Hand Saws

KINDLY NOTE:-

Our works are equipped with the latest machinery for manufacturing High Quality Hand Saws, the tempering being obtained by a scientific process which ensures perfectly accurate and regular results. We give a full warranty on all Saws marked with our " Elephant " Trade Mark.
We should be glad if customers would take careful note of the sketch at foot of each page of Hand Saws showing method of measuring teeth. Many mistakes are made through confusing number of teeth and number of points to one inch. Our Rip Saws are made with graduated teeth, commencing with 3½, 4 and 4½ points to one inch ; while Hand Saws range from 9 points for fine cutting, 6 and 7 points for cross cutting, to 5½ and 6 points to one inch for general work. Fleam teeth are suitable for wet and green wood. American teeth, lightning pattern, for rough wood and colliery work. All our Saw Handles are made from selected English Beech. Wherever possible we advocate the use of the setting stake and hammer for setting the teeth. Should a patent set be used care should be taken to set the top of the teeth only, owing to the danger of cracking highly-tempered steel. Our Hand Saws are as hard as possible, so that the maximum amount of work maybe obtained without constant sharpening.

Hand Saw Manufacture It may be of interest to many users to understand some of the processes necessary to produce a good Hand Saw and also to receive a few hints on the best way of preparing one for work and keeping it in the most serviceable condition. There is no doubt that the first and most important consideration is the selecting of the raw material, which should be a good crucible steel for preference, and one that will admit of the necessary hardening and tempering in due course.
After the steel is melted in ingot form it is rolled into sheets of requisite thickness, and pared into shape, ready for cutting the teeth, which is usually done by automatic machinery. After this the Saw Plate is ready for the important process of hardening and tempering. The hardening is effected by heating to a red heat, and plunging into oil, with the result that the plate becomes as hard and brittle as glass-in other words it is carried from one extreme to another. This brittleness is, of course, quite useless for practical purposes and must be reduced by the application of further heat. By this means, and by the most careful judgement, we can arrive at the exact toughness or temper to secure a keen cutting edge, together with perfect flexibility. Leaving the hardening process, the plate is now ready to be flattened by the Saw Maker or Saw Smith-and here again we have a highly technical process. It is not merely sufficient to flatten, but it is necessary to adjust the tension, so that when in use and subject to expansion on the edge it will not warp or buckle. Another object in flattening is to prepare for grinding and polishing. In the old days grinding was done by hand on power-driven circular stones, but to a large extent this has been superseded by machinery. The chief object of grinding is to gradually taper the thickness from teeth to back, so that the saw may be used with little set on the teeth, and thereby cut cleaner and with less waste of wood. After grinding, the blade is passed through a polishing machine to get a high finish on the surface, and then the saw maker takes it again and finally adjusts it quite flat and true. At this point, owing to these various processes having taken out some of the flexibility, it is usual to re-heat the blade to an exact degree in a special furnace to restore the temper. We now have a polished blade of perfect temper and finish, but not yet ready for use. Nothing has been done to give the cutting qualities to the teeth. Here again, though the work is more mechanical and requires less skill and judgment than hammering and tempering, it is of the greatest importance. Previous to sharpening, the teeth are "set", that is, every other tooth bent over in one direction and the remainder in the opposite direction, to give clearance when passing through the wood. There are two usual methods of setting, one by holding the teeth

over a small anvil with a rounded edge, and giving them a slight stroke with a hammer, and another by fixing the blade rigid in a vice and bending the teeth with a saw-set. Sometimes patent sets of various designs are used, but these require care, as we shall explain shortly.

When the setting has been done evenly, the teeth are sharpened with a file on the cross, so that each point represents the corner of a bevelled triangle. Correct setting and sharpening are of vital importance in securing smooth and easy cutting, and many saws are condemned owing to irregularity and carelessness in this respect. . We have not yet, however, arrived at a complete saw, and the next stage is to provide a handle. The making of saw handles is quite a trade in itself and needs an apprenticeship to become an expert. While handles are made from a variety of woods, English beech is most commonly used and is generally accepted as being most satisfactory. It admits of a clean, smooth finish and is very durable. It is cut from the tree in planks one inch thick, marked with the design, and sawn into shape with a band-sawing machine. It is then moulded on the edges, slit down the centre to admit the blade, bored for brass screws, and finally French polished. When the handle is attached to the blade we have the complete saw-perfectly flexible-brightly polished-ground thin to back for clearance-well set and sharpened-both ornamental and a useful addition to every carpenter's outfit, having taken in all twenty processes to produce. In continuing the subject it will be well to point out very clearly the way in which saws suffer at the hands of some users, often in ignorance of the correct methods of keeping in order, but more often through carelessness. Many saws are condemned and returned to the makers for these reasons, though actually as good and as serviceable as it is possible to make them. The chief cause for return is that the teeth break out in setting and are apparently too hard, but surely if the teeth can be set in the factory there is no reason why the user cannot do the same, provided he adopts similar methods; and it is quite certain that the more highly tempered a saw is the longer it will last, and the more valuable it is as a wage-earning tool. A saw that will set and file easily is soft, and is soon dull and loses its cutting edge, and therefore it is much the better plan to buy the hard-tempered saw and treat the teeth properly. As already explained, in the grinding process the blade is thinned to the back to avoid the necessity of putting too much set on the teeth, which is a very common mistake: In using patent sets many carpenters get below the root of the teeth into the body of the blade and in this way pull the blade out of shape, and in the case of a highly tempered saw run great risk of fracture. The best plan is to get over a small anvil with rounded edge, using a suitable hammer, bending only the points of the teeth, and afterwards sharpening so that each tooth is kept in correct shape- By this means a hard-tempered saw can be maintained in a high state of efficiency and much better results gained both in improved sawing and time saved. Another reason why saws are returned is that they break across the blade near the point, and this again is often through carelessness in use. If a carpenter does not keep the blade straight, and is not careful when taking a cut from the extreme point, he is in danger of jamming the blade; in which case, if the saw is of high temper, the sharp strain at the weakest point in the blade is very liable to cause fracture. Scores of first-class saws are broken in this way. Under such conditions a soft saw bends while a good blade will break. From a long experience of the trade these are the essential points which require attention, and if a little care is exercised, as suggested, the improved results will amply repay for the extra trouble, to say nothing of the daily saving in both time and temper.

