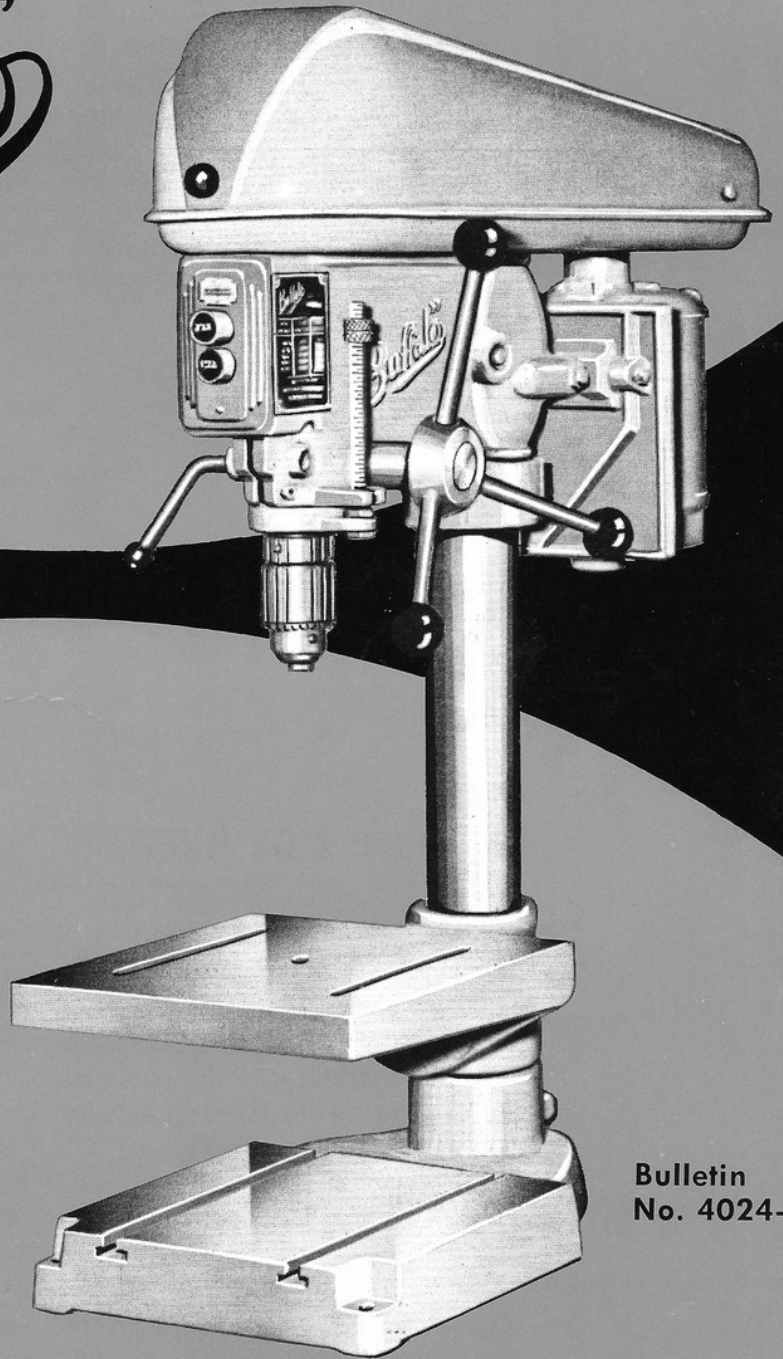


# QUALITY

*“Buffalo”*



## NO. 15 DRILLING MACHINES

*Tapper and  
Accessories*

Bulletin  
No. 4024-C

**BUFFALO FORGE COMPANY**

*Buffalo, New York*

Canadian Blower & Forge Co., Ltd., Kitchener, Ontario

**"Buffalo"**

# Quality Models of a Popular Dependable Production Drill . . .

For more than twenty-five years, "Buffalo" No. 15 Drilling Machines, in a series of models, have been widely used throughout industry.

The "Buffalo" Series of No. 15 Drills, incorporate many major improvements for even more satisfactory on-the-job service.

Retaining all the rugged, long-life, speedy and easy-operating characteristics of earlier models, the QUALITY No. 15 Drills have numerous refinements in design, facilitating operation, maintenance and flexibility.

**QUALITY**—The "start-stop" push button switch is mounted in a cavity in the front of the frame, in the most convenient location for the operator. Wiring from the switch to the motor is enclosed within the belt guard. Over-load protection for the motor can be supplied at a slight additional cost, for either single or three-phase motors.

**BUFFALO FORGE COMPANY** — *Complete Line of Drilling Machines*

## Complete Line Available

The No. 15 drill is furnished in five models as illustrated in this bulletin. In addition to those shown, special arrangements of heads can be obtained.

