

“Buffalo”

**Portable
Forges**

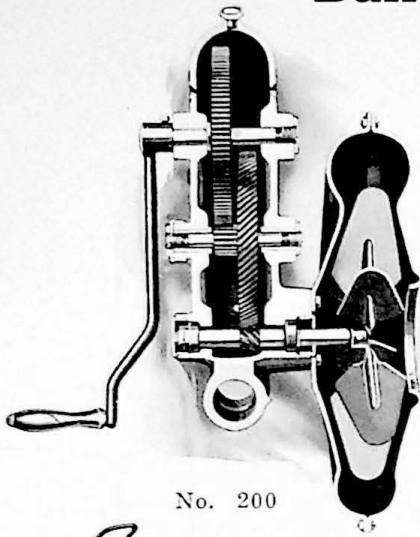
Bulletin 811-E

HARRY N. LEAVE
MOORE MACHINERY CO.,
7th & CARLETON STS.
BERKELEY 10, CALIF.
Thornwall 3 - 1636

Buffalo Forge Company
Buffalo, New York

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

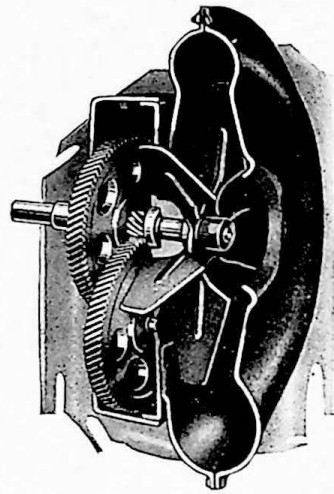
Buffalo Hand and Electric Blowers



No. 200

The No. 200 Silent Geared Blower

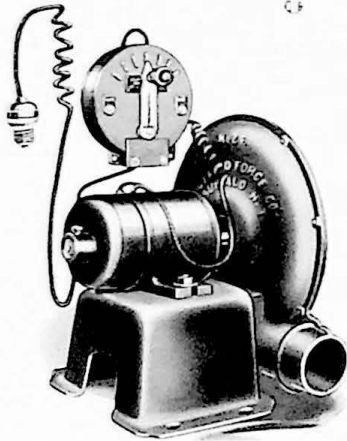
Features one-piece, cast-iron gear case with removable cover which keeps gears in permanent alignment and makes inspection easy. Helical pinion is cut from steel fan shaft. "New Departure" ball bearings are used. Gear ratio $47\frac{1}{2}$ to 1.



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.



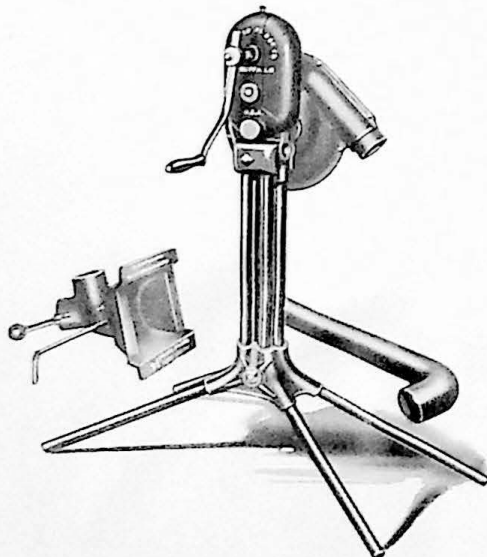
No. 2-E Electric

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.	14½ in.
3-E	82 lbs.	102 lbs.	3400	4 in.	16½ in.
4-E	126 lbs.	140 lbs.	3400	5 in.	19½ in.

