

**“Buffalo”**

**Portable  
Forges**

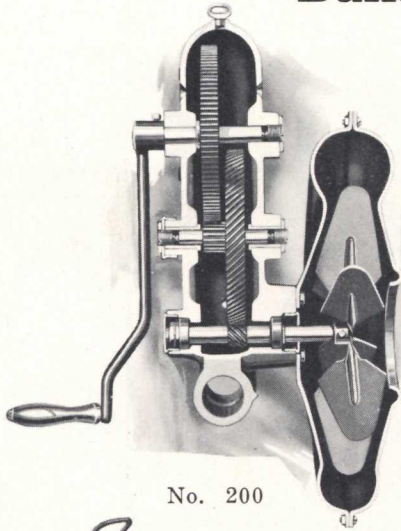
*Bulletin 811-E*

**Buffalo Forge Company**  
Buffalo, New York

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



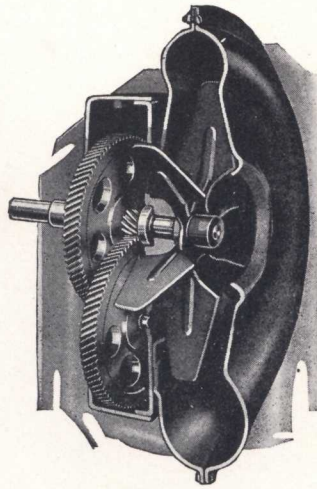
# Buffalo Hand and Electric Blowers



No. 200

## The No. 200 Silent Geared Blower

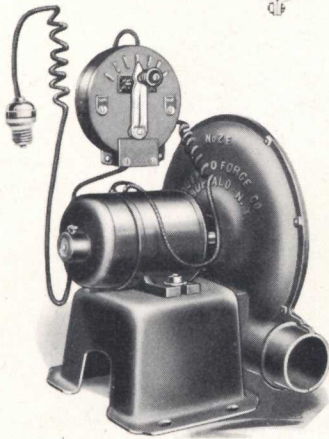
Features one-piece, cast-iron gear case with removable cover which keeps gears in permanent alignment and makes inspection easy. Helical pinion is cut from steel fan shaft. "New Departure" ball bearings are used. Gear ratio  $47\frac{1}{2}$  to 1.



No. 500

## The No. 500 Handy Geared Blower

There is little difference in the general construction of the No. 200 and 500 blowers except that the gears in the No. 500 are enclosed in all-steel housing instead of cast iron. Radial ball bearings provide easy operation and adjustment for wear. Cut steel gears are quiet in operation. Gear ratio  $47\frac{1}{2}$  to 1.



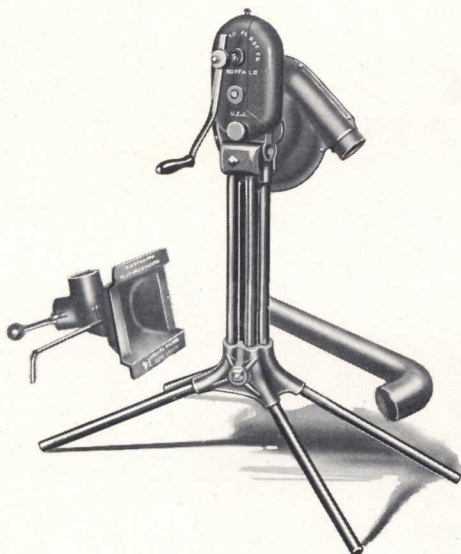
No. 2-E Electric

Also available (not illustrated) are the No. 700 Climax Geared Blower and the "Bufco" No. 070.

The Buffalo No. 700 offers greatest value for intermittent users in a high powered, light, unbreakable and inexpensive blower head. Construction is like the No. 500 except bronze bushings are used instead of ball bearings.

The "Bufco" No. 070 has helical gears, steel pinions and bronze bushings. Fan and gear case is pressed steel, fully enclosed, making it dust-tight. Can be turned, either forward or backward. Gear ratio 48 to 1.