All of these machines are made for metal or wood-working manufacturing service. They are extremely sensitive, assuring excellent results for small hole drilling. At the same time, all have sufficient weight and rigidity to operate at the full capacity of the machine without placing undue wear on any part.

All models have five speeds which meet the average shop's requirements for both high and low speed drilling. Speed range is 460 to 6300 RPM with 60 cycle, 1750 RPM motor, and 295 to 4200 with 1140 RPM motor. 50 and 25 cycle motors at 1450 RPM give a speed range of 380 to 5300 RPM. In addition, a slow speed attachment can be furnished at additional cost to further reduce speed.

**QUALITY**—The locking device for clamping the frame on the column is the split-bushing type; more positive than clamping the frame casting on the column, it also prevents possibility of scoring the column.

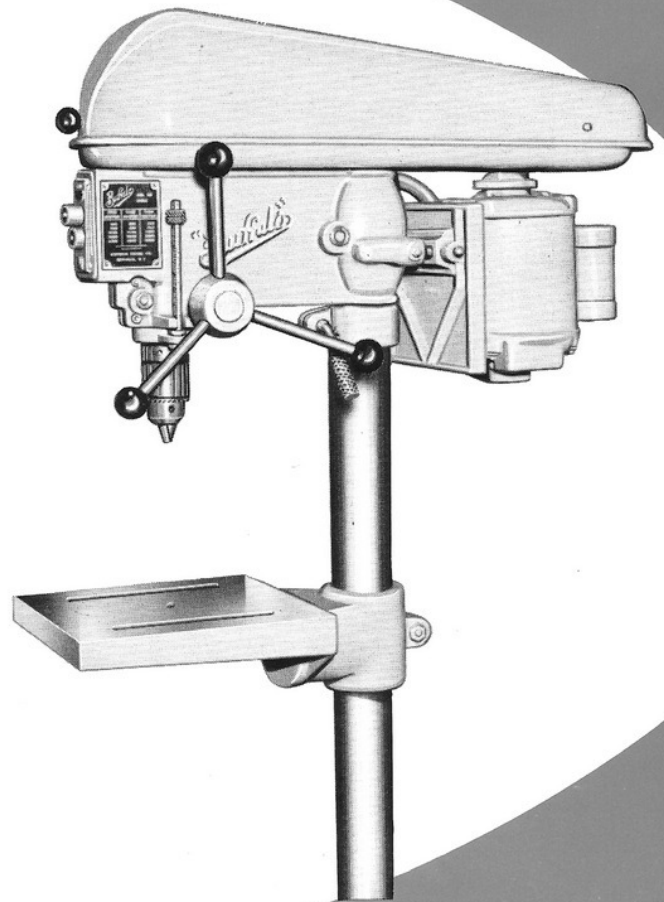
# THIS IS THE No. 15 Drilling Head

This drilling head is standard on all models. Note the clean-cut lines, streamlined belt guard, easily seen speed range table at side of switch.

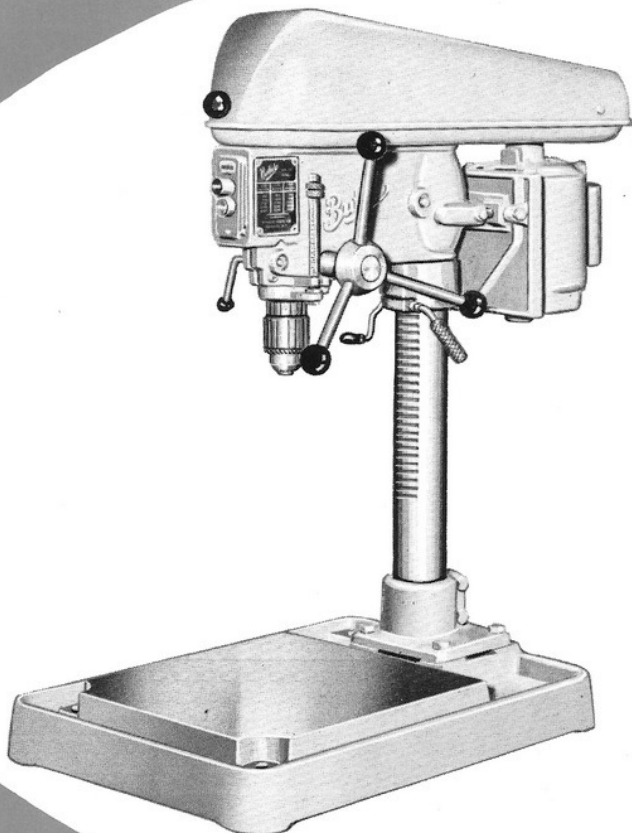
Depth gauge is graduated for easy setting; locks firmly by means of two finger-operated knurled nuts. Front-mounted "start-stop" push button switch is located in recess in front of frame in convenient position for operation.

