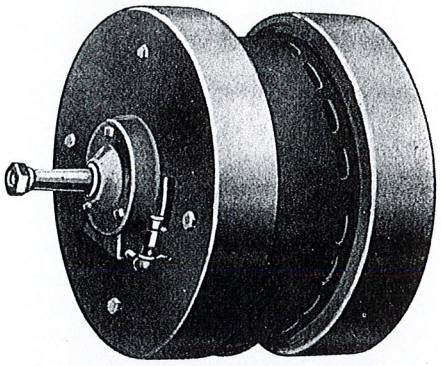
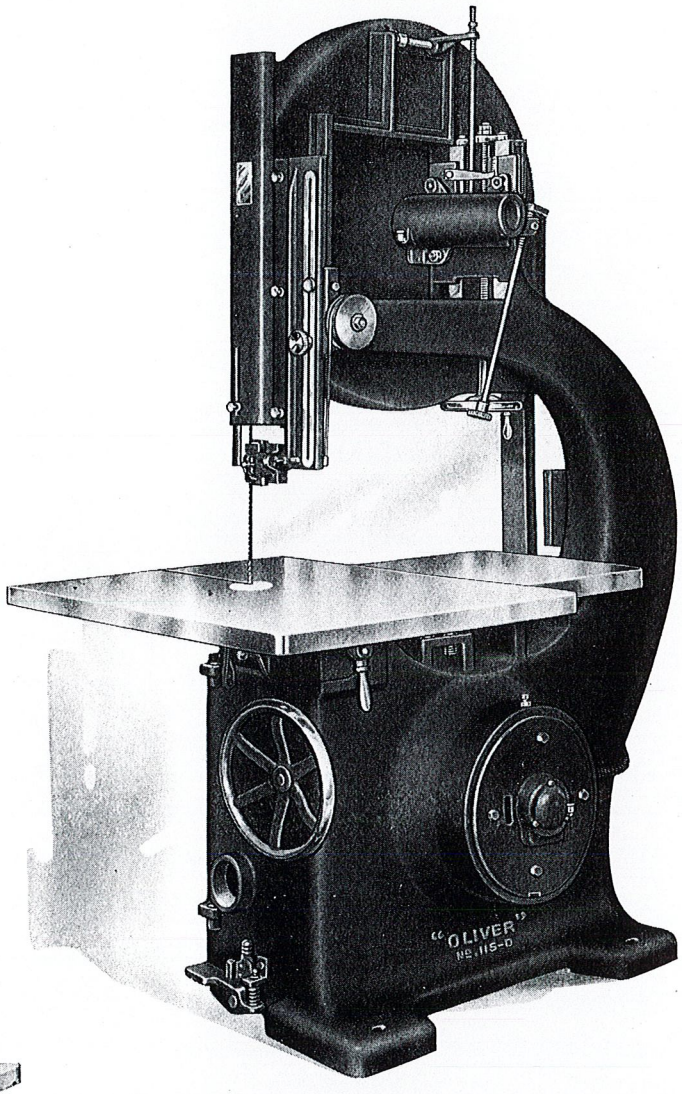
"Every User Is a Booster"

