

Crescent Band-Saws

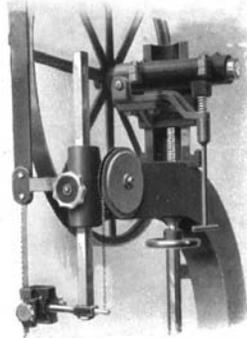
General Description

THE following description applies in a general way to all sizes of Crescent Band-Saws, except the 20-inch. Owing to its smaller size, this machine is somewhat differently constructed, having a special upper bearing arrangement, without spring tension. In other respects it is about the same as the larger sizes of machines.

The Main Frames are cast in one piece, cored out hollow, rectangular section. The foot portion is arched in the middle to make the machine set firmly on a floor that may be slightly uneven. There is no tendency of the machine to rock, as would be the case with a continuous base. Besides this, the arched base admits of being properly cleaned out, and admits of pinch bar being used to move on floor easily.

The Upper Bearing arrangement of any band-saw is a vital part of the machine. Upon it hangs the weight of the upper wheel plus the tension of the saw. The accompanying engraving taken from the 38-inch machine shows the details of our upper shaft construction. The wheel can be inclined backward or forward or raised and lowered while saw is in motion. The end of the tilting-wrench extends downward so as to be in easy reach of the operator while standing in front of the machine. The pivoting-

point is very close to the center of the wheel, so that the tension of the saw is not changed when wheel is being tilted. The pivot-bracket is fastened to the sliding head by means of two machine bolts, passing through slotted holes. When these are released it is an easy matter to give the upper wheel sidewise alignment with the lower wheel—sometimes called cross-line adjustment. Having this arrangement on the upper head permits us to bolt the lower bearing solidly to frame. This is the best way because the permanent alignment of the lower wheel with the frame needs never to be disturbed, and machine once properly set will always keep proper belt-travel on the pulleys. A spring near the back end of upper shaft holds bearing in proper position, preventing back-lash to the upper wheel in case

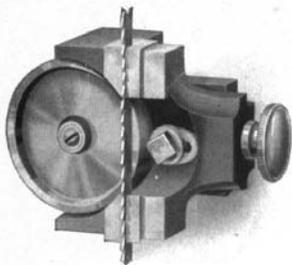


saw should break. The head that slides on the upright standard is provided with a steel gib, adjustable for wear. The standard upon which the head slides is bolted to the arm portion of the frame on machined-off surfaces. This is preferable, as repairs are easily made when necessary. The standard stands edgewise to the strain, not flatwise. The tension-spring is telescoped over the raising-screw; is located inside of frame where it does not show in cut. A spring-tension is better than a weight-tension, for the following reasons: It can act quicker, being free from inertia. No loose weights to get lost. Any degree of tension is readily obtained while tightening saw. To get different degrees of tension with a weight-tension it is necessary in each case to adjust the weight on its lever, or add more weights.

The upper wheel is fastened to the shaft, and the shaft revolves in a long split babbitted bearing; the two members of the bearing having liners between them are readily adjustable for wear. In contrast to this it is worth noticing how other makes of machines are weak at this point. Most machines have the upper wheel run on a stationary pin, like a loose pulley. The bearing thus formed in the hub of the wheel is sadly short in length and short in life; when worn, cannot be adjusted, and with difficulty repaired. Every mechanic is familiar with the woes of ordinary loose-pulley construction. The upper shaft arrangement as used on the Crescent Band-Saws is patented, and cannot be used on any other make.

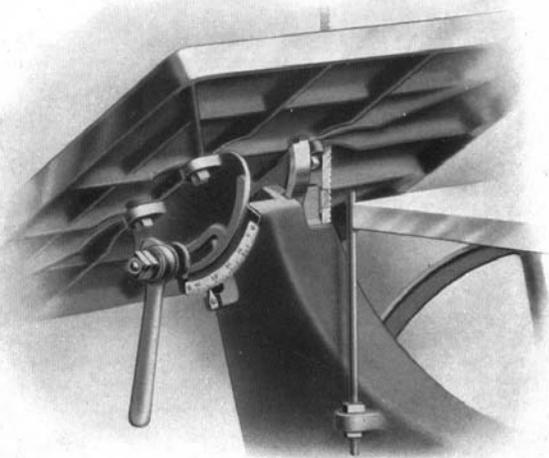
The Belt-Shifter is arranged with the handle under the subtable where it is in easy reach of the operator from the front of the machine. It has long fingers which can be reversed, either upward or downward, so as to suit for any regular direction of belting to line-shaft.