The "Centenary" Hand Saw

BY way of celebrating our hundredth year in the manufacture of Saws, and also producing the very best Hand Saw which can be made, regardless of price, we have pleasure in introducing the above brand to our customers.

The blade is made of the finest steel for the purpose that can be produced, and will be found wonderfully flexible and also exceedingly tough, lasting twice the length of time after sharpening of the usual first-class Hand Saw.

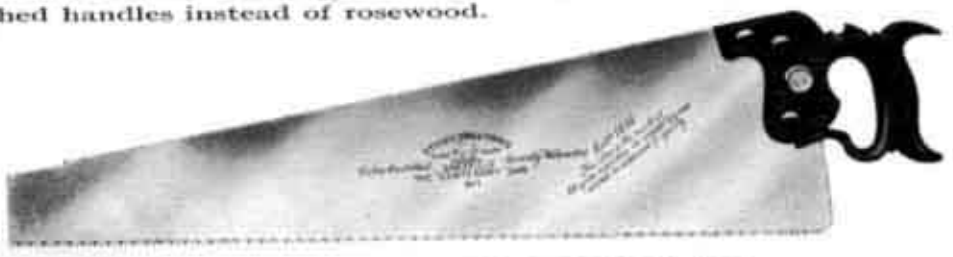
The tempering of these blades is effected by the very latest scientific process, and will not be found to vary in the slightest degree.

Every item of manufacture receives special attention, and is carefully superintended.

The handles are of the best quality solid Rosewood, fitted with polished Nickel Screws, while the whole finish of the Saw is of the highest class.

Not only in appearance, but in wear and cutting capacity, this "Centenary" Hand Saw will be found perfect, and we have every confidence in bringing it before our customers, especially those who are cultivating a high-class tool trade.

We make the Saw both in the straight and hollow back pattern and, if required, with beech full polished handles instead of rosewood.



No. A1.—The "CENTENARY" HAND SAW.

Straight back, with solid rosewood handles, and polished nickel screws.

18	20	22	24	26	28	inches long.
88/-	**96/-**	**104/-**	**116/-**	**120/-**	**132/-**	per dozen.

No. A2.—The "CENTENARY" HAND SAW.

Hollow back, with solid rosewood handles, and polished nickel screws.

18	20	22	24	26	28	inches long.
94/-	**102/-**	**110/-**	**122/-**	**126/-**	**138/-**	per dozen.

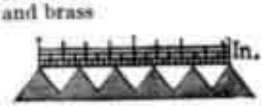
No. A3.—The "CENTENARY" HAND SAW.

Straight back, with solid rosewood handles, and polished nickel screws.

18	20	22	24	26	28	inches long.
88/-	**96/-**	**104/-**	**116/-**	**120/-**	**132/-**	per dozen.

Both above patterns, if with full polished **English Beech** handles and brass screws, **12/-** per doz. less on gross prices.

In giving Teeth of Hand Saws state points to 1 inch.



6 points or tops.

Best Quality Cast Steel Hand Saws

No. 1.—C.S. RIPPING SAW, "ELEPHANT" BRAND.

Tempered by the latest scientific process, specially finished.
English Beech Handle, edge polished, flat brass screws.

10	12	14	16	18	20	22	24	26	28	30	32	34	36	inches.
28/-	**34/-**	**42/-**	**48/-**	**54/-**	**58/-**	**64/-**	**72/-**	**74/-**	**80/-**	**86/-**	**97/-**	**100/-**	**110/-**	per dozen.

No. 2.—C.S. HAND SAW, "ELEPHANT" BRAND.

Exactly as No 1, but made for cross cutting and general work.
An all-round Carpenter's Hand Saw.

10	12	14	16	18	20	22	24	26	28	30	32	34	36	inches.
28/-	**34/-**	**42/-**	**48/-**	**54/-**	**58/-**	**64/-**	**72/-**	**74/-**	**80/-**	**86/-**	**97/-**	**100/-**	**110/-**	per dozen.

