



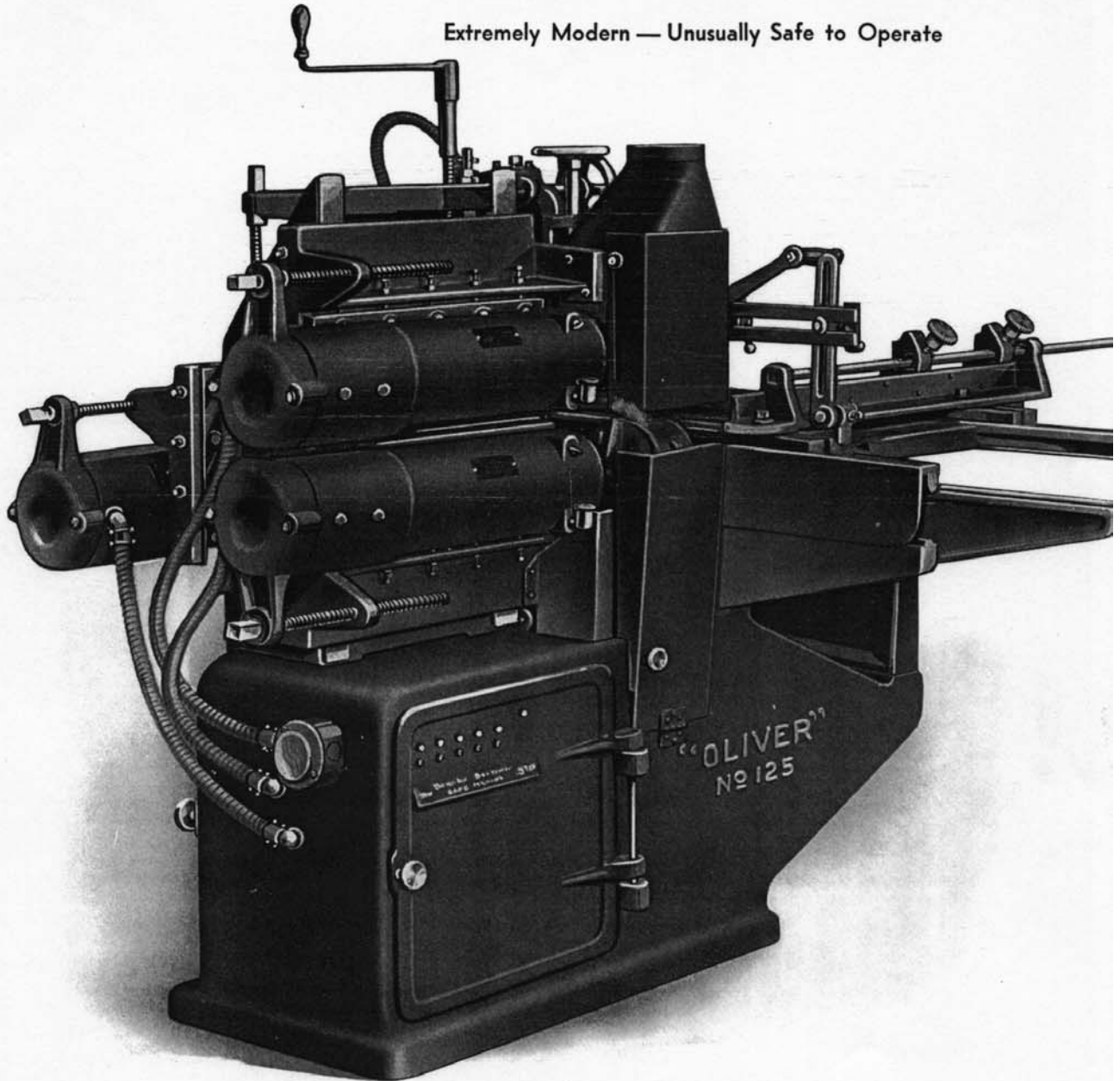
*"Every User
Is a Booster"*

"Oliver" No. 125-D

Universal Motor-On-Arbor

Single End Tenoner

Extremely Modern — Unusually Safe to Operate



"OLIVER" No. 125-D UNIVERSAL MOTOR-ON-ARBOR SINGLE END TENONER
Front View from the Left Side of Machine with Plain Non-Tilting Table.



