

The
Brown-Boggs
LIMITED



Hamilton, Canada
Section A
1912.

The Brown, Boggs Company Limited

Office and Works: Hamilton, Canada

===== CABLE ADDRESS: =====
"TOOLS, HAMILTON, CANADA"
=====

LIVERPOOL, ENGLAND REPRESENTATIVE :
TIMPANY & TYLOR, 38 Beau Street
Cable Address: "TIMPANY, LIVERPOOL"

GLASGOW, SCOTLAND REPRESENTATIVE :
D. C. MITCHELL, 118 Queen Street
Cable Address: "IRONCROWN, GLASGOW"

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Cable Address: "CARTYL"

MANUFACTURERS OF
Tinsmiths', Cornicemakers', Range
Makers' and Sheet Metal Working

TOOLS AND MACHINES

OF ALL DESCRIPTIONS

Presses, Dies, Etc., Etc.,

Can Making
and Canners' Processing Machinery

Evaporating Machinery

Introduction



IT affords us pleasure in presenting to our customers our 1912 Catalogue illustrating many of the Tools and Machines manufactured by us.

In compiling our Catalogues our aim has been to have them as compact as possible, and for this reason we have divided it into three sections, "**A**," "**B**" and "**C**." "**A**" consists principally of **Tin Smiths' Tools and Machines**; "**B**" **Heavy Sheet Metal Working Machinery**, a complete line of **Presses, Canners' Can Making Machinery**; "**C**" **Canners' Processing Machinery and Evaporating Machinery**.

In asking for Catalogue please state which section is desired, "**A**," "**B**" or "**C**."

The tools we manufacture have been carefully designed with a view of adaptation to the work for which they are intended, and are the result of practical experiments and long experience. We present them on their merits and solicit investigation as to their efficiency and durability.

Every article is carefully examined and thoroughly tested before leaving the factory.

We wish to assure our friends that we shall endeavor to merit the same confidence in the future with which we have been favored so liberally in the past, and their commands and enquiries shall always have our prompt and careful attention.

Respectfully,

THE BROWN BOGGS CO., Limited.

Notes

All Agreements made contingent upon strikes, fires or other causes beyond our control.

Quotations made by us for **home shipment**, unless otherwise specified, are for **delivery at our works**.

Quotations made by us for **foreign shipment**, unless otherwise specified, are **F. O. B. cars at Montreal, St. John or New York**.

Terms of Payment—For **home shipment** to our regular customers (of good commercial standing) unless otherwise agreed, our terms are **net 30 days from date of invoice**, subject to sight draft without notice after that time.

With new customers, unless satisfactory reference is sent when ordering, terms are **quarter of the amount with order**, the balance payable by sight draft (attached to bill of lading) on arrival of goods, or if light and of small value, by **Express C. O. D.**

Repairs and articles of small value are always sent by **Express C. O. D.**, unless cash accompanies the order.

On goods which are not of standard size or shape, or special machinery our terms are **half cash with order and balance on completion of same**.

Terms of Payment for Export are cash against shipping documents. The usual method is for our customers to open a credit for us with some **London or New York Bankers**, providing for payment against bill of lading, upon shipment of goods, or to send confirmed bank credit at either of these places.

Claims—Any claim must be made immediately after receipt of goods.

D. & W. Nos. (Dimensions and Weights)—In order to make this Catalogue more complete we issue a supplement, giving dimensions and weights (D. & W.) of each machine, which will greatly facilitate the work of arriving at costs of articles delivered at destination.

Packing—Our smaller machines and tools are boxed for **home shipment**, for which we make **no extra charge**, but the heavier ones, such as heavy formers, squaring shears, power double seamers, cornice brakes, presses etc., etc., it is unnecessary to box excepting for **export**, in which case we make an extra charge at **cost price**. Opposite each article which we make a charge for boxing we have a (★).

Inquiries—Prompt attention is given to all enquiries. In order to save time the requirements should be fully specified, and if special work, samples or correct drawings should be sent.

Illustrations given in this Catalogue are fair representations of the various machines and tools, but are not binding in detail. Where a machine is made in more than one size, it occasionally happens that the different sizes vary in form and detail.

Special Machines—Our standard machines can be more or less modified, and we have many other patterns besides those illustrated which can be used in meeting requirements out of the ordinary line.

Gauge—The gauge we use is **Birmingham English Standard Gauge**.

All Previous Quotations are hereby Revoked.

NOTE!

We use only the

WESTERN UNION
TELEGRAPHIC CODE

This Catalogue supercedes
all previous editions of
Section A.

Use this edition only, when
ordering or asking for
quotations.

Articles Included in an Ordinary Set of Tinsmiths' Tools

		£	s.	d.
31 Inch Squaring Shears.....	\$59 40	12	4	0
20 Inch Tin Folder, style "C".....	34 00	6	19	9
21 Inch B. M. Groover.....	19 00	3	18	0
No. 2 Circular Shears.....	30 50	6	5	5
31 Inch Sheet Iron Folder, No. 7.....	16 85	3	9	3
No. 3 Parallel Vice.....	4 70		19	4
No. 4 Beader.....	23 15	4	15	2
No. 2 Double Seamer, less setting down attachment.....	31 00	6	7	5
No. 4 Former, 31 in. x 1¾ in.....	23 40	4	16	3
Encased Wiring Machine, with Patent Stand.....	21 00	4	6	4
Encased Setting Down Machine, with Patent Stand.....	14 85	3	1	0
Encased Large Turning Machine, with Patent Stand.....	17 10	3	10	4
Encased Small Turning Machine, with Patent Stand.....	16 75	3	9	0
Encased Large Burring Machine, with Patent Stand.....	15 60	3	4	2
Encased Small Burring Machine, with Patent Stand.....	14 85	3	1	1
No. 1 Beakhorn Stake.....	19 30	3	19	4
Common Blowhorn Stake.....	6 45	1	6	7
Creasing Stake, with horn.....	5 20	1	1	5
Common Square Stake.....	3 90		16	0
Needlecase Stake.....	3 60		14	10
Candlemould Stake.....	3 60		14	10
No. 4 Hatchet Stake.....	3 60		14	10
No. 1 Conductor Stake.....	5 20	1	1	5
No. 2 Hollow Mandrel Stake.....	7 10	1	9	3
No. 3 Mandrel Stake.....	6 45	1	6	7
Double Seaming Stake, with 4 heads.....	11 60	2	7	9
Round Head Stake.....	1 65		6	10
No. 1 Double Seaming Stake (wrought).....	11 60	2	7	9
Set Solid Punches and Chisels.....	85		3	6
Set Hollow Punches.....	6 35	1	6	2
No. 2 Riveting Hammer, handled.....	85		3	6
No. 3 Setting Hammer, handled.....	70		2	11
Nos. 0, 90c; 2, 75c; and 4, 60c, Hand Groovers.....	2 25		9	3
Nos. 0, 96c; 4, 66c; and 6, 50c, Rivet Sets.....	2 12		8	9
No. 2 Steel Raising Hammer.....	2 30		9	6
No. 2 Bench Shears.....	7 50	1	11	0
No. 8 Hand Shears.....	3 00		12	4
No. 9 Circular Hand Shears.....	3 70		15	3
Pair Cutting Nippers.....	3 00		12	4
2 Mallets, 30 cents each.....	60		2	6
2 Scratch Awls, 16 cents each.....	32		1	4
1 Cast Iron Fire Pot.....	2 70		11	2

\$467 64 95 3 5

1 pair each, 2, 4 and 6 lb. Sol Irons=12 lbs., at.....

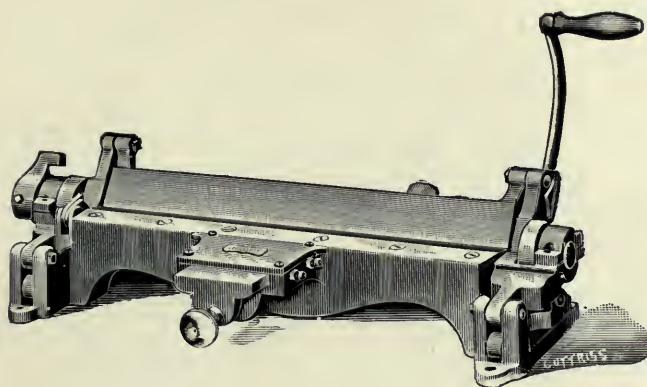
Discount.....

Net.....

Code word for above set "Clerk"

D. & W. No. 737

Folding Machines



Adjustable Bar Folder

Style "A"

We are making two styles of **Bar Folders**, viz :—"A" and "C." The only difference is in the gauge and the means of operating it. As will be seen by the accompanying illustration in style "A," the gauge is attached to a large slide moving in an extension of the frame, supplied with gibs to take up wear, and is adjusted by means of a screw handle. The width of the lock is shown in a scale marked on the slide, thereby enabling the operator to set the gauge accurately for any size of lock required (within the scope of the machine) without trying or measuring.

Style "C" is a combination of two styles of bar folders which we have been making for years. The gauge, instead of having one large slide as in style "A," has two small ones (one at each end, see cut) which prevents the possibility of it getting out of true. It is controlled by a ratchet gear, which permits the operator to adjust it very rapidly, and for this reason is preferred by many. The width of the lock is shown on a graduated scale by an index finger.

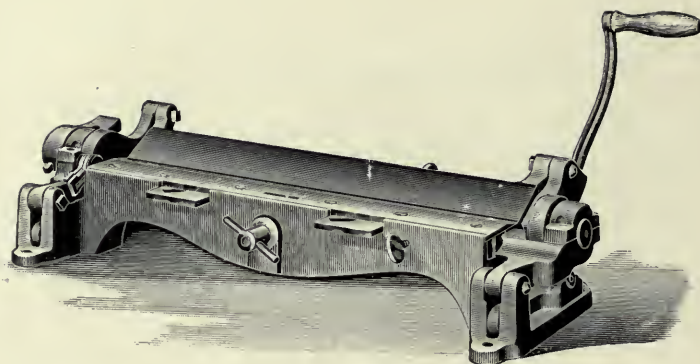
These machines will form square joints or angles, turn narrow or wide locks, turn round edges for wiring. They will also form open or close locks as desired. They have square and bevel stops, and with the No. 1 and $1\frac{1}{2}$, we supply a universal stop, see left hand end of cut style "A" which can be set at any angle required, enabling the operator to do accurate work with greater speed. To set this stop, raise the folding bar to the angle required, then adjust the stop so as to prevent the folding bar raising higher than the angle required.

Relief Weight

Where a 30 or 36 inch Folder is in constant use, we recommend our Relief Weight which we attach to the end bearing of the folding leaf. This consists of a grooved wheel, around which we wind sash cord and at the end attach a weight. The advantage is that the operator has only the bending of the stock to contend with, as the Relief Weight balances the folding bar or leaf. This attachment is supplied only when ordered.

Write for Discounts

Folding Machines—*Continued*



Adjustable Bar Folder

Style "C"

The 20 in. and 30 in. are made with style "C" gauge only, and the 24 in. and 36 in. with style "A."

Prices for "A" and "C"

No.		Price	Price			Code	Code	D. & W. No.
			£	s.	d.			
1	For tin 20 in. folds edge 1 in.	\$34 00	6	19	9	"Style A"	"Style C"	1
1½	For tin 24 in. folds edge 1½ in.	44 50	9	2	10	Abacus	Blur	2
2	For tin 30 in. folds edge 1½ in.	49 15	10	2	0		Boathook	3
3	For tin 36 in. folds edge 1 in.	77 20	15	17	3	Abandon		4
	Extra for Relief Wheel and Weight.	4 30	0	17	8			

NOTE—In cabling or telegraphing, if Relief Weight is desired, add "ed" to code word, viz. :—Boathooked or Abandoned.

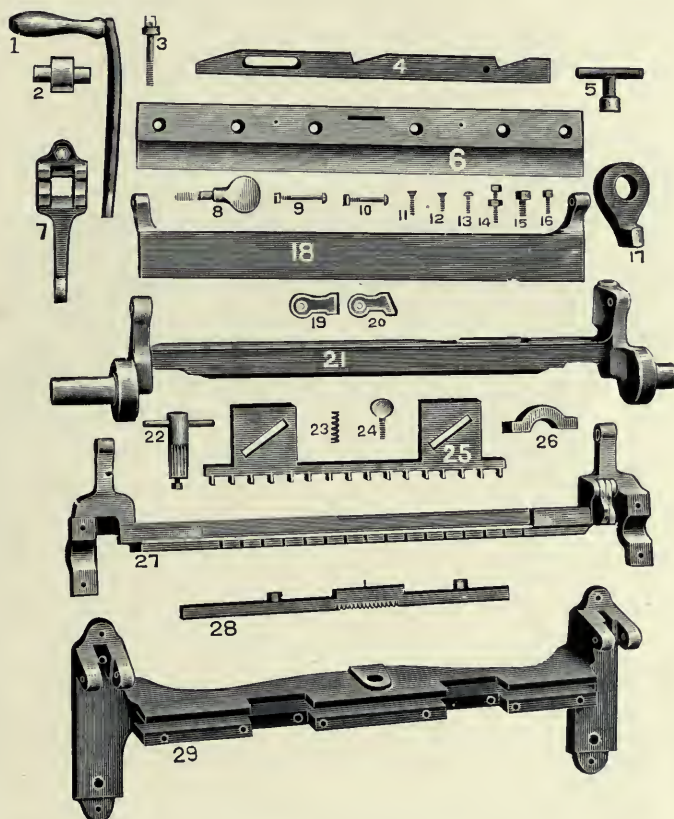
For 22 gauge iron and lighter

Special Attention

To insure a true edge on any folder, it is necessary to cut the sheet on a Squaring Shears, cutting by hand is not sufficiently true to enable a Folder to do accurate work.

Write for Discounts

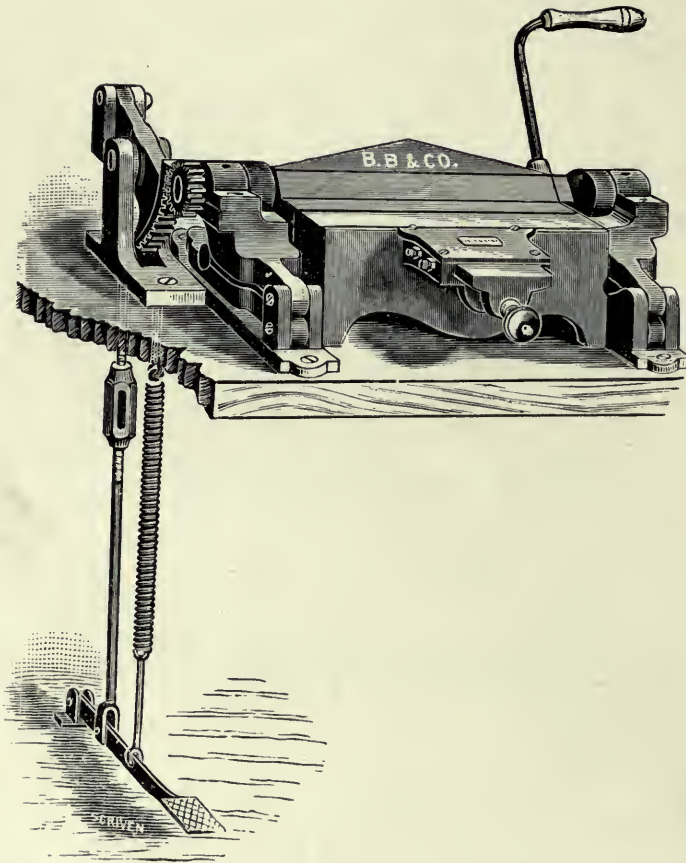
Interchangeable Tin Folder Parts



Price List

No.	21 in.	31 in.	No.	21 in.	31 in.
1—Handle.....	\$0 80	\$0 80	16—Set screw to fasten handle.....	10	10
2—Friction Roller....	90	90	17—Universal stop.....	75	75
3—Square head wedge screw.....	50	50	18—Back Plate.....	5 90	8 20
4—Wedge or step piece...	90	1 37	19—Square stop.....	30	30
5—Wrench.....	28	28	20—Bevel stop.....	30	30
6—Steel plate.....	8 20	10 90	21—Bar.....	8 20	10 45
7—Shoe.....	75	75	22—Geared gauge screw handle.....	1 35	1 35
8—Thumb screw that clamps No. 4 to No. 21	50	50	23—Gauge spring.....	15	15
9—Screw in end of No. 18.	10	10	24—Thumb screw for locking gauge.....	22	22
10—Screw in end of No. 27.	10	10	25—Gauge.....	6 85	7 25
11—Screw for No. 26.....	10	10	26—Cap.....	50	50
12—Screw for steel plate...	10	10	27—Vice piece.....	8 20	12 30
13—Screw for No. 4.....	10	10	28—Gauge bar with rack...	2 00	2 27
14—Set screw and nut for shoe.....	16	16	29—Frame or bed piece....	12 00	14 55
15—Set screw in No. 17....	10	10			

Tin Folders—Continued



No. 0, 10 in. Tin Folder with Foot Lever

This Folder was designed to turn edges of small work rapidly.

The gauge is adjustable and is the same style as "A" (page 7).

As will be seen by the cut it can be operated by either hand or foot.

For 22 gauge iron and lighter

No.		Price	Price		Code	D. & W. No.
			£	s. d.		
0	for 10 in. folds 1 in. edge, with treadle ...	\$42 70	8	15 6	Abash	5
0	for 10 in. folds 1 in. edge, less treadle . . .	34 50	7	1 9	Abate	6

Always give catalogue page when ordering tools

Sheet Iron Folders



(Wright's) No. 7

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
7 For Stove Pipe, 31 in.	\$16 85	3	9	3	Abide	10

For 22 Gauge iron and lighter

		£	s.	d.
Steel Blades, each.....	\$3 50	14	5	
Gauges, each.....	1 75	7	3	
Bolts, for handles, each.....	55	2	4	

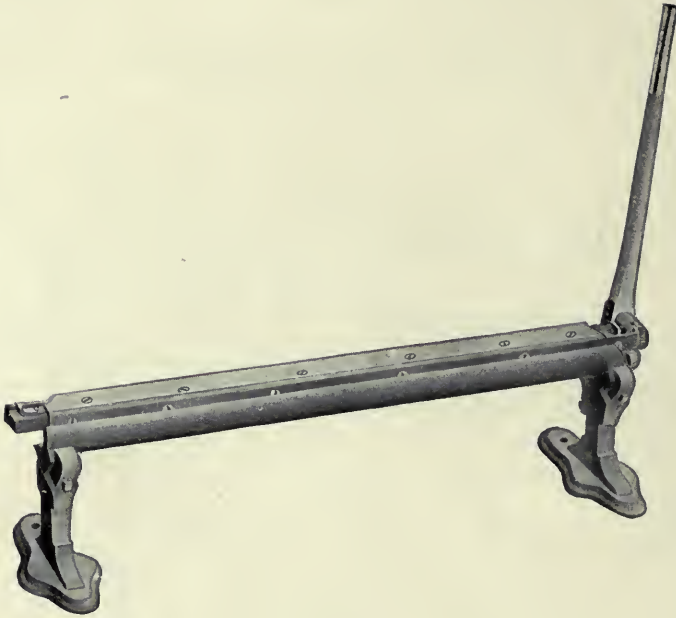
This machine is the most popular style on the market

Folders for Heavy Work

We also make a folder similar in design and operation as our No. 7, for heavier work, known as No. 7a and No. 7b. No. 7a is suitable for No. 20 gauge iron and No. 7b for No. 22 gauge iron and lighter. Both No. 7a and b make only one size fold, viz: 7-16 in.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
7A For 36 in. iron, 20 gauge	\$62 00	12	14	10	Curfew	947
7B For 48 in. iron, 22 gauge	72 00	14	15	11	Curling	948

Folders—*Continued*



No. 8

S. I. Folder

When a particularly true edge is required, we recommend either our No. 8 or 9 Folder.

The difficulty to be overcome has been the variation in stock; sheets being hard and soft in different places, in consequence of which it was impossible to fold two edges exactly alike. The construction of these Folders is such as to overcome this difficulty, and to produce the best possible results.

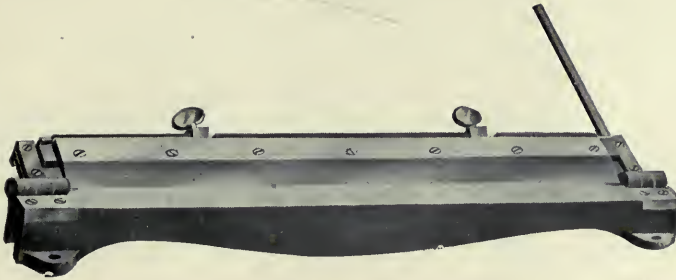
It will fold any size edge from 3-16 in. to $\frac{3}{8}$ in., thus giving it another advantage over any other Folder.

For 22 gauge iron and lighter

No.	Price	Price			Code	D. & W. No.
		£.	s.	d.		
8 31 in.	\$21 00	4	6	4	Abigail	11
9 37 in.	35 10	7	4	3	Able	12

Always give catalogue page when ordering

Folders—Continued



This folder is made in three sizes, viz: 31 in., 37 in. and 48 in. Will fold iron not exceeding No. 22 gauge in thickness, any size from $\frac{1}{4}$ in. to 1 in., and at any angle.

No.	Size	Price	Price			Code	D. & W. No.
			£	s.	d.		
10A	Sheet Iron Folder, 31 in.....	\$21 85	4	10	0	Curse	949
10B	Sheet Iron Folder, 37 in.....	36 40	7	9	8	Cursive	950
10C	Sheet Iron Folder, 48 in.....	54 60	11	4	5	Cursory	951



No. 11

Stove Pipe Folder

For 22 gauge iron and lighter

This folder is built with steel shaft, having rotary movement, working against a fixed front piece. It is a very positive and true acting folder.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
11	Sheet Iron Folder, 31 in.....\$18 85	3	17	6	Abominable	14

Folders—Continued



No. 16

Folder

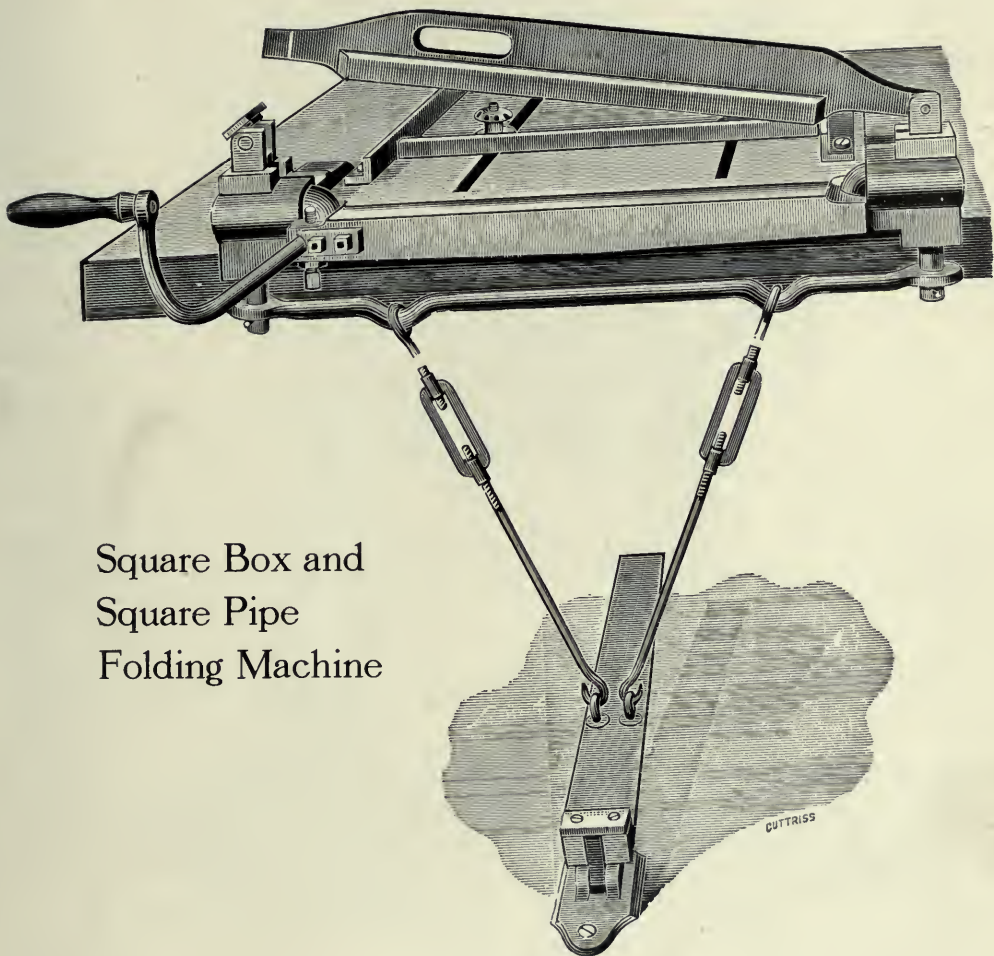
No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 12	3 ft. for 18 gauge.....	\$ 70	00		Clinic	790
★ 13	4 ft. for 18 gauge.....	80	00		Caffeine	791
★ 14	5 ft. for 20 gauge.....	90	00		Cage	792
★ 15	6 ft. for 20 gauge.....	100	00		Calamus	793
★ 16	8 ft. for 24 gauge.....	120	00		Calash	794
★ 17	10 ft. for 24 gauge.....	140	00		Calculate	795

The above cut represents a line of Folders which we make in all sizes, from 3 to 12 feet, for **extra heavy work**. They are designed specially for bending the edges of sheet iron or soft steel, galvanized conductor pipe, etc., etc., and articles of like nature.

The principle of these Folders is such as to overcome the friction necessary in Folders of other designs. They are very substantial machines.

Write for Discounts

Folders—Continued



Square Box and
Square Pipe
Folding Machine

(Back View)

The Clamping Bar is so arranged that it can be lifted and the formed work slipped off the end. These machines can be arranged to form square boxes or pipes with round corners. By slotting the Hold-down Bar it will fold boxes that are flanged on the inside.

For 22 gauge iron and lighter

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
0	30 in. long.....	\$64 35	13	4	6	Aboriginal	15
1	20 in. long.....	42 70	8	15	6	Abort	16
2	15 in. long.....	32 75	6	14	7	About	17

Write for Discounts

Always give catalogue page when ordering

Folders—*Continued*

Square Box Folder



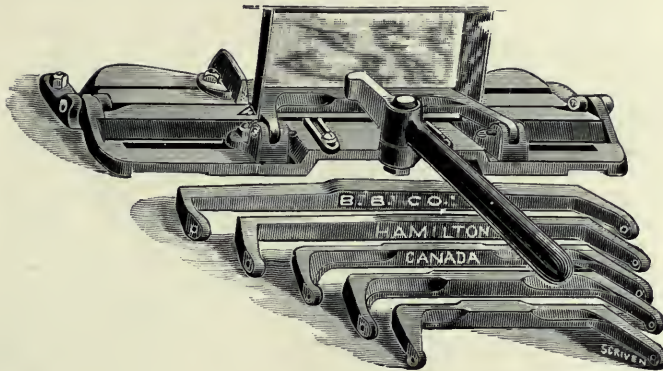
No. 12

This Square Box Folder is for doing the same work as our Nos. 0, 1 and 2, Square Box Folders described on page 15, but is preferred by many on account of the rapidity with which the work can be produced. Has a capacity of 24 gauge iron and lighter.

It is operated entirely by a treadle, thus leaving the operator's hands free to handle the work more quickly. One motion of the treadle will bend the work to an acute angle, right angle or obtuse angle. It is provided with three gauges so that a box can be formed complete in one handling. The cut above represents our No. 12 machine, which is capable of folding work not wider than 30 inches. If desired, the upper bar can be slotted to allow work flanged on the inside to be folded, but this is never done excepting when specially ordered.

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 12	30 in.	\$63 65	13	1	6	Concordat	875

Folders—Continued



No. 11

Bread Pan Folder

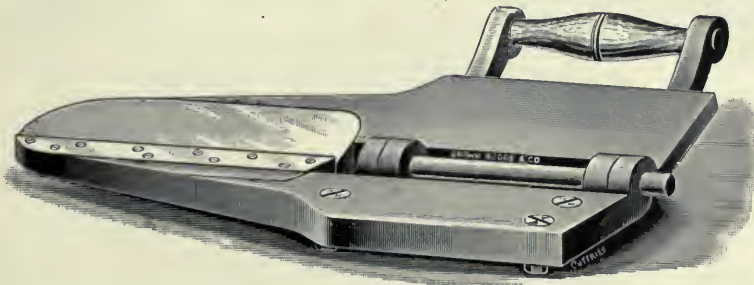
These are excellent machines for this work. We make two sizes, viz: Nos. 11 and 12. They will fold six standard lengths of pans. No. 11 will fold 18 in., 15½ in., 13 in., 11 in., 10 in., 8½ in., and any width not over 18 in. and 3 in. deep. No. 12 will fold 23 in., 21 in., 18 in., 15½ in., 13 in., 11¼ in., and any width not over 23 in. and 4 in. deep.

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
11	65 lbs. for 24 gauge iron.....	\$15 45	3	3	6	Above	18
12	150 lbs. for 24 gauge iron.....	49 75	10	4	5	Curbstone	943

Improved Wood Roofing Folder



No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	Improved 30 in. wood, with gauge.....	\$12 00	2	9	4	Abreast	19
2	Improved 20 in. wood, with gauge.....	10 00	2	1	2	Abroad	20



Can Top Folder

For forming tops of oil cans, etc.

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	6 in.....	\$13 00	2	13	6	Abscond	21
2	9 in.....	16 00	3	5	10	Cocoanut	845

Wire Cutter

No. 1

Is capable of cutting wire $\frac{1}{4}$ inch and smaller.



No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 1 Complete with gauge	\$10 60	2	3	7	Absence	22

No. 2 Heavy Wire Cutter, similar to No. 4 Wire Cutter and Bale Former, illustrated below, only without the circular gauge. It is capable of cutting $\frac{1}{2}$ in. wire and smaller.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 2 Weight about 50 lbs.	\$24 90	5	22	4	Curdle	944



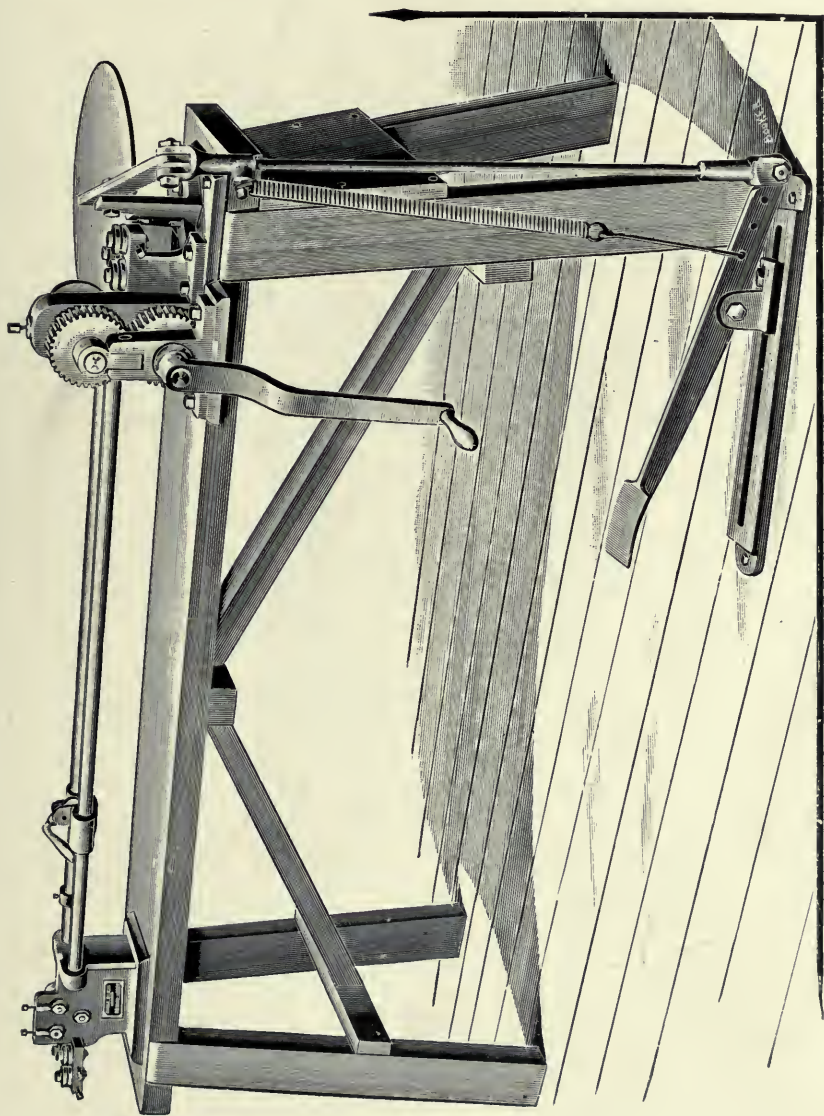
No. 4

Wire Cutter and Bale Former

A simple, cheap, durable, economical and labor-saving machine. It takes wire from the coil, gauges and cuts it to the desired length. It cuts smoothly and easily $\frac{1}{4}$ inch wire, as well as smaller sizes. It forms bucket bales with rapidity and accuracy.

	Price	Price			Code	D. & W. No.
		£	s.	d.		
Wire Cutter and Bale Former	\$18 70	3	16	10	Absentee	23
Extra Gauge Stops, each	50	0	2	1		

Wire Ring Former, Straightener and Cutter



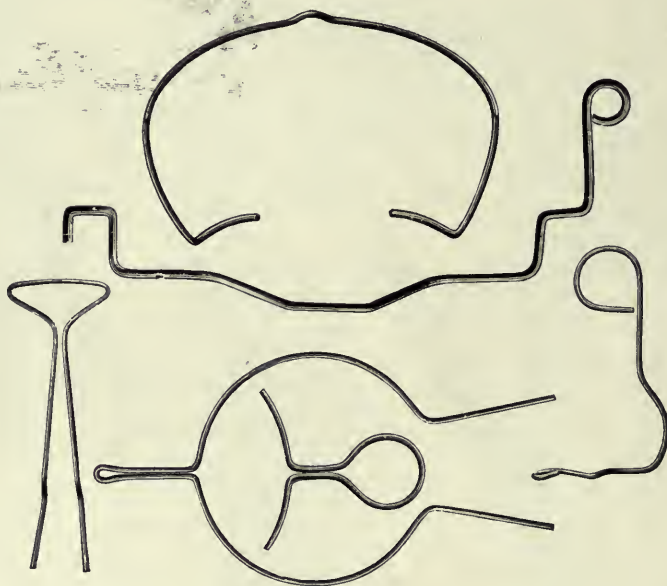
No. 20

For Straightening, Forming and Cutting Wire

This machine is indispensable in factories where tinware requiring wiring is manufactured. The wire is taken direct from the coil, straightened and formed into the circle required and cut off the proper length. There is a grip gauge which slides along the rods, and will measure the wire accurately. This machine can be operated with great speed and is capable of taking in wire up to No. 8 gauge.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 20 Wire Ring Machine, wood stand.	\$150 00	30	16	6	Absorptive	26

Wire Formers and Benders

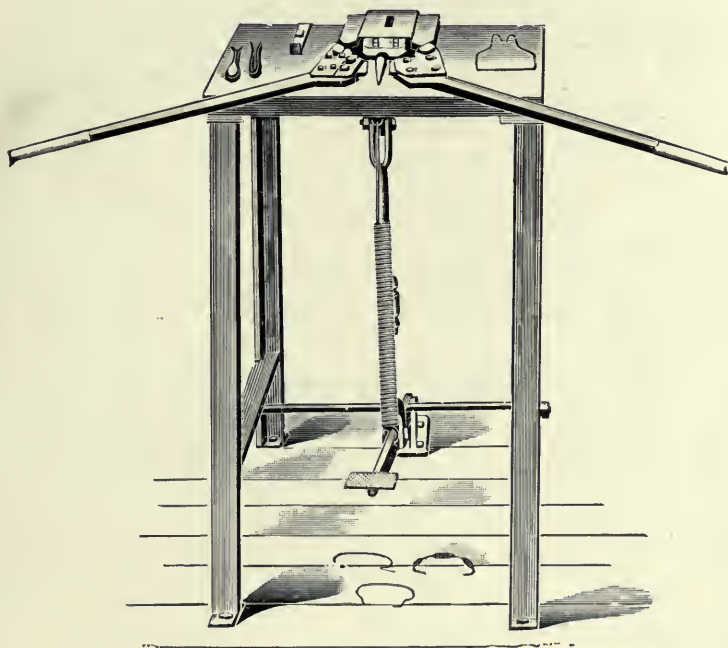


We make all kinds of tools for forming and bending wire.

Prices on receipt of sample.

Always give Catalogue page when ordering Tools.

Special Wire Forming Machine



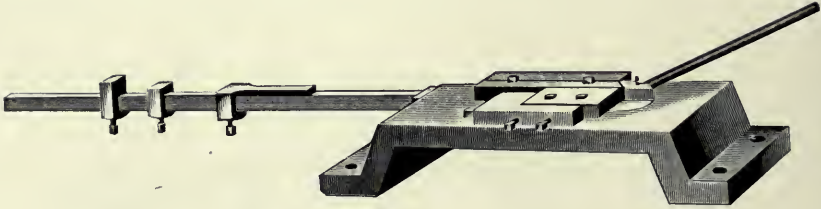
No. 25

★ With this machine wire can be formed into numerous shapes for a very large variety of work.

Each different shape requires a different set of forms or dies.

Price and further particulars on receipt of sample. (See other shapes of formed wire on page 20.

No. 10 Wire Former



For bending soft wire at right angles up to and including $\frac{1}{4}$ in. diameter, any length or width.

As illustrated by the use of gauges the four corners can be bent accurately at one handling (one corner bent at a time). Means of adjustment is provided to care for the various thicknesses of wire desired to be bent. It is accurate, quick and of great advantage to those making up standard or special articles.

Price	Price	Code	D. & W. No.
	£ s. d.		
\$23 00	4 14 6	Curule	952

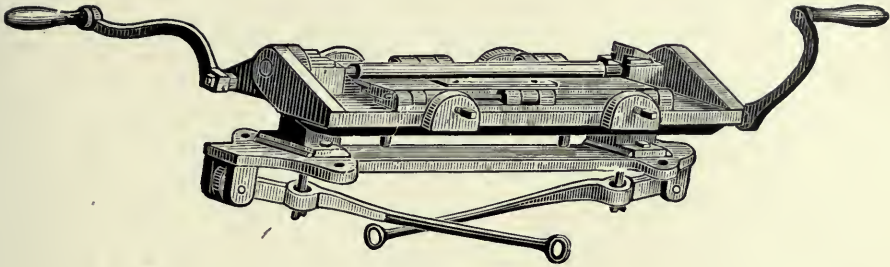


Automatic Tube Formers

We manufacture Automatic Machines for making sheet metal tubing or various sizes, from 3 to 10 ft. in length and $\frac{7}{8}$ to 3 in. in diameter, lock seam. The sheets are fed in the flat, and are formed and locked automatically, coming out accurate and perfectly straight.

Price on receipt of specifications or requirements. Please state gauge of metal desired to be used.

