

BLACKSMITHS' TOOLS AND MACHINERY

Catalogue B-20

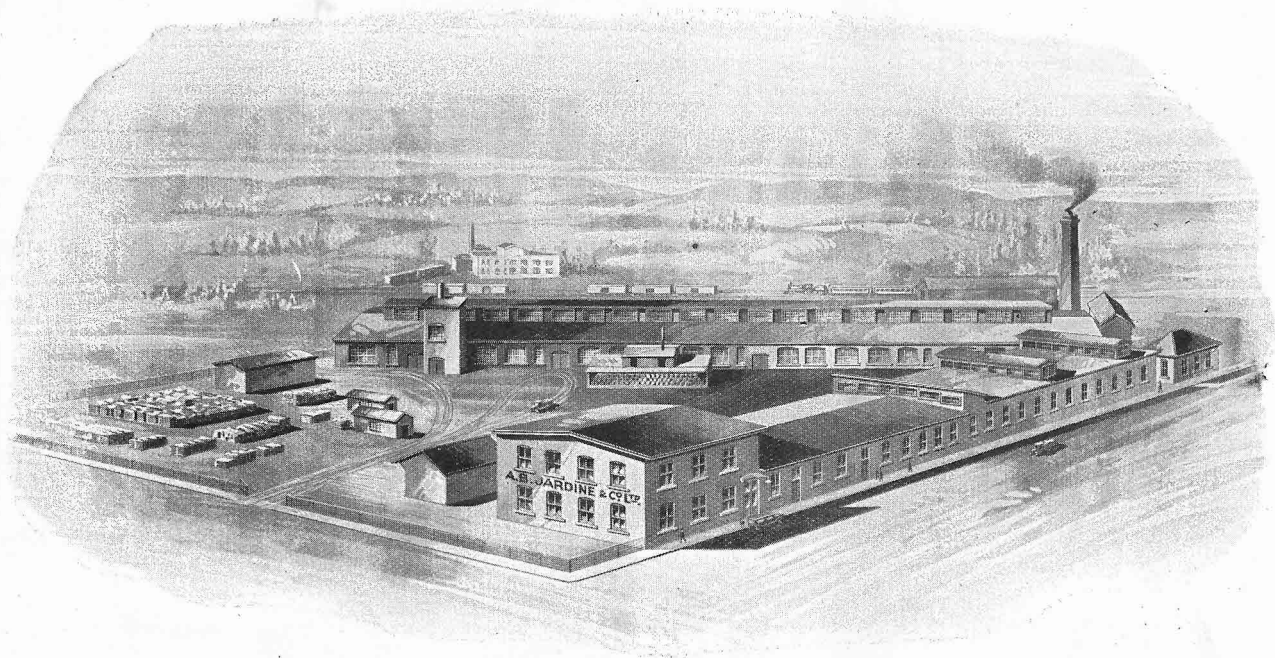


A. B. Jardine & Co.

Limited

HESPELER, ONTARIO, CANADA

Established 1870



The "Jardine" Shops, Hespeler, Ont.

A. B. JARDINE & CO., LIMITED



HESPELER, ONTARIO, CANADA



Index



Page	Page		
Adjustable Tap Wrenches.....	26, 30	Horse Shoer's Vises.....	11
Axle Straightener.....	20	Levelling Plate.....	20
Benders, Tire.....	9, 10	Light Bench Punch.....	11
Blowers, Forge.....	17	Mandrel, Taper.....	9
Bolt Threading Machines.....	21, 22	Opening Die Head.....	23
Bolt Header.....	11	Power Hammers.....	4
Bit Brace Reamers.....	33	Punch, Light Bench.....	11
Combined Punch and Shear.....	12	Punch and Shear, Combined.....	12
Countershaft, Grinder.....	18	Reamers, Bit Brace.....	33
Die Heads, Opening.....	23	Shears, Hand.....	12
Dies, Lightning.....	24, 30	Swage Blocks and Stands.....	20
Dies, Opening Die Head.....	33	Taps and Dies in Sets.....	23 to 28
Dies, Solid Square.....	23, 26, 29	Taps, Hand.....	28 to 32
Dies, Speed.....	25, 30	Taps, Machine.....	32
Die Stocks.....	28, 30	Taps, Nut.....	32
Disc Sharpener.....	19	Taper Mandrel.....	9
Drilling Machines, Hand.....	5 to 7	Tap Wrenches.....	26, 30
Foot Vises.....	11	Tire Benders.....	9, 10
Forges.....	14 to 16	Tire Plate.....	19
Forge Blowers.....	17	Tire Upsetter.....	8
Grinders.....	18	Tuyeres.....	13
Hammers, Power.....	4	Upsetters, Tire.....	8
Hand Drilling Machines.....	5 to 7	Vises, Horse Shoer's Foot.....	11
Hand Shear.....	12	Wrenches, Tap.....	26, 30

REPAIR PARTS

Benders, Tire.....	37, 38
Bolt Threaders.....	34, 35
Combined Punch and Shear.....	40
Die Head, Opening.....	34
Disc Sharpener.....	42
Drilling Machines.....	44 to 47
Foot Vises.....	41
Grinders.....	48
Hammers, Power.....	43
Hand Drilling Machines.....	44 to 47
Hand Shear.....	38
Light Bench Punch.....	39
Opening Die Head.....	34
Power Hammers.....	43
Punch and Shear, Combined.....	40
Punch, Light Bench.....	39
Shear, Hand.....	38
Sets Taps and Dies.....	28 to 30
Tap Chuck.....	35
Tire Benders.....	37, 38
Tire Upsetters.....	36
Tuyeres.....	39
Upsetters.....	36
Vises, Horse Shoer's Foot.....	41



Notice

FOR over 50 years we have been manufacturing Tools that have the reputation of being the best that human ingenuity and skill can produce. In the manufacture of our Thread Cutting Tools we use nothing but the **Best English Tool Steel** and have not at any time deviated from this practice.