Belt adjustment is simple to make from front of machine. Belt guard tilts upward in a jiffy for speed changes. Three-grip spindle feed reduces operator fatigue. All adjustments of table and heads are made without use of tools.

**QUALITY**—A pressed steel complete belt guard is furnished as standard equipment. The guard is hinged at the back and counter balanced by two torsion springs, making opening and closing easy.



**BUFFALO FORGE COMPANY**—*Complete Line of Drilling Machines*



## No. 15-M Bench Drill

Dollar for dollar, it is difficult to find a machine of comparable quality to this husky drill.

The "M" or manufacturing models are available in bench or pedestal types, one to eight spindles—with or without bench legs. Since the heads are standard on all models, the addition of head-raising device operating by rack and pinion, permits quick, easy adjustment of head to facilitate production requirements.

Available with No. 6A-33 Jacobs Chuck, or No. 2 Morse taper spindle at no extra charge.

**QUALITY**—Pulley steps are progressed so that the belt may be changed from one step to another on the pulleys, without having to adjust the motor bracket. At the same time proper tension on the belt is maintained.

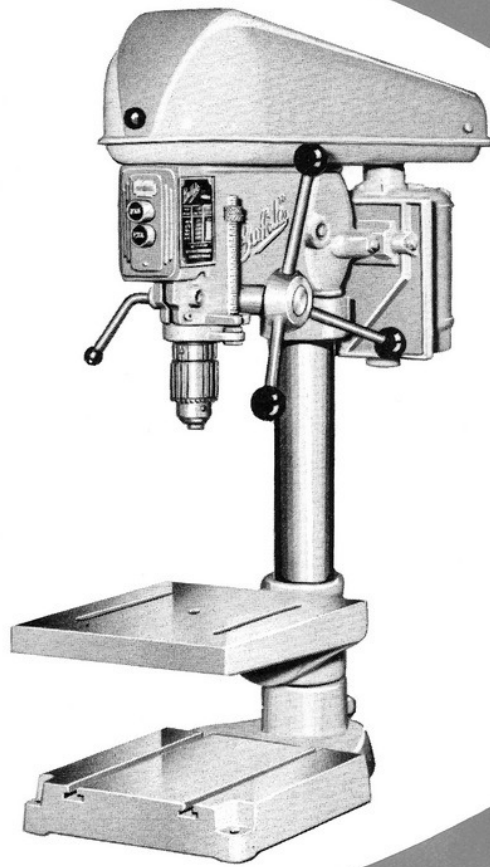
**Note:** No. 15 Production Type Drill is same as illustrated except without the head-raising device.

## No. 15 Heavy-Duty Bench Drill

This is our standard bench drill, popular for use in the factory or home workshop. The same head as on all models, but without head-raising device.

This machine is a versatile performer. It has a handy 10 x 11" tilting table mounted on table fork. The table and fork may be swivelled around the column, so that long parts may be set on the 10 x 10" base for drilling. Table also tilts to either side and can be locked in any position 0° to 90°. Locating pin is provided for 0° position.

**QUALITY**—The bench and floor bases are of new design, in that there are no troughs or pockets around the working surfaces to collect grease, dirt or chips.

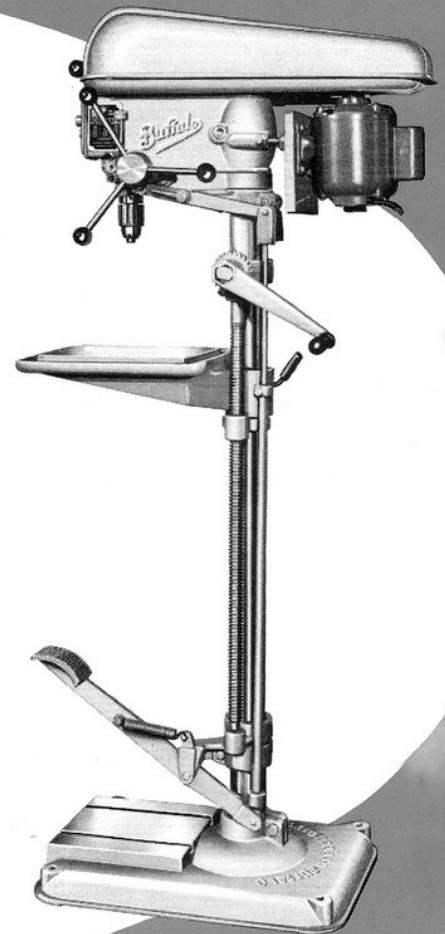
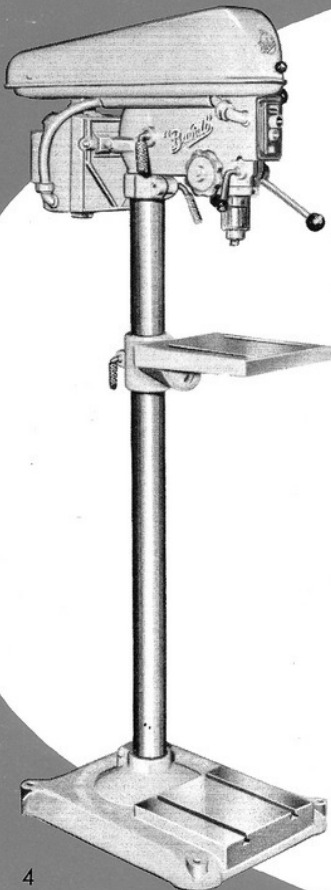