"Buffalo" Electric Blowers are used for either blowing or exhausting . . . especially popular for exhausting from grinding and buffing wheels, blowing small furnaces, removing chips in metal and woodworking operations. Housing and motor base are of all-steel construction. Six-speed regulator is supplied and variable speed motors operate satisfactorily on either direct or alternating current.



No. 200 furnished with legs, "Vulcan" Tuyere, Pipe and Elbow

## Buffalo Hand Power Blowers

No.	Type of Support	Net Wgt.	Crated Wgt.
200-L	Legs	91 lbs.	109 lbs.
500-L	Legs	85 lbs.	102 lbs.
700-L	Legs	56 lbs.	71 lbs.
070	Legs	38 lbs.	46 lbs.

## Buffalo Electric Blowers (Variable Speed)

No.	Net Wgt.	Crated Wgt.	R.P.M.	Dia. of Outlet	Total Hgt.
2-E	31 lbs.	35 lbs.	2600	3 in.	14 in.
2-EH	34 lbs.	38 lbs.	3400	3 in.	14 in.

## Buffalo Electric Blowers (Constant Speed)

2-E	21 lbs.	25 lbs.	1750	3 in.	14 in.
2-EH	40 lbs.	53 lbs.	3400	3 in.	14 1/2 in.
3-E	82 lbs.	102 lbs.	3400	4 in.	16 1/2 in.
4-E	126 lbs.	140 lbs.	3400	5 in.	19 1/2 in.

When ordering specify whether 110 Volt or 220 Volt regulator is wanted.

For Export Weights and Dimensions, See Separate Sheet, F3638

**Buffalo**

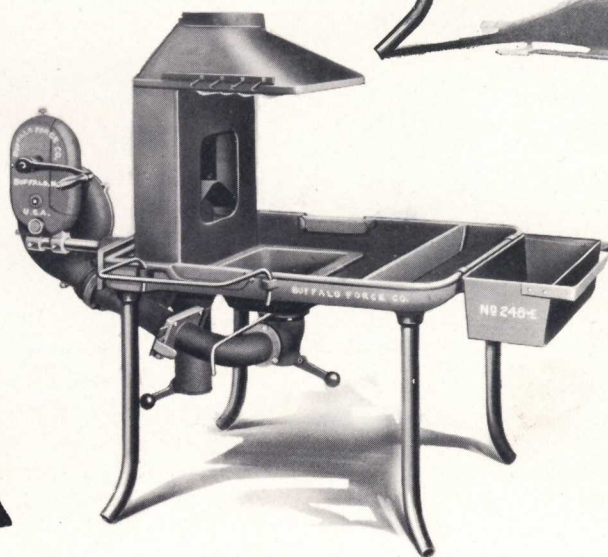
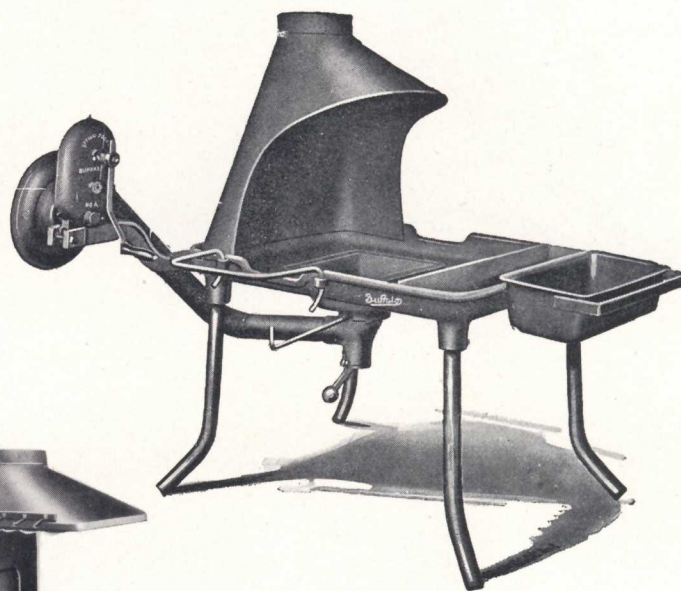


## Designation of Hoods



All Buffalo forges may be had with either of two types of hoods. The majority of forges are shipped with the type shown on the two forges at the top of this page, called "windshields." This is the hood which we regularly furnish when the order does not specify.

