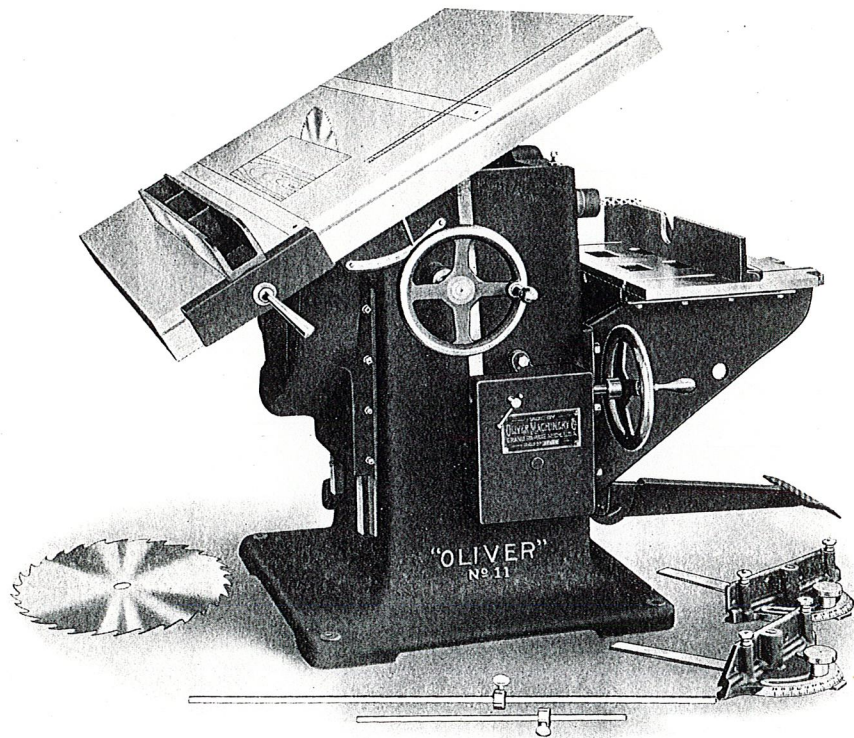
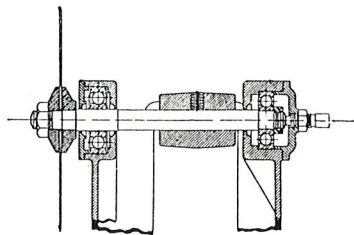