**BUFFALO FORGE COMPANY** — *Complete Line of Drilling Machines*

## No. 15 Heavy-Duty Floor Drill

A favorite tool for a variety of uses in the average machine shop where versatility is the first consideration. Like the bench type shown above, it has a 10 x 11" tilting table for swivelling on 2<sup>3</sup>/<sub>4</sub>" diam. column and is mounted on 10 x 10" base. Maximum distance of spindle nose to base is 47"—to table, 41". Overall height of drill is 68<sup>1</sup>/<sub>2</sub>". If desired, this model can be furnished with foot feed like that shown at right, as well as table adjusting screw. Oil trough table, slow speed attachment or mortising attachment are also available as extra accessories.

**QUALITY**—Spindle-return spring can now be adjusted by hand, without use of tools, to regulate the return of the spindle and to compensate for the weight of various chucks or drills that may be used. It also provides an "anti-flyback" feature of the return spring and prevents risk of injury to the operator when the spring is being adjusted.





# No. 15 Pedestal Type Drill

For the shop where higher production and versatility are desirable factors. A sturdy, efficient tool built for years of dependable service.

Available in one to eight spindles, it can be equipped with pneumatic feeds, coolant system, etc. Overall height 75", maximum distance, spindle nose to table 36½".

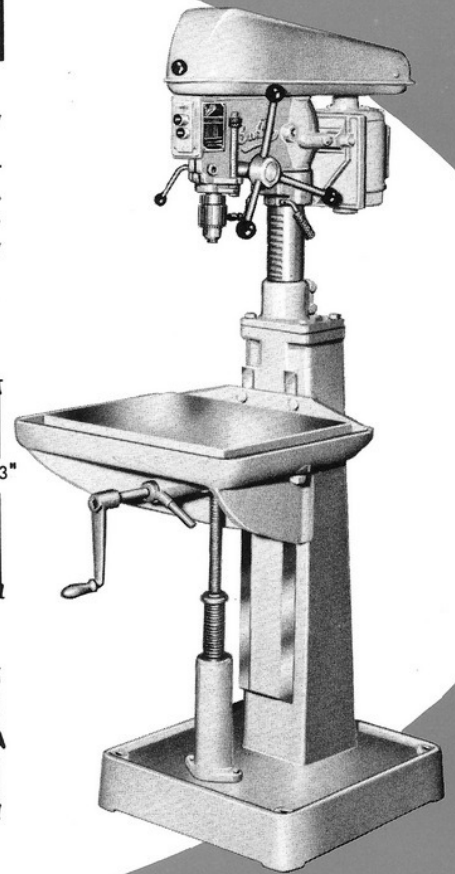
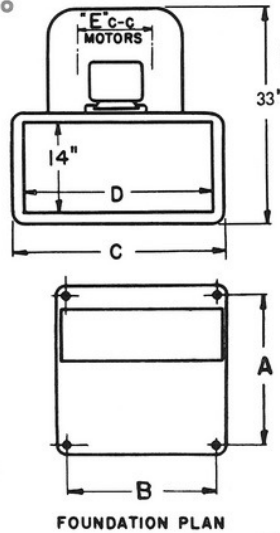
Convenient three-spoke feed wheels are fitted with comfortable plastic balls assuring easy operation. Head- and table-raising devices provide maximum flexibility of movement to the work.

Working surface of table varies from 14 x 18" for one spindle to 14 x 96" for eight spindle models.