Those who want the hood shown on the two forges at center right and bottom left, called "half-hood," can obtain same by adding the letter H to the number of the forge. Thus: No. 210-H, forge with halfhood.



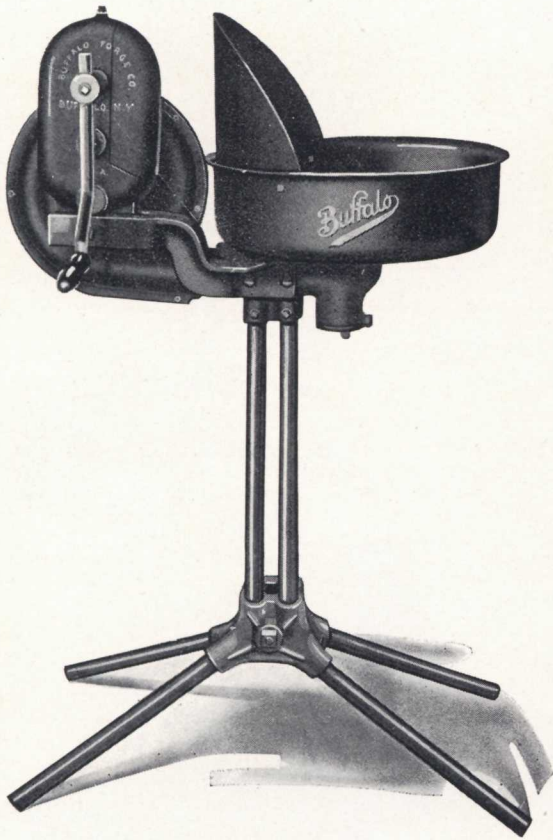
When desired, the down-draft hood shown at left can be furnished. This hood is particularly effective in removing smoke and fumes. Add letter E to the number of the forge. Thus: No. 848-E, forge with down-draft hood.

*Buffalo*



# Buffalo Series 10 and 12 Rivet Forges

ONE-PIECE SEAMLESS STEEL HEARTH



Buffalo No. 210 Rivet Forge

The one-piece unbreakable, all-steel hearth used on all No. 10 Forges was originated and perfected by Buffalo for the benefit of the user. Pressed out of heavy steel plate by enormous presses, the No. 10 hearth is far stronger than the old style two or three piece hearths, lighter in weight and about 100% better looking.

The No. 10 series is 18" in diameter, the No. 12 series 24" in diameter.

Forges of this type are generally used out-of-doors or under temporary shelters, and it formerly took only a short time for moisture to accumulate along the seams, after which rust speedily destroyed the hearth. With the one-piece Buffalo hearth this is impossible because there are no seams in the entire bowl. This feature alone doubles the life of the hearth.

Both these forges are supported by four heavy pipe legs widely spread at the bottom and securely fastened.

Blowers are mounted so that they can be taken off in a minute or two. In fact, the whole forge can be readily knocked down for transportation.

Four different types of blowers are available with both hearths as listed below.

Forge No.	Blower No.	Gear Ratio	Diam. of Fan Case	Diam. of Hearth	Depth of Hearth	Net Wgt. Lbs.	Crated Wgt. Lbs.
210	200	47½ to 1	12"	18"	5⅜"	81	98
212	200	47½ to 1	12"	24"	5 "	92	111
510	500	47½ to 1	12"	18"	5⅜"	67	79
512	500	47½ to 1	12"	24"	5 "	73	92
710	700	47½ to 1	12"	18"	5⅜"	67	79
712	700	47½ to 1	12"	24"	5 "	73	92
810	Electric	.....	9"	18"	5⅜"	83	100
812	Electric	.....	9"	24"	5 "	94	114

For half-hood add letter H after forge number and 3 lbs. to weight in No. 10 series and 6 lbs. in No. 12 series. Clay hearths before using.