New Tools are being added and improvements made in details, keeping our line of Tools and Machines in the lead.

Guarantee. Our work is fully guaranteed against defects in workmanship or material; should there through human weakness be any defective tools from the Jardine shops they may be returned to us **prepaid** and we will replace them free of charge.

Special Work. Clear and precise specifications must accompany orders for special work. Send a sample or drawing if possible. We cannot be responsible for errors when drawing is not supplied.

When Ordering regular goods use the names and terms as listed in Catalogue, and be sure your order contains full instructions.

When mailing samples or other articles to us put your own name, as well as our address on the parcel. Don't use a paper tag, it is very liable to be torn off. Use linen tag, or better still, write the address on the parcel.

Shipping Instructions. If shipment by any special route is desired, send full instructions. In the absence of definite instructions we will use our best judgment.

Our responsibility ceases when goods have been shipped. Claims for loss or breakage must be made on the carriers. We will at any time cheerfully give any assistance in our power in tracing goods that may become lost or delayed in transit.

Orders from customers with whom we have no account must be accompanied by cash.

Make cheques and money orders payable to A. B. Jardine & Co., Limited, Hespeler, Canada.

A. B. JARDINE & CO., Limited
HESPELER, CANADA

Hespeler, April, 1927.

“JARDINE” CANADIAN GIANT POWER HAMMERS

Nos. 25 and 50



This high grade Power Hammer is suitable for either manufacturing or jobbing.

The frame is strong and rigid. The cone shaped anvil block has the weight necessary to receive the shock of the blow.

There are convenient means for making adjustments necessary for different classes of work. It is simple in construction and easy to operate. Material and workmanship are of the best.

All revolving parts are ground straight and true.

The ram runs in V slides proportioned in length to prevent wearing out of parallel. Provision is made for taking up wear in the slides.

The pitman is of phosphor bronze.

The ram and connections between ram and pitman are either steel forgings or steel castings.

The dies for hammer and anvil are of tool steel. They are held in machined seats by tapered keys, the taper to suit the keys being in the ram and anvil block.

The friction clutch pulley on the crank shaft may be driven in either direction. The belt may be run direct from the line shaft to the friction pulley. No countershaft necessary.

Adjustment is provided for height of ram from anvil to suit difference in thickness of work.

The treadle is adjustable for height from floor to suit the foot.

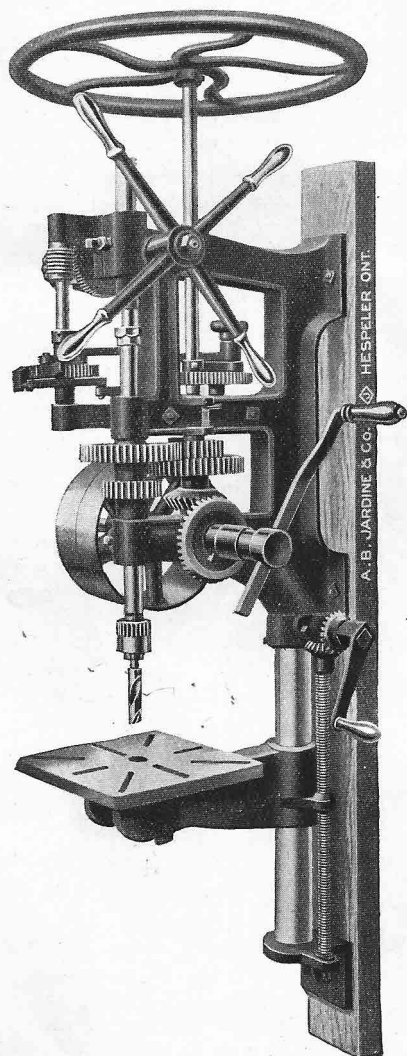
Every hammer is belted and run before leaving the factory.

	No. 25	No. 50
Floor space required.....	17" x 28"	20" x 35"
Height over all.....	5' 5"	5' 11½"
Size of upper die.....	3" x 1½"	3" x 5¾"
Size of lower die.....	3" x 2"	3" x 5¾"
Will forge stock.....	2" round	2½" round
Weight of ram and hammer die.....	30 lbs.	60 lbs.
Size of pulley.....	3½ x 10"	5" x 12"
Revolutions per minute.....	About 400	About 300
Horsepower required.....	1½ H.P.	2½ H.P.
Weight of machine.....	800 lbs.	1750 lbs.
Shipping weight.....	850 lbs.	1875 lbs.
Price.....	\$150.00	\$241.00

For list of repair parts see page 43.

HAND DRILLING MACHINE No. 6

An Upright Machine Capable of First-class Machine Work.



Hand lever feed and power feed, which can be changed to coarse or fine as desired. The feeds are independent of each other, and spindle has quick return.

Fast and slow speed to spindle; instant change of speed.

Perfect cut gearing both bevel and spur.

Ball bearing on end of spindle.

Drills to centre of a 24 inch circle.