No. 3.—LONDON SPRING HAND SAW, "ELEPHANT" BRAND.

Specially selected for high-class cabinet work. English Beech Handles, full polished, with flat brass screws

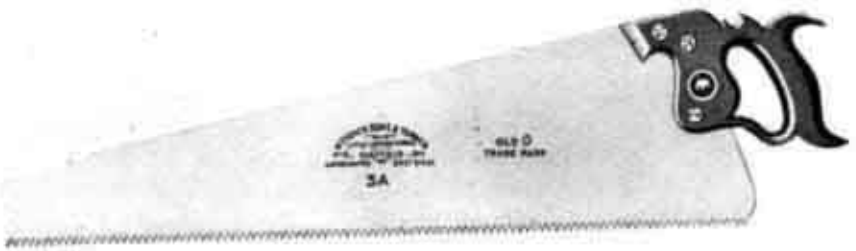
16	18	20	22	24	26	28	30	inches.
54/-	**62/-**	**66/-**	**74/-**	**84/-**	**90/-**	**96/-**	**108/-**	per dozen.

Mahogany or Rosewood Handles, **8/-** per doz. extra, gross. Ebony Handles, **20/-** per doz. extra, gross.
Saws with finer teeth than 12 points to an inch, **3/-** per doz. extra, gross.
Fleam Tooth Hand Saws, **6/-** per doz. extra, gross.

In giving Teeth of Hand Saws state points to 1 inch.

6 points or tops

Best Quality Cast Steel Hand Saws



No. 3A.—C.S. HAND SAW, "OLD O" MARK.

Fully warranted, best finish, perfectly tempered, English Beech Handles with flat brass screws.
A thoroughly good Saw.

16	18	20	22	24	26	28	inches.
41/-	**46/-**	**49/4**	**55/6**	**61/-**	**63/-**	**70/-**	per dozen.

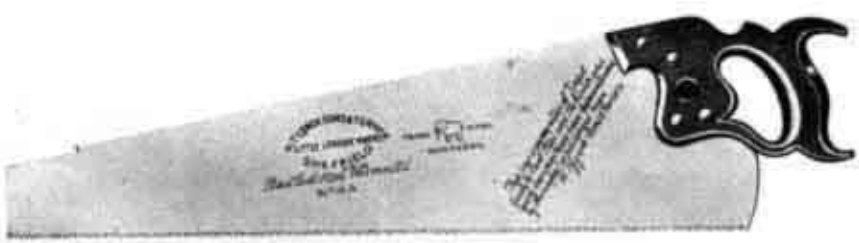
No. 4.—C.S. HOLLOW BACK HAND SAW, "ELEPHANT" BRAND.

Tempered by the latest process and possessing all the advantages of this pattern.
Full polished English Beech Handles with raised brass screws.

18	20	22	24	26	28	30	inches.
60/-	**64/-**	**70/-**	**78/-**	**80/-**	**86/-**	**92/-**	per dozen.

No. LS 4.—LONDON SPRING, WARRANTED, SILVER STEEL.

18	20	22	24	26	28	inches.
62/-	**66/-**	**72/-**	**86/-**	**90/-**	**98/-**	per dozen.



No. 4A.—TYZACKS' SPECIAL THIN-TO-BACK HAND SAW, "ELEPHANT" BRAND.

Exactly as No. 4 but with straight back. Full polished handle with raised brass screws.
An ideal Carpenter's Hand Saw.

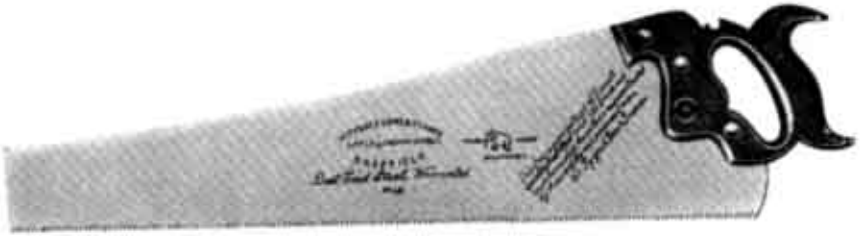
18	20	22	24	26	28	30	inches.
60/-	**64/-**	**70/-**	**78/-**	**80/-**	**86/-**	**92/-**	per dozen.

Mahogany or Rosewood Handles, **8/-** per doz. extra, gross. Ebony Handles, **20/-** per doz. extra, gross.
Saws with finer teeth than 12 points to an inch, **3/-** per doz. extra, gross.
Fleam Tooth Hand Saws, **6/-** per doz. extra, gross.

In giving Teeth of Hand Saws state points to 1 inch.

6 points or tops

Best Quality Cast Steel Hand Saws



No. 4B.—CAST STEEL HAND SAW, "ELEPHANT" BRAND.
EVERY BLADE GUARANTEED.

