

F. S. DRAPER.  
Gem-Setting.

No. 221,041.

Patented Oct. 28, 1879.

Fig. 1.

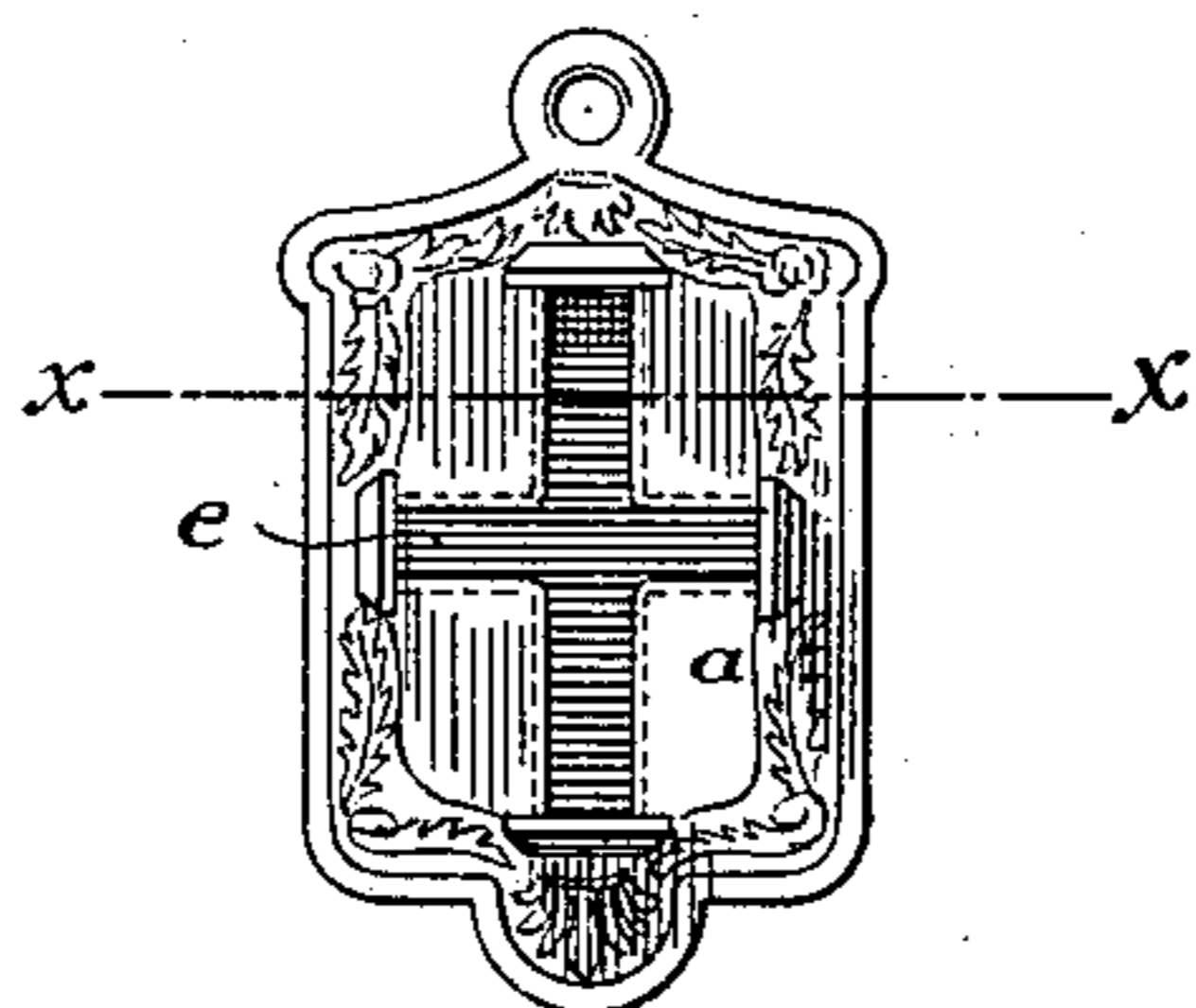


Fig. 2.