Forming Machines

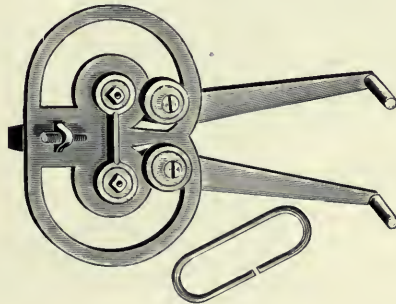


Tube Forming Machines

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	For forming Speaking Tubes 20 in. long	\$82 00	16	17	0	Abut	31
2	For forming Tubes 15 in. long	53 80	11	1	0	Abysm	32
3	For forming Dipper Handles 11 in. long	44 45	9	2	8	Acacia	33
	Extra for Breaker for No. 1 or 2	6 45	1	6	6		

It is necessary to use a Breaker on work of small diameter, or on heavy material.

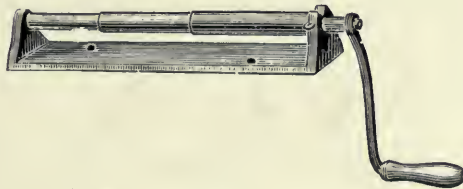
For 24 gauge iron and lighter



No. 8

Oval Wire Handle Former

	Price	Price			Code	D. & W. No.
		£	s.	d.		
It can be adjusted from 3½ in. to 4 in	\$8 20	1	13	9	Case	34

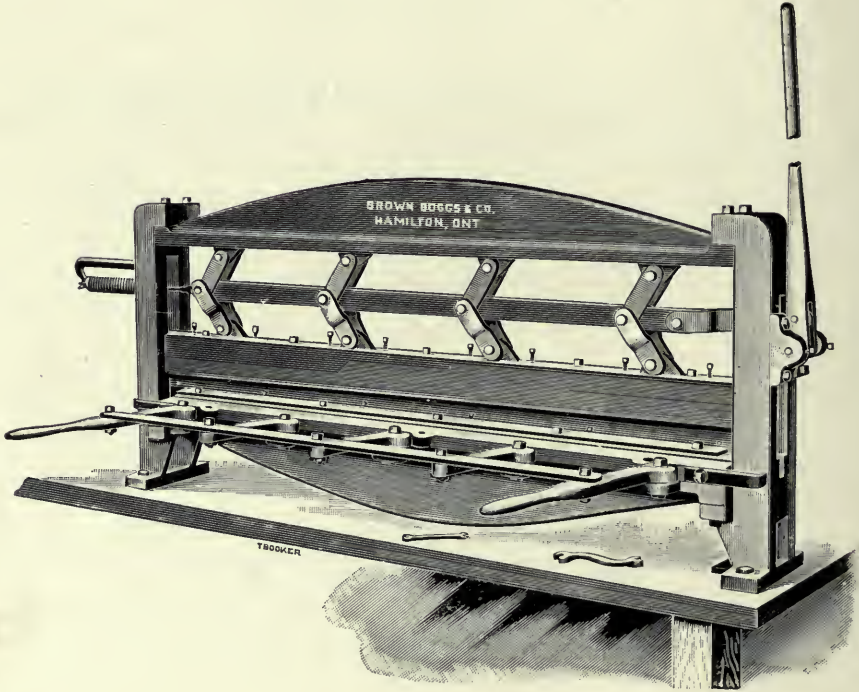


No. 1

Wire Ring Forming Machine

	Price	Price			Code	D. & W. No.
		£	s.	d.		
Wire Ring Former or Winder	\$5 25	1	1	8	Accept	35

Toggle Joint Former

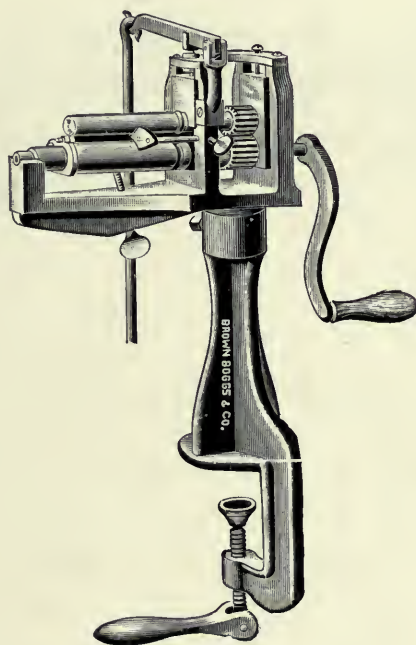


★ This Toggle Joint Former is for forming special work, such as metal window strips, tubes (butt seam), toy gun barrels, and all kinds of long, straight work of a similar nature. Separate dies are required for each different form. It is capable of forming iron or soft steel not exceeding 20 gauge in thickness, various lengths up to 5 ft. long.

Price on receipt of sample of work required.

Write for Discounts

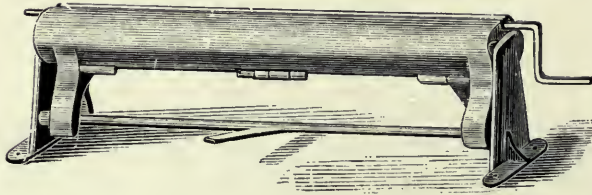
Candlestick Former and Beader



For Candlesticks, Blacking, Pepper or Rattle Boxes.

	Price	Price			Code	D. & W. No.
		£	s.	d.		
Complete with steel rolls and stand	\$35 10	7	4	3	Acceptance	37

Gutter Beaders



No. 1

Improved Gutter Bearer

The Improved Gutter Bearer opens out to allow the work to be removed.

For 26 gauge iron and lighter

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	Improved Gutter Bearer, 31 in. complete with $\frac{1}{2}$ in. steel rod	\$12 90	2	13	0	Catchword	74
2	Improved Gutter Bearer, 21 in. complete with $\frac{1}{2}$ in. steel rod	9 00	1	17	0	Acquit	75

Write for Discounts

Iron Bottom Gutter Beaders



With Enclosed Steel Rod

This tool consists of a cast iron frame that encloses the Beading Rod, the work has to be drawn out endwise.

For 24 gauge iron and lighter

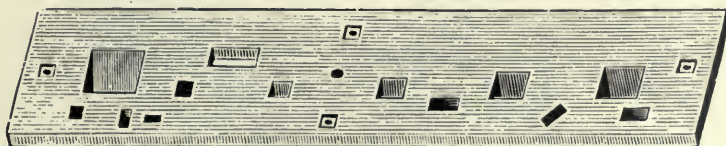
No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
3C with Steel Rod $\frac{1}{2}$ in. $\times$ 36 in....	\$9 00	1	17	0	Acquittal	76
3D with Steel Rod $\frac{5}{8}$ in. $\times$ 36 in....	9 00	1	17	0	Cates	77
3E with Steel Rod $\frac{1}{2}$ in. $\times$ 31 in. ...	7 75	1	12	0	Acropolis	78
3F with Steel Rod $\frac{5}{8}$ in. $\times$ 31 in....	7 75	1	12	0	Across	79
4 with Steel Rod $\frac{1}{2}$ in. $\times$ 21 in....	5 20	1	1	5	Act	80
5 with Steel Rod $\frac{7}{8}$ in. $\times$ 15 in....	4 50		18	6	Acting	81

Steel Gutter Rods

10 Steel Gutter Rod $\frac{5}{8}$ in. $\times$ 10 ft....	\$12 90	2	13	0	Action	82
11 Steel Gutter Rod $\frac{5}{8}$ in. $\times$ 8 ft. . .	10 30	2	2	5	Actionable	83
12 Steel Gutter Rod $\frac{5}{8}$ in. $\times$ 6 ft. ...	7 75	1	12	0	Active	84
13 Steel Gutter Rod $\frac{1}{2}$ in. $\times$ 36 in....	4 50		18	6	Actual	85
14 Steel Gutter Rod $\frac{1}{2}$ in. $\times$ 31 in....	3 85		15	10	Actualize	86
15 Steel Gutter Rod $\frac{1}{2}$ in. $\times$ 21 in....	2 60		10	9	Acutely	87
16 Steel Gutter Rod $\frac{7}{8}$ in. $\times$ 15 in....	1 90		7	10	Catkin	88

Any size made to order at \$1.30, £0 5s. 4d. per foot for four feet and over, and under four feet \$1.55, £0 6s. 5d. per foot.

Bench Plates



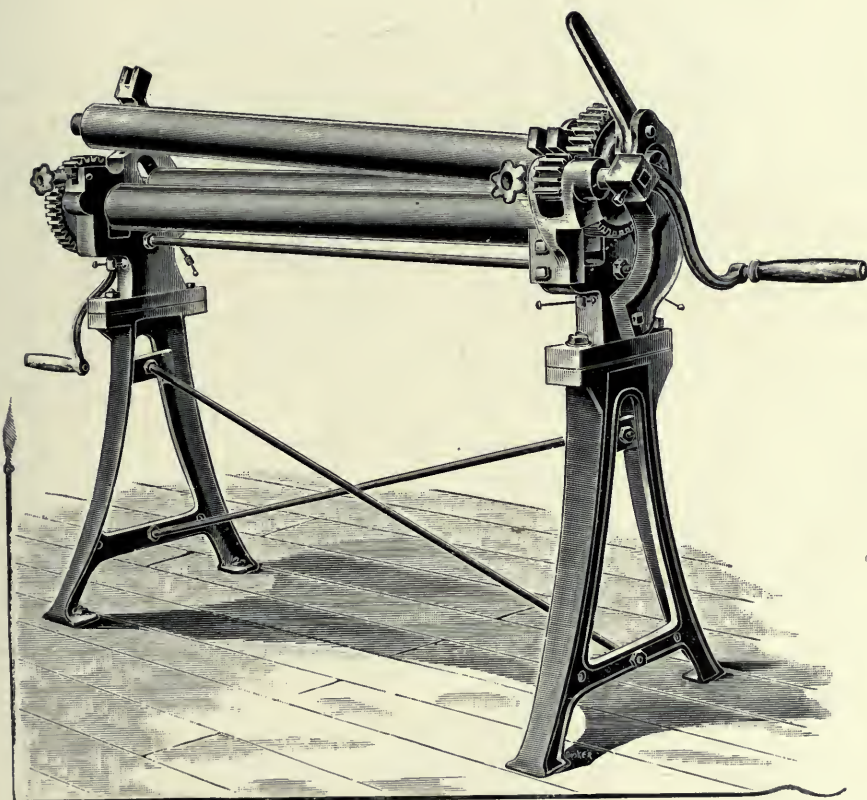
No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
0 48 in. $\times$ 12 in. each	\$10 60	2	3	7	Catlepsy	89
1 37 in. $\times$ 8 in. each	5 20	1	1	5	Adapt	90
2 30 in. $\times$ 8 in. each	3 85		15	10 -	Adaptable	91

Power Formers



Slip Roll Formers with Tight and Loose Pulleys. For description and price see page 30

Formers



Heavy Slip Roll Formers

For description and prices see page 30.

Always give catalogue page when ordering tools.

Heavy Slip Roll Formers

Power and Hand

See Illustrations on Pages 28 and 29

These machines are made for heavy work, they are powerfully geared at both ends, and are supplied with two handles.

The top roller is tilted at one end by a cam, to allow work of small diameter to be slipped off, this will be found to be a great convenience.

They are well and strongly made, and up-to-date in every particular. Supplied with or without legs as required, and for hand or fitted with tight and loose pulleys for power.

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 0000	Hand	\$260 00	53	8	7	Cureless	945
	Power	307 95	63	5	8	Cycle	959
	4½ in. rolls 48 in. long, for 12 gauge.						
★ 000	Hand	187 00	38	8	7	Cinder	40
	Power	225 30	46	5	11	Cygnat	960
	4 in. rolls 48 in. long, for 14 gauge.						
★ 00	Hand	170 00	34	18	8	Cinque	41
	Power	208 30	42	16	0	Cymbal	961
	4 in. rolls 37 in. long, for 12 gauge.						
★ 0	Hand	101 00	20	15	0	Circlet	42
	Power	131 60	27	0	10	Cypress	962
	3 in. rolls 37 in. long, for 14 gauge.						
★ 1	Hand	88 50	18	3	9	Circulate	43
	Power	119 10	24	9	6	Cynic	963
	3 in. rolls 31 in. long, for 12 gauge.						
★ 1½A	Hand	66 70	13	14	0	Bobwig	44
	Power	89 70	18	8	7	Cylinder	964
	2½ in. rolls 31 in. long, for 16 gauge.						
★ 1½B	Hand	79 00	16	4	8	Bode	45
	Power	102 00	20	19	3	Cuttle	965
	2½ in. rolls 37 in. long, for 17 gauge.						

If legs are required on any of the above formers and code word is used add to end of word—"leg," like "Bode-leg."

Extra for legs:

		£	s.	d.
2½ in. rolls.....	\$15 30	3	2	11
3 in. rolls.....	15 30	3	2	11
4 in. rolls.....	19 20	3	18	11
4½ in. rolls.....	26 75	5	9	11

Nos. 0000, 000, 00, 0 and 1, have compound gear at both ends.

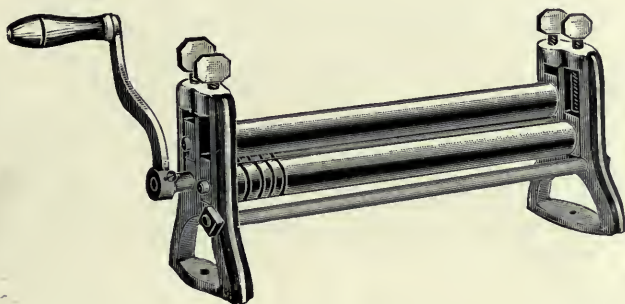
Nos. 1½A and B, are direct geared.

If desired the gear on Nos. 1½A and B, can be compounded at one end, at an additional charge of \$10.60. £2 3s. 7d. list.

Please note we have discontinued the manufacture of iron rolls. All our formers have steel rolls. Rollers of any size and description made to order.

Write for Discounts

Solid Frame Stove Pipe Formers



All our Formers have Steel Rolls

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1½C	2½ in. rollers, 37 in. long for 17 gauge iron	\$68 90	14	3	2	Daisy	975
2	2 in. rollers, 37 in. long for 20 gauge iron	31 60	6	9	10	Cist	46
3	2 in. rollers, 31 in. long for 18 gauge iron	24 60	5	1	2	Cite	47
4	1¾ in. rollers, 31 in. long for 24 gauge iron	23 40	4	16	3	Bodyguard	48
5	1½ in. rollers, 21 in. long for 24 gauge iron	14 80	3	0	10	Bogmoss	49
6	1½ in. rollers, 16 in. long for 24 gauge iron	13 50	2	15	6	Bogus	50
7	1 in. rollers, 12 in. long for I.C. Tin	11 70	2	8	2	Bohea	51

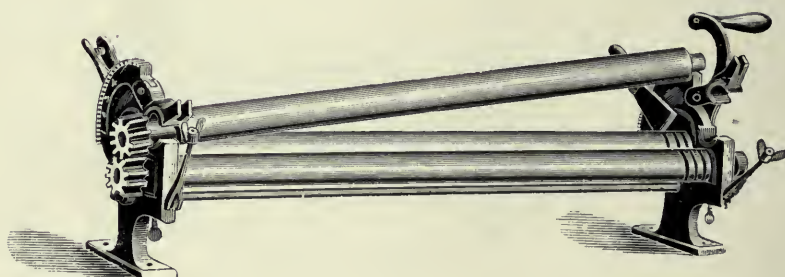
With Slip Roller

5½	1½ in. rollers, 21 in. long for 24 gauge iron	17 15	3	10	6	Boil	52
6½	1½ in. rollers, 16 in. long for 24 gauge iron	15 85	3	5	2	Boiler	53
7½	1 in. rollers, 12 in. long for I.C. Tin ...	14 00	2	17	7	Bold	54

Parts

	£	s.	d.
Set of Thumb Screws for Formers from Nos. 2 to 9 inclusive (four) ..	\$2	85	11 9
Cut gear or cogs for 2 inch rollers, per pair.....	2	85	11 9
Cut gear or cogs for 1¾ inch rollers, per pair.....	2	35	9 8
Cut gear or cogs for 1½ inch rollers, per pair.....	1	70	9 8
Cut gear or cogs for 1 inch rollers, per pair.....	1	70	9 8
Handles, each.....	95		3 11

Slip Roll Former



No. 9

We beg to call special attention to this machine. The back roll is moved by eccentrics instead of screws, and can be changed from the smallest circle to the passing of a straight sheet in an instant. For wash boiler bodies or any work required to be part straight and part circular it is unequalled. The roll is set perfectly parallel by the scale on the ends of the frame, without any adjusting whatever. It will do flaring work better than any other Former made.

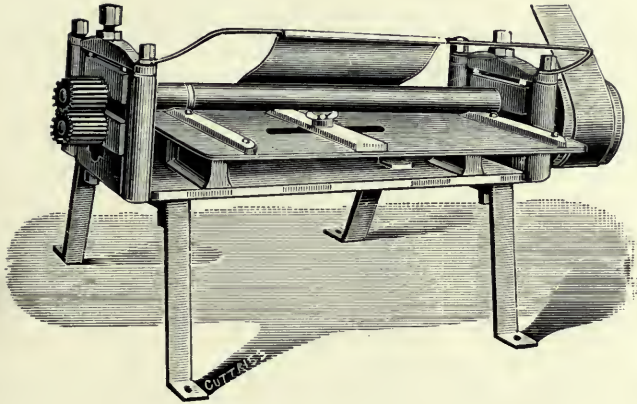
No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
8 2 in. rollers 37 in. long, for 20 gauge. . .	\$40 00	8	4	5	Bolled	55
9 2 in. rollers 31 in. long, for 18 gauge.	32 00	6	12	4	Bomb	56

Formers Nos. 2, 3, 4, 8 and 9 are provided with an attachment which greatly facilitates the forming of flaring work.

Please note we have discontinued the manufacture of iron rolls. All our Formers have steel rolls.

Write for Discounts

Power Former



No. 10

For forming can bodies, etc., with or without bead. They have steel rolls, gauges, cut gears and composition metal boxes, and roll a true circle, which secures a perfect lap of the edges, and the work drops out without aid from the operator.

By an alteration of the rolls they can also be fitted for other special purposes, such as forming and swedging at one operation, the bodies of salmon or other open top cans. Unless otherwise ordered the machine is equipped with plain rolls.

No.	Price	Price	D. & W. No.
		£ s. d.	
10, For hand or power.....	\$35 10	7 4 4	70
Extreme distance between gauges.....			12 inches
Size of Pulley.....			4 x 2¾ inches
Speed of Pulley.....			200 to 250 rev.
Size of rolls.....			12 in. long and 1 in. dia.
Code Word—Cat.			

No.	Price	Price	D. & W. No.
		£ s. d.	
11, For hand and power, less stand.....	\$69 70	14 6 5	976
Extreme distance between gauges.....			21 inches
Size of Pulley.....			9 x 2¼ inches
Speed of Pulley.....			100 R. P. M.
Size or rolls.....			2¼ x 21 inches
Extra for stand.....	11 75	2 8 4	
Code Word—Dainty.			

Foot and Power Squaring Shears

General Description

Our Shears on examination will be found to embody all the latest improvements and up-to-date in every particular.

It will be observed that we make both the ordinary Power Squaring Shears and Gap Shears in two styles, viz., "Underneath Gear" and "Overhead Gear," so called because the gearing or driving mechanism is below or above the bed. It is largely a matter of taste, and we make both styles to suit our various customers.

The Material throughout is of the very best, and the workmanship is unexcelled. **Care** being taken in every particular so as to insure the best possible results.

Wearing Surfaces. The wearing surfaces are large and adjustments are provided to take up wear.

Graduated Brass Scales are inserted in bed.

Knives. The knives are first carefully tempered, the backs and seats are then accurately planed, and bolted firmly into their places and ground perfectly true on a machine specially adapted for this purpose. By this method it avoids the unsatisfactory process of packing, and ensures an edge which cannot be equalled by any other process.

Hold Down. All power machines are equipped with an automatic hold down to prevent sheet from slipping when cutting. Foot power machines 6 ft., 8 ft. and 10 ft. long and gap shears are equipped with a lever hold down.

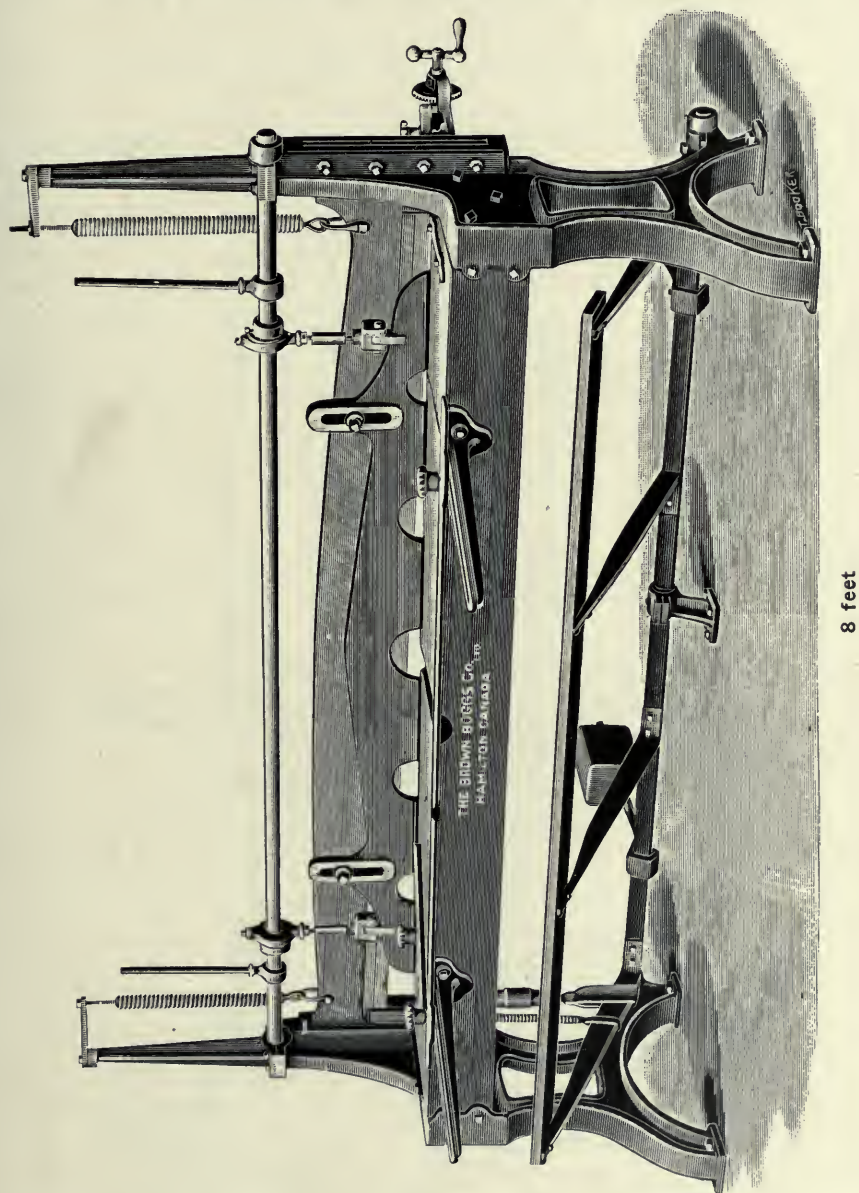
Clutch. The clutch is a four point or instantaneous one, the advantage of which cannot be overestimated, especially on a larger and necessarily slower running machine.

Back Gauge. With Nos. 720, 960 and 1200, we supply a Gauge, so arranged that it can be quickly adjusted from the front by means of a hand wheel as shown in cut on page 138. The advantage is that it saves the operator the necessity of going to the rear of machine to adjust the gauge. Brass Scales are inserted in Gauge Arms.

With Nos. 72, 96, 120, 172, 196, and 1120, we supply a Gauge which can be adjusted accurately at either end of machine by means of a small handle.

Brass Scales are also inserted into Gauge Arms and an index finger on the gauge, so that much time is saved in measuring the sheets.

Cornice Makers' Squaring Machines



Special attention is directed to our Cornice Makers' Foot Squaring and Cutting Shears. It will cut No. 18 gauge iron and lighter the entire length of a 6, 8 or 10 ft. sheet at a single cut.

The side guides and legs are formed in one piece of heavy casting. The cross-head carrying the upper knife is exceptionally strong, has wide side bearings scraped to a proper fit, and gibs in the guides to accommodate wear. In front of the upper knife, a clamping device operated by an adjustable hand-lever from anywhere in front of the Shears, which clamp holds the sheet firmly upon the bed or table, so that a perfectly straight cut is guaranteed. This clamp does not extend all the way across the upper knife, but stops short about a foot from each side, and there are a number of half round openings on its lower surface so as to give ample space to see the marks on the sheets in cases where they are marked for cutting.

Cornice Makers' Squaring Shears—*Continued*

The gauge on these shears is arranged so as to work parallel with the knives at all times and can be accurately adjusted at either end by means of a small handle. Brass scales are inserted in the Gauge Arms and an index finger is fastened on the gauge, saving considerable in measuring the sheets.

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 6 ft.....	about 1800 lbs.	375 00	77	0	0	Adjoin	101
★ 8 ft.....	about 3000 lbs.	530 00	109	0	0	Catspaw	102
★ 10 ft. with centre leg	about 4000 lbs.	696 00	143	0	0	Caul	103

Foot Squaring Shears



No. 1

Write for Discounts

(For description and prices see page 37.)

Description of Foot Squaring Shears

(See cut page 36.)

These Shears are substantially made; the best materials are used throughout, and they are of the most approved pattern.

The knives are first carefully tempered, the backs and seats are then accurately planed and bolted firmly into their places and ground perfectly true on a machine specially adapted for this purpose. By this method it avoids the unsatisfactory process of packing and insures an edge which cannot be equalled by any other process.

The crosshead has wide scraped bearings and gibs, with set screws to take up wear.

The springs are made of specially prepared, tempered steel spring wire.

Brass graduated scales are inserted in the bed.

Provision is made for a back table for catching the sheared work as it drops from the knives, but this table is not sent unless specially ordered.

The price includes full set of gauges (side, back, front and bevel).

Prices

No.	Price	Price			Code	D. & W. No.
		£.	s.	d.		
★ 00	48 in. for 18 gauge iron. \$150 00	30	16	6	Cauldron	104
★ 0	36 in. for 18 gauge iron. 88 00	18	1	8	Caulk	105
★ 1	30 in. for 20 gauge iron. 59 40	12	4	0	Cloy	106
★ 2	20 in. for 20 gauge iron. 50 00	10	6	0	Admit	107

Extra for Back Table

No.		Price	Price			Code
			£	s.	d.	
★ 00	48 in.....	\$3 20	0	13	2	Calm
★ 0	36 in.....	2 00		8	3	Calve
★ 1	30 in.....	1 60		6	7	Clubfoot
★ 2	20 in.....	1 60		6	7	Came

Those wishing to **Order** by **Code Word** and wishing **Back Table** add the letters "ly" to the end of the Code Word as follows: for a 48 in. Shears with Back Table cable "Cauldronly."

Shears for Extra Heavy Work Made to Order

We also make a specialty of Shears fitted with special knives and hold down for cutting mica, cellboard, asbestos, etc., price quoted on receipt of sample of material.

Parts for Foot Shears

	Price	Price	Code
	£	s. d.	
Extra knives for No. 00, 48 in. Square Shears per pair ...	\$38 60	7 18 8	Camerated
Extra knives for No. 0, 37 in. Square Shears per pair ...	28 00	5 15 0	Clublaw
Extra knives for No. 1, 31 in. Square Shears per pair ...	16 00	3 6 0	Camp
Extra knives for No. 2, 21 in. Square Shears per pair ...	13 20	2 14 3	Clubmoss
Treadle for 21 in. Square Shears ...	4 00	0 16 6	Admonition
Treadle for 31 in. Square Shears ...	6 00	1 4 9	Ado
Extension Arms for 21 in. Square Shears per pair ...	1 55	0 6 5	Adopt
Extension Arms for 31 in. Square Shears per pair ...	1 55	0 6 5	Adoption
Extension Arms for 37 in. Square Shears per pair ...	1 80	0 7 5	Calf
Extension Arms for 48 in. Square Shears per pair ...			
Back Gauge for 21 in. Squaring Shears each ...	2 05	0 8 6	Adorer
Back Gauge for 31 in. Squaring Shears each ...	2 05	0 8 6	Adown
Back Gauge for 37 in. Squaring Shears each ...	3 50	0 14 5	Causal
Back Gauge for 48 in. Squaring Shears each ...	6 00	1 4 9	Adrift
Front Gauge for 21 in. Squaring Shears each ...	80	0 3 4	Clod
Front Gauge for 31 in. Squaring Shears each ...	1 00	0 4 2	Advance
Front Gauge for 37 in. Squaring Shears each ...	1 50	0 6 2	Cause
Front Gauge for 48 in. Squaring Shears each ...	2 05	0 8 6	Advantage
Bevel Gauges each ...	60	0 2 6	Caustic
Clamp Screw and nut (five) for gauges, each ...	35	0 1 6	Causterize
Crosshead for top knife, 21 in. Squaring Shears ...	6 00	1 4 9	Adversity
Crosshead for top knife, 31 in. Squaring Shears ...	10 50	2 3 2	Advert
Crosshead for top knife, 37 in. Squaring Shears ...			Califate
Crosshead for top knife, 48 in. Squaring Shears ...			Clip
Side Arm for 21 in. Squaring Shears each ...	3 50	0 14 5	Clipper
Side Arm for 31 in. Squaring Shears each ...	4 00	0 16 6	Calk
Side Arm and leg (all one piece) for 37 in. Sq. Shears ea.			Calling
Side Arm and leg (all one piece) for 48 in. Sq. Shears ea.			Callow
Set connecting rods with nuts for 21 in. ...	2 40	0 9 11	Advise
Set connecting rods with nuts for 31 in. ...	2 40	0 9 11	Advised
Set connecting rods with nuts for 37 in. ...	2 80	0 11 6	Aerate
Set connecting rods with nuts for 48 in. ...	2 80	0 11 6	Aerated
Steel spring for 21 in. each ...	1 90	0 7 10	Afar
Steel spring for 31 in. each ...	1 90	0 7 10	Affably
Steel spring for 37 in. each ...	2 30	0 9 6	Coction
Steel spring for 48 in. each ...	2 50	0 10 4	Cod

Write for Discounts

Foot, Gap, Squaring and Slitting Shears



No. 1

These Shears are for slitting or trimming sheet metal any length not exceeding 16 gauge in thickness.

We make them with two depths of gap, viz.: 15 and 18 inch. The 15 inch will slit the centre of a 30 in. sheet, and the 18 in. a 36 in. sheet.

Drop leaf tables are furnished on each end of bed for supporting long sheets.

The hold-down, operated by a hand lever, is adjustable for various thicknesses of metal.

The knives are ground perfectly true and require no packing.

The prices include full set of gauges (side, back, front and bevel), hold-down and assistant lever.

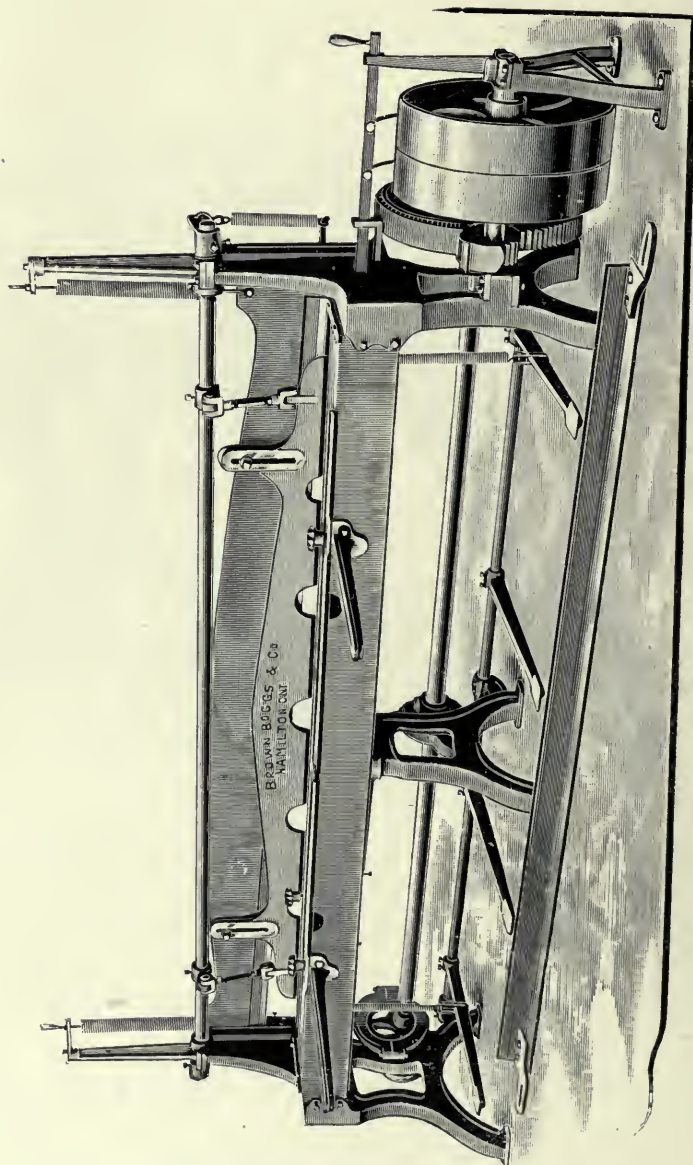
For 16 gauge iron and lighter

No.			Price	Price			Code	D. & W. No.
				£	s.	d.		
★ 1	Cut 30 in.	15 in. Gap....	\$192 00	39	9	0	Affair	126
★ 2	Cut 30 in.	18 in. Gap....	211 00	43	7	2	Affect	127
★ 3	Cut 36 in.	15 in. Gap....	222 00	45	12	4	Cautiously	128
★ 4	Cut 36 in.	18 in. Gap....	246 00	50	11	0	Caveat	129

Write for Discounts

Underneath Gear Power Squaring Shears

See description page 34



No. 1120

Underneath Gear Power Squaring Shears

(See cut page 40.)

They are supplied with our four point clutch, all necessary wrenches, gauges (side, back, front and bevel), and for the work which they are intended they are in many points superior to anything in the market.

For fuller description of machines, see page 34.

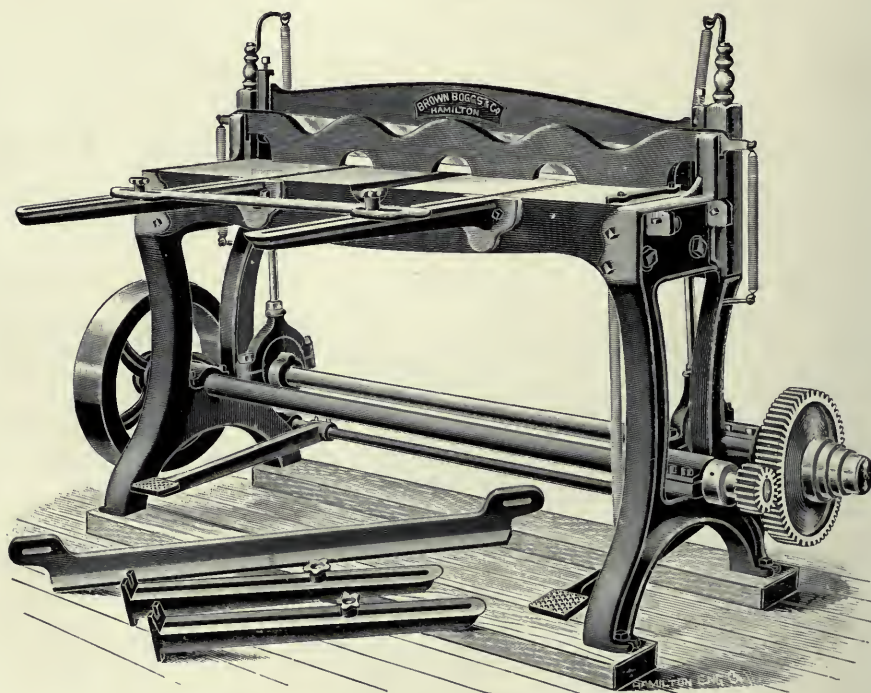
Price

Underneath Gear Power Squaring Shears

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 172	6 ft. for 18 gauge iron, about 2300 lbs.	\$515 00	105	17	0	Addition	95
★ 196	8 ft. for 18 gauge iron, about 3450 lbs.	700 00	144	0	0	Additional	96
★ 1120	10 ft. for 18 gauge iron, about 4400 lbs.	820 00	168	10	0	Address	97

*For a full line of heavy Shears,
Brakes, Power Presses, Etc.,
see our Section B.
Catalogue.*

Underneath Gear Power Squaring Shears—*Continued*



No. 37

Power Squaring Shears

Our Nos. 37, 37a and 48 Power Squaring Shears are built on the same principle as our larger ones, excepting the hold-down which is worked automatically by strong springs.

Experience has proved to us that for these sizes of Shears this style of hold-down is most satisfactory.

Brass graduated scales are inserted in the bed.

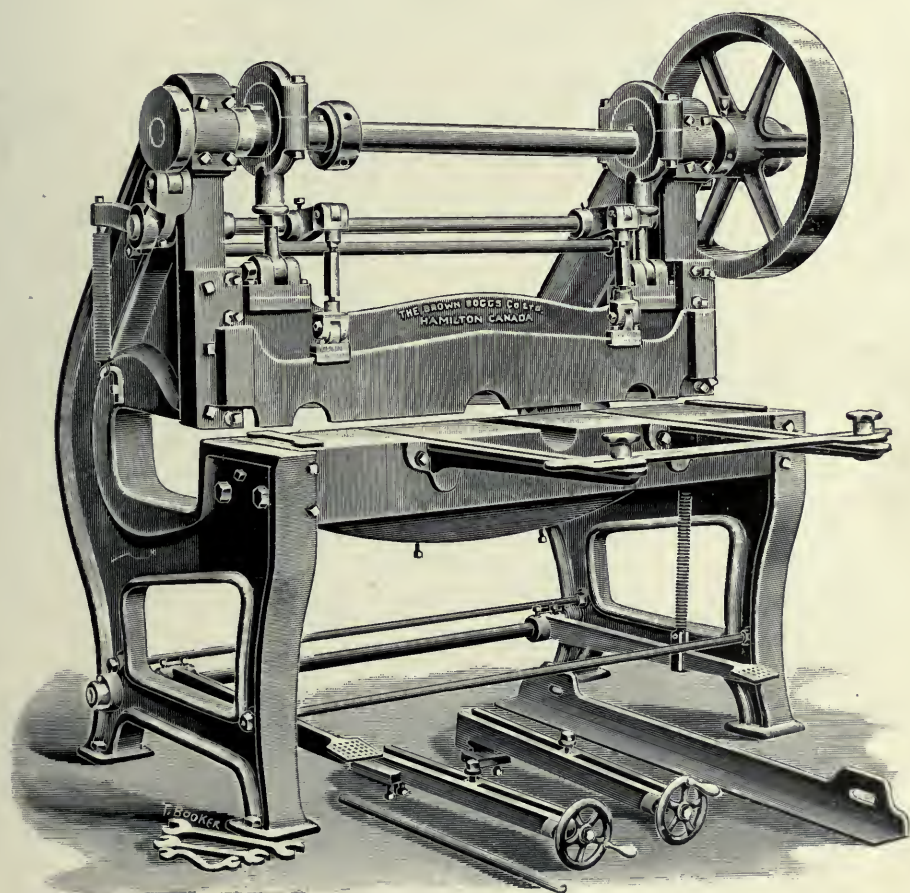
Price includes full set of gauges (side, back, front and bevel), four point clutch and drop side tables not shown in cut.