The Lower Shaft runs in a long bearing that is bolted rigidly to the frame of the machine. It is properly aligned with the frame at the factory, and needs never to be disturbed. Has split babbitted bearings, with liners, adjustable for wear. The end of shaft where loose pulley is on is bored out hollow to form an oil-chamber, and is plugged with an oil-screw having a small hole to receive the oil. Several small holes are drilled through the diameter of the shaft, through the oil-chamber, to feed the oil to the bearing of the loose pulley. Oiling can be done without shifting the belt, or while machine is running or stopping. This is a superior arrangement and requires very little attention.



Guides. Wright's anti-friction saw-guides are furnished above table. The No. 0 size is furnished on the 26-inch machine, and the No. 1 size on the larger machines. A simple but efficient plain guide is furnished below table. When ordered (at additional cost), the No. 0 guide can be furnished below table.

Tilting-Tables are provided on all the Crescent Band-Saws, except on the Angle Band-Saw. The table segment works on a machined tongue and groove that slides free and easy, but keeps table laterally aligned while being tilted. A neatly graduated brass scale and pointer indicates accurately the degrees of angle to which the table is being inclined. The table will tilt to any angle up to 45 degrees, and is rigidly held in any posi-



tion by means of an eccentric lever. To operate, push the lever back to unclamp the table; push table down till desired angle is indicated by the pointer on the scale; draw lever up again to clamp the table. That's all. Done in half the time it takes to tell it. The clamping device locks easily and *positive*. When setting table square again, a stop is provided, making reference to scale unnecessary. A slight in-tilt can be obtained by lowering the stop. With this arrangement no loose wrench is used. No protractor or T-bevel needed for getting proper angle. No gas-pipe pump-handle cog-wheel arrangement to tilt the table with, that is springy and sure to dodge back and forth past the desired angle. No slow screw to turn and get worn. All tables are made of cast iron planed true; and ground smooth on the edges.

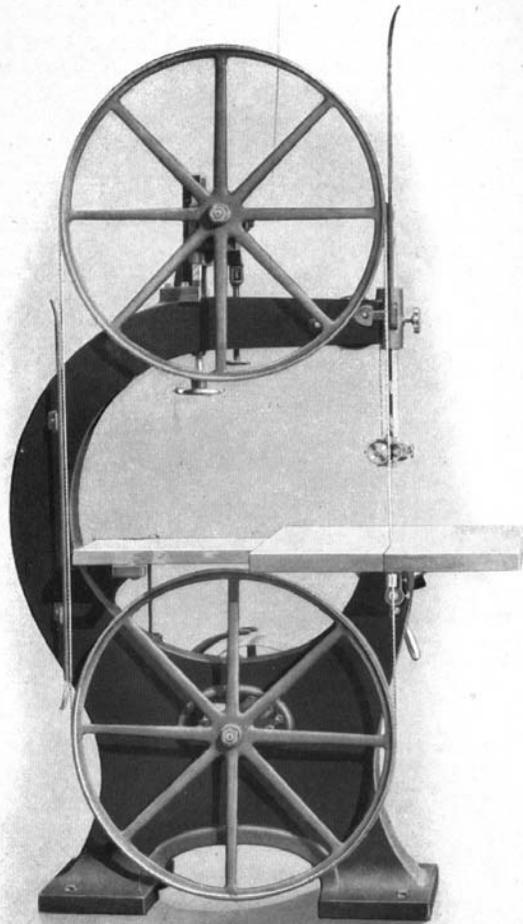
Clamps and Tongs for joining saw-blades are furnished with each machine. The tongs are made of forged steel; not the cheap cast-iron kind.



Wheels. All machines are regularly equipped with iron wheels, carefully turned inside and outside of rim, and properly balanced. Wood-rim wheels can be furnished in the large sizes, and are described under the head of "Special Equipment." Solid rubber tires of extra good quality are vulcanized to the face of wheels by a process that is guaranteed to hold them securely.

Speed of Band-Saws. Some manufacturers refer to their machines as being "high-speed" band-saws and then list them to run faster than a band-saw ought to run, hoping thereby to convince the purchaser of superior qualities. But this is misleading and of doubtful policy. The Crescent Band-Saws are safe and capable of running at as fast a speed as any we know of, and could properly be called "high-speed"—but what is the use? In listing the speed we give the correct speed for best results, when used under ordinary conditions, based on our experience and best practice. Under certain conditions it may be advisable to run somewhat faster or slower than our listed speeds, but extremes should be avoided.

Saws do not last as long on higher speeds, and unless it is desired to do extremely fast cutting, it is better to run at the speeds we have listed.