Sure Grip Chuck on spindle, takes drills with $\frac{1}{2}$ inch shank only.

Drills must have a flat on shank.

Run of feed 6 inches.

Run of table on pillar $15\frac{1}{2}$ inches.

Table raised and lowered by crank and screw.

Table large and machined on face.

Pulleys 10 inches diameter, $2\frac{1}{2}$ inch face; should run about 175 revolutions per minute.

Driving shaft on hand machine is extended so that pulleys may be used without alteration.

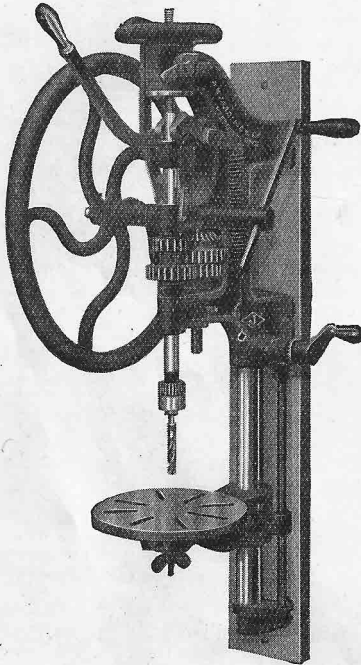
For hand only (without pulleys)
shipping weight 385 lbs.....\$91.50

For hand and power (as illustrated),
shipping weight 415 lbs.....\$96.50



DRILLING MACHINES Nos. 8 and 80

For Hand or Power



Patented Opening Feed Nut, opened by one motion of a lever. All parts strong and substantial, cannot get out of order, wears as well as a solid nut.

Hand Lever Feed, used for countersinking or light drilling, also to lower the drill quickly to the work.

Hand Screw Feed.

Automatic Adjustable Power Feed, three changes of feed can be made while machine is running.

Automatic Quick Return of spindle can be had with all feeds, by opening the feed nut.

Back Geared Spindle, giving two speeds, quick change.

Table raised and lowered by crank and screw.

Patented Clamp for table bracket, holds the table bracket positively rigid, no spring clamp to break.

Ball Bearing on end of spindle to take thrust of feed screw, eliminates friction.

Cut gears throughout.

Driving shaft made long enough for pulleys for power.

Sure Grip Chuck, on end of spindle, takes drills with $\frac{1}{2}$ inch shank only.

Drills must have a flat on shank.

Drills to centre of 21 inch circle.

Run of feed 4 inches.

Run of table on pillar 15 inches.

Greatest distance from spindle to table 15 inches.

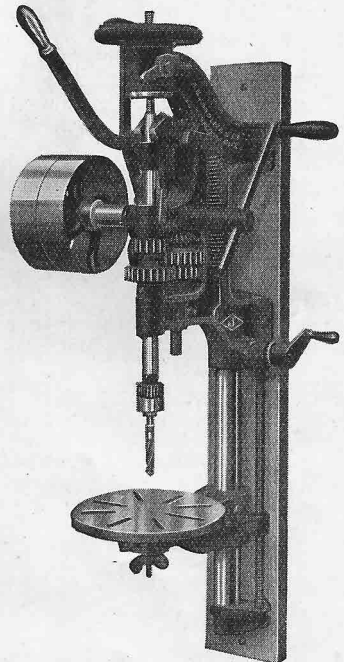
Tight and loose pulleys 10" x $2\frac{1}{2}$ " face, should run about 170 revolutions per minute.

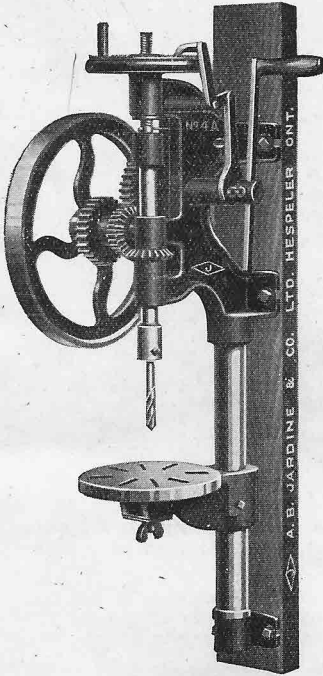
No. 8, for hand only, shipping weight 250 lbs. Price.....\$60.00

No. 80, for power only, shipping weight 240 lbs. Price.....\$60.00

No. 800, for hand and power, (with both pulleys and flywheel), shipping weight 270 lbs. Price.....\$65.00

For list of repair parts see page 45.





HAND DRILLING MACHINE No. 4A

With Ball Bearing

The machine is strongly built, well made and well fitted with reamed bearings. There are no babbitted bearings to wear loose. The pillar is extra large in diameter, giving a rigid support to the table arm. Improved clamp on table arm. Table is machined, giving a perfect level face for the work. The machine has ball thrust bearing on end of spindle automatic feed with three changes; drills to centre of 16 inch circle; run of feed is 4 inches; greatest distance from point of drill spindle to table arm, 17 $\frac{1}{4}$ inches.

QUICK CHANGE GEARING: Giving two speeds for small and large holes. The speed that is right for a $\frac{1}{4}$ inch hole cannot be nearly right for a $\frac{3}{4}$ inch hole. Even a $\frac{1}{2}$ inch or $\frac{1}{16}$ inch hole requires slower speed than the one speed machine gives. We give two speeds requiring only a few seconds to change.

Shipping weight, 170 lbs.

Price, \$39.50.