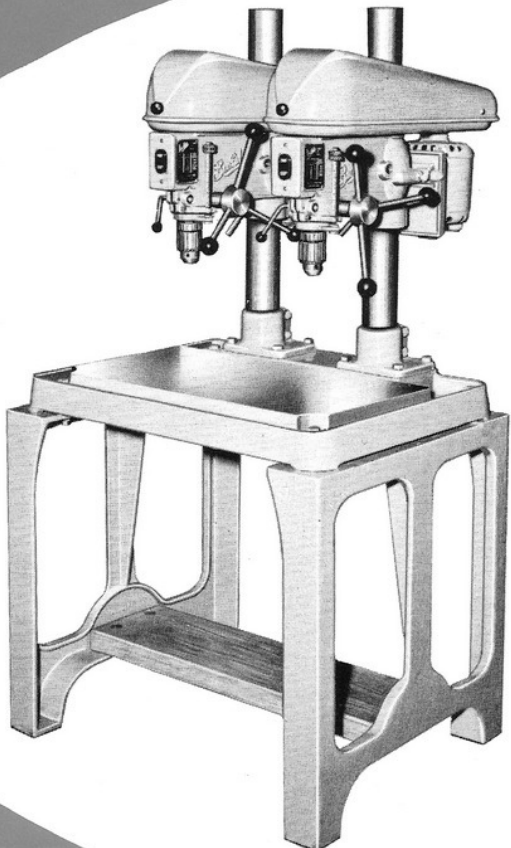
**QUALITY**—Spindle feed travel has been increased to 4½".

## DIMENSIONS AND WEIGHTS

Spindles	A	B	C	D	E	Net Wgt.
1	17⅝	16⅝	21¾	18	—	435
2	17½	16½	33¾	30	12	635
3	17½	28½	45¾	42	12	835
4	17½	36½	57¾	54	10⅝	1025
6	17½	54½	72	66	10	1555
8	17½	84½	100	96	11½	2080



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# No. 15 Multiple Spindle Bench Drill

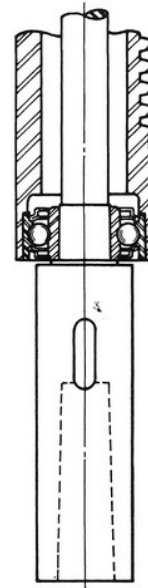
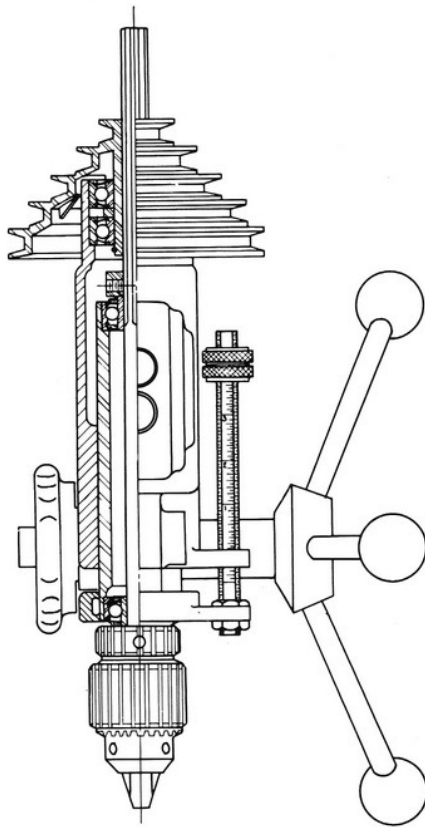
The illustration at left shows the standard bench drill mounted on legs for multiple spindle use. The bench legs shown are furnished as an extra. 2- and 3-spindle drills require two legs, 4-, 6- and 8-spindle drills require three legs. Addition of head-raising device can be readily made for manufacturing types.

Can be furnished one to eight spindles, with or without head-raising device. Working surface of table with convenient oil trough varies from 14 x 14" for one spindle to 14 x 92" for eight spindle models.

If you have an unusual application, consult our Engineering Department who will be glad to be of service.

**QUALITY**—Standard on all models, the split-type head provides better adjustment of the feed sleeve in the frame and compensates for any wear of the sleeve.

Spindle Assembly: The spindle pulley is mounted on two ball bearings and the spindle rotates in two ball bearings mounted in the feed sleeve. The spindle nose has a No. 33 taper and is fitted with a Jacobs No. 633-D chuck with an attached chuck remover, which also serves to hold the chuck securely on the spindle taper.



No. 1 or No. 2 Morse taper spindle is shown above. Desirable in some shops where Morse taper tools are standard.