38-Inch Crescent Heavy Band-Saw
(Patented)

38-Inch Crescent Heavy Band-Saw

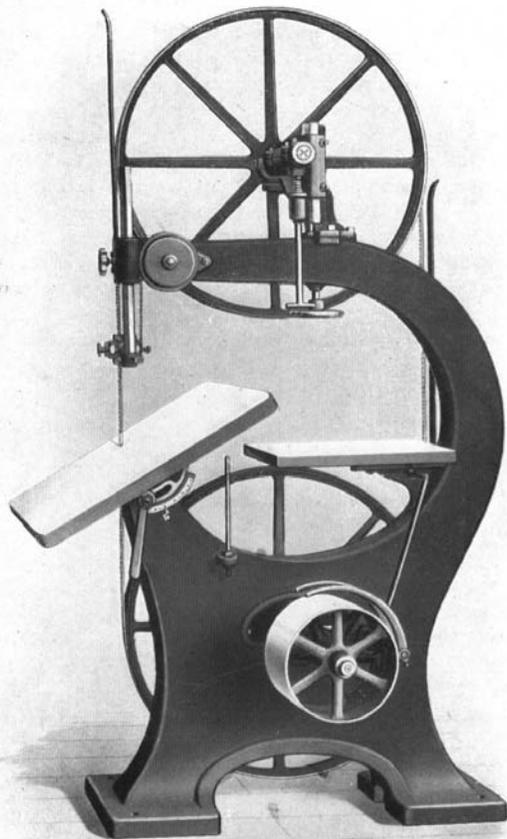
THIS machine is made for those who require a band-saw unusually heavy and strong. It is of heavy, massive design; yet the lines are most graceful and pleasing. Utmost strength, rigidity and durability predominate in every detail. The frame is cast in one piece, cored out hollow throughout. The upper shaft revolves in a bearing $1\frac{5}{8}$ inches in diameter, 13 inches long. The lower bearing is $1\frac{3}{4}$ inches in diameter, $17\frac{1}{2}$ inches long. The belt-shifter handle is on front side of machine. An oil-chamber with self-oiling arrangement is provided for loose pulley. Table tilts to any angle up to 45 degrees; it has a quick-acting locking device and an accurate scale to show the angle. The machine has a spring-tension for the saw and a counterbalanced hexagon steel guide-bar.

When specially so ordered, this machine can be furnished left hand—that is, just reversed from what cut shows. For a more detailed description see front pages of catalog. For extra equipment that can be furnished see pages 24 to 26.

Dimensions

Size of wheels.....	38 x 2 in.
Distance clear from saw to frame.....	38 in.
Height clear under guide when raised.....	19 in.
Size of table (iron).....	30 x 36 in.
Size of tight and loose pulleys.....	16 x 4 in.
Speed, revolutions per minute.....	400 to 450
Length of saw-blade.....	20 ft. 4 in.
Height, over all.....	102 in.
Floor space required, over all.....	44 x 62 in.
Cubic measure, boxed for export.....	55 ft.
Gross weight, boxed for export.....	1,730 lbs.
Domestic shipping weight.....	1,475 lbs.
Telegraphic code word.....	Agamo

Equipment. Each machine is furnished with one anti-friction roller saw-guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, and one saw-blade $\frac{3}{4}$ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge.



36-Inch Crescent Band-Saw
(Patented)

36-Inch Crescent Band-Saw

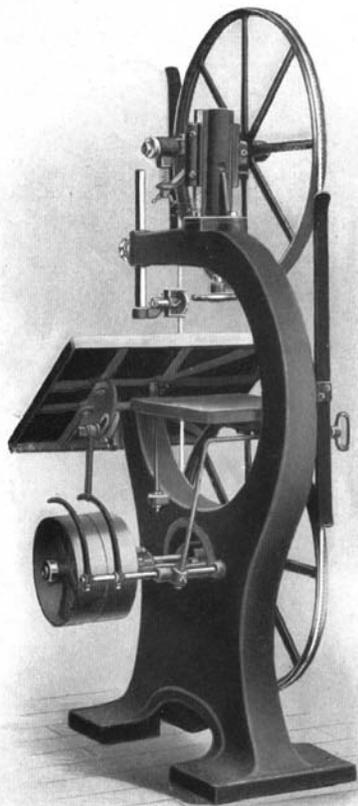
FOR all regular work in factories, planing mills, pattern shops, and other wood-working establishments, this is usually considered the standard size machine. It has ample strength and capacity for any ordinary work. For completeness in detail, elegance of design and durability, the 36-inch Crescent Band-Saw will stand comparison with any in the market. The frame is cast in one piece, cored out hollow throughout. The upper shaft revolves in a bearing $1\frac{1}{2}$ inches in diameter, 12 inches long. The lower bearing is $1\frac{1}{2}$ inches in diameter, 15 inches long. The belt-shifter handle is on front side of machine. An oil-chamber with self-oiling arrangement is provided for loose pulley. Table tilts to any angle up to 45 degrees; it has a quick-acting locking device and an accurate scale to show the angle. The machine has a spring-tension for the saw and a counterbalanced hexagon steel guide-bar.