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

For Export Weights and Dimensions, See Separate Sheet, F3638

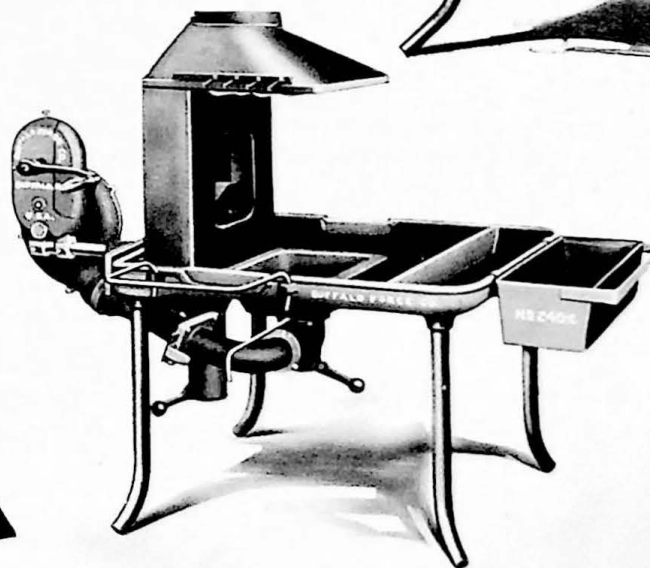
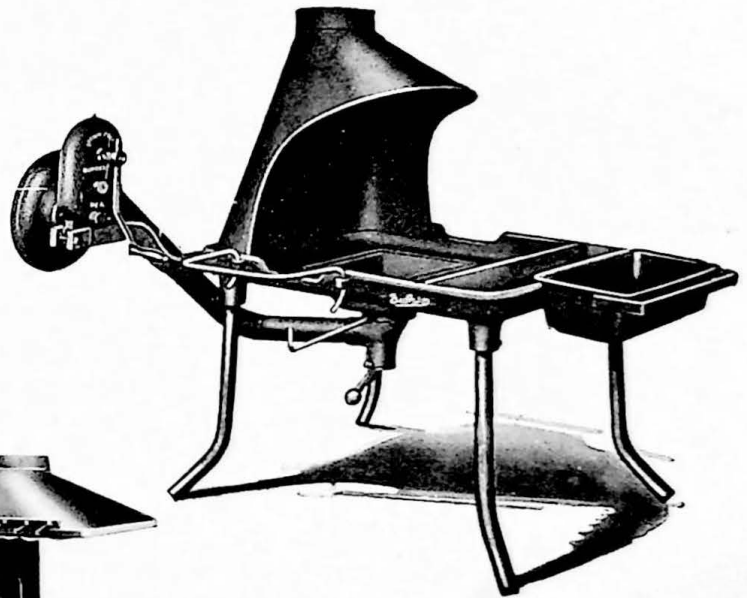
"Buffalo"

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.

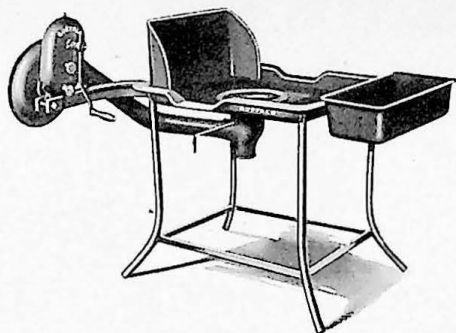
Forge No.	Blower No.	Gear Ratio	Diam. of Fan Case	Diam. of Hearth	Depth of Hearth	Net Wgt. Lbs.	Crated Wgt. Lbs.
210	200	47½ to 1	12"	18"	5⅜"	81	98
212	200	47½ to 1	12"	24"	5 "	92	111
510	500	47½ to 1	12"	18"	5⅜"	67	79
512	500	47½ to 1	12"	24"	5 "	73	92
710	700	47½ to 1	12"	18"	5⅜"	67	79
712	700	47½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

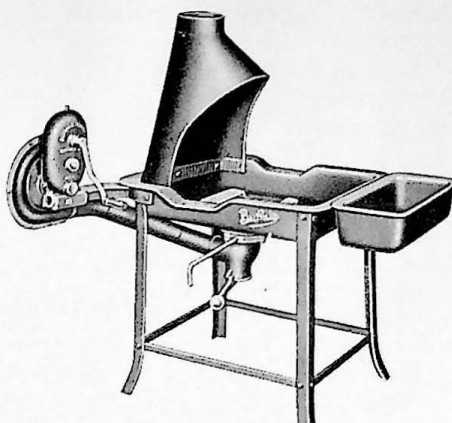
For Export Weights and Dimensions, See Separate Sheet, F3638