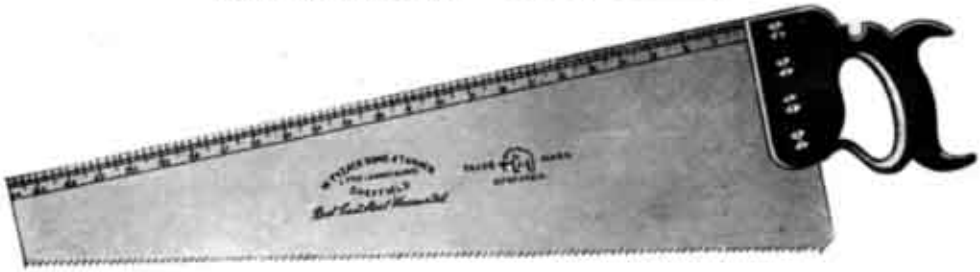
Solid Rosewood Handle, raised brass screws.

18	20	22	24	26	28	30	inches.
62/-	**66/-**	**74/-**	**84/-**	**90/-**	**96/-**	**108/-**	per dozen.

No. 4C.—CAST STEEL HAND SAW, exactly as No. 4B, but with English Beech Handle.
Raised brass screws.

18	20	22	24	26	28	30	inches.
60/-	**64/-**	**70/-**	**78/-**	**80/-**	**86/-**	**92/-**	per dozen.

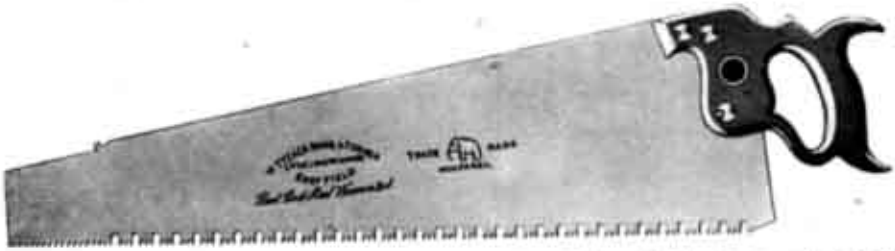
If with polished nickel-plated screws, **2/-** doz. extra gross.



No. 5.—C.S. RULE SAW, BRASS-MOUNTED, "ELEPHANT" BRAND.

Handle acts as a square with back of saw blade. Etched with English and French Measures.
English Beech Handle, flat brass screws.

22	24	26	28	30	inches.
88/-	**92/-**	**96/-**	**100/-**	**108/-**	per dozen.



No. 6.—C.S. HAND SAW, AMERICAN TOOTH. Specially suitable for rough wood.
"ELEPHANT" BRAND.

22	24	26	28	30	inches.
70/-	**78/-**	**80/-**	**86/-**	**92/-**	per dozen.

Mahogany or Rosewood Handles, **8/-** per doz. extra, gross. Ebony Handles, **20/-** per doz. extra, gross.
Saws with finer teeth than 12 points to an inch, **3/-** per doz. extra, gross.
Fleam Tooth Hand Saws, **6/-** per doz. extra, gross.

In giving Teeth of Hand Saws state points to 1 inch.

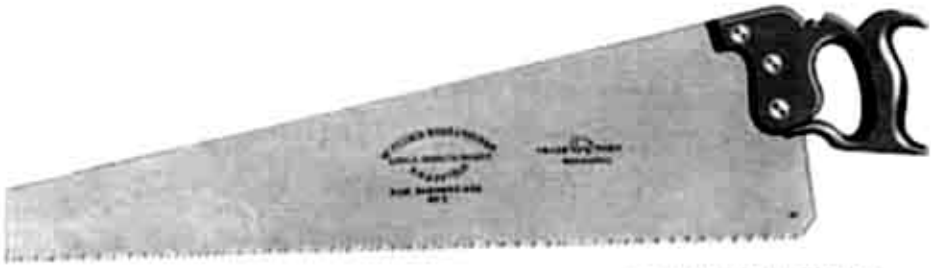
6 points or tops.

Best Quality Cast Steel Hand Saws

No. 7.—CAST STEEL HAND SAW, LONDON PATTERN, "ELEPHANT" BRAND.

Same quality as Nos. 1 and 2. Flat brass screws. Unpolished English Beech Handle.
Made specially for the London tool trade.

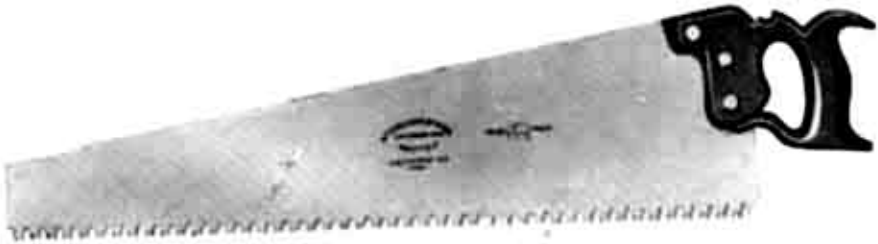
10	12	14	16	18	20	22	24	26	28	30	inches.
28/-	34/-	42/-	48/-	54/-	58/-	64/-	72/-	74/-	80/-	86/-	per dozen.



No. 8.—CAST STEEL FARMERS' HAND SAW, "ELEPHANT" BRAND.

18	20	22	24	26	28	inches.
44/-	48/-	52/-	56/-	60/-	66/-	per dozen.