Ball Bearings of the highest grade are used for the main bearings of this machine. Less Friction—More Power.

Manufactured by

Oliver Machinery Co.

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

BRANCH SALES OFFICES:

Chicago, Denver, Salt Lake City, Seattle, Manchester, E
New York, St. Louis, Minneapolis, Los Angeles, San Francisco

Application

Designed for tenoning, coping and cutting off up to wide stock to lengths used in the production of furniture, cabinets, automobile bodies, implements, chairs, vehicles, talking machines, toys, cars, house trim and finish, sash, doors, blinds and manual training manufacture, or wherever a tenoner of wide range is needed.

Principle

Two tenon heads on horizontal arbors are mounted on front side of a stand placed on a frame which forms the base of the machine. These two arbors have independent horizontal and either independent or unisonal vertical adjustment. Back of these two heads are located the two vertical cope heads, each with independent vertical and horizontal adjustment. On the rear of the stand is mounted a saw arbor in a horizontal position having both vertical and horizontal adjustment. All of the above are driven by individual motors mounted directly on the running arbor. To the right of the stand carrying the heads and arbors is a table with horizontal rolling travel to carry material to be machined.

Features

- 1—Motor-on-Arbor construction applies power directly on the cutting unit, eliminates all unnecessary parts, motor bearings and cutter head bearings become the same.
- 2—Push button control with low voltage protection and overload relay for each motor with provision for simultaneous stopping of all motors, gives maximum safety in electrical control and ease of operation.
- 3—All control mechanism is mounted in a dust-proof enclosed compartment in the base with doors for easy access and all wired in flexible conduit ready for use as soon as the power line wires are connected in the junction box provided at left end of machine.
- 4—All revolving parts are completely guarded, assuring greatest degree of safety.
- 5—All head spindles and saw arbors run in frictionless ball bearings of the most approved type.
- 6—Base is a solid one-piece casting with deep flanges, assuring rigidity.
- 7—Shaving chute and exhaust connection is provided above the top tenon head as well as directly below all the heads.
- 8—Table runs on ball bearings assuring easy operation and perfect alignment.
- 9—Table tilts (when so ordered) up to 15 degrees with screw adjustment and pointer, hence angle and compound tenons for chair back and similar work may be cut without the use of jigs or fixtures.
- 10—In addition to improved spring stops in the center of the table, a stop rod with two swing back stops is mounted on the fence for use on long and heavy work.
- 11—Tenon heads are of circular safety type fitted with reversible spurs and thin high speed knives which do not need to be sharpened as often as the thick laid-up knives.
- 12—Each tenon arbor may carry two heads, front tenon head being tongued into the rear head so that smooth tenons up to 7 inches long may be cut at one sweep.
- 13—Tenon heads can be put on or removed easily because the arbors can be quickly pulled out of the heads or slid back in place.
- 14—Tenon heads have independent cross movement, independent vertical movement and each one may be adjusted vertically in unison with the other. All adjustments are made by screw and wheel micrometer arrangement.
- 15—Cope heads have motors mounted directly on the spindle, eliminating back counter-shaft and twisted belts, saving floor space and expense of renewing belts.
- 16—Cope heads have independent vertical as well as cross movement all adjusted by screws. Cut-off saw attachment has vertical as well as both quick set and micrometer cross movement.
- 17—May carry special heads on all arbors for routing, rabbeting, dovetailing and similar special work. End thrust takeup by micrometer adjustment is provided for all heads and the saw.
- 18—May be easily converted into a saw tenoner by carrying suitable saws on all heads.
- 19—All lubrication is by means of automobile thin oil splash system, assuring good results.
- 20—Unit system of construction is used; all parts are machined in jigs and fixtures assuring absolute interchangeability.

Capacity

Will cut tenons 7 inches long at one cut or 10 inches long by two cuts, 6 inches thick and 24 inches wide; cut off stock 42 inches wide; will make double or triple tenons 4 inches deep; can be used as saw tenoner to work tenons 4 inches long, 6 inches thick and 24 inches wide.