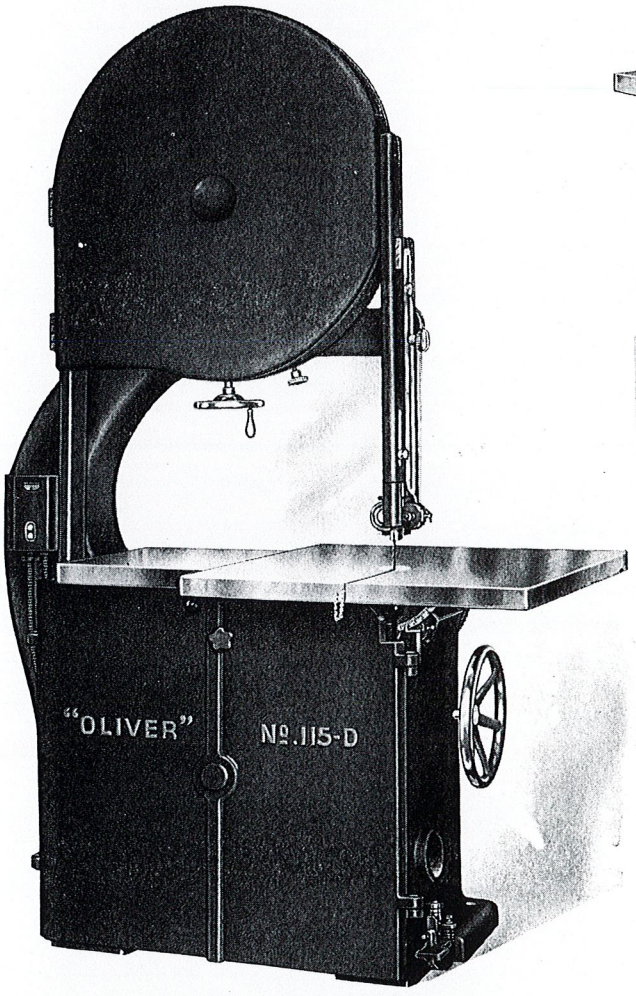
"Oliver" No. 115
Band Sawing Machine
38-Inch Ring-Disk Wheels, Ball Bearing



"OLIVER" MOTOR-ON-SHAFT UNIT
This unit as a whole is inserted in the finished round opening in the column, giving a very compact, rigid, yet easily accessible direct motor drive.



No. 115-D "OLIVER" MOTOR-ON-SHAFT BAND SAW
Rear View showing the motor unit inserted in the circular finished opening in the column; also showing circular exhaust pipe connection, foot brake for the lower wheel and automatic brake for the upper wheel.



Front view showing new cast iron double doors for the lower wheel chamber, large table with large hand wheel and enclosed worm and gear tilting mechanism, exhaust hood also brake lever, foot pressure on which shuts off the power and stops the wheels.

THE ELECTRICAL PART OF EVERY MOTOR USED WITH "OLIVER" BAND SAWS, THAT IS, THE ROTOR AND THE STATOR, ARE ABSOLUTELY STANDARD PARTS MANUFACTURED BY LEADING MOTOR MANUFACTURERS

Manufactured by

Oliver Machinery Co.

Grand Rapids, Michigan, U.S.A.

BRANCH SALES OFFICES:
New York, St. Louis, Minneapolis, Los Angeles, San Francisco, Chicago, Denver, Salt Lake City, Seattle, Manchester, Eng.

NO. 115 "OLIVER" BAND SAWING MACHINE — 38-INCH WHEELS

Design

"OLIVER" No. 115 Band Saw is the largest of a complete line of various sizes of band saws in the manufacture of which "Oliver" has actually incorporated the latest and most desirable features. Ball bearing throughout, with unit construction of principal parts — all castings made from the finest semi-steel with rib reinforcements totally eliminating all objectionable vibration or distortion stresses — of great strength and durability — excellent workmanship and clean cut design — delivering years of dependable service making a most popular band saw for all woodworking and allied industries. Machines can be furnished to run at special speeds for special metal cutting, when so desired.

Capacity

Height of cut under guide 21″; swings 38″ between saw and column; takes saws 18′ 6″ to 20′ 0″ long, up to 2½″ wide; table is 36″ wide, 40″ long and tilts 45 degrees to the right and 5 degrees to the left. Speed up to 1200 r.p.m. if desired; but normally either 720 or 600 r.p.m. to suit the work. This machine has frequently been adapted for special cutting requirements, to operate at exceptionally slow speeds — as low as 13 r.p.m. Such motor drives require engineering in which our experience is of real value.

