(No Model.)

J. W. BABBIT.

PORTABLE FURNACE.

No. 321,332. Patented June 30, 1885.

Fig. 1.

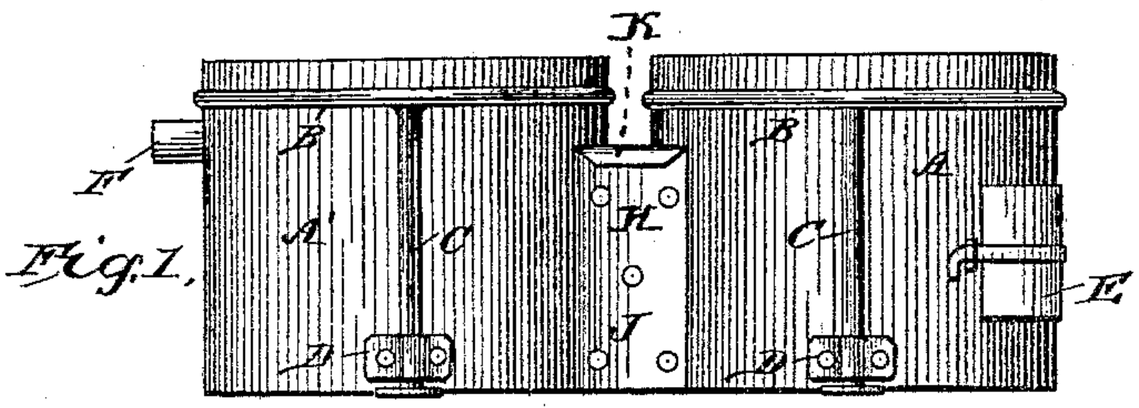


Fig. 2.

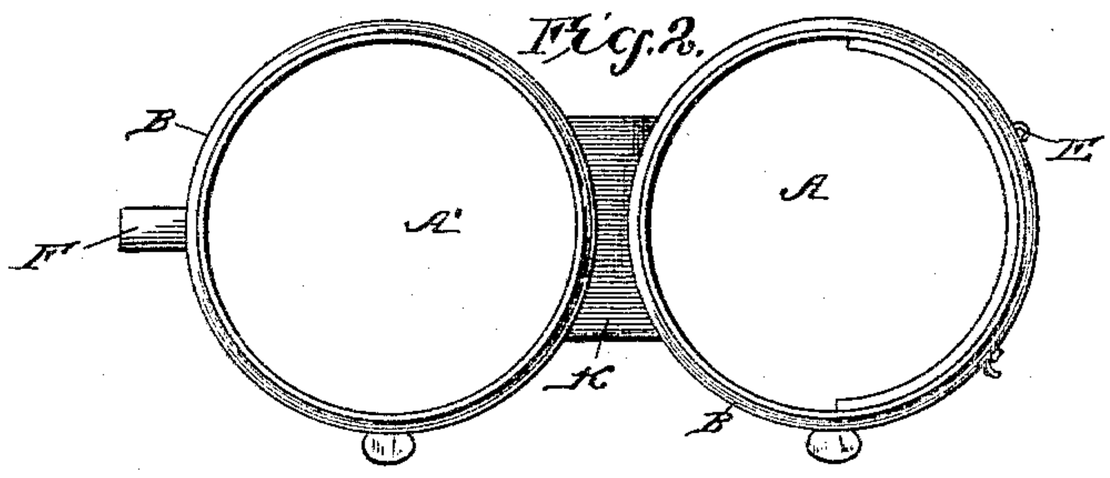


Fig. 3.

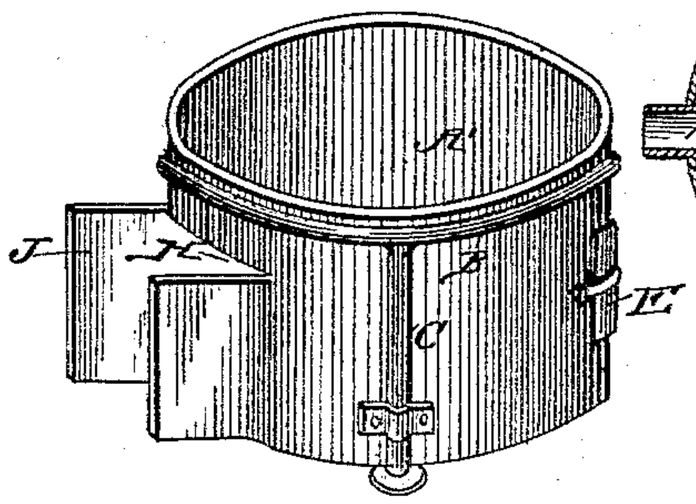


Fig. 4.