For a more detailed description see front pages of catalog. For extra equipment that can be furnished see pages 24 to 26.

Dimensions

Size of wheels.....	36 x 2 in.
Distance clear from saw to frame.....	36 in.
Height clear under guide, when raised.....	17 in.
Size of table (iron).....	28 x 32 in.
Size of tight and loose pulleys.....	12 x 4 in.
Speed, revolutions per minute.....	400 to 450
Length of saw-blade.....	18 ft. 6 in.
Height, over all.....	92 in.
Floor space required, over all.....	39 x 57 in.
Cubic measure, boxed for export.....	45 ft.
Gross weight, boxed for export.....	1,350 lbs.
Domestic shipping weight.....	1,200 lbs.
Telegraphic code word.....	Albin

Equipment. Each machine is furnished with one anti-friction roller saw-guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, and one saw-blade $\frac{3}{4}$ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge.



32-Inch Crescent Band-Saw
(Patented)

32-Inch Crescent Band-Saw

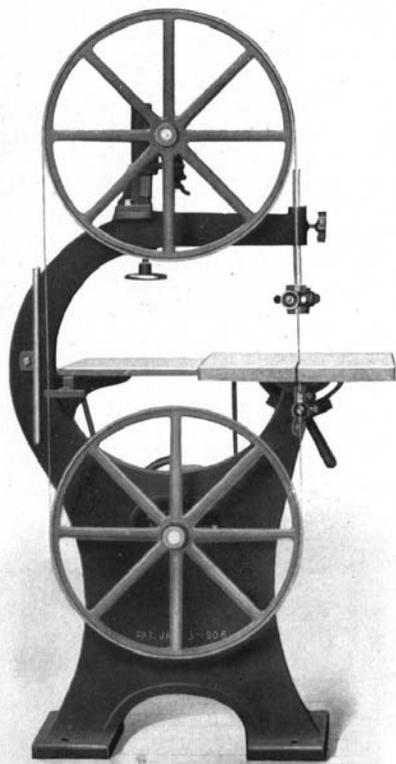
THIS is a good size machine to select on, where the work to be done is not of extremely large dimensions, or where the amount of work would not justify the purchase of a more expensive machine. In construction, workmanship and design the machine is the equal of the 36-inch shown on preceding page; and, like it, the frame is cast in one piece, cored out hollow throughout. The upper shaft revolves in a bearing $1\frac{3}{8}$ inches diameter, $10\frac{1}{2}$ inches long. The lower bearing is $1\frac{1}{8}$ inches in diameter, $14\frac{1}{4}$ inches long. The belt-shifter handle is on front side of machine. An oil-chamber with self-oiling arrangement is provided for loose pulley. Table tilts to any angle up to 45 degrees; it has a quick-acting locking device and an accurate scale to show the angle. The machine has a spring-tension for the saw. The guide-bar is of hexagon steel; is not counterbalanced, as it is not heavy enough to require it. A spring counterbalance for the guide-bar can be furnished at an additional cost.

For a more detailed description see front pages of catalog. For extra equipment that can be furnished see pages 24 to 26.

Dimensions

Size of wheels.....	32 x $1\frac{3}{4}$ in.
Distance clear from saw to frame.....	32 in.
Height clear under guide, when raised.....	13 in.
Size of table (iron).....	24 x 28 in.
Size of tight and loose pulleys.....	12 x $3\frac{1}{2}$ in.
Speed, revolutions per minute.....	400 to 450
Length of saw-blade.....	16 ft. 4 in.
Height, over all.....	81 in.
Floor space required, over all.....	35 x 48 in.
Cubic measure, boxed for export.....	36 ft.
Gross weight, boxed for export.....	1,050 lbs.
Domestic shipping weight.....	900 lbs.
Telegraphic code word.....	Alset

Equipment. Each machine is furnished with one anti-friction roller saw-guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, and one saw-blade $\frac{1}{2}$ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge.