Frame

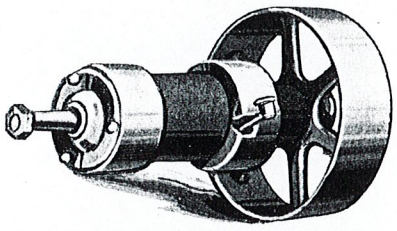
The frame is a one-piece casting in the cored form, strong, durable, and free from vibration at any speed. The bottom is machined straight and all other parts are finished square to the bottom, assuring perfect permanent alignment. Provision for blower connections is made. The base is 50″ long, 25″ wide, 7′ high.

Unit Construction

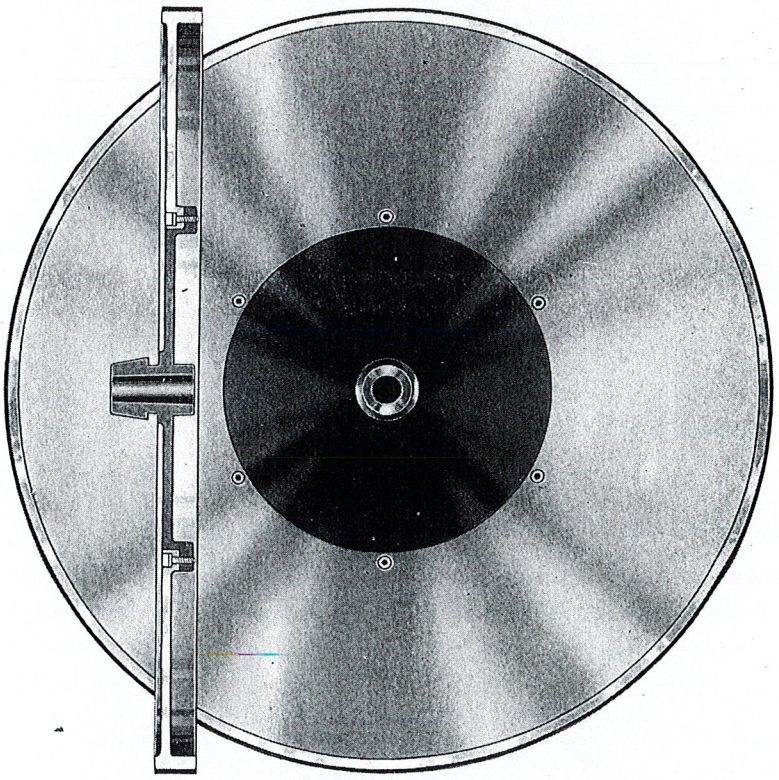
The unit system of construction is used in this machine. All major parts are interchangeable. The built-in "Motor-on-Shaft" Unit as well as the belt driven lower spindle unit are located in a finished circular hole in the base, tightly fitting and locked in place when in use, yet they may be readily removed as a whole and exchanged for a new unit should it ever be necessary.

Wheels

On "Oliver" 38″ High Production Band Saws we furnish rubber faced aluminum Ring-Disk demountable wheels. On regular band saws we furnish one-piece semi-steel cast spoked wheels. Both types are accurately machined and perfectly balanced. They are 38″ in diameter, 2¼″ wide, faced with rubber bands and carried by finished self-centering hubs which are taper fitted to the wheel shafts and locked by hexagonal nuts. The lower wheel is swept by a cleaning brush. The upper wheel has a vertical adjustment of 9″ and may be tilted for tracking the blade.

