.

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

Weight $1 \frac{1}{4}$ pounds

Price with two sets of cutters \$1.00 Extra cutters, per dozen sets \$1.25



CAST IRON POST MAULS

Has 3-foot handle, standard size and weight.

Shipping weight, lbs.	10	13	16	18	20
Price, each	\$.75	\$1.00	\$1.25	\$1.35	\$1.50



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 \$1.10



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 cancellation after work has been begun.

Four-Ply Red Stitched Canvas Belting			
Width	Per foot	Width	Per foot
1½ in.	8c.	6 in.	27c.
2 in.	10c.	7 in.	31c.
2½ in.	12c.	8 in.	35c.
3 in.	15c.	9 in.	38c.
3½ in.	17c.	10 in.	42c.
4 in.	19c.	12 in.	54c.
5 in.	23c.		

Five-Ply Red Stitched Canvas Belting			
Width	Per foot	Width	Per foot
3 in.	18c.	8 in.	44c.
4 in.	24c.	9 in.	48c.
5 in.	29c.	10 in.	53c.
6 in.	34c.	12 in.	67c.
7 in.	39c.	14 in.	75c.

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.



		4 Ply			
Width	Length	50 ft.	75 ft.	100 ft.	125 ft.
5"		\$12.25	\$17.75	\$23.50	
6"		14.25	20.75	27.50	
7"		16.25	23.75	31.25	
8"		18.25	26.75	35.25	
					150 ft.
					Length
					\$46.25
					52.00



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. ¼ inch, \$2.50; ⅜ inch, \$4.50; ½ inch, \$5.00; ⅝ 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.	Width	Price per ft.
1"	.12	3"	.36
1½"	.19	3½"	.42
2"	.24	4"	.48
2½"	.30	5"	.60
		6"	.72

We can give you interesting prices on rubber belting. Tell us how much you want and what you will use it for, and we can then quote on exactly what you need.

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 form. Put up in 1 lb. Bars. Price per bar 25c.

GASOLINE ENGINES

See Special Catalog for Gasoline Engines. If none is enclosed with this catalog, write us and receive one, also our Special Cash Prices on 1½ HP to 15 HP Engines.



HITCHING-WEIGHTS

Solid iron, nicely finished and painted hitching-weights.
 No. 24, weighs 18 pounds \$1.35
 No. 25, weighs 40 pounds 2.95

SASH WEIGHTS

Cast iron sash weights, eastern patterns, all sizes
 Lead sash weights, all sizes to specifications.

Price on Application

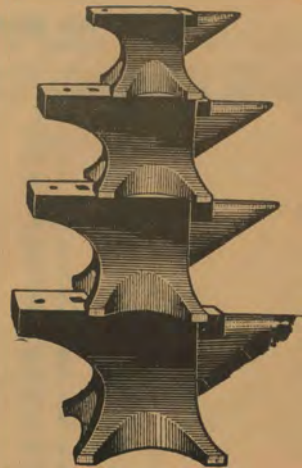
Grate Bars

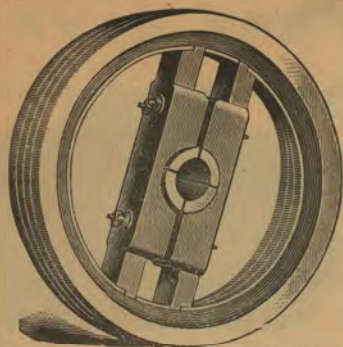
We carry a large stock of Grate Bars for all different styles and types of boilers. Write us at once, giving us the size of fire box, stating whether round or square, "Straight Bar" or "Zigzag" Bars are wanted and we will name you a price that will get your order.

Chilled Face High Grade Iron Anvils

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

Weight, lbs.,	20	50	70	100
Price	\$1.50	\$3.75	\$5.15	\$7.50





WOOD SPLIT PULLEYS

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 WOOD SPLIT PULLEYS

Diam.	Face	3	4	5	6	7-8	9-10	11-12	13-14	15-16
3"-4"		\$2.29	\$2.39	\$2.54	\$2.70	\$3.03	\$3.36	\$3.69		
5"		2.34	2.44	2.62	2.78	3.16	3.53	3.89		
6"		2.38	2.46	2.66	2.87	3.28	3.69	4.10		
7"		2.42	2.50	2.75	2.95	3.40	3.85	4.30	4.75	
8"		2.46	2.54	2.78	3.03	3.52	4.01	4.51	5.00	
9"		2.54	2.66	2.95	3.19	3.73	4.26	4.79	5.33	
10"		2.66	2.78	3.07	3.36	3.93	4.51	5.08	5.65	6.23
11"		2.87	3.03	3.36	3.69	4.34	5.00	5.65	6.31	6.97
12"		3.07	3.28	3.65	4.01	4.75	5.49	6.23	6.97	7.70
13"			3.52	3.93	4.34	5.16	5.98	6.80	7.62	8.44
14"			3.77	4.22	4.67	5.57	6.47	7.38	8.28	9.18
15"			4.01	4.51	5.00	5.98	6.97	7.95	8.93	9.92
16"			4.26	4.79	5.23	6.39	7.46	8.52	9.59	10.66
17"			4.51	5.08	5.65	6.80	7.95	9.10	10.25	11.39
18"			4.75	5.37	5.98	7.21	8.44	9.67	10.90	12.14
19"			5.00	5.65	6.31	7.63	8.93	10.25	11.56	12.87
20"			5.24	5.94	6.64	8.03	9.43	10.82	12.21	13.61
22"			5.74	6.51	7.29	8.85	10.41	11.97	13.53	15.08
24"			6.31	7.21	8.11	9.92	11.72	13.53	15.33	17.13
26"			6.88	7.91	8.93	10.98	13.03	14.98	17.13	19.18
28"			7.46	8.61	9.75	12.07	14.35	16.64	18.94	21.23
30"			8.03	9.30	10.57	13.12	16.66	18.20	20.74	23.28
32"			8.61	10.00	11.39	14.18	16.97	19.76	22.55	25.33
34"			9.26	10.78	12.30	15.33	18.36	21.40	24.43	27.47
36"			9.92	11.56	13.20	16.48	19.76	23.04	26.32	29.60

STANDARD MACHINE MOULDED IRON PULLEYS

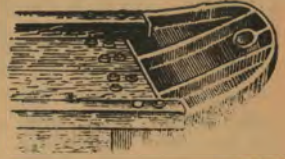
They are bored, turned and balanced, with key seat or set screws. If bore is special size or is large in comparison with size of pulley or if both key-seated and set-screwed, an extra charge will be made.

Diam.	Face	3	4	5	6	8	10
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 36	24 15
36"		12 40	14 20	16 05	18 05	22 10	24 15

Cast Stone Boat Heads

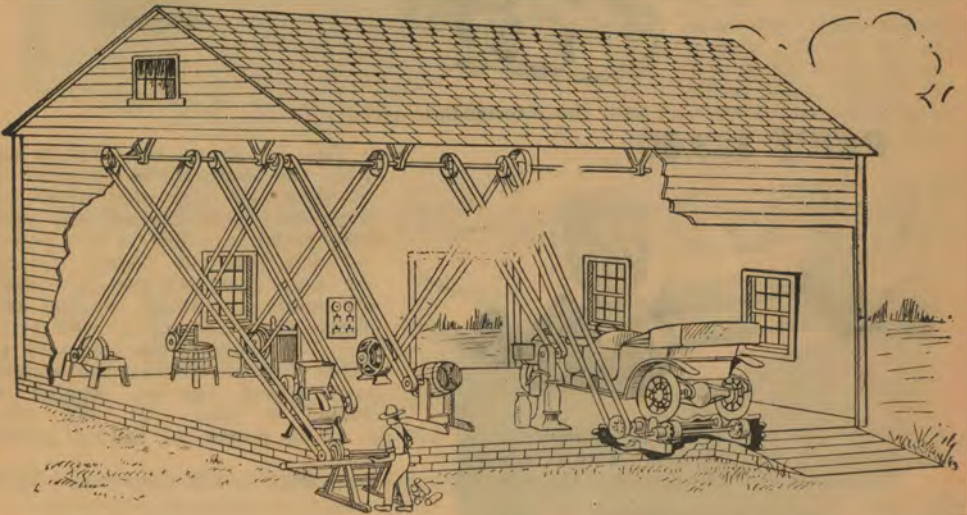
This stone boat head is a single heavy casting. Has shoulder to fit ends of three 10-inch planks and holes to fasten them with bolts. There are six holes for bottom boards and four for side strips.

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



\$4.50

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 Bull Mill for grinding feed.
- 4th—Wash Machine.
- 5th—Churn.
- 6th—Corn Sheller.

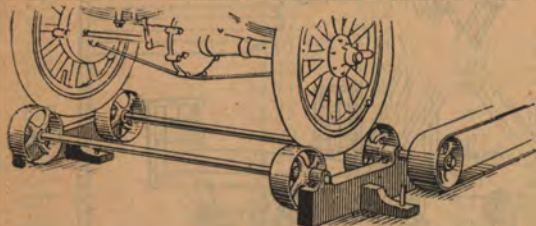
- 7th—Cream Separator.
- 8th—The Auto Jack, that drives it all and enables you to convert power from your auto to the different machines.
- 9th—The Dynamo, which makes the electric light to light all your different buildings.

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.

PRICE \$23.50



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 time until the smaller 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.

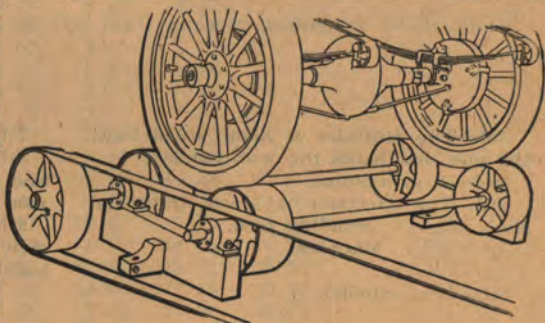
Hertzler & Zook Co., Belleville, Pa.

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.

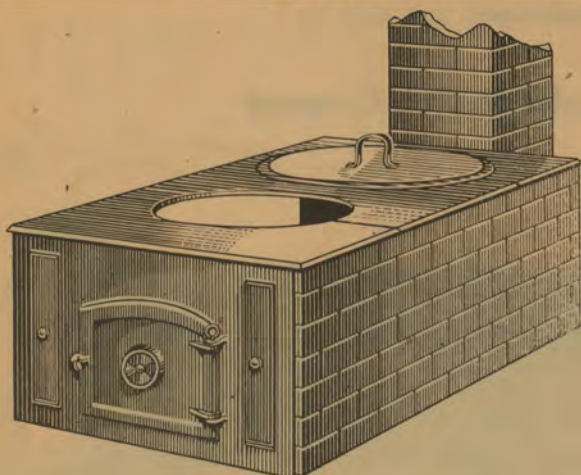
When ordering, state whether you want it for an Auto or Truck or both, and we will give you pulleys best suited to your work. It will also help us if we know what machines you wish to run with it.