Buffalo

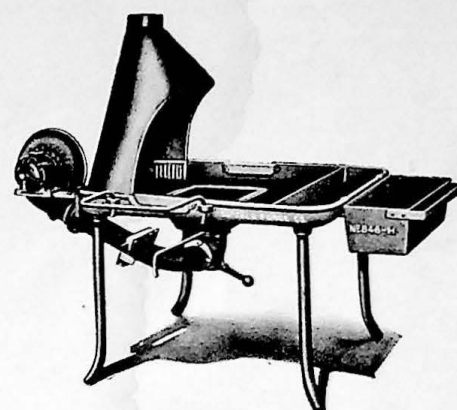
Buffalo Series 35, 36, 48 and 49 Forges



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.
235	200	47½ to 1	12"	24x30x3"	134	144
535	500	47½ to 1	12"	24x30x3"	121	133
735	700	47½ to 1	12"	24x30x3"	121	133
835	Electric	.....	12"	24x30x3"	137	160
236	200	47½ to 1	12"	24x30x5½"	164	178
536	500	47½ to 1	12"	24x30x5½"	146	159
736	700	47½ to 1	12"	24x30x5½"	146	159
836	Electric	.....	12"	24x30x5½"	164	186
248	200	47½ to 1	12"	38x42x3"	380	418
548	500	47½ to 1	12"	38x42x3"	365	405
748	700	47½ to 1	12"	38x42x3"	365	405
848	Electric	.....	12"	38x42x3"	370	418
249	200	47½ to 1	12"	38x42x7"	392	487
549	500	47½ to 1	12"	38x42x7"	376	472
749	700	47½ to 1	12"	38x42x7"	376	472
849	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.

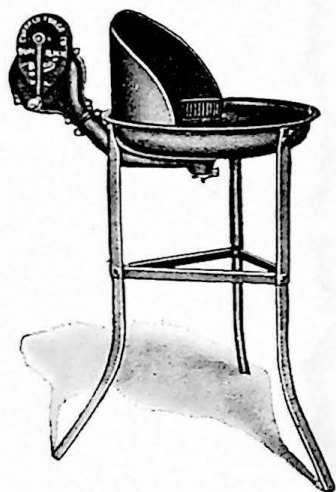
"Bufco" Nos. 061, 062 and 075 Forges

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.

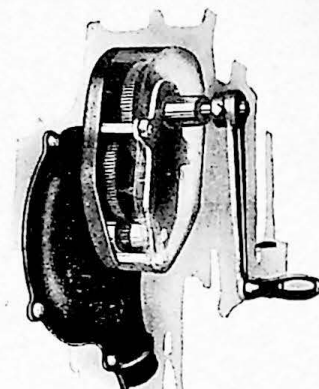
The 061 and 062 forges are mounted on three strong jointed legs and will stand firmly on uneven ground. Can also be had for bench use with windshield or half-hood.

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



"Bufco" No. 061

No.	Size of Hearth	Hood	Weight	
			Net	Shp'g.
061	18" diam., 3" deep	Windshield	33	36
061-H	18" diam., 3" deep	Half-hood	37	40
062	24" diam., 3" deep	Windshield	42	46
062-H	24" diam., 3" deep	Half-hood	46	50
075	24 x 30 x 3"	Windshield	88	108
075-H	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. 861



No. 875-H

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

For Export Weights and Dimensions, See Separate Sheet, F3638

Buffalo Oil-Burning Forges

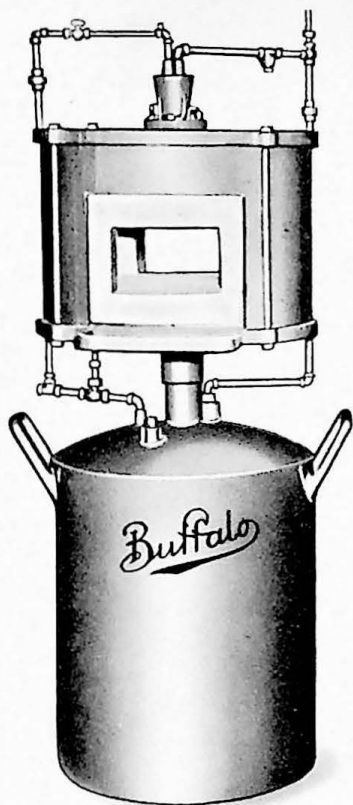
Buffalo Oil Burning Forges provide the most easily controlled and safest method of heating rivets where compressed air is available. With these forges there are no sparks, rivets are always in plain view and held at the proper temperature.

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.