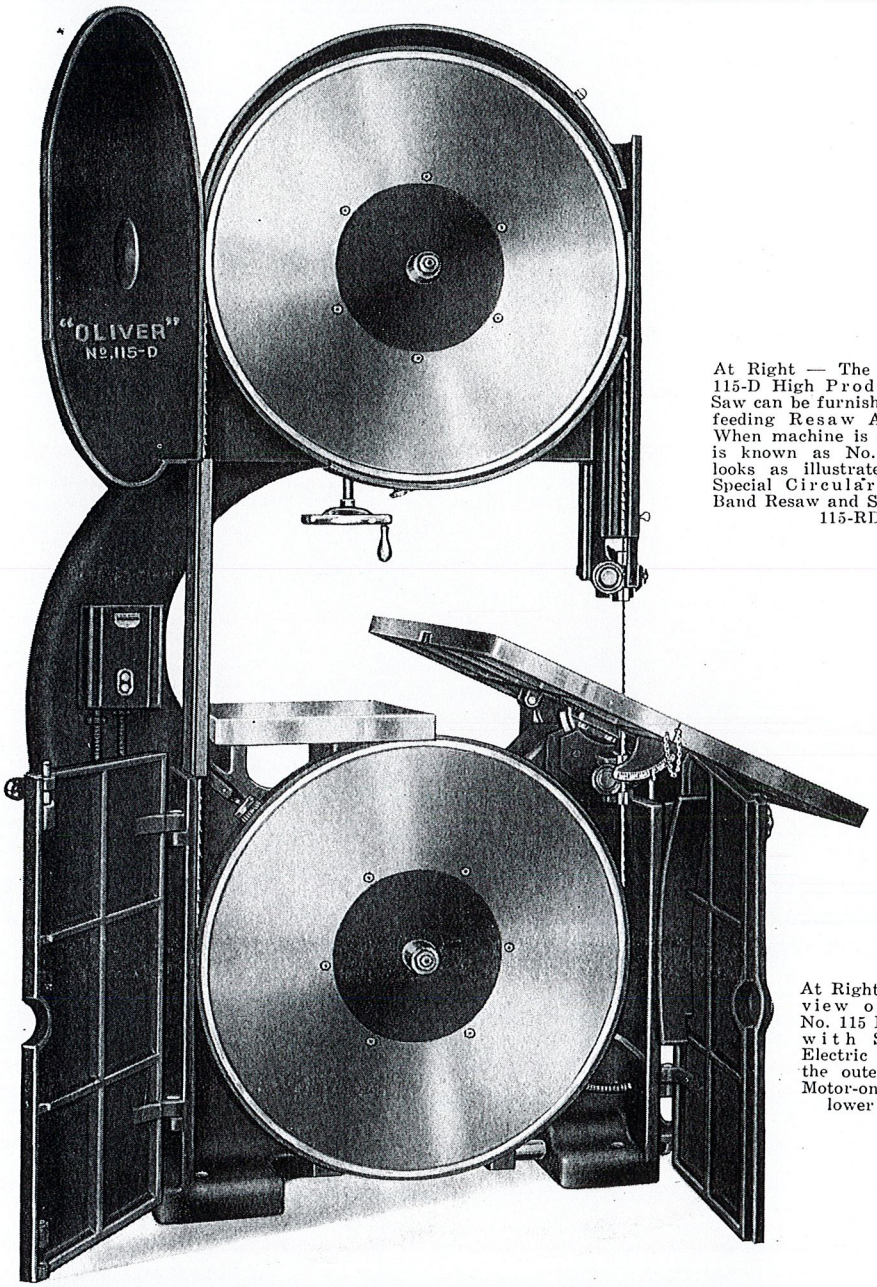


LOWER WHEEL SHAFT UNIT
Assembled with the Ball Bearings complete as a unit interchangeable in every respect.