26-Inch Crescent Band-Saw
(Patented)

26-Inch Crescent Band-Saw

THIS machine is intended for those whose requirements do not demand a machine of larger size. The machine is abundantly strong for any ordinary work that would come within the range of this size machine. In construction, workmanship and design the machine is the equal of the larger sizes. It is decidedly a belt-power machine, but can be provided with double foot-treadles, connected direct to lower shaft by wooden connecting rods, making an efficient foot-power machine. The frame is cast in one piece, cored out hollow throughout. The upper shaft revolves in a bearing $1\frac{1}{4}$ inches in diameter, 9 inches long. The lower bearing is $1\frac{1}{4}$ inches in diameter, 11 inches long. The belt-shifter handle is on front side of machine. An oil-chamber with self-oiling arrangement is provided for loose pulley. Table tilts to any angle up to 45 degrees; it has a quick-acting locking device and an accurate scale to show the angle. The machine has a spring-tension for the saw. The guide-bar is of hexagon steel; is not counter-balanced, as it is not heavy enough to require it.

For a more detailed description see front pages of catalog. For extra equipment that can be furnished see pages 24 to 26.

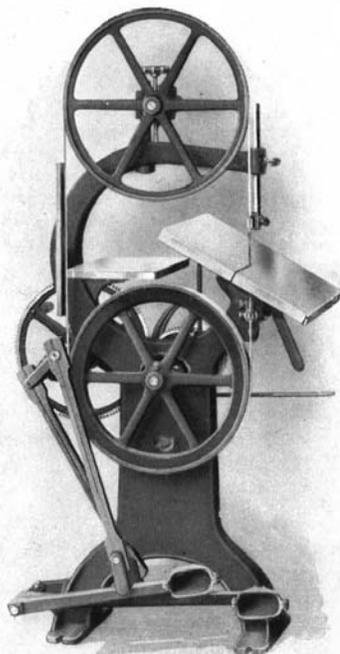
Dimensions

Size of wheels.....	26 x $1\frac{1}{2}$ in.
Distance clear from saw to frame.....	.26 in.
Height clear under guide, when raised.....	.9 in.
Size of table (iron).....	20 x 24 in.
Size of tight and loose pulleys.....	.10 x 3 in.
Speed, revolutions per minute.....	400 to 450
Length of saw-blade.....	.13 ft. 9 in.
Height, over all.....	.78 in.
Floor space required, over all.....	.30 x 40 in.
Cubic measure, boxed for export.....	.23 ft.

Belt Power Foot and Belt

Gross weight, boxed for export.....	700 lbs.	750 lbs.
Domestic shipping weight.....	625 lbs.	675 lbs.
Telegraphic code word.....	Amphi	Andro

Equipment. Each machine is furnished with one anti-friction roller saw-guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, and one saw-blade $\frac{3}{8}$ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge. Belt power machine will always be sent unless the combined foot-and-belt power is specified.



20-Inch Crescent Band-Saw

20-Inch Crescent Band-Saw

THIS small machine is suited for parties having mostly light work, and who would not be justified in paying the higher price for the larger machines. The amount of work that can be done with one of these machines is usually a surprise to those not familiar with it. The machine has recently been greatly improved, so that it now conforms to the high standard of the larger machines as nearly as the size of the machine and the price will admit.

The frame is cast in one piece, cored out hollow throughout. The upper shaft revolves in a bearing 1-inch in diameter, 6 inches long. The lower bearing is 1-inch diameter, 10¼ inches long. The belt shifter is on side of machine under table. The table tilts to any angle up to 45 degrees; it has a quick-acting locking device and an accurate scale to show the angle. The guide-bar is of hexagon steel; is not counterbalanced. Owing to the small size of the machine the spring-tension is omitted.

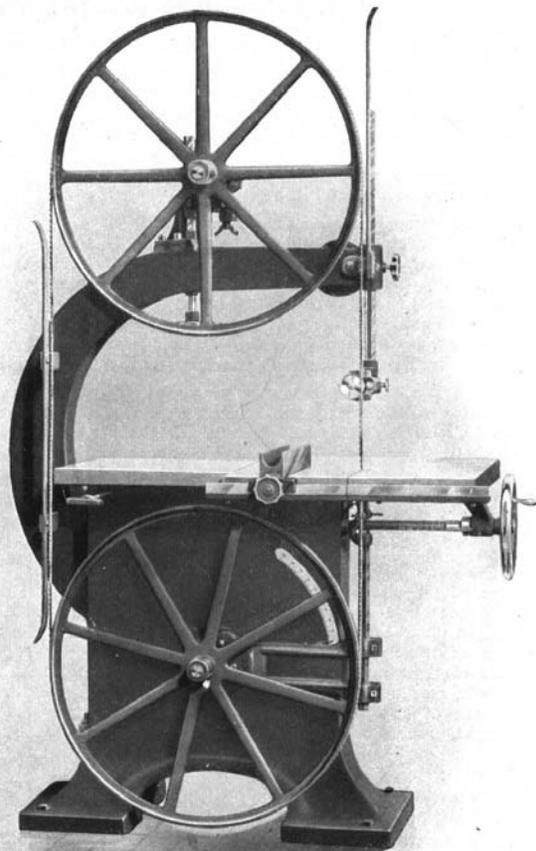
The foot power is arranged with two treadles, suited for operator to be seated on a high stool. For best results the stool should be 28 to 30 inches high. The action of the treadles is about the same as on a bicycle—much more powerful than a single treadle would be. If desired, operator may stand, using only one foot on one of the treadles. A handle is provided on large gear, so a second man may help to turn when job is too heavy for one man.