For further description see page 34.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 37 3 ft. for 16 gauge iron, back geared, weight about 850 lbs	\$234 00	48	2	0	Adductor	98
★ 37A 3 ft. for 18 gauge iron direct geared, weight about 775 lbs	202 00	41	10	0	Adhere	99
★ 48 4 ft. for 18 gauge iron, back geared, weight about 1100 lbs	281 00	57	15	0	Adhesive	100

Heavier ones made to order.

Overhead Power Gap Shears



No. 404

See description and price, page 44

Overhead Power Gap Shears

(See cut page 43.)

DESCRIPTION

As mentioned on page 34 we make both Underneath and Overhead Gear Power Gap Shears, so called on account of the mechanism being placed beneath or above the bed.

With the Overhead Gear Machines an automatic hold-down is provided; this hold-down automatically clamps the sheet while being cut and which is adjustable to the various thicknesses of metal. With the Underneath Gear Machines an independent hand lever hold-down is supplied.

With both styles of Shears we use the celebrated instantaneous clutch, and each machine is supplied with front, back and bevel gauges and all necessary wrenches.

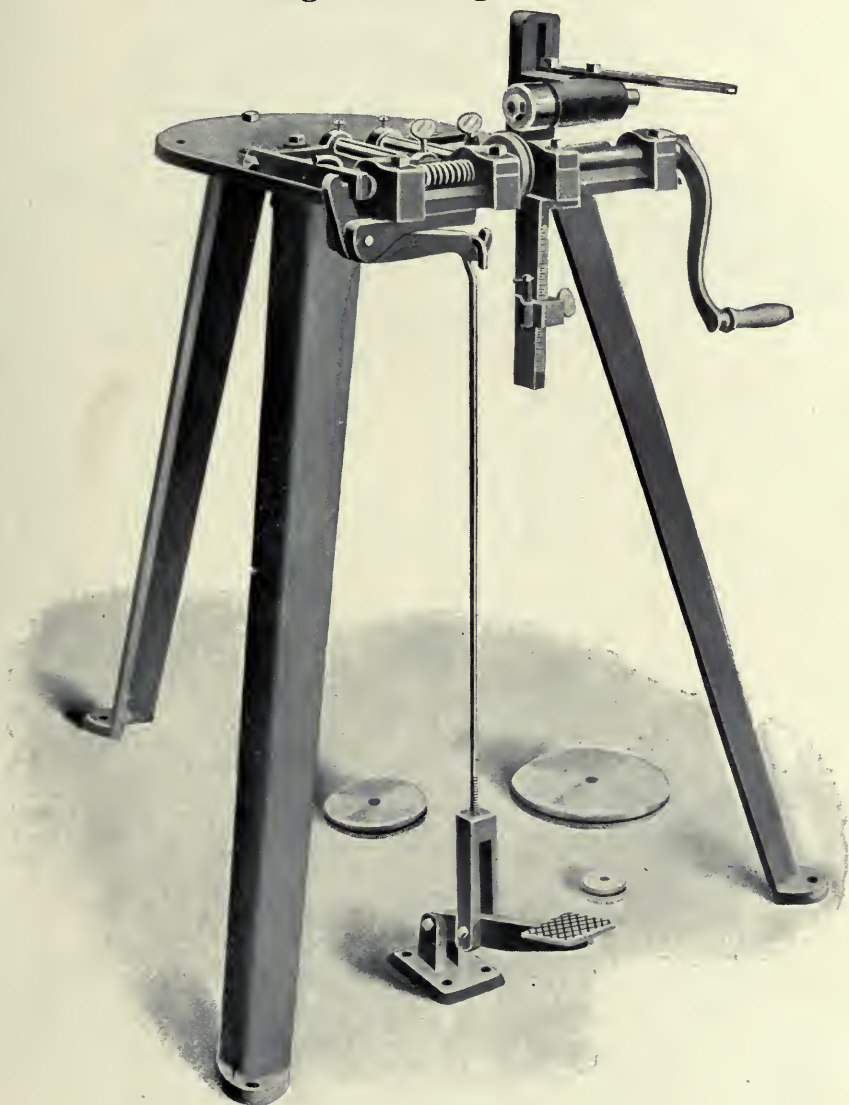
Special sizes made to order.

Price and Particulars Power Gap Shears

Overhead Gear

No.	Will Cut and Square	Depth of Throat	Weight	For What Gauge Iron	Price	Price			Code	D. & W. No.	
						£	s.	d.			
★ 396	42 in.	15 in.	2750 lbs.	16	500 00	102	15	0	Cannot	799	Direct
★ 400	42 in.	15 in.	3000 lbs.	14	560 00	115	2	0	Candle	798	Direct
★ 402	48 in.	15 in.	3160 lbs.	16	570 00	117	3	0	Canard	797	Direct
★ 404	48 in.	15 in.	3400 lbs.	14	620 00	127	8	0	Canal	796	Direct
★ 406	72 in.	6 in.	5700 lbs.	12	1300 00	267	3	0	Cog	847	Geared

No. 1A Circular Shears With Edge Turning Attachment



Set on Iron Legs

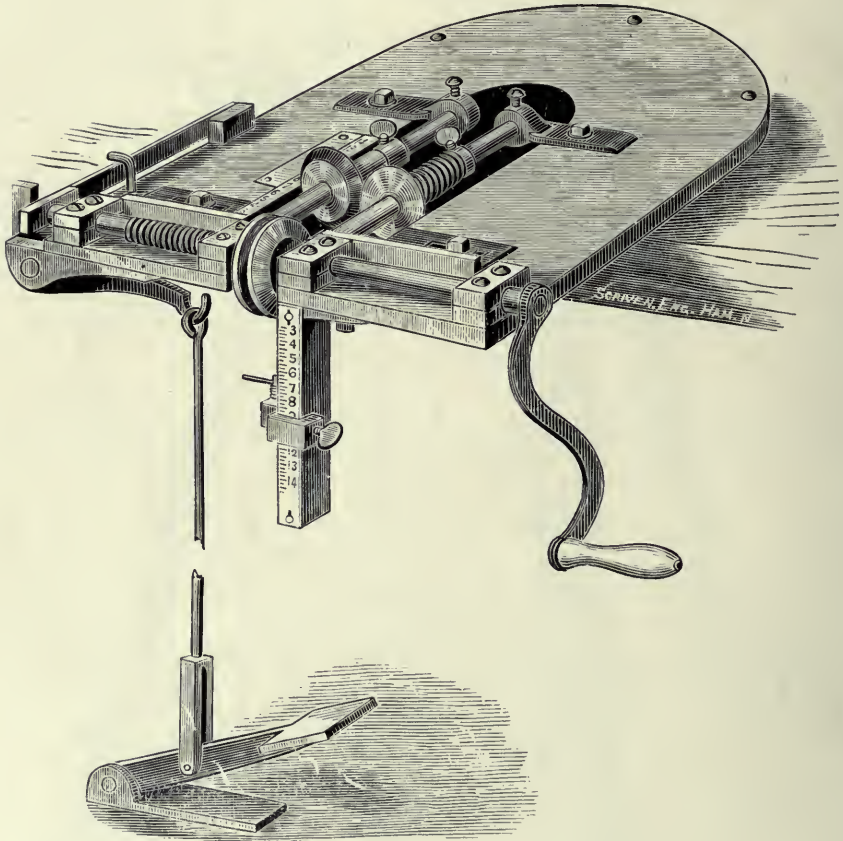
This Shears will cut circles and flange over the edge at the same setting. It is, however, necessary to have a pair of discs for each size article required to be flanged. Will cut circles from $2\frac{3}{4}$ to 14 in. in diameter. Each machine is supplied with 5 pair of discs, viz.: $2\frac{1}{4}$, 3, $4\frac{7}{8}$, $5\frac{3}{4}$ and $7\frac{1}{2}$ in.

For 24 gauge iron and lighter

	Price	Price £ s. d.	Code	D. & W. No.
Complete with 5 pair discs and iron stand	\$57 00	11 14 3	Curvet	954
Extra for discs up to $7\frac{1}{2}$ in. diameter, per pair . . .	2 60	10 9		
Extra for discs larger than $7\frac{1}{2}$ in. diameter per pair .	5 00	1 0 7		

Always give page in catalogue when ordering

Circular Shears



No. 1 (Newton's)

With two pair discs, one pair each $2\frac{1}{4}$ and $5\frac{3}{4}$ in. in diameter.

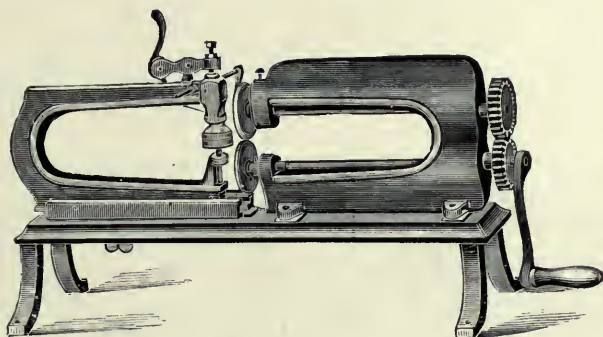
Will cut circles from $2\frac{3}{4}$ to 14 in. in diameter.

For 24 gauge iron and lighter

	Price	Price			Code	D. & W. No.
		£	s.	d.		
Complete, with two pair of discs	\$28 35	5	16	6	Aforehand	143
Extra for discs, per pair	2 60		10	9	Aforesaid	
Extra for cutters, per pair	5 90	1	4	4	Aforetime	
Lower gauges	1 20		5	0	Aft	
Cutter Holder	95		4	0		

Always give page in catalogue when ordering

Circular Shears—*Continued*



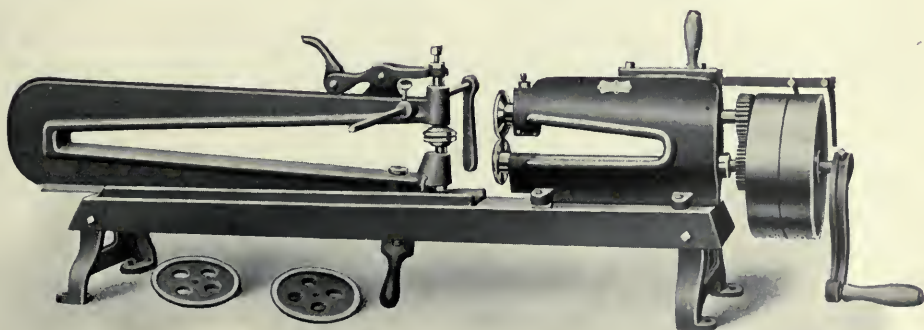
No. 2 (Waugh's)

The above cut represents our Improved Circular Shears. The improvement is on the side head, which carries the discs, it being locked by a clamp screw to the bed, instead of a set screw on the side, which breaks away the face of the slide, and thereby renders it impossible to set the machine accurately. The clamp screw enables the operator to set the machine instantly and firmly, and has no tendency to tip the head (as the set screw has), and therefore insures better work.

The discs both in Nos. 2 and 3 Circular Shears (as illustrated in cuts) are clamped together by an eccentric lever. This is much quicker and more convenient than the hand screw formerly used. It is provided with a hardened steel set screw to take up the wear.

No 2 is suitable for sheet iron or tin not exceeding 22 gauge; and No. 3, 20 gauge.

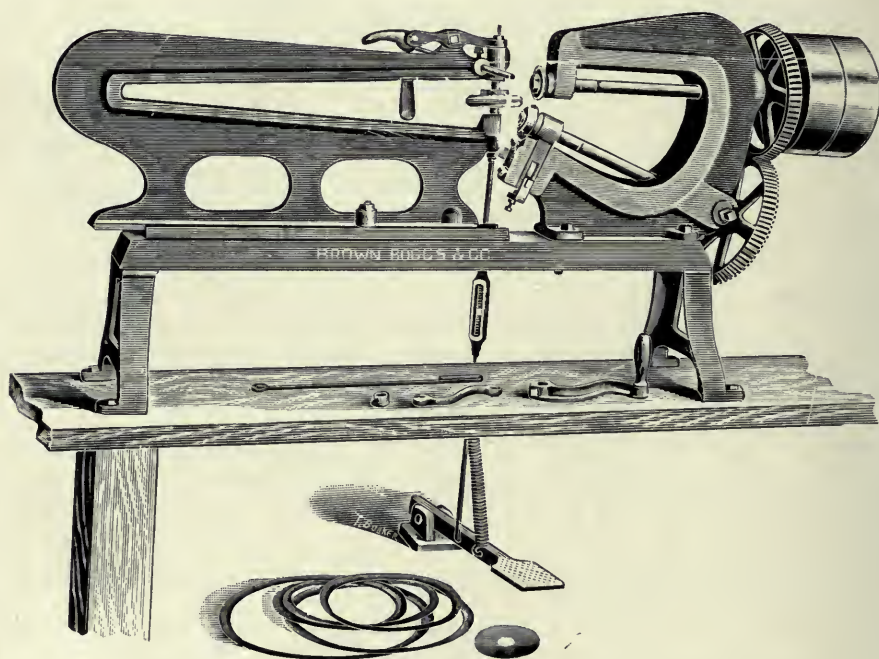
No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
2 Cuts circles from 2¼ to 19 inches	\$30 50	6	5	5	Afteract	149
2 With pulleys for power, with shifter . . .	36 30	7	9	3	Aftercrop	150



No. 3

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 3 Cuts circles from 3 to 41 in. hand . . .	\$58 50	12	1	0	Aftermost	151
★ 3 With pulleys for power, with shifter . .	69 00	14	3	8	Afternoon	152

Combined Ring and Circular Shears



No. 6

It is for the purpose of cutting internal circles or rings from a sheet of metal without cutting through the outer edge. It can also be used as an ordinary circular shears. Greatest width or rim that can be cut, 12 in. Largest diameter of circle, 36 in. Smallest, 6 in.

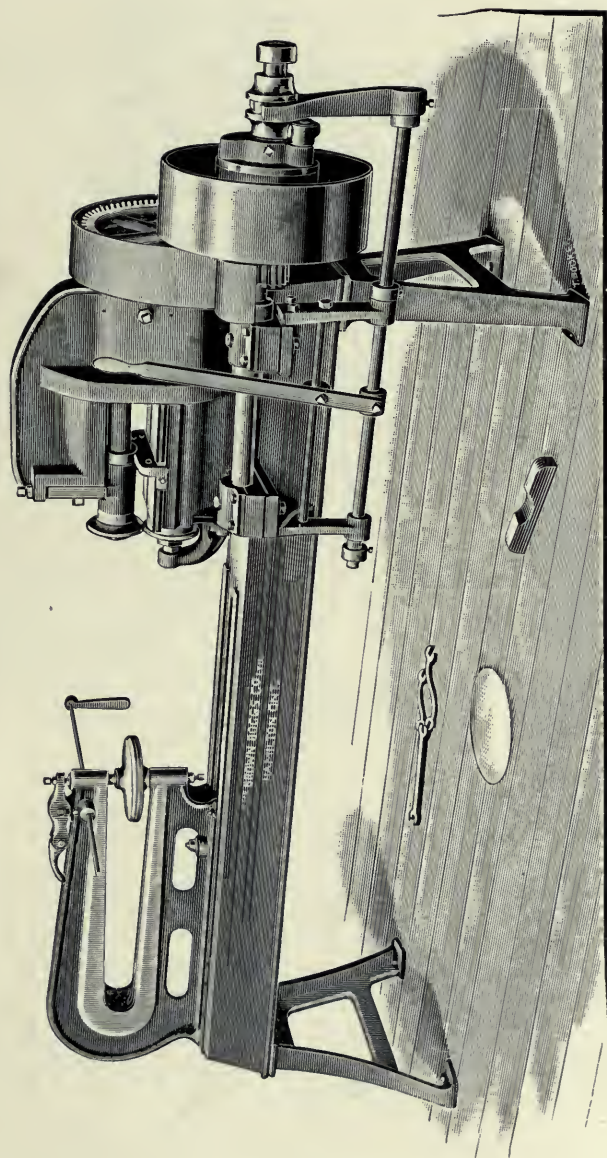
The discs are clamped together by an eccentric lever, which is much quicker and more convenient than the hand screw formerly used. The cutters are brought together by means of a foot treadle, enabling the operator the use of both hands.

This machine is guaranteed for iron or soft steel, not exceeding 20 gauge in thickness. Both crank and tight and loose pulleys are always sent unless otherwise ordered.

No. 6 Combined Ring and Circular Shears.

Price	Price	Code	D. & W. No.
	£ s. d.		
★ \$140 00	28 16 0	Button	767

Power, Circular and Slitting Shears



★ No. 120 (Geared)

See description and dimensions, Page 50

Power Circular and Slitting Shears

No. 120

(See cut page 49.)

This Shear was designed for the purpose of cutting circular blanks from 10 to 52 inches in diameter and slitting sheets any length, and in width limited only by the depth of throat.

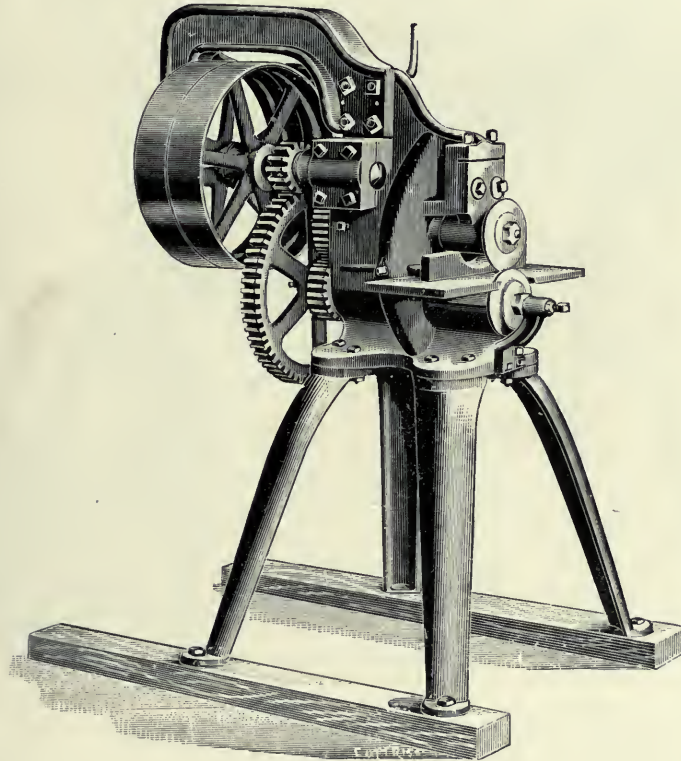
The clamping device for holding the sheet is operated by an eccentric handle so that the operation is instantaneous. The bed is graduated to correspond with the diameter of the circle to be cut. It is a very substantial machine, nicely proportioned and supplied with a friction clutch, so that the operator has full control of the machine.

Particulars

Will cut Gauge.....	No. 12
Depth of throat of cutting head, inches.....	12
Depth of throat of circular arm, inches.....	26
Diameter of Cutters, inches.....	5
Diameter of Pulleys, inches.....	16
Width of Pulleys, inches.....	5½
Speed of Pulleys, per minute.....	250
Proportion of Gearing, 4 to 1.....	

	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
★ Price	1550 lbs.	\$390 00	80	0	0	Cogent	848

Power Slitting Shears



No. 0 Power Slitting Shears

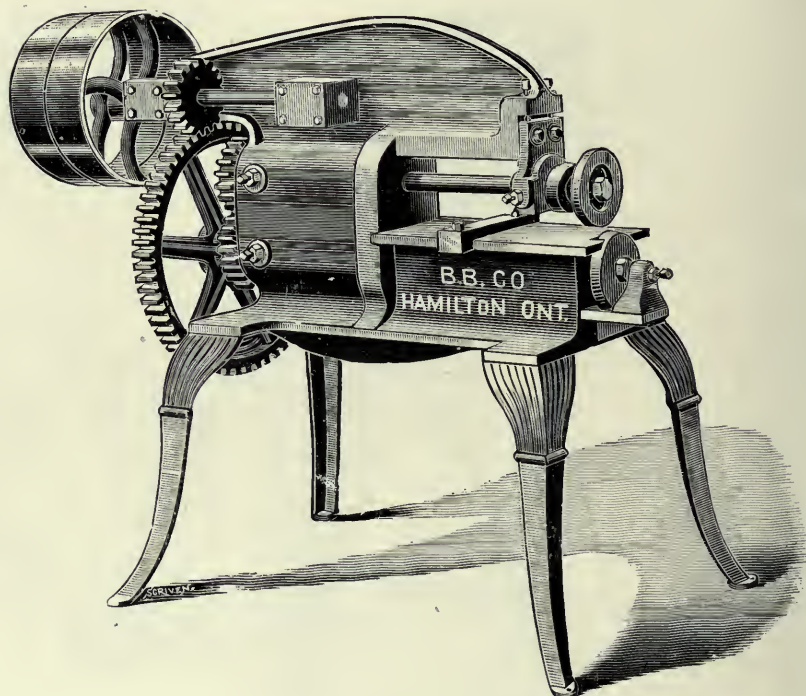
This Shear is for cutting or trimming iron or soft steel not heavier than $\frac{1}{8}$ inch thick. No. 0 has a gap of 4 inches, and No. 0A has a gap of 12 inches.

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 0	With pulleys complete, 4 in. throat ...	\$129 00	26	10	0	Affliction	136
★ 0A	With pulleys complete, 12 in. throat ..	163 75	34	1	2	Bachelor	968

Speed of driving pulley 160 to 180 revolutions per minute.

Write for Discounts

Power Slitting Shears



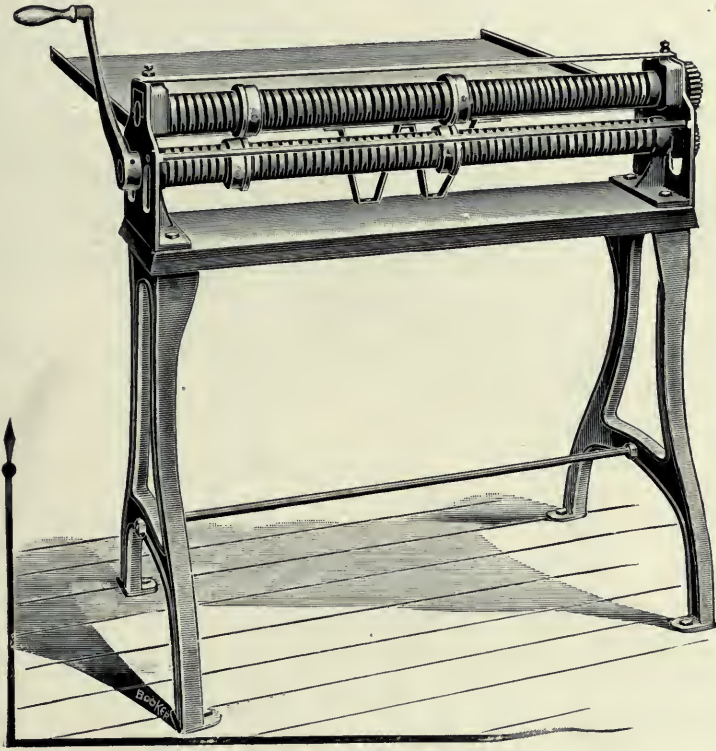
No. 1

These shears are especially adapted for cutting and trimming heavy sheet steel. If desired, irregular work can be cut, providing the curve or sweep be not too acute.

No.	Price	Price			Code	D. & W. No
		£	s.	d.		
★ 1	For 12 gauge soft steel with pulleys, geared 4 to 1, depth of throat 18½ ins.....	\$187 00	38	9	0	Affluent 137
	Less Pulleys	176 00	36	4	1	Afford 138
★ 1A	Same as No. 1, but will cut 10 gauge soft steel	210 65	43	5	8	Daffodil 972
	Less pulleys.....	199 65	41	0	6	Dahlia 973
★ 2	For 12 gauge soft steel with pulleys, geared 4 to 1, depth of throat 24 ins....	246 00	50	0	11	Afield 139
★ 2A	Same as No. 2, but will cut 10 gauge soft steel	273 30	56	3	2	Dandelion 974

When ordering always give catalogue page

Cornice Makers' Rotary Slitting Shears



No. 1

This machine is specially designed for cornice makers who are not provided with eight or ten foot Squaring Shears. It is capable of slitting sheets of galvanized iron or tin any length, 20 gauge and lighter, and any width not exceeding 36 inches.

It has two sets of cutters, which enables the operator to cut two strips off the sheet at one time.

The work is not only done about five time quicker than can be performed on the brake, but the edges of the stock are left clean and straight, which greatly facilitates the work in subsequent operations. This is a most important feature, especially when a round bead is to be formed on the work, as it is somewhat difficult to insert in a beading rod a piece of stock which has been broken off in the brake.

Another advantage is that it prolongs the life of the brake, as there is no work so wearing on the latter machine as the cutting off or breaking of sheets.

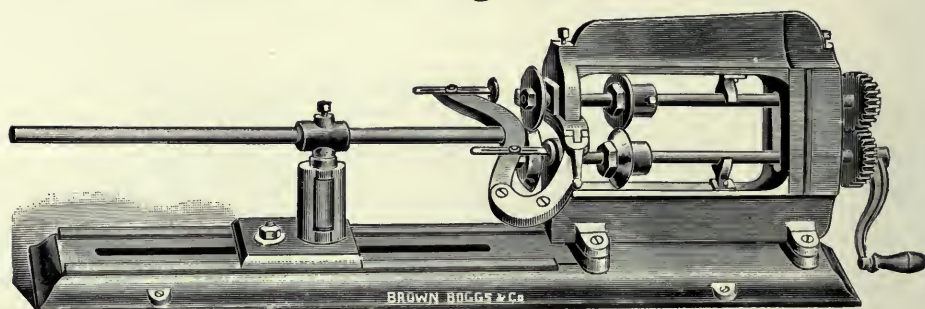
	Price	Price	Code	D. & W. No.
		£ s. d.		
★ Complete with front table and gauge....	\$96 00	19 15 0	Cavern	130

Power can be applied to this machine at a small additional cost

Always give page of catalogue when ordering

Write for Discounts

Shears for Cutting Parallel Curves



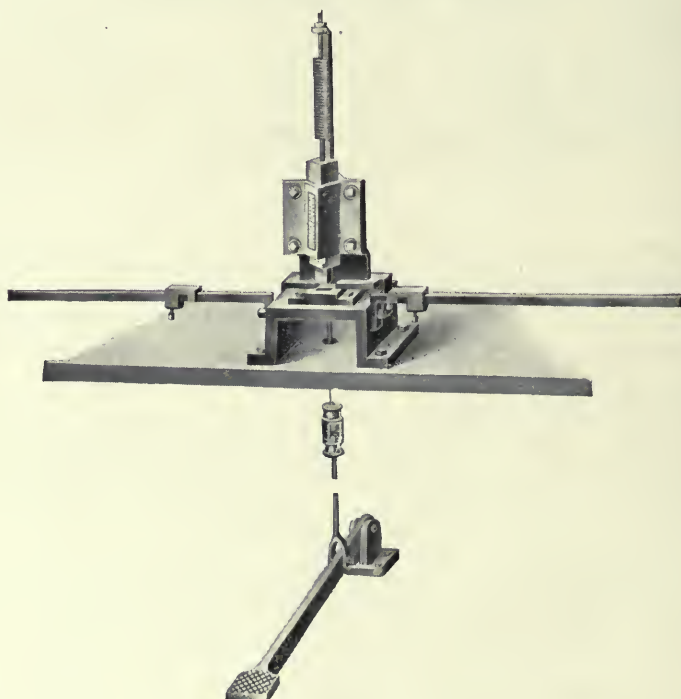
No. 2

These Shears were designed for performing the same work as is accomplished by the use of dies in large manufacturing establishments. Will cut 22 gauge iron and lighter.

They are adapted for cutting at one operation from sheet metal parallel curves of almost any ordinary pan section. They can be adjusted quickly for various sizes required.

	Price	Price		Code	D. & W. No.
		£	s.	d.	
★ No. 2.....	\$148 60	£	30	11 0	Again 154

Notching Machine



No. 1

This machine is adapted for notching the sections of pieced sheet metal ware, for cutting corner and hinge notches for square boxes and other similar work. It is operated by treadle, and will cut through several thicknesses of tin at one stroke. The gauges are adjustable. It is compact, strong and easily operated.

	Price	Price		Code	D. & W. No.
		£	s.	d.	
★ Complete with 1 in. Square Notching Die....	\$43 65	£	8	19 5	Against 155

Notching Shears



No. 15

The above cut is a fair representation of our No. 15 Notching Shears; as can be seen by the illustration they are compact and well proportioned.

They are so constructed as to accommodate as many cutters or notching knives as the size of the machine will allow, according to the size of the notches required. Notches of various distances apart can be cut, by simply loosening the bolts which hold the cutters in position and sliding them along the slot and re-tightening the bolt. The advantage of this is obvious as it saves the time that would otherwise be taken in removing and replacing the cutters, and prevents the possibility of throwing the machine out of adjustment each time a change is made.

Sets of different shaped notchers or cutters can be fitted to the machine so that it is capable of a large variety of work.

The moving parts have scraped bearings and gibs fitted with set screws to take up wear; the knives therefore cannot overlap or injure each other while in operation.

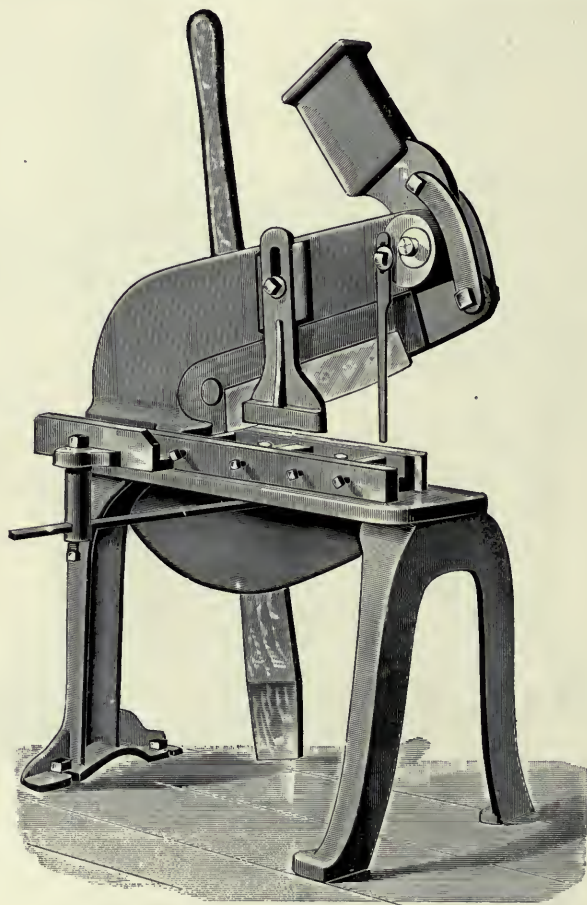
No. 15 is capable of notching a sheet not exceeding 24 in. in width. Side tables and gauges are provided.

Price

According to the number, size and shape of notches required.

Code Word—Agate. D. & W. No. 156. ★

Hand Lever Slitting Shears



No. 1

These Shears are for slitting sheet iron or soft steel any length or width. No. 1 will cut No. 10 gauge sheet iron, or bar iron 3-16 x 5, $\frac{1}{4}$ x 3 or $\frac{3}{8}$ x $1\frac{1}{2}$.

No. 3 is for $\frac{1}{4}$ in. sheet iron or bar iron $\frac{3}{8}$ x 5, or its equivalent in lighter stock.

The knives are solid cast steel of the very best quality, ground perfectly true. The light finger or pointer shown in cut near the front of the knife assists the operator, in enabling him to follow the lines of the work in hand.

Each Shear is supplied with two levers (long and short), hold down, and adjustable gauge which may be used on either side of machine.

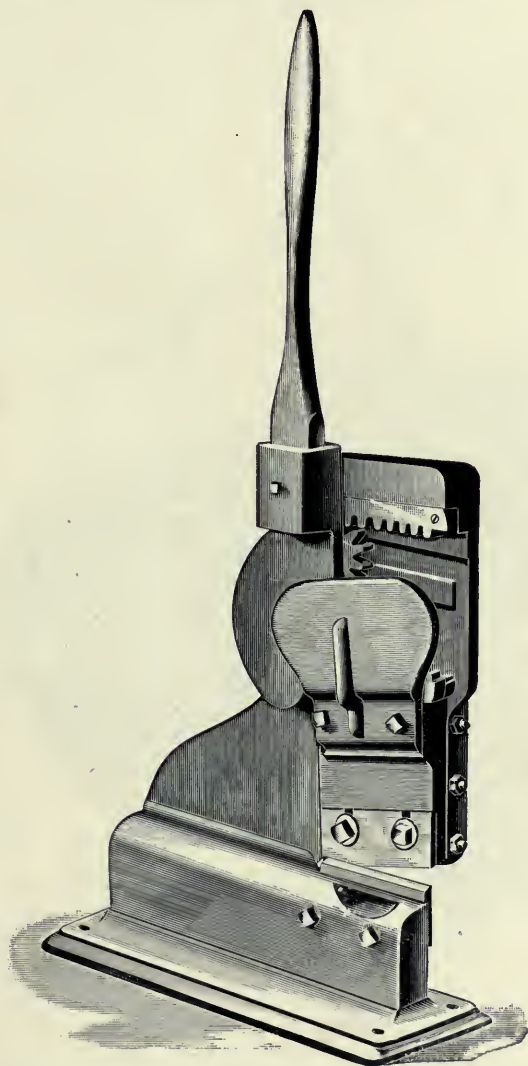
No.	Weight	Length Blade	Price	Price			Code	D. & W. No
				£	s.	d.		
★ 1	About 350 lbs.	12 in.	\$64 50	13	5	0	Affirm	131
★ 3	About 450 lbs.	8 in.	106 50	21	18	0	Affirmable	132

We also make these Shears with a gap, so that a hole can be cut out in the centre of a sheet. Depth of gap 7 in. Length of blade 8 in.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 5	\$82 00	16	17	0	Cavil	133

Always give page in catalogue when ordering.

Hand Lever Slitting Shears



No. 15 (Pond's)

For those desiring a shear to work with **rapidity** and comparative **ease** on sheet iron or soft steel not exceeding **No. 10 gauge** (any length or width) we can recommend this machine.

Its construction is somewhat different to the ordinary lever shears and its source of power is contained in its peculiar leverage. Instead of being worked with an eccentric it has two incline planes, and by means of a combination of gear, gives precisely the same power at the end of the stroke as at the beginning. A short lever is therefore only necessary and the work can be cut with much **greater rapidity** and also enables the operator to stand close to the work.

It is specially adapted for **range makers** and other sheet metal workers doing similar work.

	Price	Price	Code	D. & W. No.
	£	s. d.		
★ Length of Blade, 7 in. ; weight, about 500 lbs..	\$140	00	28 16 0	Buy 774

Extra Heavy Lever Shears



No. 20

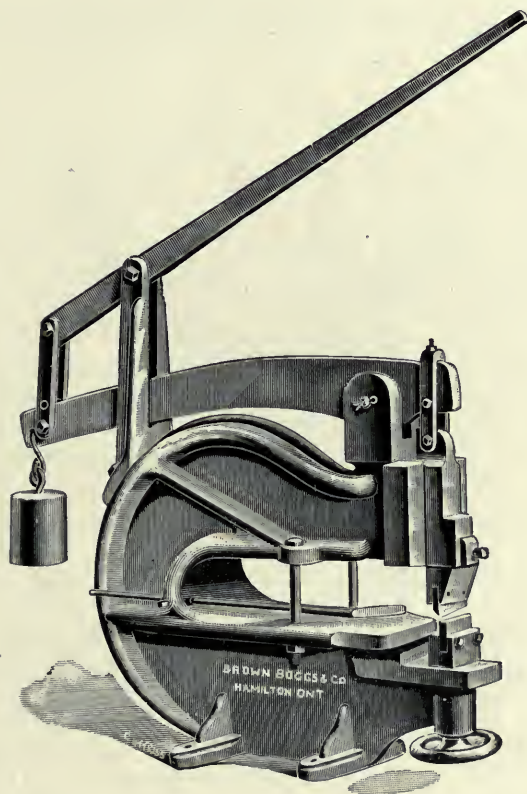
Capacity, $\frac{1}{2}$ in. iron plate.

This machine is intended for cutting heavy sheet iron in factories where a power Shear would be too expensive. The lever works to the front so one man can use the machine. It is very strongly built and is adapted for cutting sheets of any length or width as well as bars. It is off-set so that in splitting long or wide sheets the metal will pass through freely and will not bind, as is the case with the majority of machines of this type now on the market.

This machine can be operated at three different speeds, viz.: with the lever acting direct on the slide, for light work, or with the ratchet and pawl, for plates of medium thickness, or with compound lever, for heavy work. Machine has adjustable knives, adjustable gauge and a hold-down that prevents the material rising while being cut.

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 20	About 800 lbs.	\$219 30	45	1	3	Abbot	966

Inside Cutting Shears



No. 23

With Reversible Knives

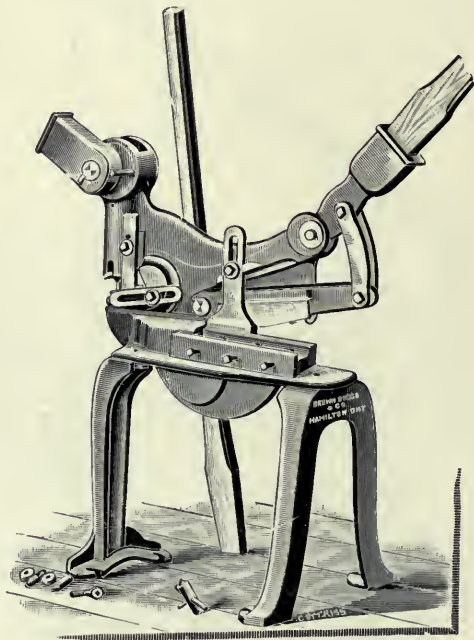
This Shear is for the purpose of cutting holes or the centres out of large sheets, No. 12 gauge and lighter. The knives being reversible, they can be set to cut parallel or at right angles with the machine, they are so arranged that they can be changed by simply loosening and tightening two screws. It will add length of life to the knives by first punching a small hole in the corners or at the starting point of the sheet desired to be cut. They will be found indispensable to range makers and designers in sheet metal. When desired, we substitute a treadle for the hand lever (as shown in cut) without any additional charge, but the hand lever is always sent unless otherwise specified.

Weight, about 575 lbs.

Price	Price			Code	D. & W. No.
	£	s.	d.		
★ \$105 00	21	13	0	Affix	135

Write for Discounts

Combined Lever Punch and Slitting Shears



No. 10

These tools will be found almost indispensable in a jobbing shop or places where Heavy Sheet Metal is used.

