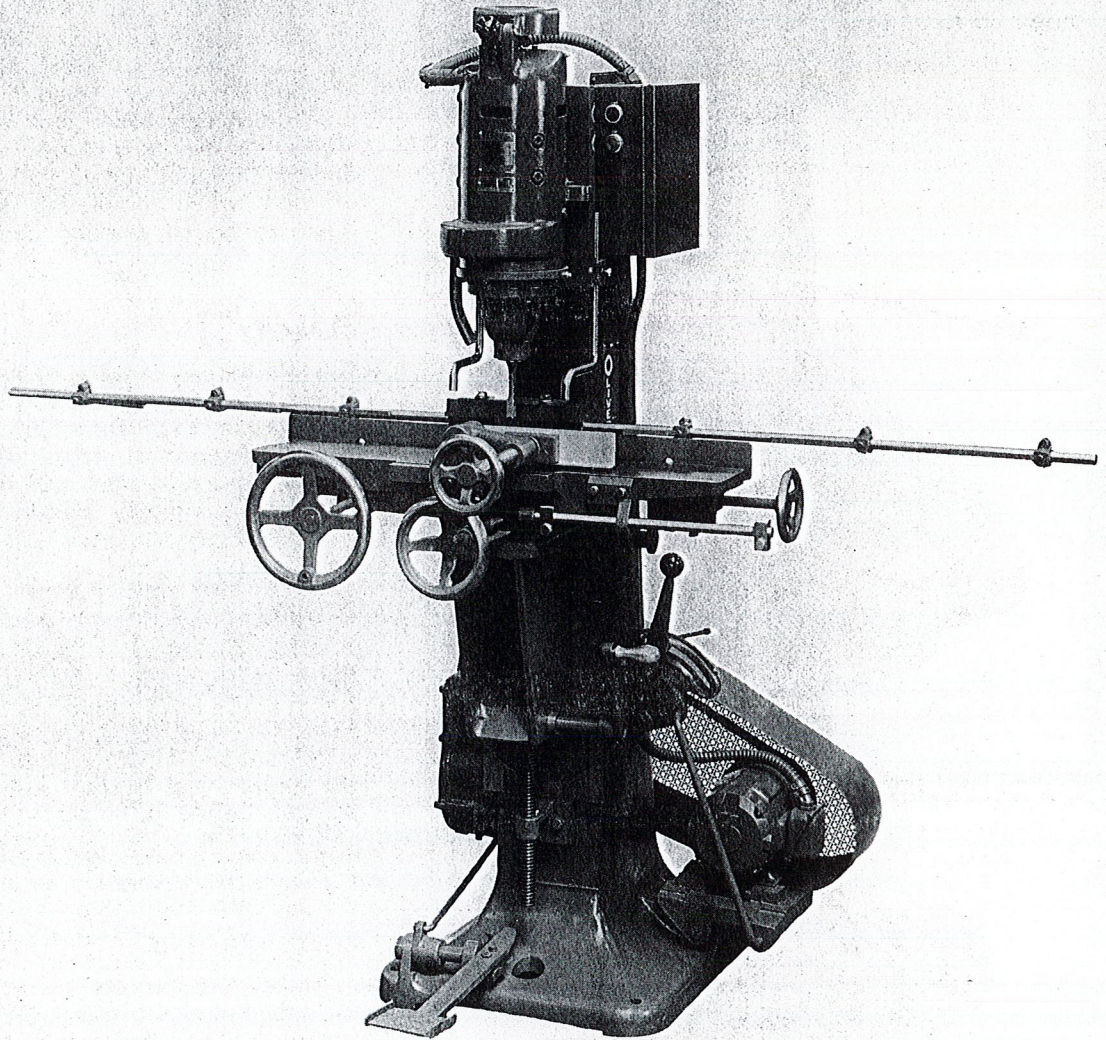


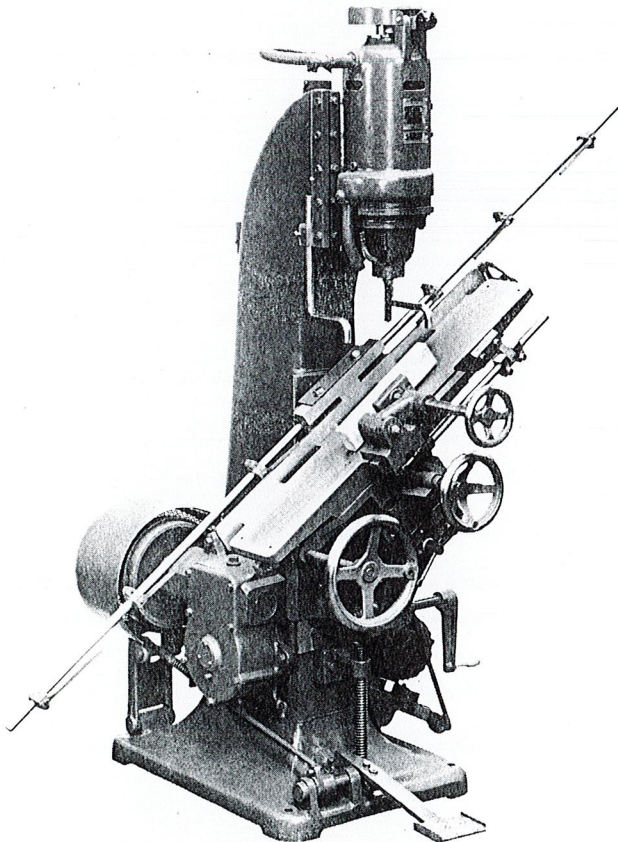


OLIVER
No. 92 Power Feed
Vertical Hollow Chisel Mortiser



FEATURES

The No. 92 Power Feed Vertical Mortiser has a newly designed head with fan integral with ball bearing motor and hand brake. The hand lever adjustment for depth of mortise is a time-saver. Each motor has individual push button control with overload and under-voltage protection. Has adjustable swing-type clamp. Adjustable stops control mortise length. A universal compound table has vertical and horizontal adjustments. A hand shift lever controls rate of feed from 16 to 40 strokes a minute. Head and table operate in adjustable gibbed ways. The ball bearing head and feed motors are easily lubricated. A foot lever controls the vertical movement of the mortising head. The mortising head motor takes chisels up to 1" square.



No. 92-D Mortiser with universal compound table with tilting feature.
Available on special order only.

ADAPTATION

This Mortiser meets the always-present demands for greater production and accuracy than is possible with old foot-feeding devices. The No. 92 is particularly adapted for use in wood-working factories making quantity lots of cabinets, sash and doors, furniture, etc. The improvements will be recognized by knowing woodworkers.

DESIGN

Several new features have been incorporated into this Mortiser. The variable speed transmission for feed strokes has a quick return. A new twin ball bearing clutch furnishes a positive drive. Has silent V-belt drive from ball bearing motor. New head construction has a ball bearing fan cooled motor. Spindle is equipped with quick detachable tool holders. Number of power strokes per minute is clearly indicated. At rear of machine another indicator shows short, medium or long position of chisel when completing down stroke. A removable guard covers all working parts at rear of machine.

CAPACITY

This Mortiser is capable of handling chisels from 1/4" to 3/4" in hardwood, 1" in soft wood. The stroke can be regulated in length from 2 1/2" to 4". Stock up to 6" wide can be clamped on table. Hollow chisels with 4-inch blades mortise in stock 12" high. Chisels with 2 3/4-inch blades are commonly used in 1/4-inch and 5/16-inch sizes.

