

F. JUDSON.
Lamp Reflector.

No. 99,908.

Patented Feb. 15, 1870.

Fig. 1

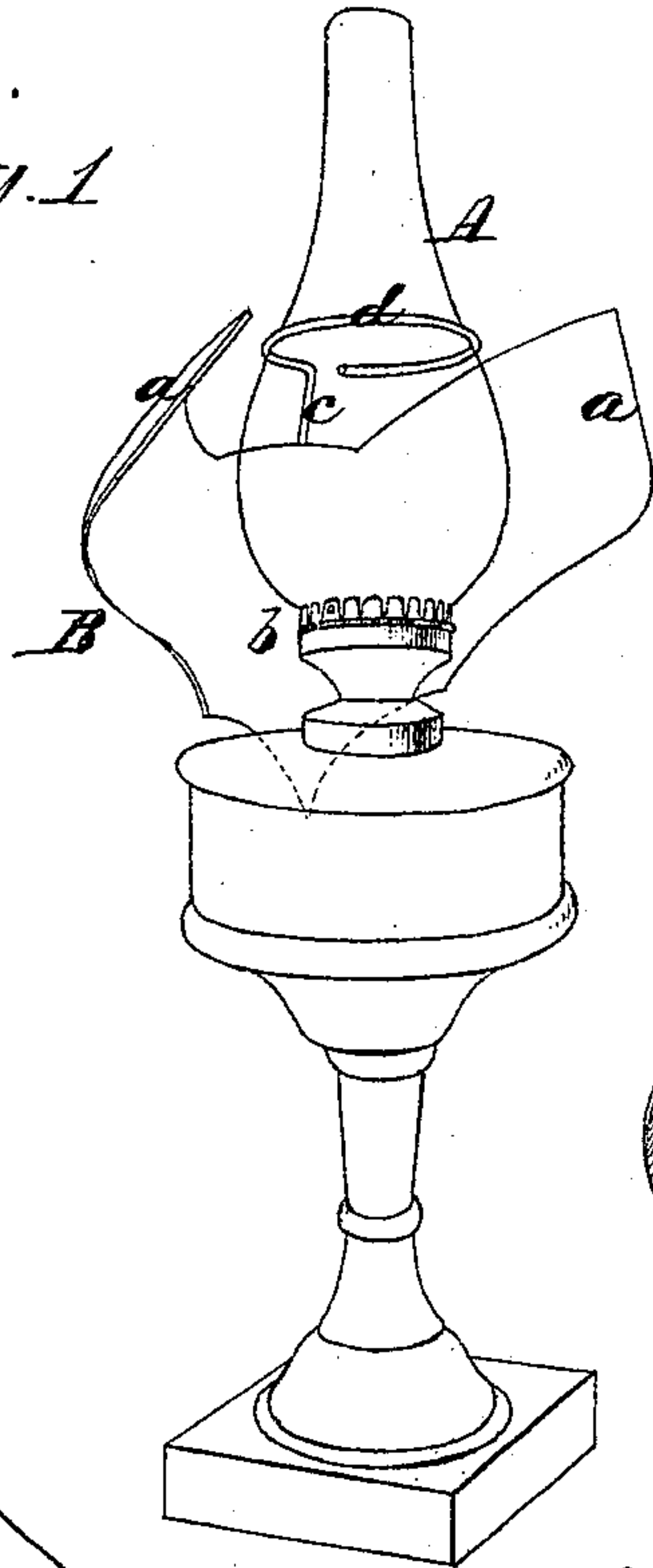


Fig. 2

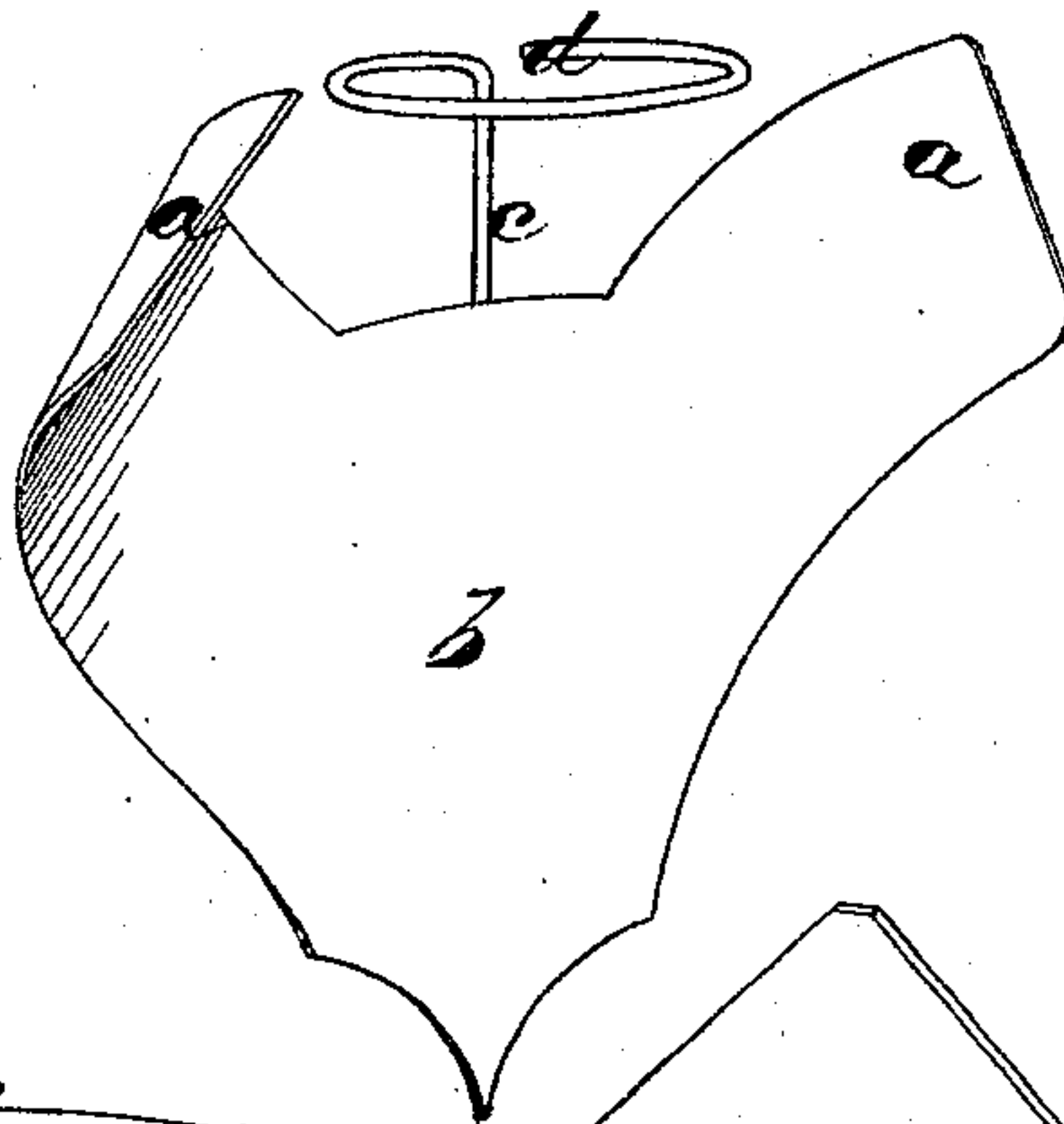


Fig. 3