Dimensions

Size of wheels.....	20 x 1¼ in.
Distance clear from saw to frame.....	20 in.
Height clear under guide, when raised.....	7 in.
Size of table (iron).....	18 x 22 in.
Size of tight and loose pulleys.....	7 x 3 in.
Speed, revolutions per minute, (power).....	400 to 450
Length of saw-blade.....	10 ft. 1 in.
Height, over all.....	67 in.

	Belt Power	Foot Power	Foot and Belt
Floor space, over all.....	20x30 in.	24x40 in.	30x40 in.
Measure, boxed for export.....	18 ft.	18 ft.	18 ft.
Gross weight, boxed for export.....	450 lbs.	530 lbs.	555 lbs.
Domestic shipping weight.....	335 lbs.	415 lbs.	440 lbs.
Telegraphic code word.....	Annan.	Antin.	Apton.

Equipment. Each machine is furnished with one plain guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, and one saw-blade ¼ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge. Belt-power machine will always be sent unless otherwise specified.



Crescent Angle Band-Saw
Erect, for Square Sawing
(Patented)

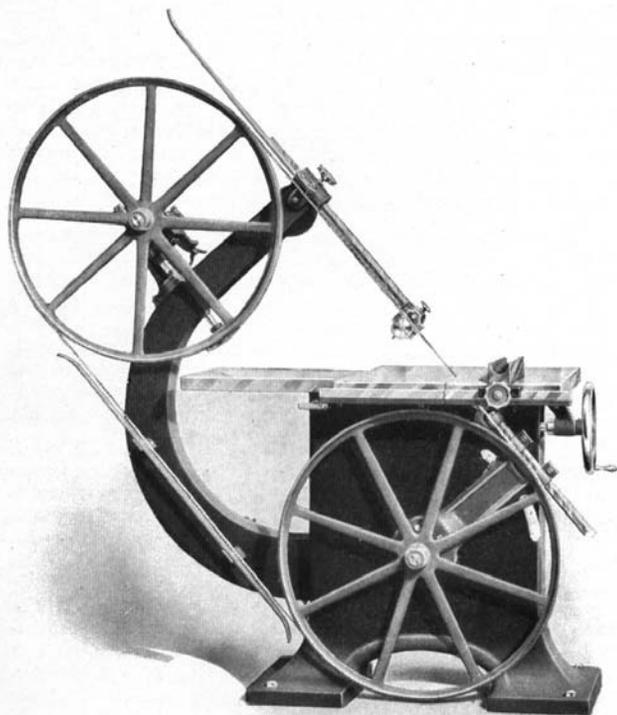
Crescent Angle Band-Saw

THE construction of this machine is decidedly unique. There being nothing else in the market that will compare to it, the machine stands in a class all by itself. The advantage of a band-saw on which the table is always level, but which admits of tilting the saw, is at once apparent, since it is so much easier to handle the work on a level table than on an inclined one. On large work it means the saving of an extra man helping to hold the work; while smaller work can be turned out more accurately and in less time.

In the Crescent Angle Band-Saw the level-table feature is worked out on thoroughly practical lines, and the machine is so perfected that it is not only more convenient for bevel sawing than the ordinary type of machine, but there is not a single objectionable feature in the machine for common, plain, square sawing. The angle may be gradually changed while saw is in the cut, making it an easy matter to saw a twisted line. This feature makes it a valuable machine for boat-work. It is also very well adapted for pattern shop use—in fact, any place where bevel-work is being done.