Price, with high grade babbit bearing, shipping weight, 200 lbs. \$23.50

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. \$65.00



We have the Best largest assortment of Cast Iron Furnace Plates or Cookers on the market

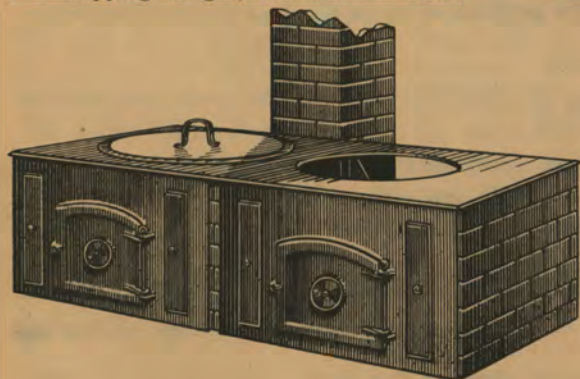
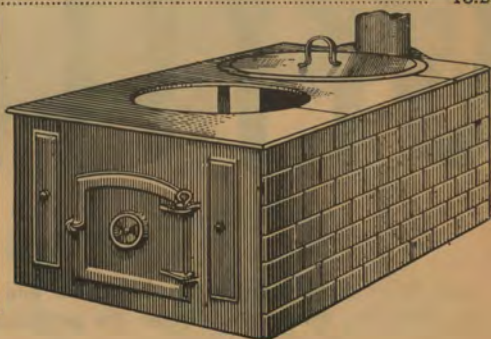


Our cast iron furnace plates are superior to many plates on the market. They are made in sections so as to take care of all expansions and contractions. Our plates are 15 inches from the door to first kettle, enabling you to get the best results from the fuel. We furnish the castings only, consisting of top plates with 22 and 2 inch holes, one bushing to fit any smaller size kettle, on 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. \$15.25
- No. 42—All castings, etc., to make furnace same as above cut. Shipping weight 260 lbs. 18.25

- No. 45 — Same as shown for one kettle only, complete with all castings. Shipping weight, 220 lbs. \$15.50

- No. 48 — All castings, etc., to make furnace same as shown Shipping weight, 265 lbs. 18.50



- No. 49— All castings and iron work to make furnace same as shown. Shipping weight, 310 lbs. \$22.00
- Furnace Rings \$1.50
- Covers \$1.50

- No. 50—Same as above, with stove pipe collar for pipe instead of flue. Shipping weight, 310 lbs. \$22.25

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

- No. 51—Straight bar grates, 3" wide, 33" long, three bars in one. Wt. 10½ \$1.50 each
- No. 52—Straight bar grates, 3" wide, 25" long, three bars in one. Wt. 8 1.25 each
- Door and Frame Complete \$7.00

Hertzler & Zook Grain, Seed and Fertilizer Drills

Manufactured and Sold by

The Hertzler & Zook Company

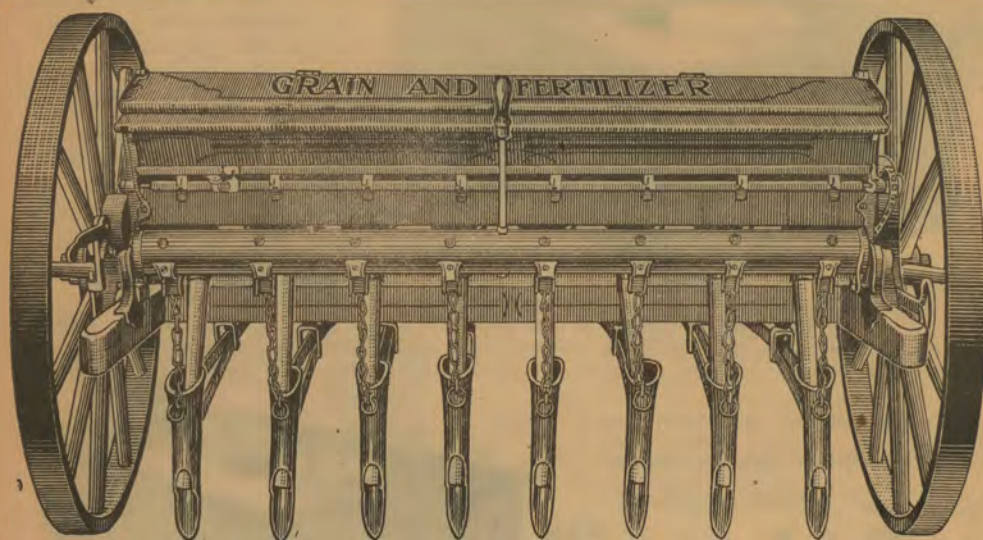


Fig. 1

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.



Fig. 157

PRICE \$80.00 UP

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	00 00	710 lbs.

Extra for grass seeder which can be used front or rear of drill, \$5.50.

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.

Facts You Should Know About Our Grain Drills

Read all about this drill. We will tell you what it consists of.

The Hertzler & Zook is the simplest, lightest running and most durable drill on the market; in all respects a strictly modern and superior spring hoe drill. It is substantially built, being designed for hard usage and to give the farmer the best possible service. It has three positive force feeds—grain, seed and fertilizer—a grain feed that will not choke, a grass feed that can be instantly regulated to any quantity desired and a fertilizer feed that will sow any kind of fertilizer and prevent bridging. The grass seeder can be arranged to sow either in front or behind the boots, as desired. The drill is of the low down type, the wheels being standard height, the hopper only being dropped, making it convenient and easy to fill. The fertilizer drops directly into the boot through rubber tubes and will not lodge. Drill is provided with levers for changing quantity of grain and fertilizer, so that there are no gearwheels to change. Amount of fertilizer can be changed while the machine is in motion. Grain, seed and fertilizer hoppers are filled from behind, making it unnecessary for operator to go in front of drill. Hoes can be raised with one hand by lever conveniently located in the center of the drill. Even when in the ground the hoes raise sufficiently to pass obstructions when drilling rocky or stumpy ground. Hoes can be thrown "zigzag" while drill is in operation. We furnish the drill with spring hoes only.

On this and the following pages we describe the general construction of the Hertzler & Zook Grain Drills. We have endeavored to give you full detail of price and show the back view of the different drills we manufacture on the foregoing pages and will now give you the construction and point out to you a few of the many good features of the Hertzler & Zook Drill.

We call your attention to the frame of this drill, which is built of the best oak timber available, well braced and bolted. It is absolutely impossible for any ordinary blacksmith or even a mechanic to straighten a steel frame, while a wood frame can be straightened up or repaired by any ordinary farmer and the drill will again be as good as new. Without a good frame it is impossible to get the best results from seeding.

For the 10 hoe 8-inch and the 11 hoe 7-inch drills, tongue, doubletree and yoke are sent for either two or three horses, but must be specified in ordering if tongue and doubletree is wanted for three horses, as if not specified, it will be equipped for two horses and shipped out.

On the right hand side of the drill, is the grain seed regulating lever, which opens the grain slide to the desired amount of wheat or oats that is wished to be sown. The wheat is regulated by the peck and is marked on the lever gauge.

The oats regulations are on the lower side of the dial, marked oats, pecks, and will sow from 1 to 12 pecks of oats and from 1 to 10 pecks of wheat. After this is set it is very seldom necessary to fasten it, but in case the operator wishes to lock this up, it is provided with a lock nut or thumb screw which can be readily adjusted without a wrench and will stay until removed.

On the left hand side of the drill there is a dial with a pointer showing the amount it is opened and the amount of fertilizer that will be sown per acre any quantity from nothing up to five hundred pounds per acre and will sow the same volume in lime or anything you wish to sow with the fertilizer sowing device that is sowable on a fertilizer drill. This lever is arranged with a ratchet so that it is impossible to get loose from any jolts, as it will stay positively where it is placed by the operator.

We have a simple gear arrangement which drives the grain seeding side of the drill as well as the grass seeder which we control. This is the simplest of any in use. It consists of an eccentric pin, cast and turned in two parts, upon which the middle gear wheel is fastened. When the shovels are lowered, the eccentric causes the middle gear wheel to mesh into the upper and lower gear wheel, and when the hoist lever is raised, the wheel is withdrawn, and the whole feed is thrown out of gear. It is driven directly from the main axle which is driven from both wheels, so as to sow around any corner or turning either way.

The grass seeder is also driven with a sprocket chain running from the same shaft that sows the grain and the instant the hoes are lifted, all is thrown out of service.

We also call your attention to the dove-tail which is fastened on the front part of the drill head which is to receive the grass seeder in front of the hoes and which can be readily changed in a few moments' time and is then driven from the same shaft at the opposite end which will be explained and shown in Figure 94.

When the grass seeder is used in front of the hoes, take off gear where No. 388 and put on No. 336, which is only wanted when sowing wheat at which time the agitator is not used. By this method the grass seeder can be used equally well in front of the drill and only requires a few moments to change it. An extra sprocket, however, is furnished free of charge with every drill. The fertilizer drill gear arrangement is practically the same as that just described that drives the grain seeder with the exception of the attachment of the lever extending back which is to make it convenient to throw the fertilizer gear in or out of gear when the drill is in motion, and independent of wheat feed. For instance, you have a spot in your field which is very rich and you would consider it waste to sow fertilizer on this spot, as the operator is moving along, without stopping the drill, he can throw the lever up which will throw out of gear the fertilizer sower and when he comes to the place where he wishes to throw it in, by pulling lever down it will go into service and thereby make it possible for a great saving of fertilizer and enable the operator to sow fertilizer just where it is needed. Just notice the simplicity of the gear device of this drill—there is practically nothing to it to keep in repair; no gears to change for the different seedings.

A tight fitting shield is placed over the machinery at each end of the hopper, to keep the dirt and grit out thus better protecting the machinery.

The spring hoe is almost indispensable where the land is not clear of roots, rocks or obstructions. The spring is nearly three inches long, and fastened perpendicularly upon the bar by means of a bolt. This bolt has a center drag bar, which is fastened upon the top of the boot or hoe. The whole maintains an even, steady motion, when passing over the ground, and can be made to sow deeper or shallow by means of two holes in a lug on the boot, which is done by changing a bolt. In stony ground where a disc will not cut through a stone, this will shove the stone around and get the grain in, and in many instances preferred to the disc.

The agitator, a part of which runs down directly to the opening where the rubber roll takes charge of the grain, making it impossible for the choking of any grain sown. The grain feed is a rubber roll feed made of the best rubber—sows all kinds of grain with absolute regularity, no cracking or bunching, and is so constructed that it cannot choke. The flow of grain is constant and regular—all straw, white caps or any foreign substances that should chance to be in the wheat is fed through without stoppage. In this way the "skipping" or bunching which is so frequent and objectionable in the fields of drilled wheat, is entirely avoided. The quantity to be sown can be instantly regulated by a lever, no change of gear wheels being necessary. In turning at the ends, or in passing from one field to another, no grain passes down the tubes, as the hoisting of the hoes throws the distributing apparatus out of gear. This feed has proven to be the most positive and regular feed ever devised, distributing seed with unvarying equality. The growing crops will show no "skips" or "over-sowing." The grain conveyors in this drill are so arranged that there cannot possibly be any lodging of the grain in going down the steepest hills.

The feed is simple. Two parts make this feed, while others have anywhere from four to six parts.

It is impossible to sow in bunches whether sowing on smooth or rough ground. The rubber roll holds the grain firmly so they cannot be jarred or shaken down ahead of time, while practically every other sowing device sows in bunches when going over rough ground.

The grain hopper lid opens from behind so that the grain can be put in without going in front of the drill.

The sectional gear of the fertilizer feed consists of a series of non-corrodible discs, one for each hoe, arranged to revolve horizontally in the bottom of the hopper. A bar provided with upwardly extending fingers, extends along the bottom of the hopper, which constantly agitates the mass of fertilizer and prevents bridging. On the upper surface of the non-corrodible discs referred to, there are revolving radial arms, which serve to keep the upwardly extending fingers in motion, agitating the mass of fertilizer, breaking up lumps, and at the same time forcing the fertilizer down through the openings in the center of the discs into the conductors. These openings or grates are wider towards the discharge, facilitating the passage of the fertilizer and preventing anything like clogging.

The discs can be removed for cleaning, especially at the end of the season, so as

to have the drill in good condition when next wanted. The fertilizer feed can be thrown in and out of gear when machine is in motion and independent of wheat feed. Quantity of fertilizer sown is regulated with lever, no change of gear being necessary. This feed will distribute fertilizer that others will not sow at all, and also does nice work distributing air-slaked or ground lime, and will distribute air-slaked or ground lime to the same volume as it will sow fertilizer. As the weight of air-slaked and ground lime varies it is hard to give an accurate statement as to what the drill will do, any more than that it will sow the same volume of lime as fertilizer.

• There is a small revolving scraper on the disc plate which scrapes off the amount of fertilizer wanted and as the scraper is moved towards the hand, or the point towards the center of the disc, the more readily and larger quantity of fertilizer or lime it will scrape off, therefore, you can readily see that the fertilizer can be sown by volume and not by weight, making it one of the most durable and accurate fertilizer sowing devices on the market, inasmuch as it is one of the simplest as well as the best.

Peas, beans and corn are also sown in the fertilizer sowing device and is regulated in the same manner. They can be successfully sown just as the drill is, but when a large quantity is to be sown, the agitator should be taken out by removing the spring cotters. At the end you will notice the bar on which the agitator is fastened to the revolving disc bar by a spring cotter. This can easily be removed, as the beans and corn do not need agitating. It will not be as liable to break the grain when this is out.