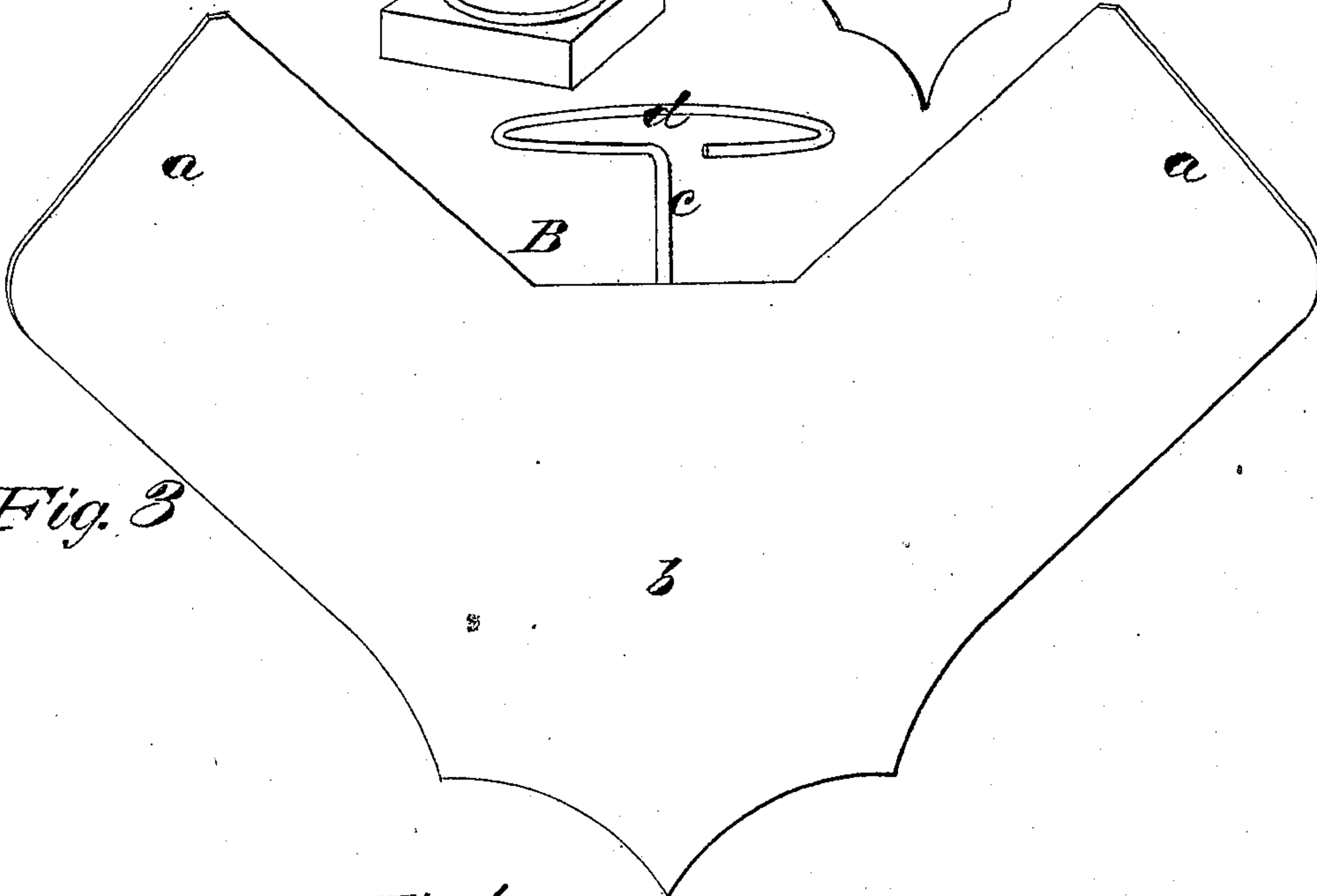
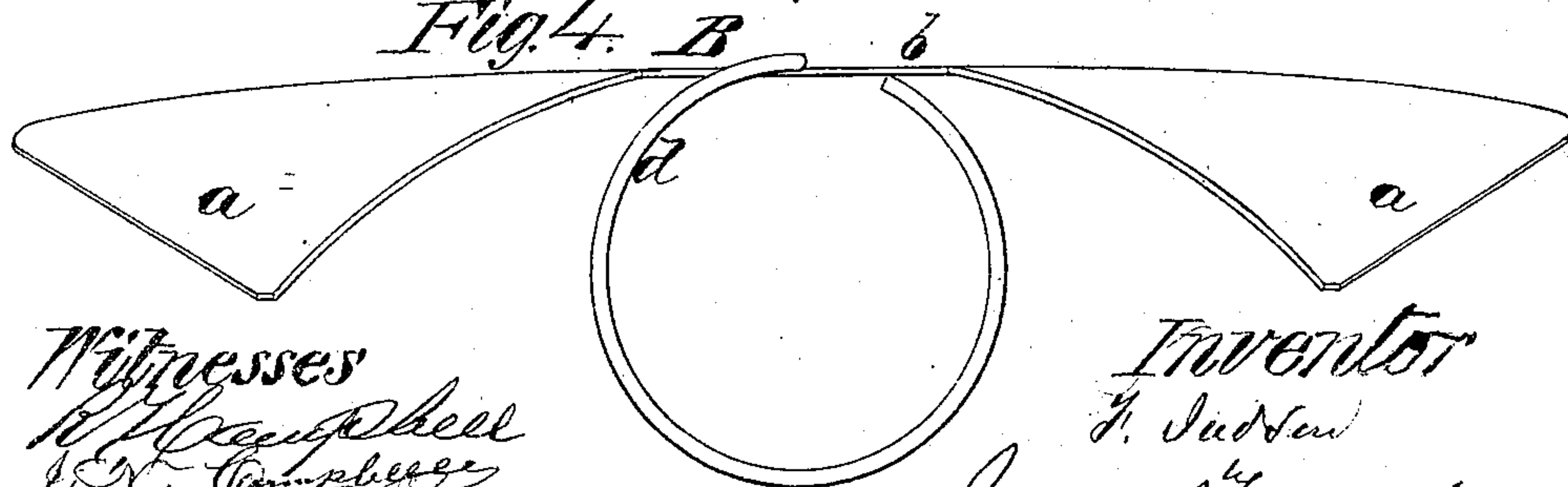