COLUMN

A hollow, box type, heavily ribbed casting has a wide flanged floor support accurately machined on the bottom surface. The floor support is drilled to take four anchor bolts. The head, table, etc. are bolted to the column and rigidly supported. The power-feed mechanism — except the motors and transmission unit — is enclosed and securely bolted to the sides of the column.

MORTISING HEAD

The head reciprocates on adjustable gibbed ways that allow the spindle to travel 2 1/2" to 4" vertically. Directly back of the head the length of stroke is indicated. Stroke length can be changed by a hand crank attached to the end of the screw shaft or rocker arm. The rotor of the motor is mounted directly on the spindle. This spindle rotates at 3600 r.p.m. on two large ball bearings. It is bored out to fit the adapter of various size bits. The bit adapter is a closed end type with a screw collar to adjust bit to chisel. The chisel adapter, fastened to the lower end of the head, is centered with a tongue and groove arrangement which locates it concentric with bit and spindle. The chisel bushing is a split sleeve with a collar to act as a positive stop for the chisel. A set screw on a milled flat tightens the sleeve and prevents chisel from turning.

FOOT LEVER

The clutch is operated by a foot lever at the front of the column. This lever directly controls the vertical movement of the spindle. When the operator's foot is placed on the lever, a slight movement to the right engages a locking device and holds the pedal down, allowing a continuous movement of the spindle. A slight movement to the left disengages the lock, and automatic feeding ceases.

HEAD MOTOR

The ball bearing fan-cooled motor for the mortising head is totally enclosed in a one-piece casting. It is rated 5 h.p., 3600 r.p.m., 3 phase, 60 cycle, 230/460 volt A.C. A blower fan with an exhaust pipe is built into the frame. It supplies a constant blast of air to cool the motor and tools, and keep the work free from chips. A hand operated brake, located at upper end of motor head, quickly stops the boring spindle when desired.

FEED MOTOR

The ball bearing motor is easily lubricated. It is rated 1 h.p. 1200 r.p.m. Mounted directly on the armature is a variable pitch pulley with V-type belt to drive the clutch pulley. A metal guard encloses the drive mechanism.