Guards

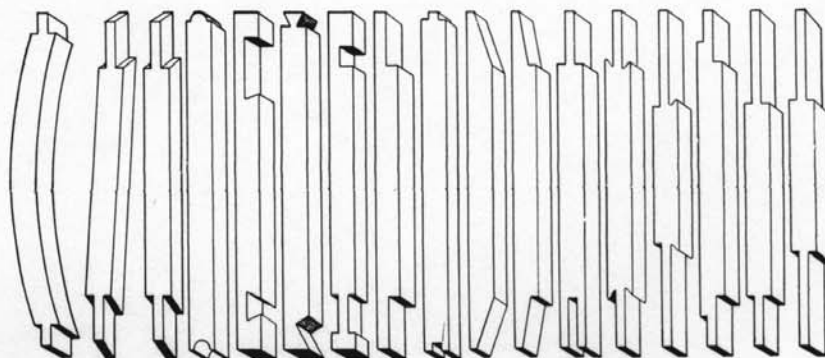
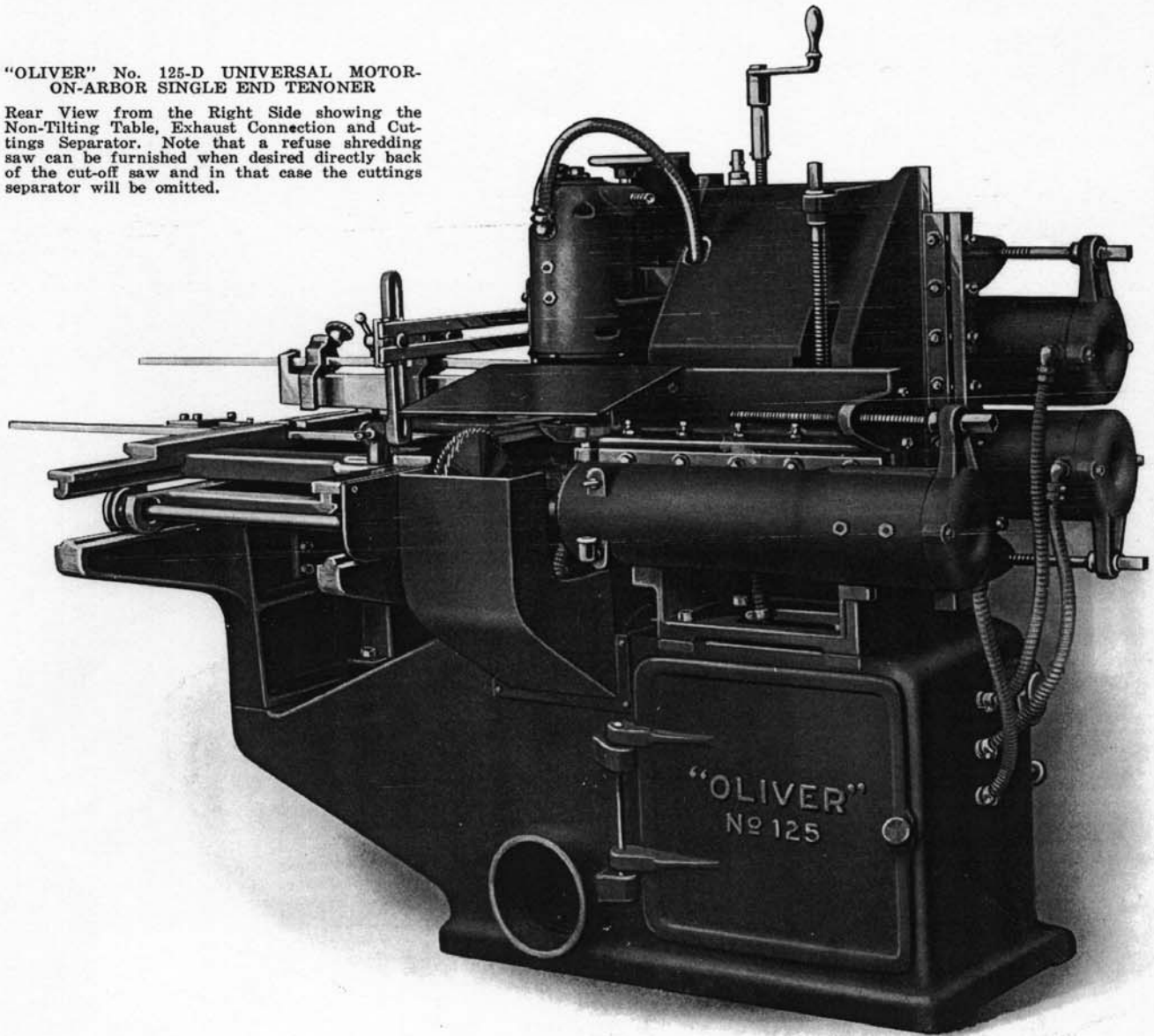
Are provided to cover all cutting heads and saw.