**Don't overlook our prices on Canvas and
Leather Belting.**

**We are prepared to give you the latest
prices on Black and Galvanized Pipe and
Fittings. Get our quotations.**

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	Pricing No.	Cast- ing No.	Name of Parts	Pricing No.
1-A	Pivot or Bearing for Fertilizer Disc	20 434	1	Sprocket Wheel for Grass Seed Shaft, 14 Teeth 13-16 in. bore	40
2	Gear Wheel	25 439-A	1 50	Boot with Hoe or Shovel Point	1 50
4	Yoke for Grain Slide	10 443-A	1	Arm with Pins for No. 429 Gear Wheels (O. S.)	25
33	Hinge for Grass Seed Hopper Lid (Left)	15 454	25	Pulley for No. 374 Bracket for Chain Tightener	25
34	Hinge for Grass Seed Hopper Lid (Right)	15 457	25	Sprocket Wheel on Grain Feed Shaft, 14 Teeth, 13-16 in. bore	75
72	Stay for Fertilizer Hopper Lid	05 458-A	40	Cap on end of Wood Roller to lift Boots (Right)	40
116	Pinion for Grain Feed Shaft 14 Teeth 13-16 inch bore	40 459	20	Latch with Pawl for No. 458-A Cap	20
135	Crank for Zigzag Rod	10 460	25	Lift Bar latch lug	25
156	Washer for Drag Bar Spring	1 35 469	35	Bracket with Pin for No. 459 Latch	35
246	Gear Wheel on No. 443-L Arm 42 Teeth 1 in. bore	25 470	35	Eccentric for No. 493 Cap on end of Wood Roller	35
258	Lever to move Grass Seed Slide	20 487	40	Lever for No. 487 Link, for Fertilizer Slide Bar	40
259	Bracket with Pin for No. 258 Lever	20 489	40	Link between No. 433-A Arm and No. 473 Lever	40
260-L	Coupling for Zigzag Bar	20 497	20	Bracket on Wood Roller for Chain for Lifting Boot	20
283-O	Bracket on end of Tongue for Hook Bolt	25 520	15	Bracket with Pin for No. 419 Lever	15
309	Box with No. 310 Bottom for Grain Feed Rod	25 521	10	Star (with Pin) to Feed Fertilizer	10
311	Hinge for Fertilizer Hopper Lid (Left)	25 550	2	Head for Grain Hopper with No. 550-A Cap for Box (Left)	2
312	Hinge for Fertilizer Hopper Lid (Right)	25 550-A	30	Cap for Box on No. 550 Head (Left)	30
313	Hinge for Grain Hopper Lid (Left)	25 551	30	Head for Grain Hopper with 551-A Cap for Box (Right)	30
314	Hinge for Grain Hopper Lid (Right)	15 551-A	70	Cap for Box on No. 551 Head (Right)	70
315	Bracket for Axle Stub (Right) (O. S.)	15 553	35	Frame for Fertilizer Disc (Malleable)	35
322	Triangle to move Oats Agitator	15 556	20	Angular Cut-off Gate for Fertilizer	20
324	Arm Bar Oats Agitator	25 563	35	Bracket on Wood Frame for Zigzag Lever	35
328	Frame on Grain Roller	1 00 565	65	Bed Plate for Fertilizer Disc	65
332	Gear Wheel on No. 469 Arm, 42 Teeth 1 inch bore	1 25 568	15	Bed Plate for Fertilizer	15
333	Gear Wheel for Grain Feeder Shaft, 45 Teeth 13-16 in. bore	25 568	15	Gauge Plate for Fertilizer	15
338	Worm for Grain Feed Shaft, 3/4 inch square hole	20 569	50	Pointer for Fertilizer Gauge	50
341	Bracket on Wood Frame for Drag Bar	25 570-A	75	Top or coupling (2 pieces with spring) for Gum Tube	75
341-A	Bracket on Wood Frame for Drag Bar End	65 580	25	& 580-A, Conveyor for Grain and Fertilizer (fit together)	25
342	Slide (Section) under Grain Hopper with Pin	65 586	35	Shield over No. 565 Bed Plate for Fertilizer	35
343	Slide (Section) under Grain Hopper without Pin	65 589	15	Guide on Wood Frame for No. 443-L Arm	15
349	Dial for Acre Register	50 602	20	Frame protection casting	20
350	Gear Wheel for Acre Register (Outside)	15 603	20	Box for Zigzag Shaft (Left)	20
351	Gear Wheel for Acre Register (Inside)	20 606	30	Box for Zigzag Shaft (Right)	30
353	Cap for Shaft for Acre Register	35 608	1 50	Hub (Ratchet) for Truck Wheel (Right and Left)	1 50
354	Link on Boot for Drag Bar (Right)	20 607	1	Cap for No. 606 Hub (Left)	1
355	Link on Boot for Drag Bar (Left)	35 609	1 50	Cap for No. 610 and No. 332 Gear Wheels	1 50
363	Bracket on Drag Bar for Spring	50 610	10	Gear Wheel with Set Screw for Drive Axle, 32 Cogs,	10
368	Grain Regulator in Hopper	35 613	1 15	1 1/2 in. bore (Right and Left)	1 15
369	Head for Grass Seed Hopper (Left)	1 50 614	1 75	Arm (1 Piece) for No. 332 Gear Wheel	1 75
370-A	Head for Grass Seed Hopper (Right)	15 615	10	Shield over Gearing (Left)	10
374	Bracket with Pin for No. 154 Pulley for Chain Tightener	50 619	10	Shield over Gearing (Right)	10
382-A	Gear Wheel for Fertilizer Feed Shaft to sow 500 lbs., 35 teeth 3/4 in. bore (Special)	40 620	10	Hand for Acre Register	10
383	Pointer for Grass Seed Slide	25 621	20	Tie in Seed Hopper	20
388	Sprocket Wheel for Grain Feed Shaft, 8 Teeth 13-16 in. bore	40 621	45	Sprocket Wheel (Special) to Drive Seed Shaft 13-16 in.	45
413	Cap on end of Wood Roller to lift Boots (Left)	50 622	20	bore, 10 sprockets	20
418	Register Plate on Grain Hopper (for Wheat and Oats)	50 623	22	Wrench for 6 Nuts	22
419	Lever for Wheat and Oats Register	85 624	10	Set Collar Fort. Shaft, 3/4 in. bore	10
423	Stand for Wood Roller to Lift Boots (Right)	50 624	10	Oil Hole Cap	10
424	Stand for Wood Roller to Lift Boots (Left)	50 625	10	Washer on Drag Bar	10
426	Disc to Feed Fertilizer (some not numbered)			Casting to hold Shift Bar	10
430-A	Box for Fertilizer Feed Shaft, 1 5-16 in. bore				

Cast- ing No.	Name of Parts	Price	Cast- ing No.	Name of Parts	Price
626	Bracket for Seeder Box	15		Gum Tube or Spout with No. 570-A Coupling	
627	Pawl for Latch for 459 Cstg.	10		Zigzag Bar	\$ 25
628	Cstg. for Slot in 613	10		Hopper for Grass Seed (8 Hoe) (Wood only)	1 50
631	Swingle Tree Hook	18		Hopper for Grass Seed (9 Hoe) (Wood only)	1 60
632	Button for Lid	10		Hopper for Grass Seed (10 Hoe) (Wood only)	1 75
633	Collar for Seeder Shaft	10		Hopper for Grass Seed (11 Hoe) (Wood only)	1 85
635	Slide under Grain Hopper	65		Hoe or Shovel for Boot	20
636	Slide under Grain Hopper	65		Lid for Grass Seed Hopper (8 Hoe)	50
637	28 Tooth Gear, U. S.	1 10		Lid for Grass Seed Hopper (9 Hoe)	50
638	41 Tooth Gear, U. S.	1 25		Lid for Grass Seed Hopper (10 Hoe)	60
639	Hub, R. & L.	3 00		Lid for Grass Seed Hopper (11 Hoe)	60
640	Hub Cap, R. H.	1 50		Lever for Zigzag Boots	1 25
641	Hub Cap, L. H.	1 50		Neck Yoke, 10-11 Hoe, 3 Horse yoke, 41 1/4 in. long, each	75
642	Shield	1 75		Neck Yoke 8-9 Hoe, 2 Horse Yoke, 45 1/4 in. long	75
643	Shield, R. H.	1 75		Plate to hold Fertilizer Slide (Casting)	10
644	Shield, L. H.	1 75		Pinion (Bevel) on Fertilizer Shaft to Drive Disc	30
645-L	Box for Axle 1 3/8 in. bore	1 25		Roller (Wood) for Chain to Lift Boots (8 Hoe)	1 50
645	Box or Axle 1 3/8 in. bore	1 25		Roller (Wood) for Chain to Lift Boots (9 Hoe)	1 60
646	Box for Axle U. S. 1 3/8 in. bore	1 25		Roller (Wood) for Chain to Lift Boots (10 Hoe)	1 75
646-L	Box for Axle U. S., 1 3/8 in. bore	1 25		Roller (Wood) for Chain to Lift Boots (11 Hoe)	1 85
652-A	Arm	1 15		Shaft for Bevel Pinion to Drive Fertilizer Disc, (8 and 9 Hoe)	
655	Gear	1 10		66 3/8 in. x 3/4 in.	2 50
656	Bottom for fertilizer on 11 hoe	65		Shaft for Bevel Pinion to Drive Fertilizer Disc (10 and 11 hoe)	
657	Casting on end of channel iron	30		82 1/2 in. x 3/4 in.	2 50
PARTS NOT NUMBERED					
	Acre Register (Complete)	2 25		Shaft to Drive Gum Feeders (Front) (8 Hoe) 67 3/8 in. x 7/8 in.	2 50
	Agitator (Wood) for Oats (8 Hoe)	75		Shaft to Drive Gum Feeders (Rear) (8 Hoe) 68 1/2 in. x 7/8 in.	2 25
	Agitator (Wood) for Oats (9 Hoe)	85		Shaft to Drive Gum Feeders (Front) (9 Hoe) 67 3/8 in. x 7/8 in.	2 75
	Agitator (Wood) for Oats (10 Hoe)	1 00		Shaft to Drive Gum Feeders (Rear) (9 Hoe) 68 1/2 in. x 7/8 in.	2 50
	Agitator (Wood) for Oats (11 Hoe)	1 15		Shaft to Drive Gum Feeders (Front) (10 Hoe) 83 5/8 in. x 7/8 in.	3 00
	Agitator (Iron) for Fertilizer (8 Hoe)	90		Shaft to Drive Gum Feeders (Rear) (10 Hoe) 84 1/2 in. x 7/8 in.	2 75
	Agitator (Iron) for Fertilizer (9 Hoe)	95		Shaft to Drive Gum Feeders (Front) (11 Hoe) 83 5/8 in. x 7/8 in.	3 00
	Agitator (Iron) for Fertilizer (10 Hoe)	1 00		Shaft to Drive Gum Feeders (Rear) (11 Hoe) 84 1/2 in. x 7/8 in.	2 75
	Agitator (Iron) for Fertilizer (11 Hoe)	1 15		Shaft for Grass Seeder (8 & 9 Hoe) 67 3/8 in. x 5-16 in.	90
	Axles—In ordering axles always give No. on Hub			Shaft for Grass Seeder (10 & 11 Hoe) 83 5/8 in. x 5-16 in.	1 00
	Axle (Steel) 8 and 9 Hoe 6 ft. 11 in. x 1 3/8 in.	2 90		Shaft for Coupling for Zigzag Bar (8 & 9 Hoe)	1 75
	Axle (Steel) 10 and 11 Hoe 8 ft. 4 in. x 1 3/8 in.	3 00		Shaft for Coupling for Zigzag Bar (10 & 11 Hoe)	1 85
	Axle—Plain drill, same price and size as above.			Slide for Grass Seeder (8 & 9 Hoe) 3-32 in. x 60 7/8 in.	50
	Cap for Timothy Seed Rod	10		Slide for Grass Seeder (10 & 11 Hoe) 3-32 in. x 3/4 in. x 77 in.	60
	Chain to Drive Grass Seed Attachment, 40 No. 25 Links	65		Slide for Fertilizer (8 Hoe) 3-16 in. x 3/4 in. x 61 1/2 in.	90
	Chain to Lift Boot, 29 1/2 in. long	30		Slide for Fertilizer (9 Hoe) 3-16 in. x 3/4 in. x 60 1/2 in.	90
	Chain to Lift Boot, U. S., 21 in. long	28		Slide for Fertilizer (10 Hoe) 3-16 in. x 3/4 in. x 77 in.	1 00
	Double Tree with Single Trees	2 75		Slide for Fertilizer (11 Hoe) 3-16 in. x 3/4 in. x 77 in.	1 10
	Feeder for Timothy Seed (Complete) Fit Together	50		Single Tree (8, 9, 10 and 11 Hoe)	40
	Gum Grain Feeder (13-16 in. square hole)	30		Spring for Brake Bar	75
	Gum Tube or Spout (Tube only)	40		Thripple Tree Complete (10 and 11 Hoe)	3 75
				Wheel for Truck (with No. 639)	6 00
				Tongue (8, 9, 10, 11 Hoe) for 2 Horses	3 00
				Tongue (10 and 11 Hoe) for 3 Horses	5 00
				Whiffle Tree for 2 Horses	1 25