For list of repair parts see page 46.

HAND DRILLING MACHINE No. 10

With Ball Bearing

This machine embodies very important improvements and comes at a price within the reach of any user of a Hand Drilling Machine.

It is of the same general design as our No. 4A. Ball Bearings between spindle and feed screw, thus minimizing friction. Improved clamp on table arm. Heavy slotted table to hold the work. Automatic feed with three changes, and a change of feed can be made while the machine is running. Fly wheel turns two and one half times to one turn of the crank.

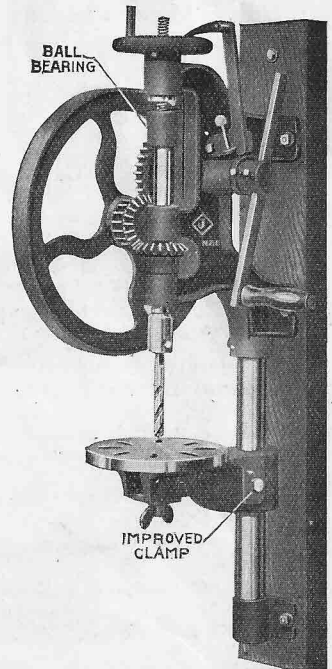
We take pleasure in offering this machine at a very moderate price. It will do as good work as the most expensive machine. Except in drilling very large sized holes, it works as easily as the most expensive machine, and more than nine-tenths of the drilling in the average blacksmith's shop is in small sized holes.

Drills to centre of 14 inch circle.

Shipping weight, 125 lbs.

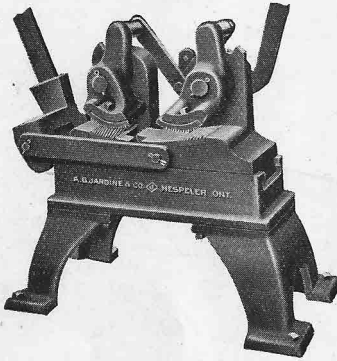
Price, \$25.50.

For list of repair parts see page 47.





TIRE UPSETTER NO 5



Upsets tires up to 4 inches wide by 1 inch thick and axles up to $1\frac{1}{4}$ inches.

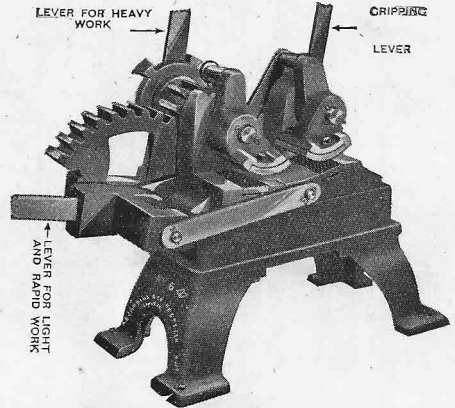
Jaws have tool steel face, with machine cut teeth, carefully tempered. Both upper jaws are operated by one lever with equalizing links giving quick and sure grip.

The machine is extra heavy and calculated to stand the strain of upsetting the heaviest tires up to 4 inches wide.

Weight, 375 lbs.

Price, \$48.25.

TIRE UPSETTER NO. 6



Has two pulling levers, one for light work and one with heavy gearing, giving ample power for the heaviest work.

Both upper gears are operated by one lever with equalizing links that adjust them to uneven thicknesses, giving a quick and sure grip.

Jaws are faced with plates of tool steel with machine cut teeth carefully tempered.

Upsets tires up to 4" wide by 1" thick, and axles up to $1\frac{1}{4}$ inches.

Weight, 435 lbs.

Price, \$57.00.

For list of repair parts see page 36.

IMPROVED TIRE UPSETTER NO. 2

It has quick grip, both the eccentrics being raised and lowered by one lever with equalizing links. It has strong and sure grip, the eccentrics and jaws being faced with tempered steel. The tire cannot slip.

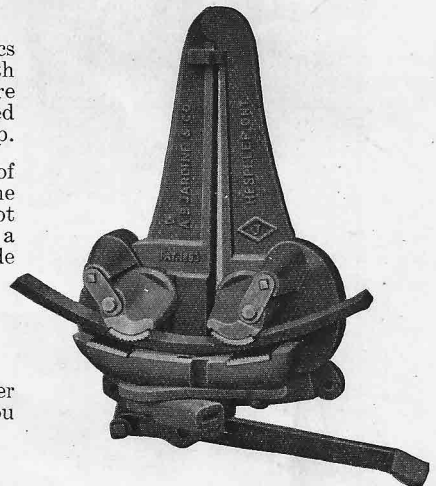
It is durable, the upsetter being made of heavy castings, strong enough to stand the very heavy work it has to do. All pivot pins are of steel. The eccentric strap is a heavy forging and the machine is well made throughout.

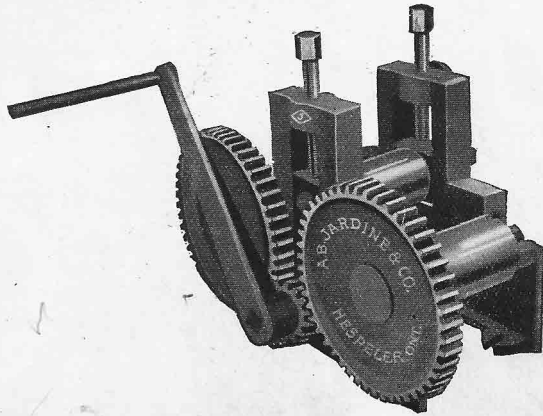
Weight, 175 lbs.