"Oliver" No. 11 Variety Saw Bench

With Hollow Chisel Mortising and
Boring Attachment



"Oliver" New No. 11 Variety Saw
General View Showing Table in Tilted Position



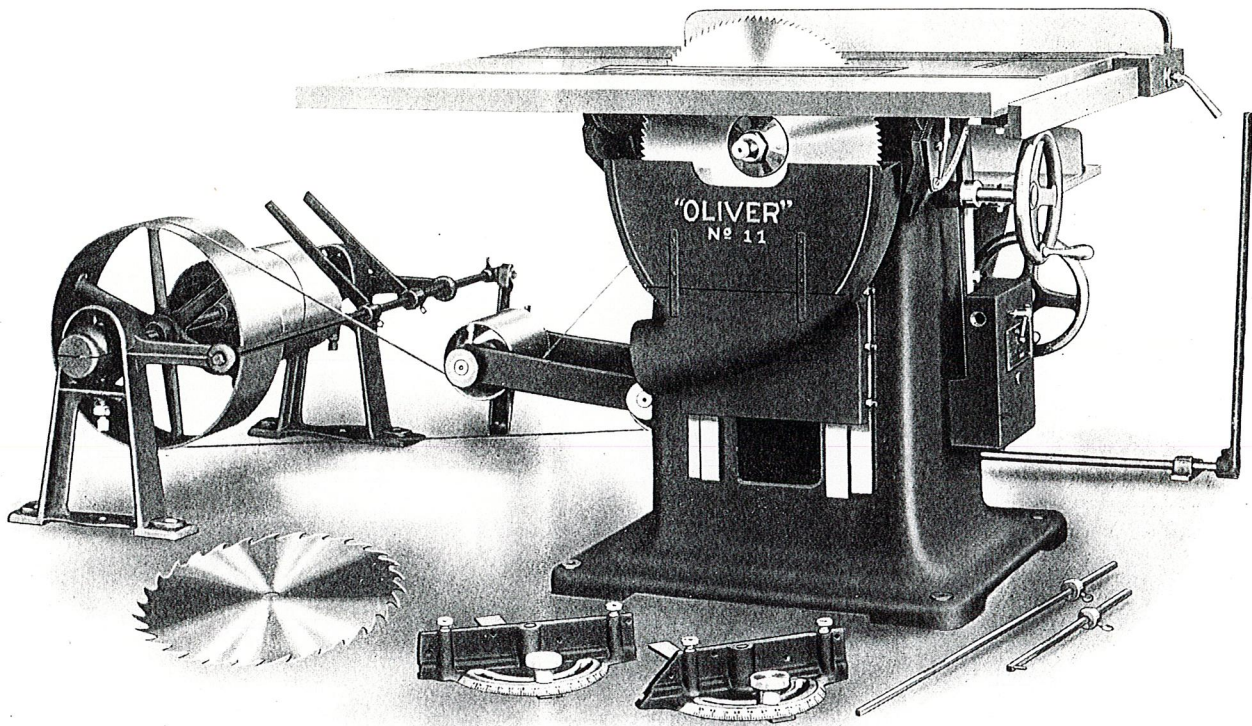
Ball Bearings

Oliver Machinery Co.

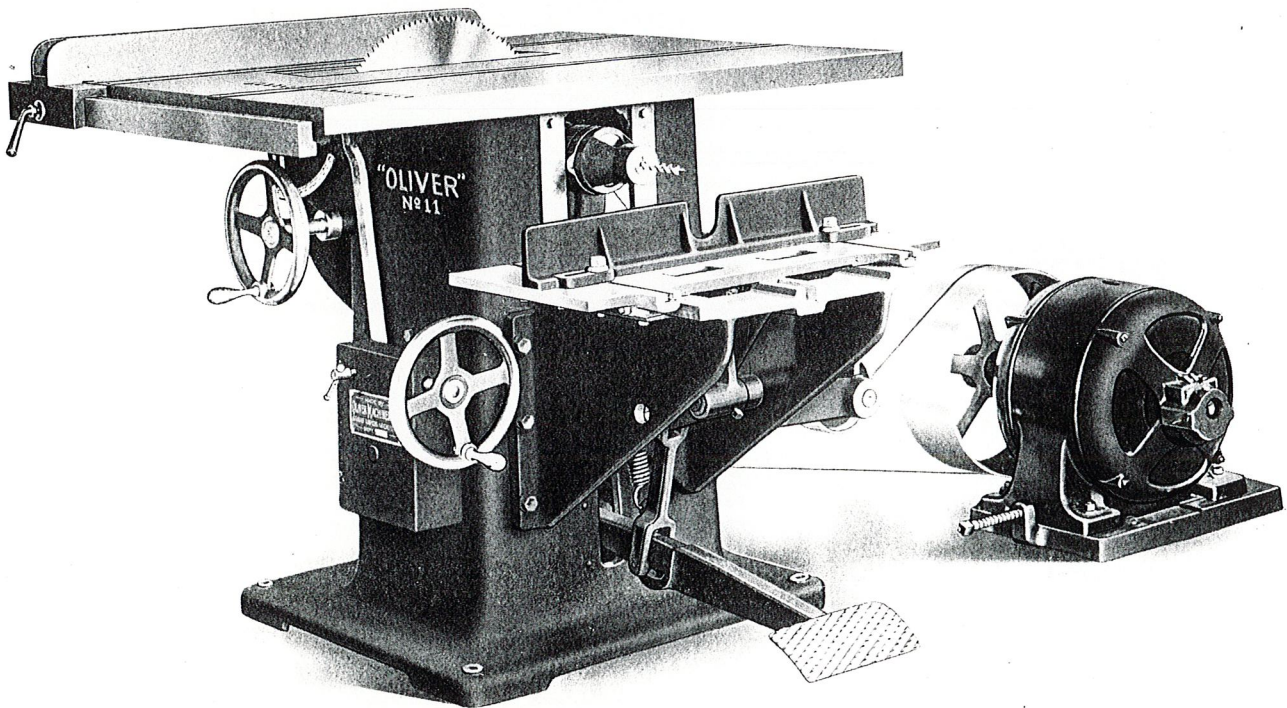
Grand Rapids, Mich., U. S. A.

BRANCH OFFICES:

New York	Chicago	St. Louis	Los Angeles	Berkeley, Cal.
Seattle	Salt Lake City	Denver	Phoenix	Manchester, Eng.



"Oliver" No. 11 Variety Saw Bench—Belt Driven with Countershaft and Belt Tightener



"Oliver" No. 11 Variety Saw Bench—Motor Driven and with Mortising and Boring Attachment

"Oliver" No. 11 Variety Saw Bench

With Hollow Chisel Mortising and Boring Attachments

Carries 18 inch Saws—Mortises up
to $\frac{3}{4}$ inches Square

Introduction This machine is known as our New Improved No. 11 Variety Saw Bench and Hollow Chisel Mortiser. It has gone through the usual process of evolution. Some of the new things are ball bearings, hollow chisel mortising and boring attachments, worm and gear device for tilting the table, and standardized top to take the same miter gauges that are used on our Nos. 60 and 90 Universal Saw Benches.