A reliable saw for rough work. Extra strong blade. Unpolished English Beech Handle. Flat brass screws.



No. 8A.—CAST STEEL FARMERS' HAND SAW, AMERICAN TOOTH, "ELEPHANT" BRAND.

18	20	22	24	26	28	inches.
50/-	54/-	58/-	62/-	66/-	72/-	per dozen.

Same quality as No. 8, but with American lightning teeth.

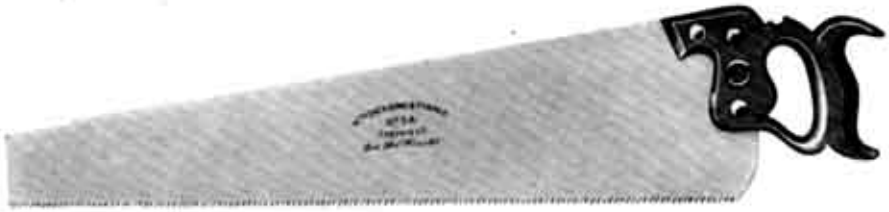
No. 8B.—FORESTERS' HAND SAWS, "ELEPHANT" BRAND.

24	26	inches.
56/-	60/-	per dozen.

In giving Teeth of Hand Saws state points to 1 inch.

6 points or tops.

Best Quality Cast Steel Hand Saws



9A.—CAST STEEL HAND SAW. Fully Warranted. English Beech Handle, edge polished.

Raised brass screws.

14	16	18	20	22	24	26	28	30	inches.
29/-	**31/-**	**33/-**	**36/-**	**40/-**	**46/-**	**48/-**	**54/-**	**62/-**	per dozen.

No. 9B.—Same as 9A, but with American Teeth	22	24	26	28	inches.
	48/-	**54/-**	**56/-**	**60/-**	per dozen.

No. 10.—" ABBEYDALE " HAND SAW.

English Beech Handles, edge polished, raised brass screws.

A good reliable Saw for household or farm use.

16	18	20	22	24	26	28	inches.
32/-	**34/-**	**36/-**	**38/-**	**41/-**	**43/-**	**48/-**	per dozen

Can be supplied with American teeth at **6/-** per doz. extra.

No. 10A.—HAND SAW. Beech Handle, edge polished. Raised brass screws.

A good cheap Saw, suitable for a garden, tool house or amateur work. Low-priced but not common.

12	14	16	18	20	22	24	26	28	inches.
20/-	**22/-**	**24/-**	**26/-**	**28/-**	**30/-**	**33/-**	**36/-**	**40/-**	per dozen.

In giving Teeth of Hand Saws state points to 1 inch.

6 points or tops

Hand Saws for Miners' Use

No. 8M.—" ELEPHANT " BRAND QUALITY.

	24	26	inches
English Beech Handle, edge polished, flat brass screws, strong blade ...	**56/-**	**60/-**	per dozen.

No. 9M.—CAST STEEL HAND SAW. Fully Warranted. English Beech Handle, edge polished.

	24	26	inches.
Same quality as No. 9A, but strong blade	**46/-**	**48/-**	per dozen.

No. 10M.—" ABBEYDALE " HAND SAW.

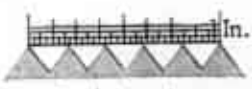
	24	26	inches.
Same quality as No. 10, strong blade			
English Beech Handle, edge polished, raised brass screws	**41/-**	**43/-**	per dozen.

No. 10AM.—HAND SAW. Beech Handle, edge polished. Raised brass screws.

	24	26	inches.
Same quality as No. 10A with strong blade	**33/-**	**36/-**	per dozen.

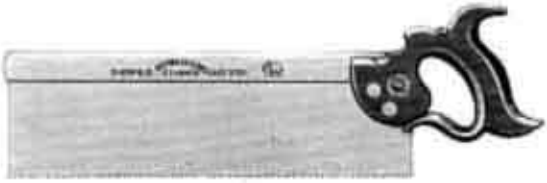
All Miners' Use Saws can be supplied with narrow points if required.

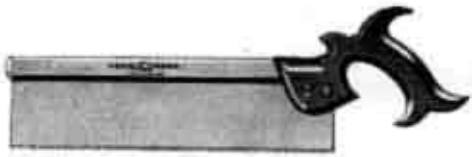
In giving Teeth of Hand Saws state points to 1 inch.



6 points or tops.