*For Export Weights and Dimensions, See Separate Sheet, F3638*

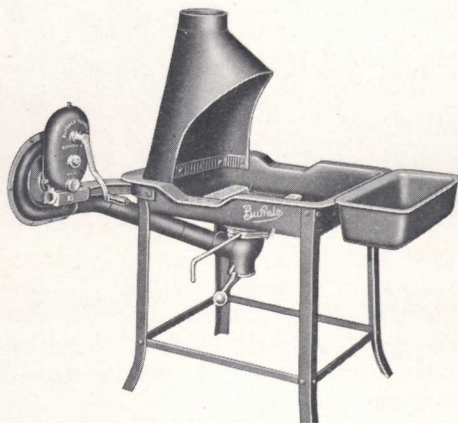
**Buffalo**



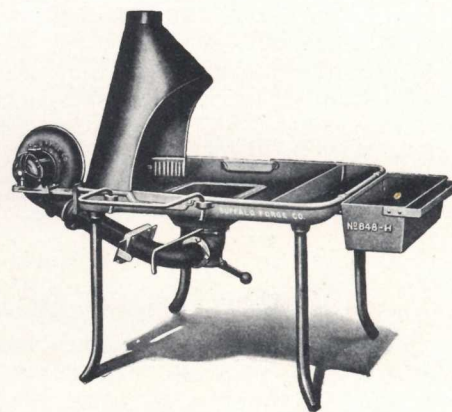
## Buffalo Series 35, 36, 48 and 49 Forges



No. 235 Forge



No. 236-H Forge



No. 848-H Forge

The series 35 forges with shallow hearths were designed for light work of large size. Heavy gauge steel plate hearth is 24" wide, 30" long and 3" deep and top is turned back to form a broad flange, strengthening the whole forge and forming a convenient tool rest. Four blowers can be had with the series.

The series 36 forges feature a 5½" deep hearth, 24" wide, 30" long. Legs are heavy angle iron bolted securely to the deep hearth and effectively strengthened with steel

braces. The Buffalo "Vulcan" tuyere, shown on page 8, is supplied on this series.

The No. 48 and 49 cast iron hearths are used for heaviest kind of blacksmith work in railroad shops, truck and bus garages. The No. 48 hearth, 38" x 42" by 3" deep and weighing 224 lbs., is semi-portable. Removable iron partition is arranged to serve as coal box. The No. 49 has a hearth 38" x 42" but is 7" deep to fill need for a larger fire for very heavy work. Hearth may be lined with fire brick if desired.

Forge No.	Blower No.	Gear Ratio	Diam. of Fan Case	Hearth	Net Wgt. Lbs.	Crated Wgt. Lbs.
<b>235</b>	200	47½ to 1	12"	24x30x3"	134	144
<b>535</b>	500	47½ to 1	12"	24x30x3"	121	133
<b>735</b>	700	47½ to 1	12"	24x30x3"	121	133
<b>835</b>	Electric	.....	12"	24x30x3"	137	160
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<b>236</b>	200	47½ to 1	12"	24x30x5½"	164	178
<b>536</b>	500	47½ to 1	12"	24x30x5½"	146	159
<b>736</b>	700	47½ to 1	12"	24x30x5½"	146	159
<b>836</b>	Electric	.....	12"	24x30x5½"	164	186
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<b>248</b>	200	47½ to 1	12"	38x42x3"	380	418
<b>548</b>	500	47½ to 1	12"	38x42x3"	365	405
<b>748</b>	700	47½ to 1	12"	38x42x3"	365	405
<b>848</b>	Electric	.....	12"	38x42x3"	370	418
<b>249</b>	200	47½ to 1	12"	38x42x7"	392	487
<b>549</b>	500	47½ to 1	12"	38x42x7"	376	472
<b>749</b>	700	47½ to 1	12"	38x42x7"	376	472
<b>849</b>	Electric	.....	12"	38x42x7"	373	487

For half-hood on any of these forges add the letter H after the forge number and 7 pounds to the weight of the 35 and 36 series. Add 12 pounds to the weight of the 48 and 49 series.

