

**S.A.WOODS  
MACHINE CO.**

**BOSTON, MASS.  
U. S. A.**


**WOOD-WORKING  
MACHINERY**



## NO. 141 DROP TABLE VARIETY MOULDER

Table Dimensions Both Sections	Weight in Pounds	Floor Space	Tight and Loose Pullers			Code Word
			Diam.	Face	R. P. M.	
40" X 56"	3000	4' 8" X 10'	10"	5"	1075	Culvertin

### Patent drop table.

Permits of retaining the cutters  on the spindles and provides for a range of work beyond any other machine.

### Broad base.

Insures rigidity.

Drop table securely gibbed to frame and supported on two screws.

Taper spindles prevent lifting, no vibration, provision for taking up wear.

Detachable spindles if desired.

Each spindle independently controlled by a hand wheel on front of machine.

Patent bronze boxes.

With forced lubrication.

Removable filling-in collars for table.

Self-contained countershaft.

New adjustable tighteners.

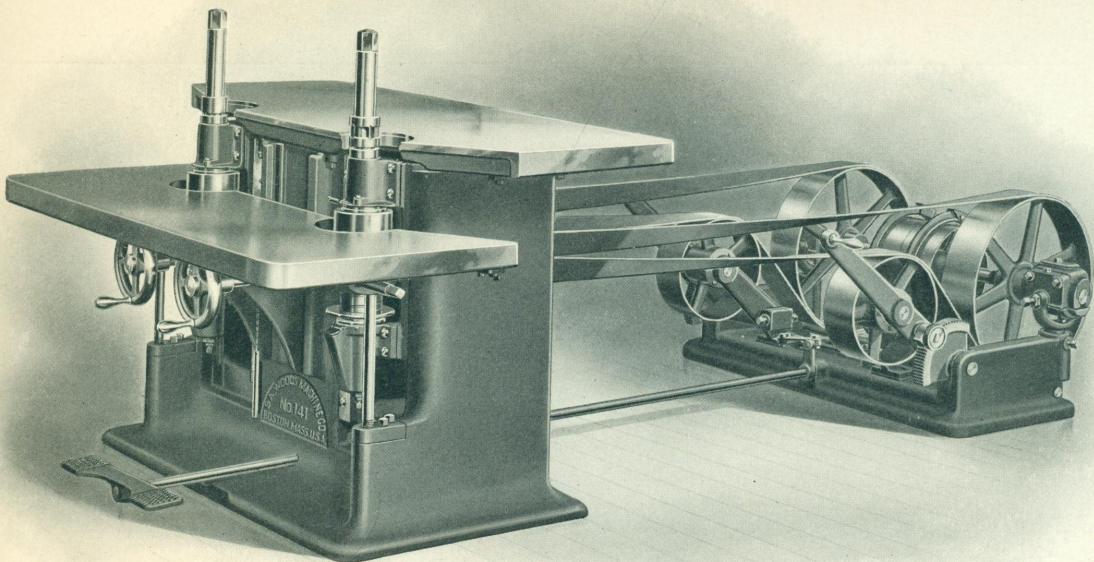
Permit of instantly releasing or tightening the belts.

Extreme height of spindles above fixed table, 9 3/4".

Drop of table, 7 1/2".

Belt shipper controlled by foot treadle.

Features  
of  
Construc-  
tion



General description following  
Pages 134 to 138



## VARIETY MOULDER

A Distinctive Machine

### *Variety Moulder*

OUR drop-table variety moulder is a distinctive creation. To begin with, it is the only drop-table moulder built. The spindle construction, with its patent lubricating system, is characteristic, and the general design of the machine is of a high order.

The Frame

The frame is cast in one piece with a broad base, providing a rigid foundation for the working parts and freedom from vibration.

### *Patent Drop Table*

Our patent drop table adapts this machine to fluting columns, working stair ramps, and shapes of greater curve or sweep than can be handled on any other moulder.

Table in Two Sections

The table is in two sections, one half being fastened directly on the frame and the front section resting on two large steel screws in combination with a supporting bracket which is gibbed to the main frame at the front, thus providing a means for locking at any point of the vertical travel. This front section can be lowered seven and one-half inches below the level of the fixed table, the adjustment being controlled by a crankshaft on the right-hand side of the machine directly under

## VARIETY MOULDER

the table, which operates the two supporting screws.

