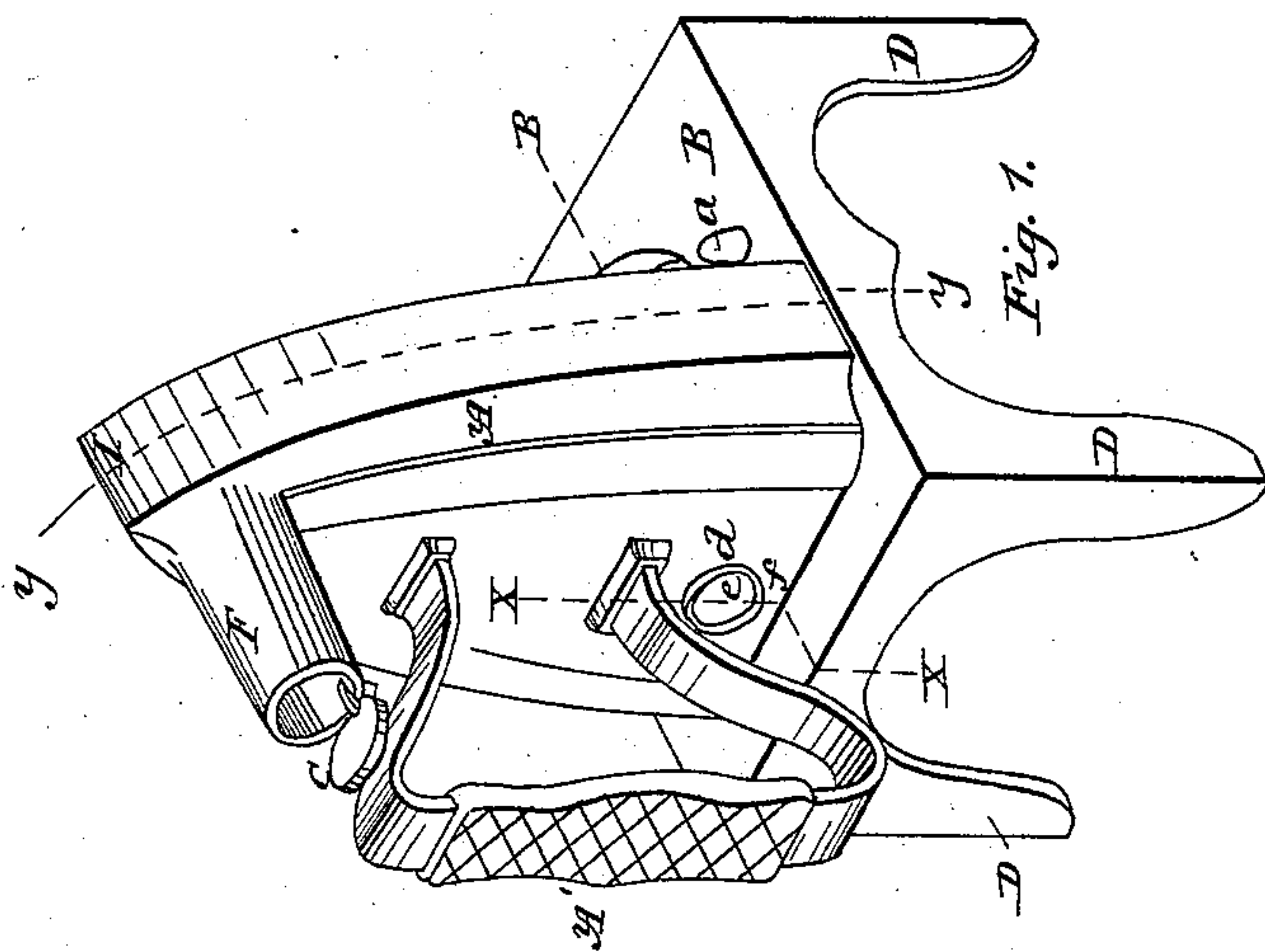
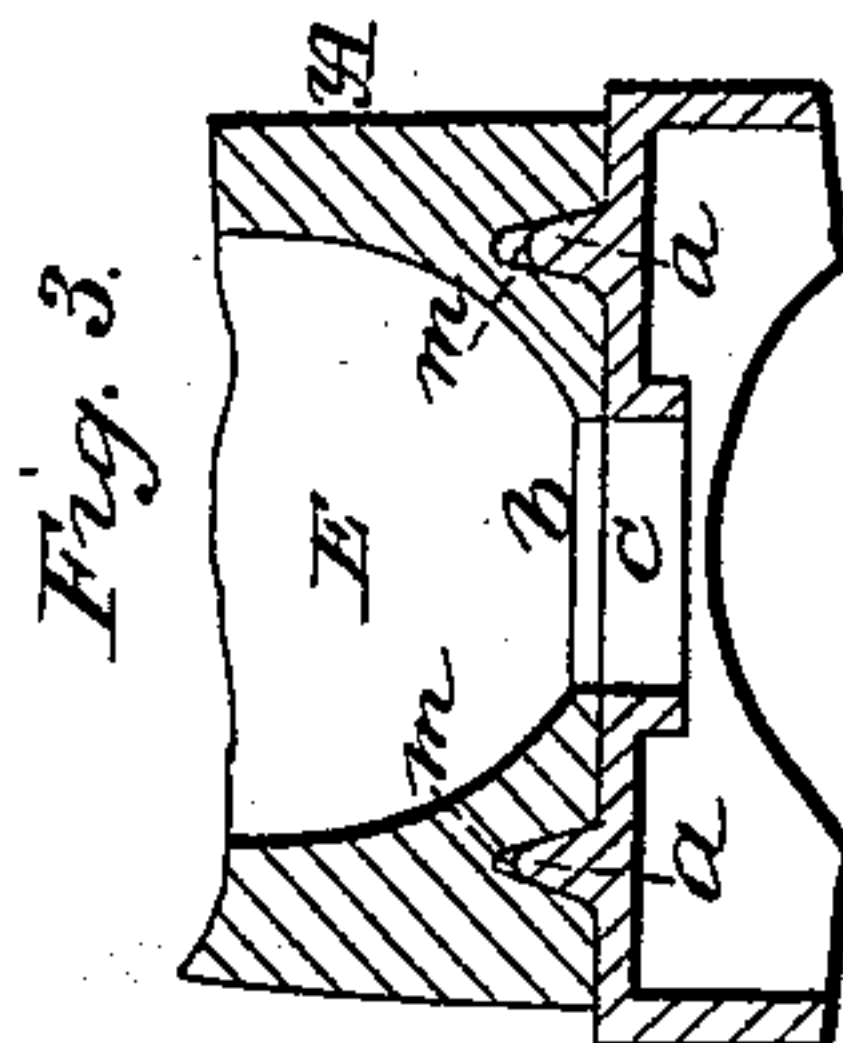