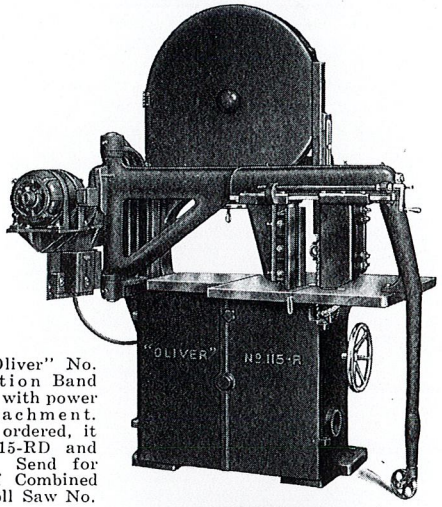


The "Oliver" demountable Ring-Disk Wheel, illustrated here, is the lightest weight, yet the strongest and most rigid band saw wheel made. Scientifically balanced, it runs perfectly true, smoothly, without vibration at highest speeds. The Hub is 15″ diameter, semi-steel, finished all over and perfectly balanced. The Ring-Disk consists of a one-piece aluminum alloy web and Rim unit, finished all over, dynamically balanced and fastened to the hub by six hollow head, flush cap screws; producing a very rigid and smooth running wheel. The tire consists of a live rubber, form moulded band, securely fastened to the rim by tension and by "Oliver" Bandocement; after which it is ground true, providing a durable, even, and smooth thread for the band saw blade.

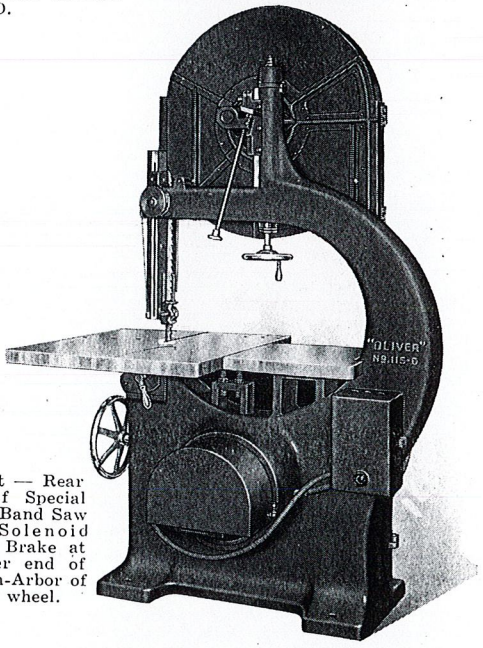
NO. 115 "OLIVER" BAND SAWING MACHINE — 38-INCH WHEELS



"OLIVER" No. 115 — 38" HIGH PRODUCTION BAND SAW
Note the double Rocker Seats, the cast iron doors and the demountable disk wheels — something new!



At Right — The "Oliver" No. 115-D High Production Band Saw can be furnished with power feeding Resaw Attachment. When machine is so ordered, it is known as No. 115-RD and looks as illustrated. Send for Special Circular of Combined Band Resaw and Scroll Saw No. 115-RD.



At Right — Rear view of Special No. 115 Band Saw with Solenoid Electric Brake at the outer end of Motor-on-Arbor of lower wheel.

Motor Drives

We can furnish any type of motor drive desired — belted, geared, coupled, silent chain motor hung at the rear, or our newly created, fully enclosed, built-in "Motor-on-Shaft" drive. When 1700 or 1800 r.p.m. motors are used, we recommend the "Attached Belted Drive" which supports the motor on a self-contained bracket bolted to the frame on a finished square pad and fitted with sheet metal belt guard, endless leather belt and slide base with screw take-up for belt stretch.

When 600, 720 or 900 r.p.m. 2 or 3 phase Alternating Current motors can be used, we very strongly recommend our newly created, ball bearing, fully enclosed, "Motor-on-Shaft" drive, wherein the motor is built-in directly on the lower wheel shaft, as a unit, giving the most efficient, enclosed, silent, practical, durable, and self-contained motor drive possible.

Brake

Both wheels are provided with positive brakes for greater safety. On High Speed Production Band Saws, a handy foot lever within easy reach of the operator, shuts off the electric current and applies a formed brake shoe on the inside of the rim near the floor, and gently but quickly stops the wheels a few seconds after the power is shut off, thus saving operator's time while changing saws. The brake for the upper

wheel (extra when so ordered) is fully automatic; it is located near the top of the wheel at the rear. It is normally kept open by the same mechanism that applies tension to the saw blade, and the instant the pressure is released for any reason (either by the saw breaking or by running off the wheel), the formed brake shoe is automatically applied against the inside of the rim of the upper wheel and instantly stops the wheel, thus preventing coiling of the broken blade around the wheel or throwing the broken upper end of the blade against the table, assuring maximum safety to the operator and saving the blade.