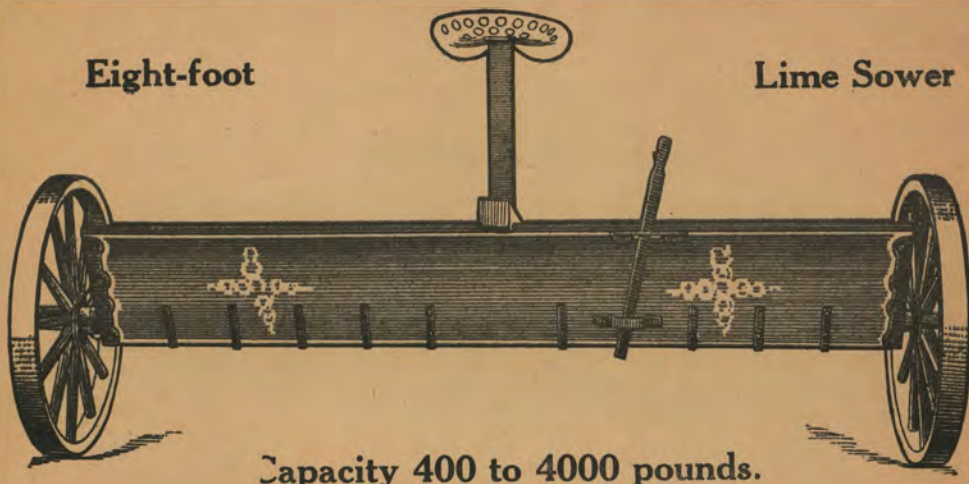
HERTZLER AND ZOOK LIME SOWER

No. 87

\$48.50

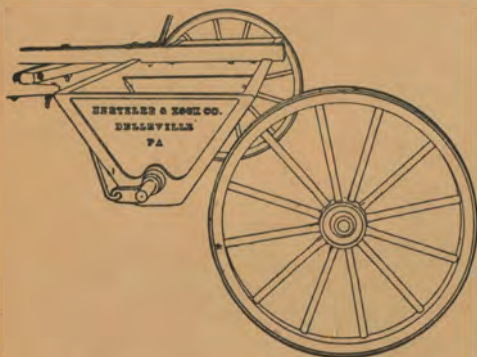
Eight-foot

Lime Sower



Capacity 400 to 4000 pounds.

Capacity 400 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.

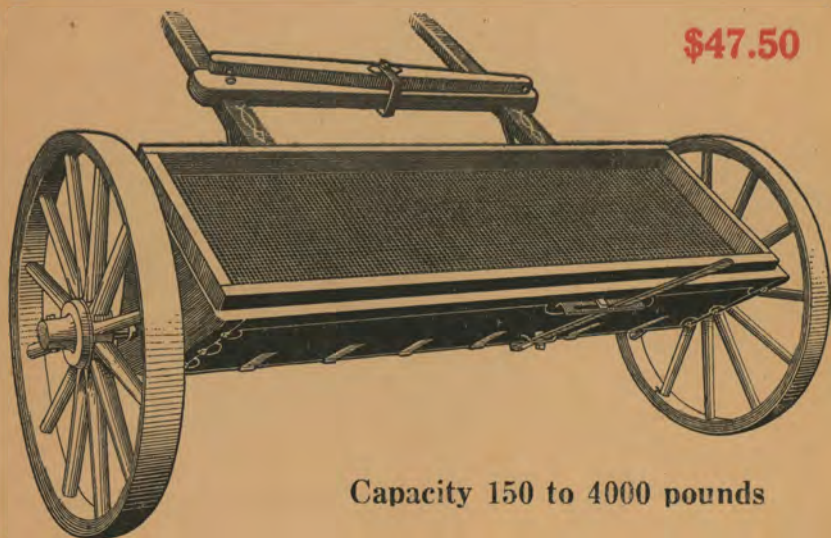
WHEELS—The wheels are made of hand shaved and driven spokes, 3 in. iron tire, 34 inches in diameter, each wheel consisting of a cast iron hub with ratchet making a permanent, direct drive from each end avoiding any missing or skipping.

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 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.

HERTZLER AND ZOOK LIME SOWER

Low Down Force Feed Lime Sower



Capacity 150 to 4000 pounds

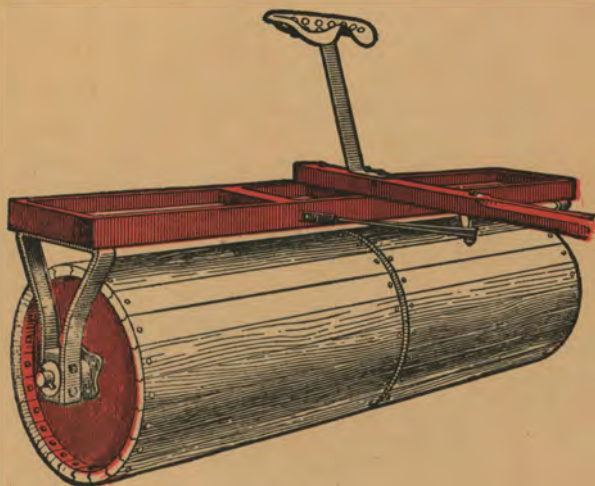
This cut shows our 5-foot overall spreader for vineyard use, also 5-foot hopper. Simple, strong and durable. This sower or broad caster is strongly built of good material and workmanship and sold absolutely on its merits that if it does not sow (Commercial fertilizer, Hydrated Lime, Pulverized or ground 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. Can be used successfully to sow Calcium Chloride.

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.

Number	Length	Capacity	Shipping wt.		Price
84	3 ft.	5 bu.	400 lbs.	with shaft and screen	\$46.50
86	5 ft.	7 bu.	425 lbs.	with shaft and screen	47.50
87	8 ft.	11 bu.	450 lbs.	with screens and pole only	48.50
Double-tree and yoke extra					2.50
Extra screens per set					2.50
Seat extra					1.75

The **HERTZLER & ZOOK**

HARDWOOD, STAVE LAND ROLLER



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 5/8" 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	\$45.00
Price with seat and spring	47.50
Price with seat and spring, double tree and yoke all complete	50.00

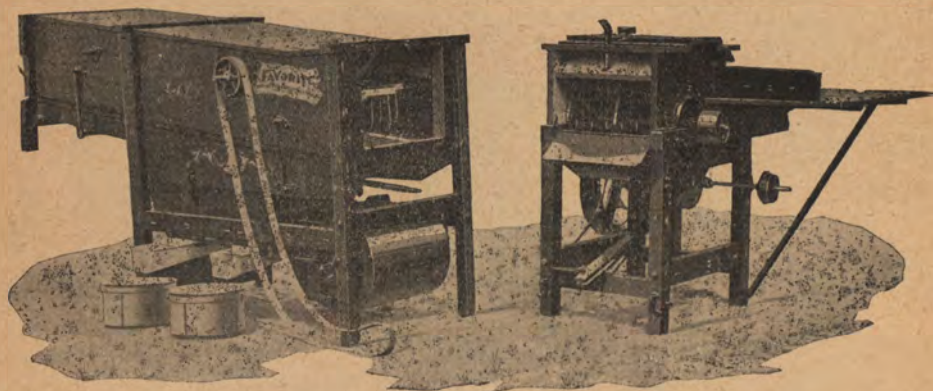
Grain Thresher, Separator, and Cleaner

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

The following illustration shows our No. 1 Favorite 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.

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.

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.



IMPROVED NO. 1 FAVORITE THRESHER AND CLEANER

For price see page 46.

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.

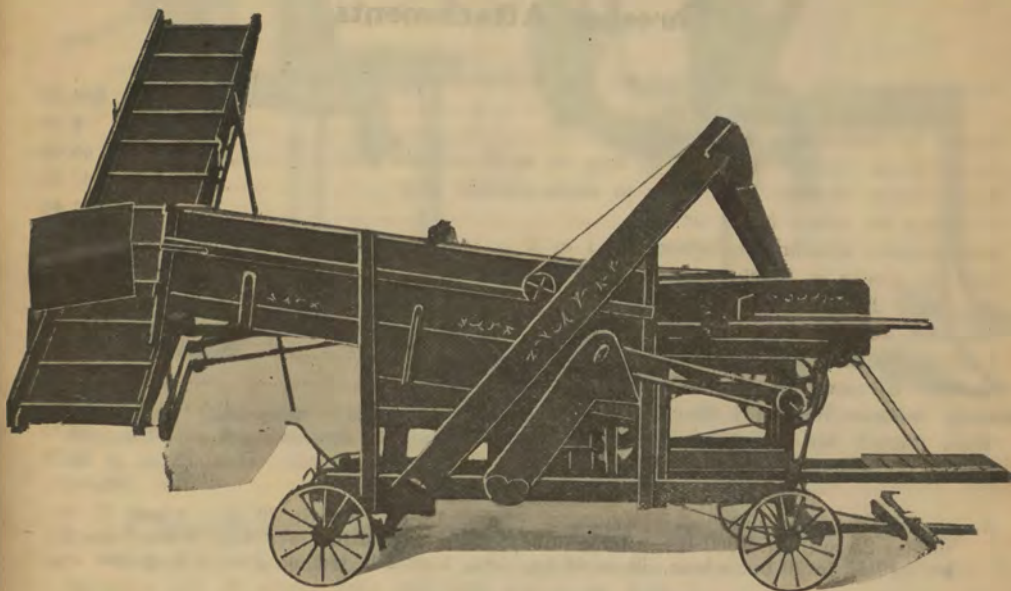
COMPLETENESS OF MACHINE. When straw carrier and Tailings elevator are attached to this machine it makes a complete outfit and we guarantee it to do as good clean and accurate work as any large machine only less of it.

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.

IMPROVED NO. 2 FAVORITE THRESHER AND CLEANER

Mounted with Tailings Elevator, Bagger and Side Delivery Straw Carrier. For Price
For price see page 50.



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

We use nothing but the best of material and no one but experienced workmen are employed to prepare and assemble the material that goes into the make-up of our machines.

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 Northwest, 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.

Prices on Threshers and Cleaners with Small Belts

Junior Favorite Thresher, hand or light power, size of cylinder 18 in. long	\$ 84.50
No. 1, Favorite Overshot Thresher, size of cylinder 20 in.	209.00
No. 1, Favorite Overshot Peanut Thresher, size of cylinder 20 in.	209.00
No. 2, Favorite Overshot Thresher, size of cylinder, 24 in.	285.00
Bean or Pea attachment for either No. 1 or No. 2 Grain Thresher	15.20

Thresher Attachments

Four wheel truck with attachments for mounting any of the above Threshers and cleaners without brake	\$64.60
Brake for mountings, additional	8.55
No. 1 Straw Stacker, 16 or 18 ft. long to work straight only	45.60
No. 2 Straw Stacker, 16 ft. long to work straight only	47.50
Windlass for either No. 1 or 2	11.40
Side delivery attachment, either No. 1 or 2	11.40
Add for screen in Stacker for No. 1 Peanut Thresher	3.80
For No. 2	4.75
For each additional foot of Straw Stacker	2.66
Tailings Elevator for No. 1 Machine	23.75
Tailings Elevator for No. 2 Machine	26.60
Grain Bagger for No. 1 Machine	22.80
Grain Bagger for No. 2 Machine	23.75
Duster for either of above Machines put on	23.75

No. 1 Favorite Thresher, plain; cylinder, diam. 18 in., length 20 in.; trunk 27 in.; riddles 22 in.; wt. 1060 lbs.; drive pulley, diam. 5 & 6 in., face 4 or 5 in.; capacity, per hr., 15 to 20 bu. wheat, 30 to 40 bu. oats; 1 or 2 h. trd. p., 2 or 3 h. p. gas eng.

