

# CRESCENT T-3

*Direct Motor Drive*

# TENONER



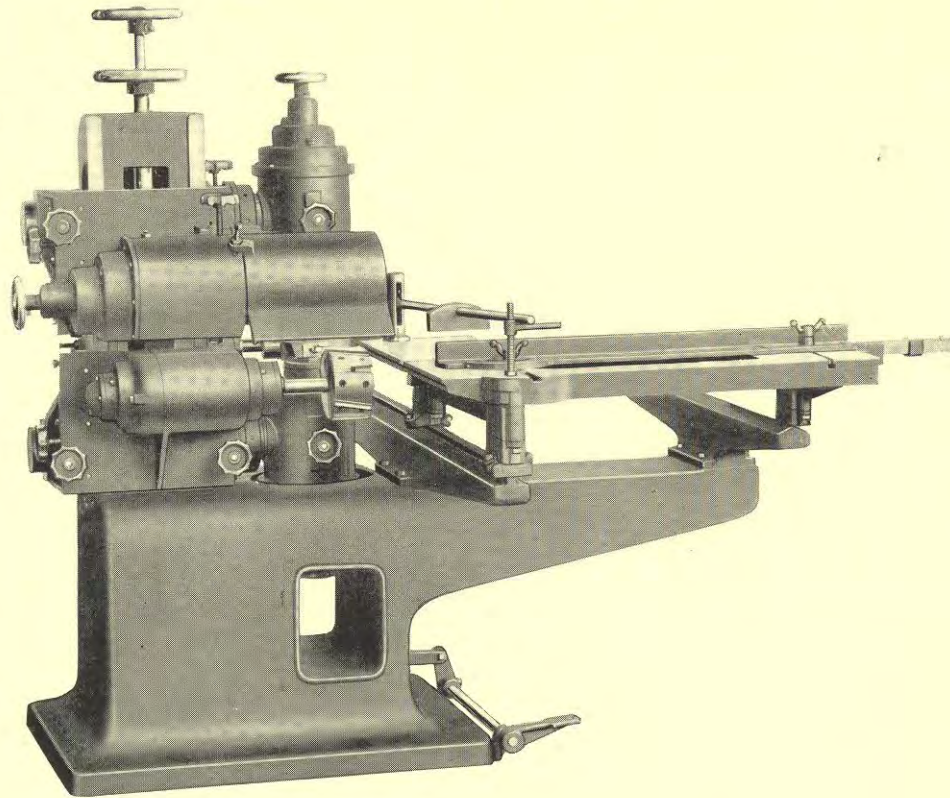
THE CRESCENT MACHINE COMPANY

LEETONIA, OHIO, U. S. A.



## Crescent Single End Tenoner

WITH BUILT-IN MOTORS



**B**ELTS and their attendant annoyances are completely eliminated from the CRESCENT ball bearing, single end tenoner, with built-in motors. The workmanship throughout is in keeping with modern practice in high-grade machine tool construction, and it is only because of our excellent manufacturing facilities that we are able to build this tool at such a moderate price. The machine is compact, entirely self-contained, and requires a floor space of only 72 inches square. The motors have interior fans for ventilation. The armature shafts form the spindles for carrying the cutter heads and the cut-off saw. Each spindle is mounted in self-aligning ball bearings, completely enclosed in dust-proof cases, which are provided with self-closing oil hole covers to exclude dirt and to insure proper lubrication. The ventilating openings of the motors are covered with fine wire screen to exclude chips and at the same time to permit motors to run at proper temperature.

**A Hinged Guard** that may be swung out of the way when setting knives tends to protect the operator and directs the shavings toward the floor.

To see the machine in operation is to become thoroughly impressed by its adequate efficiency. The ample power of the motors used to drive the various cutters permits the machine to be operated at maximum capacity without overheating. The rigidity of the heavy base, with its supporting column and the quiet, steady running motors, together with the extreme ease of operating the rolling table, are features that will be especially noted and appreciated by those who are familiar with the operation of tenoning machines. The simplicity and ease of making all necessary adjustments and of holding them in place are features that will be given careful consideration by the intending purchaser.

**The Base** is cored out hollow, cast in one piece. It is designed so as to rigidly support the working



parts and the table without any tendency to vibration. The substantial, rectangular column, to which is gibbed the heavy bracket that carries the motors for tenoning and coping cutters, is properly ribbed and braced and is securely bolted to the base. This makes a compact, substantial unit, insuring a steady running machine capable of turning out vast quantities of accurate work. Adjustable gibs are provided for taking up wear between the column and bracket.

**Tenoning and Coping Assembly**, consisting of four motors and their cutters, may be vertically adjusted by turning the handwheel at top of column and may be securely locked in position by the screw and handwheel provided for the purpose.

**The Tenoner Heads** are attached to the shafts of  $1\frac{1}{2}$  horsepower motors running 3600 R.P.M., and have simultaneous adjustment of 4 inches to suit for location of tenon. The upper tenoner head has independent vertical adjustment of 3 inches to provide for varying thickness of tenons. The motor that drives the upper tenoning cutter has lateral adjustment of  $1\frac{1}{2}$  inch to suit for cutting off-set tenons.