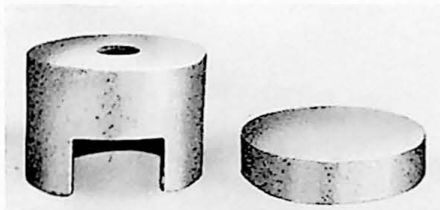
Air is supplied to the tank and the atomizer thru a single connection. Kerosene, distillate or any fuel oil can be used. All three models are furnished with 26 gal. tanks providing greater fuel capacity.

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.



No. 3 Oil-Burning Rivet Forge



Removable Fire Brick Linings can be supplied

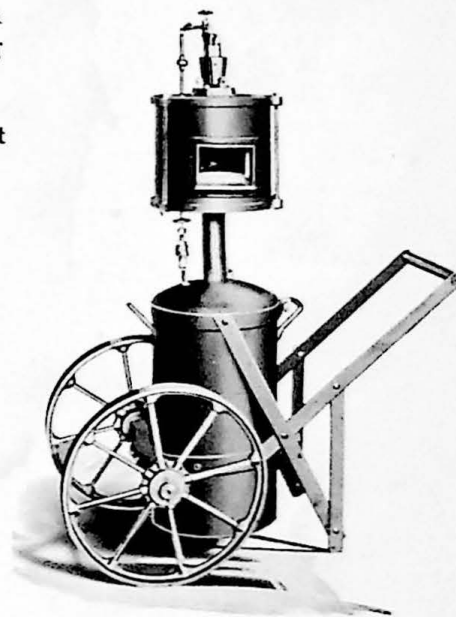
Tests conducted in our laboratory with a No. 1 forge produced the following results:

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



Truck Mounting as shown is available for all sizes

GENERAL SPECIFICATIONS

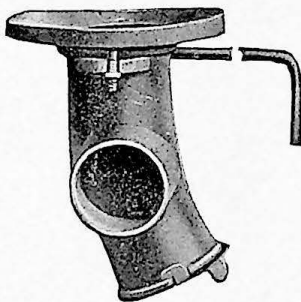
Models	No. 1	No. 2	No. 3
Height to top of chamber.....	43 in.	48 1/2 in.	48 1/2 in.
Height of chamber.....	11 1/4 in.	14 1/4 in.	14 1/4 in.
Inside diameter.....	7 in.	12 in.	12 in.
Inside height.....	6 in.	7 3/4 in.	7 3/4 in.
Fire opening.....	3 1/2 x 5 1/4 in.	4 3/4 x 7 1/2 in.	4 3/4 x 7 1/2 in.
Capacity 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

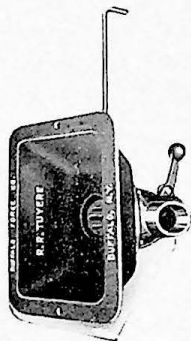
Buffalo Tuyeres



Vulcan



Climax



RR

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.

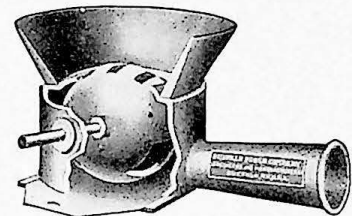
This tuyere when used with the No. 200 Blower has nearly three times the welding capacity of any other standard type tuyere on the market. It takes four-inch iron up to 12 inches long in one heat without moving the iron.

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

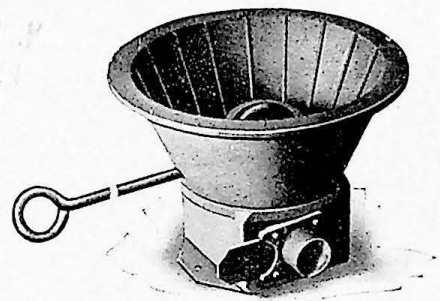
RR—This tuyere has clinker-breaking valve, also hinged and balanced ash gate, which opens and closes by a touch of the foot.

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.



EE



JJ

SPECIFICATIONS

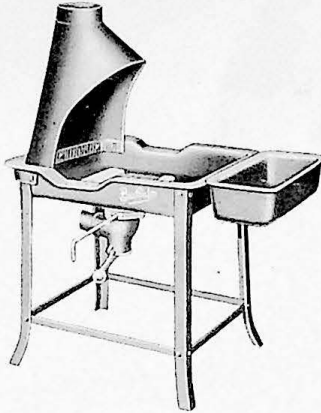
Name	Size of Bowl	Blast Pipe Diam.	Depth of Fire Pot	Weight
Vulcan	12 x 14 in.	3 in.	4½ in.	45 lbs.
Climax	8 x 7 in.	3 in.	.....	16 lbs.
RR	14½ x 17 in.	3 in.	4½ in.	64 lbs.
EE	11 in. diam.	3 in.	3¾ in.	62 lbs.
JJ	18 in. diam.	3 in.	8 in.	172 lbs.
LL	11½ x 27 in.	3 in.	3 in.	90 lbs.