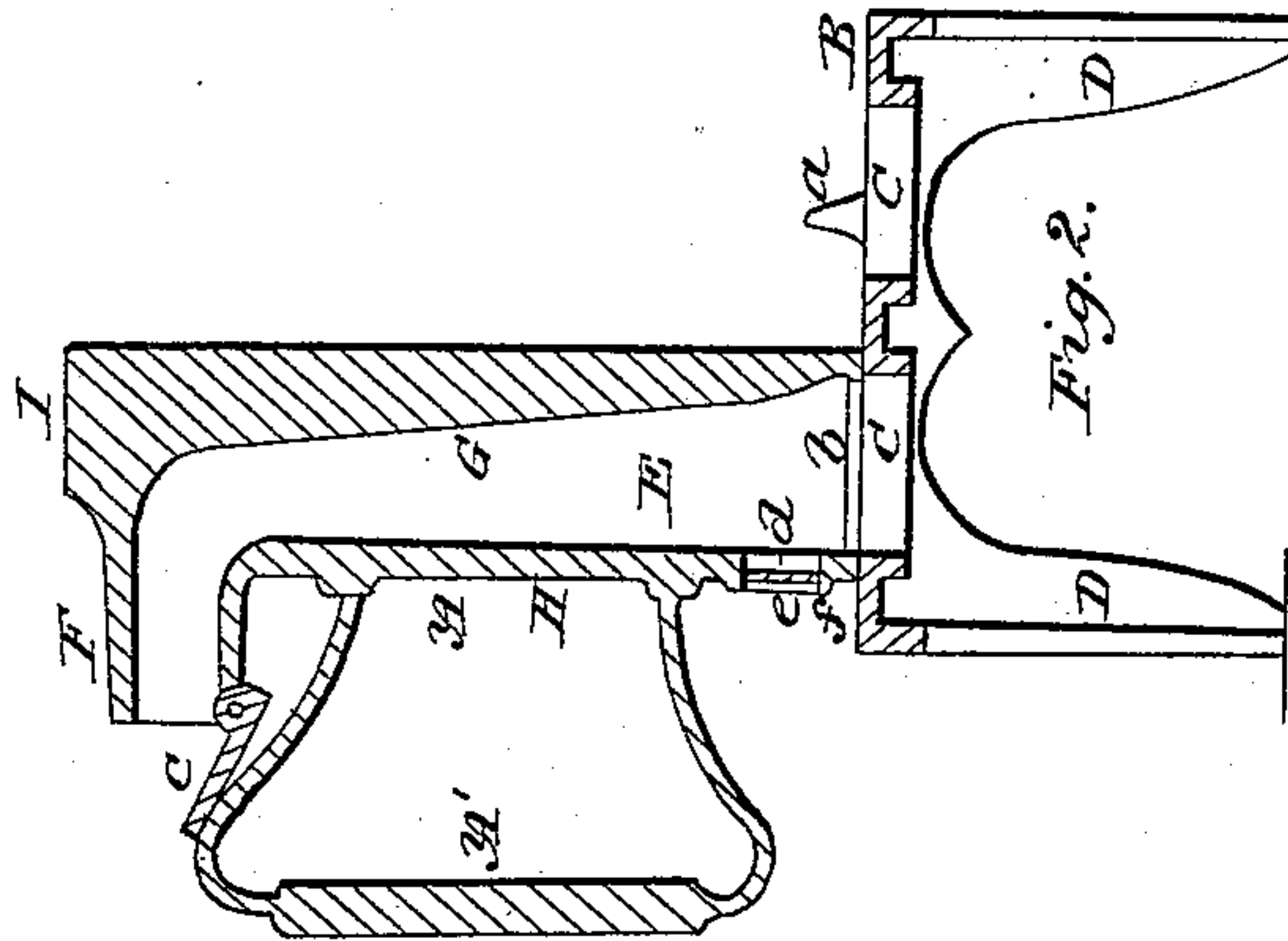