No. 2 Favorite Thresher, plain; cylinder, diam. 18 in., length 24 in.; trunk 34 in.; riddles 30 in.; wt. 1400 lbs.; drive pulley, diam. 5 & 6 in., face 5 in.; capacity per hr., 25 to 30 bu. wheat, 50 to 60 bu. oats; 2 h. trd. or 4 h. lr. p., 4 to 6 h.p. gas eng.

Add for Extras, No. 1, Straw Stacker, 16 or 18 ft. long; wt. 200 lbs.; about $\frac{1}{2}$ h. p.
 Add for Extras, No. 2, Straw Stacker, 16 or 18 ft. long; wt. 225 lbs.; about $\frac{1}{2}$ h. p.
 Add for Extras, No. 1, Tailings Elevator; wt. 75 lbs.; about $\frac{1}{4}$ h. p.
 Add for Extras, No. 2, Tailings Elevator; wt. 80 lbs.; about $\frac{1}{4}$ h. p.
 Add for Extras, No. 1, Bagger; wt. 60 lbs.; about $\frac{1}{4}$ h. p.
 Add for Extras, No. 2, Bagger; wt. 70 lbs.; about $\frac{1}{2}$ h. p.
 Add for Extras, No. 1, Mountings and Brake; wt. 470 lbs.
 Add for Extras, No. 2, Mountings and Brake; wt. 500 lbs.

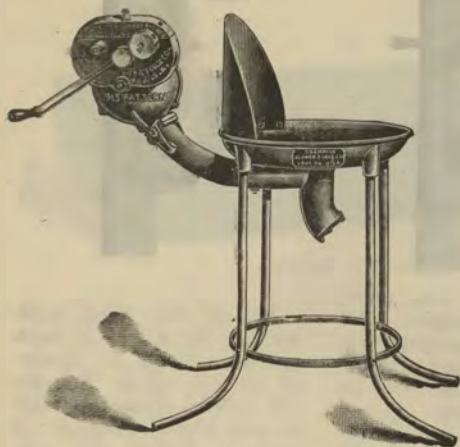
No. 1, Favorite Thresher, complete with mountings, Straw Stacker, Tailings Elevator and Bagger; cylinder, diam. 18 in.; length 20 in.; trunk 27 in.; riddles 22 in.; wt. 1865 lbs.; drive pulley, diam. 5 & 6 in.; face 4 or 5 in.; capacity per hr., 15 to 20 bu. wheat, 30 to 40 bu. oats; 3 to 4 h. p. gas eng. or larger.

No. 2, Favorite Thresher, complete with mountings, Straw Stacker, Tailings Elevator and Bagger; cylinder, diam. 18 in., length 24 in.; trunk 34 in.; riddles 30 in.; wt. 2275 lbs.; drive pulley, diam. 5 & 6 in., face 5 in.; capacity per hr., 25 to 30 bu. wheat, 50 to 60 bu. oats; 5 to 6 h. p. gas eng. or larger.

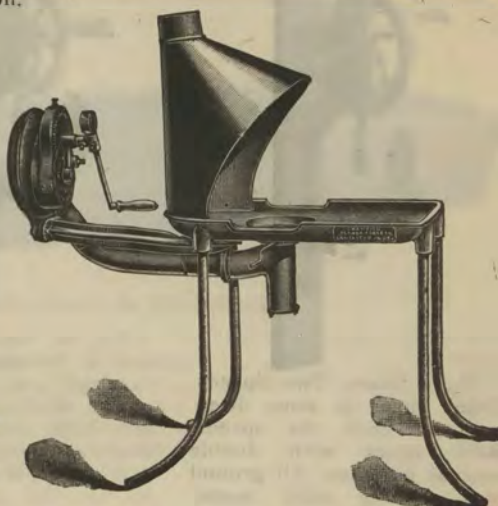
Speed:—For cylinder on all Favorite Threshers with regular pulleys, oats and wheat 1000 to 1200 R. P. M.; buckwheat, 800 to 900 R. P. M. on large pulley. Use the blank concave for buckwheat as well as for beans and cow peas. Regulate the wind accordingly. For further information see directions with the machine.

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. \$21.00



No. 43 Champion Lancaster Geared Direct-Drive Agricultural Forge. Hearth 23x35 in., height 30 in., fan 12 in., with half hood, weight 170 lbs. \$31.75

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. \$9.60

No. 151 Champion Agricultural Lever Forge, same as No. 150, with half hood, weight 85 lbs. \$10.75



No. 152 Champion Agricultural Crank Forge with shield, hearth 18 in., height 30 in., fan 8 in., weight 75 lbs. \$9.60

No. 153 Champion Agricultural Crank Forge, same as No. 152, with half hood, weight 80 lbs. \$10.75

Champion Post Drills

No. BB 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. BB Champion self-feed blacksmith post drill ball bearings; wt. 130 lbs. Price \$16.50

THE CHAMPION "EASY" SCREW PLATE WITH TAP WRENCH

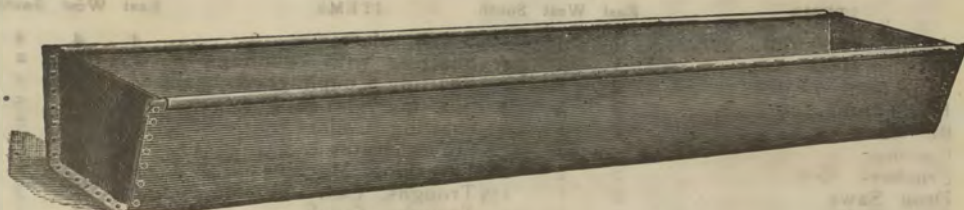


"Easy" Sets are now furnished with two stocks. Every set is furnished with the Celebrated Electric Adjustable Tap Wrench. All our taps are machine-relieved.