Best Quality Cast Steel Back Saws





No. 13.— C.S. IRON BACK SAW (Tenon).
No. 13B.—C.S. BRASS BACK SAW ,,

No. 13.— C.S. IRON BACK SAW (Dovetail)
No. 13B.—C.S. BRASS BACK SAW ,,

	10	12	14	16	18	20	22	24 inches.
No. A13, London Spring, Brass Back	84/-	96/-	108/-	120/-	132/-	144/-	160/-	180 - per doz.
No. B13, London Spring, Iron Back...	70/-	75/-	80/-	85/-	98/-	112/-	125/-	150/- ,,
No. 13B, Cast Steel, Brass Back ...	72/-	80/-	90/-	104/-	112/-	118/-	128/-	140/- ,,
No. 13, Cast Steel, Iron Back ...	56/-	60/-	64/-	72/-	76/-	78/-	84/-	90/- ,,

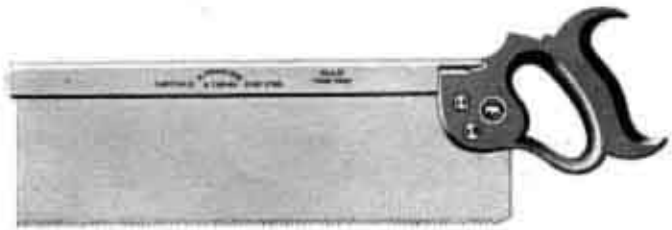
Mahogany or Rosewood Handles, **8**/- per doz. extra, gross. Ebony Handles, **20**/- per doz. extra, gross.

Our leading Carpenters' Back Saw, English Beech Handle, polished edges, flat brass screws.

If with polished flats and raised brass screws, **6**/- doz. extra, subject.

	10	12	14	16	inches.
Extra heavy Brass Backs	4/-	5/-	6/-	7/-	doz. extra, subject
,, ,, Iron ,, ...	2/-	2/6	3/-	3/6	,, ,,

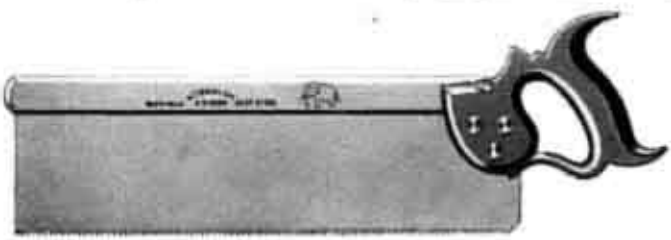
Back Saw Plates only, Set and Sharpened ... ... **2d.** per 1 inch of length ,,



No. 14A.—C.S. IRON BACK SAW, " OLD O " MARK.

	8, 9, 10	12	14	16	inches.
No. 14A, Iron ...	47/6	51/-	55/6	61/-	per dozen.
No. 14B, Brass ...	61/-	68/-	76/6	94/6	,,

A fully warranted Back Saw for general work. Polished edges, English Beech Handle, flat brass screws.



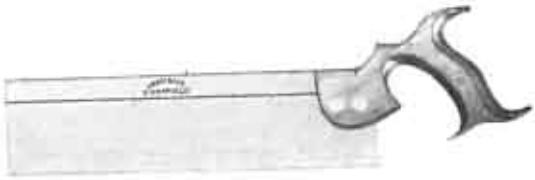
No. 15.—C.S. BACK SAW, LONDON PATTERN.

	10	12	14	16	18	20	22	24 inches.
No. A15, London Spring, Brass Back	84/-	96/-	108/-	120/-	132/-	144/-	160/-	180/- per doz.
No. B15, London Spring, Iron Back...	70/-	75/-	80/-	85/-	98/-	112/-	125/-	150/- ,,
No. 15B, Cast Steel, Brass Back ...	72/-	80/-	90/-	104/-	112/-	118/-	128/-	140/- ,,
No. 15, Cast Steel, Iron Back ...	56/-	60/-	64/-	72/-	76/-	78/-	84/-	90/- ,,

Exactly as No. 13, but with unpolished Beech Handle.

Best Quality Back and Bow Saws

No. 24.—"Kitchen Use" Back Saw.



No. 24A.—"Abbeydale" Back Saw.

	10	12	14	16	inches
No. 24, "Kitchen Use," Iron Back	**36/-**	**40/-**	**44/-**	**48/-**	per doz.
No. 24A, "Abbeydale," Iron Back	**22/-**	**24/-**	**26/6**	**30/-**	"

No. 16.—Butchers' Bow Saw, with Screw.

No. 17.—Butchers' Bow Saw.

	12	14	16	18	20	22	24	inches.
No. 16, With Screw, for Butchers' use	**6/8**	**7/-**	**7/4**	**7/8**	**8/-**	**8/4**	**9/-**	each
No. 17, Without Screw, for Butchers' use	**4/8**	**5/-**	**5/4**	**5/8**	**6/-**	**6/4**	**7/-**	"
No. 18, London Pattern	**4/8**	**5/-**	**5/4**	**5/8**	**6/-**	**6/4**	—	"

No. 18.—Butchers' Bow Saw, London Pattern.

No. 23.—Domestic Bow Saw.

	12	14	16	inches.
No. 23, Domestic Bow Saws	**2/10**	**3/2**	**3/8**	each
Blades only	**10/-**	**12/-**	**14/-**	doz.

Wing Nuts and Screws for Bow Saw Frames, **9/-** per doz., subject.

Best Quality Cast Steel Pruning Saws

No. 11.—C.S. Pruning Saw.

No. 12.—Double-edged Pruning Saw, American Pattern.

English Beech Handles, polished edges, flat brass screws.