For downdraft hood on Nos. 248 and 848, add the letter E after the forge number and 325 pounds to the weights. Water tanks furnished only when specified and at an extra charge. Clay hearths before using.

*For Export Weights and Dimensions, See Separate Sheet, F3638*

**Buffalo**



## The Famous "Bufco" Forges

"Buffalo Forge Company's distinctive accomplishment in the way of light forges."

An accurately stamped steel gear and fan case furnishes air for our standard drawn steel hearths. Bronze bushings are used thruout. The fan has a 5½ inch pressed steel wheel.

The portability and sturdy construction of "Bufco" forges make them particularly suited to agricultural implement work, occasional repair work and rivet heating.

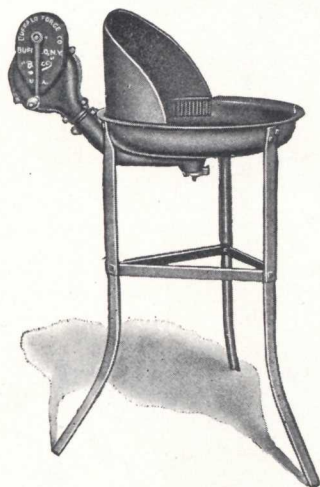
### "Bufco" Nos. 061, 062 and 075 Forges

These forges are made with a heavy, one-piece, drawn-steel hearth, perfectly formed, without seams or corners to collect moisture and rust.

The hearth is stronger and more durable than cast iron, and is considerably lighter. "Bufco" blower is regularly furnished.

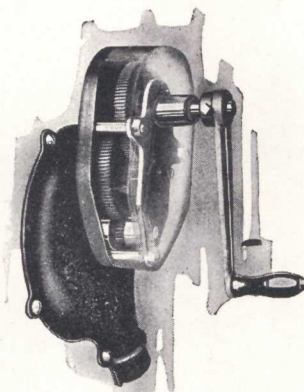
The 061 and 062 forges are mounted on three strong jointed legs and will stand firmly on uneven ground. Can also be had for bench use with windshield or half-hood.

The 075 forge is mounted on four steel pipe legs, securely braced.



"Bufco" No. 061

No.	Size of Hearth	Hood	Weight	
			Net	Shp'g.
<b>061</b>	18" diam., 3" deep	Windshield	33	36
<b>061-H</b>	18" diam., 3" deep	Half-hood	37	40
<b>062</b>	24" diam., 3" deep	Windshield	42	46
<b>062-H</b>	24" diam., 3" deep	Half-hood	46	50
<b>075</b>	24 x 30 x 3"	Windshield	88	108
<b>075-H</b>	24 x 30 x 3"	Half-hood	90	110



"Bufco" Blower



"Bufco" No. 075-H

### Buffalo Electric Forges

Buffalo Electric Forges feature a one-piece, all-steel, unbreakable hearth.

Blower is a quiet, powerful, low-cost unit with ability to supply plenty of air for quick firing. Blast control slide is built on inlet side of the blower. Motors are brushless type—no contact except in bearings which are of impregnated bronze and unusually large.

The 861 series has three sturdy angle iron legs, well braced. This series can also be had for bench use, with windshield or half-hood.

The 875 forge has four steel pipe legs, securely fastened.



No. 875-H



No. 861

No.	Hearth	Hood	Weight	
			Net Wgt.	Shpg. Wgt.
<b>861</b>	18" diameter, 3" deep	Windshield	40	43
<b>861-H</b>	18" diameter, 3" deep	Half-hood	44	47
<b>875</b>	23 x 30 x 3" deep	Windshield	95	106
<b>875-H</b>	23 x 30 x 3" deep	Half-hood	100	108

For Export Weights and Dimensions, See Separate Sheet, F3638



# Buffalo Oil-Burning Forges

Buffalo Oil Burning Forges provide the most easily controlled and safest method of heating rivets where compressed air is available. With these forges there are no sparks, rivets are always in plain view and held at the proper temperature.