No. 5b, Plate Complete in Box. Two stocks, 15 1/2 and 23 inches. Cutting 1/20, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1 1/8, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4, 6, 6 1/4, 6 1/2, 6 3/4, 7, 7 1/4, 7 1/2, 7 3/4, 8, 8 1/4, 8 1/2, 8 3/4, 9, 9 1/4, 9 1/2, 9 3/4, 10, 10 1/4, 10 1/2, 10 3/4, 11, 11 1/4, 11 1/2, 11 3/4, 12, 12 1/4, 12 1/2, 12 3/4, 13, 13 1/4, 13 1/2, 13 3/4, 14, 14 1/4, 14 1/2, 14 3/4, 15, 15 1/4, 15 1/2, 15 3/4, 16, 16 1/4, 16 1/2, 16 3/4, 17, 17 1/4, 17 1/2, 17 3/4, 18, 18 1/4, 18 1/2, 18 3/4, 19, 19 1/4, 19 1/2, 19 3/4, 20, 20 1/4, 20 1/2, 20 3/4, 21, 21 1/4, 21 1/2, 21 3/4, 22, 22 1/4, 22 1/2, 22 3/4, 23, 23 1/4, 23 1/2, 23 3/4, 24, 24 1/4, 24 1/2, 24 3/4, 25, 25 1/4, 25 1/2, 25 3/4, 26, 26 1/4, 26 1/2, 26 3/4, 27, 27 1/4, 27 1/2, 27 3/4, 28, 28 1/4, 28 1/2, 28 3/4, 29, 29 1/4, 29 1/2, 29 3/4, 30, 30 1/4, 30 1/2, 30 3/4, 31, 31 1/4, 31 1/2, 31 3/4, 32, 32 1/4, 32 1/2, 32 3/4, 33, 33 1/4, 33 1/2, 33 3/4, 34, 34 1/4, 34 1/2, 34 3/4, 35, 35 1/4, 35 1/2, 35 3/4, 36, 36 1/4, 36 1/2, 36 3/4, 37, 37 1/4, 37 1/2, 37 3/4, 38, 38 1/4, 38 1/2, 38 3/4, 39, 39 1/4, 39 1/2, 39 3/4, 40, 40 1/4, 40 1/2, 40 3/4, 41, 41 1/4, 41 1/2, 41 3/4, 42, 42 1/4, 42 1/2, 42 3/4, 43, 43 1/4, 43 1/2, 43 3/4, 44, 44 1/4, 44 1/2, 44 3/4, 45, 45 1/4, 45 1/2, 45 3/4, 46, 46 1/4, 46 1/2, 46 3/4, 47, 47 1/4, 47 1/2, 47 3/4, 48, 48 1/4, 48 1/2, 48 3/4, 49, 49 1/4, 49 1/2, 49 3/4, 50, 50 1/4, 50 1/2, 50 3/4, 51, 51 1/4, 51 1/2, 51 3/4, 52, 52 1/4, 52 1/2, 52 3/4, 53, 53 1/4, 53 1/2, 53 3/4, 54, 54 1/4, 54 1/2, 54 3/4, 55, 55 1/4, 55 1/2, 55 3/4, 56, 56 1/4, 56 1/2, 56 3/4, 57, 57 1/4, 57 1/2, 57 3/4, 58, 58 1/4, 58 1/2, 58 3/4, 59, 59 1/4, 59 1/2, 59 3/4, 60, 60 1/4, 60 1/2, 60 3/4, 61, 61 1/4, 61 1/2, 61 3/4, 62, 62 1/4, 62 1/2, 62 3/4, 63, 63 1/4, 63 1/2, 63 3/4, 64, 64 1/4, 64 1/2, 64 3/4, 65, 65 1/4, 65 1/2, 65 3/4, 66, 66 1/4, 66 1/2, 66 3/4, 67, 67 1/4, 67 1/2, 67 3/4, 68, 68 1/4, 68 1/2, 68 3/4, 69, 69 1/4, 69 1/2, 69 3/4, 70, 70 1/4, 70 1/2, 70 3/4, 71, 71 1/4, 71 1/2, 71 3/4, 72, 72 1/4, 72 1/2, 72 3/4, 73, 73 1/4, 73 1/2, 73 3/4, 74, 74 1/4, 74 1/2, 74 3/4, 75, 75 1/4, 75 1/2, 75 3/4, 76, 76 1/4, 76 1/2, 76 3/4, 77, 77 1/4, 77 1/2, 77 3/4, 78, 78 1/4, 78 1/2, 78 3/4, 79, 79 1/4, 79 1/2, 79 3/4, 80, 80 1/4, 80 1/2, 80 3/4, 81, 81 1/4, 81 1/2, 81 3/4, 82, 82 1/4, 82 1/2, 82 3/4, 83, 83 1/4, 83 1/2, 83 3/4, 84, 84 1/4, 84 1/2, 84 3/4, 85, 85 1/4, 85 1/2, 85 3/4, 86, 86 1/4, 86 1/2, 86 3/4, 87, 87 1/4, 87 1/2, 87 3/4, 88, 88 1/4, 88 1/2, 88 3/4, 89, 89 1/4, 89 1/2, 89 3/4, 90, 90 1/4, 90 1/2, 90 3/4, 91, 91 1/4, 91 1/2, 91 3/4, 92, 92 1/4, 92 1/2, 92 3/4, 93, 93 1/4, 93 1/2, 93 3/4, 94, 94 1/4, 94 1/2, 94 3/4, 95, 95 1/4, 95 1/2, 95 3/4, 96, 96 1/4, 96 1/2, 96 3/4, 97, 97 1/4, 97 1/2, 97 3/4, 98, 98 1/4, 98 1/2, 98 3/4, 99, 99 1/4, 99 1/2, 99 3/4, 100, 100 1/4, 100 1/2, 100 3/4, 101, 101 1/4, 101 1/2, 101 3/4, 102, 102 1/4, 102 1/2, 102 3/4, 103, 103 1/4, 103 1/2, 103 3/4, 104, 104 1/4, 104 1/2, 104 3/4, 105, 105 1/4, 105 1/2, 105 3/4, 106, 106 1/4, 106 1/2, 106 3/4, 107, 107 1/4, 107 1/2, 107 3/4, 108, 108 1/4, 108 1/2, 108 3/4, 109, 109 1/4, 109 1/2, 109 3/4, 110, 110 1/4, 110 1/2, 110 3/4, 111, 111 1/4, 111 1/2, 111 3/4, 112, 112 1/4, 112 1/2, 112 3/4, 113, 113 1/4, 113 1/2, 113 3/4, 114, 114 1/4, 114 1/2, 114 3/4, 115, 115 1/4, 115 1/2, 115 3/4, 116, 116 1/4, 116 1/2, 116 3/4, 117, 117 1/4, 117 1/2, 117 3/4, 118, 118 1/4, 118 1/2, 118 3/4, 119, 119 1/4, 119 1/2, 119 3/4, 120, 120 1/4, 120 1/2, 120 3/4, 121, 121 1/4, 121 1/2, 121 3/4, 122, 122 1/4, 122 1/2, 122 3/4, 123, 123 1/4, 123 1/2, 123 3/4, 124, 124 1/4, 124 1/2, 124 3/4, 125, 125 1/4, 125 1/2, 125 3/4, 126, 126 1/4, 126 1/2, 126 3/4, 127, 127 1/4, 127 1/2, 127 3/4, 128, 128 1/4, 128 1/2, 128 3/4, 129, 129 1/4, 129 1/2, 129 3/4, 130, 130 1/4, 130 1/2, 130 3/4, 131, 131 1/4, 131 1/2, 131 3/4, 132, 132 1/4, 132 1/2, 132 3/4, 133, 133 1/4, 133 1/2, 133 3/4, 134, 134 1/4, 134 1/2, 134 3/4, 135, 135 1/4, 135 1/2, 135 3/4, 136, 136 1/4, 136 1/2, 136 3/4, 137, 137 1/4, 137 1/2, 137 3/4, 138, 138 1/4, 138 1/2, 138 3/4, 139, 139 1/4, 139 1/2, 139 3/4, 140, 140 1/4, 140 1/2, 140 3/4, 141, 141 1/4, 141 1/2, 141 3/4, 142, 142 1/4, 142 1/2, 142 3/4, 143, 143 1/4, 143 1/2, 143 3/4, 144, 144 1/4, 144 1/2, 144 3/4, 145, 145 1/4, 145 1/2, 145 3/4, 146, 146 1/4, 146 1/2, 146 3/4, 147, 147 1/4, 147 1/2, 147 3/4, 148, 148 1/4, 148 1/2, 148 3/4, 149, 149 1/4, 149 1/2, 149 3/4, 150, 150 1/4, 150 1/2, 150 3/4, 151, 151 1/4, 151 1/2, 151 3/4, 152, 152 1/4, 152 1/2, 152 3/4, 153, 153 1/4, 153 1/2, 153 3/4, 154, 154 1/4, 154 1/2, 154 3/4, 155, 155 1/4, 155 1/2, 155 3/4, 156, 156 1/4, 156 1/2, 156 3/4, 157, 157 1/4, 157 1/2, 157 3/4, 158, 158 1/4, 158 1/2, 158 3/4, 159, 159 1/4, 159 1/2, 159 3/4, 160, 160 1/4, 160 1/2, 160 3/4, 161, 161 1/4, 161 1/2, 161 3/4, 162, 162 1/4, 162 1/2, 162 3/4, 163, 163 1/4, 163 1/2, 163 3/4, 164, 164 1/4, 164 1/2, 164 3/4, 165, 165 1/4, 165 1/2, 165 3/4, 166, 166 1/4, 166 1/2, 166 3/4, 167, 167 1/4, 167 1/2, 167 3/4, 168, 168 1/4, 168 1/2, 168 3/4, 169, 169 1/4, 169 1/2, 169 3/4, 170, 170 1/4, 170 1/2, 170 3/4, 171, 171 1/4, 171 1/2, 171 3/4, 172, 172 1/4, 172 1/2, 172 3/4, 173, 173 1/4, 173 1/2, 173 3/4, 174, 174 1/4, 174 1/2, 174 3/4, 175, 175 1/4, 175 1/2, 175 3/4, 176, 176 1/4, 176 1/2, 176 3/4, 177, 177 1/4, 177 1/2, 177 3/4, 178, 178 1/4, 178 1/2, 178 3/4, 179, 179 1/4, 179 1/2, 179 3/4, 180, 180 1/4, 180 1/2, 180 3/4, 181, 181 1/4, 181 1/2, 181 3/4, 182, 182 1/4, 182 1/2, 182 3/4, 183, 183 1/4, 183 1/2, 183 3/4, 184, 184 1/4, 184 1/2, 184 3/4, 185, 185 1/4, 185 1/2, 185 3/4, 186, 186 1/4, 186 1/2, 186 3/4, 187, 187 1/4, 187 1/2, 187 3/4, 188, 188 1/4, 188 1/2, 188 3/4, 189, 189 1/4, 189 1/2, 189 3/4, 190, 190 1/4, 190 1/2, 190 3/4, 191, 191 1/4, 191 1/2, 191 3/4, 192, 192 1/4, 192 1/2, 192 3/4, 193, 193 1/4, 193 1/2, 193 3/4, 194, 194 1/4, 194 1/2, 194 3/4, 195, 195 1/4, 195 1/2, 195 3/4, 196, 196 1/4, 196 1/2, 196 3/4, 197, 197 1/4, 197 1/2, 197 3/4, 198, 198 1/4, 198 1/2, 198 3/4, 199, 199 1/4, 199 1/2, 199 3/4, 200, 200 1/4, 200 1/2, 200 3/4, 201, 201 1/4, 201 1/2, 201 3/4, 202, 202 1/4, 202 1/2, 202 3/4, 203, 203 1/4, 203 1/2, 203 3/4, 204, 204 1/4, 204 1/2, 204 3/4, 205, 205 1/4, 205 1/2, 205 3/4, 206, 206 1/4, 206 1/2, 206 3/4, 207, 207 1/4, 207 1/2, 207 3/4, 208, 208 1/4, 208 1/2, 208 3/4, 209, 209 1/4, 209 1/2, 209 3/4, 210, 210 1/4, 210 1/2, 210 3/4, 211, 211 1/4, 211 1/2, 211 3/4, 212, 212 1/4, 212 1/2, 212 3/4, 213, 213 1/4, 213 1/2, 213 3/4, 214, 214 1/4, 214 1/2, 214 3/4, 215, 215 1/4, 215 1/2, 215 3/4, 216, 216 1/4, 216 1/2, 216 3/4, 217, 217 1/4, 217 1/2, 217 3/4, 218, 218 1/4, 218 1/2, 218 3/4, 219, 219 1/4, 219 1/2, 219 3/4, 220, 220 1/4, 220 1/2, 220 3/4, 221, 221 1/4, 221 1/2, 221 3/4, 222, 222 1/4, 222 1/2, 222 3/4, 223, 223 1/4, 223 1/2, 223 3/4, 224, 224 1/4, 224 1/2, 224 3/4, 225, 225 1/4, 225 1/2, 225 3/4, 226, 226 1/4, 226 1/2, 226 3/4, 227, 227 1/4, 227 1/2, 227 3/4, 228, 228 1/4, 228 1/2, 228 3/4, 229, 229 1/4, 229 1/2, 229 3/4, 230, 230 1/4, 230 1/2, 230 3/4, 231, 231 1/4, 231 1/2, 231 3/4, 232, 232 1/4, 232 1/2, 232 3/4, 233, 233 1/4, 233 1/2, 233 3/4, 234, 234 1/4, 234 1/2, 234 3/4, 235, 235 1/4, 235 1/2, 235 3/4, 236, 236 1/4, 236 1/2, 236 3/4, 237, 237 1/4, 237 1/2, 237 3/4, 238, 238 1/4, 238 1/2, 238 3/4, 239, 239 1/4, 239 1/2, 239 3/4, 240, 240 1/4, 240 1/2, 240 3/4, 241, 241 1/4, 241 1/2, 241 3/4, 242, 242 1/4, 242 1/2, 242 3/4, 243, 243 1/4, 243 1/2, 243 3/4, 244, 244 1/4, 244 1/2, 244 3/4, 245, 245 1/4, 245 1/2, 245 3/4, 246, 246 1/4, 246 1/2, 246 3/4, 247, 247 1/4, 247 1/2, 247 3/4, 248, 248 1/4, 248 1/2, 248 3/4, 249, 249 1/4, 249 1/2, 249 3/4, 250, 250 1/4, 250 1/2, 250 3/4, 251, 251 1/4, 251 1/2, 251 3/4, 252, 252 1/4, 252 1/2, 252 3/4, 253, 253 1/4, 253 1/2, 253 3/4, 254, 254 1/4, 254 1/2, 254 3/4, 255, 255 1/4, 255 1/2, 255 3/4, 256, 256 1/4, 256 1/2, 256 3/4, 257, 257 1/4, 257 1/2, 257 3/4, 258, 258 1/4, 258 1/2, 258 3/4, 259, 259 1/4, 259 1/2, 259 3/4, 260, 260 1/4, 260 1/2, 260 3/4, 261, 261 1/4, 261 1/2, 261 3/4, 262, 262 1/4, 262 1/2, 262 3/4, 263, 263 1/4, 263 1/2, 263 3/4, 264, 264 1/4, 264 1/2, 264 3/4, 265, 265 1/4, 265 1/2, 265 3/4, 266, 266 1/4, 266 1/2, 266 3/4, 267, 267 1/4, 267 1/2, 267 3/4, 268, 268 1/4, 268 1/2, 268 3/4, 269, 269 1/4, 269 1/2, 269 3/4, 270, 270 1/4, 270 1/2, 270 3/4, 271, 271 1/4, 271 1/2, 271 3/4, 272, 272 1/4, 272 1/2, 272 3/4, 273, 273 1/4, 273 1/2, 273 3/4, 274, 274 1/4, 274 1/2, 274 3/4, 275, 275 1/4, 275 1/2, 275 3/4, 276, 276 1/4, 276 1/2, 276 3/4, 277, 277 1/4, 277 1/2, 277 3/4, 278, 278 1/4, 278 1/2, 278 3/4, 279, 279 1/4, 279 1/2, 279 3/4, 280, 280 1/4, 280 1/2, 280 3/4, 281, 281 1/4, 281 1/2, 281 3/4, 282, 282 1/4, 282 1/2, 282 3/4, 283, 283 1/4, 283 1/2, 283 3/4, 284, 284 1/4, 284 1/2, 284 3/4, 285, 285 1/4, 285 1/2, 285 3/4, 286, 286 1/4, 286 1/2, 286 3/4, 287, 287 1/4, 287 1/2, 287 3/4, 288, 288 1/4, 288 1/2, 288 3/4, 289, 289 1/4, 289 1/2, 289 3/4, 290, 290 1/4, 290 1/2, 290 3/4, 291, 291 1/4, 291 1/2, 291 3/4, 292, 292 1/4, 292 1/2, 292 3/4, 293, 293 1/4, 293 1/2, 293 3/4, 294, 294 1/4, 294 1/2, 294 3/4, 295, 295 1/4, 295 1/2, 295 3/4, 296, 296 1/4, 296 1/2, 296 3/4, 297, 297 1/4, 297 1/2, 297 3/4, 298, 298 1/4, 298 1/2, 298 3/4, 299, 299 1/4, 299 1/2, 299 3/4, 300, 300 1/4, 300 1/2, 300 3/4, 301, 301 1/4, 301 1/2, 301 3/4, 302, 302 1/4, 302 1/2, 302 3/4, 303, 303 1/4, 303 1/2, 303 3/4, 304, 304 1/4, 304 1/2, 304 3/4, 305, 305 1/4, 305 1/2, 305 3/4, 306, 306 1/4, 306 1/2, 306 3/4, 307, 307 1/4, 307 1/2, 307 3/4, 308, 308 1/4, 308 1/2, 308 3/4, 309, 309 1/4, 309 1/2, 309 3/4, 310, 310 1/4, 310 1/2, 310 3/4, 311, 311 1/4, 311 1/2, 311 3/4, 312, 312 1/4, 312 1/2, 312 3/4, 313, 313 1/4, 313 1/2, 313 3/4, 314, 314 1/4, 314 1/2, 314 3/4, 315, 315 1/4, 315 1/2, 315 3/4, 316, 316 1/4, 316 1/2, 316 3/4, 317, 317 1/4, 317 1/2, 317 3/4, 318, 318 1/4, 318 1/2, 318 3/4, 319, 319 1/4, 319 1/2, 319 3/4, 320, 320 1/4, 320 1/2, 320 3/4, 321, 321 1/4, 321 1/2, 321 3/4, 322, 322 1/4, 322 1/2, 322 3/4, 323, 323 1/4, 323 1/2, 323 3/4, 324, 324 1/4, 324 1/2, 324 3/4, 325, 325 1/4, 325 1/2, 325 3/4, 326, 326 1/4, 326 1/2, 326 3/4, 327, 327 1/4, 327 1/2, 327 3/4, 328, 328 1/4, 328 1/2, 328 3/4, 329, 329 1/4, 329 1/2, 329 3/4, 330, 330 1/4, 330 1/2, 330 3/4, 331, 331 1/4, 331 1/2, 331 3/4, 332, 332 1/4, 332 1/2, 332 3/4, 333, 333 1/4, 333 1/2, 333 3/4, 334, 334 1/4, 334 1/2, 334 3/4, 335, 335 1/4, 335 1/2, 335 3/4, 336, 336 1/4, 336 1/2, 336 3/4, 337, 337 1/4, 337 1/2, 337 3/4, 338, 338 1/4, 338 1/2, 338 3/4, 339, 339 1/4, 339 1/2, 339 3/4, 340, 340 1/4, 340 1/2, 340 3/4, 341, 341 1/4, 341 1/2, 341 3/4, 342, 342 1/4, 342 1/2, 342 3/4, 343, 343 1/4, 343 1/2, 343 3/4, 344, 344 1/4, 344 1/2, 344 3/4, 345, 345 1/4, 345 1/2, 345 3/4, 346, 346 1/4, 346 1/2, 346 3/4, 347, 347 1/4, 347 1/2, 347 3/4, 348, 348 1/4, 348 1/2, 348 3/4, 349, 349 1/4, 349 1/2, 349 3/4, 350, 350 1/4, 350 1/2, 350 3/4, 351, 351 1/4, 351 1/2, 351 3/4, 352, 352 1/4, 352 1/2, 352 3/4, 353, 353 1/4, 353 1/2, 353 3/4, 354, 354 1/4, 354 1/2, 354 3/4, 355, 355 1/4, 355 1/2, 355 3/4, 356, 356 1/4, 356 1/2, 356 3/4, 357, 357 1/4, 357 1/2, 357 3/4, 358, 358 1/4, 358 1/2, 358 3/4, 359, 359 1/4, 359 1/2, 359 3/4, 360, 360 1/4, 360 1/2, 360 3/4, 361, 361 1/4, 361 1/2, 361 3/4, 362, 362 1/4, 362 1/2, 362 3/4, 363, 363 1/4, 363 1/2, 363 3/4, 364, 364 1/4, 364 1/2, 364 3/4, 365, 365 1/4, 365 1/2, 365 3/4, 366, 366 1/4, 366 1/2, 366 3/4, 367, 367 1/4, 367 1/2, 367 3/4, 368, 368 1/4, 368 1/2, 368 3/4, 369, 369 1/4, 369 1/2, 369 3/4, 370, 370 1/4, 370 1/2, 370 3/4, 371, 371 1/4, 371 1/2, 371 3/4, 372, 372 1/4, 372 1/2, 372 3/4, 373, 373 1/4, 373 1/2, 373 3/4, 374, 374 1