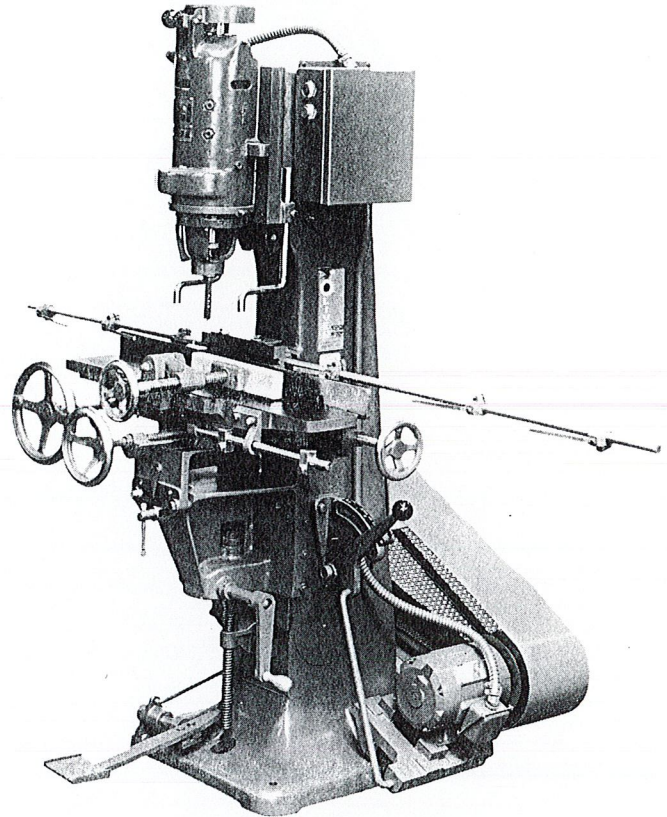
TABLE

A universal compound table 6" wide and 36" long is made of semi-steel machined on three surfaces. It has a gib with adjustment for correct sliding fit, and a removable screw clamp that slides in a groove on the table with hand wheel adjustment for holding stock. The table moves horizontally by a rack and pinion attached to a hand wheel. This movement can be accurately gauged by two adjustable stops to accommodate a mortise 13" long. There is also a hand wheel and screw for a 4-inch cross traverse movement of the table. This also assists in lining up the work with the chisel. A hand crank, turning two spiral gears fastened to a screw shaft, moves the table in a vertical direction on a dovetail. A movable gib assures correct sliding fit. A locking device holds the table at the desired height. The table is also fitted with a vertical adjustable back fence with a lip hold-down and carries a 6-foot stop rod with six spring stops for automatically locating mortises on the stock. A rod with adjustable stops in front of table governs the length of mortises. Two swinging holddown fingers, fastened to the column by bolts and held in position by set screws, project over the table and prevent work from climbing up when the chisel recedes.

A table can also be furnished on special order to tilt 45 degrees right and left. The degree of tilt is accurately indicated at the front of the machine.

ELECTRICAL PARTS

Each motor is controlled by individual automatic push button starters with overload and under-voltage protection.



Right side view of the Oliver No. 92-D Motor-in-Head Power Feed Mortiser with 5 h.p. head motor for heavy duty work. Tilting table, as shown, available if required.

CLUTCH AND TRANSMISSION

The Power Feed Mortiser has a cone type clutch revolving on double ball bearings lubricated by a fitting in the top flange. It has cast iron friction surfaces of ample dimensions. The contact tension is supplied by a steel spring mounted on the rear of the clutch adapter shaft, and held on this shaft by a steel collar securely locked with a set screw. When the operator steps on the foot lever the clutch is engaged allowing the spindle to move in a vertical direction. Any speed from 16 to 40 strokes a minute is transmitted to the spindle and is easily changed by a convenient lever on the right side of the column. The worm shaft turns on ball bearings.

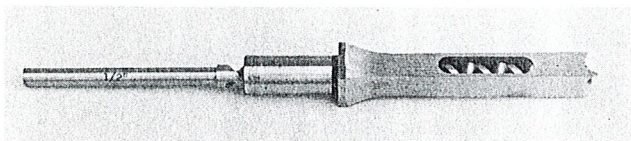
The worm gear shaft has heavy bronze bushings, easily lubricated. All working parts are accessible and interchangeable.

EQUIPMENT

This Mortiser is regularly fitted with a 1/2" square, 4" long hollow chisel with bit, a set of chisel and bit bushings, a 6-foot layout stop rod with six spring stops.

FLOOR SPACE

The base of this machine covers 22" by 30"; actual operating space, 44" by 54". Overall height, 6 feet.



SQUARE HOLLOW CHISEL AND BIT TO SUIT
Furnished any size 1/4" to 3/8".

Suggested sizes of 4-inch Blade Hollow Chisels — 3/8" x 3/8", 3/8" x 1/2", 1/2" x 1/2", 5/8" x 5/8", 3/4" x 3/4".

Suggested sizes of 2 1/2-inch Blade Hollow Chisels — 1/4" x 1/4", 3/16" x 3/16".

Sash and Door Plants

In Chair Work

In Furniture Factories

Specimens of stock finished by the Oliver Mortiser on a production basis.

SPECIFICATIONS

TABLE

6" wide by 36" long, non tilting.
12" vertical adjustment; 12 1/2" horizontal adjustment. 4" cross travel adjustment.

MOTORS

5 H.P., 3600 RPM; 3 phase, 60 hertz, 230/460 volt head motor.
1 H.P., 1200 RPM; 3 phase, 60 hertz, 230/460 volt feed motor.

CONTROL

Push button magnetic, giving overload and low voltage protection.

CAPACITY

From 1/4" to 3/4" in hardwood, to 1" in softwood. Maximum stock thickness 12". Stock to 6" wide can be clamped on the table.

