

## Machinery and Mill Equipment

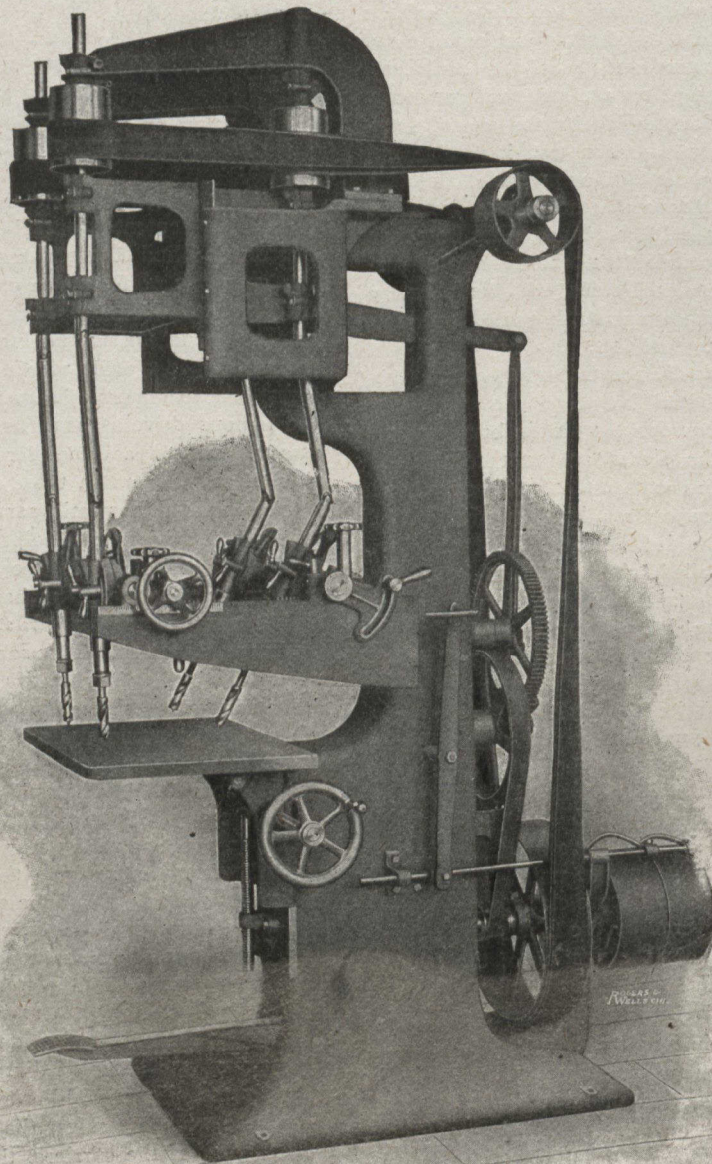
### UNIVERSAL BORING MACHINE.

The illustration represents a four-spindle power-feed boring machine manufactured by J. M. Nash, of Milwaukee, Wis. This machine is especially adapted for the boring of the four leg holes in chair seats all at one operation, insuring perfect uniformity in the distances apart and angles of holes, making

raising and lowering the table. On this side of the machine there is a vertical scale with figures to indicate height of table.

The table can be set at various angles if desired, a positive gauge being arranged and numbered to determine the angle.

Two belts are used, working over extremely large pulleys, which give the four-bit spindles a very strong drive. These



Universal Boring Machine.

the machine not only a wonderful labor saver, but giving a greatly improved quality of work as well. A great variety of other work may be done on this machine even where only one, two or three holes are required to do the work.

The cut presents a view of the right-hand side, showing the arrangement for belt shifter and hand wheel and screw for

belts can be made endless and proper tension can be maintained by tighteners which are conveniently arranged for take-up with a hand wheel.

Graduations are used as a guide on every part of the machine where movements are required to obtain angles and distances apart of the boring spindles. Each of these is