OUR TROUGH DEPARTMENT

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



GOOD STRONG DURABLE TROUGHS

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	16.23	10 feet long	30.00
10 feet long	18.76	12 feet long	33.00
12 feet long	22.60		

HEAVY PATTERN CAST IRON HOG TROUGHS

Prices are within reach of all



No. 33

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 \$1.00 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.

Any man who raises pigs or shoats cannot afford to do without them.

At this age greater attention is being paid to the raising of hogs than ever before, and our hog troughs improved these conditions, and are of

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 or 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, 5¾ 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

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, Mounted 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	1	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	\$6.72	5.45	4.37	3.28	3.00	
ALABAMA						
Birmingham	2.81	2.42	2.13	1.85	1.48	1.20
Montgomery	2.69	2.37	2.10	1.57	1.40	1.20
ARKANSAS						
Little Rock	3.67	3.22	2.53	1.92	1.46	1.20
BRITISH COL.						
Rossland	7.94	6.66	5.42	4.16	3.65	
Vancouver	7.42	6.59	5.52	4.68	3.98	
COLORADO						
Denver	4.97	4.10	3.16	2.45	1.93	
CALIFORNIA						
Los Angeles	7.50	6.16	5.40	4.59	3.68	
Sacramento	7.50	6.16	5.40	4.59	3.68	
CONNECTICUT						
Hartford	1.43	1.26	.99	.78	.64	.52
DELAWARE						
Dover	1.33	1.13	.97	.71	.59	.49
Wilmington	1.05	.89	.80	.53	.46	.38
DIST. OF COL.						
Washington	1.13	.95	.84	.59	.50	.41
FLORIDA						
Jacksonville	2.44	2.02	1.71	1.30	1.02	.90
Tampa	3.33	2.84	2.32	1.86	1.53	1.36

From	Freight Rates, Per 100 lbs.					
BELLEVILLE	CLASS					
To	1st	2nd	3rd	4th	5th	6th
GEORGIA						
Atlanta	2.63	2.32	2.06	1.90	1.41	1.12
Thomasville	2.63	2.32	2.06	1.90	1.41	1.12
IOWA						
Des Moines	2.48	2.25	1.83	1.36	.99	
INDIANA						
Indianapolis	1.50	1.30	1.05	.85	.67	.60
Evansville	1.69	1.47	1.19	.88	.74	.63
ILLINOIS						
Springfield	1.74	1.50	1.20	.92	.77	.62
Chicago	1.57	1.37	1.12	.84	.73	.60
IDAHO						
Avery	7.50	5.77	5.21	4.21	3.76	
KENTUCKY						
Frankfort	2.13	1.86	1.71	1.16	1.02	
Louisville	1.55	1.39	1.08	.84	.70	
LOUISIANA						
Baton Rouge	2.55	2.10	1.76	1.40	1.22	
MAINE						
Augusta	1.60	1.39	1.15	.88	.73	
Portland	1.43	1.26	.99	.78	.56	
MARYLAND						
Baltimore	1.18	.99	.87	.67	.55	.46
Cumberland	1.18	.99	.87	.67	.55	.46
Hagerstown	1.18	.99	.87	.67	.55	.46

From BELLEVILLE To	Freight Rates, Per 100 lbs. CLASS					
	1st	2nd	3rd	4th	5th	6th
MICHIGAN						
Lansing	1.53	1.33	1.06	.78	.66	.55
Marquette	2.02	1.71	1.26	1.04	.90	.66
MINNESOTA						
St. Cloud	2.51	2.14	1.74	1.26	1.04	
St. Paul	2.28	1.99	1.55	1.19	.94	
MISSOURI						
Jackson	2.21	1.50	1.18	1.12	.73	.60
St. Louis	2.21	1.50	1.18	1.12	.73	.60
MISSISSIPPI						
Jackson	2.88	2.48	2.18	2.17	1.51	1.29
MONTANA						
Great Falls	6.26	5.35	4.37	3.40		
MASSACHUSETTS						
Boston	1.38	1.20	.95	.71	.60	.50
NEW YORK						
Albany	1.30	1.12	.90	.67	.55	.46
Buffalo	1.19	1.04	.87	.63	.53	.43
Rochester	1.19	1.04	.87	.63	.53	.43
Utica	1.23	1.08	.87	.66	.56	.45
N. CAROLINA						
Asheville	2.60	2.27	1.99	1.62	1.36	1.13
Raleigh	1.20	1.88	1.34	1.13	.89	.81
N. DAKOTA						
Bismarck	3.98	3.40	2.70	2.02	1.67	
N. HAMPSHIRE						
Concord	1.39	1.20	.96	.71	.60	.50
Plymouth	1.39	1.20	.96	.71	.60	.50
NEBRASKA						
Lincoln	2.94	2.55	2.06	1.46	1.15	
N. JERSEY						
Bridgetown	1.26	1.09	.95	.71	.62	.53
Trenton	1.19	1.03	.87	.63	.53	.43
OHIO						
Cincinnati	1.43	1.23	.98	.74	.62	.52
Columbus	1.32	1.15	.92	.74	.62	.48
Dayton	1.32	1.26	.97	.73	.63	.50
Portsmouth	1.43	1.23	.98	.74	.62	.55
Toledo	1.32	1.15	.92	.74	.62	.48
OREGON						
Portland	6.93	6.05	5.00	4.24	3.56	

From BELLEVILLE To	Freight Rates, Per 100 lbs. CLASS					
	1st	2nd	3rd	4th	5th	6th
PENNA.						
Erie	1.16	.99	.85	.62	.50	.42
Altoona	.98	.80	.64	.48	.42	.36
Reading	1.18	1.01	.87	.63	.53	.43
Philadelphia	1.18	1.01	.87	.63	.53	.43
Lock Haven	1.09	.94	.76	.59	.49	.41
Waynesboro	1.13	.97	.84	.59	.50	.41
Everich	1.08	.92	.76	.59	.50	.41
CANADA						
Quebec	1.58	1.37	1.08	.78	.67	.49
RHODE ISLAND						
Providence	1.39	1.20	.95	.71	.60	.50
S. CAROLINA						
Abbeville	2.93	2.52	2.23	1.89	1.55	1.27
Columbia	2.68	2.17	1.90	1.60	1.29	1.01
S. DAKOTA						
Watertown	3.11	2.59	2.11	1.53	1.15	
SASKATCHEWAN						
Regina	5.27	4.44	3.47	2.58	2.45	
TEXAS						
Dallas	4.58	3.89	2.98	2.66	2.16	
TENNESSEE						
Chattanooga	2.58	2.21	1.95	1.40	1.15	
Nashville	2.13	1.78	1.39	1.02	.88	
UTAH						
Salt Lake City	7.11	6.12	4.94	3.49		
VERMONT						
Bennington	1.39	1.20	.95	.71	.60	.50
Montpelier	1.60	1.35	1.07	.81	.66	.55
VIRGINIA						
Roanoke	1.85	1.60	1.36	.99	.80	.66
Portsmouth	1.53	1.33	1.04	.76	.62	.52
Richmond	1.46	1.23	1.01	.76	.62	.52
Winchester	1.13	.97	.84	.59	.49	.41
WEST VA.						
Parkersburg	1.27	1.11	.88	.67	.55	.46
Romney	1.34	1.20	.94	.70	.59	.50
Wheeling	1.18	1.01	.87	.63	.52	.43
WASHINGTON						
Seattle	6.43	5.92	4.93	4.16	3.53	
WISCONSIN						
Madison	2.13	1.81	1.50	1.12	.98	

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.

BELLEVILLE, PENNA.

Date of this order _____

19

Enclosed please find

(Mr., Mrs., or Miss; write name very plainly; always write name the same way)

State

Shipping
Point

County

HOW TO BE SHIPPED	Freight	Express	Mail	Insured	Registered	Mail Spec. Prepaid Express
See Rules in Catalogue						(1c per oz.)

(Make a mark under the heading selected)

Order your Mail Shipments Insured
and allow 5c for each \$5.00 in value

If there is no freight agent at your shipping point, you must send money to prepay the freight charges. If there is an agent you can pay the freight when shipment reaches you. It is only necessary to prepay when there is no agent at your station. The charges will be the same.

2

(Say how much money you send)

Give Number or name of catalogue from which this order was selected.

Read the introductory pages of catalogue for information about how to send money, how to ship, etc.

If this Order Blank is not large enough for your order, use another sheet of blank paper, following this style.

More order sheets will be sent upon request.

Be sure to read about Freight Rates.

