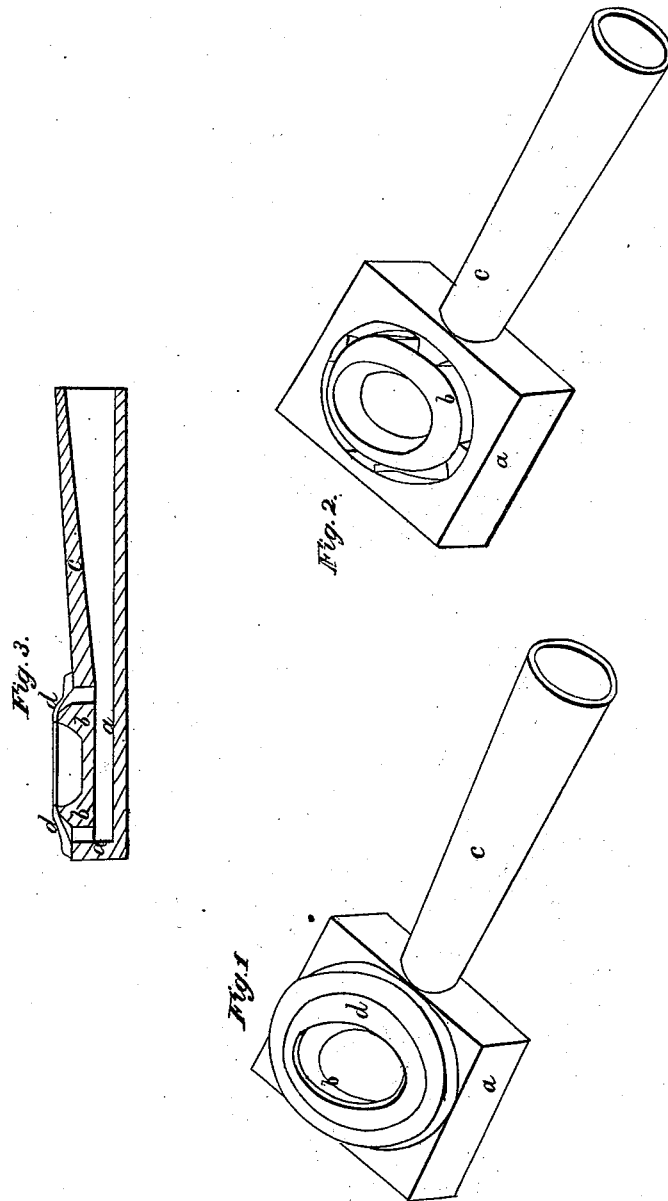


L. D. Brown,

Tuyere,

Nº 3,132,

Patented June 14, 1843.



UNITED STATES PATENT OFFICE.

LORENZO D. BROWN, OF LEE, MASSACHUSETTS.

TWYER.

Specification of Letters Patent No. 3,132, dated June 14, 1843.

To all whom it may concern:

Be it known that I, LORENZO D. BROWN, of Lee, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Tew-Irons for blacksmiths' forges; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification, Figure 1, being the machine complete; Fig. 2, cap removed; Fig. 3 section through the iron.

The nature of my invention consists in constructing a tew iron in such a manner as that the blast shall converge toward the center in an unbroken column from every point.

In constructing my apparatus a square or oblong box (*a*) is formed, in the cover of which a conical projection rises at (*b*); this is truncated, and its center hollowed out down below the level of the top of the box. All around the base of this conical part the cover is perforated with holes; and from one side of the box a tube (*c*) projects, which receives the wind from the bellows; over the cover or upper side of the box, (which is in one casting) a separate cap (*d*) is fitted. This is a hollow truncated cone through the center of which there is a hole about the same size as the hollowed part of (*b*) above named; the

cap is a little more obtuse than the projection (*b*) on its under side and extends out over the apertures in the top of the box; at its base it has a flange by which it is secured to the box below by screws; the aperture for the passage of the air gradually contracts from the base to the point of delivery. Instead of the circular formed aperture as above described and represented it may be square or oblong to suit the character of the work to be performed.

When the wind is forced into the tube (*c*) it is driven through the apertures in the top of the box and flattens out between the two cones and issues in a continuous stratum. The cap can be raised or lowered at pleasure to suit the purpose required, its lower edges being luted with clay to make an air tight joint.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the box (*a*) having a conical or pyramidal formed projection on its top surrounded by apertures at its base, with a conical or pyramidal cap constructed and arranged in the manner and for the purpose substantially as herein set forth.

LORENZO D. BROWN.

Witnesses:

JOHN S. TOUGH,
J. J. GREENOUGH.