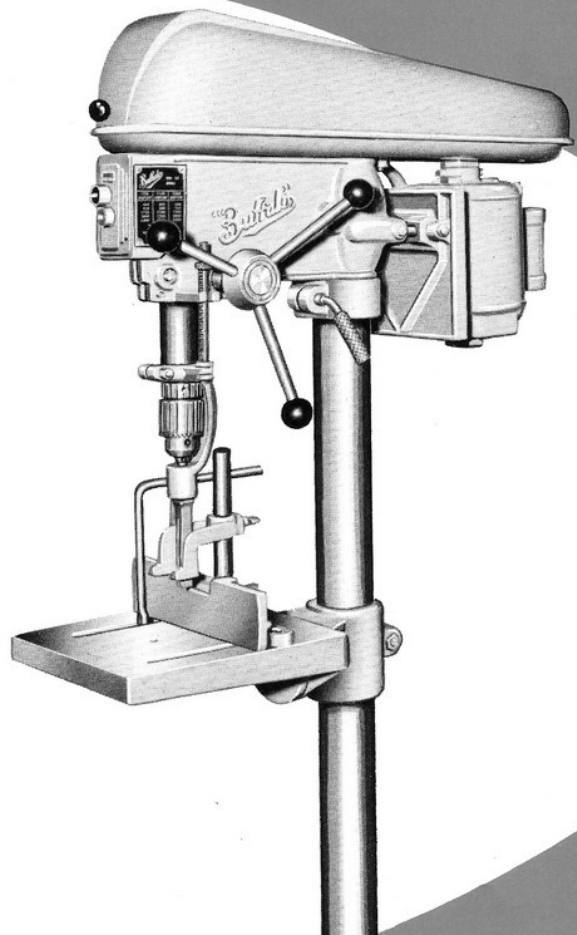
**BUFFALO FORGE COMPANY** — *Complete Line of Drilling Machines*

## No. 15 Drill with Mortising Attachment

Illustrated at right is a mortising attachment—fence and hold-down, adapted to the No. 15 Drill. Mortising attachment fits over chuck. The fence and hold-down is of all-metal construction similar to those used on higher priced mortising machines.

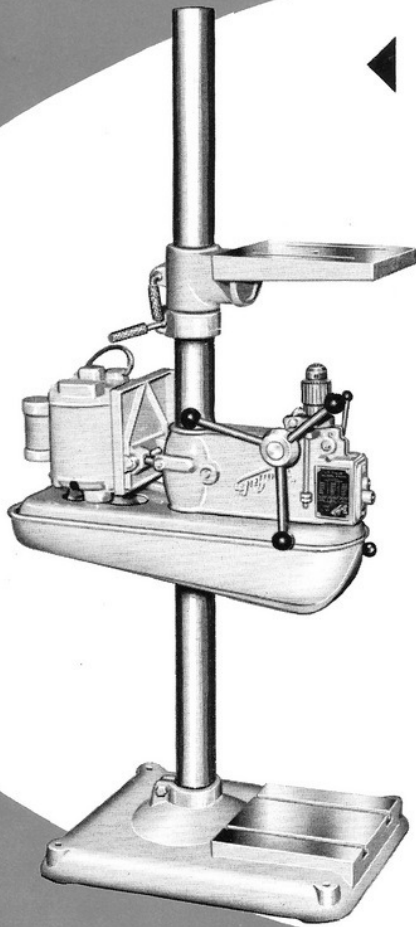
**QUALITY**—A spindle-locking device of the split-sleeve type, operated by a small lever conveniently located on the front of the machine, is provided for locking the spindle in any position. This device is of great value when the machine is used for routing or shaping.

Capacity:  $\frac{1}{2}$ " Square. Use chisel with  $\frac{5}{8}$ " shank.



## ◀ Inverted Head for Routing or Back Spot-Facing

At left is shown a No. 15 floor drill with head inverted, used for routing or back spot-facing.



## ▶ No. 15 Tapping Machine

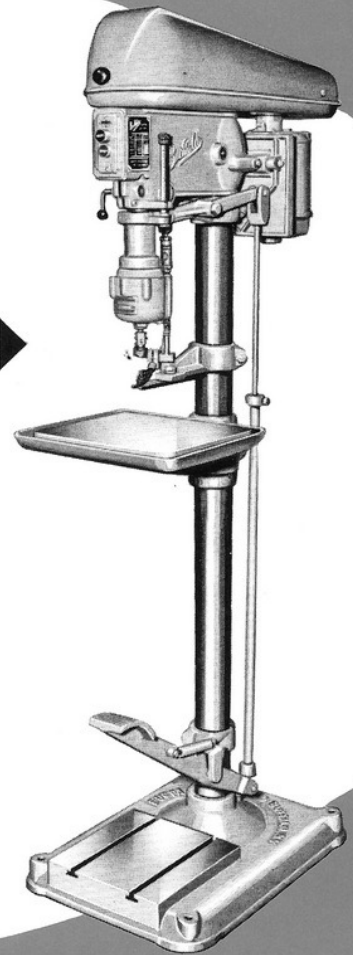
Shown at right is a No. 15 Floor Drill that includes foot feed and oil trough table and other accessories to make an inexpensive tapping machine.

Can be furnished in two sizes—No. 0, 3/16" and No. 1, 5/16" capacity. A stripper and tap oiler are provided for both machines. For the 3/16" capacity machine, either 1/3 or 1/2 HP, 1750 RPM motor is required. For the 5/16" capacity, a 1/2 HP, 1140 RPM motor is recommended.