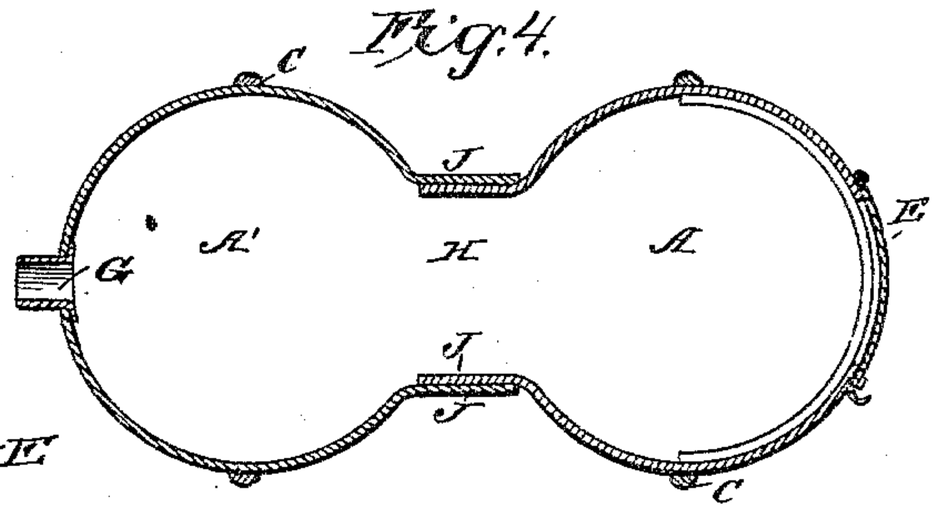


Fig. 5.

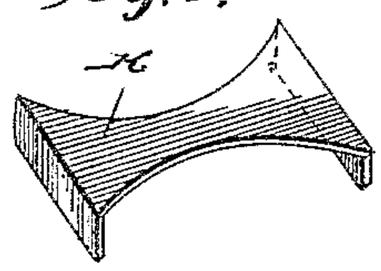
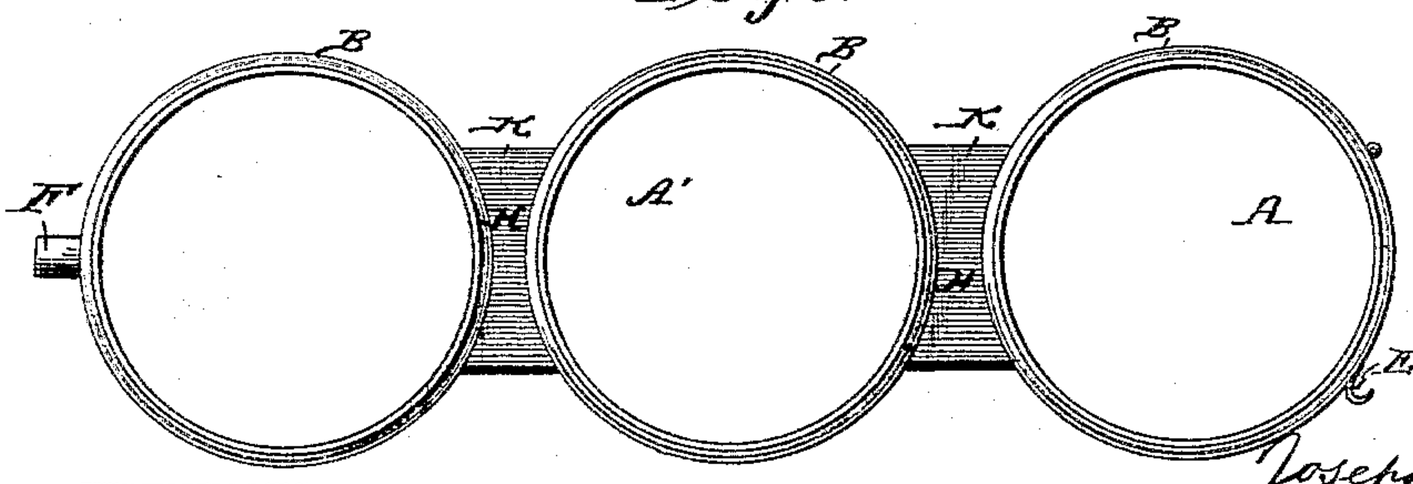


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH WALTER BABBIT, OF AROMA, INDIANA.