They will slit any length or width of sheet required up to their capacity. They are made in two sizes, viz.: No. 10 and 11.

No. 10 will slit No. 12 gauge sheet iron or soft steel or bar iron $\frac{1}{4}$ in. x 2 in. or $\frac{3}{8}$ in. round, and will punch a 5-16 in. hole in $\frac{1}{4}$ in. iron or its equivalent in lighter metal.

No. 11 is the same as No. 10, only heavier and will cut No. 10 gauge sheet iron, or punch a $\frac{3}{8}$ hole in $\frac{1}{4}$ in. iron.

No.	Length Blade	Depth Throat	Weight about	Price	Price			Code	D. & W. No.
					£	s.	d.		
★ 10	8 in.	4 in.	260 lbs.	\$58 00	11	18	0	Caw	134
★ 11	8 in.	5½ in.	375 lbs.	65 00	13	7	0	Codify	846

Write for Discounts

Lever Punching Presses

Lever punching presses are coming more and more into general use every day. With the aid of them work can be done at a much greater speed than any other way, and the cost is so reasonable they are within the reach of nearly every tinsmith.

In ordering punches and dies it is absolutely necessary to state the thickness of metal to be punched, as dies suitable for thin metal will not work satisfactorily on heavier metal, and vice versa. By bearing this in mind it will avoid trouble and unnecessary correspondence.

No. 70 Lever Punching Press

This machine we guarantee to punch $\frac{1}{4}$ in. hole in $\frac{1}{8}$ in. iron or soft steel or its equivalent, but this guarantee does not cover spring or tool steel.

We test these machines before leaving the factory on material fifty per cent. heavier than we guarantee them for.

A pipe should never be used on the handle of these punches to give additional leverage. The handle sent with the machine is sufficiently long for any ordinary workman to punch to the machine's capacity.

In setting up, bore a hole through bench or stand about two inches from edge of bench for punchings to go through, and set punch over same. Do not let front of punch project over the edge of bench.

For those who desire a heavier and stronger punch we have designed our No. 71, which has a capacity of $\frac{1}{4}$ in. hole in $\frac{1}{4}$ in. iron or soft steel.

See next page for cuts and prices of these two machines.

Lever Punching Presses—*Continued*

No. 70 Lever Punching Press

This small Punching Press will be found a very useful machine around a tin shop. It will punch a $\frac{1}{4}$ in. hole in $\frac{1}{8}$ in. iron or soft steel.

Each machine is supplied with an adjustable gauge stripper, three punches and dies, viz., $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$.

Depth of throat $4\frac{1}{2}$ in.

Weight about 50 lbs.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 70 Complete	\$16 50	3	8	0	Avoid	476



No. 71 Lever Punching Press

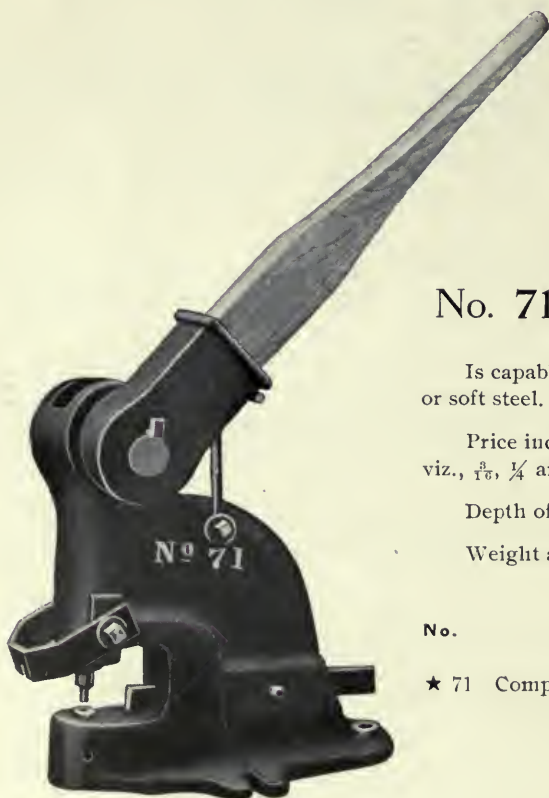
Is capable of punching a $\frac{1}{4}$ in. hole in $\frac{1}{4}$ in. iron or soft steel.

Price includes stripper, three punches and dies, viz., $\frac{3}{16}$, $\frac{1}{4}$ and $\frac{5}{16}$.

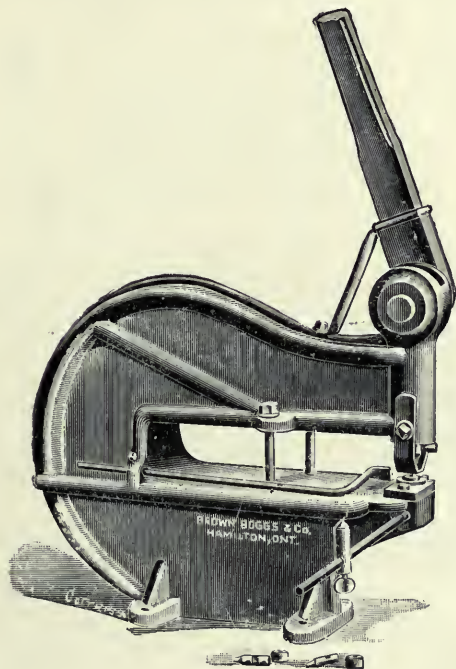
Depth of throat 4 in.

Weight about 120 lbs.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 71 Complete	\$28 70	5	18	0	Curator	946



Lever Punching Presses—*Continued*



No. 78 Deep Throat Hand Lever Punching Press

This press is specially adapted for range makers or work of a similar nature. It will also be found of immense value in a jobbing shop where heavy sheet metal is used.

The machine is heavily ribbed and is a very substantial and well made tool.

We guarantee it to punch a $\frac{1}{4}$ in. hole in $\frac{1}{4}$ in. iron 18 in. from the edge, and with the aid of stay bolts $\frac{3}{8}$ in. hole in $\frac{1}{4}$ in. iron $8\frac{1}{2}$ in. from the edge, or its equivalent in lighter metal. Each press is furnished with an adjustable gauge, stripper, three punches and dies, viz.: $\frac{1}{4}$, 3-16, and $\frac{3}{8}$ in.

Depth of throat, 18 in.

Distance back from centre of punch to stay bolt, $8\frac{3}{4}$ in.

Weight, about 375 lbs.

Weight with compound lever, about 450 lbs.

Price	Price	Code	D. & W. No.
	£ s. d.		
★ \$69 30	14 5 0	Avow	478

Extra Heavy Lever Punch



No. 85

In designing this punch our one aim has been to make it with as few parts and as simple as possible. We claim there is nothing on the market that surpasses it at the price.

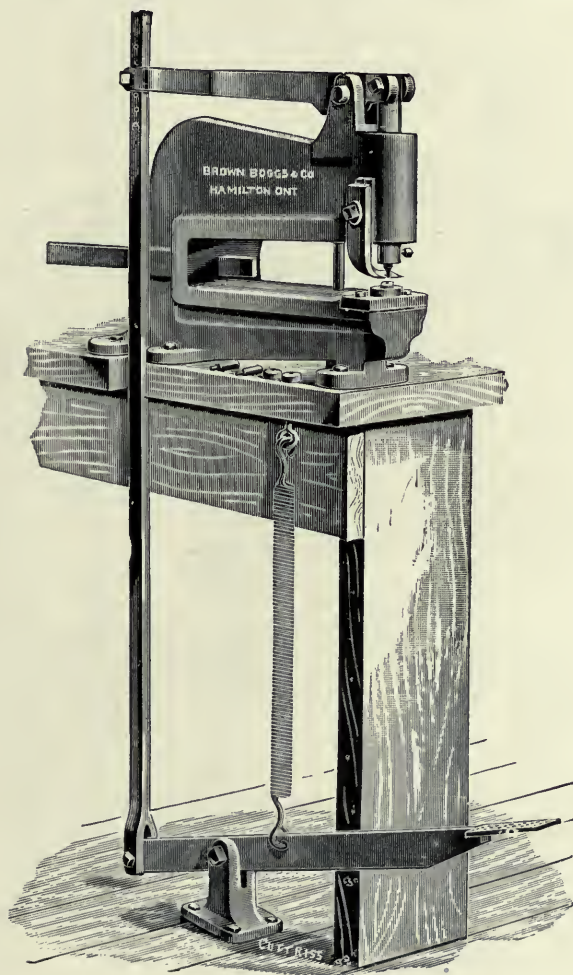
Body is cast in one solid piece, the space for lever, etc., being cored out. The ram which holds the punch is square to avoid turning when square or irregular punches are being used.

The capacity of this punch is $\frac{5}{8}$ in. hole in $\frac{1}{2}$ in. iron, to the centre of 15 in., or $7\frac{1}{2}$ in. throat. The distance from centre of punch to front of machine is only $1\frac{7}{8}$ in., so that the machine may be used to punch flanges, angles, etc.

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 85	About 800 lbs.	\$150 50	30	18	6	Absorb	967

Lever Punching Presses—*Continued*

No. 75 Lever Punching Press



This press is for doing similar work to our No. 70, but where a deeper throat is required. It also has the advantage of being worked by foot treadle, thus leaving the operator with both hands free.

It is capable of punching $\frac{1}{4}$ in. hole in $\frac{1}{8}$ in. iron 16 in. from the edge, and with the use of stay bolt it will punch a $\frac{1}{4}$ in. hole in 3-16 in. iron 4 in. from the edge, or its equivalent in lighter iron.

Each machine is supplied with an adjustable gauge, stripper, three punches and dies, viz.: $\frac{1}{8}$, 3-16 and $\frac{1}{4}$.

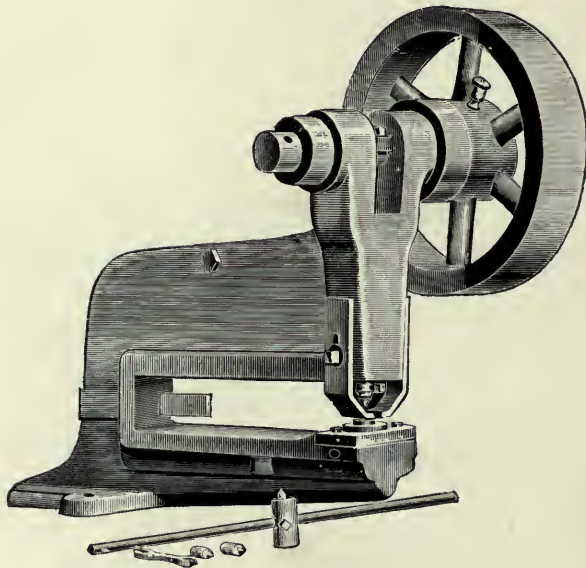
Depth of throat, 16 in.

Distance back from centre of punch to stay bolt, 4 in.

Weight, about 260 lbs

★ Price	Price			Code	D. & W. No.
	£	s.	d.		
\$48 40	9	19	0	Chemist	477

Power Punches



No. 100 (Not geared)

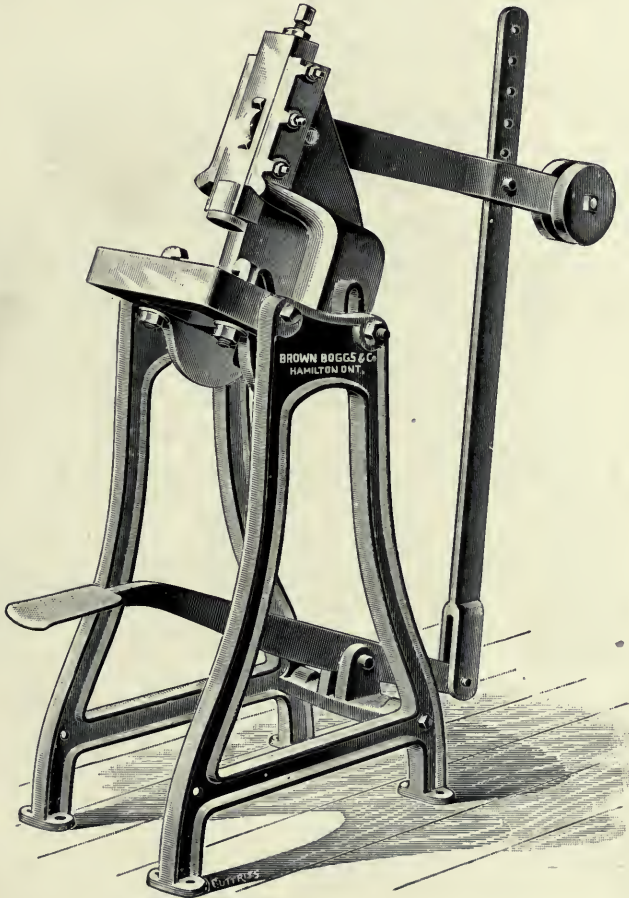
Our Nos. 100 and 102 Power Punches are capable of punching with ease $\frac{1}{4}$ in. hole in $\frac{1}{8}$ iron or soft steel. They are supplied (unless otherwise ordered) with three punches and dies, viz.: $\frac{1}{8}$, 3-16 and $\frac{1}{4}$, stripper, adjustable gauges and with our instantaneous clutch.

When desired we erect them on an iron stand.

No	Throat	Weight	Code	Price	Price			D. & W. No.
					£	s.	d.	
★ 100	15 in.	410 lbs.	Bushy	\$ 92 40	19	0	0	759
★ 102	18 in.	515 lbs.	Busily	110 00	22	12	0	760
Extra for iron stand		125 lbs.		10 00	2	1	0	

Foot Presses

Adjustable Lever Foot Press



No. 5

This press is adapted for making 1 lb. fruit or tall fish can tops or bottoms, caps or other small work.

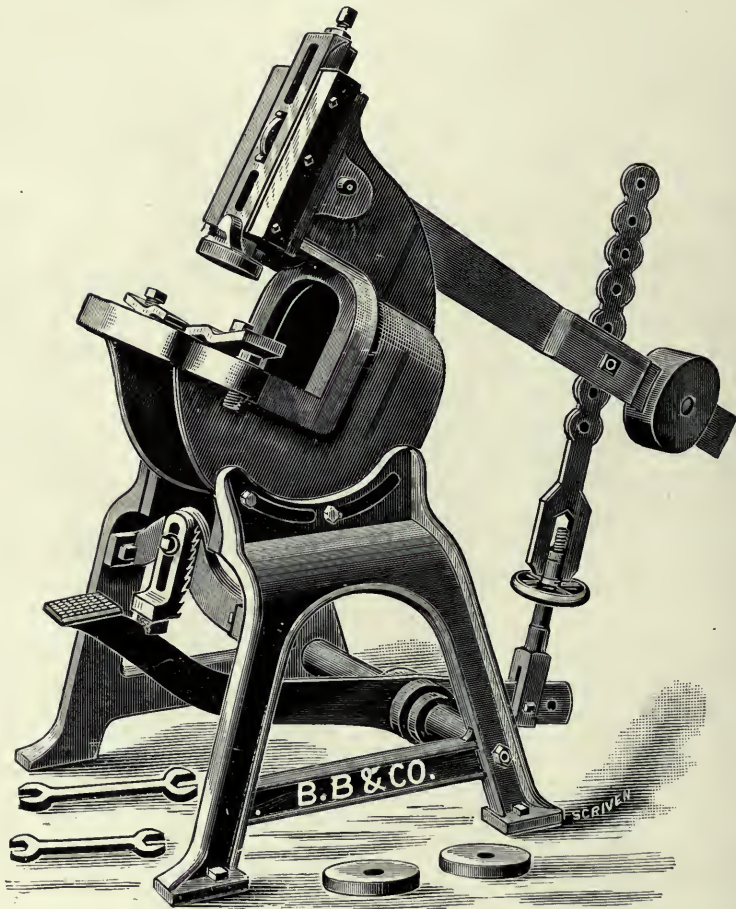
It can be changed from incline to upright as may be desired.

Price and Dimensions

Size of opening in back, 6 in. Distance back from centre of slide, 4 in. Distance from bed to bottom of slide, when slide is up, 5 in. Size of hole in slide (unless otherwise ordered), 1 in. Number of threads in hole in slide, 8 to the inch. Weight, about 310 lbs.

	Price	Price	Code	D. & W. No.
		£ s. d.		
★ Complete.....	\$77 00	15 17 0	Await	480

Foot Presses—Continued



No. 10

Adjustable Lever Foot Press

This press was specially designed for canners' use, it will, however, be found a most convenient press for all work of a similar nature, such as oyster, paint, lye, condensed milk, spice and grease cans, lard pail bottoms, etc. It is made with an opening in bed to allow work not exceeding $6\frac{3}{8}$ in. diameter to drop through, but if so desired this size can be altered to suit other size work. It can be changed from incline to straight, according to the wish of the operator. The adjustable stop with a rubber bumper at the front of the press, which regulates the height of the treadle, is a valuable addition, as it prevents a jar which is usually so destructive to machinery.

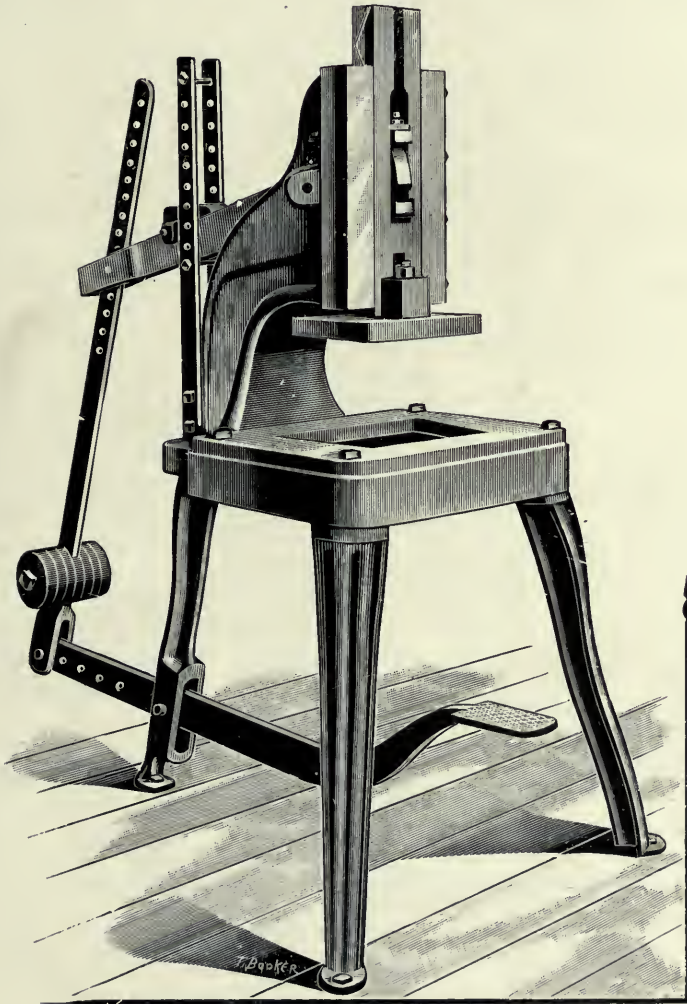
Dimensions and Price. Size of opening in back, $9\frac{1}{2}$ in. Distance from centre of slide, $5\frac{1}{2}$ in. Distance from bed to bottom of slide, when slide is up, 6 in. Size of hole in slide (unless otherwise ordered), 1 in. Number of threads in hole in slide, 8 to the in. Weight, about 635 lbs.

	Price	Price	Code	D. & W. No.
		£ s. d.		
★ Complete	\$100 00	20 11 0	Awakening	481

NOTE—For oval dies or irregular work we always bore hole in slide $1\frac{1}{2}$ in. plain, and use a set screw to hold die in position.

Foot Presses—*Continued*

No. 26 Upright Foot Press



This press is suitable for large blanking of pieced tinware, section bodies of square meat cans, lard pails, straight and taper pails, tops and bottoms of petroleum and varnish cans, syrup cans, etc., and a large variety of other work.

The lower end of slide has flanges so that large punches can be secured by bolts. Steel gibs are supplied to take up wear.

It is well proportioned, exceptionally strong and nicely finished.

Price and Dimensions

Distance back from centre of slide, 10 in. Distance from bed to bottom of slide, when slide is up, 9 in. Size of opening in bed (unless otherwise ordered), 14 x 16 in. Weight, about 1200 lbs.

Price	Price	Code	D. & W. No.
	£ s. d.		
★ \$200 00	41 2 0	Buttock	766

Foot Presses—*Continued*

No. 90 Bench Foot Press



This press is adapted for cutting and forming small work. It has long gibbed slides which insures accurate work. The screw in top of slide allows of a very fine adjustment. If preferred we supply this press with a pendulum treadle instead of a lever treadle as shown in cut. Price, the same.

Dimensions. Greatest stroke, $2\frac{1}{2}$ in. Distance from bed to bottom of slide when slide is up, $5\frac{3}{4}$ in. Distance back from centre of slide, 3 in. Size of hole in bed, 3 in. Size of hole in slide, $\frac{3}{4}$ in. plain. Weight, about 130 lbs.

	Price	Price		Code	D. & W. No.
	£	s.	d.		
★ Less legs.....	\$45	25		Aw1	486
★ Complete with legs	55	25		Awoke	487

Screw Press



No. 7

The above cut represents our No. 7 Screw Press for cutting, stamping and embossing, especially the latter operation, which can be better performed on a Screw Press than on a Foot Press. We make this press either with or without legs. In the latter case it may be screwed to a bench, and will work satisfactorily.

	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ With legs	\$114 60	23	11	0	Awful	484
★ Without legs	106 30	21	17	0	Awhile	485

Dimensions. Size of hole in bed, $7\frac{1}{2}$ in. Distance from bed to bottom of slide when up, $5\frac{1}{2}$ in. Distance back from centre of slide, $6\frac{1}{4}$ in. Size of hole in slide, $1\frac{1}{2}$ in. plain (unless otherwise ordered). Weight, complete with legs, about 650 lbs.

Write for Discounts

Encased Machines

This style has always been the favorite, but more or less difficulty has been experienced in the frame being rather light for the work, and breakages have resulted therefrom. We have recently reconstructed this machine overcoming this defect. The bushings are so arranged that the wear can be taken up and the shafts always kept a snug fit.

The cut of parts on page 76 illustrates the machines as they are now made, and in order to designate them from a similar style formerly made, we have called the original style "A" and this style "B."

In ordering parts be particular to designate for which style is desired and it will save much confusion and correspondence.

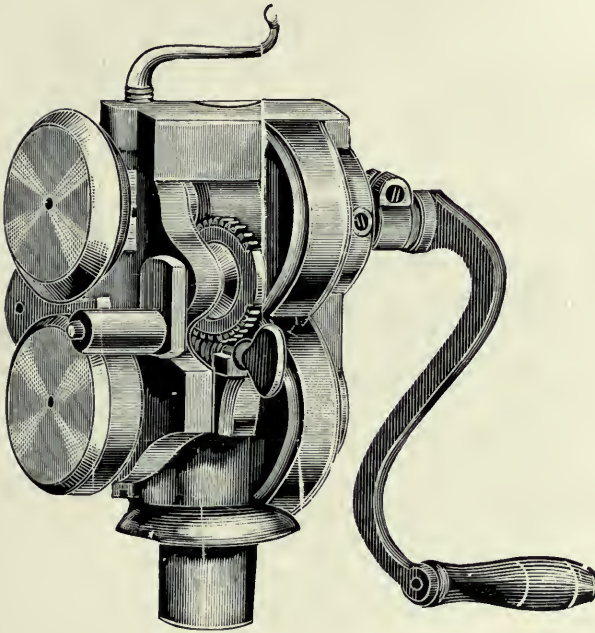
We have got our special machinery for the manufacture of these, and can **strongly recommend them in preference to any other.**

Some of the parts from style "A" were not made interchangeable, and in ordering parts for this style it would be well to send sample at the time of ordering.

These machines will work 24 gauge iron and lighter.

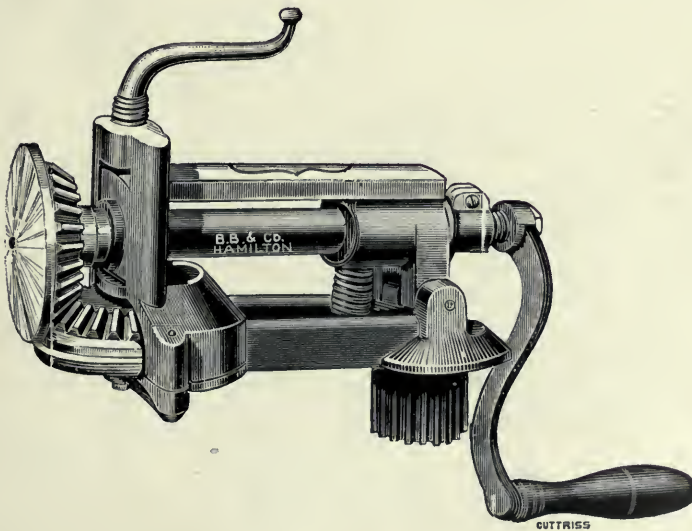
Encased Machines

Style "B" (see description page 72)



Encased Wiring Machine

Price, with patent stand \$21 00 £4 6s. 4d. Code word, Aged. D. & W. No. 157.

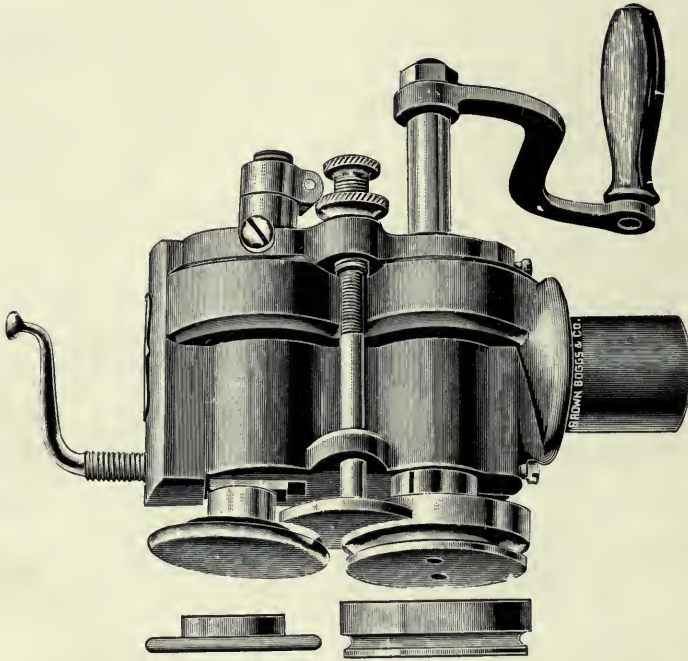


Encased Setting Down Machine

Price, with patent stand \$14 85 £3 1s. 0d. Code word, Agency. D. & W. No. 158.

Encased Machines—*Continued*

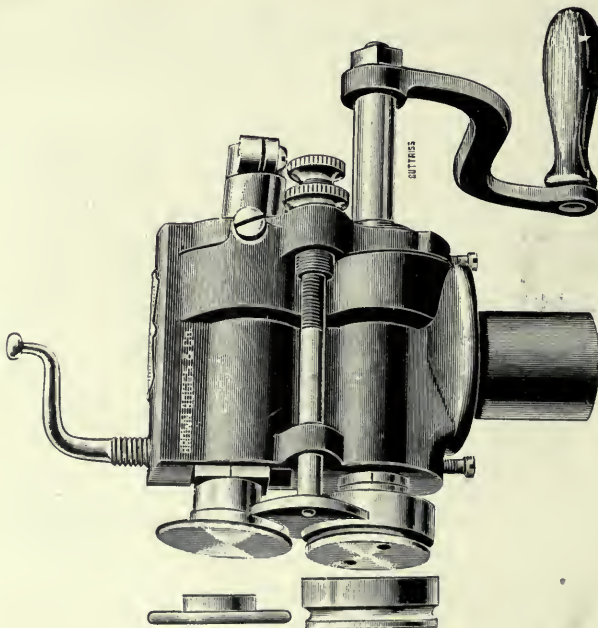
Style "B" (see description page 72)



Encased Large Turner

With patent stand.... ..\$17 10 £3 10s. 4d.

Code Word, Agent. D. & W. No. 159.



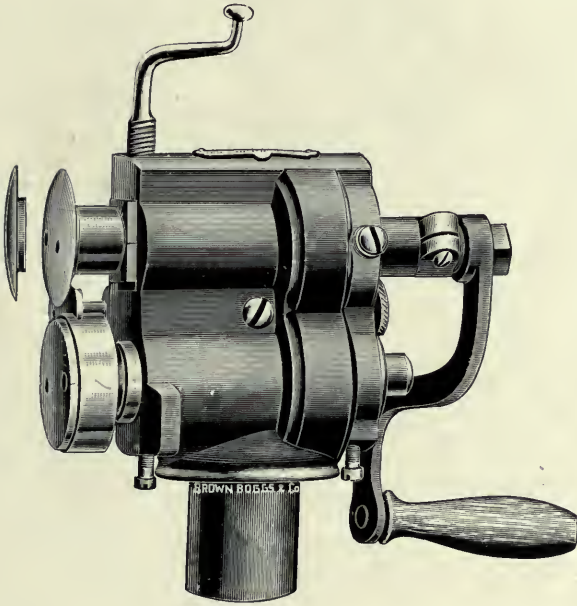
Encased Small Turner

With patent standard.... ..\$16 75 £3 9s. 0d.

Code Word, Cease. D. & W. No. 160.

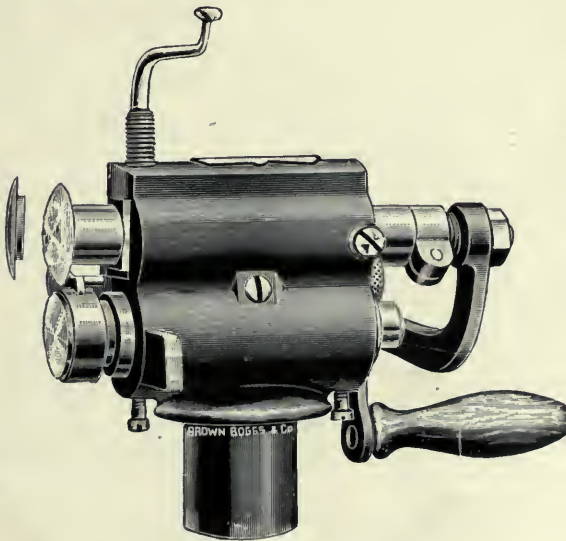
Encased Machines—*Continued*

Style "B" (see description page 72)



Encased Large Burr

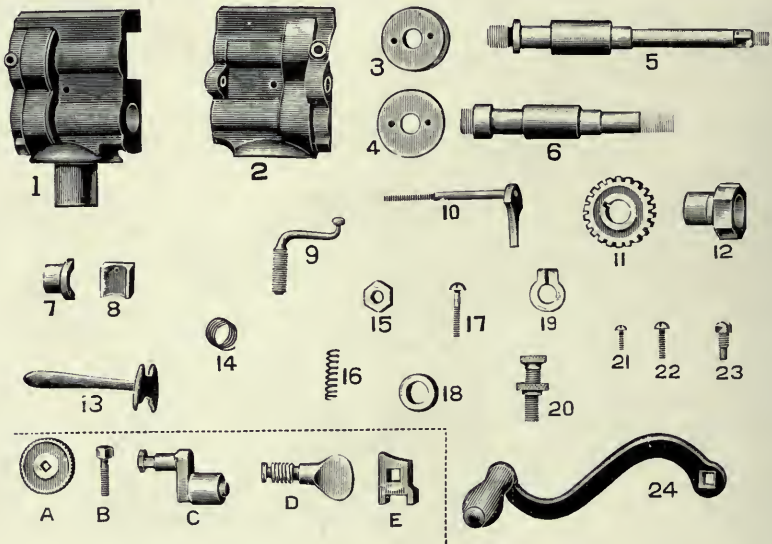
Price with pat. standard, \$15 60 £3 4s. 2d. Code Word, Cedar. D. & W. No. 161.



Encased Small Burr

Price with pat. standard, \$14 85 £3 1s. 1d. Code Word, Cede. D. & W. No. 162.

Interchangeable Parts for Encased Machines



No. 1—Frame or heavy side.

“ 2—Cap or light shade.

“ 3—Lower face.

“ 4—Upper face.

“ 5—Lower shaft.

“ 6—Upper shaft.

“ 7—Bottom bush.

“ 8—Top bush.

“ 9—Top screw handle.

“ 10—Slide gauge.

“ 11—Gear.

“ 12—Swivel bush.

“ 13—Face wrench.

“ 14—Coil spring for top shaft.

“ 15—Jam nut for back handle.

No. 16—Spring underneath No. 8.

“ 17—Bolt to clamp frame together.

“ 18—Wrought iron collar on bottom shaft.

“ 19—Clasp nut.

“ 20—Sliding gauge nut with jam nut.

“ 21—Screw for No. 19.

“ 22—Screw for No. 1 under bush.

“ 23—Screw that No. 12 pivots on.

“ 24—Handle.

A.—Worm wheel for wiring machine.

B.—Bolt to clamp E. to frame.

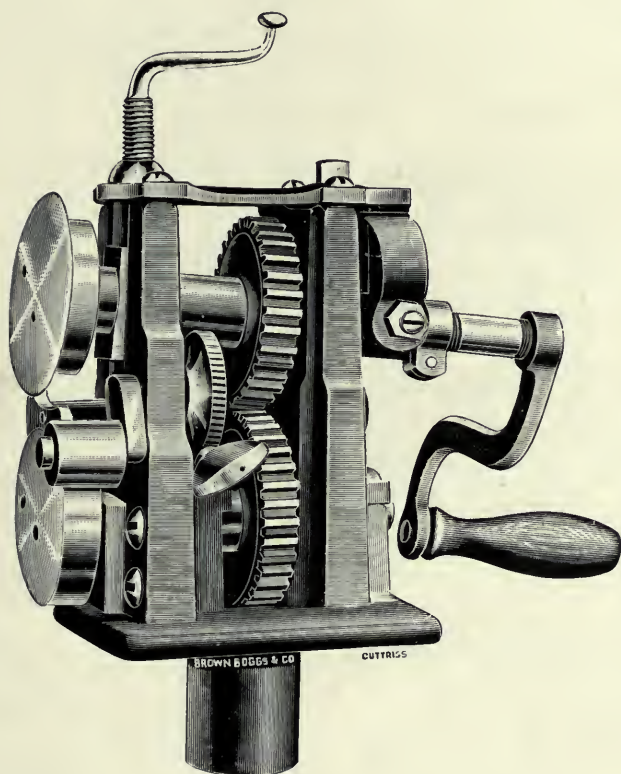
C.—Forming or front gauge with roller.

D.—Worm screw.

E.—Worm screw holder.

Write for Discounts

No. 1 Small Machines



No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	Wiring Machine with patent standard . .	\$18 60	3	16	6	Ceil	163

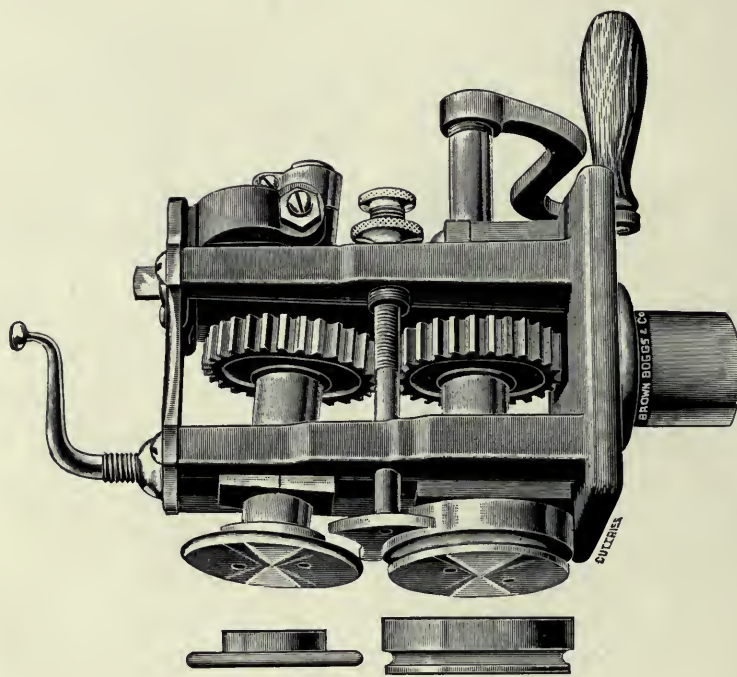
Setting Down Machine

	Price	Price			Code	D. & W. No.
		£	s.	d.		
With patent stand	\$14 85	3	1	0	Aggregate	164

Patent stands (see page 84) are always sent with No. 1 and solid frame machine unless otherwise ordered. No 1 stands (see page 83) will be sent, if desired, at a list price 20c.—10d. less than the patent stands.

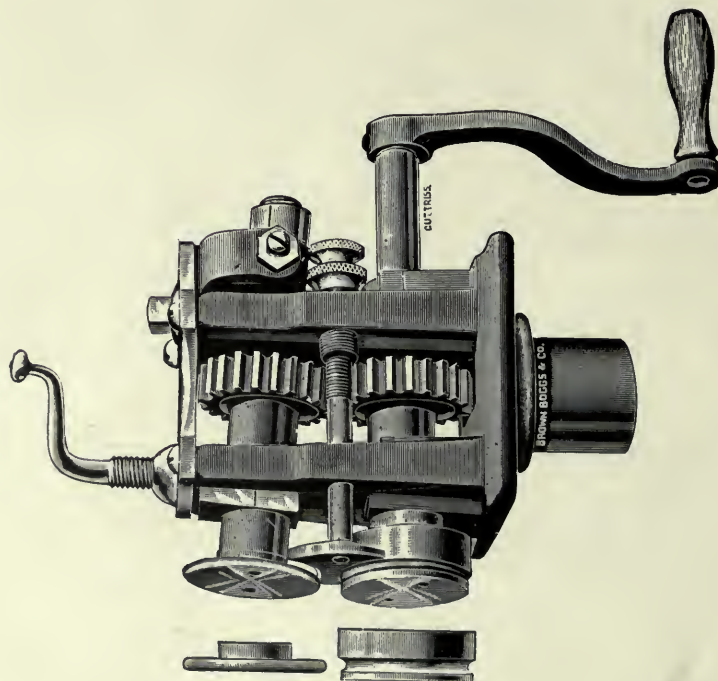
Write for Discounts

No. 1 Small Machines— *Continued*



Price

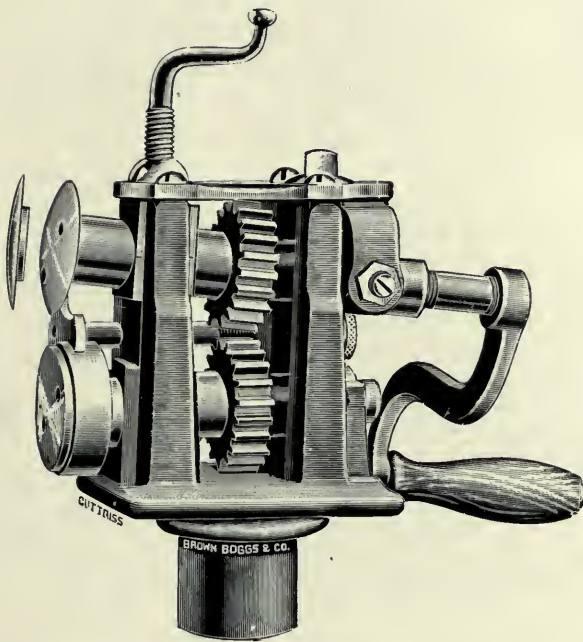
No. 1, Large Turner, with patent standard..... \$16 00 £3 5s. 9d.
Code Word, Aggressor. D. & W. No. 165.