Price, \$23.60.

When ordering steel plates, specify upper or lower plate, and right or left side, as you stand facing the machine.

For list of repair parts see page 36.





No. 2 TIRE BENDER

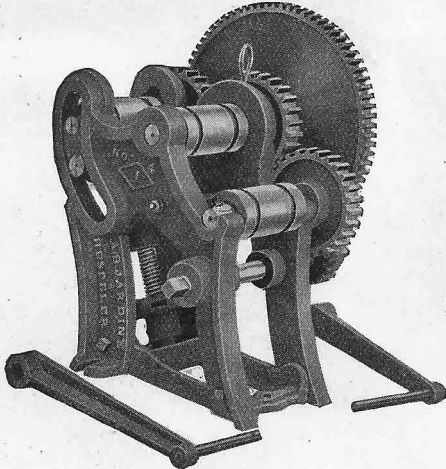
It is strongly geared and will bend iron up to 4 inches in width, and is good for tires up to 2 x 3/4 inches. It has change of speed for light and heavy tires. The middle roller is removable, to take the tire out after bending or to round up welded tire. A convenient, strong and cheap bender.

Weight, 120 lbs.

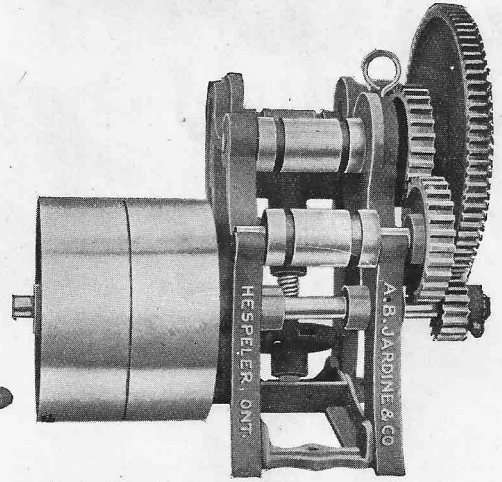
Price, \$20.50.

For list of repair parts see page 37.

NO. 4 TIRE BENDER



No. 40 TIRE BENDER



All the rollers are geared. Rollers are grooved for bending circles edgewise. Unless otherwise ordered grooves are made for 3/8" and 1/2" iron.

Will take iron up to 6" wide, bends up to 4" x 1", or wider iron of proportionate thickness, or 1 3/4" x 3/8", edgewise for circles.

All our Benders have centre rollers removable.

Weight, 220 lbs. Price, \$41.50.

For list of repair parts see page 37.

Made from the same patterns as our Hand Tire Bender No. 4, a general description of which (opposite) applies also to this machine.

It is capable of doing first-class work on tires up to 4 x 3/4 in., but for continuous duty on heavy tires we recommend our heavier machine No. 70, (see page 9).

If desired, it can, for a slight extra charge, be arranged to drive by crank when power is not available.

Tight and loose pulleys are 1 1/4 inches diameter by 4 1/4 inch face.

Weight, 245 lbs.

Price, \$55.50.

TAPER MANDREL

The mandrel is 48 in. high, 12 in. diameter at the base, and 2 3/4 in. at top.

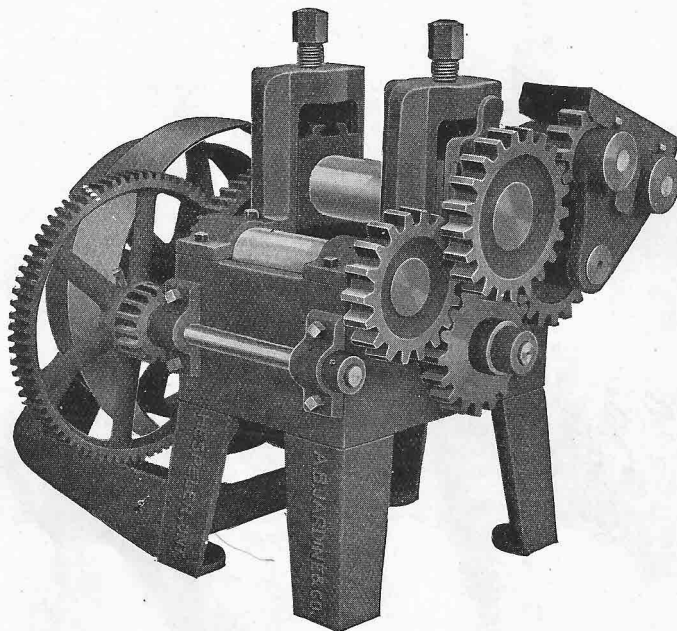
The groove which runs the whole length of the mandrel is very convenient for gripping the work with the tongs or for rounding a ring with an eye-bolt on it.



Weight, 150 lbs.

Price, \$16.00.

TIRE BENDER No. 70



This is a powerful machine, which will bend tires up to 6 in. x 1 in.

All the rollers are driven.

The centre roller is removable.

There are two driving pulleys, giving a change of speed.

The bearings are of ample length, the gears are heavy, and the machine through-
out is of proportions to perform its heavy duty without fear of breakage.

Countershaft should run about 210 revolutions per minute.

Shipping weight, 850 lbs.

Price, complete with countershaft, \$280.00.

We can also supply this Bender for hand use, without countershaft and pulleys
and with legs to raise the machine to a convenient height.