The tank is of welded steel, with steel fire chamber lined with two inches of refractory material of the best quality. To replace worn-out linings it is only necessary to unscrew three nuts and lift the top off the fire chamber.

Air is supplied to the tank and the atomizer thru a single connection. Kerosene, distillate or any fuel oil can be used. All three models are furnished with 26 gal. tanks providing greater fuel capacity.

Nos. 1 and 2 forges are open at the front only, while No. 3 has an opening thru so that long stock can be heated. A block of fire brick is provided to close the back of this forge when heating rivets.

Where portability is a factor, this forge may be mounted on truck at an additional cost, thus making an ideal unit for factories and construction jobs.

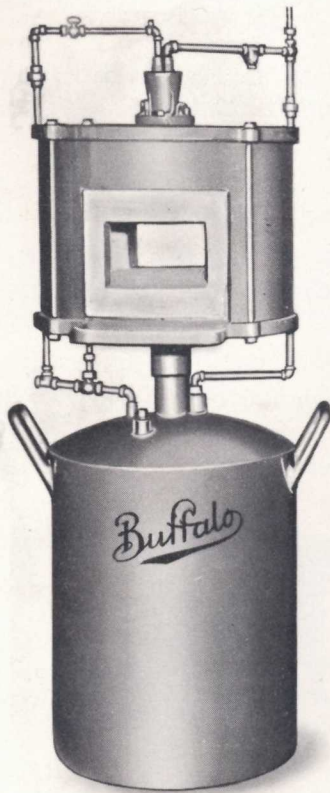
Tests conducted in our laboratory with a No. 1 forge produced the following results:

### Total Number of Rivets Possible to Heat At One Time

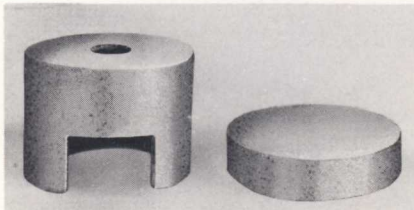
Size Rivets	No. of Rivets
3/4" x 2 1/2"	24
5/8" x 2"	30
1/2" x 2"	35
1/4" x 1"	50

### Time Required to Heat Rivets

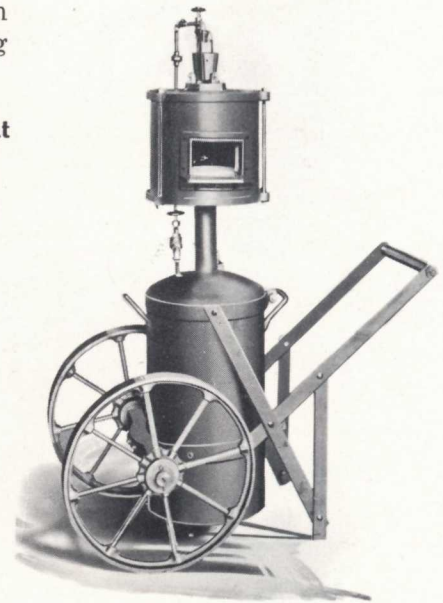
Size Rivets	Minutes
3/4" x 2 1/2"	7
5/8" x 2"	4 1/2
1/2" x 2"	3
1/4" x 1"	2 1/2



No. 3 Oil-Burning Rivet Forge



Removable Fire Brick Linings can be supplied



Truck Mounting as shown is available for all sizes

## GENERAL SPECIFICATIONS

Models	No. 1	No. 2	No. 3
Height to top of chamber.....	43 in.	48 1/2 in.	48 1/2 in.
Height of chamber.....	11 1/4 in.	14 1/4 in.	14 1/4 in.
Inside diameter.....	7 in.	12 in.	12 in.
Inside height.....	6 in.	7 3/4 in.	7 3/4 in.
Fire opening.....	3 1/2 x 5 1/4 in.	4 3/4 x 7 1/2 in.	4 3/4 x 7 1/2 in.
Capacity of tank.....	26 gal.	26 gal.	26 gal.
Net Weight.....	196 lbs.	317 lbs.	322 lbs.
Net Weight with Truck.....	265 lbs.	386 lbs.	391 lbs.
Shipping Weight.....	246 lbs.	368 lbs.	372 lbs.
Shipping Weight with Truck.....	275 lbs.	395 lbs.	401 lbs.