Wheel Shafts and Bearings

Made of special spindle steel, machine ground, and tapered to receive wheel hubs. Both shafts run in anti-friction oil lubricated ball bearings, assuring permanent alignment and long life. The upper shaft is vertically adjusted to suit varying lengths of blades, also tilted by hand wheel for tracking the saw. Lower wheel is mounted directly on the motor shaft.

Guides and Post

Post is a one-piece casting. It carries the upper guide and also serves as a guard for the face of the upper wheel and saw blade directly above the guide. Post is counterbalanced by an encased coil spring, and is fitted with a small glass window to assist operator in tracking the blade properly on the wheel. Guide post is adjustable vertically and can be locked in various positions by means of a knurled hand knob. The guides are of the frictionless, ball bearing, self-lubricating roller type, one above and one below the table. The saw runs against the outer edge of a hardened wheel which revolves in enclosed ball bearings. Hardened steel side guides or lips are adjustable and prevent turning of the saw sidewise.

Adjustment

The lower wheel has a positive, non-changing alignment with the frame of the machine. The upper wheel has a very simple 9-inch vertical screw adjustment fitted with double helical springs for saw tension. Indicator finger and comparative scale is provided to show tension on saw. Upper wheel has an exceedingly delicate screw tilting device for tracking the blade on the wheel. All adjustments are controlled by handwheels conveniently located to the operator.

Safety Guards and Doors

Blade runs in a fully enclosed metal guard at back of machine, which has a narrow slot for inserting saw in same. Saw is guarded at front by the guide post, which forms a U shape around the saw, and also by the L shaped shuttle guard which covers the saw down to the work. Upper wheel is totally enclosed in steel housing, the front half acting on hinges and swinging out for access to wheel. Lower wheel is also totally enclosed and has a two-piece steel door at front swinging on hinges. Upper and lower doors are locked to frame by spring clasps. This is the most completely guarded Band Saw on the market, and all moving parts are covered except that part doing the sawing between the guide and table.

Table

The table is semi-steel 36″ x 40″, 41″ high, made exceptionally deep, cross ribbed for strength and fitted with double rib around the edge to assure rigidity and provide a good hold for form clamps. Table is mounted on two machined rockers and rocker seats (not babbitted) having a tongue and groove fitting and provided with take-up for wear. Table tilts 45 degrees to the right and 5 degrees to the left by means of hand wheel worm and worm gear self-locking enclosed tilting device having index and pointer to automatically register the tilt. Auxiliary table is 22″ x 19″, finished and securely mounted in alignment with the main table when horizontal.

Electrical Control

An enclosed push button switch with overload and undervoltage protection is mounted on the column at the left of the operator and wired to the motor, ready for use.

Countershaft

Tight and loose pulleys for belt drive are self-contained 12″ x 3½″, 600 r.p.m. for wood and 1000 r.p.m. for sheet metal sawing. Belt shifter is self-contained.

Floor Space

Maximum floor space 40″ x 68″. Overall height with wheel at highest position 103″.

Horse Power

Three to five, in accordance with the work.

Equipment

One saw blade ½″ wide, and saw guards.

CODE, WEIGHT, ETC.

CODE	DESCRIPTION	WEIGHT IN POUNDS CRATED	WEIGHT IN POUNDS BOXED	CUBIC FEET
Deludo	No. 115-D — Motor-on-Shaft Band Saw, right hand	3400	4000	130

DEDUCTIONS

Deluf	SINGLE PULLEY DRIVE instead of Motor-on-Shaft.
Delul	SPOKE WHEELS instead of High Speed Disk Wheels.
Delum	LOWER BRAKE — Not wanted.
Delun	TIGHT AND LOOSE PULLEY DRIVE instead of Motor-on-Shaft.
Deluna	ATTACHED BELTED MOTOR Drive, consisting of motor bracket, sliding top, belt, belt guard, mounting of motor, but no motor.