All the parts work automatically—no adjustments necessary in changing the angle of the saw. The entire operation is accomplished by simply turning the handwheel at side of table until pointer indicates the desired angle on the graduated scale on the pedestal, and this may be readily done while saw is in motion. The handwheel turns easily, as the weight of the upper part of the machine is properly counterbalanced. The location of the drive-pulley is not changed, and the machine is as easily belted up as an ordinary band-saw. The table is carried back on the pedestal in harmonic motion with the saw, so the saw keeps its proper position in the table slot. Both the lower and upper guides keep in exact alignment with the saw, and the lower guide keeps a proper distance from the under side of the table. The tension of the saw does not change when angle of saw is changed. There are no complicated devices to get out of order, and it is owing to its simplicity that we are enabled to sell the machine at a moderate price.

The arm is hinged to the pedestal in a very rigid manner by means of a heavy trunnion passing through them, concentric with lower shaft, making the machine just as rigid when tilted as when standing erect, and just as rigid and durable as an ordinary band-saw. The bearings for lower shaft consist of solid bushings fastened into trunnion, and



Crescent Angle Band-Saw
(Tilted, for Bevel Sawing)

Crescent Angle Band-Saw

(Continued)

are provided with oil-chamber and capillary felt, making them practically self-oiling and dust-proof. The upper bearing is made with revolving shaft running in adjustable bearings, same as our regular band-saws. This is much better than the loose-pulley style used on most makes of band-saws. The table slides on the planed ways of the pedestal, and is provided with a steel gib for taking up possible wear. The saw will tilt back to an angle of 45 degrees, a stop being provided at that point. Also the saw may be tilted forward to 4 degrees beyond the perpendicular. A stop is also provided on the perpendicular point so this point may be easily reached without referring to the graduated scale. But this stop can be instantly swung out of place, allowing saw to pass on an out-tilt angle as mentioned.

The upper shaft revolves in a bearing $1\frac{1}{2}$ inches in diameter, 12 inches long. The lower bearing is $1\frac{1}{2}$ inches in diameter, 16 inches long.

The machine has all the good features of our regular style of band-saws, such as spring-tension, counterbalanced guide-bar, hollow cored-out frame, universal adjustments to upper wheel, etc. These features, together with extra equipment that can be furnished, are described elsewhere in catalog.

The special features of this machine are patented, and cannot be obtained in any other make of machine.

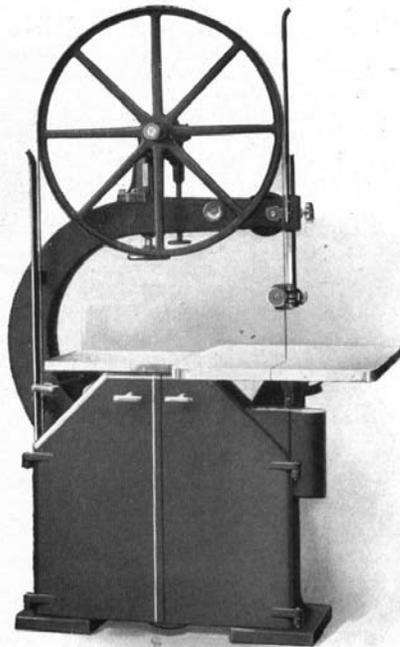
Dimensions

Size of wheels.....	36 x 2 in.
Distance clear from saw to frame.....	36 in.
Height clear under guide, when raised.....	18 in.
Size of table (iron).....	28 x 34 in.
Height of table from floor.....	41 in.
Size of tight and loose pulleys.....	16 x 4 in.
Speed, revolutions per minute.....	400 to 450
Length of saw-blade.....	19 ft.
Floor space over all, when erect.....	40 x 63 in.
Height, over all.....	.95 in.
Cubic measure, boxed for export.....	51 ft.
Gross weight, boxed for export.....	2,050 lbs.
Domestic shipping weight.....	1,800 lbs.
Telegraphic code word.....	Argus

Equipment. Each machine is furnished with one anti-friction roller saw-guide above table, one plain guide below table, one brazing-tongs, one brazing-clamp, one ripping-gauge, and one saw-blade $\frac{3}{4}$ inch wide. Or customer can select any other width of saw up to 1 inch wide without extra charge.

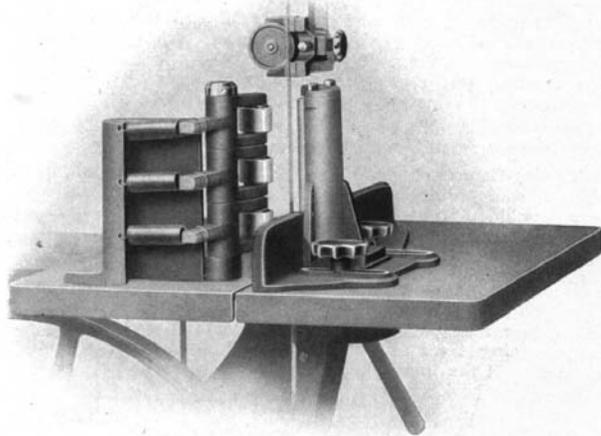
Special Equipment

UNDER this head we wish to merely mention some special features that can be furnished, but for which there is not sufficient demand to warrant same being included regularly. An extra charge will be made in each case, for any of the following special features.



