

W. Dunkerly,

Forge Bonnet.

No. 103,160.

Patented May 17, 1870.

Fig. 1.

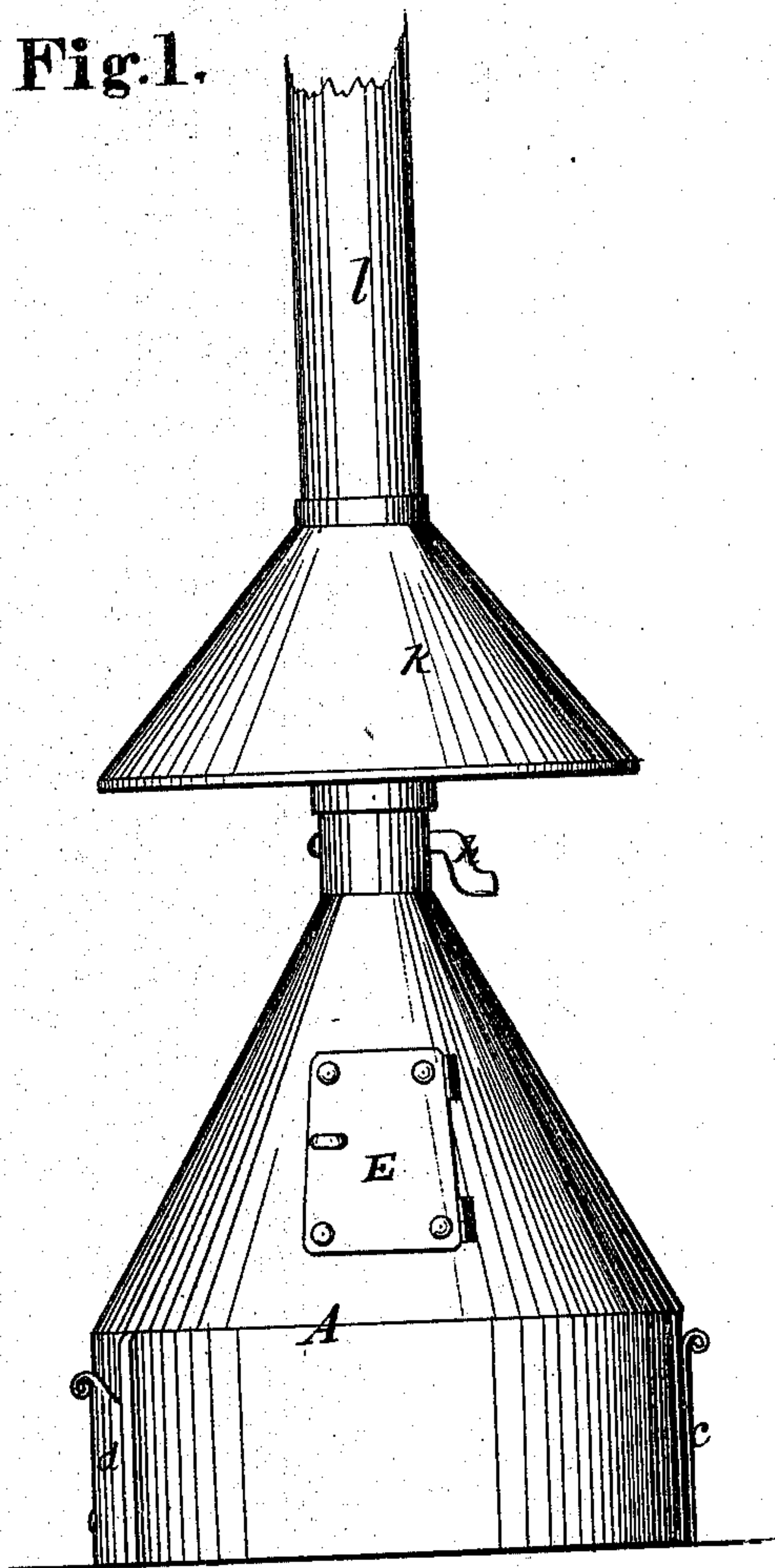
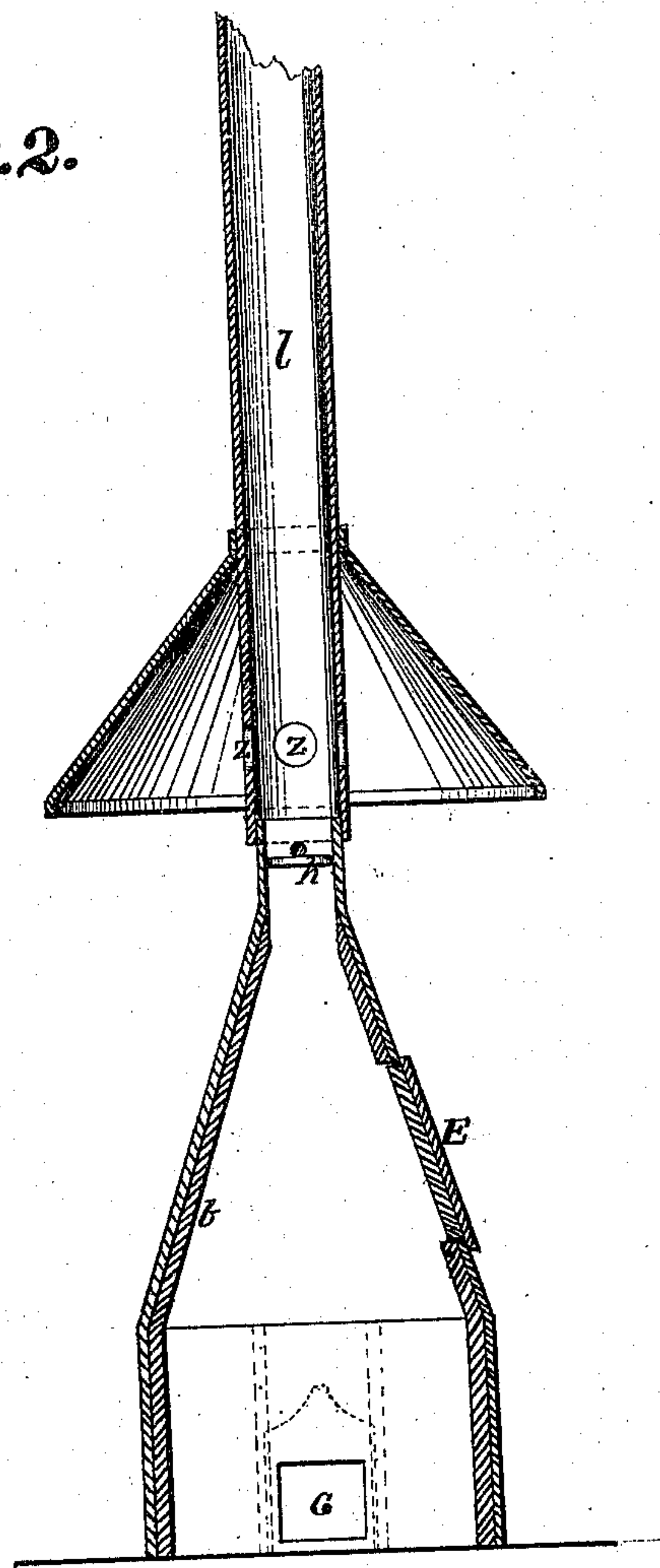