J. W. HALL.

Sad Iron.

No. 76,754.

Patented April 14, 1868.



WITNESSES

Thos. H. Dodge
Geo. H. Miller

INVENTOR

Judson W. Hall

United States Patent Office.

JUDSON W. HALL, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 76,754, dated April 14, 1868.

IMPROVEMENT IN SAD-IRONS.

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

KNOW ALL MEN BY THESE PRESENTS:

That I, JUDSON W. HALL, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Sad-Irons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a perspective view of my improved sad-iron as it appears when placed upon its heating-stand.

Figure 2 represents a section on line *x x*, fig. 1; and

Figure 3 represents a section of a portion of the sad-iron and stand on line *y y*, fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, the part marked A represents my improved sad-iron in position upon the heating-stand B, the latter being made of sufficient size to support two sad-irons at a time. In the top of the stand B are two holes, C C, while upon each side of each hole C projects a conical point, *a*. A' is the handle by which the iron is used.

Stand B is supported by legs D D. The body of the sad-iron A is made hollow, or with a chamber, E, and is open both in rear and front, as shown in the drawings. The rear opening is made to correspond with the opening in the stand B, as shown at *b*, while the front opening is through the chimney F, to the end of which is hinged the valve *c*. An opening, *d*, is made in the rear upper side of the sad-iron, and covered with an isinglass window, *e*. In this instance the window of isinglass is fitted into the inside of a flange, *f*, which answers as a frame, the glass being held in by plaster of Paris.

In practice, it may be found more convenient to have two flanges in dove-tail shape, between which the isinglass can be slipped, a perforated plate being slipped in over the glass, if found necessary, to retain it in place.

The object of the window is to enable the ironer to see the lamp-flame, so that it may be regulated to burn with the proper clearness, my sad-iron being designed so as to enable a kerosene-lamp to be used for the purpose of heating the same.

The lamp should be supported so that the flame will be quite or entirely above the top of the stand B.

It will be observed that the lower inner surface, G, of the sad-iron inclines up toward the back, H, as it approaches the point I, and, as a consequence, the flame and heated air and gases from the lamp impinge more effectually against that part of the iron where the heat is required.

By the employment of the chimney F, a sufficient protection and draught are secured to burn kerosene-oil very perfectly, for the purpose of heating the iron.

The valve *c*, when the iron is placed on end for heating, falls back and leaves the chimney F open, while, when the flat or iron is removed and placed upon a table for use, the valve *c* falls and closes the top of chimney F, thus preventing a draught of cold air through the iron while it is in use.

If the chimney F were left open during the operation of ironing, the current of cold air, which would pass through chamber E, would tend to cool the flat or iron very much, and to such a degree as to require a repetition of the heating operation much more frequently than when the valve *c* is used. Valve *c*, it will be observed, is automatic in its operation.

The rear of the iron is provided with two conical holes, *m m*, into which the projections *a a* fit when the flat is placed in position for heating, as shown in the drawings, thus insuring the proper position of the iron upon the heating-stand.

I prefer to use a lamp with double tubes and wicks, thereby heating two flats or irons from the same lamp at the same time.

Having described my improvements in sad-irons, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the rear of the iron, of the concavities *m m*, for the purposes stated.
2. The combination, with the rear of the iron, of window *e*, substantially as and for the purposes set forth.

JUDSON W. HALL.

Witnesses:

THOS. H. DODGE,
GEO. H. MILLER.