For Export Weights and Dimensions, See Separate Sheet, F3638

Buffalo

BUFFALO STATIONARY FORGES

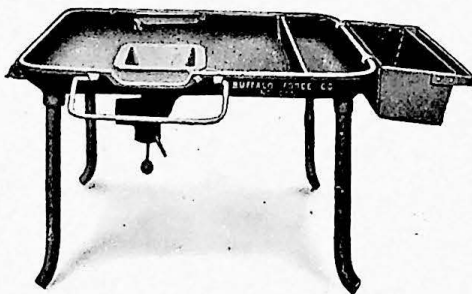
Buffalo Semi-Portable Forges



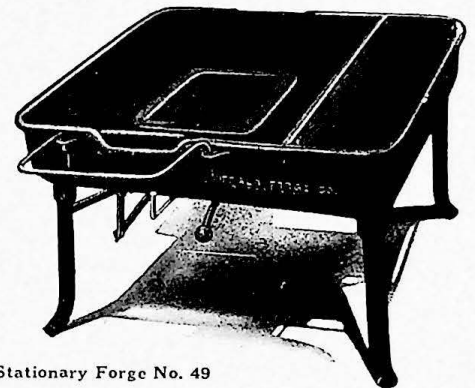
"Buffalo" No. 36-H Forge

These forges are of the semi-portable type that has great adaptability for many shops. Construction of hearths is as shown below. In place of hand blowers, these forges are equipped with dumping tuyeres and blast connections for air supply from power blowers. The extra heavy construction and bracing of these forges permits handling and hard usage without damage.

The blast connections are 3" in diameter, and are fitted with a lever-controlled blast gate.



"Buffalo" Cast Iron Semi-Portable Forge No. 48



"Buffalo" Stationary Forge No. 49

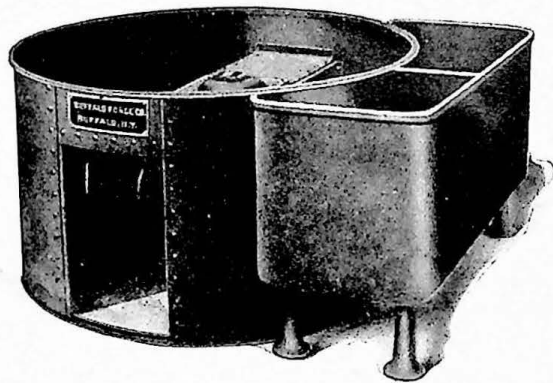
No.	Construction	Size of Hearth (Inside Dimensions)	Kind of Tuyere	Crated Weight
35-H	Steel	24x30x3"	Round Pot	120
36-H	Steel	24x30x5"	Vulcan	130
48	Cast Iron	35x39x3"	R. R.	300
48-H	Cast Iron	35x39x3"	R. R.	340
49	Cast Iron	36x40x7"	R. R.	370
49-H	Cast Iron	36x40x7"	R. R.	410

Half-hood furnished on all the above forges. Water Tanks Extra. Clay hearths before using.

The above items correspond with those listed on Pages 48, 50 of Catalog 820-B.

BUFFALO FORGE COMPANY
BUFFALO, NEW YORK
 Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

HARRY N. LEAVE
MOORE MACHINERY CO.
 7th & CARLETON STS.
 BERKELEY 10, CALIF.
 THornwall 3 - 1636



Stationary Forges Nos. 85 and 86

These forges are designed and built for heavy work. Built of heavy steel plate, rigidly stiffened and strengthened throughout to meet every strain of service. The edges are reinforced. The hearth may be lined with clay to reduce heat radiation through the sides.

Regularly equipped with anti-clinker dumping tuyere, and blast gate. Steel coal box and water tank can be furnished, if desired, at extra cost. The No. 85 has a 3-inch and No. 86 a 4-inch blast connection.