PORTABLE FURNACE.

SPECIFICATION forming part of Letters Patent No. 321,332, dated June 30, 1885.

Application filed April 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. BABBIT, a citizen of the United States, and a resident of Aroma, in the county of Hamilton and State of Indiana, have invented certain new and useful Improvements in Portable Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved portable furnace, showing the same to be constructed of two cylinders or compartments. Fig. 2 is a top or plan view of the same. Fig. 3 is a perspective view showing the manner of constructing the connecting-flue. Fig. 4 is a horizontal sectional view of the furnace, looking downwardly into the same. Fig. 5 is a detail view of one of the plates forming the tops of the connecting-flues, and Fig. 6 is a top view showing my improvement applied to a furnace having three cylinders or compartments.

The same letters refer to the same parts in all the figures.

This invention relates to portable furnaces for agricultural and domestic purposes; and it consists in the improved construction of a furnace of this class having two or more cylindrical drums or compartments, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A and A′ denote two sheet-metal cylinders, open at the top and bottom, and provided near their upper ends with metallic bands or hoops B, serving to brace and stiffen the cylinders, and provided with downwardly-extending legs C C, upon which they are supported. The legs are secured, near their lower ends, to the sides of the cylinders by means of bails D, thereby increasing the rigidity of the said legs and strengthening the device generally.

One of the cylinders, A, is provided with a door, E, through which fuel may be fed into the furnace; and the other cylinder is provided with a thimble or collar, F, surrounding an opening, G, and to which a pipe or smoke-stack may be attached. The cylinders A and A′ are connected by a central chamber or flue, H, which is constructed in the following manner: A slit is made vertically in the side of each cylinder, and a transverse cut is made at the upper end of and at right angles to the said slit. The flaps or wings thus formed, as shown at J in Fig. 3 of the drawings, are bent outward and placed so as to overlap the corresponding wings of the adjoining cylinder. The overlapping flaps are then fastened together by riveting, and the top of the flue is closed by a plate, K, cut of a shape to fit the flue. In this manner the two cylinders or drums are connected rigidly, the connecting-flue H being constructed with double sides formed by the overlapping wings or flaps J, as will be seen more clearly by reference to Fig. 4.

It will be noticed that this way of forming the flue H makes it three-sided, or, rather, without a bottom. This permits the fire to be placed underneath both or all of the kettles being heated, and it will also permit of the use of long sticks of wood that will reach through both parts of the furnace.

My improved furnace may, when desired, be constructed of more than two drums or cylinders, as will be seen in Fig. 5 of the drawings, where three such drums or cylinders have been shown. In such case the several cylinders are connected by flues H, of the construction already described, and the two end cylinders are provided, respectively, with a door, and with a thimble for the attachment of a smoke-stack.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. Kettles or caldrons may be readily fitted to the upper ends of the cylinders. Wood, coal, or other fuel may be used, and grates may be provided for the lower ends of the drums or cylinders, when desired.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A portable furnace consisting of a series of two or more drums or cylinders open at their upper and lower ends, and connected by bottomless flues or passages constructed of wings or flaps cut from the bodies of the said

cylinders, placed together overlapping each other, connected by riveting, and provided with top covering-plates, substantially as herein described, for the purpose set forth.

2. In a portable furnace, the combination of a series of drums or cylinders, bottomless flues or passages connecting the same, and constructed of overlapping wings or flaps cut from the sides of said cylinders, and suitable top plates, hoops, or bands arranged near the upper ends of said cylinders and provided with suitable legs, and a door and a pipe collar or thimble attached, respectively, to the front and the rear end cylinder, substantially as herein described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOSEPH WALTER BABBIT.

Witnesses:

WILLIAM COX,

LEVIS KUNERLING.