On fixed table moulders it is necessary to locate the cutters near top of spindles to permit of working shapes of unusual curve or sweep. This naturally results in vibration (the spindles revolving upwards of five thousand revolutions per minute) and imperfect work, which under such conditions cannot be overcome.

With our patent drop table the cutters remain close to the boxes, at all times securing the greatest rigidity. This construction also permits of taking exceptionally heavy cuts without springing the spindles.

### *The Spindles and Patent Boxes*

The spindles are manufactured from hardened tool steel, balanced and finely finished by grinding. The upper bearing is tapered, and lost motion or wear is eliminated by end adjustment of the spindle in its boxes. The taper portion of the spindles being smallest at the top overcomes the difficulty, common heretofore, of their lifting or rising under heavy cuts or heating. The spindles ordinarily are made to "run out," or in other words, revolve toward the operator as

Advantages of the Drop Table

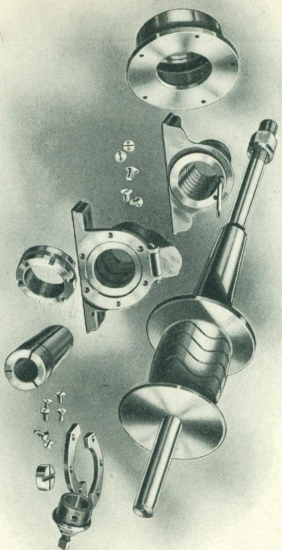
The Spindles



## VARIETY MOULLER

The cutters pass one another, but may be made to run in if desired.

**The Spindle and its Boxes Detached**



The boxes are of phosphor bronze, and the method of lubrication is such that the bearings are supplied with a continuous flow of oil as long as any remains in the reservoirs.

The oil reservoir or chamber is fastened to the top of the pulley and revolves with it. The lower end of the box enters into this chamber, and a projecting tube with its opening directed against the oil, which is revolving with the pulley, conveys the oil to the top of the box where it meets the journal and is then returned by grooves to the reservoir. A small throttling screw is provided for controlling the flow of oil through this tube.

## VARIETY MOULLER

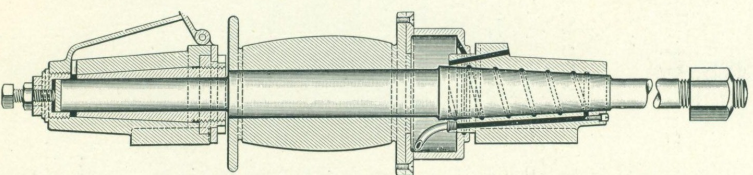
The oil reservoir is of large capacity and can be filled while running. There can be no escape of oil.

The bottom box is fitted with a taper bronze bushing or sleeve with a nut at the top for adjustment. ♦ This forms the spindle bearing, and as a large oil reservoir extends the entire length of the box, thorough lubrication is assured.

Both boxes of each spindle are nicely fitted in yokes which are gibbed to the main frame, and connection is made with the hoisting mechanism to hand wheels at the front of the machine, thus permitting either spindle to be lowered below the level of the fixed table.

Step bearings, submerged in oil, in the bottom boxes receive the weight of the spindles and provide for vertical adjustment.

A double set of table rings is provided for each spindle, giving varying openings for the



**Cross-Section Showing Spindle and Boxes**

**Step Bearings**

**Filling-in Rings and Collars**



## VARIETY MOULDER

sweep of cutters. Fourteen filling-in collars are furnished.

*Patent Pneumatic Pulleys*

A Saving  
in Power

The spindles are fitted with our patent pneumatic pulleys, as described on page 189.

*The Countershaft*

The  
Driving  
Pulleys

The countershaft, with the tighteners, is self-contained on a single base casting. The shaft equipment consists of our patent self-oiling and the regular tight-driving pulleys.

Patent  
Boxes

The countershaft boxes are of the side-wing type, as described on pages 47 and 48.

Connection is made with the countershaft, for starting and stopping, by a rod extending through the base of the machine to the front.

New  
Style Belt  
Tight-  
eners

The belt tighteners are contained in swinging frames, and ratchets operating in notched segments permit of instantly moving them to any position for tightening the belt under heavy cuts or for entirely releasing when it is desirable to remove it.

Adjustment is provided for changing the alignment of these tighteners when desired.

The idler pulleys are of our patent self-oiling loose type, as described on pages 184 and 185.