	12	14	16	18	20	22	24	inches.
No. 11.	**34**/-	**36**/-	**38**/-	**40**/-	**42**/-	**46**/-	**50**/-	dozen.
No. 12.	**40**/-	**42**/-	**45**/-	**48**/6	**52**/-	**56**/-	**60**/-	,,

No. 12B. Zinc Salt Saws

14	16	18	inches.
18/-	**19**/-	**20**/-	dozen.

No. 20.—Fret Saw and Pad.

Assorted to 9 inches, **6**/**6** ; to 12 inches, **7**/**6** ; to 14 inches, **9**/**6** per dozen.
Fret Saws, if set and sharpened, **1**/**6** per dozen extra, gross.
Saw Pads, Beechwood, small, **19**/- ; large, **22**/- per dozen. Boxwood, large, **29**/- per dozen.

No. 21.—C.S. Compass or Lock Saw.

No. 22.—C.S. Lock Saw.

	10	12	14	16	18	20	inches.
No. 21. Cast Steel	**20**/-	**21**/-	**22**/-	**24**/-	**26**/-	**28**/-	dozen.
No. 22. Cast Steel (American Pattern) ...	**20**/-	**21**/-	**22**/-	**24**/-	**26**/-	**28**/-	,,
No. 21A. " Abbeydale "	**12**/-	**13**/-	**14**/-	**16**/-	**18**/-	**20**/-	,,

Compass Saw Blades only, Set and Sharpened

10	12	14	16	18	inches.
15/-	**16**/-	**17**/-	**19**/-	**21**/-	dozen.

No. 30.—Interchangeable Compass Saws

Handle and three Blades, **4**/**6** per set.
Handle and Screws only, **18**/- ; large Blades, **14**/- ; medium, **12**/- ; small, **10**/- dozen.

No. 31.—Pruning or Grecian Saw.

12	14	inches.
34/-	**42**/-	per doz.

No. 31.—IRON PIT SAW TILLER AND BOX, 3/- pair.

No. 32.—PIT SAW TILLER HANDLE, 6d. each.

No. 36.—DOUBLE HAND SAW SET, For Large Saws, 9/- each.

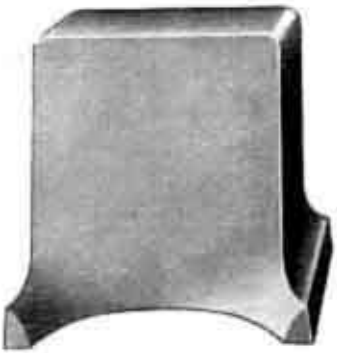
No. 34.—SAW SET. For Pit and Cross-Cut Saws, **3/-**

No. 35.—SAW SETS, for Small Saws, **1/6** each If with Wood Handles, **2/-** each.

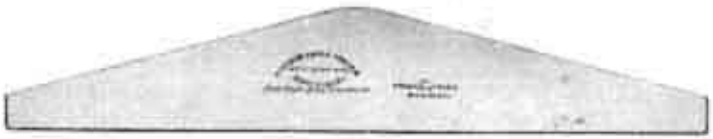
No. 33.—BEECHWOOD PIT SAW BOX, 4/- each.

No. 38.—SAW MAKERS' CROSS-FACE HAMMER 1/6 per lb.

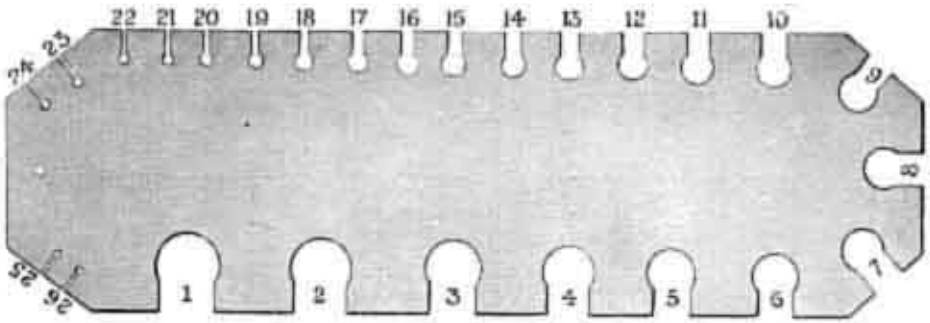
No. 37.—SAW MAKERS' DOG-HEAD HAMMER 1/6 per lb.



No. 41.—SAW MAKERS' ANVIL 68/- per cwt. nett.



No. 39.—SAW MAKERS' STRAIGHT EDGE, 4d. per inch.



No. 40.—SAW GAUGES, 10/- to 16/-

Beech Saw Handles

No. 42.

No. 42A.

No. 43.

No. 42. C.S. Back Saws...	13/-	per doz.
Nos. 42A and 43. C.S. Hand Saws	13/-	,,

If Polished Edges, 8d. per dozen extra nett.

	No. 1	2	3 Plain	4	5	Stamped.
Brass Saw Screws ...	5/8	7/-	9/6	12/-	16/-	per gross.
Raised Brass Screws...	14/-	16/-	18/-	25/-	30/-	,,

Joiners' Scrapers

Any Size or Shape quoted for.

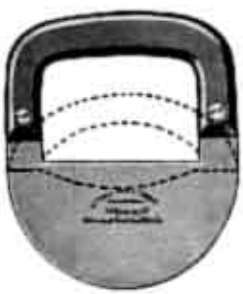
No. 49.