No. 7 Bender for hand only, supplied with two cranks.

Shipping weight, 575 lbs.

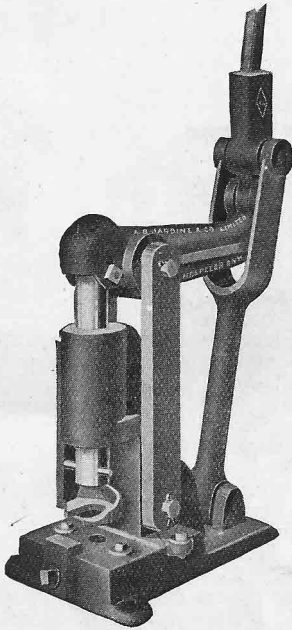
Price, \$198.50.

All our Tire Benders have removable centre roller.

For list of repair parts see page 38.



LIGHT BENCH PUNCH



An excellent punch for light work, and is used extensively by manufacturers of fire escapes and iron railings. It should be on the bench of every machine shop, and blacksmith shop.

When required we fit it with shears at a slight extra cost.

Will punch $\frac{1}{4}$ inch hole in $\frac{1}{4}$ inch iron, and proportionately larger in thinner iron, will gum any cross-cut saw. Weight, 75 lbs. Depth of throat, $1\frac{3}{8}$ in.

Price, without punches or dies.....\$21.00
 Price, with four round punches and dies..... 27.00
 Price, with four punches and dies for saw gumming, 42.50

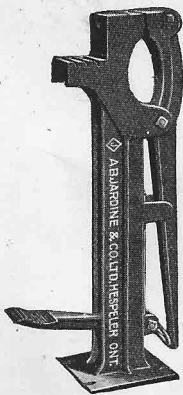
We keep in stock Saw Gumming Punches and Dies $\frac{1}{8}'' \times \frac{7}{8}''$, $\frac{3}{16}'' \times \frac{7}{8}''$, $\frac{1}{4}'' \times \frac{7}{8}''$, $\frac{5}{16}'' \times \frac{7}{8}''$ and $\frac{3}{8}'' \times \frac{7}{8}''$ and Round Punches and Dies $\frac{3}{16}$ 1/32, $\frac{1}{4}$ 1/32, $\frac{5}{16}$ 1/32, $\frac{3}{8}$ 1/32. All other sizes and Square Punches and Dies made up as ordered.

Unless otherwise ordered we make round and square punches and dies 1/32 inch oversize.

For list of repair parts see page 39.

No. 2 FOOT VISE

Grips the shoe quickly and holds it firmly. The anvil block is tempered crucible steel, proper shape for inside of calk. Jaw 4" wide. Weight, 100 lbs. Price, \$16.40.



No. 2
FOOT VISE

No. 3 FOOT VISE AND BOLT HEADER

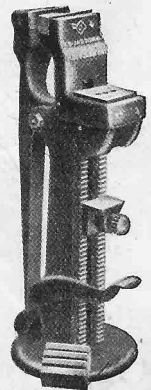
The Foot Vise has tempered, crucible steel anvil, bevelled at one end, square at the other, for square and bevelled calks. The back jaw is self-adjusting to the back of the shoe. Jaw 6 in. wide.

FOR BOLT HEADING

Pressure on the treadle operates a short, stiff arm (not shown in cut) opposite the pivot of the swinging side of the machine. This closes the dies of Bolt Header as firmly as a vise. When pressure is removed from treadle the bolt is free to be taken out to square the head. No time lost adjusting machine while the bolt head is cooling.

No. 3, weight, 210 lbs. Price \$28.75.

For list of repair parts see page 41.



No. 3 FOOT
VISE AND
BOLT
HEADER



COMBINED PUNCH AND SHEAR

Shears up to $\frac{3}{4}$ inches square or $1\frac{3}{4} \times \frac{5}{8}$ inches and thinner iron up to 4 inches wide; has a fence or stop for cutting off a number of pieces the same length, and a bar to prevent the work from rising while being cut.

The lower cutter is adjustable for wear. The punch beam is adjustable to accommodate for wear of punches. Centre of punch is $3\frac{1}{8}$ inches clear of back of throat.

It will punch $\frac{3}{8}$ inch hole in $\frac{3}{8}$ iron or $\frac{3}{4}$ inch hole in $\frac{1}{4}$ inch iron. We supply, when required, punches and dies for saw gumming. The punches and dies are of the best cast steel, and are well fitted.

The regular assortment of round punches and dies is $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$ inches, all $1/32$ inch oversize.

Any four sizes of Round Punches and Dies in even eighths or sixteenths from $\frac{3}{16}$ to $\frac{5}{8}$, all $1/32$ oversize, may be ordered in place of the above assortment without extra charge.

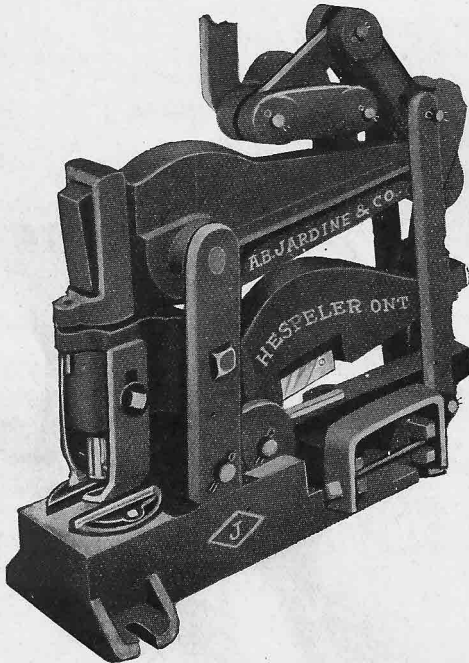
Shipping weight, 300 lbs.