The No. 11 is a quality machine through and through and strong enough to work up to full capacity on hard woods. Self-locking devices, self-oiling features, fine micrometer adjustment, cut gears and correct workmanship serve to give durability, ease of operation and adjustment.

Utility It has one saw arbor carrying an 18" saw on one end and the other end fitted to use the hollow chisel mortising and boring bits. A dado head 12" in diameter to cut 2" wide may be used upon the saw end of arbor. It will rip 20" wide, cut off 18" wide; saws from 10" to 20" may be used; 18" saw projects through table $5\frac{1}{2}$ ".

Base Is cored one piece casting, heavy, well ribbed, and has ample floor support. The rocker seats which carry the tilting top are cast solid with the base and properly machined to insure perfect alignment and ease of operation.

Table Top Is $39\frac{1}{2}$ " x 48" accurately machined with two parallel slots equi-distant from the saw line which guide the miter gauges. A scale is graduated into the top to determine ripping widths. This in connection with the easy method of setting the plain ripping fence affords convenience to the operator and minimizes danger from using a rule by hand.

Table Tilting Mechanism Operated by hand wheel, worm and worm gear, is self-locking, holding top at any angle up to 45 degrees. All gears covered.

Saw Arbor Crucible steel $1\frac{1}{4}$ " diameter where saw is applied, revolves in high quality ball bearings; arbor pulley is solid steel 5" diameter, $6\frac{1}{4}$ " face. A 2" wide cutter head may be carried between the collars on saw end. The hollow chisel end of arbor is fitted to receive the various boring bits.

Saw Arbor Yoke This is a one-piece casting, including the ball bearing housing, is machined to fit the ways planed upon the face of the column. It has a vertical adjustment of sufficient length to admit of ripping 6" stock with 20" saw, or boring or mortising 7" above the boring table. The adjusting mechanism consists of hand wheel, as illustrated, operating a screw by means of bevel gears.

Hollow Chisel Mortising and Boring Attachments These are operated by foot lever feed, can be used as a plain boring machine or as a hollow chisel mortiser; provided regularly with one $\frac{3}{8}$ " hollow chisel with bit and one $\frac{1}{2}$ " regular boring bit. Will mortise to depth of $3\frac{1}{2}$ ". Width of mortising table, 28".

Boring Attachment Should the hollow chisel attachment not be desired, the mechanism may be operated as a boring attachment in the ordinary way. Deepest depth of boring is 7". Boring and mortising fence is adjustable for angular work.

Oliver Machinery Co.,  *Grand Rapids, Mich.*

Ripping Fence

The ripping fence regularly furnished and highly recommended is the so-called plain double sided type. On a machine of this type and particularly for heavy work for which this machine is admirably suited a plain ripping fence is more accurate, easier handled and, in connection with the tilting table, does all kinds of useful work. It may be used on either side of the saw.

Universal Gauges

Operate in the table grooves as shown on first page. They are graduated to read from 30 to 150 degrees from the line of the saw and may be set accurately. When the gauges are not used, the grooves in the table are filled with steel strips.

Countershaft

Hangers are of ring oiling type. The loose pulley has a self-oiling bronze sleeve. Tight and loose pulleys 10" diameter, 6½" face. Driving pulley 18" diameter, 6½" face. Speed, 600 revolutions per minute.

Motor Drives

These are sometimes preferable to countershaft. We recommend the use of a 5 to 7½ H. P. constant speed motor.

Equipment

This consists of one 18" rip saw, one 18" cross cut saw, one double faced lever-locked ripping gauge, two universal miter gauges, two filling strips for table grooves, and also one ¾" square hollow chisel with bit to suit and one ½" boring bit when mortising attachment is ordered.

Code	No.	Machine	Weight in Pounds		Measure. Cu. Ft.
			Crated	Boxed	
Dagob	11-A	Machine with Mortiser, Borer and Countershaft	2000	2300	88
Dahlia	11-B	Same as above, except without Countershaft	1900	2200	88
Daily	11-C	Machine without Mortising Attachment but with Countershaft	1800	2000	84
Dairy	11-D	Machine without either Mortising Attachment or Countershaft	1600	1900	65

EXTRAS

Daish

One endless leather belt to drive saw arbors.

Daiso

One Special Dado Head and Cutters to work grooves from ⅛" to 2" wide.

Dabzyt

One No. 46 Universal Saw Guard with cast iron tripod stand, counterweights and adjustable hood for use with this machine. Weight, 200 pounds.