Main Frame

Of machine is made of iron, rigid construction, having large base and dust chute cast in one piece. This frame carries all of the sub units which compose the machine and are interchangeable.

"OLIVER" No. 125-D UNIVERSAL MOTOR-ON-ARBOR SINGLE END TENONER

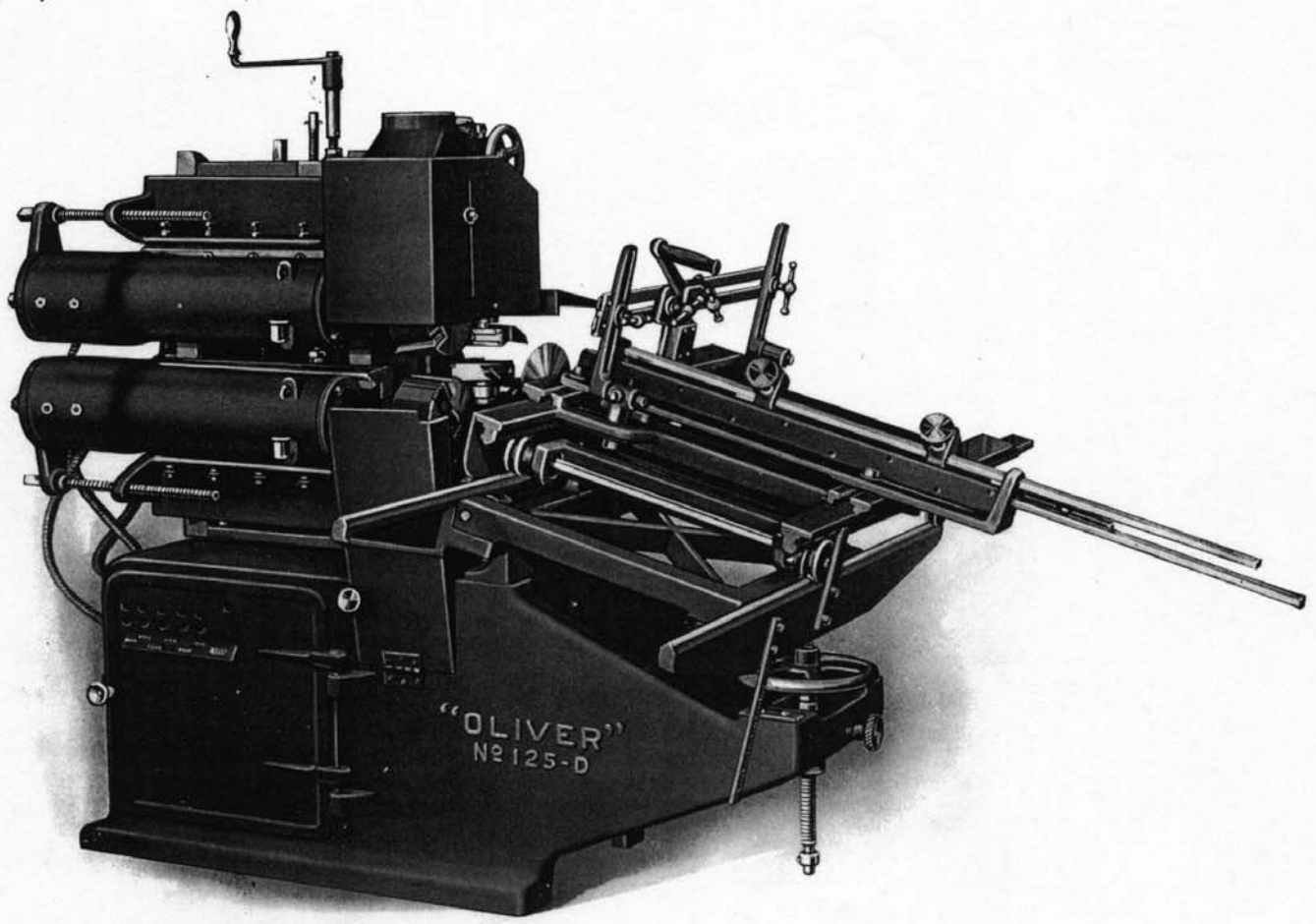
Rear View from the Right Side showing the Non-Tilting Table, Exhaust Connection and Cuttings Separator. Note that a refuse shredding saw can be furnished when desired directly back of the cut-off saw and in that case the cuttings separator will be omitted.