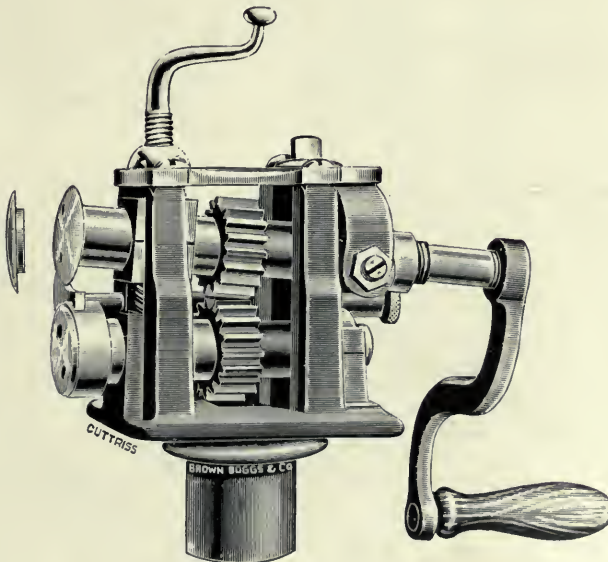
Price

No. 1, Small Turner, with patent stand. \$15 60 £3 4s. 2d.
Code Word, Aggressive. D. & W. No. 166

No. 1 Small Machines—*Continued*



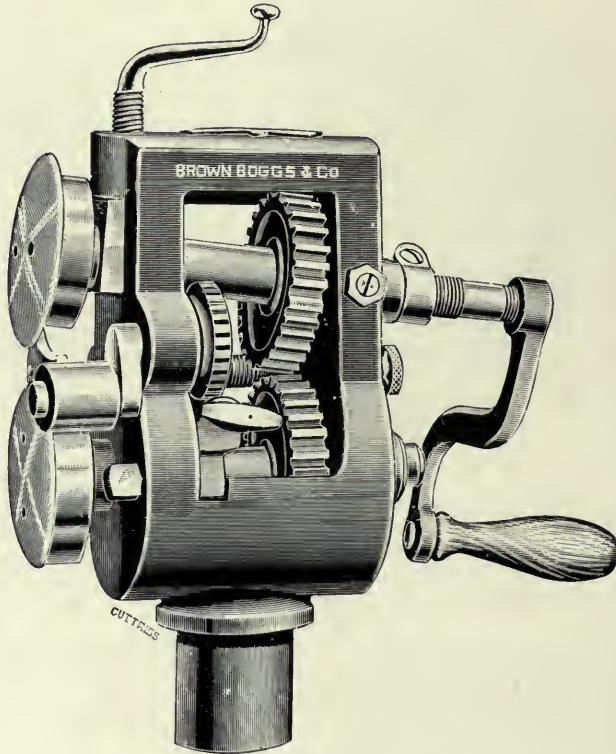
No. 1, Large Burr, with patent stand..\$14 05 £2 17s. 9d.
Code Word, Agio. D. & W No. 167.



No. 1, Small Burr, with patent stand..\$13 30 £2 14s. 8d.
Code Word, Aglow. D. & W. No. 168.

Solid Frame Small Machines

These machines are very substantially made; the frame being all one casting adds greatly to their strength and durability.



Solid Frame Wiring Machine

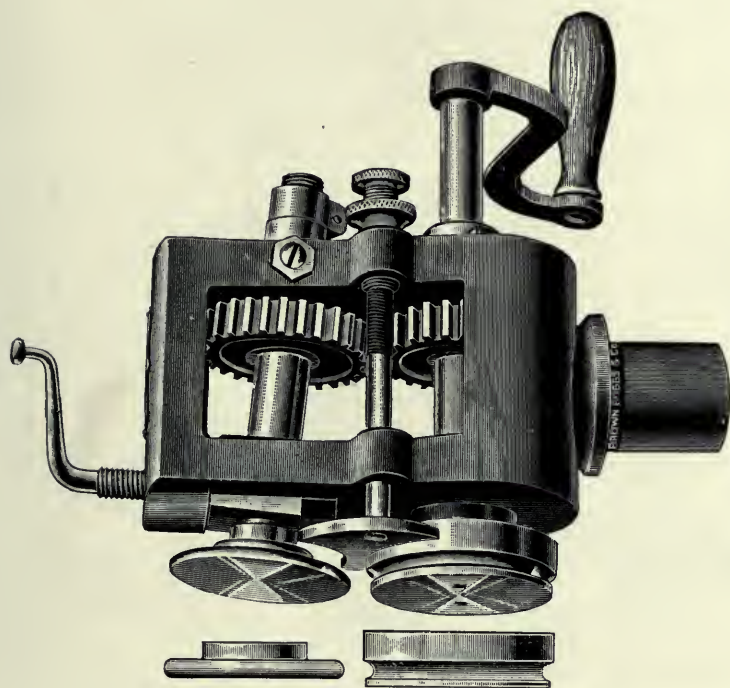
Price with patent stand, \$18 60 £3 16s. 6d. Code Word, Agnate. D. & W. No. 169.

Setting Down Machine

Patents stand (see page 84) are always sent with **Solid Frame and No. 1 Machines** unless otherwise ordered. No. 1 stands (see page 84) will be sent if desired, at a list Price with patent stand, \$14 85 £3 1s. 0d. Code Word, Agnostic. D. & W. No. 170.

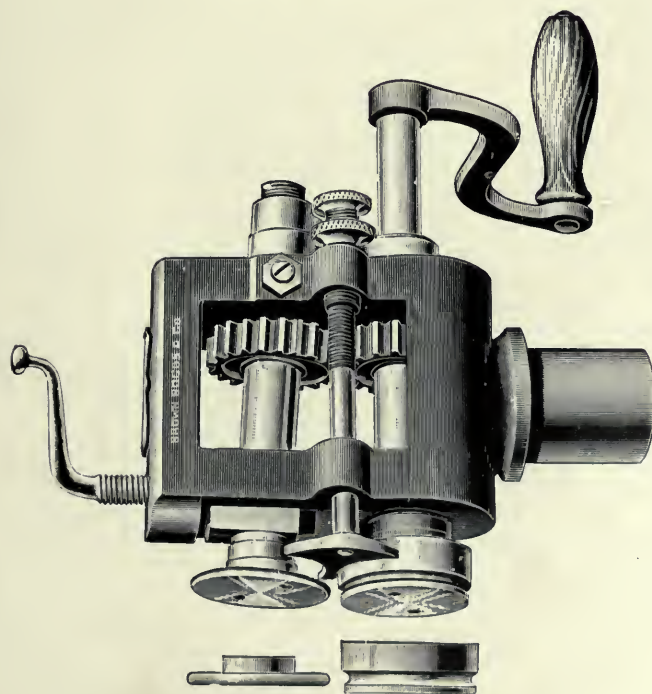
price 20c.—10d. less than the patent stands.

Write for Discounts



Solid Frame Large Turner

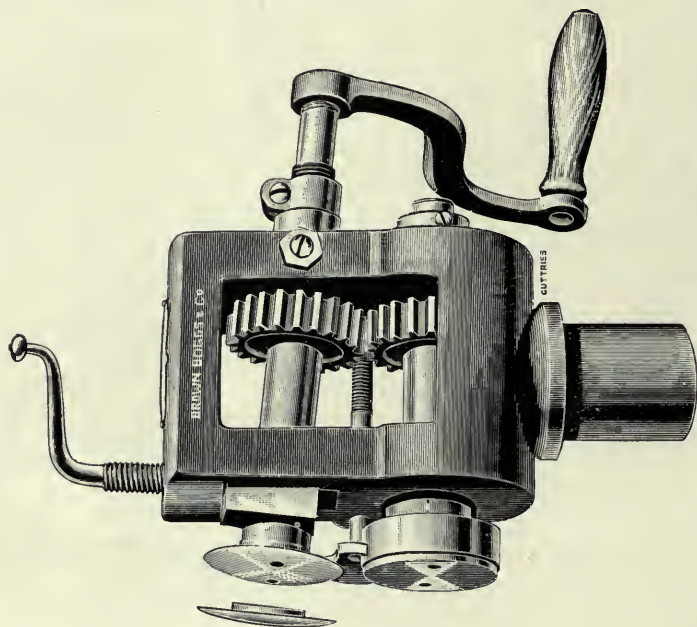
With patent stand..... \$16 00 £3 5s. 9d.
Code Word, Agog. D. & W. No. 171.



Solid Frame Small Turner

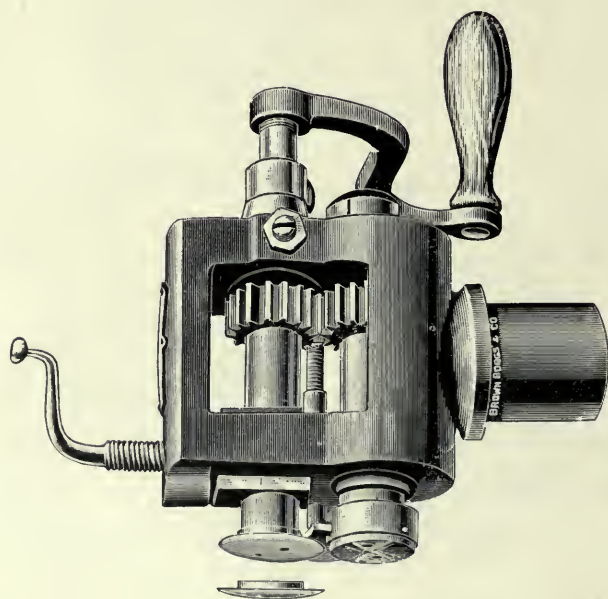
With patent stand..... \$15 60 £3 4s. 2d.
Code Word, Agoing. D. & W. No. 172.

Solid Frame Small Machines—*Continued*



Solid Frame Large Burr

With patent stand.... ..\$14 05 £2 17s. 9d.
Code Word, Agree. D. & W. No. 173.



Solid Frame Small Burr

With patent stand.... ..\$13 30 £2 14s. 8d.
Code Word, Agreement. D. & W. No. 174.

Small Machines—Continued

A Full Set of Encased Machines is Made up as Follows :

	Price	Price	Code	D. & W. No
	£	s. d.		
Encased Wiring Machine, with patent stand ..	\$21 00	4 6 4	Aged	157
Encased Setting Down, with patent standards....	14 85	3 1 0	Agency	158
Encased Large Turner, with patent standards...	17 10	3 10 4	Agent	159
Encased Small Turner, with patent standards ..	16 75	3 9 0	Cease	160
Encased Large Burr, with patent standards	15 60	3 4 2	Cedar	161
Encased Small Burr, with patent standards	14 85	3 1 1	Cede	162
Full set of Encased Machines, with pat. stands ...	100 15	20 11 11	Celerity	175
Full set of Encased Machines, with No. 1 stands..	98 95	20 6 11	Aground	176
Full set of Encased Machines, without standards.	92 95	19 2 3	Ahead	177

Full Set of No. 1 or Solid Frame Small Machines is made up as Follows :

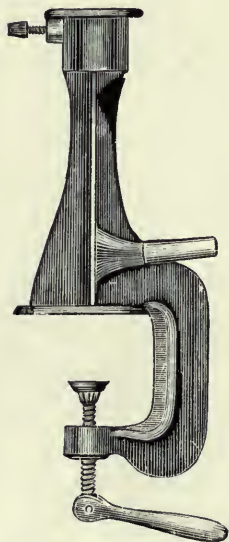
With Patent Stands	Price	Price	Code No. 1	D. & W. No.	Code Solid Frame	D. & W. No.
	£	s. d.				
Wiring Machine.....	\$18 60	3 16 6	Ceil	163	Agnate	169
Setting Down Machine.	14 85	3 1 0	Aggregate	164	Agnostic	170
Large Turning Machine	16 00	3 5 9	Aggressor	165	Agog	171
Small Turning Machine	15 60	3 4 2	Aggressive	166	Agoing	172
Large Burring Machine	14 05	2 17 9	Agio	167	Agree	173
Small Burring Machine	13 30	2 14 8	Aglow	168	Agreement	174
Full Set No. 1 Machines						
With patent stands.	92 40	18 19 10	Ahoy	178		
With No. 1 stands.	91 20	18 14 10	Ahull	179		
Without stands	85 20	17 10 2	Aid	180		
Full Set S. F. Machines						
With patent stands.	92 40	18 19 10			Aimless	181
With No. 1 stands..	91 20	18 14 10			Air	182
Without stands	85 20	17 10 2			Ajar	183

Repairs

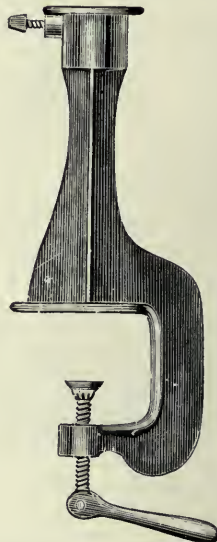
	£	s. d.
Crank Handles for Encased Machines (malleable), each.....	\$0 55	0 2 3
Crank Handles for No. 1, or Solid Frame Machines (malleable), each.	55	0 2 3
Faces for Wiring Machines, each.....	2 65	0 10 11
Faces for Setting Down Machines, each.....	2 65	0 10 11
Faces for Large Turner, each.....	2 65	0 10 11
Faces for Small Turner, each.....	2 25	0 9 3
Faces for Large Burr, each.....	2 25	0 9 3
Faces for Small Burr, each.....	1 95	0 8 1
Front Gauge for Wiring Machine, with roller, worm wheel and crank, each.....	3 50	0 14 5
Sliding Gauge for Small Machines.....	1 50	0 6 2
Cog Wheels for Small Machines, per pair.....	2 35	0 9 8
Brass Springs for Small Machines, each.....	18	0 0 9
Top Handles for Small Machines, each.....	90	0 3 9
Top Screws for Small Machines, each.....	09	0 0 5
Upper Shaft and Steel Face for Setting Down Machine, each.....	4 40	0 18 1
Lower Shaft and Steel Face for Setting Down Machine, each.....	4 00	0 16 6
Cog Wheel for Setting Down Machine, each.....	90	0 3 9
Top Brass Plate for Small Machine, each.....	2 25	0 9 3
Brass Collar, each.....	90	0 3 9
Face Wrenches, each.....	22	0 0 11
Adjusting Screw and jam nut for sliding gauge.....	75	0 3 1

Small Machine Standards

To insure a good fit, the hole to receive the socket of the machine in both Patent and No. 1 Standards are reamed out to 1½ in.; other sizes can be made to order.



PATENT STAND FOR WIRING MACHINE



PATENT STAND (Ordinary)

These Standards are quickly attached to any bench, varying from 1 in. to 3½ in. thick, and saves cutting holes. All small machines are put up with these Standards, unless otherwise ordered.

Patent Standards, each.... ..\$1 20 £0 5s. 0.

Wiring ...Cell

Code D. & W. No.
200

Ordinary...Algun

Code D. & W. No.
201



No. 1 STAND FOR WIRING MACHINE

Price

No. 1 Stands, each.....\$1.00 £0 4s. 2d.

Wiring.....Align
Ordinary.....Alignment

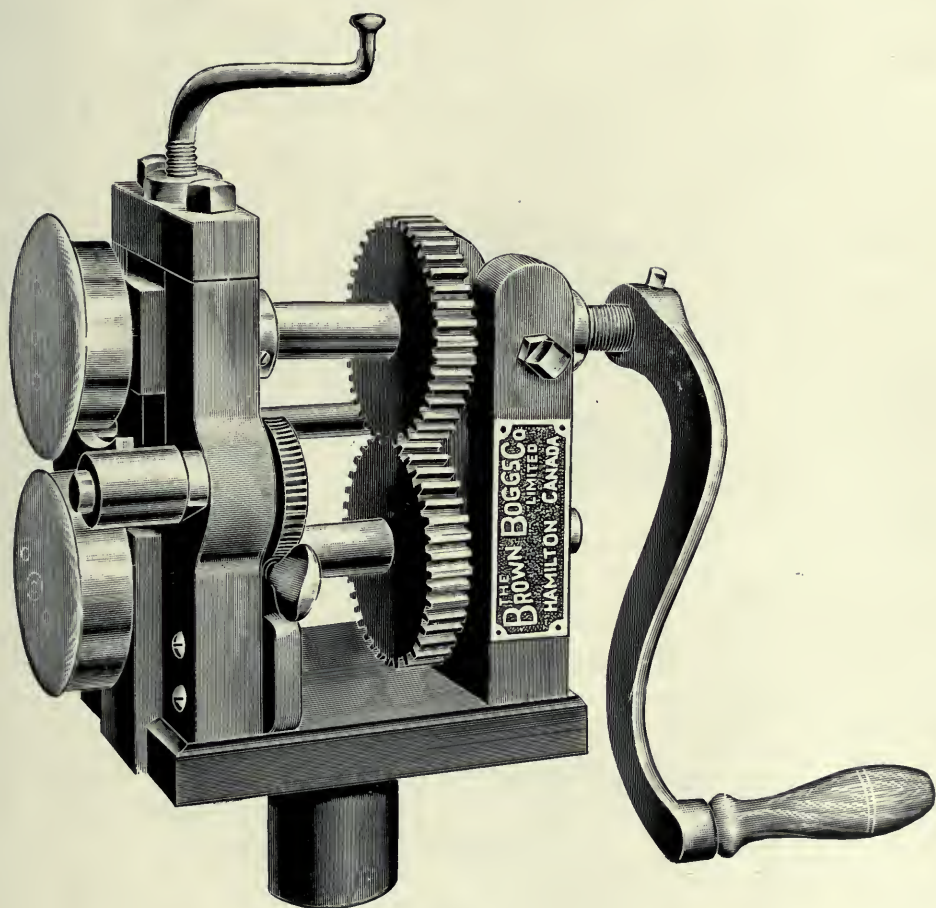
Code D. & W. No.
202
203



No. 1 STAND (Ordinary)

Either styles of stands will fit Encased No. 1 or Solid Frame Machines.

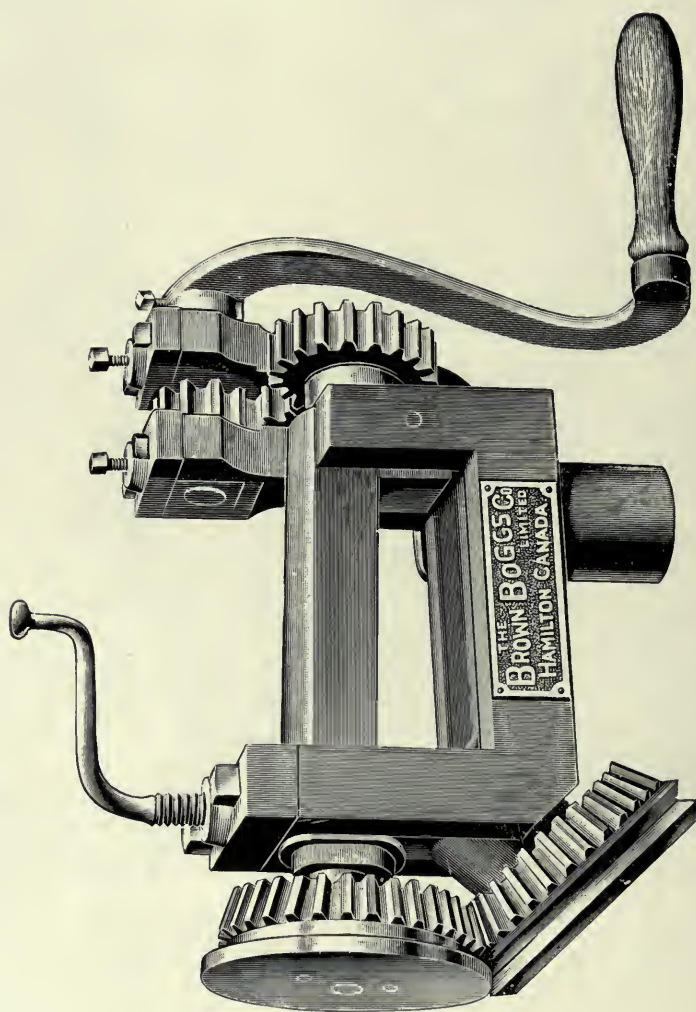
Write for Discounts



No. 40 Wiring Machine for 18 Gauge

(For Description and Price see page 87)

Write for Discounts



No. 40 Setting Down Machine for 18 Gauge

(For Description and Price see page 87)

Write for Discounts

No. 40 Small Machines

(See illustrations on pages 85 and 86)

The demand for machinery for heavy sheet metal work is ever increasing, and to meet this demand we have designed a set of special machines for **Wiring, Setting Down, Turning and Burring.**

They will successfully work sheet iron or soft steel not heavier than 18 gauge. In order to designate them from the ordinary **Small Machines** they will be known as **Style No. 40.**

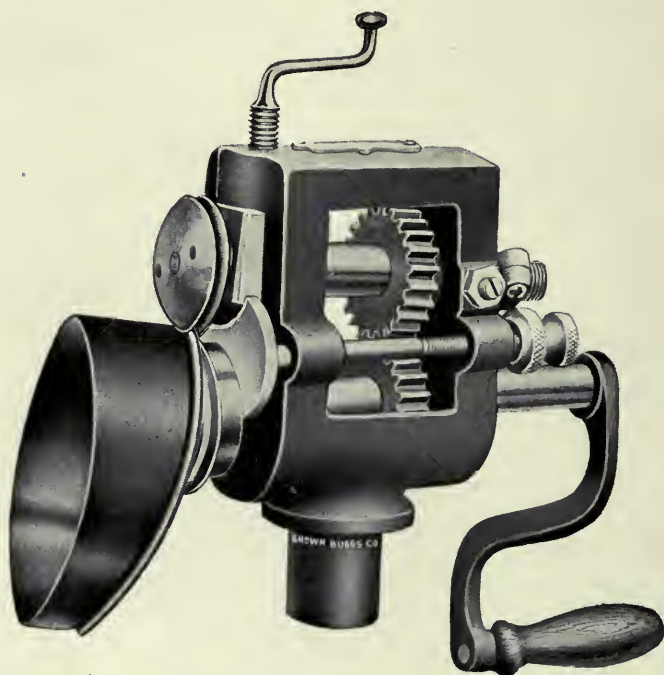
PRICES:

No.	Price	Price		Code	D. & W. No
		£	s. d.		
40 Wiring Machine with 1 set heads and stand	\$44 00	9	1 0	Carious	837
40 Setting Down Machine with 1 set heads and stand	36 00	7	8 0	Carnal	838
40 Turning Machine with 1 set heads and stand.....	40 00	8	5 0	Coax	839
40 Burring Machine with 1 set heads and stand	40 00	8	5 0	Carnality	840

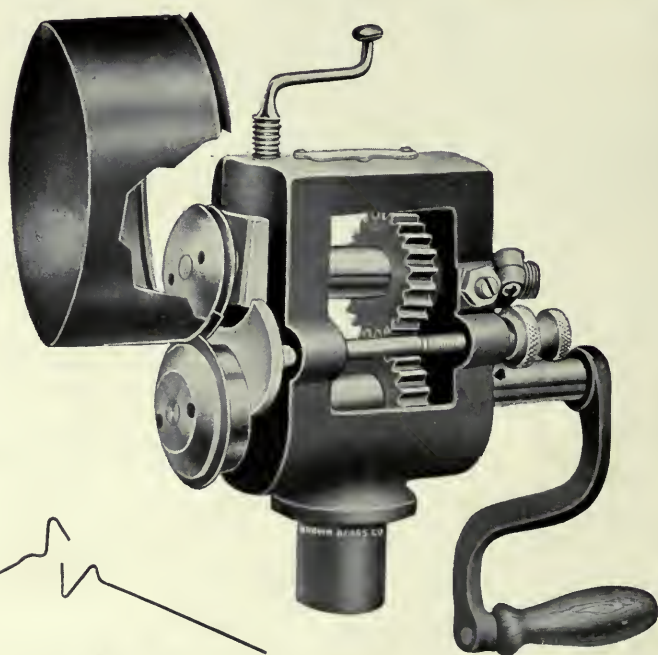
NOTE—The Turning and Burring Machines are the same style as the Wiring Machine illustrated. Thickness of heads on Turner $\frac{5}{16}$ in.

Write for Discounts

Eclipse Elbow Edging Machine



(See description page 89.) Code Word, Alike. D. & W. No. 204.



Sectional Cut of Elbow after being formed
on Eclipse Elbow Edging Machine

Write for Discounts

Eclipse Elbow Edging Machines

(See cuts page 88)

The accompanying cuts represent our Eclipse Elbow Edging Machines, designed to facilitate the manufacturing of elbows. They make the offset and turn the edge in one operation, making a perfect reversible elbow, doing it at least three times quicker and much neater than any other process.

For Furnace Work they are Specially Valuable

The first cut illustrates the machine creasing the elbow or forming the part which fits inside the groove that is formed on the corresponding piece of elbow or pipe as shown in second cut; the sectional cut shows this clearly.

When so desired these heads can be fitted on to a small turner, but when ordering them for this purpose it is necessary to accompany with order a pair of the turner heads off the machine for which they are intended, unless they are our own make of machine. This insures a perfect fit and avoids any difficulty. Will work 24 gauge iron quite handily.

No.	Price	Price		Code	D. & W. No.
		£	s. d.		
1 Eclipse Elbow Edging Machine, with patent stand	\$15 60	3	4 2	Alike	204
Extra Heads, per pair	4 70	19	4	Alive	

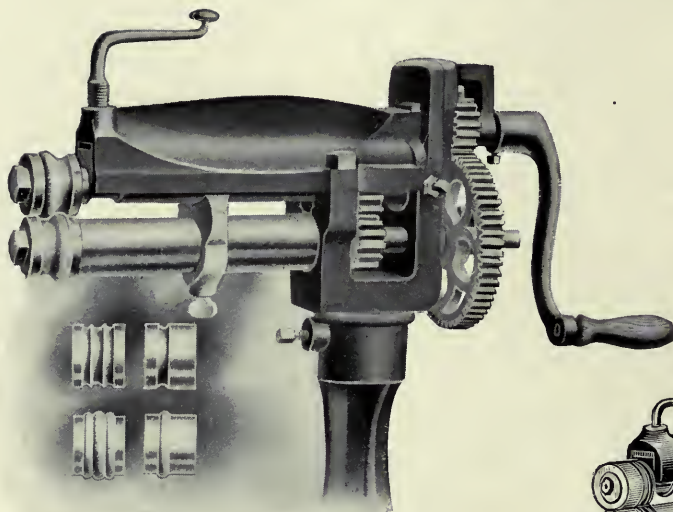
Tinners' Mallet



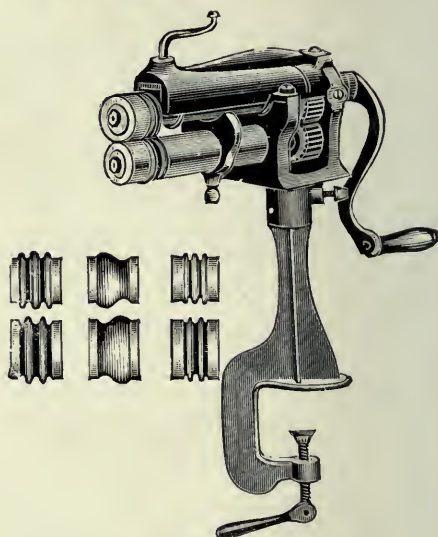
These Mallets are made from first-class stock and are well seasoned. They are done up in one gross barrels or boxes.

	Price	Code	D. & W. No.
Best Second Growth Hickory	On application	Alkali	206
Best Applewood	On application	Axe	969

Beading Machines



Nos. 1, 2 and 3 Machines
with
Compound Gearing



Nos. 4 and 5 Machines Direct Acting

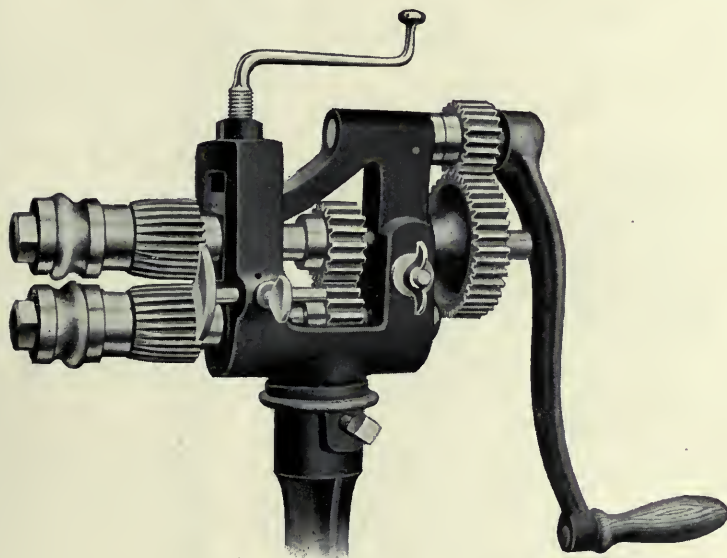
No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	Imp., 13 in., 3 pair rollers and rot. stand	\$41 55	8	11	0	Allegorise	209
2	Imp., 10 in., 3 pair rollers and rot stand	40 25	8	5	6	Allegro	210
3	Imp., 7½ in., 3 pair rollers and rot. stand	33 80	6	19	0	Alligation	211
4	Imp., 6 in., 4 pair rollers and pat. stand	23 15	4	15	2	Alligator	212
5	Imp., 4 in., for tin, 5 pair rollers and patent stand	21 60	4	8	10	Allocate	213
		Nos. 1, 2 and 3 will work 20 gauge iron.					
		Nos. 4 and 5 will work 26 gauge iron.					

	Ordinary Beads Prices			Crimping Beads Prices		
	£	s.	d.	£	s.	d.
Extra Beads for Nos. 1 and 2 Beaders, per pair	\$6 65	1	7 5	\$8 20	1	13 9
Extra Beads for No. 3 Beaders, per pair	5 25	1	1 8	6 45	1	6 7
Extra Beads for No. 4 Beaders, per pair	4 40	18	1	3 50	14	5
Extra Beads for No. 5 Beaders, per pair	3 55	14	8	3 50	14	5
Extra standards for Nos. 1, 2 and 3 each	2 25		9 3			
Extra patent standards for Nos. 4 and 5 each.	1 20		5 0			

Special sizes of beads made to order.

In ordering beads for other machines than our own, it is necessary to send a pair of sample beads in order to insure a proper fit.

Stove Pipe Crimper and Bearer



No. 7

This machine is one of the latest pattern and is designed to facilitate the making and putting together of metal pipe of different diameters. It crimps and turns in the edges of stove and conductor pipes so that the lengths are put together easily. It is also provided with beading rollers, which bead the pipe at the same time it is corrugated.

If it is desired to crimp and not bead, loosen the thumbnut on the back of the machine and tighten the one on front. To bead and not crimp reverse above operation.

NOTE.—This machine is arranged with an adjustment to do deep or shallow work. To give more crimp slacken the thumb nut on front side of machine and tighten the one on the opposite side. For less crimp and more bead, slacken the back thumb nut and tighten the front one.

This machine is supplied with straight or spiral crimpers as desired, but is always sent with straight crimps unless ordered with spiral.

	Price	Price			Code	D. & W. No.
		£	s.	d.		
7 Stove Pipe Crimper and Bearer, Complete with patent stand	\$18 25	3	15	0	Ally	220
7 Without standard	17 20	3	10	8	Almonds	221
Extra Crimping Beads, per pair	3 50	0	14	5		

NOTE.—When ordering state whether straight or spiral crimpers are wanted.

Crimpers—*Continued*



No. 9

Crimper and Bearer

This is a much simpler machine than our No. 7. It is made with a very substantial frame, and has a new but simple method of adjusting the depth of crimp or bead. It is direct acting, and is therefore quicker to operate than if made with compound gear. The long handle giving it the necessary power to perform its duties. The beading and crimping rolls are made of hardened steel; the gear is machine cut and also made of steel.

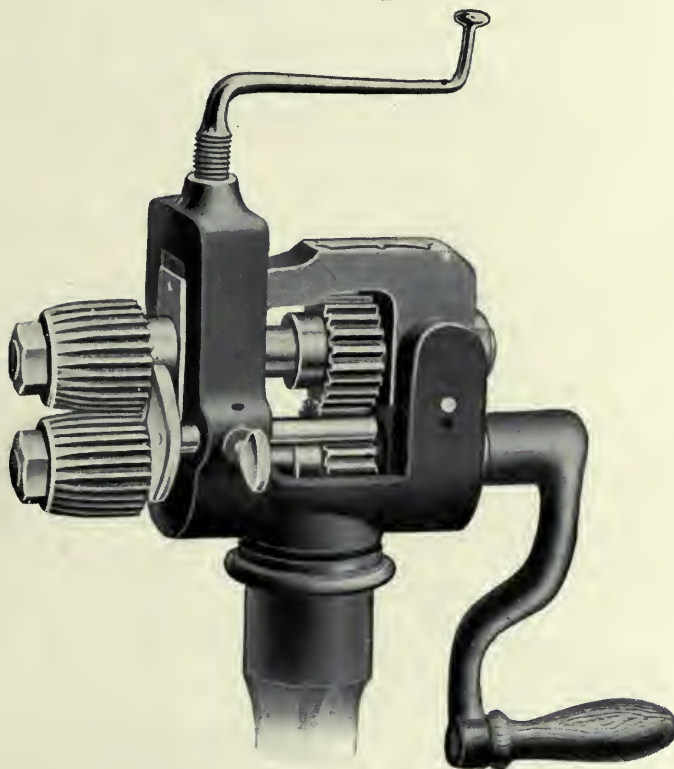
To get more crimp and less bead slacken the thumb nut on front side of machine and tighten the one on opposite side. For less crimp and more bead slacken the back thumb nut and tighten the front one.

This machine is supplied with straight or spiral crimping beads, as desired, but is always sent with straight crimps unless ordered with spiral.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
9 Crimper and Bearer with patent stand	\$16 30	3	7	0	Custom	956
Extra Crimping Beads, per pair	3 50		14	5		

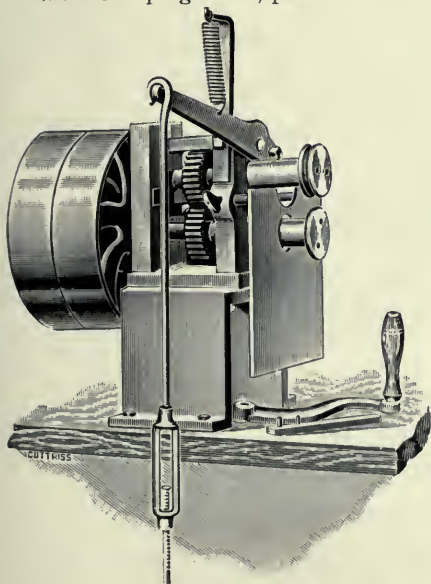
Always state whether straight or spiral crimps are wanted.

No. 8 Stove Pipe Crimper



It crimps and turns in the edges of stove and conductor pipes so that the lengths are put together easily. Supplied with either straight or spiral crimps. Straight are always sent unless ordered spiral.

No.	Price	£	s.	d.	Code	D. & W. No.
8 Complete with patent stand	\$12 20	2	10	2	Almug	223
8 Without stand	11 15	2	5	10	Aloes	224
Extra Crimping Beads, pair	3 50	14		5		



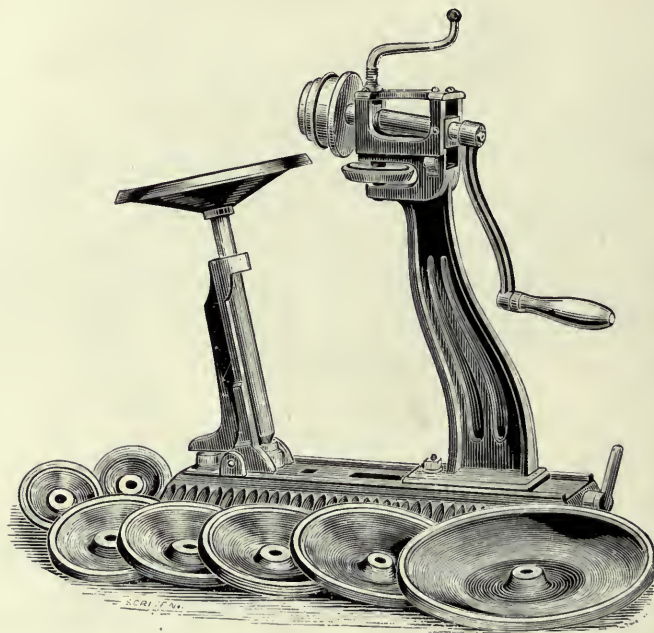
No. 18 Power Beader

For beading or swaging sheet metal boxes, covers, collars and can bodies, and for fastening bottoms on ground lead cans, and other similar work.

For Hand and Power—

Price	£	s.	d.	Code	D. & W. No.
\$51 00	10	10	0	Allege	208

Double Seaming Machines



No. 1

Double Seaming and Setting Down Machine

(Olmsted's Patent)

This machine is adapted for straight, flaring, deflecting or setting down work.

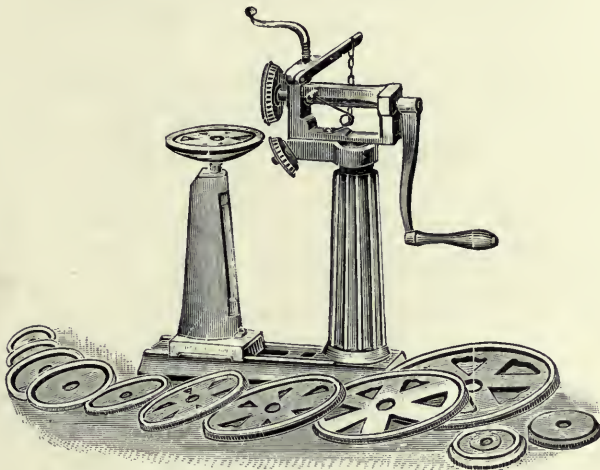
For 26 gauge iron and lighter

Price

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
1 Complete with setting down attachment	\$34 75	7	3	0	Amiss	240
1 Without setting down attachment	28 10	5	15	6	Cement	241

Write for Discounts

Double Seaming Machines—Continued



No. 2

Double Seaming and Setting Down Machine

(B. and B. Double Seamer)

The above cut represents a machine we believe to be superior to any other, for double seaming and setting down. It can be worked by a top screw or treadle without any adjustment. The Setting Down Attachment can be turned aside, when not in use, by a touch of the hand, and is geared with cog wheels, same as the ordinary setting down machine; this improvement adds materially to the convenience of this machine, and we can confidently recommend this style in preference to any other.