DO NOT FORGET TO GIVE SIZES AND NUMBER

[illegible]

INDEX

Anvils	33	Pulleys, Universal Woodsplit	34
Auto Jacks	35, 36	Pulleys, Iron	34
Belt Dressing	33	Repairs, Wood Saws	29
Belting, Leather	32	Repairs, Grain Drills	43, 44
Belting, Canvas	32	Rollers	47
Belting, Canvas Endless	32	Ripping Tables	14, 16, 18, 23
Belt Lacing	32	Saw Sets	25
Blower, Lancaster, Geared Blacksmith	51	Saw Blades for Ripping	28
Calcium Chloride Sowers,	45, 46	Saw Blades for Cordwood Sawing	27
Commercial Fertilizer Drills	45	Screw Plates	52
Cookers	37	Shingles, How to Saw	26
Drills, Grain	38-42	Shingle Sawing Tables	26
Drills, Post "Champion"	52	Stone Boat Heads	35
Engines	33	Stove Grates	25
Engine Trucks	30	Threshers	48-50
Engine and Saw Trucks	30	Troughs, Hog and Poultry	53
Expressions Made by Hardware Deal- ers	23	Trucks, Bag	25
Feed Cutters	8	Valuable Information	27
Files, Round Edge	22	Wagons	30
Freight rates (approximate)	54, 55	Weights, Hitching	33
Forges, Blacksmith	51	Weights, Sash	33
Furnace Plates	37	Wheels, Fly	29
Grinder and Ear Corn Crusher	7	Wheels, Grinding	31
Grain Drill Repairs	43, 44	Wheel Dressers	31
Grate Bars	33	Wood Saws (shown in colors)	9-12
Grinding Attachments	31	Wood Saws for Light Power	14
Hitching Weights	33	Wood Saws for all Purposes	9-30
Lace Leather	32	Wood Saws, Swing Tables	9-18, 23
Land Rollers	47	Wood Saws, Sliding Tables	16, 19, 20
Lime Sowers (for vineyards)	45	Wood Saws, Steel Frames	20, 21
Lime Sowers	45, 46	Wood Saw, Roller Table,	24
Mandrel Sets	28, 29	Wood Saws for Mounting on Wagon	23
Oiler, Felloe	31	Wood Saws for Pole and Cordwood only	17-23
Post Mauls	31	Wood Saws, Parts	26
Pulleys, Cast Iron	34		

H & Z CO.

In the preceding pages of this little book, we present the H & Z Line for your careful inspection and consideration.

You will appreciate that with ink and paper, the true worth of an article can not always be shown and we can but say that the H. & Z. Line is designed by practical and experienced men, that the best material obtainable is used in the manufacture of our products, and they are made, erected and finished by expert workmen.

We offer to our trade one of the most complete line of wood saw frames manufactured.

We assure you you will profit by keeping in touch with us.

Plate and Burr Feed Mills
at factory
prices

Manufacturers of
The Greatest line of
Cord Wood-Sawing
Machinery in the
World

Manufacturers of
Grain Seed, Fertilizer,
Bean, Pea and
Corn Drills

BEFORE SEALING THIS ENVELOPE

Be sure you have written your name,
postoffice and shipping point plainly
on your order.

PLEASE WRITE NAME PLAINLY

Name

Post Office

State

R. R. No. Box No.

St. and No.

PLACE
TWO-CENT
STAMP
HERE

The Hertzler & Zook Co.

Belleville, Penna.



These Certificates entitle you to share in our profits

When you buy from The United Factories Co. you pay Yourself a Profit every time you buy



Tilting Table Wood and Pole Saw Frame No. 2

A 345. The illustration shows our combination pole and wood saw frame with table set for sawing poles. It can be used for sawing wood by simply changing a few bolts, making it in appearance in operation almost exactly the same as wood saw frame No. 1, with the exception of part of the frame.

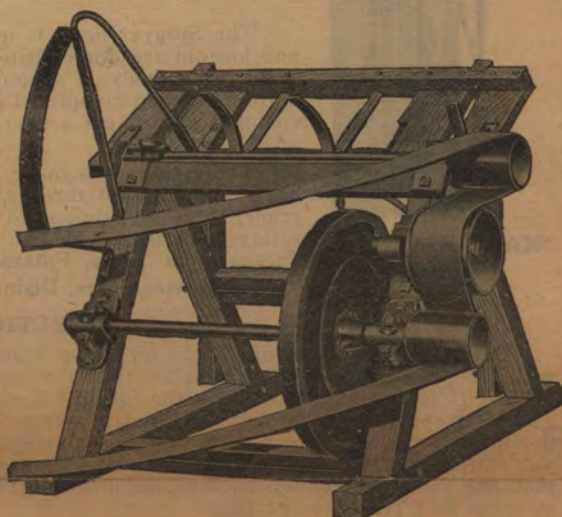
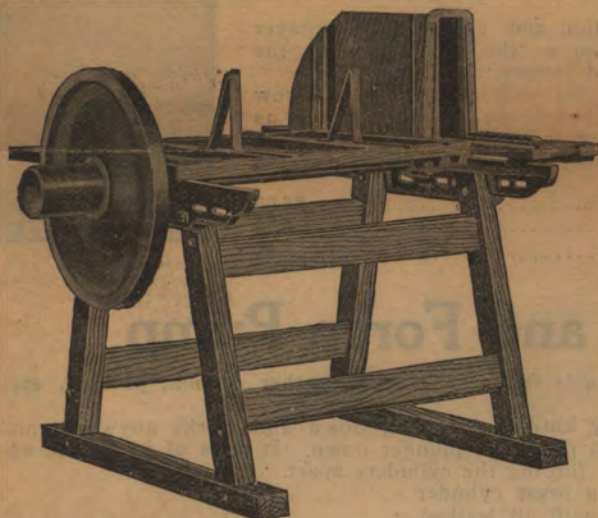
This combination frame is built of the same material and we give it the same factory specifications as our No. 1. It weighs 335 lbs. Sent out as our No. 1 on a guarantee to be in every way a perfect working machine, free from defects of either workmanship or material, or we will take it back and return your money.

PRICE, without saw \$12.50

Three Pulley Tilting Table Wood and Pole Saw Frame No. 3

A 346. A very strong, simple machine, built of the same material and with the same specifications in the factory as our No. 1 and No. 2, the difference in construction is shown in the picture. The lower shaft carrying the balance wheel runs clear across the frame and is held by very heavy habbitted boxes. The tightening pulley is hung on a heavy casting with a heavy steel shaft. Weight complete, 350 lbs.

PRICE, without saw \$15.75



Sliding Table Wood Saw Frame No. 4

A 347. This machine is built for sawing regular cord wood. It is a very rapid, perfect working machine. The specifications under which it is built are the same as those given under No. 1 regarding material and workmanship. The table runs on two iron rolls that form part of the frame and slides on rollers, making it very easy to operate. We make the saw hood or guard to accommodate any size saw from 20 to 30 inches in diameter. Weight, 300 lbs.

PRICE, this machine without saw \$14.75

Sliding Table Wood and Pole Saw Frame No. 5

A 348. An excellent saw frame for general work constructed of the best materials and guaranteed to give satisfaction. It is built with a sliding table and the balance wheel is on a separate shaft entirely out of the way so that long poles can be sawed as well as wood. The belt passes around an idler pulley to the balance wheel shaft, giving a steady, well balanced motion to the saw. It is a very substantial and strong machine throughout. Weight, complete 380 lbs.

PRICE, without saw \$18.50

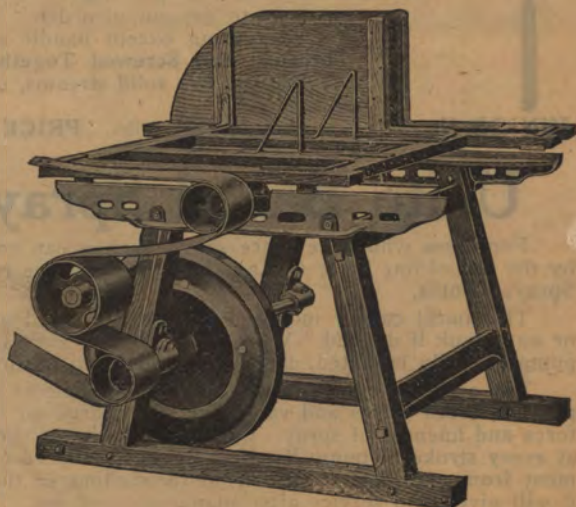
SAWS

A 349. We carry in stock in our implement factory a line of saws in order to give our people prompt shipment. These are cut-off or cord wood saws such as are suitable for use with saw frames described on these pages.

Price list of cord wood or cut-off saws:

Diameter, Inches	20	22	24	26	28	30
Thickness, Gauge	13	12	11	11	10	10
Size Hole, Inches	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Price, each	\$3.77	\$4.52	\$5.45	\$6.25	\$7.15	\$7.78

* For crating saw alone, 25 cents extra.



TRY BEFORE YOU BUY—THAT'S OUR OFFER.



Over 20 big factories united to
divide profits with you

This means Better Goods at Lower Prices and a share of
the Profits for you



Our Unito "Kant Klog" Sprayer

On Your Farm Will Make Your Profits Grow



"KANT-KLOG"
Style G

A slight pressure of the thumb starts the spray; remove it, and the spray stops instantly.

Special attention is called to the new "Kant-Klog," the only nozzle that can be successfully cleaned without stopping the spray or removing the nozzle from the tree. The first and only nozzle ever made which gives both flat and round sprays, or solid streams.

DESCRIPTION

The Sprayer body is made of heavy polished brass or galvanized steel as desired. Top and bottom are dome shaped; joined to body under heavy pressure, making a complete double seam. The body is supported and further strengthened by a heavy steel band around the bottom. When completed this body is tested under double the pressure formerly used, so enabling you to get a finer spray for a greater length of time than with any sprayer ever made.

The air pump is made of heavy brass two inches in diameter. Hose couplings are solid brass, standard cut threads, ends heavily ribbed to prevent hose slipping off. Hose is high grade, three ply, supported by a coiled spring, bell-shaped at outer end to prevent breaking. A safety-valve is provided to allow air to escape after the necessary pressure has been obtained. Sprays Fruit Trees, Potatoes, Vegetables, Tobacco and Cotton. For Wagons, Windows, Henhouses, Fires, Disinfecting, etc., etc.

DIRECTIONS

A few seconds working of the air pump agitates the solution and charges the sprayer with compressed air. This being an elastic force, will, as soon as the thumb presses the "Shut-off" force out the liquid in the form of a spray or a solid stream, as desired.

After sprayer is charged, you need not stop for anything; just walk along from one row to another, the machine will supply sufficient spray to enable you to do the work as fast as you can walk. The great saving in time, labor and solution even on small sprayings will more than pay for this splendid machine the first month it is used, to say nothing of the big increase in crops as a result of spraying properly.

PRICE, with galvanized Steel body.....\$5.00
with polished Brass body.....6.50

Brass Pipe for elevating nozzle in tree Spraying, length 3 feet......35



Unito Spray and Force Pump

We do away entirely with the objectionable foot-rest, clamps, leather suction, packing, etc., etc.

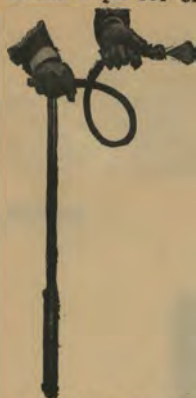
This Pump requires no fastening of any kind, holds itself down and works anywhere and everywhere. All the operator need do is to press the plunger down. It rises of itself, the upward stroke being made by a brass spring forcing the cylinders apart.

The all Brass suction working within a brass cylinder with all Brass Valves, does away entirely with all leather, rubber, or other packing. It is practically impossible for any part to get out of order.

Everything except handle and hose is Solid Brass Threaded and Screwed Together.

Throws two solid streams, one fine round and one flat spray.

Weight only 4 lbs. PRICE \$3.50.



JUNIOR No. 5

Unito Barrel Sprayer Outfit

For those who have more spraying than can conveniently be taken care of by the use of our Style G Kant-Klog Sprayer, we recommend our Unito Barrel Sprayer Outfit.

This outfit can be mounted on either the end or side of an ordinary barrel or on a tank if desired. We do not furnish barrels, as suitable ones, on which pump is easily mounted, can be secured in all localities.

The all-brass cylinder is 2½ inches in diameter and 7 inches long. All brass plunger, brass valves and valve seat. Has large air chamber giving great power, force and fineness of spray. Churn dash agitator thoroughly mixes the solutions at every stroke of pump handle. Brass wire sieve on intake pipe prevents sediment from entering. Constructed throughout in the best possible manner and it will give good service after many years of use.

PRICE—For Unito Barrel Sprayer Outfit with 5 feet of hose, 5 feet galvanized iron extension pipe and 1 Kant-Klog nozzle.....\$11.50



No. 8 BARREL SPRAYER

A "Kant-Klog" Sprayer Will Pay For Itself Many Times Over