Samples of Work Done on the "Oliver" No. 125 Universal Single End Tenoner

Cope Head Yokes

Are attached to tenon head yokes and adjust with tenon head yokes. Also have independent vertical and horizontal adjustment. Horizontal adjustment is 2 inches, vertical 2 inches. The cope spindles and drive shafts run in ball bearings, which are impervious to wear, run in lubricating grease which prevents cutting and which are encased so completely that no dirt can come in contact with them. The spindles are 1-inch diameter where heads are applied. Cope heads are of the square type with long hook shear cutting knives.



"OLIVER" No. 125-D UNIVERSAL MOTOR-ON-ARBOR SINGLE END TENONER
Front View of Machine with Tilting Table.

Head Stand

Is of rigid construction and carries the head yoke, cope, and saw arbor motor head spindles. It is bolted and pinned to the main frame.

Table

Rolls on roller ball bearings; has a horizontal travel of 44 inches. Will clamp stock 6 inches thick, 24 inches wide. Has a tilting adjustment (when so ordered) for tenoning angle tenons such as chair backs and polygon joints. It also has a fence which can be adjusted to angle; on this fence is a swing stop gauge and the stops can be swung back out of the way as occasion re-

quires. On main frame of table is an automatic stop bar having two disappearing stops which can be set to the work and are used when cutting double end tenons mostly. There is a positive grip clamp rod and shoe to hold the stock while passing through machine.

Tenon Heads

Are of the shear knife circular safety type with the modern self-hardening steel thin knife; the spur knives are of the fluted type, cutting diameter 7 inches, face of front head 3½ inches with spur cutters; face of back head 3½ inches without spur cutters; they have 2-inch holes.