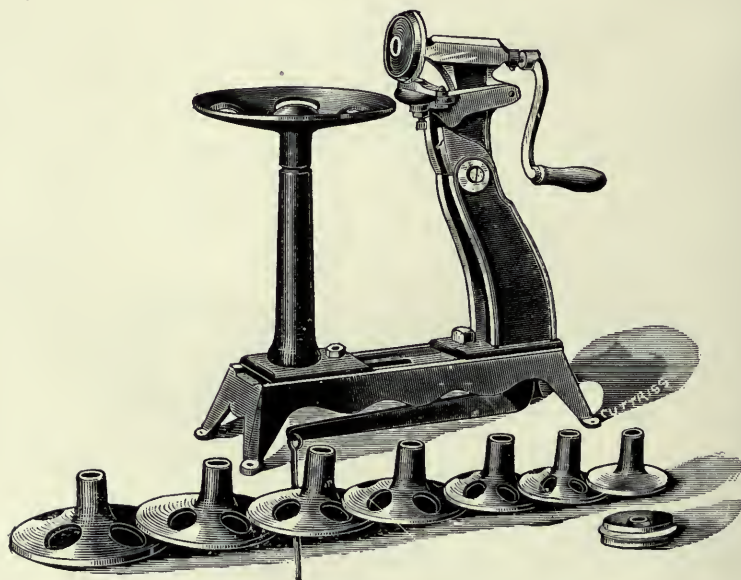
It will double seam an article 15½ inches deep, and do it quicker and better than any other machine made.

For 26 gauge iron and lighter

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
2 Complete with Deflecting Head and Setting Down Attachment	\$41 55	8	11	0	Amyloid	242
2 Without Setting Down Attachment	31 00	6	7	5	Anaconda	243

Write for Discounts

Double Seaming Machines—*Continued*



No. 3

Double Seaming and Setting Down Machine

(Stow's Patent)

This Double Seamer is the favorite machine for light work.

For 26 gauge iron and lighter

Price

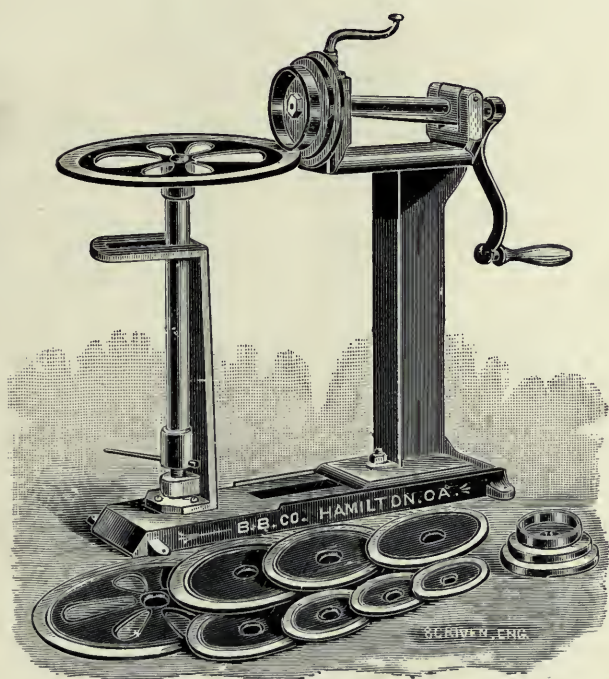
No.	Price	Price			Code	D. & W.'s No.
		£	s.	d.		
3 Complete with setting down attachment	\$34 75	7	3	0	Anaemia	244
3 Less setting down attachment	28 10	5	15	6	Anarchist	245

Write for Discounts

Double Seaming Machines—*Continued*

Complete with Nine Discs

(Burton's Patent)



No. 4

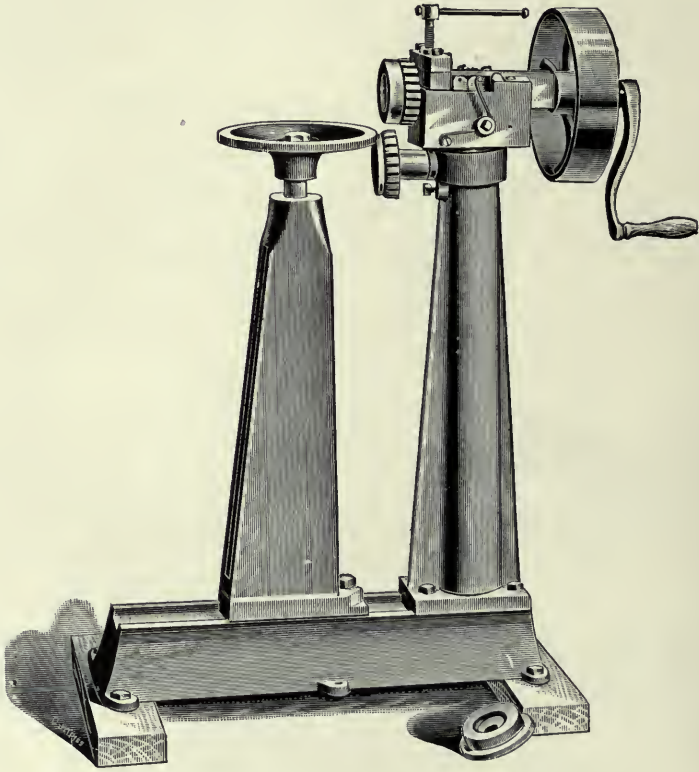
A deflector for stiffening bottoms, and full sets of discs for straight or flaring work accompany each machine.

²⁸
For ~~22~~ Gauge iron and lighter

	Price	Price		Code	D. & W. No.
		£	s. d.		
No. 4 Double Seamer, complete.....	\$28 10	5	15 6	Anatomic	246

Write for Discounts

Double Seaming Machines—*Continued*



No. 5 Double Seamer

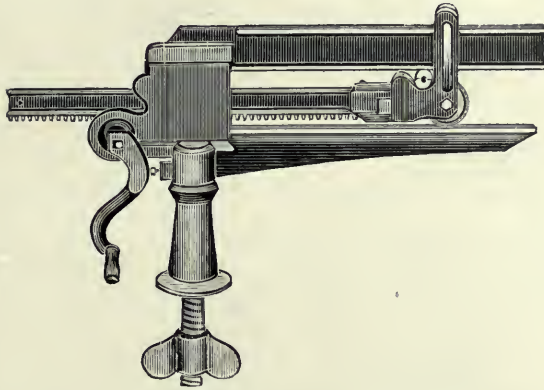
The above cut represents our Nos. 5, 6 and 7 Double Seamers, which are intended for extra heavy work. They are powerfully built, and convenient to operate. As will be seen they are provided with a setting down attachment, which is indispensable for this class of work.

The setting down attachment is constructed on the same principle as our No. 2, described on page 95. The only change necessary when setting down and double seaming is to push lower setting down head back out of the way and replace top setting down head with double seaming head. This feature is of great importance when handling heavy material, as it saves a great amount of unnecessary labor.

They can be run by power or hand as desired.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 5 For double seaming articles not deeper than 20 in. and for material not over 18 gauge (Stubbs) in thickness	\$117 00	24	1	0	Anbury	247
★ 6 For double seaming articles not deeper than 24 in. and for material not over 18 gauge (Stubbs) in thickness	128 00	26	6	0	Anchor	248
★ 7 For double seaming articles not deeper than 30 in. and for material not over 20 gauge (Stubbs) in thickness	138 00	28	7	0	Ancorage	249

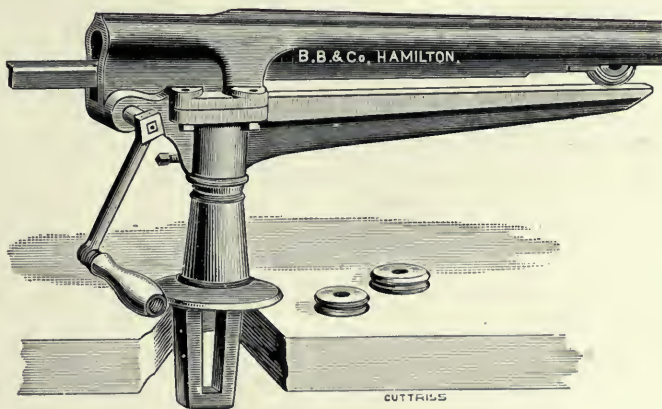
Grooving Machines



No. 1

Brass Mounted Groover

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	With standard 20 in. long, 20 gauge iron	\$19 00	3	18	0	Andiron	250
2	With standard 17 in. long, 20 gauge iron	15 50	3	3	9	Anele	251
	Extra standards	1 55	0	6	5		
	Extra grooving rollers	2 35	0	9	8		
	Rack with brass mounting for Nos. 1 or 2						
	Groovers	5 75	1	3	8		
	Extra springs, each 95c.; small Steel						
	Rollers, each 85c	1 80	0	7	5		
	Extra Crank Handles	95	0	4	0		



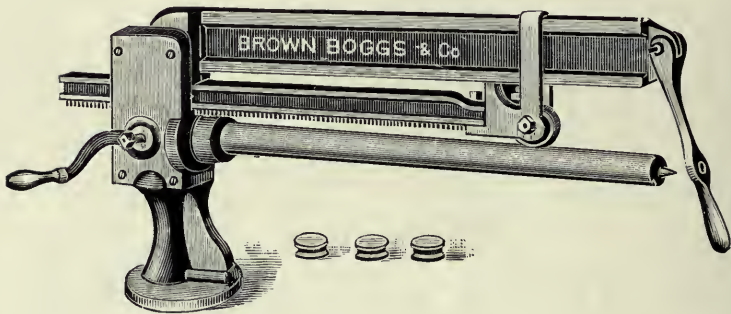
Encased Groover

No.	Weight	Price	Price			Code	D. & W. No.
			£	s.	d.		
3	20 in. long with standard	\$22 90	4	14	4	Animation	257
	Extra stands	1 20	0	5	0		
	Extra Steel Rollers	2 35	0	9	8		
	Racks complete.....	4 40	0	18	1		

Groovers—*Continued*

Heavy Brass Mounted Groover

Groover for Inside and Outside Seam



No. 4

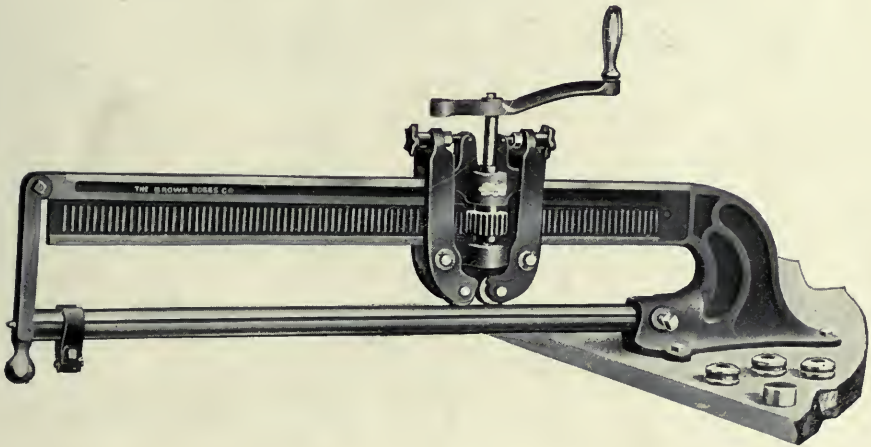
This machine is used for grooving all kinds of tinware, the same as the ordinary groover, and in addition will groove stove pipe, leaders and conductors, and will put the seam either into the inside or on the outside of the work as may be desired. It will groove work two inches in diameter the full length of the machine without reversing; smaller work can be grooved by removing the horn and replacing it with one the size desired. The horn is held by a set screw and is provided with a flat surface its entire length for ordinary work, and with four grooves, 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ in. in width for throwing the seam on inside of work.

No.	Price	Price			Code	D. & W. No
		£	s.	d.		
4 31 in. long, for 22 gauge iron.....	\$ 38 65	7	19	0	Census	261
5 37 in. long, for 22 gauge iron	46 35	9	10	6	Announce	262
5A 48 in. long, for 20 gauge iron	140 00	28	15	5	Canter	771

Write for Discounts

Groovers—*Continued*

Noyes Groover



With this machine work can be grooved and the seam rolled or closed down in one operation, thus saving the work of malleting; the seam when grooved being perfect in tightness and appearance.

It is adapted for either inside or outside seaming.

It can be adjusted quickly and without removing the work from the machine to accommodate the various thickness of material and regulating the tightness of the seam.

Machine will handle 22 gauge material and lighter, and will groove work down to 2 inches in diameter.

It is provided with a stop to prevent the work sliding on the bar.

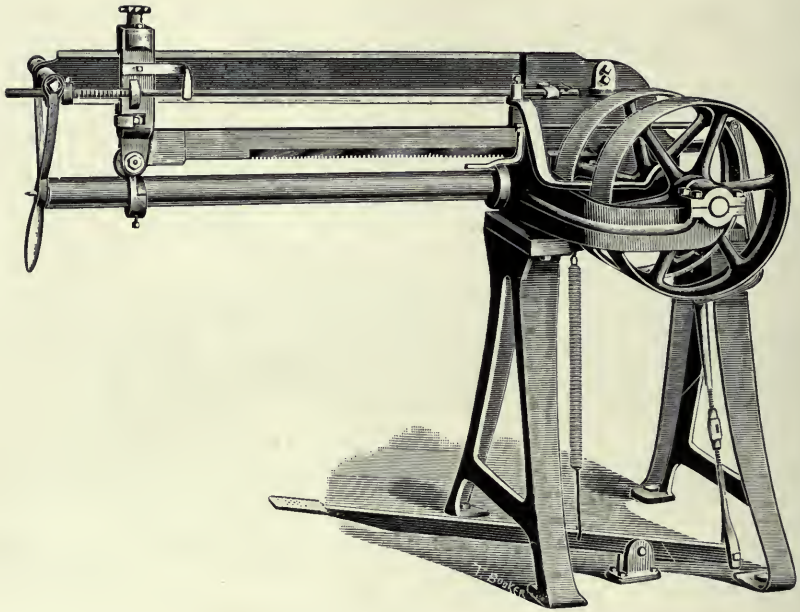
Width of grooved roller sent with each machine $\frac{3}{16}$, $\frac{5}{16}$, $\frac{7}{16}$, $\frac{9}{16}$ inches.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
6 For 30 in. material	\$44 50	9	3	0	Answerable	263
7 For 36 in. material	54 00	11	1	0	Congar	971

Write for Discounts

Groovers—Continued

Power Groover



No. 12

Our No. 12 Power Groover is capable of grooving articles 20 gauge and lighter, not less than three in. in diameter or longer than 36 in.

Work can be grooved on the outside or inside as desired. The machine can be quickly adjusted to make any desired length of stroke under 36 in.

It is a particularly desirable machine where a number of any one articles require to be grooved, and especially so in heavy work, as the operator standing in front of the machine, by simply depressing the treadle, causes the roll carriage to move forward, automatically reverses at the end of the seam and returns to starting point to rest, ready for another article to be grooved.

The horn is held by set screws and is provided with a flat surface its entire length for ordinary work, and with four grooves, viz.: 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ in. in width, for throwing the seam on inside of work, and the same number and size of grooved wheels for outside grooving.

Price	Price	Code	D. & W. No.
	£ s. d.		
★ \$170 50	35 0 0	Buttery	765

We also manufacture heavy Power Groovers, 8, 10, 12 ft. long for engine and boiler work, etc.

Pan Turners

Square Pan Turner



No. 1

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
1	20 in. long, steel	\$4 25	0	17 6	Antacid	264

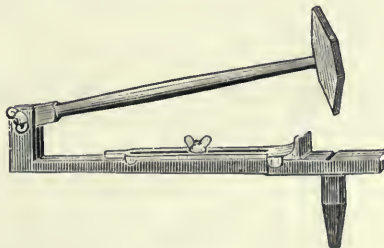
Improved Square Pan Turner



No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
2	With adjustable gauge 20 in. long, steel	\$6 00	1	4 8	Cent	265

Swedges

Square Pan Swedge



	Price	Price			Code	D. & W. No.
		£	s.	d.		
Square Pan Swedge	\$10 65	2	3 9		Centage	266
Creasing	12 25	2	10 4		Anticipate	269

Roofing Tools

Roofing Double Seamer Tongs

The Roofing Double Seamer Tongs illustrated below will prove very useful tools for roofers; it is an improvement on the O. W. Burrett's patent. The improvement consists of a link which connects the foot treadle with one of the handles, so that in bending the tin, the foot and hands act together, thus making what was a very laborious job a rather pleasant one.



The Double Seamer Tongs follow the ordinary Roofing Tongs and are needed in the same proportion to the tongs as the roofing irons—for instance, to make a 1 in. standing seam when finished, a $1\frac{1}{2}$ and $1\frac{1}{4}$ in. tongs and one $1\frac{1}{4}$ and one 1 in. Roofing Double Seamer Tongs would be required. These seamers are intended to be used on Terne plate and light galvanized iron.

They are made in two sizes, viz:

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 1 1 x $1\frac{1}{4}$ in., per set of two	\$38 65	7	19	0	Cental	270
★ 2 $1\frac{1}{4}$ x $1\frac{1}{2}$ in., per set of two	38 65	7	19	0	Antimony	271

Gutter Tongs

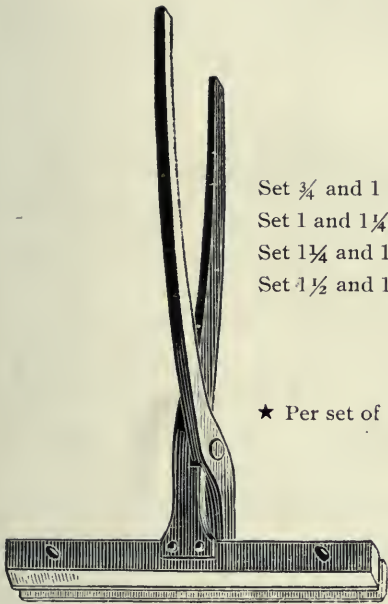
	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ Eight in. throat, per pair	\$6 45	1	6	7	Antipope	272

Special size of Gutter Tongs made to order.

Write for Discounts

Roofing Tools—Continued

Ordinary Roofing Tongs

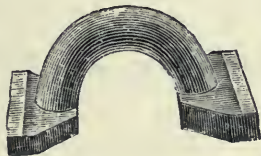


Ordinary Roofing Tongs

	Code	D. & W. No
Set $\frac{3}{4}$ and 1 makes $\frac{1}{2}$ in. standing seam.....	Anvil	273
Set 1 and $1\frac{1}{4}$ makes $\frac{3}{4}$ in. standing seam.....	Anxious	274
Set $1\frac{1}{4}$ and $1\frac{1}{2}$ makes 1 in. standing seam....	Anxiously	275
Set $1\frac{1}{2}$ and $1\frac{3}{4}$ makes $1\frac{1}{4}$ in. standing seam..	Anywhere	276

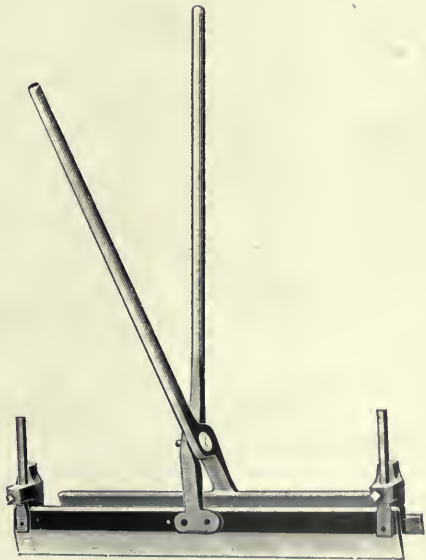
	Price	Price
	£	s. d.
★ Per set of two	\$7 75	1 12 0

Roofing Double Seamers



	Code	D. & W. No.
Set $\frac{1}{2}$ and $\frac{3}{4}$ will match $\frac{3}{4}$ and 1 Tongs	Aorta	277
Set $\frac{3}{4}$ and 1 will match 1 and $1\frac{1}{4}$ Tongs.	Apart	278
Set 1 and $1\frac{1}{4}$ will match $1\frac{1}{4}$ and $1\frac{1}{2}$ Tongs	Ape	279
Set $1\frac{1}{4}$ and $1\frac{1}{2}$ will match $1\frac{1}{2}$ and $1\frac{3}{4}$ Tongs	Apeak	280

	Price	Price
	£	s. d.
Per Set of two	\$2 70	0 11 2

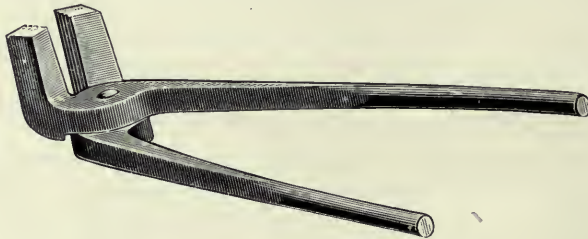


Roofing Tongs with Adjustable Gauge

	Price	Price	Code	D. & W. No.
	£	s. d.		
★ Roofing Tongs with adjustable gauge from 1 to 3 inch, per pair.....	\$6 25	1 5 9	Apiece	281

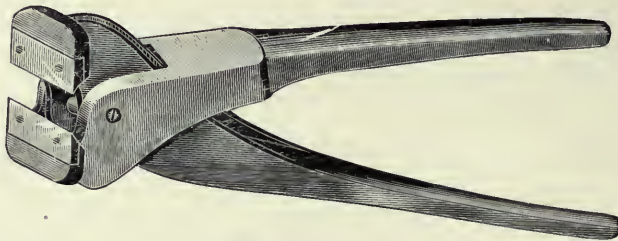
Roofers' Spike Puller

We can recommend this tool to Roofers for drawing eavetrough spikes, etc. It is a great saving on snips and cutting nippers frequently used for this purpose for the want of a better tool.



	Price	Price	Code	D. & W. No.
	£	s. d.		
Each	\$3 15	0 13 0	Apocope	282

Cutting Nippers With Removable Cutters



The cutters of these nippers are removable and can be replaced at any time. They are made of special cast steel, and great care is taken in the manufacturing and tempering of them.

The jaws are pivoted so near the cutters that less effort is required in cutting, but the increased leverage thus obtained often leads to abuse, and frequently they are used for prying and other work not intended for cutting nippers. Every pair is thoroughly tested before leaving the factory, and if any breakage occurs it will be assumed it happened from unfair usage.

No.	Price	Price	Code	D. & W. No.
	£	s. d.		
1 Length 12 in., breadth 1 3/4 in. per doz	\$35 60	7 6 4	Apogee	283
1 Length 12 in., breadth 1 3/4 in., each	3 00	0 12 4		
Extra Cutter, per pair	1 00	0 4 2		
Screws, per set (4)	20	0 0 10		

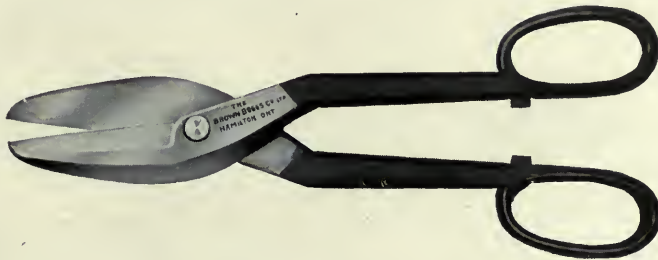
Bench Shears



No.	Price	Price	Code	D. & W. No.
	£	s. d.	Each	
00 Bench, cut 12 in., will cut No. 18 iron, each	\$21 70	4 9 3	Apparation	285
0 Bench, cut 10 in., will cut No. 18 iron, each	19 10	3 18 6	Appeal	286
1 Bench, cut 9 in., will cut No. 19 iron, each	12 60	2 12 0	Appear	287
2 Bench, cut 8 in., will cut No. 20 iron, each	7 50	1 11 0	Appearance	288
3 Bench, cut 7 in., will cut No. 21 iron, each	6 50	1 6 9	Appellant	289
4 Bench, cut 6 in., will cut No. 22 iron, each	5 80	1 4 0	Centre	290

No. 00 and 0 are made with removable blades.

Tinners' Hand Shears or Snips



Right Hand Snips for Right Hand Man

In order to avoid confusion we term our **Snips Right** and **Left Hand**, that is, a right hand Snip is for a right hand man and a left hand Snip for a left hand man. A left hand Snip has both blades and handles inverted, and is only sent when specially ordered and at an additional cost of \$1.20, 5s. list.

These Snips are **drop forged**, steel faced, carefully tempered and nicely finished, and are equal to any Snip on the market.

Straight Hand Shears

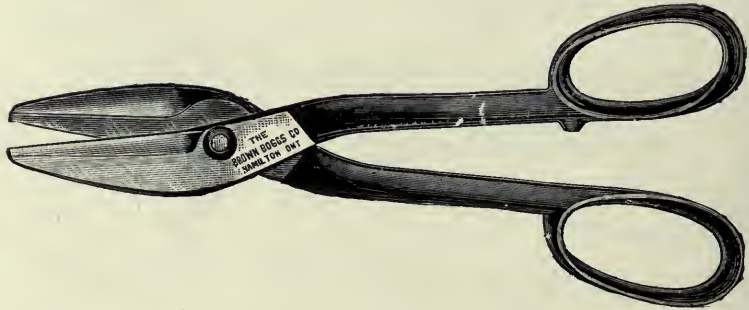
No.		Price	Price			Code Each	D. & W. No.
			£	s.	d.		
6½	Hand, cut 4½ in., will cut No. 22 iron, each	\$4 40	0	18	1	Appetise	291
7	Hand, cut 4 in., will cut No. 22 iron, each	3 70	0	15	3	Appliance	292
8	Hand, cut 3½ in., will cut No. 22 iron, each	3 00	0	12	4	Applicant	293
9	Hand, cut 3 in., will cut No. 24 iron, each	2 30	0	9	6	Ceramic	294
10	Hand, cut 2½ in., will cut No. 26 iron, each	2 10	0	8	8	Apposite	295
12	Hand, cut 2 in., will cut No. 28 iron, each	1 30	0	5	4	Custodial	955



Circular Hand Shears

No.		Price	Price			Code Each	D. & W. No.
			£	s.	d.		
7	Circular Hand, will cut No. 22 iron....each	\$5 20	1	1	5	Apposition	296
8	Circular Hand, will cut No. 24 iron ..each	4 40	0	18	1	Cere	297
9	Circular Hand, will cut No. 24 iron....each	3 70	0	15	3	Cerebellum	298
10	Circular Hand, will cut No. 24 iron....each	3 70	0	15	3	Certain	299

Tinners' Snips—*Continued*



Combination Snips for Straight, Circular and Irregular Work

These snips are made with straight blades but the jaws are shaped and grooved in such a manner that they can be used almost as readily for cutting curves, scrolls and irregular shapes as for straight work; thus combining all the advantages of both the circular and straight snips in one tool.

They are drop forged, laid with the best cast steel and will be found almost indispensable in a tin shop.

No.	Full Length	Length Cut	Price	Price			Code	D. & W. No.
				£	s.	d.		
17	14 in.	4 in.	\$4 20	0	17	4	Doz. Pairs	814
18	13 in.	3½ in.	3 50	0	14	5	Coagulum	815
19	12 in.	3 in.	2 80	0	11	7	Capstan Capsule	816



Corrugated Snips

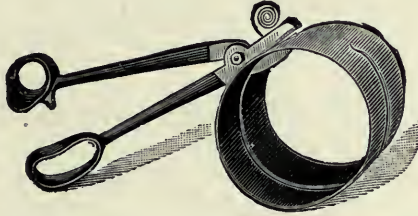
This tool will be found of immense advantage where corrugated iron is used.

It will cut the iron without injuring the shape of the corrugation in the least.

NOTE.—When ordering these snips, either a sample of the corrugated iron or a sketch giving depth and centres of the corrugations must accompany the order.

	Price	Price			Code	D. & W. No.
		£	s.	d.	EACH	
Per pair	\$10 90	2	4	10	Certify	300

Double Cutting Shears



For Cutting Pipe in Setting Up Stoves and Furnaces

These Shears are designed specially for cutting any kind of metal cylinders. The method of cutting (that of taking a piece $\frac{1}{8}$ in. out) avoids waste and leaves the edges perfectly smooth. The blade is pointed and is readily inserted in the metal at the point desired, to begin the cutting. They are adapted for cutting off bottoms of pails, cans, etc., or cutting round or square work, and are indispensable for general repairing, erecting stove and furnace pipe.

No.	Price	Price	Code Each	D. & W. No.
		£ s. d.		
Each.....	\$3 70	0 15 3	Ceruse	301

Scratch Awls



	Price	Price	Code Doz.	D. & W. No.
		£ s. d.		
Cast steel, 16 cents each, 8d. per dozen....	\$1 50	0 6 2	Apprise	302

Punches



Hollow Punches—Cast Steel

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
3	inch	each \$3 45	0	14	3	Apse	312
2½	inch	each 2 90	0	12	0	Apsidal	313
2¼	inch	each 2 65	0	11	0	Apsis	314
2	inch	each 2 30	0	9	6	Apsides	315
1¾	inch	each 2 30	0	9	6	Aquarius	316
1¾	inch	each 2 05	0	8	6	Arab	317
1¾	inch	each 2 05	0	8	6	Arabic	318
1½	inch	each 1 75	0	7	3	Arbitrate	319
1¾	inch	each 1 75	0	7	3	Arbitrator	320
1¼	inch	each 1 45	0	6	0	Cervine	303
1½	inch	each 1 45	0	6	0	Cess	304
1	inch	each 1 15	0	4	9	Approval	305
¾	inch	each 1 15	0	4	9	Approve	306
¾	inch	each 86	0	3	7	Approven	307
¾	inch	each 86	0	3	7	Cessation	308
½	inch	each 58	0	2	5	Cession	309
¾	inch	each 58	0	2	5	Cesspool	310
¼	inch	each 40	0	1	8	Apron	311

The usual set of Hollow Punches comprises ½, ¾, 1, 1½ and 1¾ inch.

	Price	Price			Code	D. & W. No.
		£	s.	d.		
Per set	\$6 35	1	6	2	Arboreous	321

NOTE.—All hollow punches over 2½ in. are only made to order and cannot be exchanged.

Hammers



Raising Hammers

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
1	Raising Hammer, Steel	each \$2 65	0	11	0	Cestus	322
1	Raising Hammer, Cast Iron	each 1 40	0	5	10	Arbute	323
2	Raising Hammer, Steel	each 2 30	0	9	6	Arcanum	324
2	Raising Hammer, Cast Iron	each 1 15	0	4	9	Archer	325
3	Raising Hammer, Steel	each 1 90	0	7	10	Archetype	326
3	Raising Hammer, Cast Iron	each 80	0	3	4	Chace	327
4	Raising Hammer, Steel	each 1 50	0	6	2	Chafe	328
4	Raising Hammer, Cast Iron	each 70	0	3	0	Archivist	329

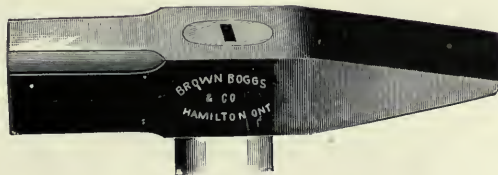
Hammers—Continued



Riveting Hammers

Best Cast Steel, Handled

No.		Price	Price	Price	Price	Code	D. & W. No.
		Per Doz.	Per Doz.	Each	Each		
	½ doz, in each box		£ s. d.		£ s. d.		
0	Heavy work, bright, 1¼ in. sq.	\$15 15	3 2 4	\$1 25	0 5 2	Archon	330
1	Sheet iron, bright, 1½ in. sq.	11 60	2 7 9	1 00	0 4 2	Arctic	331
2	Tin, etc., bright, 1 in. sq.	10 00	2 1 2	85	0 3 6	Artistic	332
3	Tin, etc., bright, ¾ in. sq.	8 15	1 13 7	70	0 2 11	Arduous	333
4	Tin, etc., bright, ¾ in. sq.	6 55	1 7 0	56	0 2 4	Area	334
5	Tin, etc., bright, ⅝ in. sq.	5 90	1 4 4	50	0 2 1	Arena	335



Setting Hammers

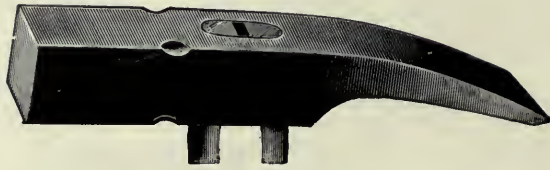
(Ordinary)

Best Cast Steel, Handled

No.		Price	Price	Price	Price	Code	D. & W. No.
		Per Doz.	Per Doz.	Each	Each		
	½ doz. in each box		£ s. d.		£ s. d.		
1	Setting, bright, 1½ in. sq. . .	\$11 60	2 7 9	\$1 00	0 4 2	Argent	336
2	Setting, bright, 1 in. sq.	10 00	2 1 2	85	0 3 6	Argonaut	337
3	Setting, bright, ¾ in. sq.	8 15	1 13 7	70	0 2 11	Argus	338
4	Setting, bright, ¾ in. sq.	6 55	1 7 0	56	0 2 4	Arian	339
5	Setting, bright, ⅝ in. sq.	5 90	1 4 4	50	0 2 1	Aries	340

Write for Discounts

Hammers—Continued



Style "B"

Setting Hammers

Best Cast Steel. Handled

No.		Price	Price	Price	Price	Code	D. & W. No.
$\frac{1}{2}$ doz. in each box.		Per doz.	Per doz.	Each	Each	Doz.	
			£ s. d.		£ s. d.		
1	Bright, $1\frac{1}{8}$ in. square....	\$14 10	2 18 0	\$1 20	0 5 0	Aright	341
2	Bright, 1 in. square ...	12 30	2 10 7	1 05	0 4 4	Arise	342
3	Bright, $\frac{7}{8}$ in. square....	10 50	2 3 2	90	0 3 9	Arm	343
4	Bright, $\frac{3}{4}$ in. square....	8 65	1 15 7	75	0 3 1	Armenian	344



Made of Best Cast Steel

	Code	D. & W. No.
Planishing Hammers, price on application according to weight	Armipotent	345
Flanging Hammers, price on application according to weight .	Armoric	340



Eavetrough Hammers

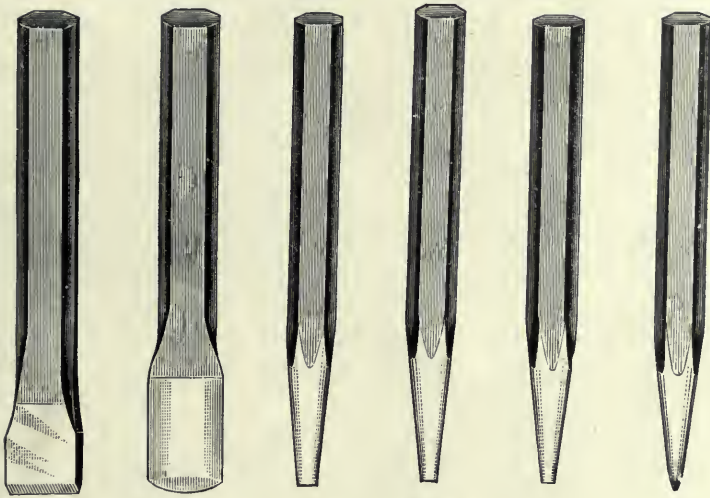
	Price	Price	Code	D. & W. No.
		£ s. d.	Doz.	
Total Length $14\frac{1}{2}$ inches, each	\$1 70	0 7 0	Armourer	347

Chisels

Stencil Chisels

	Price	Price	Code	D. & W. No.
		£ s. d.		
Stencil Chisels, per set of 10 pieces	\$1 60	0 6 7		
Size Letter $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 in.				
No. 1, 2, 3, 4, 5, 6, 7				
No. 12, 26 pieces, capable of cutting all sizes of letters and figures from $\frac{1}{2}$ inch to 2 inches. Per set.....	4 20	0 17 4	Armoury	348

Solid Punches

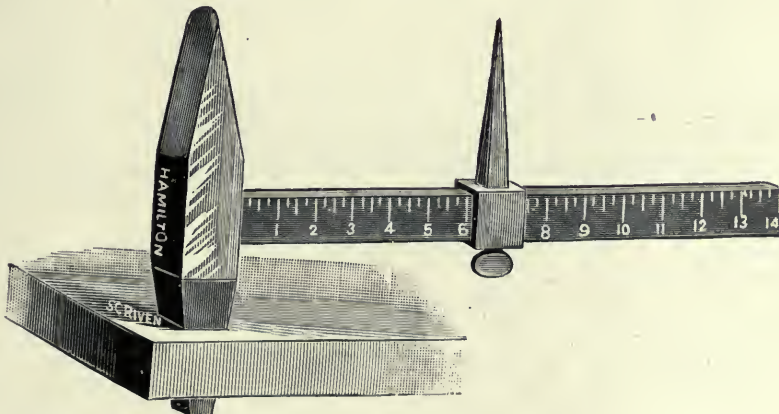


Full Size of Ends



Solid Punches—Best Cast Steel

	Price	Price	Code	D. & W. No
		£ s. d.	Doz. Sets	
Set Solid Punches (4 punches, 2 chisels)	\$0 85	0 3 6	Arms	349
Solid Punches, Nos. 0, 1, 2, 3, 4, 5, 6, 7, 8 .each	19	0 0 9½		
Solid Punches, per set 0 to 8	1 55	0 6 5	Army	350



Inside Circle Cutting Chisel

For cutting centres from stove pipe, safes, drum heads, or anything requiring a centre circle cut out, this tool is invaluable. It will cut a circle from 2 to 10 inches.

Price	Price	Code	D. & W. No.
	£ s. d.		
\$4 20	0 17 4	Aroma	351

Extra Heavy Solid Punches

Best Cast Steel

The set comprises reamer, three solid punches, one prick punch, and combined screw driver and wrench as shown herewith.

They will be found very convenient for furnace and other heavy work.



	Price	Price	Code	D. & W. No.
		£ s. d.		
Per Set	\$2 10	0 8 8	Arose	352
Extra Reamers.....each	65	0 2 9		
Extra Punches.....each	28	0 1 2		
Extra Comb, Screw Driver and Wrench...each	38	0 1 7		

Cast Steel Chisels

Made of the Best English Cast Steel

Circular Chisels, per lb.	\$.....
Lantern Chisels, per lb.	
Cold Chisels, per lb.	

Rivet Sets

Best Tool Steel



We do not endeavor to compete in price with the many cheap grades of rivet sets on the market. Ours are made from the best tool steel and the additional work that can be accomplished with them makes them much cheaper in the end than the so-called cheap grades.