Price, without punches or dies. \$59.00

Price, with four round punches and dies..... 64.50

We keep in stock round punches and dies $\frac{3}{16}$ 1/32, $\frac{1}{4}$ 1/32, $\frac{5}{16}$ 1/32, $\frac{3}{8}$ 1/32, $\frac{7}{16}$ 1/32, $\frac{1}{2}$ 1/32, $\frac{5}{8}$ 1/32. All other sizes and square or saw gumming punches and dies are made up as ordered.

All round and square punches and dies are made $1/32$ inch oversize unless specially ordered otherwise.



For list of repair parts see page 40.

HAND SHEAR

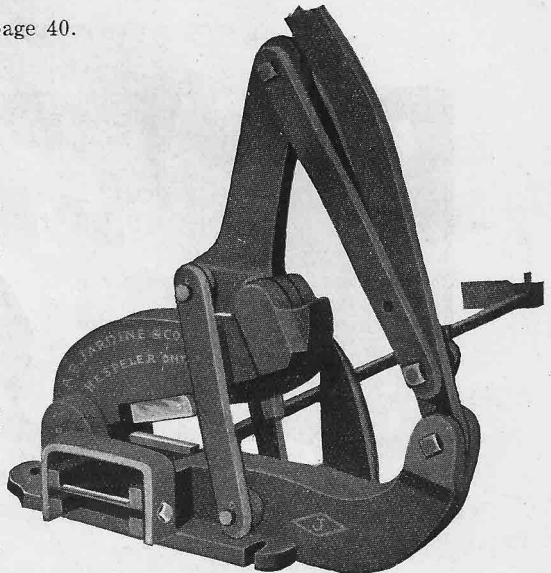
This shear will cut off iron up to $\frac{3}{4}$ in. square, or $1\frac{3}{4} \times \frac{5}{8}$ in. and thinner iron up to 4 in. wide. It is especially designed to meet the wants of a general blacksmith and is handy and convenient, as well as durable and strong. It is provided with a fence or stop, for convenience in cutting a number of pieces the same length, and a bar to prevent the iron from rising or twisting while being cut.

The shear blades are of the best cast steel, and are adjustable for wear.

Weight, 175 lbs.

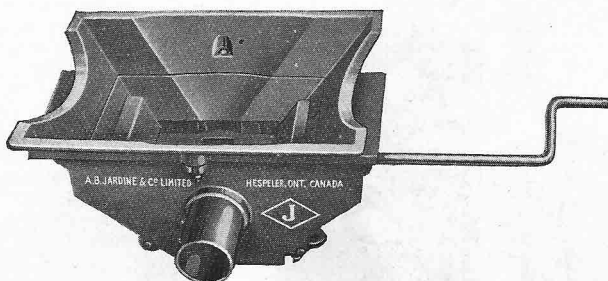
Price, \$33.50.

For list of repair parts see page 38.





FLEWELLING EXTENSION TUYERE



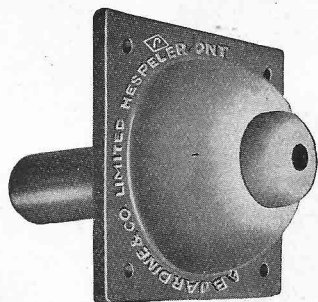
The Flewelling Tuyere is closed or extended by a right and left hand screw operated by a crank. Can be closed for a small fire the same as an ordinary tuyere and can be extended to uniformly heat a 12 inch plow share in the same time taken to make a short heat in an ordinary fire.

Will heat a $2\frac{1}{2} \times \frac{1}{2}$ inch wagon tire, ready to put on a wheel in from five to eight minutes.

The handiest and best tuyere made for regular repair blacksmith work.

Weight, 82 lbs. Price, \$14.00.

SIDE BLAST TUYERE

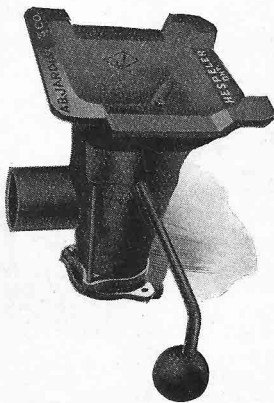


The breast and point are extra heavy.

Breast 9" x 9"

Weight, 35 lbs. Price, \$4.50.