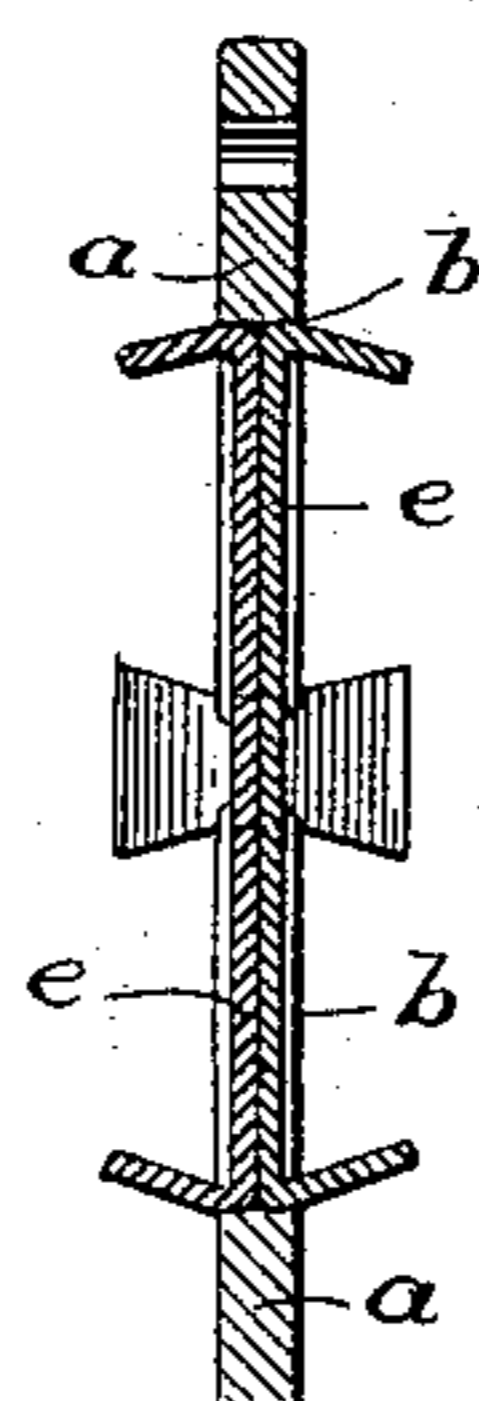
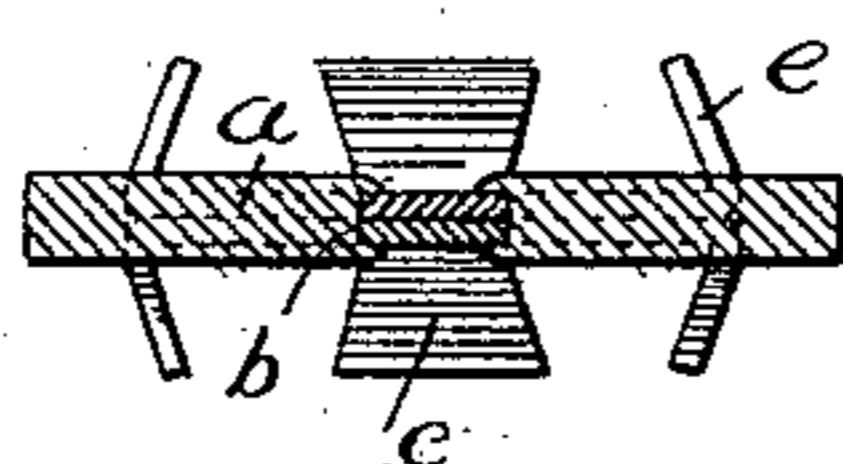


Fig. 3.



Attest:

C. Clarence Poole  
F. L. Middleton

Inventor:

Francis S. Draper.  
by E. S. Spear  
Attorney.

# UNITED STATES PATENT OFFICE.

FRANCIS S. DRAPER, OF ATTLEBOROUGH, MASSACHUSETTS.

## IMPROVEMENT IN GEM-SETTINGS.

Specification forming part of Letters Patent No. **221,041**, dated October 28, 1879; application filed September 6, 1879.

*To all whom it may concern:*

Be it known that I, FRANCIS S. DRAPER, of Attleborough, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Gem-Settings; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to gem-settings of that class which are used upon charms, scarf-rings, and like articles.

The object of the invention is to secure a firm setting for the gem, with neatness of appearance, and especially with increased economy in the construction.

My present invention is an improvement upon that which is described in the specification of the application of Charles F. Quinley, filed in the United States Patent Office 1st day of July, 1879; and it consists of an improved mode of securing the gem-holder to the body of the ornament, all as hereinafter more fully described.

In the drawings hereunto attached and forming part of this specification, Figure 1 shows a side elevation of the charm. Fig. 2 is a longitudinal central section through the body, with the gem-holders in place, on line *xx* of Fig. 1. Fig. 3 is a similar transverse section.

In the application above referred to the body of the ornament to which the gem is to be held was stamped with a shallow recess in its surface, of a depth sufficient to receive the gem-holder, which was cut in the form of a cross or in some equivalent shape from sheet metal, with the ends turned upward to clasp the gem. The gem-holders thus made were placed in their corresponding recesses, and attached thereto by rivets or solder.

In my present invention, instead of stamping recesses upon each side, I cut directly through the body of the ornament, forming a slit or opening of a shape adapted to receive the gem-holder or gem-holders. Where, as in the case illustrated, the ornament is a charm, and a gem-holder is required on each side, I insert into the cavity thus cut the gem-holders, adapted to fit the cavity, and secure them in place by forcing down the metal against or over the edge of the inserted piece. In this

way the gem-holders may be securely fixed in place without rivets and without any solder or other extraneous means of connection, the metal of the body itself holding the inserted piece securely in place. Manifestly this method of connection is applicable to articles in which only one gem-holder is required; but it is specially applicable to articles like that shown in the drawings, in which the gem-holder is applied to both sides alike.

The metal out of which the gem-holders are cut may be of little less than half the thickness of the body of the ornament, so that when the two are placed in the opening they will not come quite flush to the surface of the said body, and will allow the metal, when forced downward, slightly to overlap the inserted piece.

In the drawings, *a* represents the body; *e*, the gem-holder, which, in this case, is of cross shape; and *b*, the opening in the body *a*, into which the gem-holders securely fit.

The up-turned ends of the gem-holder are of ordinary shape, and serve to hold the gem in the ordinary manner.

It is obvious that the opening may be cut in the body of the ornament when it is formed, and by the same die, and the nature of the connection between it and the pieces which hold the gems is such that said pieces may be inserted and fixed in place very easily and expeditiously.

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

A gem-setting consisting of a body, *a*, having an opening, *b*, of suitable shape, cut entirely through the said body, in combination with a gem holder or holders, *e*, inserted in said opening, and held thereon by the metal of the body *a* compressed against the edges of said holder, in the manner set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS S. DRAPER.

Witnesses:

JAMES W. RILEY,  
W. H. FISHER.