No.	Diam. of Hearth	Kind of Tank	Size of Coal Box	Size of Water Tank	Crated Weight
85	36 in.	Steel Plate	15x10x20"	18x10x15"	300
86	48 in.	Steel Plate	20x13x18"	25x13x18"	400

Water tank and coal box are extra equipment. Clay hearth before using.

Stationary Forges Nos. 885 and 886

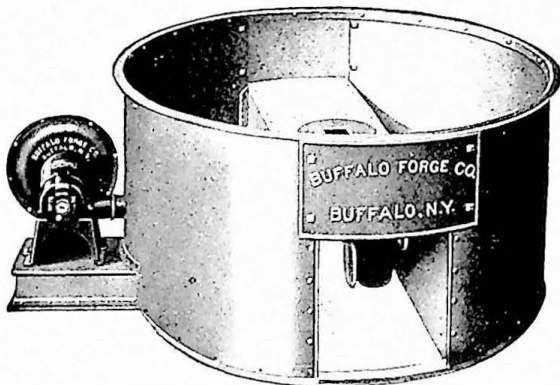
These are the Nos. 85 and 86 forges equipped with individual electric blowers, otherwise the same construction.

The forge may be set in the location most convenient, without any reference to line shafts, pulleys, or the requirements of belting. When placed in position, connections are made by running the wires to the nearest electric circuit. When not in use the current is shut off and no power is wasted.

Fitted with Variable or Constant Speed Electric Blower, mounted inside of forge casing, and easily accessible thru door in side of forge, and protected. For convenience, the illustration shows blower outside. Tanks furnished if desired.

No.	Height to Top Fire Pan	Diam. of Fire Pan	No. Electric Blower	Crated Weight
885	26 in.	36 in.	2E	375
886	26 in.	48 in.	2EH	440

Water tank and coal box are extra equipment. Clay hearth before using.



The above items correspond with those listed on Page 51 of Catalog 820-B.

Stationary Forges Nos. 97 and 98

The No. 97 Forge is especially adapted for the heaviest forge shop work. It was originally designed for the shops of the Union Pacific R. R. Co.

The hearth is made of cast iron and is 8 inches deep, but the two gates, one on each side, when opened, lower the sides of the hearth 4 inches. A coal box and water tank are at one end and integral with the hearth. Legs are cast iron.

Furnished regularly with improved tuyere of extra heavy construction, a 4-inch blast connection and lever control blast gate.

No.	Size of Hearth	Height to Top of Hearth	Depth of Fire Pit	Blast Connections	Crated Weight
97	49 1/2 x 56 1/2 in.	26 1/2 in.	8 in.	4 in.	955 lbs.

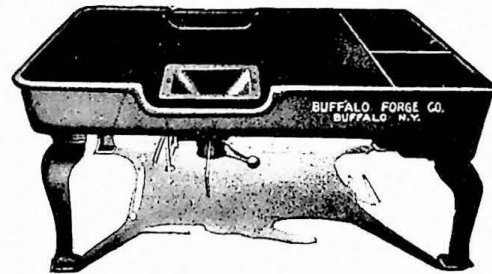
The No. 98 Forge will handle extremely heavy work and is a splendid forge for large railroad shops where it is necessary to spring locomotive frames and similar heavy and difficult work. It is advisable to install one of these forges in a shop equipped for light work, to handle heavy work that may come in from time to time.

The frame and hearth are made of cast iron. The firepot is 8 inches deep while the depth of the fire pan is 4 inches, making a total of 12 inches.

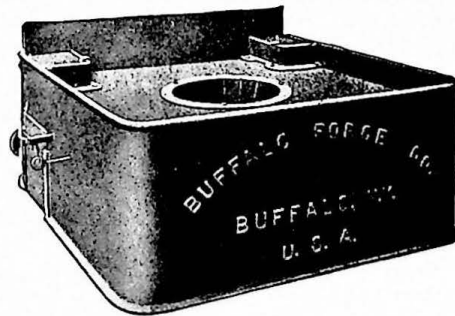
Regularly equipped with extra heavy Buffalo anti-clinker tuyere and improved blast gate.

No.	Size of Hearth	Height to Top of Hearth	Depth of Fire Pit	Blast Connections	Crated Weight
98	54 x 54 in.	25 in.	8 in.	4 in.	1165 lbs.

Clay hearths before using.



"Buffalo" Stationary Forge No. 97



"Buffalo" Stationary Forge No. 98

The above items correspond with those listed on Page 52 of Catalog 820-B.