For Export Weights and Dimensions, See Separate Sheet, F3638



# Buffalo Tuyeres

The Buffalo Vulcan Tuyere was designed for general all around blacksmith work. Eccentric blast valve gives a wide range of regulations as follows:

With the small opening of the tuyere the blast is forced into the fire pot through three tapering converging channels, giving a large deep fire.

A quarter turn of the rod brings the valve to a position suitable for a small fire at either side of the fire-pot.

It is very easy because of the rising and falling action of the valve to break up clinkers and clean the fire-pot making cleaning out from the top unnecessary.

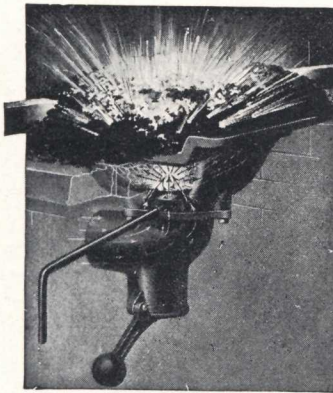
This tuyere when used with the No. 200 Blower has nearly three times the welding capacity of any other standard type tuyere on the market. It takes four-inch iron up to 12 inches long in one heat without moving the iron.

**Climax**—has revolving clinker-breaking valve. Sliding cover at bottom for removing ashes.

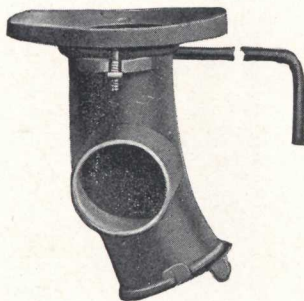
**RR**—This tuyere has clinker-breaking valve, also hinged and balanced ash gate, which opens and closes by a touch of the foot.

**EE**—The bowl of this tuyere is bolted on, and can be removed when desired. A twist of the seven-inch ball valve breaks up the clinker, which falls thru the large slot in bottom of ball. This valve is also used for regulating the size of the fire.

**JJ**—This tuyere has same features as the EE described above and in addition has a blast gate at the side.



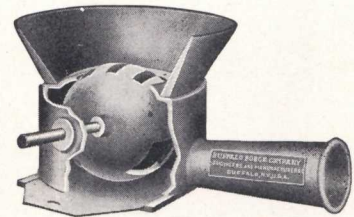
Vulcan



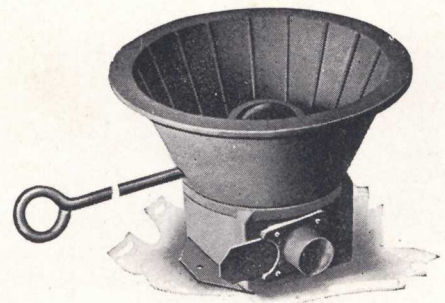
Climax



RR



EE



JJ

## SPECIFICATIONS

Name	Size of Bowl	Blast Pipe Diam.	Depth of Fire Pot	Weight
Vulcan	12 x 14 in.	3 in.	4½ in.	45 lbs.
Climax	8 x 7 in.	3 in.	.....	16 lbs.
RR	14½ x 17 in.	3 in.	4½ in.	64 lbs.
EE	11 in. diam.	3 in.	3¾ in.	62 lbs.
JJ	18 in. diam.	3 in.	8 in.	172 lbs.
LL	11½ x 27 in.	3 in.	3 in.	90 lbs.

For Export Weights and Dimensions, See Separate Sheet, F3638

*Buffalo*