**The Coping Cutters** are attached to the shafts of  $\frac{3}{4}$  horsepower motors running 3600 R.P.M., and have simultaneous vertical adjustment of 4 inches. Each coping cutter has independent vertical adjustment of  $1\frac{1}{2}$  inch to suit for various thickness of material and a lateral adjustment of  $1\frac{1}{4}$  inch.

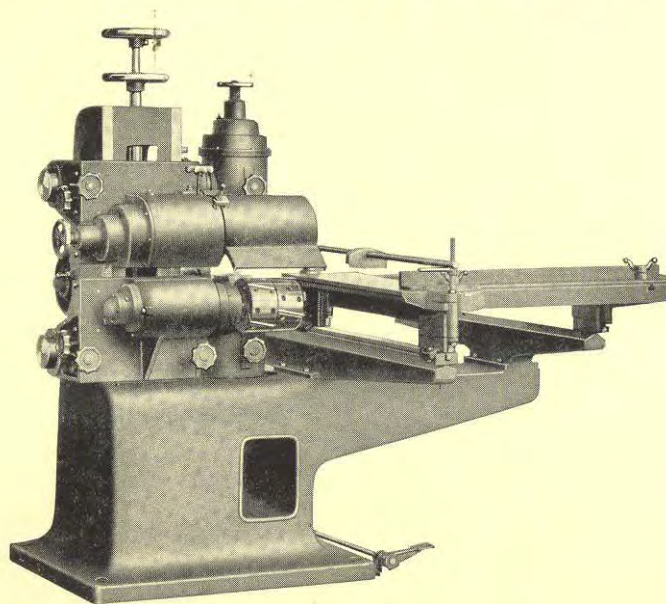
**Locking Devices**, consisting of screws and handwheels, hold the different motors securely in position once they are properly adjusted for the work to be done.

**The Table** is light running, of rigid construction, and is mounted on cored-out hollow machined rails. Roller bearings on the top and bottom of the rails reduce friction so that the table may be moved with a minimum of effort on the part of the operator. The rollers that bear against the lower sides of the rails keep the table always in proper alignment and are provided with eccentric axles for adjustment, so as to take up any possible wear. The table is provided with a fence that may be adjusted to an angle of 45 degrees, either right or left, and suitable scale and pointer indicate the angle. Two steel bars with stops are placed in a groove in the table and may be shifted to suit for gauging the length of tenons.

**The Clamping Lever** for holding stock down on the table is provided with a lock as a help in holding heavy work. This device will clamp stock up to 6 inches thick, and the table will accommodate stock up to 24 inches wide.

**The Machine** is regularly furnished with one CRESCENT patent round safety tenoner head for each horizontal spindle and will cut tenons up to  $3\frac{1}{4}$  inches long. By passing the material through the machine a second time tenons of a maximum length of  $6\frac{1}{2}$  inches may be cut.

*(See back page for Dimensions and Regular Equipment)*





# T H E   C R E S C E N T   M A C H I N E   C O M P A N Y

## DIMENSIONS

Length of Table.....	29 in.
Width of Table.....	36 in.
Machine will tenon up to.....	20 in. wide
Machine will cut off up to.....	20 in. wide
Tenoning Heads 6½ in. dia. will open to receive lumber.....	3 in. thick
Maximum Distance between center of Tenoner Cutters.....	9½ in.
Minimum Distance between center of Tenoner Cutters.....	6½ in.
Maximum Distance between Coping Cutters.....	4½ in.
Minimum Distance between Coping Cutters.....	¼ in.
Tenoner Heads.....	6½ in. dia. 3¼ in. face
Coping Heads.....	6 in. dia. x 1¼ in. face
Diameter of Tenoner Spindle Tapered to.....	1¼ in.
Diameter of Coping Head Spindle.....	1 in.
Diameter of Cut-off Mandrel.....	1¼ in.
Height of Table from Floor.....	36 in.
Height over all.....	65 in.
Floor Space.....	72 x 72 in.
Domestic Shipping Weight.....	2,500 lbs.
Gross Weight, Boxed for Export...	3,200 lbs.
Cubic Measure, Boxed for Export...	150 ft.
Net weight.....	2,055 lbs.
Code Word, Machine with 60 Cycle, 220 Volt, 3 Phase Motor.....	ANELA

## REGULAR EQUIPMENT

Two 1½ H.P., 3600 R.P.M. motors for driving tenoner cutters, one round safety tenoner head complete with knives and lead cutters for each spindle, two ¾ H.P., 3600 R.P.M. motors for driving coping cutters, two coping heads with cutters and ¾ H.P. motor for driving cut-off saw and one 10 inch cut-off saw.

Each motor is provided with independent push button starter, so any cutter may be operated independently of the rest of the machine. A master control operated by push button makes it possible to stop all motors at one time when necessary. Unless otherwise specified, machine will be equipped with 220 volt, 60 cycle, 3 phase motors.

**Special Electrical Equipment.** Machine may be furnished with 110, 440, 550 volt, 60 cycle, 2 or 3 phase motors when so ordered.