Tenon Head Yokes

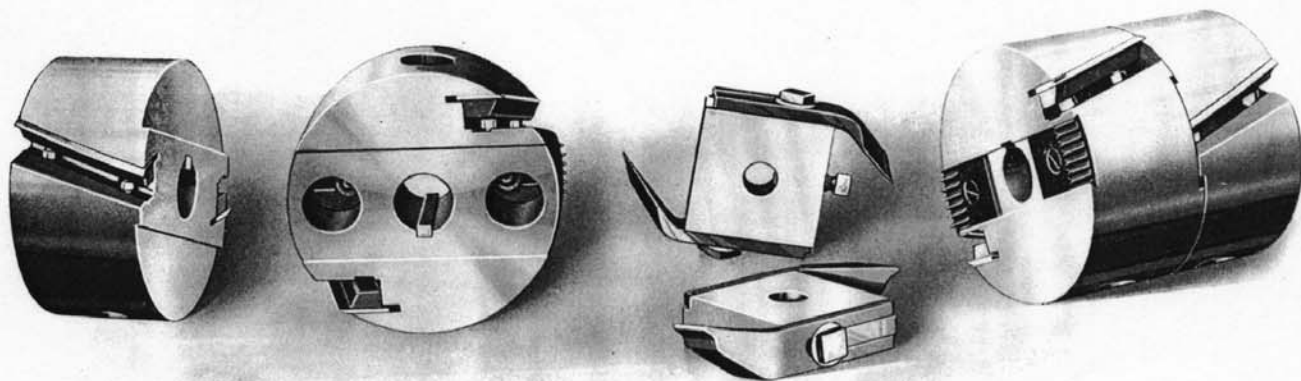
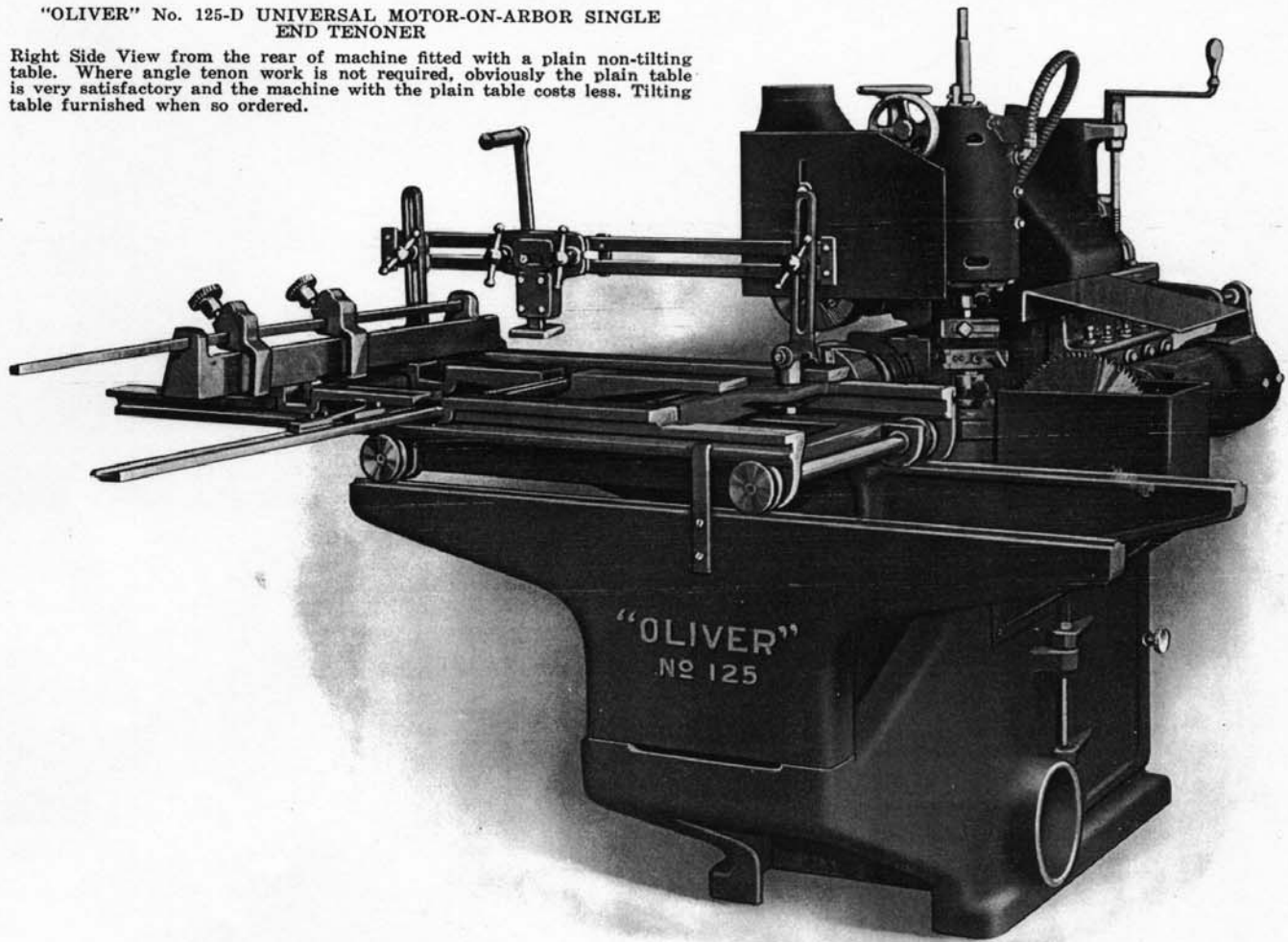
Have both vertical and horizontal adjustment by means of screws and hand wheel. The vertical adjustment is 6 inches and the horizontal adjustment is 4 inches. The spindles, both upper and lower, ride in ball bearings, which are practically impervious to wear and run in a lubricating oil that prevents cutting, and which are encased so completely that no dirt can come in contact with them. The spindles are 2 inches diameter where heads are applied. The head yokes adjust vertically on the head stand which is bolted to main frame of machine.