The success or failure of any tapping device is dependent on many variable conditions. The size of the drill hole, the type of tap used, the type of thread-cutting lubricant and the material to be tapped make each job a separate study.

Under favorable conditions the Buffalo No. 15 Tapping machine will give results equal to machines costing many times more.

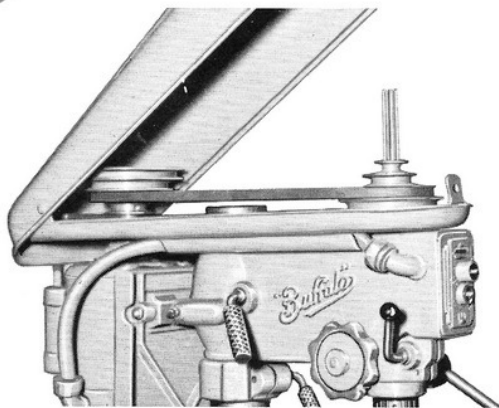
**QUALITY**—Depth-stop bar has larger adjusting nuts to provide easier adjustment.



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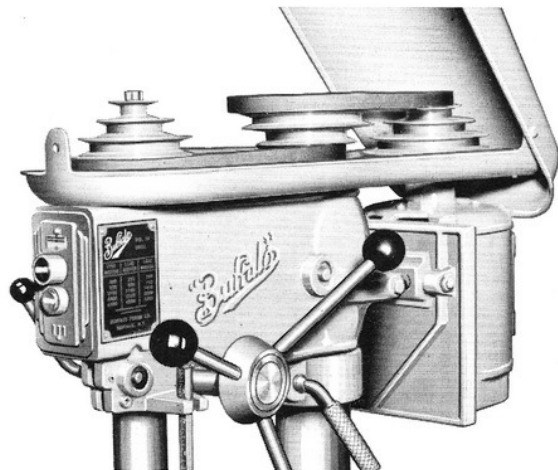
## Standard Drive

At left is illustrated the standard drive available on all models. It provides speeds of 460-920-1725-3400 and 6300 when used with 60 cycle, 1725 RPM motors. Proportionate speeds are obtained with 25 or 50 cycle, 1450 or 1140 RPM motors.



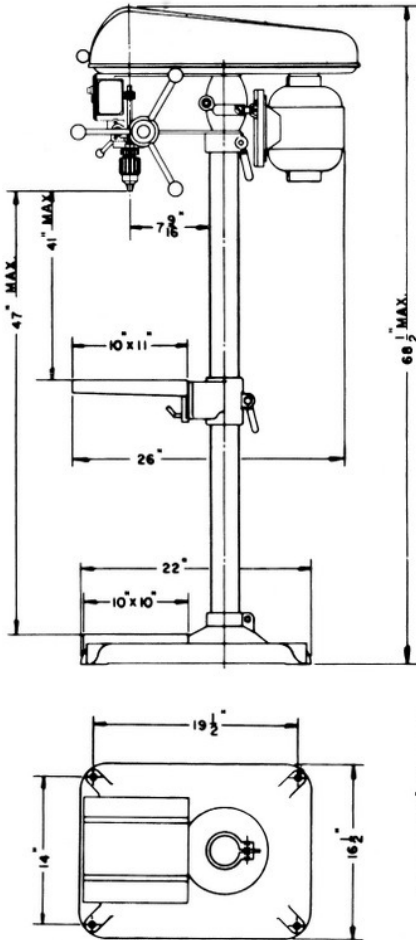
## Slow Speed Attachment

At right is shown the slow speed attachment that is available on all machines. Three lower speeds of 112-210-380 RPM are available when used with a 60 cycle, 1750 RPM motor. Proportionate speeds are obtained with 25 or 50 cycle motors or with motors of different shaft speed.

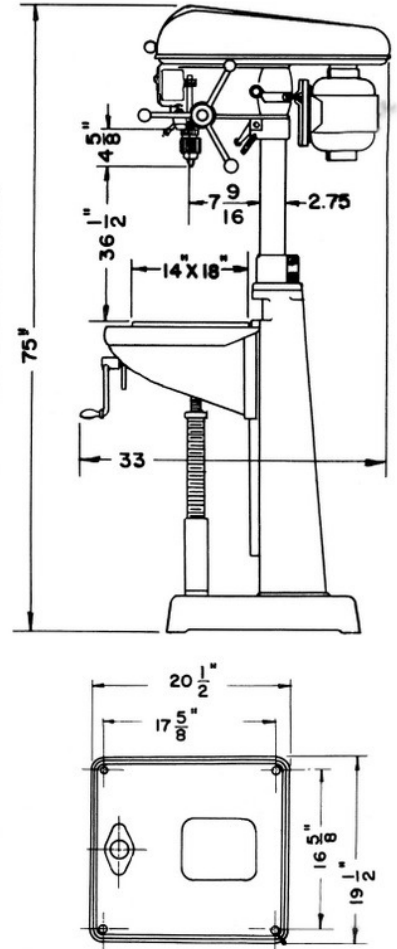


**QUALITY**—The head-raising device used on No. 15 Manufacturing Bench and Pedestal models is now a separate unit used with a standard head having rack teeth cut integral with the column.