Fig. 2.



Witnesses.

Villeite Anderson,
Chas. Kenyon

Inventor.

W. Dunkerly,
Chipman, Hosmer & Co.,
Attorneys.

United States Patent Office.

WALTER DUNKERLY, OF WOONSOCKET, RHODE ISLAND.

Letters Patent No. 103,160, dated May 17, 1870.

IMPROVED FORGE-BONNET.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WALTER DUNKERLY, of Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and valuable Improvement in Forge-Bonnets ; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a front view of my invention.

Figure 2 is a central vertical cross-section thereof.

My invention relates to means for increasing the heat and economizing coal in a blacksmith's forge, and consists in the construction of a bell-shaped bonnet lined with fire-clay, designed to be placed upon the forge directly over the tweek.

The letter A of the drawings represents the forge-bonnet made of cast-iron and lined with fire-clay, *b*. It is, in shape, a cylinder, surmounted by a cone, but its horizontal sections are elliptical, the longest diameter being in the line of the doors *c* and *d*, through which the articles to be heated are introduced. These doors slide vertically.

E designates the feeding-door, through which coals are passed.

h represents a damper designed to prevent the escape of heat, when necessary.

The bonnet may be used either with or without a chimney. When the forge is provided with a chimney, the bonnet as above described is complete for use,

but when there is no chimney, the sheet-iron pipe *l* is used to convey off the products of combustion.

At its lower end, just above the damper, the sheet-iron pipe is provided with an inverted funnel or cone-shaped collar, *k*, designed to gather the gases and smoke when the damper is closed, and to convey them off through the draught-openings *z z*.

With this bonnet an iron bar can be heated quickly and with great uniformity. Less coal is necessary to accomplish the work, and there is no waste. With the bonnet a certain degree of neatness is possible about a forge, which cannot be obtained without it. The fire-clay lining serves to retain the heat, and, at the same time, to prevent the cast-iron body of the bonnet from being quickly burned out.

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

1. The forge-bonnet herein described, lined with fire-clay or other suitable material, and provided with the feeding-door *E*, sliding doors *c* and *d*, and damper *h*, as specified.

2. In combination with the conical cast-iron forge-bonnet *A*, having feeding-door *E*, sliding doors *c* and *d*, and damper *h*, the sheet-iron pipe *l*, having conical collar *k*, and draught-openings *z z*, substantially as shown and described.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

Witnesses:

WALTER DUNKERLY.

GEORGE A. WILBOR,

C. H. FLETCHER.