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END TENONER

Right Side View from the rear of machine fitted with a plain non-tilting table. Where angle tenon work is not required, obviously the plain table is very satisfactory and the machine with the plain table costs less. Tilting table furnished when so ordered.



Tenon and Cope Heads used on "Oliver" No. 125-D Universal Single End Tenoner. Note methods of tongue and grooving Front Tenon Heads to the Rear Ones; Reversing Spurs, Thin High Speed Knives and Decidedly New and Smooth Cutting Cope Heads.

Cut-Off Saw Yoke

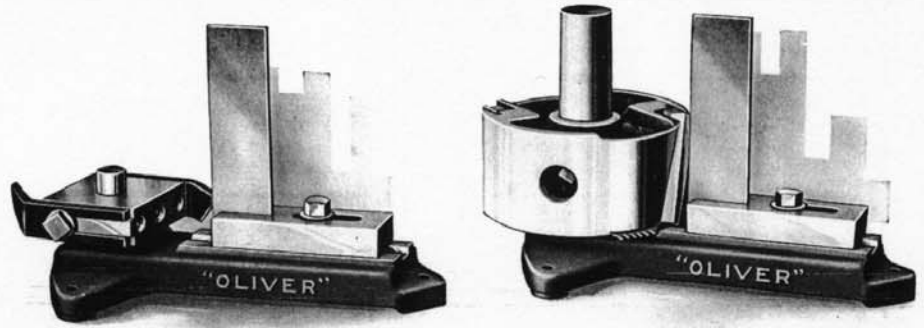
Is attached to rear of head stand. The advantage of this is that machine can be used for cutting and edging wide stock such as table tops and ends of framings, and by

the use of lower tenoning head on the saw arbor wide cross grain rabbets and grooving can be done. Saw arbor runs in ball bearings which are impervious to wear and are encased in dust proof mountings.