POWER FEED

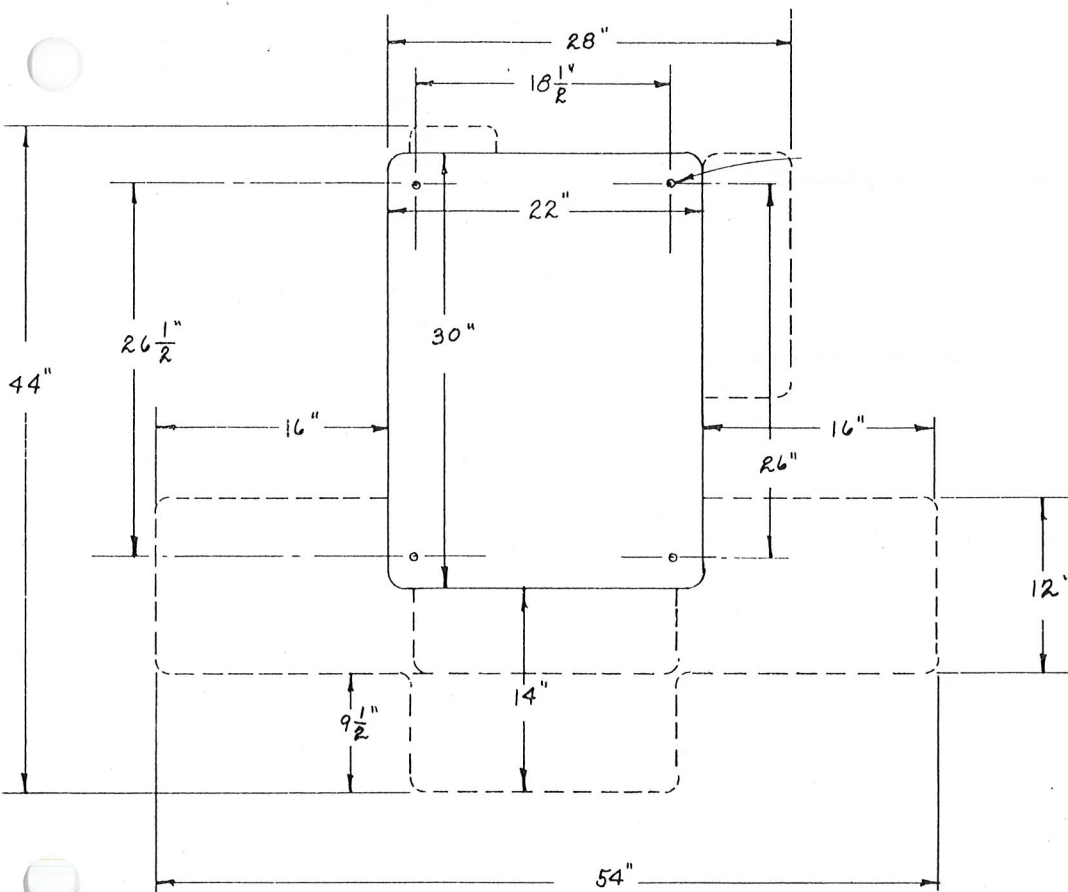
16 to 40 strokes per minute. 2 1/2" to 4" stroke length.

STANDARD EQUIPMENT

6 foot layout rod with 6 spring stops;
1/2" hollow chisel with bit.
Set of chisel and bit bushings.
Magnetic control.

OPTIONAL EXTRAS

Tilting table.
Chisels and bits as required.
Single bit adapter for boring.
CRATED WEIGHT — 1500 pounds.



MAXIMUM TRAVEL OF TABLE

(All specifications subject to change without notice)

OLIVER MACHINERY COMPANY, GRAND RAPIDS, MICH. 49504

TELEPHONE NO. 616-456-1591

TELEX NO. 22-6483