Half Dozen in Box

No.	Price	Price			Code Doz.	D. & W. No
		£	s.	d.		
00 Size hole $\frac{1}{32}$ in., for 16 and 20 lb. rivets, each	\$0 96	0	4	0	Around	353
0 Size hole $\frac{1}{16}$ in., for 12 and 14 lb. rivets, each	96	0	4	0	Arrack	354
1 Size hole $\frac{3}{32}$ in., for 8 and 10 lb. rivets, each	82	0	3	5	Chain	355
2 Size hole $\frac{1}{8}$ in., for 6 and 7 lb. rivets, each	82	0	3	5	Arras	356
3 Size hole $\frac{7}{32}$ in., for 4 and 5 lb. rivets, each	66	0	2	9	Array	357
4 Size hole $\frac{3}{16}$ in., for 2 and 3 lb. rivets, each	66	0	2	9	Arrest	358
5 Size hole $\frac{5}{32}$ in., for $1\frac{1}{4}$ lb. rivets each	50	0	2	1	Arrogate	359
6 Size hole $\frac{3}{8}$ in., for $1\frac{1}{2}$ lb. rivets each	50	0	2	1	Arrowroot	360
7 Size hole $\frac{1}{2}$ in., for 14, 16 and 20 oz. rivets each	42	0	1	9	Arrowy	361
8 Size hole $\frac{7}{8}$ in., for 8 and 10 oz. rivets, each	42	0	1	9	Arsenic	362



Full Size of Holes



Hand Groovers

Best Cast Steel

No.	Price	Price			Code Per Set	D. & W. No.
		£	s.	d.		
00 Size at largest part of groove, $\frac{9}{16}$ in. each	\$0 90	0	3	9	Assert	392
0 Size at largest part of groove, $\frac{1}{2}$ in. each	90	0	3	9	Assessor	393
1 Size at largest part of groove, $\frac{7}{16}$ in. each	75	0	3	1	Assets	394
2 Size at largest part of groove, $\frac{3}{8}$ in. each	75	0	3	1	Assiduous	395
3 Size at largest part of groove, $\frac{5}{16}$ in. each	60	0	2	6	Assign	396
4 Size at largest part of groove, $\frac{3}{4}$ in. each	60	0	2	6	Chap	397
5 Size at largest part of groove, $\frac{5}{8}$ in. each	50	0	2	1	Assignee	398
6 Size at largest part of groove, $\frac{1}{8}$ in. each	50	0	2	1	Assist	399

All small tools made of best cast steel.

Steel Letters and Figures



Steel Letters and Figures made of best tool steel and are warranted.

Code Per Set Figures	D. & W. No.	Sizes	Price Per Set Figures	£ s. d.	Code Per Set Alphabet	D. & W. No.	Price Per Set Alphabet	£ s. d.
Chantry	374	$\frac{1}{32}$ in.	\$2 50	10 4	Asphodel	383	\$7 50	1 10 10
Ascribe	375	$\frac{1}{16}$ in.	1 50	6 2	Asperant	384	4 50	18 6
Ash	376	$\frac{3}{32}$ in.	1 50	6 2	Aspire	385	4 50	18 6
Ashore	377	$\frac{1}{8}$ in.	1 50	6 2	Asquint	386	4 50	18 6
Aside	378	$\frac{3}{16}$ in.	2 00	8 3	Assail	387	6 00	1 4 8
Askew	379	$\frac{1}{4}$ in.	2 50	10 4	Curly	388	7 50	1 10 10
Aslope	380	$\frac{5}{16}$ in.	3 00	12 4	Currant	389	9 00	1 17 0
Aspect	381	$\frac{3}{8}$ in.	3 50	14 5	Assault	390	10 50	2 3 2
Asperse	382	$\frac{1}{2}$ in.	5 00	1 0 7	Assegal	391	15 00	3 1 8

Steel Stamps

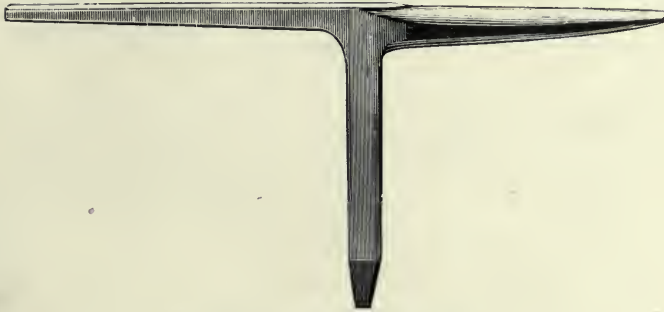
Any Description Made to
Order

Price on Application



Stakes

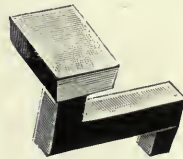
Wrought Iron with Steel Faces



No. 1 Beakhorn Stake



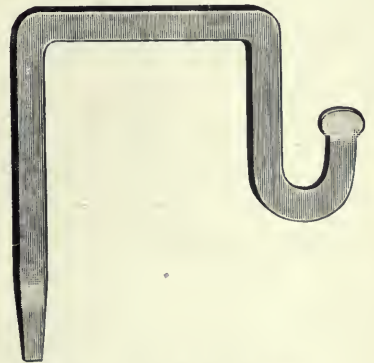
Creasing Stake with Horn



Bevel-Edge Square Stake



Double Seaming Stake



Tea Kettle Ear Stake

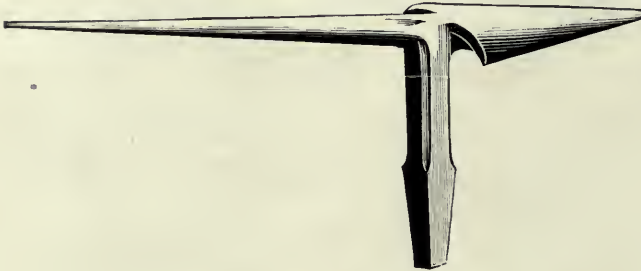


Needle Case Stake

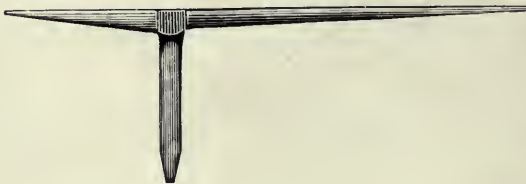
Write for Discounts

Stakes—*Continued*

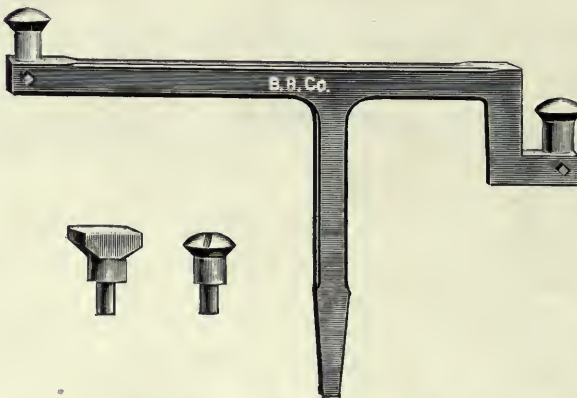
Wrought Iron With Steel Faces



Blowhorn Stake



Candle Mould Stake



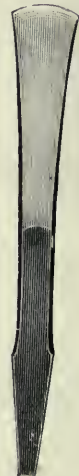
Tea Kettle Stake with 4 Steel Heads



Square Stake



Hatchet Stake



Bottom Stake

Stakes—*Continued*

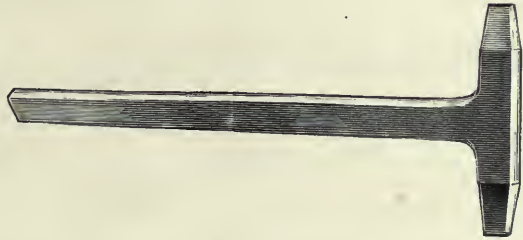
Cast Iron With Polished Faces



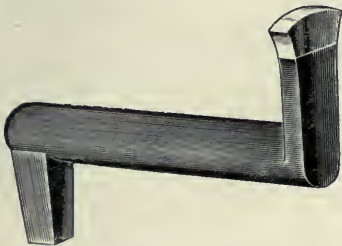
Hollow Mandrel Stake



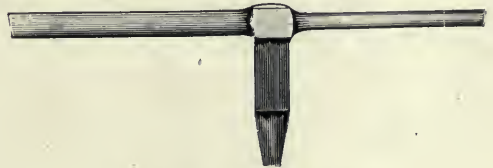
Round Head Stake



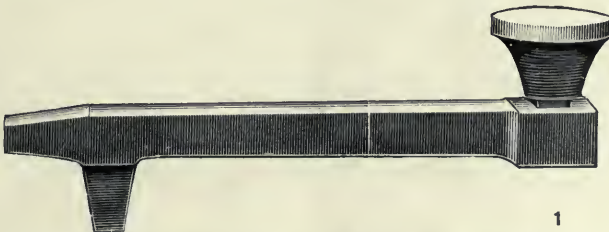
Mandrel Stake



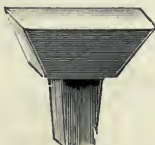
Kettle Breast Stake



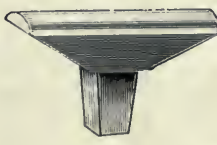
No. 1 Conductor Stake



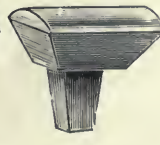
Double Seaming Stake with Four Heads



2



3



4

Stakes—Continued

Wrought Iron and Steel

No.		Price	Price			Code Each	D. & W. No.
			£	s.	d.		
1	Large Stake, or Beakhorn, 45 lbs.	\$19 30	3	19	4	Assignment	400
2	Large Stake, or Beakhorn, 40 lbs.,..	17 10	3	10	4	Chapbook	401
3	Large Stake, or Beakhorn, 30 lbs. .	12 90	2	13	0	Assonance	402
1	Double Seaming, large end 17 in., small end 11 in.	11 60	2	7	9	Assortment	403
2	Double Seaming, each end 11 in. .	10 30	2	2	5	Assuage	404
1	Bevel-edged Square, 3 × 5 in.	7 75	1	12	0	Chapiter	405
2	Bevel-edged Square, 2½ × 4½ in. .	6 45	1	6	7	Assurance	406
	Common Blowhorn, large end 9 in., small end 17½ in.	6 45	1	6	7	Assur	407
	Creasing, with horn, round end 8½ in., flat end 6½ in.	5 20	1	1	5	Astern	408
	Common creasing, 14½ in. long, both ends flat	5 80	1	4	0	Asteroid	409
	Coppersmith's Square, face 2¾ × 4½ in..	4 50		18	6	Asthma	410
	Common Square, face 2¾ × 4½ in.	3 90		16	0	Astonied	411
	Large Square, face 3½ × 5½ in.	7 75	1	12	0	Char	412
	Small Square, face 2¾ × 1½ in.	2 60		10	9	Charily	413
	Candle Mould, small end 18 in., horn 8½ in.	3 60		14	10	Astriction	414
	Needle Case, flat end 8 in. small end 10½ in.	3 60		14	10	Astrologer	415
1	Hatchet, blade 16 in. long.....	6 45	1	6	7	Astronomy	416
2	Hatchet, blade 14½ in. long.....	5 50	1	2	8	Atavism	417
3	Hatchet, blade 13 in. long.	4 50		18	6	Athenian	418
4	Hatchet, blade 11 in. long.....	3 60		14	10	Athwart	419
5	Hatchet, blade 9 in. long	3 25		13	5	Atlantean	420
6	Hatchet, blade 7 in. long	3 00		12	4	Atlantic	421
1	Bottom, width 1¾ in.	1 65		6	10	Atlas	422
2	Bottom, width 1½ in.	1 30		5	5	Atomist	423
3	Bottom, width 1¼ in.	1 10		4	7	Atone	424
4	Bottom, width 1 in.	95		4	0	Attach	425
	Tea Kettle Stake, wrought with 4 Steel Heads	20 40	4	4	0	Charm	426
	Extra Steel Heads, for Tea Kettle Stakes each	2 35		9	8	Attainment	427
	Tea Kettle Ear Stake.	5 50	1	2	8	Coddle	953

Write for Discounts

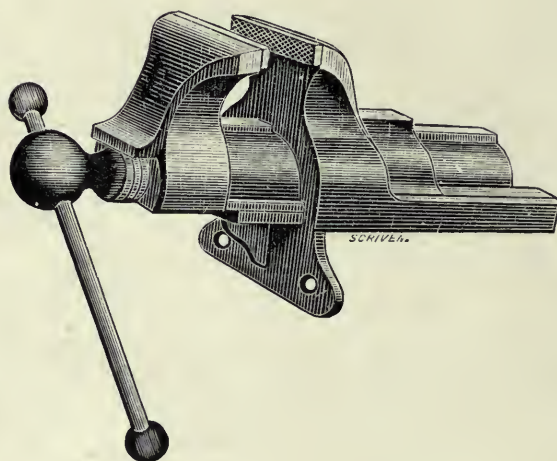
Stakes—Continued

Cast Iron with Polished Faces

No.	Price	Price £ s. d.	Code Each	D. & W. No.
1 Conductor, turned, large end 15 in., small end 11½ in. long	\$5 20	1 1 5	Attempt	428
2 Conductor, turned, large end 14 in., small end 10 in. long	3 90	16 0	Attend	429
1 Solid Mandrel, 5-ft. long to the standard	12 90	2 13 0	Attendance	430
2 Solid Mandrel, 3 ft. 4 in. long to the standard.....	7 75	1 12 0	Attention	431
3 Solid Mandrel, 2 ft. 10 in. long to the standard	6 45	1 6 7	Attentive	432
4 Solid Mandrel, 2 ft. 6 in. long to the standard	5 20	1 1 5	Attest	433
Round Head.. ..	1 65	6 10	Chart	434
Bath Tub	1 65	6 10	Attic	435
Double Seaming with 4 Heads.....	11 60	2 7 9	Charter	436
Double Seaming less Heads.. ..	4 50	18 6		
Extra Heads for Double Seaming, with 4 Heads, each	2 00	8 3	Chatter	437
1 Hollow Mandrel, with handle, 5 ft. entire length	12 90	2 13 0	Attune	438
2 Hollow Mandril with handle, 3 ft. 4 in. entire length	7 10	1 9 3	Auditorium	439
Common Square Stake, cast iron	2 00	8 3	Augean	440
1 Double Seaming, same pattern as wrought	5 80	1 4 0	Auger	441
Bread Pan (size of top 10½ x 8 in.)	2 60	10 9	Aught	442
Kettle Breast	3 00	12 4	Chatty	443

Write for Discounts

No. 3 Oval Slide Vise

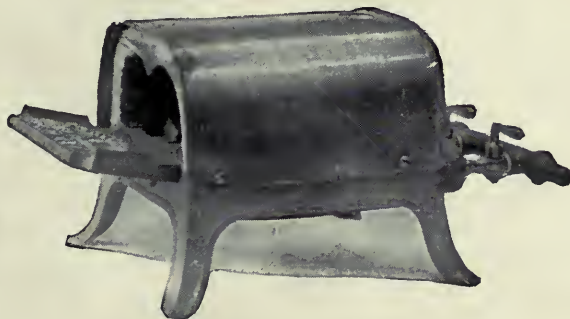


These Vises have steel jaws, are strongly made and nicely finished and are well adapted for general work in a tin shop.

No.	Weight	Width of Jaws	Opens	Price	Price		Code Dozen	D. & W. No.
					£	s. d.		
★ 3	Vise, 33 lbs.	3½ in.,	4 in ,	\$4 70	0	19 4	Augustan	447

Write for Discounts

Jacobson's Gas Soldering Furnaces



Reliable and Economical

They burn with air and gas together at a proportion of about 92 per cent. of air and 8 per cent. of gas at a time, giving an excellent heat.

The fire brick keeps the heat within the furnace and prevents the same from radiating.

The centre projection of the brick on furnace No. 2 divides the heat so it is kept around each soldering iron.

The gas consumption for the double burner No. 2, with both burners at full blaze is about 12 feet an hour with ordinary gas pressure, but after the irons have become hot and the work is not too heavy, one can reduce the gas consumption by turning down the faucets a little or by using only one burner, which consumes just half as much gas or about 6 ft. an hour. This matter may, of course, be regulated according to the gas pressure.

The cleaning of the furnaces is most practicable; you have only to unfasten the nuts underneath and you can clean the furnace in a couple of minutes.

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
1 Single burner with firebrick.....	\$4 00	0	16	6	Augustine	448
2 Double burner with firebrick.....	5 15	1	1	3	Auk	449

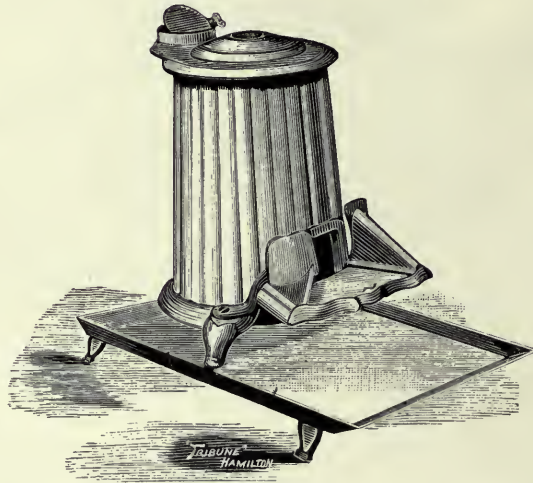
When ordering please state whether for natural or artificial gas.

Write for Discounts

Fire Pots—*Continued*

Cast Iron Fire Pots

We supply these Fire Pots with or without a grate. They are made in the most substantial manner. The draft door is in two sections, which economizes fuel while in use.



For canners' use we always send these with pan unless otherwise ordered.



	Price	Price £ s. d.	Code	D. & W. No.
★ With Pan....	\$4 10	0 17 0	Aulic	450
★ Without Pan.	2 70	0 11 2	Aunt	451
★ Grate Extra.	60	0 2 6	Aurelia	452

“The Dangler” Gasoline Soldering Furnace

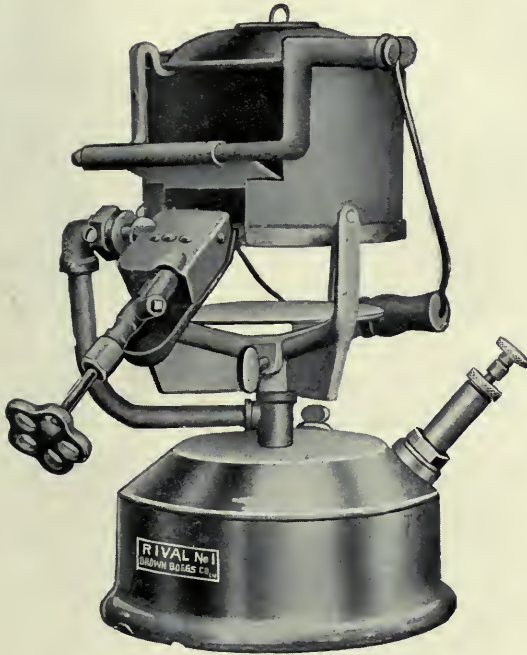
Price	Price £ s. d.	Code Dozen	D. & W. No.
\$12 70	2 12 3	Auricle	453

This combined tinnery and plumbers' furnace is well and favorably known.

Write for Discounts

Fire Pots—*Continued*

No. 1 Rival Gasoline Fire Pot



The accompanying illustrations represents our No. 1 Rival Gasoline Fire Pot.

A few of its many admirable qualities may be mentioned, as follows:—

The hood can be readily removed, as shown in cut 2, and the fire pot used to melt joints, thaw out pipes, re-tin galvanized iron, burn off paint, etc., etc.

The pressure is obtained by a metallic force pump, screwed into well. When necessary either pump or valve can be removed without interfering with any other part of the pot.

Should the burner become clogged, it can be readily cleaned in a few minutes by removing screws on end of channels and cleaning out with a small wire.

The tank is made of heavy sheet brass, and the hood is of the best Russian iron with malleable iron trimmings

The burner is of brass, and is connected by a swivel joint which allows the burner to be placed at any desired angle.

The parts are all interchangeable, and can be renewed at a small cost.

The fire pot is fully warranted, and we guarantee it equal if not superior to any Gasoline Fire Pot on the continent.

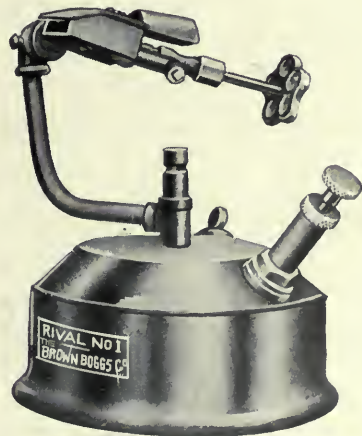
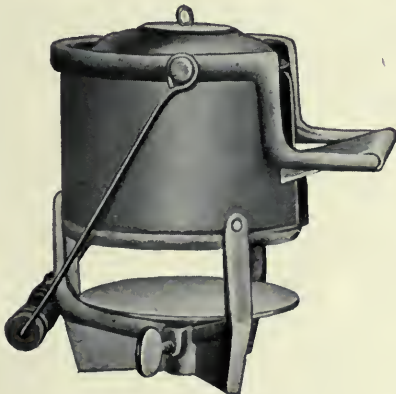


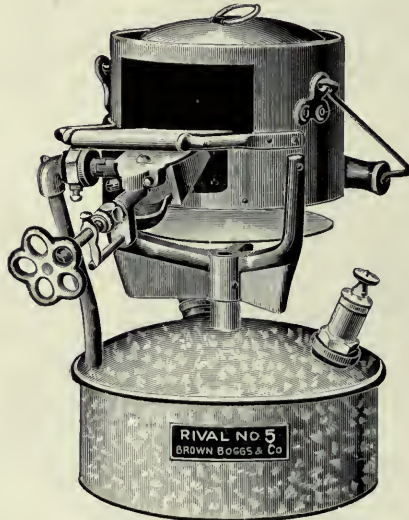
Illustration No. 2, Showing Hood Removed

Price
\$

Code
Doz.
Curry

D. & W. No.
454

Gasoline Fire Pots—*Continued*



No. 5

Rival Gasoline Fire Pot

This Fire Pot is in many ways similar to our No. 1, only having a smaller well, and is somewhat plainer.

The well is of heavy galvanized iron, double seamed and well soldered together.

The pump is brass, same as used on our No. 1 Fire Pot.

The burner is of brass, and is connected by a swivel joint, which allows the burner to be placed at any desired angle, and with the hood removed can be used to thaw out water pipes, melt joints, or used as a paint burner.

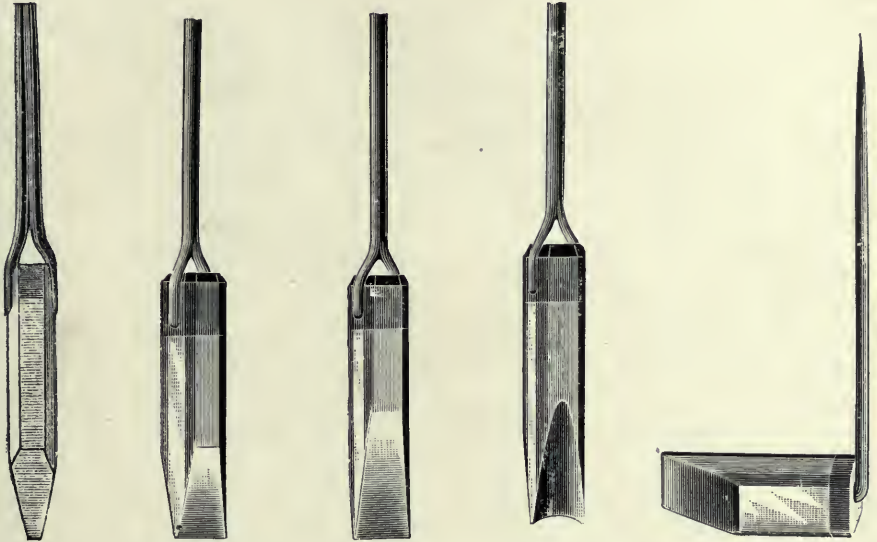
It is a very substantial pot, well made and nicely finished in every particular.

Fully warranted.

No.	Price	Code Dozen	D. & W. No.
5 Rival Gasoline Fire Pot.....	\$	Auriculate	454a

Soldering Coppers

Octagon shaped, made of the best Lake Superior Bar Copper. We brand all our Coppers "LAKE SUPERIOR."



**Soldering
Iron**

**Bottoming
Iron**

**Floating
Iron**

**Capping
Iron**

**Hatchet
Iron**

Extras

Pointed—Bottoming and Hatchet Coppers

Base Pricects. per lb.

- 3 lb. to pair and heavier. Base Price
- 2½ lb. to pair.1c. per lb. over base.
- 2 lb. to pair.2c. per lb. over base.
- 1½ lb. to pair.3c. per lb. over base.
- 1 lb. to pair.6c. per lb. over base.
- ½ lb. to pair.7c. per lb. over base.

Other Shapes

Floating Coppers } 3½c. lb. over base
Capping Irons }

Above prices are for orders of not less than 100 lbs. to be shipped in one lot.

Orders for less than 100 lbs. 2c. advance over above prices.

Orders of not less than 500 lbs. to be shipped in one lot, ¼c. per lb. less than above prices.

Orders of not less than 1000 lbs. to be shipped in one lot, ¾c. per lb. less than above prices.

Base price on application.

Sizes

Soldering Irons—½, 1, 1½, 2, 2½, 3, 3½, 4, 5, 6, 7, 8, 10, 12 lbs. per pair.

Bottoming Irons—3, 4, 5, 6, 7, 8 lbs. per pair.

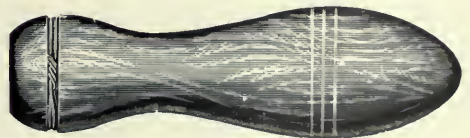
Hatchet Irons—5, 6, 7, 8 lbs. per pair.

Floating Irons—5, 6, 7, 8 lbs. per pair.

Capping Irons—5, 6, 7, 8 lbs. per pair.

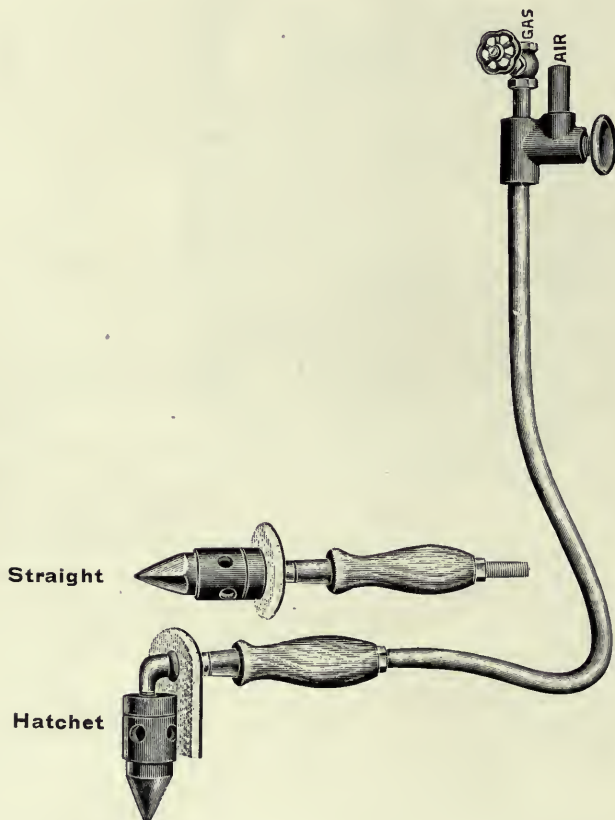
Any size or shape made to order.

Soldering Iron Handles



Price	Price		Code	D. & W. No
	£	s. d.		
Each....	\$ 0 06	0 0 3		
Per 100..	5 00	1 0 7	Carp	843
Per 1,000	40 00	8 4 5	Cart	844

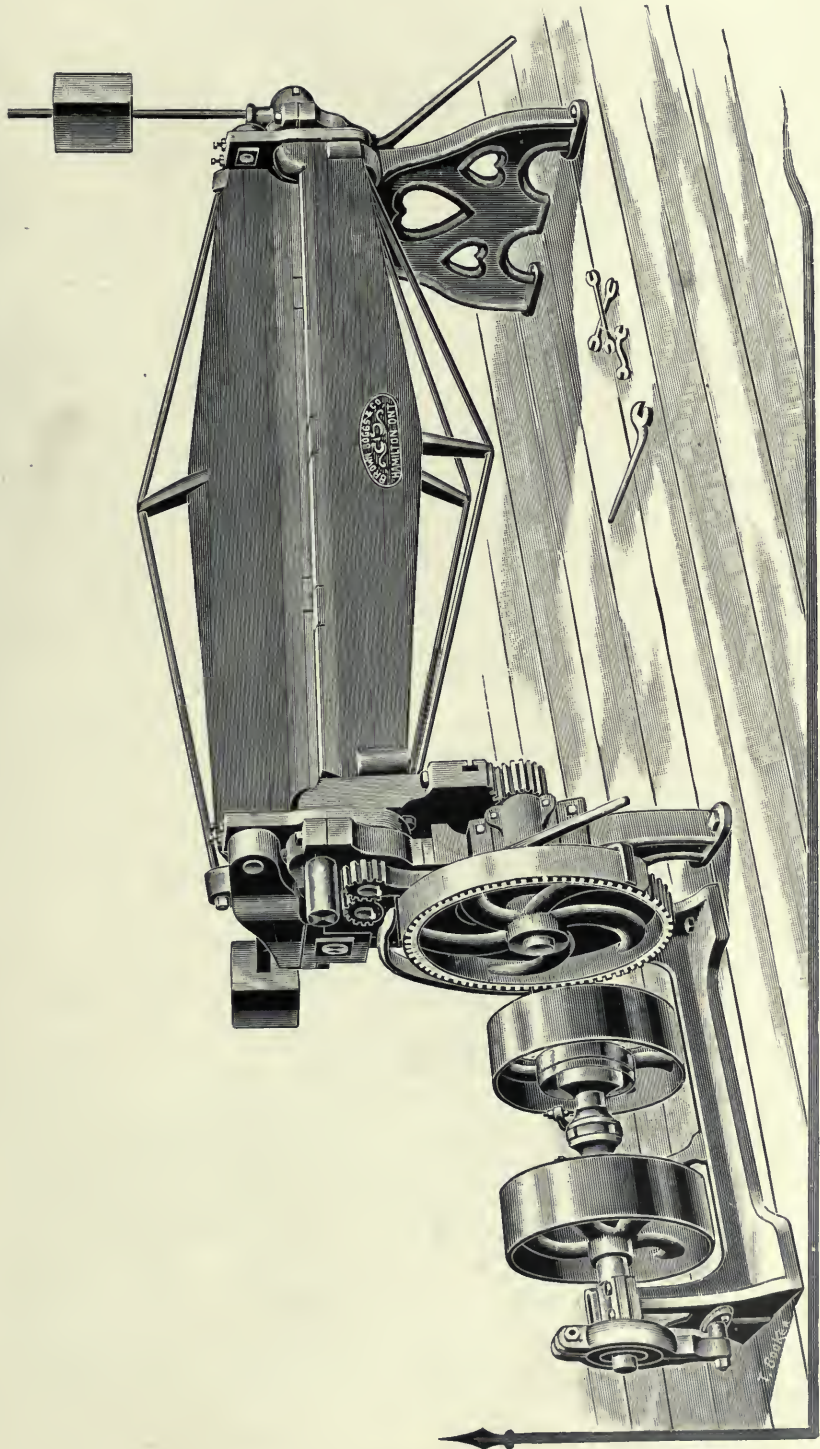
Gas Soldering or Heating Irons



This tool is used extensively in tinshops in place of the ordinary Copper. The point is made of soft steel, therefore wears much longer than the ordinary soldering iron and can be replaced at a small cost. The gas consumption is very small, as when it once becomes hot the gas can be turned down. Air pressure is necessary in order to work this iron. Supplied either straight or hatchet shape.

	Price	Price £ s. d.	Code
Straight	\$10 00	2 1 2	Culpable
Hatchet	10 00	2 1 2	Cultivate

No. 18—8 Ft. Geared Power Brake



(See description page 131)

No. 15—6 Ft. Geared Hand Power Brake

(For 10 gauge)



(See description page 131)

Geared Hand and Power Brakes

(See Cuts pages 129 and 130)

Designed specially for **Range makers** and those requiring a machine for the bending of heavy sheet metal not exceeding **10 gauge**.

The cut represents one of our 8 ft. machines set up ready for power, but if so desired, the small pinion can be slipped out of gear, and the machines run by hand. If required to run by hand entirely, a star wheel is supplied instead of the clutch and pulleys. For power two belts are required, one straight and the other crossed; these operate a sensitive clutch which actuates the bending bar instantly when put in motion. It can be adjusted for bending either sharp or rounding bends, according to the material. Leaves can be slotted to suit purchaser.

	Price	Price £ s. d.	Code	D. & W. No.
★No. 13, 6 ft. hand power for 12 gauge iron, weight about 4200 lbs.....	\$560 00	115 2 0	Caption	817
★No. 14, 6 ft. power for 12 gauge iron, weight about 4700 lbs.....	700 00	143 17 0	Coalfield	818
★No. 15, 6 ft. hand power for 10 gauge iron, weight about 4600 lbs.....	700 00	143 17 0	Coarse	819
★No. 16, 6 ft. power for 10 gauge iron, weight about 5100 lbs.....	850 00	174 14 0	Carack	820
★No. 17, 8 ft. hand power for 10 gauge iron, weight about 5500 lbs.	850 00	174 14 0	Carafe	821
★No. 18, 8 ft. power for 10 gauge iron, weight about 6000 lbs.....	1000 00	205 10 0	Buttriss	768

Heavy Cam Brake

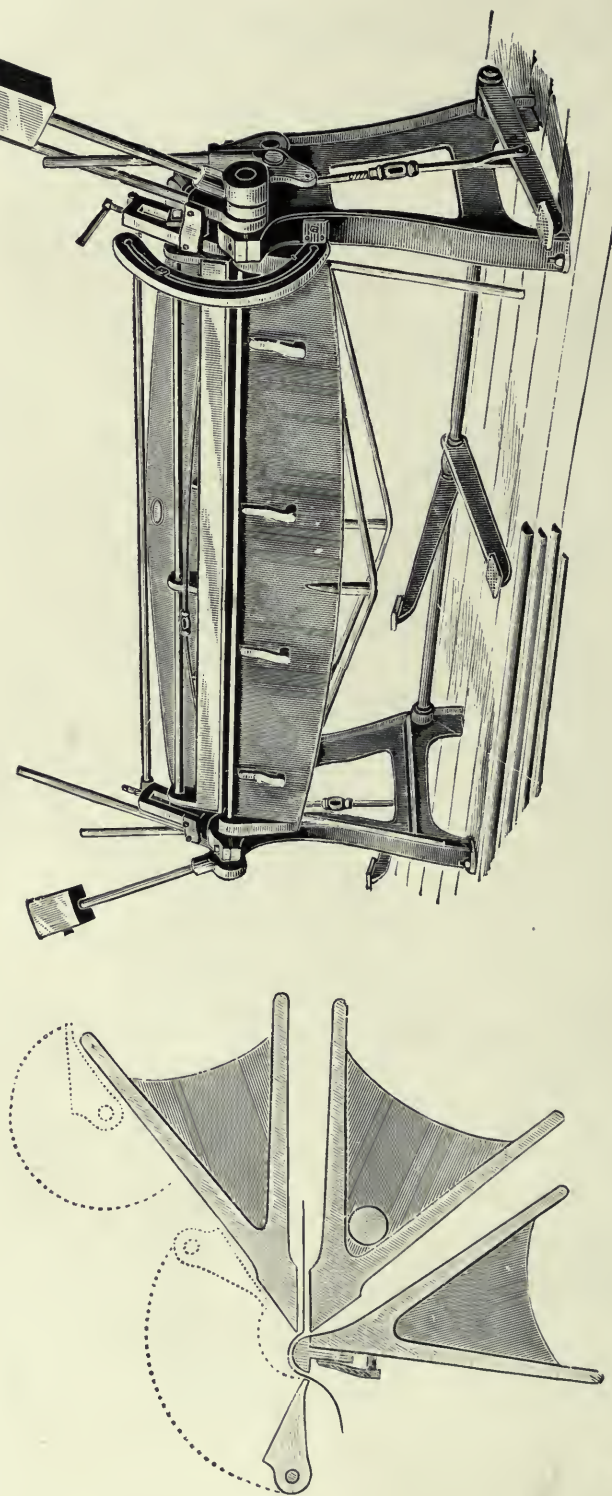
(Hand Power)

We also make a 4 ft. Hand Power Cam Brake for Range work which is guaranteed to bend 16 gauge iron and lighter.

It is similar in construction to our No. 3 illustrated on page 132, only heavier. It can be slotted to suit purchaser.

	Price	Price £ s. d.	Code	D. & W. No.
★No. 4, 4 ft.	\$235 00	48 6 0	Authority	464

Four Leaf Cornice Brakes (Patented)



(See Description of this Cornice Brake on page 133)

Four Leaf Cornice Brakes

Patented

This cut (page 132) represents our Nos. 2, 3 and 10 Cornice Brakes, which is acknowledged to be the most complete machine yet produced for cornice, eavetrough and all work of that class. For Nos. 2 and 3 we provide a fourth leaf for making circular bends, thus doing away with the slow unsatisfactory process of bending circles over the forms by hand. Members can be worked out with this attachment which are impossible to be produced on any other brake. The fourth leaf can be adjusted to the various forms in a moment by means of hand screws at both ends of leaf, and can be thrown back out of the way of ordinary work in an instant.

A glance at the sectional cut is sufficient to show the mode of operating the machine; the dotted lines show the course travelled by the fourth leaf, also showing it at rest and thrown back.

We make three sizes of this machine, viz.: 6, 8 and 10 ft.

We guarantee the 6 and 8 foot to bend 20 gauge iron perfectly straight with ease, and with the reinforcing bar, which is sent with each machine, 18 gauge.

The 10 ft. is guaranteed for 22 gauge iron, and with the reinforcing bar, 20 gauge.

The bar can be used as a straight edge when not in use on the brake.

These machines are made of the best material and carefully finished, and the moveable parts (the front and fourth leaf) are so balanced that the operator has only the material he is working to contend with.

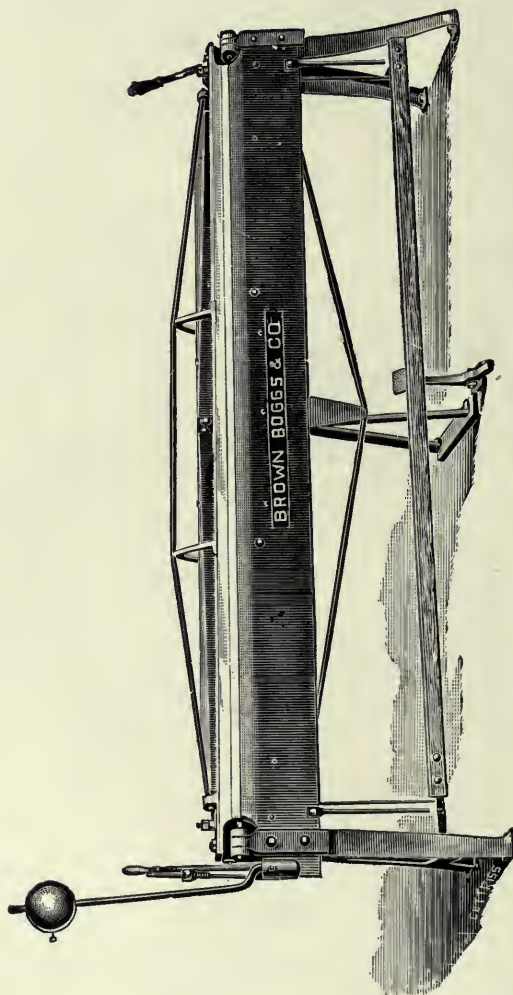
For operation of Brakes, see page 136.