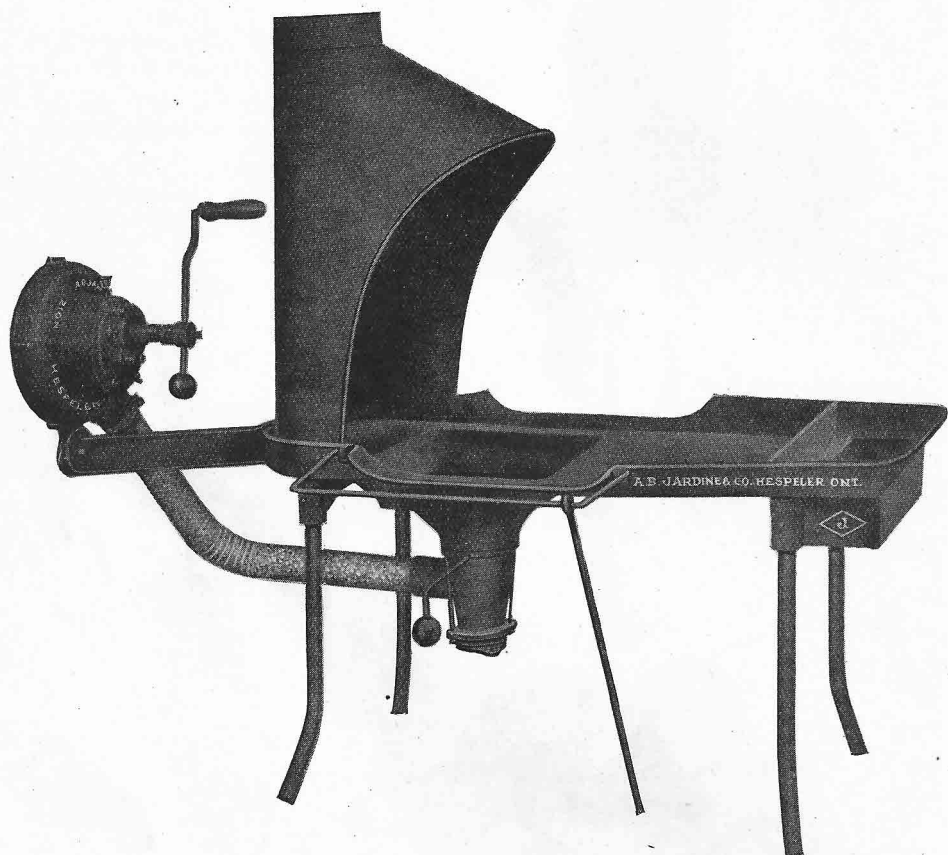
CENTRE BLAST TUYERE



The Ball, in opening is so arranged that it will break the clinkers and allow them to drop out at the bottom. It also allows the blast to come out at the centre, as well as sides, making a perfect fire. The extra weight is distributed around the fire pot, making it indestructible.

Weight, 55 lbs.

Price, \$7.25.



No. 10 FORGE

SUITABLE FOR ALL CLASSES OF WORK UP TO 4 INCH IRON

Legs are removable.

Hearth, 31 x 44 inches. Blower, 12 inches. Length over coal tank, 53 inches. Height, 31 inches.

The tuyere is made extra heavy where the fire comes in contact, no danger of burning out.

The bottom of pan is lowered to make ample room for a large fire without spreading.

Weight, 325 lbs. Price, \$60.00.

A. B. JARDINE & CO., LIMITED



HESPELER, ONTARIO, CANADA

No. 20 FORGE

Suitable for all purposes when a portable forge is needed.

Legs are removable, making it possible to pack in small space.

Tuyere of same construction as the more expensive forges.

Fan that will supply blast sufficient for 4-inch iron.

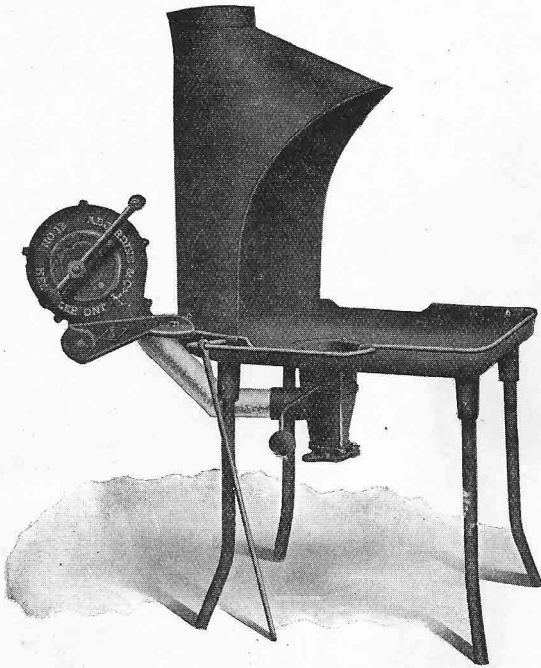
Hearth, 24 x 36 in.

Height, 31 in.

Fan, 12 in.

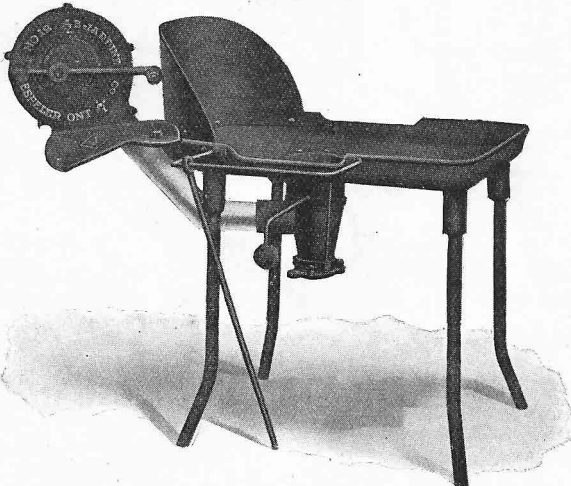
Weight, 210 lbs.

Price, \$46.70.



No. 30 FORGE

Suitable for contractors and all outdoor work.



Legs are removable, making it possible to pack in small space for moving.

Hearth, 24 x 36 in. Height, 31 in. Fan, 12 in.

Weight, 209 lbs. Price, \$43.60.

