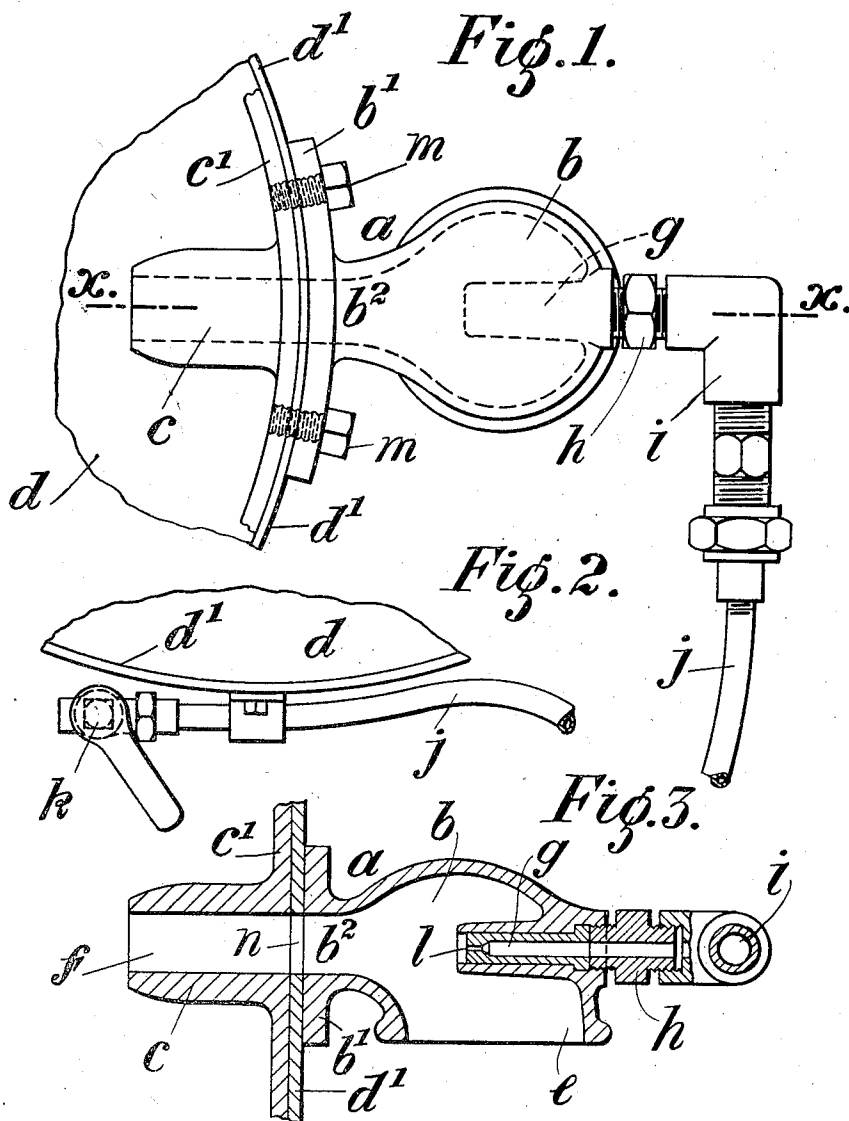


W. WALKER.
 BLOWER FOR PORTABLE RIVET HEARTHES OR FORGES.
 APPLICATION FILED FEB. 4, 1919. RENEWED AUG. 20, 1920.

1,356,674.

Patented Oct. 26, 1920.



Witnesses.
 Geo. Marshall Mackenzie.
 Mary A. Lindsay.

William Walker INVENTOR.
 per *N. S. Symington*
 ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM WALKER, OF GLASGOW, SCOTLAND, ASSIGNOR TO JOHN MACDONALD & SON LIMITED, OF MARYHILL, GLASGOW, SCOTLAND.

BLOWER FOR PORTABLE RIVET HEARTHS OR FORGES.

1,356,674.

Specification of Letters Patent.

Patented Oct. 26, 1920.

Application filed February 4, 1919, Serial No. 274,955. Renewed August 20, 1920. Serial No. 404,962.

To all whom it may concern:

Be it known that I, WILLIAM WALKER, a subject of the King of Great Britain, residing at Langside, Glasgow, Scotland, have
5 invented a certain new and useful Improved Blower for Portable Rivet Hearths or Forges, of which the following is a specification.

This invention relates to portable rivet
10 hearths or forges.

Under this invention I combine with the portable rivet hearth or forge a compound blower comprising an atmospheric nozzle and a compressed air nozzle the jet issuing
15 from the latter inducing a large volume of atmospheric air which is projected into the fuel in the rivet hearth or forge.

The atmospheric nozzle which, for convenience, I will hereinafter refer to as the
20 "large nozzle" is preferably made of cast iron and of somewhat bulbous formation with a wide atmospheric inlet at its outer end and a nipple part or mouth at its inner end this nipple part projecting over the
25 hearth. At the back of the large nozzle is a small nozzle which is supplied with compressed air the compressed air blowing through the large nozzle and inducing a current of atmospheric air. The bulbous part
30 of the large nozzle is preferably secured to the one side of the rim of the hearth and the nipple part to the other side.

The compressed air nozzle may be provided with a pipe connection having an air
35 cock thereon for regulating the air supply.

In order that the invention may be clearly understood I have hereunto appended an explanatory sheet of drawings, whereon:—

Figure 1 is a plan view showing the
40 blower as fitted to a rivet hearth which is only partly shown the remainder of the hearth being broken away.

Fig. 2 shows the air pipe connection.

Fig. 3 is a vertical cross section taken on
45 the line x, x , Fig. 1.

The blower comprises a large nozzle a which is made in two parts, a bulbous part b and a nipple part c , these parts having flanges b^1, c^1 , which are secured by screws m ,

to the rim d^1 of the rivet hearth d which
50 is shown broken away. n is a hole in the rim. It will be seen that the nipple part c is secured at the inside of the rim d^1 and the part b at the outside. The part b , which has a narrow neck b^2 , is curved downward,
55 as shown at Fig. 3, and has a large atmospheric inlet e while the nipple part c has a narrow passage f . At the back of the part a is a small nozzle g which is preferably screwed in place and is coupled, by means
60 of a coupling piece h , to a knee i and air supply pipe j . The pipe j is supplied with compressed air under the control of a hand operated cock k .

The compressed air issuing from the small
65 outlet l in the nozzle g induces a current of atmospheric air through the large nozzle b, c .

Having now fully described my invention what I claim and desire to secure by Let-
70 ters Patent is:—

1. The combination with a portable rivet hearth or forge of a compound blower comprising an atmospheric air nozzle made in two parts the one part of bulbous formation
75 with narrow neck and flange and the other part of nipple formation with flange, means for securing the flanges of the two parts to the rivet hearth or forge, a compressed air nozzle at the rear of and projecting into the
80 atmospheric air nozzle and means for supplying compressed air to the compressed air nozzle.

2. The combination with a portable rivet hearth of a compound blower comprising,
85 an atmospheric nozzle secured to the rim of the hearth and made in two parts a nipple part and an air inlet part, the nipple part projecting over the hearth, and a compressed air nozzle projecting into the air
90 inlet part.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM WALKER.

Witnesses:

WILLIAM FLEMING,
KATE WALKER.