No. 50.

No. 51.

No. 52.

Mincing Knives



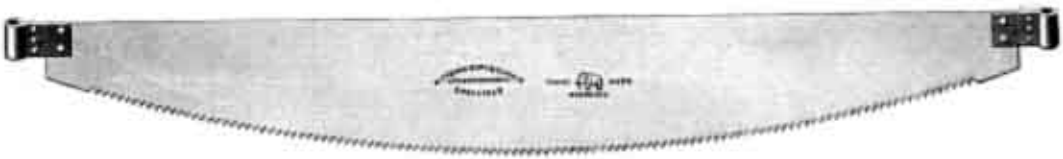
No. 53.—C.S. Half Round Double Tang Mincing Knife.

No. 54.—C.S. Mincing Knife.

No. 55.—Beech Handle Mincing Knife.

Any pattern quoted for.

Stone Saws



No. 1.—STONE SAWS, BELLIED PATTERN.

No. 2.—STONE SAWS, SINGLE HAND.

	5	5½	6	6½	7	7½	8	feet.
No. 1.—Bellied Pattern	**24/-**	**26/-**	**28/-**	**31/-**	**34/-**	**38/-**	**42/-**	each.
No. 2.—Single Hand ...	**27/-**	**29/-**	**31/-**	**34/-**	**37/-**	—	—	,,

If exceeding 9 inches wide, **2/-** per inch extra, gross.

No. 11.—HAND SAWS FOR CUTTING STONE.

Extra strong blades. English Beech Handles.

Polished edges. Flat brass screws.

24	26	28	30	inches
80/-	**84/-**	**90/-**	**96/-**	dozen.

Cast Steel One-man Cross-cut Saws

No. 13.—"ELEPHANT" BRAND. AMERICAN TEETH.

2½	3	3½	4	4½	5	feet.
14/6	**15/6**	**18/-**	**21/-**	**24/-**	**27/6**	each nett.

No. 13B.—"ELEPHANT" BRAND. TENON OR V TEETH.

2½	3	3½	4	4½	5	feet.
13/6	**14/6**	**17/-**	**20/-**	**23/-**	**26/6**	each nett.

No. 13A.—"OLD O" BRAND. AMERICAN TEETH.

2½	3	3½	4	4½	5	feet.
14/6	**15/6**	**18/-**	**21/-**	**24/-**	**27/6**	each.

No. 13C.—"OLD O" BRAND. TENON OR V TEETH.

2½	3	3½	4	4½	5	feet.
13/6	**14/6**	**17/-**	**20/-**	**23/-**	**26/6**	each.

Set and Sharpened ready for use with one supplementary handle.

No. 13D.—POINT HANDLES, 1/- each.

No. 13E.—FRONT HANDLES, 1/6 each.

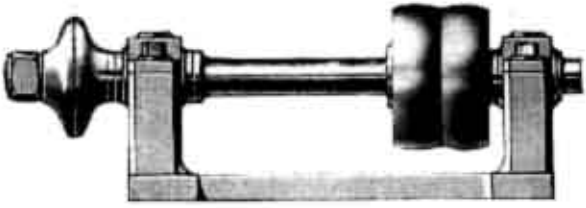
Circular Saws for Cutting Iron and Steel, Hot

MADE IN ALL SIZES, FINISHED BLACK.

SPECIALLY FOR HOT IRON, HOT RAILS AND HOT STEEL.

PRICES ON APPLICATION.

CIRCULAR SAW SPINDLES



Circular Saw Spindles, with Improved Metal Frames.

Complete with Pedestals, Collars and Fast and Loose Pulleys.

Circular Saw Spindles and Pedestals.

Complete with Pedestals, Collars and Fast and Loose Pulleys.

PRICES ON APPLICATION.

Circular Saws for Cutting Metal

IN this branch of the Saw Trade we have made rapid strides in recent years and our facilities for making Cold Saws are second to none.

Having our own melting furnace we are able to produce the very best steel which can be had for this purpose—the result of careful tests and many years' experience.

All the teeth of our Metal Saws are automatically cut and absolutely true and equal.

The grinding is effected on the latest machines for this purpose and accurate thickness guaranteed.

We have three leading types of Steel which have proved successful for Cold Saws, notably our special "Alloy" Steel and our "Elephant Nonpareil" High Speed Steel, both of which we can recommend where difficult work has to be dealt with.

While the ordinary "Crucible" Steel Saw answers perfectly well on mild steels or soft metals, in these days of alloys and self-hard material it is very necessary to produce a Saw capable of cutting these special types, and for this class of work the "Alloy" Brand and "Elephant Nonpareil" High Speed qualities will give results far in advance of the usual Crucible material.

In ordering Cold Saws always state whether for cutting tubes or brass and also whether the material is hard or mild steel, brass or copper. In addition give full details of thickness, holes, and key ways, &c.

Running Speeds of Cold Saws

Crucible Steel	30	periphery feet per minute.
"Alloy" Steel	45 to 50	" " "
"High Speed" Steel	60 to 70	" " "