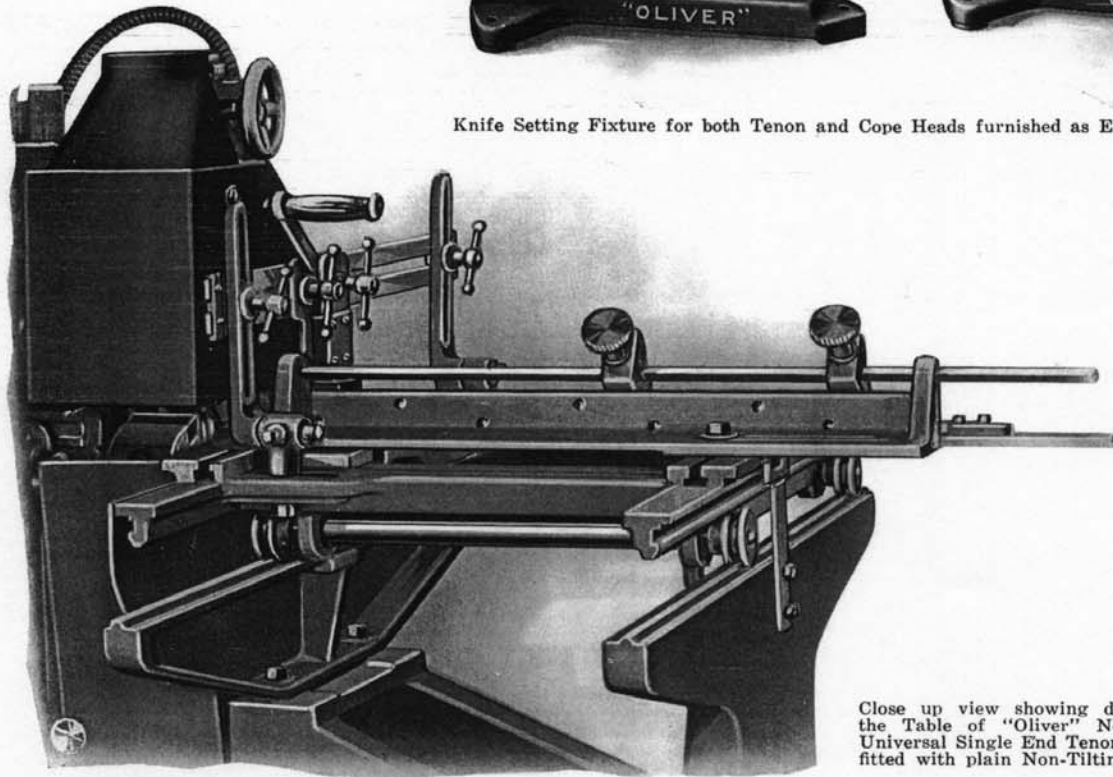
It is 1½ inches diameter where saw is applied. The arbor also has micrometer horizontal adjustment of 2 inches and vertical adjustment of 3 inches controlled by screw and hand wheel.

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NO. 125-D "OLIVER" UNIVERSAL SINGLE END TENONER



Knife Setting Fixture for both Tenon and Cope Heads furnished as Extra when so ordered.



Close up view showing details of the Table of "Oliver" No. 125-D Universal Single End Tenoner when fitted with plain Non-Tilting Table.

Motor Direct to Spindles

This machine is equipped with individual two or three phase, 60 or 50 cycle A. C. motors built in on each spindle giving the most direct application of power and eliminating all belts, idlers and countershafts. Re-

quired motors would be two 2 h.p. motors for tenon spindles, two 1 h.p. motors for cope spindles, and a 2 h.p. motor for the saw arbor—all 3600 r.p.m. All motors are controlled by individual push button remote control magnetic switches with overload relay and low voltage

protection located in base of machine in dust-proof cabinet and wired through push buttons on the front door to junction box on outside—making unit complete ready for use with master push button to stop all motors at one time if desired.

CODE	MACHINE DESCRIPTION	WEIGHT IN POUNDS		CUBIC FEET
		CRATED	BOXED	
Fahad	No. 125-D Universal Motor-on-Arbor Single End Tenoner having a 2 or 3 phase, 60 cycle, 220 volt or 440 volt, 3600 r.p.m. motor of proper size built directly on arbors of both tenon heads, both cope heads and the cut-off saw attachment, making five built-in motors in all and including Safety First Enclosed Switch for each motor and plain table.....	2700	3200	133
	EXTRAS			
Fahed	Tilting Table in place of Plain Table, very strongly recommended.....	.....	.....	.....
Faheg	2 h. p. Motor on Cope Heads instead of 1 h.p.....	.....	.....	.....
Fahek	Extra Tenon Head for extra long tenons, no spurs, each.....	30	30	.....
Fahem	Knives for Tenon Heads, plain, per pair.....	.....	.....	.....
Fahen	Spurs for Tenon Heads, per pair.....	.....	.....	.....
Fahep	Knives for Cope Heads, any shape desired, per pair.....	.....	.....	.....
Faher	Tenon Cut-off Saw 10" dia.....	.....	.....	.....
Fahes	Knife Setting Fixture for both Tenon and Cope Heads.....	.....	.....	.....
Fahet	Grinding Gauge for determining correct shape of tenon knife.....	.....	.....	.....
	DEDUCTIONS			
Fahib	Cut-off Attachment with 10-inch saw, Motor-on-Arbor type.....	50	50	.....
Fahik	Cope Heads, either upper or lower, each.....	50	50	.....