Iron Enclosing Doors for the lower wheel can be furnished on the 36-inch and 38-inch machines. In connection with these is also furnished a dust-spout suitable for attaching blower-pipe.

Re-Saw Gauge. This Re-Saw Gauge can be attached to any make of band-saw by drilling and tapping a few holes in the table. It is for hand feed and answers nicely when there is but a limited amount of re-sawing to be done. The rollers are to be placed just a little forward of the saw-guide, so as



not to interfere with the raising and lowering of the guide. In this way narrow lumber may be re-sawed and the guide adjusted down close to the work. The three small rollers on the left side give flexibility for irregular lumber, and the springs can be adjusted for heavy or light pressure.

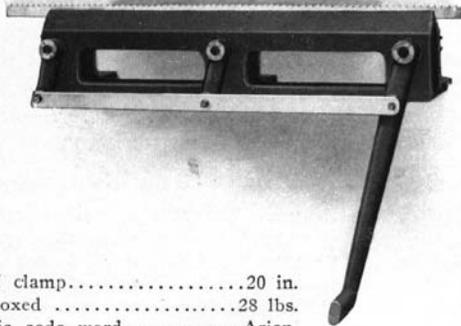
Height of main roller.....	10 in.
Length of fence.....	24 in.
Weight, boxed	100 lbs.
Code word	Arhod.

Left-Hand Band-Saws. The 38-inch machine can be furnished left hand. All the illustrations show the regular right-hand machines. A left-hand machine would be set up reverse hand from those shown in cuts. No extra charge for making a 38-inch machine left hand, but will delay an order somewhat. No other size made left hand.

Special Wheels. We have always advocated the use of iron wheels, for the reason that they are more likely to stay true. Wood-rim wheels, however, can be furnished in 36-inch and 38-inch sizes at an additional cost. The usual way and the cheap way of making wood-rim wheels is to use a pair of wagon felloes, with ends butted together. Such wheels, while cheap, are not safe to run at moderate or high speed, but are liable to cause accident. They are not good enough when you know better. The Crescent wood-rims are made of rock-maple, laminated, with no butt-joints of end wood—the only correct way of making a good rim, but not cheap. They are stronger and more apt to remain true than the other kind. Can furnish wood-rim wheels with cast-iron arms, or with steel spokes. When any special wheels are ordered on a machine, it must be understood that there will be an additional charge, and a slight delay in filling the order.

Ripping-Gauge, or fence, can be furnished. The rail upon which it slides is fastened to table with slotted holes, so as to be adjustable to suit the lead of the saw. It can be used on either side of the saw. (See cut of Angle Band-Saw).

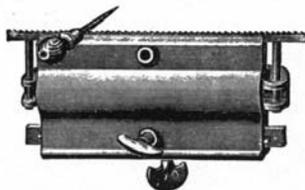
Filing Clamp. This Filing Clamp is suited for filing band-saws up to 1¾ inches in width. The clamping device is arranged to clamp equally at three points on the clamp, thus holding saw firmly throughout the entire length of the clamp. The clamping lever extends downward so as to be easily operated with the knee while hands are used to adjust the saw in its proper position in the jaws.



Length of clamp.....20 in.
Weight, boxed28 lbs.
Telegraphic code word.....Arion.

Filing and Setting Clamp

THIS is a splendid tool for filing and setting band-saw blades. It is not intended to compete with or take the place of the automatic setting and filing machines on the market, but to accommodate parties who have not



sufficient saw-dressing to do to warrant the expenditure for higher-priced machinery. By the use of this clamp, saws can be set and filed to perfection in a very little time. Reference to the cut will show that the clamp has two pairs of jaws, one pair on upper edge and one pair on lower edge.

To change for setting, the clamp is loosened from work-bench and turned upside down. The setting is effected by use of a nail-set and light hammer, a beveled steel plate being secured to the rear jaw to give the proper set to each tooth. The saw is always held to the proper height in the jaws by means of adjusting screws shown at both ends of the clamp. By this arrangement the saw can be shifted endwise almost instantly when one through is filed. You can arrange to get one on trial, to be returned if not satisfactory. Length of jaws, 10 inches. Will handle saws up to 1 inch wide.

Weight18 lbs.
Code wordBelus