No.		Price	Price			Code	D. & W. No.
			£	s.	d.		
★ 2	6 ft. Brake, complete with 4th Leaf, weight about 2,000 lbs.	\$300 00	61	13	0	Aurochs	456
★ 2	6 ft. Brake, not including 4th Leaf, weight about 1,800 lbs.	234 00	48	2	0	Aurora	457
★ 3	8 ft. Brake, complete with 4th Leaf, weight about 3,300 lbs..	413 00	84	18	0	Cheap	458
★ 3	8 ft. Brake, not including 4th Leaf, weight about 3,000 lbs..	328 00	67	8	0	Check	459
★10	10 ft. Brake, not including 4th Leaf, weight about 4,600 lbs.	535 00	109	19	0	Austrian	461

Write for Discounts

No. 7—8 Foot Light Cornice Brake

All Iron and Steel



Patented in Canada and the United States

For 24 gauge iron and lighter

No.	Price	Price			Code	D. & W. No.
		£	s.	d.		
★ 7 Brake, with wood forms, gauges, scratch awls and wrenches, less Beading attachment	\$130 00	26	15	0	Cheery	462
★ 7 Brake with Beading Attachment and steel rod	158 00	32	10	0	Authorise	463

Weight, less Beading Attachment, about 1,150 lbs.

For full description see pages 135 to 142

No. 7-8 Foot Light Cornice Brake

(See Cut page 134)

The invention of our No. 7 Brake was the outcome of a demand for an inexpensive machine for country tin shops and places where there is only a limited amount of eavetrough and cornice work required, or for large contracts where it is necessary to have a brake on the premises, and which is not too cumbersome to move from place to place.

The same work can be done on it as on an ordinary cornice brake, such as splitting sheets, making any design of cornice, ridge roll, valleys, gutters, square pipes, octagon conductor pipes, any size of eavetrough, either with square or round bead, etc.

By the combination of the treadle and the handles the machine can be operated from either end or any place in front, thus small sections of work can be formed without the operator requiring an assistant or going to the end of machine each time to release the clamping leaf. The treadle is connected to the roller cams by means of connecting rods; the roller cams are so constructed that when the top leaf is firmly clamped, the roller in the cam is to the rear of the pivotal centre of the cam, thus the leaves are locked upon the work until released by the operator.

The third or centre leg is to add strength to the lower leaf, it is made shorter than the end legs to allow for adjustment.

In setting up the brake, be sure and see that it is put on a **Level Floor** and that both end legs are bolted firmly to the floor. After this, wedge up the centre leg, so as to bring the top of lower leaf 1-32 in. (or a little more) higher than the top of front leaf, this is to allow for the spring in the machine.

For city shops, or where there is a volume of cornice work to do, we recommend our Nos. 3 or 10 Brake. They will stand rougher usage and do considerable heavier work.

To Adjust the Machine

If in shipping, through any carelessness of the railway, the brake should have got out of order and requires adjusting, see that the **Tension Rod Pillars** are in their places, then tighten tension or stay rods, these are the rods on top and back of top leaf, and bottom and back of front leaf, this can be done by screwing up the nut at each end of rod; the rod should be so tight that the top and bottom leaves will touch in the centre when they are about $\frac{1}{8}$ in. open near the ends. It is necessary to adjust each leaf separately. The **Tension Bars** will not require adjusting except in some extraordinary case, as they are not liable to get out of order in shipping, and the proper tension is put on them before leaving the factory.

Write for Discounts

Brakes—*Continued*

For the benefit of those who are not accustomed to the working of a cornice brake we give the following general instructions, these will be suggestive to an endless number of shapes and forms and uses a brake can be put to.

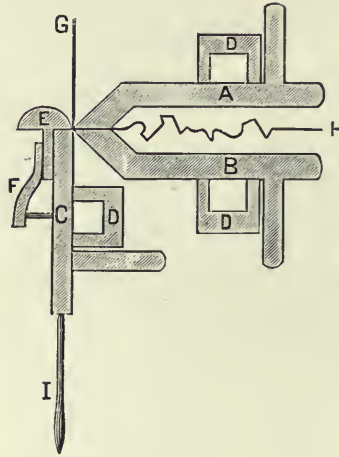


Fig. 0

In figure 0—A B C illustrates the centre section of the top, bottom and front leaves of the brake.

A the top leaf. B the bottom leaf. C the front or bending leaf. D the tension bars. E a form over the iron is bent when making curved mouldings, and can be quickly removed when not required. F is a clamp to hold form in place. G is the material being formed, on the end of which are several formed members of a moulding, between the top and bottom leaves A and B showing recess H, in which formed members can be inserted, while continuing the work of forming other members on G without fear of mutilation. I the handle of front leaf.

Operation of Brake

The fundamental principle in forming any design, is the same. The sheet is first marked at both ends from a templet, with a prick punch, where it is intended to bend or form it. Raise top leaf A by pushing lever at either end of machine from you or by pressing on the elbow foot lever in front, insert the sheet and push through so that the first prick marks are in line with front edge of top leaf, then draw the handle to you or press on any part of the treadle and the top leaf clamps the sheet; next raise the front leaf C by handle I to the desired angle.

Write for Discounts

Brakes—*Continued*

Making O. G. Eavetrough

With Square Bead

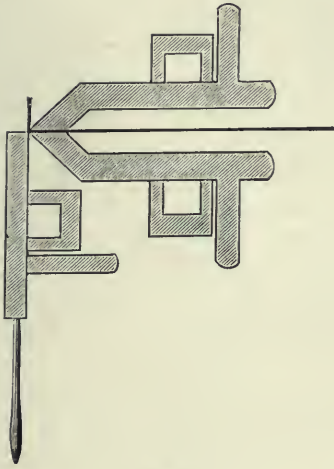


Fig. 1

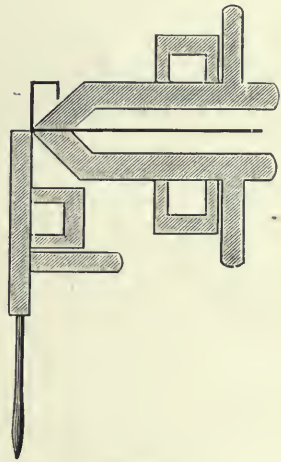


Fig. 2

Figure 1 shows the first bend in making O. G. Eavetrough with square bead, and the front leaf at rest again.

Second operation:—Release sheet and bring forward to next prick punch mark and make second bend as in Fig. 2.

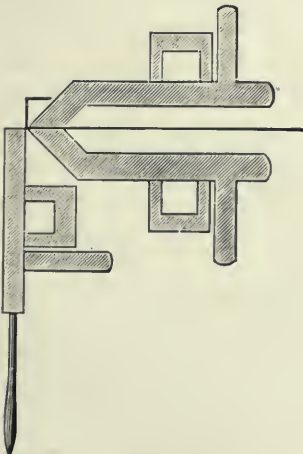


Fig. 3

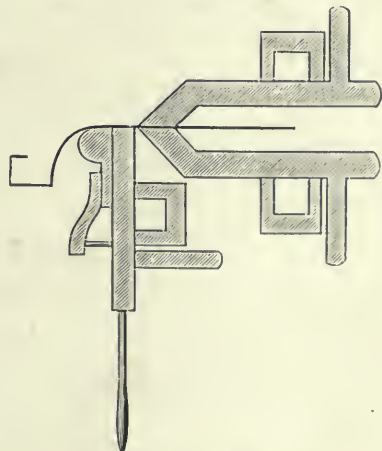


Fig. 4

Brakes—Continued

Making O. G. Eavetrough

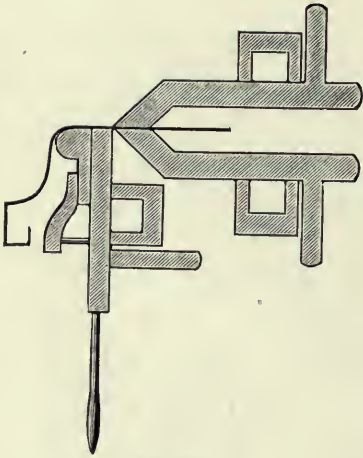


Fig. 5

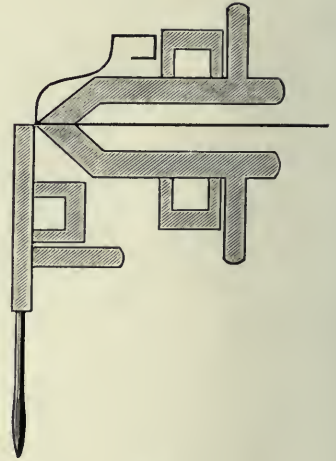


Fig. 6

Third operation:—Repeat operation 2 and make bend as in Figure 3. Fourth operation:—See Figure 4. Clamp on wood form (which is done very quickly by inserting clamp F in Figure 0 and giving it a light tap with a mallet) then bend sheet over form with hands, or by the use of a hardwood straight edge (we recommend the latter as it makes neater trough). Fifth operation:—Reverse sheet and make second curve as in Figure 5. Sixth operation:—Reverse sheet and make last bend as in Figure 6. It is not necessary to remove the wood form during any of the operations in making O. G. Eavetrough with square bead.

Beading Attachment

Our Beading Attachment (see section cut on Fig. 7 on page 139) for forming round beads is very simple and can be put on or taken off in two minutes. With this attachment half round eavetroughing 8 ft. long with a bead on can be formed in one operation without reversing the sheet; we supply these with $\frac{5}{8}$ or $\frac{3}{4}$ steel rods as desired. $\frac{5}{8}$ rods always sent unless otherwise ordered. The brake is complete without this attachment but its usefulness and convenience is so apparent that it requires no recommendation from the manufacturers.

Write for Discounts

Brakes—*Continued*

Section Cut of Brake with Beading Attachment

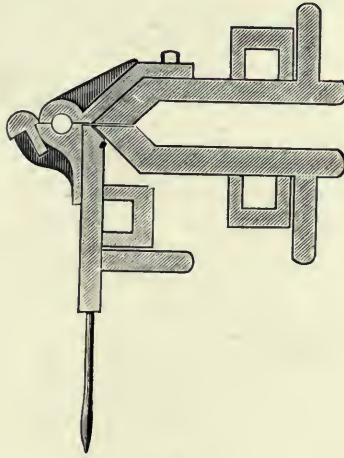


Fig. 7

Fig. 7 illustrates an end section of the Brake showing Beading Attachment. The top part of the attachment shows one of 5 malleable iron fingers, screwed firmly to the top leaf, so that when the leaf is raised the work can be taken out in an instant. The bottom part of attachment is held on by clamps F as in Fig. 0 and can be readily removed when not in use, the wood form is simply dropped into a slot and requires no fastening whatever. It is obvious how quickly round eavetroughing with a bead can be made with this attachment.

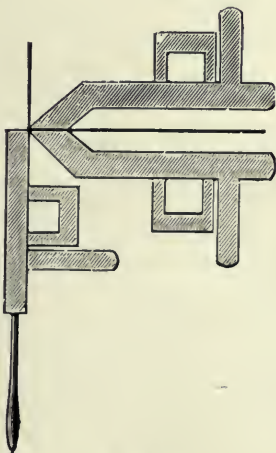


Fig. 8

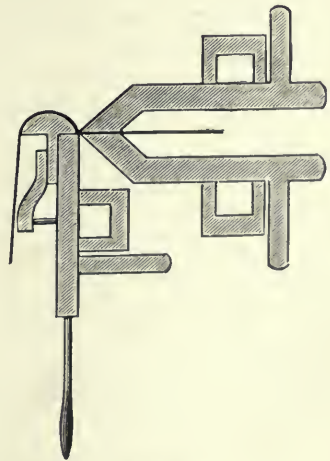


Fig. 9

Brakes—Continued

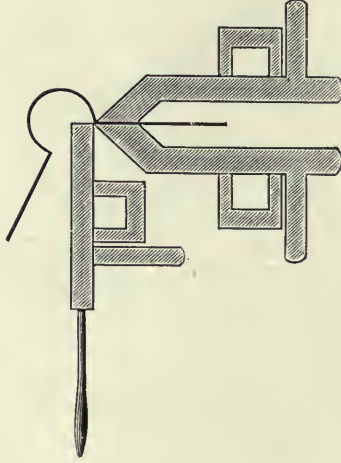


Fig. 10

Figs. 8, 9, 10 show the three operations in making ridge roll.

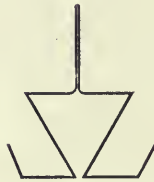


Fig. 11

Fig. 11 illustrates a difficult portion of sky light bar which can be formed on our brake.



Fig. 12

Fig. 12 illustrates $\frac{1}{4}$ in. V crimp. In forming this or any other size crimp, set the stop on the quadrant at the desired place, so that the balance weight bar will be arrested each time, and prevent the front leaf from being raised higher. Reverse the sheet each time and always bring the balance weight bar to the stop, this will insure even crimps. In each operation the point of the last bend should be $\frac{1}{4}$ in. (or the size required) from the edge of top leaf.

Write for Discounts

Brakes—Continued

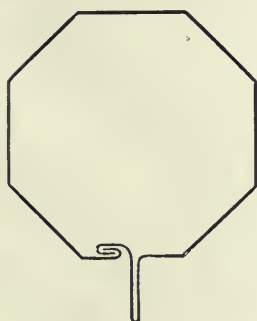


Fig. 13

Expansion Conductor



Fig. 14



Fig. 15



Fig. 16

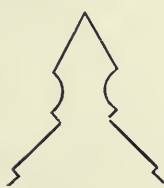


Fig. 17



Fig. 18

Figs. 14, 15, 16, 17 and 18 are illustrations of various designs of ridge or combing caps.



Fig. 19



Fig. 20



Fig. 21



Fig. 22



Fig. 23



Fig. 24

Write for Discounts

Brakes—*Continued*



Fig. 25



Fig. 26



Fig. 27

Figs. 19 to 27 inclusive are fair representations of work which can be formed on our Brake in combination with the Beading Attachment.

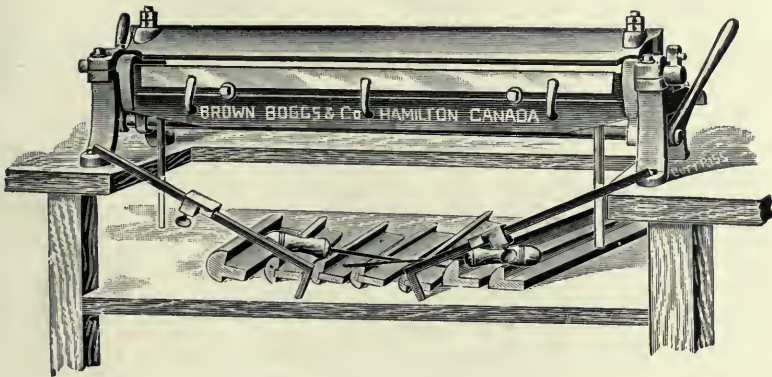
Splitting Sheets

First screw on gauges and set stops at the required distance from the edge of top leaf; then raise top leaf, insert sheet, bringing edge of sheet to the stops on gauges, clamp leaves together; now take one of the two heavy scratch awls (which are always sent with each Brake) and bear heavily along the entire length of the sheet, keeping close to the edge of top leaf to insure a straight edge; next raise the front leaf as high as possible, and after allowing front leaf to return to rest, bring sheet down quickly and it will snap off.

It will not pay you to be without one of these machines, the difference in freight between eavetrough alone and sheet iron will soon pay for it.

Write for Discounts

Brakes—Continued



36 inch Brake

We make this style of Brake in three sizes, 30 in., 36 in., and 48 in.

The 30 in. is specially adapted for heavy work, it will bend 16 gauge iron and lighter.

The 36 in. and 48 in. are more suitable for lighter work, such as making square pipe, eavetrough, short sections of cornice and mitres, and will bend iron not exceeding 20 gauge in thickness.

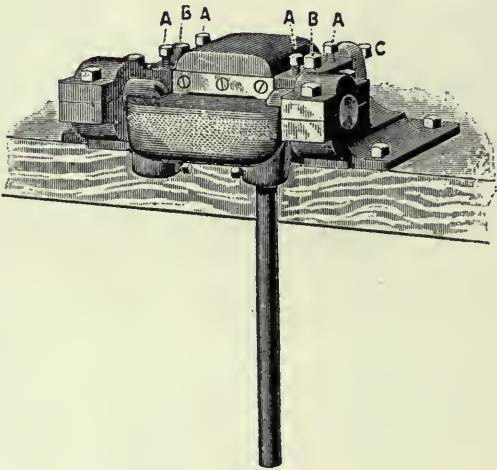
For a jobbing shop they will be found almost indispensable.

When desired we supply two treadles, one for opening and one for closing the top leaf. This will be found very convenient as it allows the operator the use of both hands for manipulating the work.

No.	Price	Price			Code Less Treadle Attachment	Code With Treadle Attachment	D. & W. No.
		£	s.	d.			
★ 0 30 in. Brake.....	\$77 00	15	17	0	Avast	Burnish	467
Weight about 450 lbs.							
★ 1 36 in. Brake	54 00	11	2	0	Avatar	Burst	468
Weight about 225 lbs.							
★ 1½ 48 in. Brake	86 00	17	14	0	Avaunt	Bury	469
Weight about 450 lbs.							
★ Extra for treadle attachment.	19 20	3	19	0			

Write for Discounts

Cleat, Brace and Corner Iron Bender



No 1

It is capable of bending 4 x 1/8 inch, or its equivalent in heavier iron.

Price	Price	Code	D. & W. No.
	£ s. d.		
★\$21 30	4 8 0	Avenge	470

Write for Discounts

No. 15—8 Ft. Gutter Beading Machine



Manufacturers of eavetrough desiring a round bead will find this machine of immense advantage. While the piece which has been previously beaded is being formed up in the brake by other operators, the work of beading other sheets is not interfered with, or in case the brake should be required for other work there is no inconvenience caused thereby.

With this machine and without the aid of the brake, half round trough can be formed same as with beading attachment described on page 139.

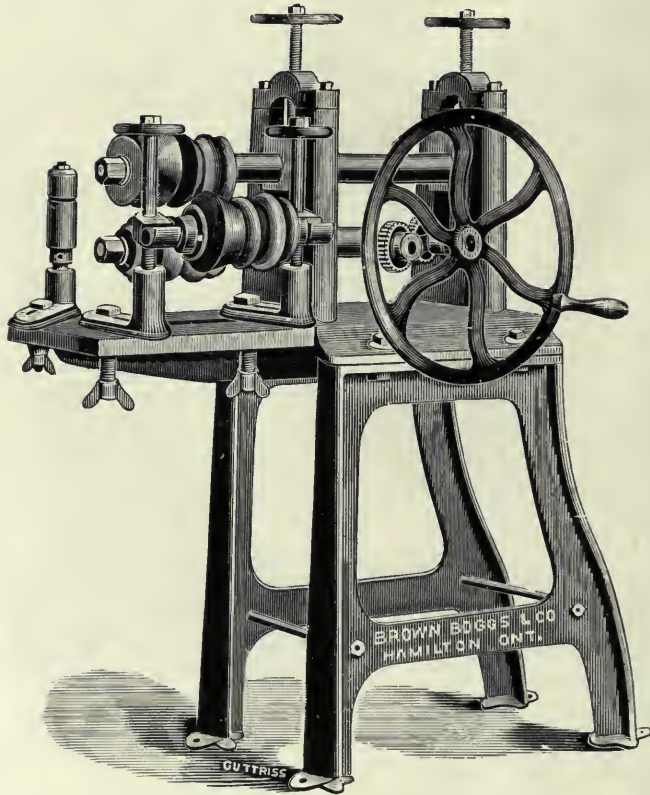
As shown in cut there is a handle bar running the full length of the machine which operates the eccentric handles for opening and closing the machine to allow the work to be removed without drawing it out endwise.

With this machine three wood forms for 10 in., 12 in. and 14 in. trough are sent unless otherwise specified.

No.		Price			Price			Code	D. & W. No.		
		With Forms			Less Forms						
		£	s.	d.	£	s.	d.				
★ 15	8 ft. Gutter Beading Machine.....	\$61 00	12	11	0	\$50 40	10	7	0	Aver	471
★ 16	10 ft. Gutter Beading Machine	68 60	14	2	0	56 00	11	10	0	Average	472

Write for Discounts

Cornice Beader



No. 40

We desire to call special attention to this excellent machine for beading arches, oval and circular cornice.

The practical cornice maker can see at a glance the usefulness of this tool.

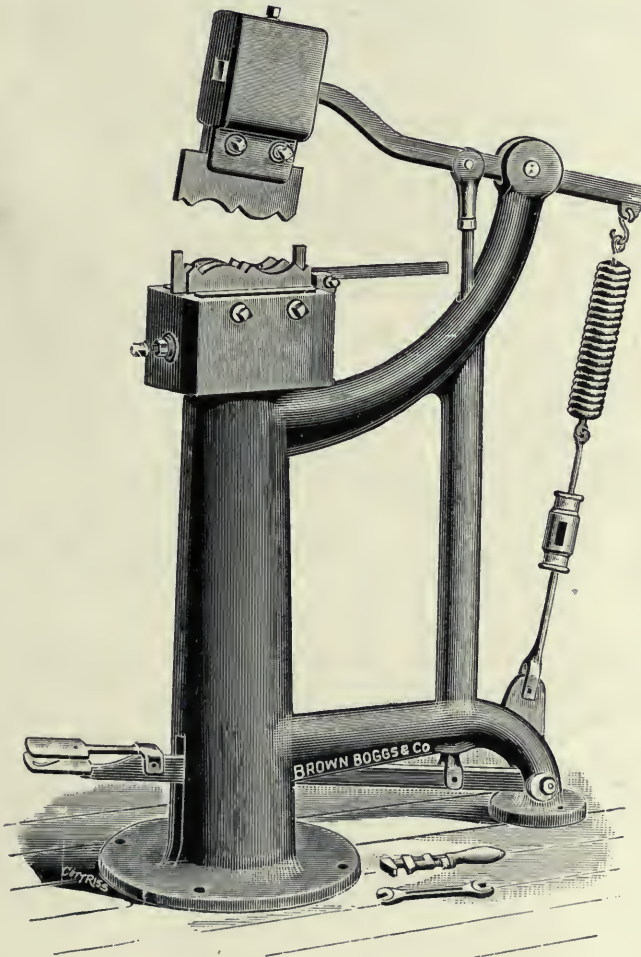
Impressions of any form or design made to order.

No.		Price	Price		Code	D. & W. No.
			£	s. d.		
★ 40	Complete with 3 sets Beads	\$187 00	38	9 0	Averse	473
★	Extra set beads, 4 to set (2 iron and 2 hardwood)	22 00	4	11 0	Aversion	474

Write for Discounts

Foot Power Curved Moulding Machine

(See Catalogue B for Power Machine)



No. 14

The above cut represents our foot power machine. They are specially adapted for rapid formation of curved mouldings in sheet metal. To insure strength and solidity we make the body all in one casting.

See description and price page 148-149.

Write for Discounts

Foot Power Curved Moulding Machine—*Continued*

On account of the architectural designs changing so often these machines are a favorite, as with a trifling cost any design can be produced which may be called for from time to time. (See instructions page 149 for making dies.)

How to Set and Operate Machine

There are four dies required. Place one of these in the hammer and three in the chuck on the anvil. The centre one in chuck must be in line with the one in the hammer, and those on either side of same on the angle required to form the segment of the circle. These can be adjusted by the set screws on the sides and front of the chuck.

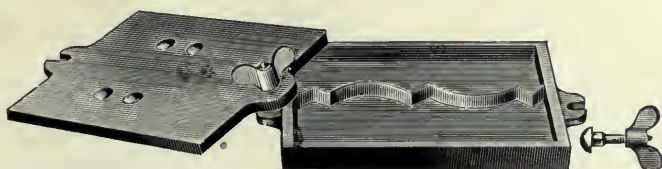
In forming circular pieces for archways, windows, doors, and similar work, the die should be set fan shaped, and for round work the two outside dies are raised above the centre one and tipped so as to form the required circle.

The sheet is first cut the right size and shaped for the moulding desired. It is then placed up to and guided along gauges previously set. With a downward pressure of the foot on treadle it will cause the hammer to strike a downward blow, which should be slow and light for the first passage of the sheet over the dies in order to make a slight indentation, which will serve as a guide and enable the operator to hold the sheet in place, when the blows of the hammer can then be increased.

The tension of the spring can be increased or diminished as desired by operating the turn buckle shown in cut. To obviate the constant jar on the foot of the operator we provide a leaf spring fastened between the two treadles as shown in cut. This not only takes away the jar but gives elasticity to the stroke.

Write for Discounts

Foot Power Curved Moulding Machine—*Continued*



How to Make Moulds or Dies

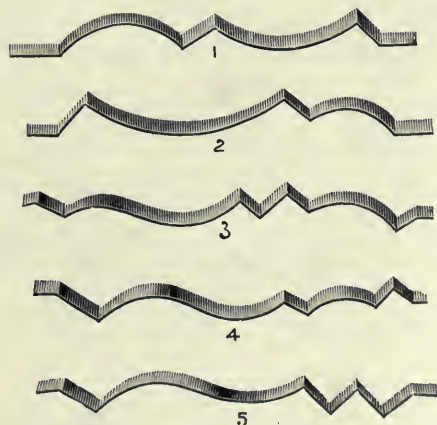
With each machine an iron moulding box is sent. The mode of procedure is as follows: Cut up a strip of black iron the depth of the iron box and long enough to allow forming into whatever shape of mould is desired, after forming same insert in centre of mould box, fitting the two ends in slots in ends of box cut for that purpose. Next clamp cover on tight. The mould is then ready to receive the composite metal, which may be made as follows:

Composite Metal

Nine parts tin, one part lead, one part antimony, or all zinc will do if there is not much use for the dies. Should any of the moulds become obsolete or useless they can be melted and recast again.

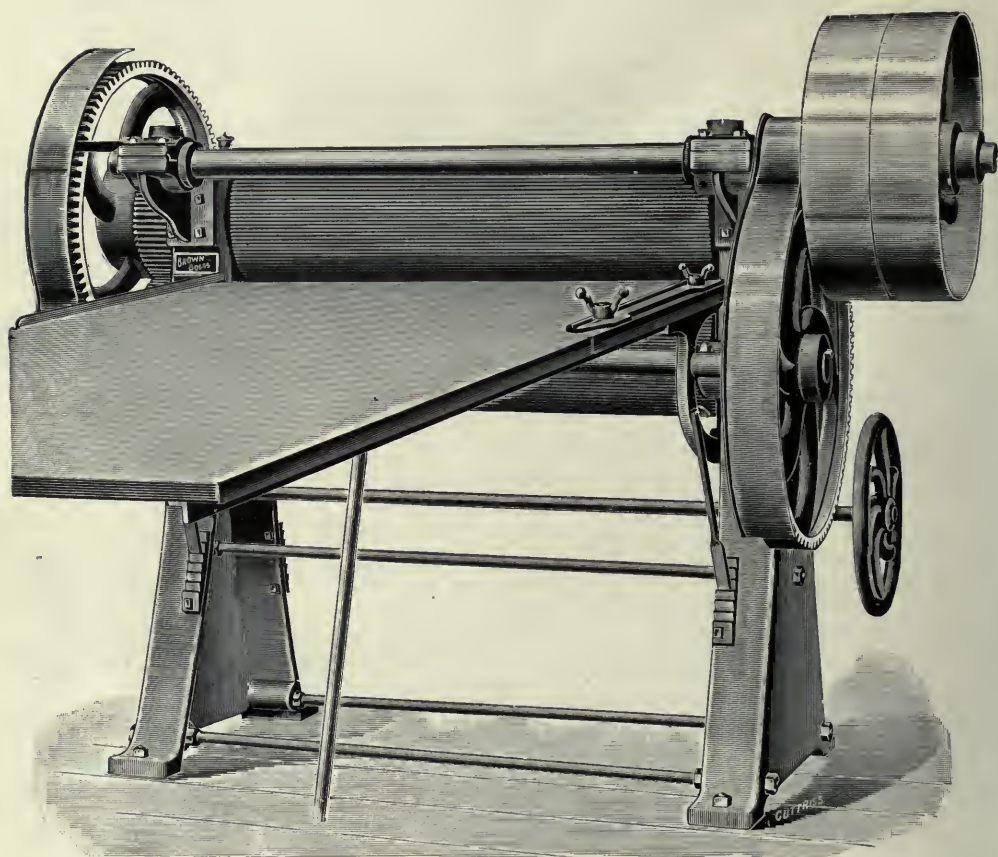
With each machine we send five sets of cast iron dies as per cuts below, 1 to 5 inclusive.

	Price	Price	Code	D. & W. No.
		£ s. d.		
★ Price	\$160 00	32 18 0	Avert	475



Write for Discounts

Corrugating Machines



No. 37

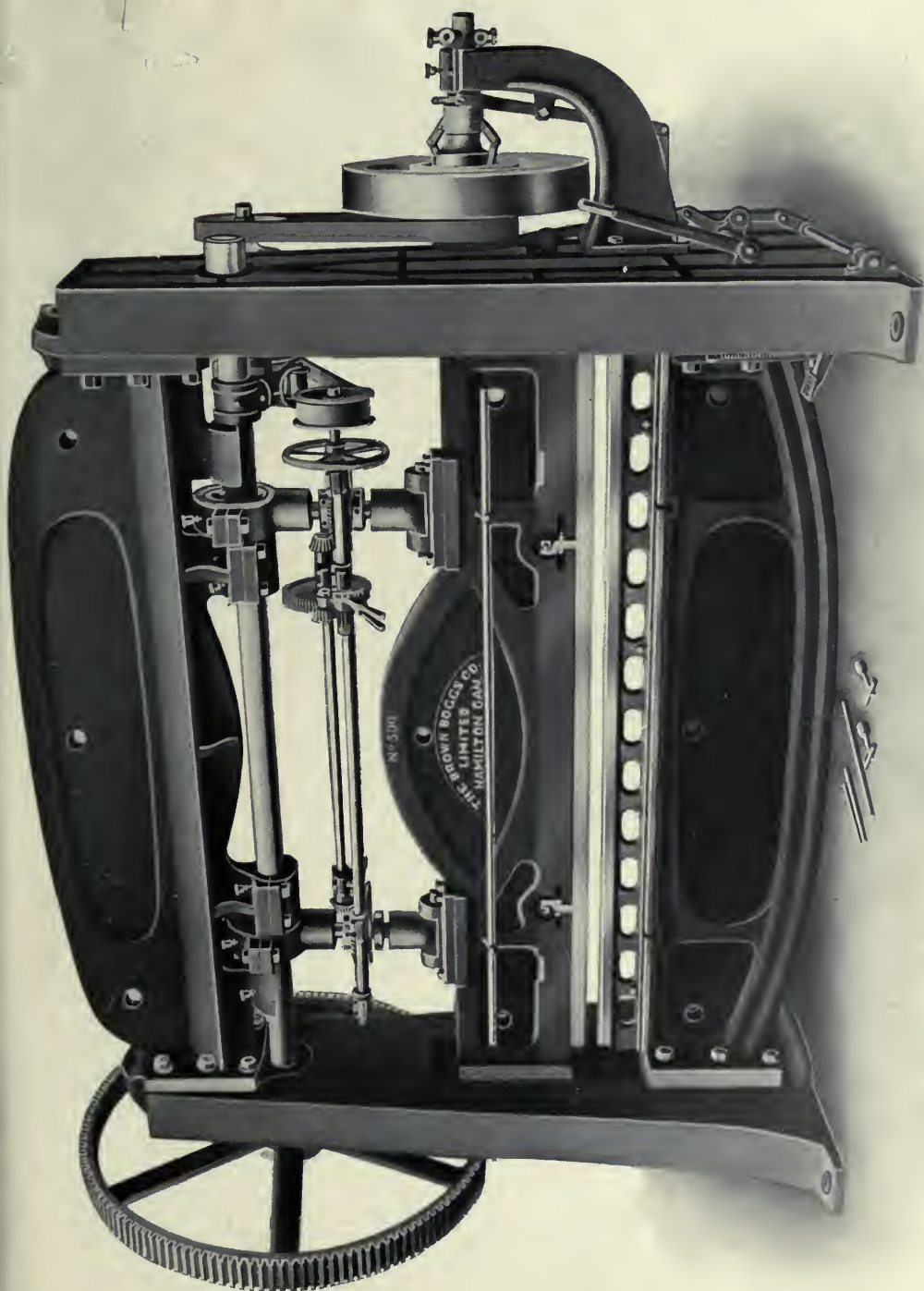
This illustration represents our No. 37 Corrugating Machine. It will take buckles out of sheet metal and is specially adapted for cornice work, as it produces a nice flat sheet, resembling chiseled stone. It also has the effect of greatly stiffening the stock.

The rolls are of steel, and corrugations cut therein of any size desired. It is heavily back geared and can be run by either hand or power. We make various sizes to suit the trade, beside those listed below. The rollers are so arranged that they can be opened and closed perfectly parallel with each other by means of a hand wheel shown at right hand end of machine.

No.	For Hand and Power	Price	Price	Code	D. & W. No.
			£ s. d.		
★ 31,	Steel Rolls, 31 in. x 8 in....	\$550 00	113 0 0	Abstinent	27
★ 37,	Steel Rolls, 37 in. x 10 in....	650 00	133 12 0	Caryates	28

Prices for other sizes on application.

No. 500 10 Ft. Power Brake or Press



See description pages 152 and 153.



No. 500—10 ft. Power Brake or Press

(See Cut page 151)

It is with considerable pride that we call the attention of sheet metal workers to our No. 500 10 ft. Brake or Press, illustrated on the preceeding page; for in this machine we have embodied all the most modern and up to the minute features in the manufacture of formed sheet metal.

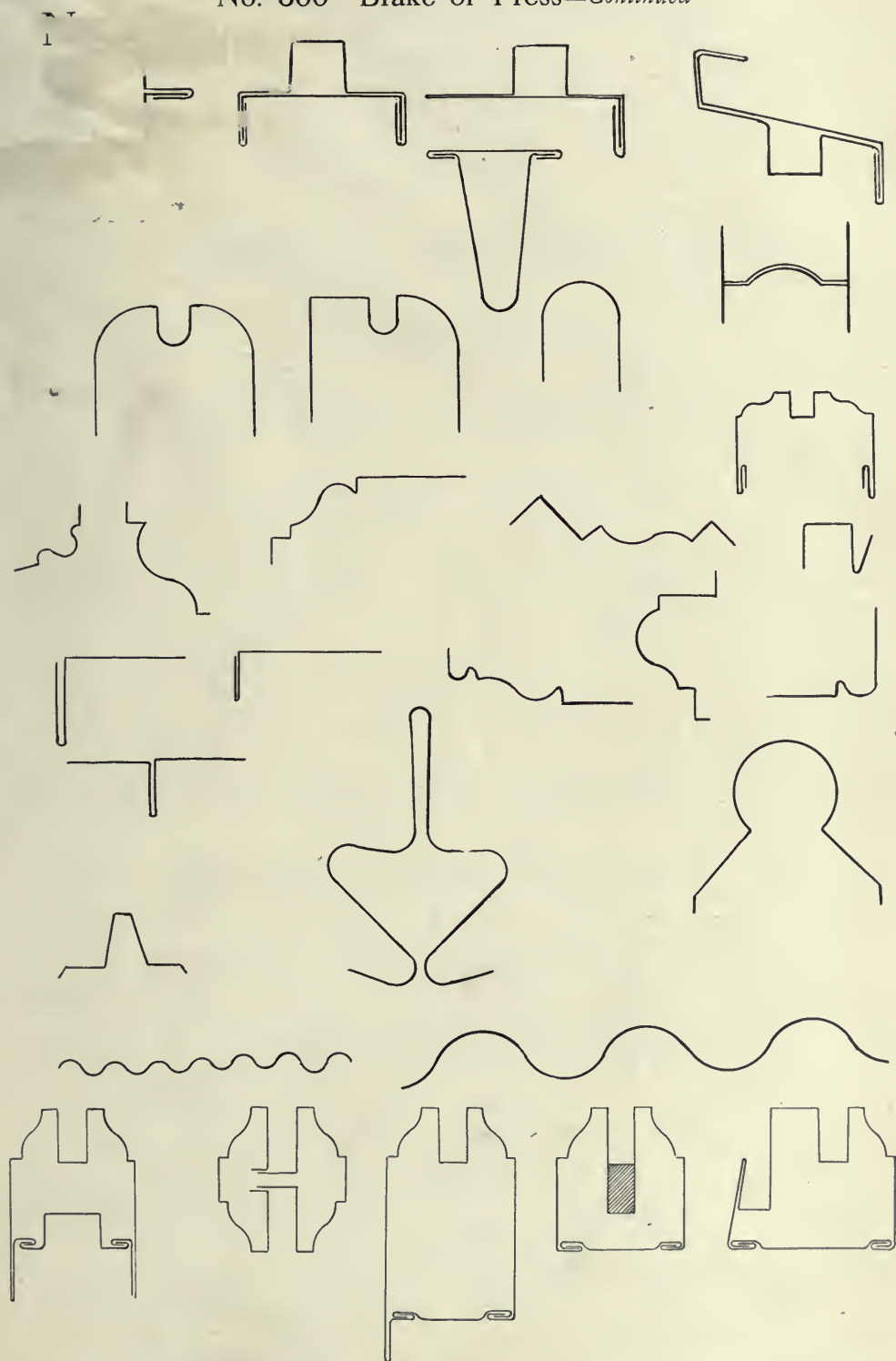
With this machine equipped with the proper dies it is possible to get out almost an unlimited line of cornices, skylights, window and door frames, fancy mouldings of many shapes, corrugated iron, etc., etc.

This machine has many features that make it rapid and convenient to work, among which are: first, the ease and rapidity with which the dies can be set in and removed; second, the complete control which the operator has over the slide, for by turning the hand wheel he is able to adjust same to a nicety almost instantly, or if he wishes to move it any great distance up or down, by pressing the lever at the front the slide is automatically raised or lowered to the required distance; third, the slide can be stopped instantly at any part of the stroke. The importance of this cannot be over estimated, when working long heavy sheets when the least slip of the material might destroy the whole sheet if it were not possible to stop slide in this way.

The machine is equipped with all cut gear, thus assuring smooth operation. The workmanship and finish are the best that can be obtained, supplemented by our wide experience in the manufacture of sheet metal working tools. Proper provision is made for the perfect lubrication of all the working parts.

We show on the opposite page several cuts of work that we have supplied machines and dies for doing, and while these do not begin to cover the assortment, they will convey some idea of the unlimited possibilities of this machine.

No. 500—Brake or Press—*Continued*



A few of the sky-light bars, ridge rolls, cornices and window bars that can be made with this machine.

Note

*Heavy Sheet Metal Working Tools
and Machines*

*Presses, Canners' Can Making and
Processing Machinery
Are Illustrated in Catalogue B.*

*Evaporating Machinery and a
Full and Complete Line of
Canners' Processing Machinery for
Packing all Kinds of
Domestic Fruits and Vegetables
Are Illustrated in our Section "C" Catalogue*

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