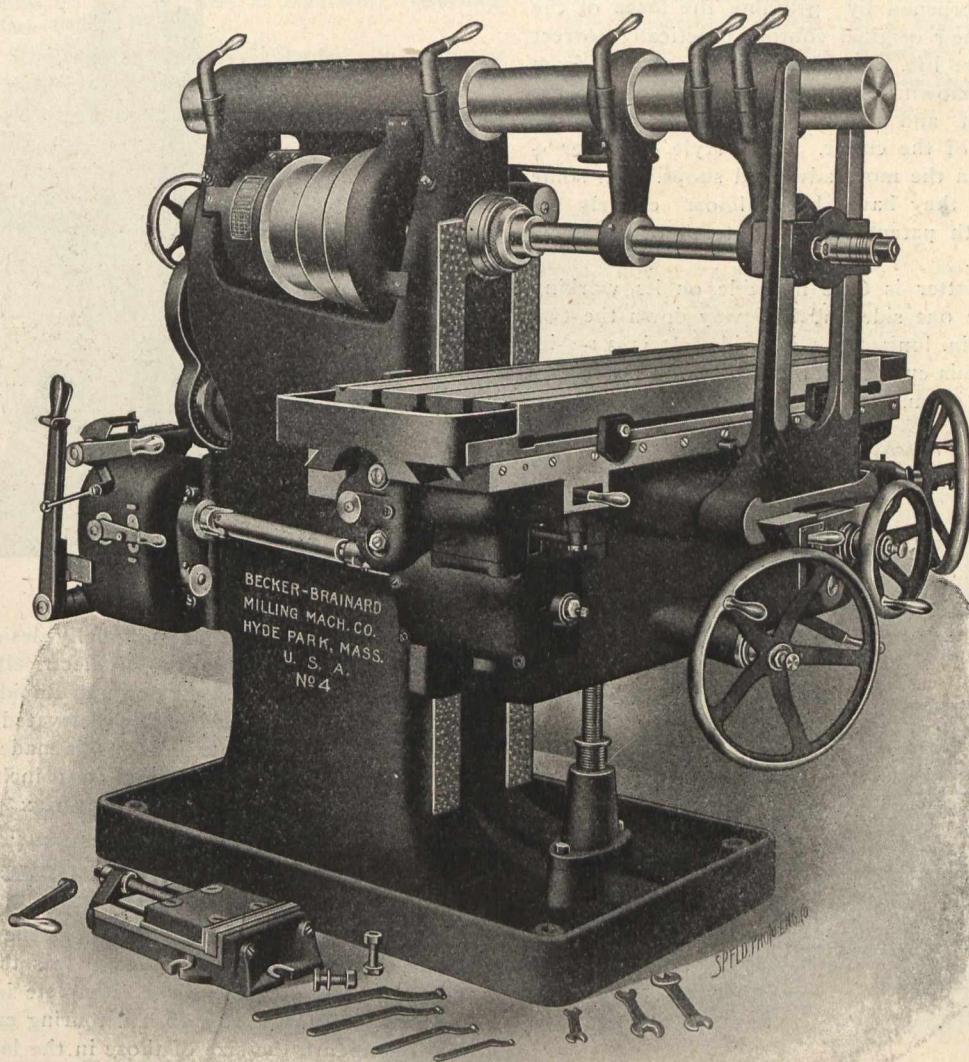


is threaded to take a chuck, and a threaded collar covers the screw when not in use. It is connected with the change-feed mechanism by three spur gears, making a positive-driven feed. The spindle is double back-gear, and gears are protected with guards. The arm is made of steel, is designed for horizontal adjustment, and has an arbor support which may be removed, so that any of the attachments

off. Hand wheels for operating the feeds are provided with clutch arrangement enclosed in hub. When the table has been set to required position, the clutch may be instantly disengaged by pressing in the knob on the front of the hand wheels, thereby preventing any accidental change from their fixed position, and also preventing them from revolving when the automatic feeds are thrown in. Dials are adjust-



Plain Milling Machine. Gear feed. Double back gears.
Range 46 x 14 x 20 ins.

can be placed in position without the necessity of removing the arm. The platen has automatic longitudinal, cross and vertical feeds. It is provided with three $\frac{3}{4}$ -inch T slots, with oil pans at each end. Feed is reversed in front of machine. The knee is of box type, and is supported by telescopic elevating screw, so that no holes are necessary in the floor. It is also provided with automatic vertical feed and knock-

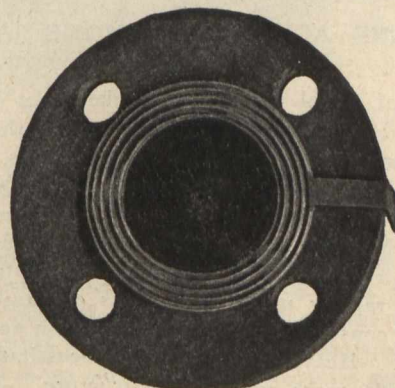
able and graduated to read to thousandths of an inch, to indicate the vertical, transverse and longitudinal movements of platen, and are set at any position with set screw. The patented change-feed mechanism is conveniently arranged on the back of column, and is capable of obtaining instantly twenty changes of feed, slow or fast, by a simple movement of the lever without stopping the machine.

A NEW GASKET.

Gaskets for joining pipe for carrying steam, air or water, under pressure, have always been a source of trouble and inconvenience in all classes of manufacture, and to all plant operations.

An interesting gasket has recently been brought out by The Smooth-On Manufacturing Company, Jersey City, N. J., which consists of a thin, corrugated iron gasket, which is treated with a coating of metallic iron cement on each side, and then clamped in the joint. The spring of the corrugated metal tends to keep it in constant contact with the surfaces, and together with the metal cement, makes a tight and permanent joint, which is air, water, or gas tight, can be easily and quickly taken apart and then replaced. The

joint is very thin. It will not leak when hot or cold, due to unequal expansion, and will not cause electrolysis nor



corrode the faces of the metal at the ends of the pipe or between the flanges.