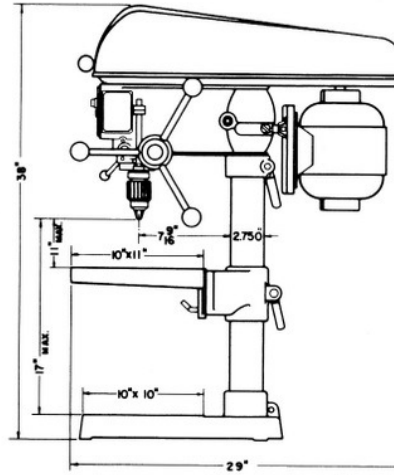
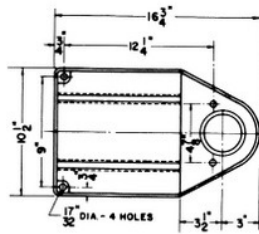
No. 15 Floor Type



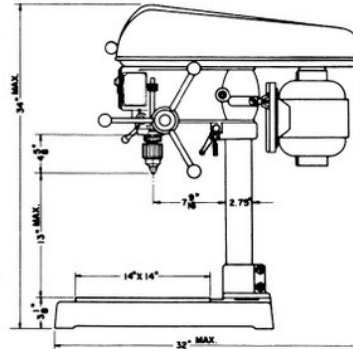
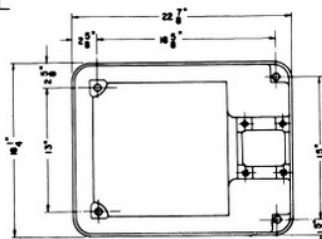
No. 15 Pedestal Type



No. 15 Bench Type



No. 15 Manufacturing Bench Type



**GENERAL SPECIFICATIONS** — No. 15 QUALITY Drilling Machines

NO. 15 DRILLING MACHINES	No. 15 Bench	No. 15 Floor	No. 15 Mfg. Bench	No. 15 Pedestal	No. 15 Tapper	
					No. 0	No. 1
Capacity in Cast Iron:						
With 1/3 H.P. Motor.....	1/2"	1/2"	1/2"	1/2"	3/16"	—
With 1/2 H.P. Motor.....	5/8"	5/8"	5/8"	5/8"	—	5/16"
Motor H.P.—Standard.....	1/3	1/3	1/3	1/3	1/3	1/2
Spindle Sleeve Diameter.....	1.747"	1.747"	1.747"	1.747"	1.747"	1.747"
Max. Dist., Spindle Nose to Base.....	17"	47"	13"	—	43 1/2"	42"
Max. Dist., Spindle Nose to Table.....	11"	41"	—	36 1/2"	37"	35 1/2"
Feed Travel.....	4 1/2"	4 1/2"	4 1/2"	4 1/2"	2 1/2"	2 1/2"
Column Diameter.....	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"
Maximum Height.....	38"	68 1/2"	34"	75"	68 1/2"	68 1/2"
Net Weight, Lbs.....	96	133	182	435	155	162
Working Surface of Base.....	10 x 10"	10 x 10"	14 x 14"	—	10 x 10"	10 x 10"
Working Surface of Table.....	10 x 11"	10 x 11"	—	14 x 18"	10 x 11"	10 x 11"
Spindle Nose.....	No. 33 Jacobs Taper or No. 1 or No. 2 Morse Taper					
Spindle Speeds—All Models:						
With 1750 RPM Motor.....	460 — 920 — 1725 — 3400 — 6300					
With 1450 RPM Motor.....	380 — 760 — 1450 — 2850 — 5300					
With 1140 RPM Motor.....	295 — 600 — 1140 — 2200 — 4200					
<b>NO. 15 MULTIPLE SPINDLE DRILLS</b>						
Spindles	Working Surface of Table		Center Distance Between Spindles			
	Manufacturing Bench	Pedestal	Manufacturing Bench	Pedestal		
1.....	14 x 14"	14 x 18"	12"	—		
2.....	14 x 26"	14 x 30"	12"	12"		
3.....	14 x 38 1/2"	14 x 42"	12"	12"		
4.....	14 x 50 1/2"	14 x 54"	12"	10 5/8"		
6.....	14 x 74 1/2"	14 x 65 1/4"	12"	10"		
8.....	14 x 92"	14 x 96"	11 1/2"	11 1/2"		

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**BUFFALO FORGE COMPANY, Buffalo, N. Y.** — Complete Line of Drilling Machines