Fig. 4. B



Witnesses
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FREDERICK JUDSON, OF CASTLETON, NEW YORK.

Letters Patent No. 99,908, dated February 15, 1870.

IMPROVEMENT IN REFLECTORS FOR LAMPS.

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, FREDERICK JUDSON, of Castleton, in the county of Rensselaer, and State of New York, have invented a new and Improved Reflector; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a perspective view showing my improved reflector applied to a lamp-chimney;

Figure 2 is a perspective view of the reflector detached from the chimney;

Figure 3 is a front view of the reflector; and

Figure 4 is a top view.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to so construct a portable light reflector that it can be adjusted to lamp-chimneys of different sizes and sustained by the chimneys without the use of springs; and

Also to so construct the reflector that it can be adjusted according to the direction it may be desired to reflect the rays of light.

I am aware that reflectors of a circular form have been provided with spring-bands, and thereby adapted for being applied to and sustained by lamp-chimneys, and I do not claim such a contrivance as my invention.

The nature of my invention consists in a winged reflector made of flexible sheet metal, with its wings so shaped that they can be bent and adjusted according to the kind of lamp used, so as to reflect the rays of light to the best advantage from each side of an intermediate reflecting portion, said winged reflector being provided with an adjustable suspension device by which it can be readily applied to a lamp-chimney and sustained in position thereby, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, fig. 1, I have represented a common form of lamp having a chimney, A, applied to it, which chimney is swelled near its base and tapers upwardly. This is the kind of chimney to which my invention is especially applicable, as will be shown by the following description.

The reflector B consists of a central body portion, *b*, and two expanded wings, *a a*, made of one piece of metal.

In the manufacture of the reflectors B, flexible sheet metal should be used for the purpose of allowing the

wings *a a* to give any desired angle and curvature with respect to the central or body portion *b*. When this reflector is applied at the back of the flame, the central portion *b* should radiate the light directly outward, and the wings *a a* should be adjusted so as to radiate the rays of light outwardly from the sides of the flame to the best advantage. To this end the reflector should, of course, be made of a sheet metal which will retain any curvature given it, and the wings should be made of the form shown in fig. 3, or substantially of this form. The direction of the wings is upward and outward, so as to reflect the rays downwardly.

To the winged reflector I permanently secure a device by which this reflector can be applied to and sustained by a lamp-chimney. This device consists of a wire of suitable gauge to afford the required stiffness, which wire is permanently secured by solder or otherwise to the upper portion of the reflector at the middle of its width.

The straight portion *c* of this wire terminates upwardly in a circularly bent portion, *d*, the extremity of which is free.

This circular portion *d* can be expanded or contracted so as to increase or diminish its diameter according to the diameter of the lamp-chimney to which the reflector is to be applied.

By means of this attaching device the reflector can be adapted to fit various sizes of lamp-chimneys, and it can be sustained in different positions on the same lamp-chimney.

Although I have described my reflector as applicable especially to lamp-chimneys, I do not intend to limit it to lamp-chimneys, as it can readily be adapted without changing its form to fit upon gas-burners, the only change required being to set the holding device in a proper position so as to have the reflector come in proper relation to the flame.

Having described my invention,

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

The lamp-chimney reflector constructed with a closed fixed reflecting body portion *b*, and with wings *a a* branching up and out from said portion *b*, and with a supporting device *c d*, all being constructed of ductile or flexible material, which may be bent into the desired form by the user to adapt it for the special use intended, substantially in the manner described.

FREDERICK JUDSON.

Witnesses:

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