

(No Model.)

F. MOORFIELD.
DIE FOR MAKING WATCHCASE PENDANTS.

No. 546,548.

Patented Sept. 17, 1895.

Fig. 1.

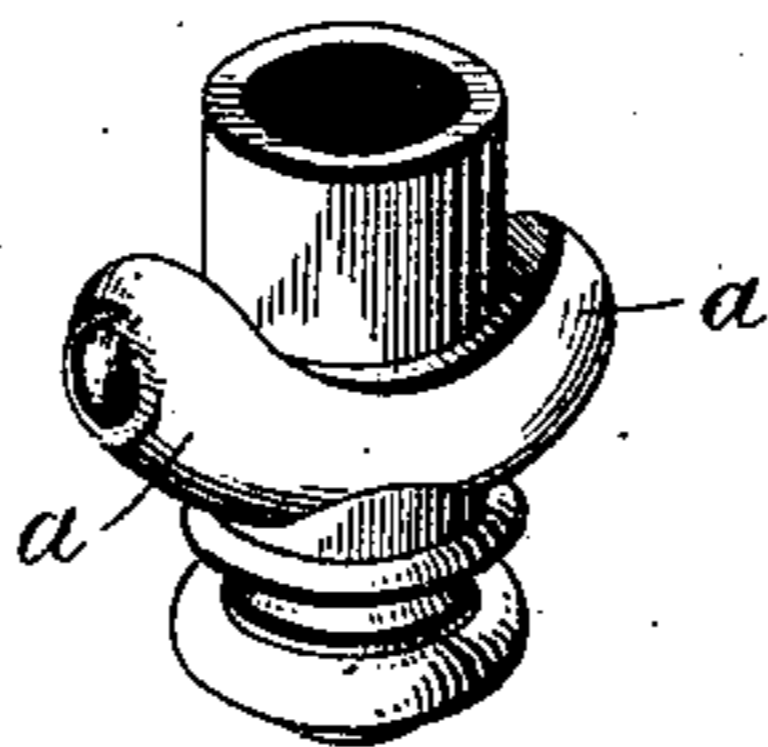


Fig. 2.

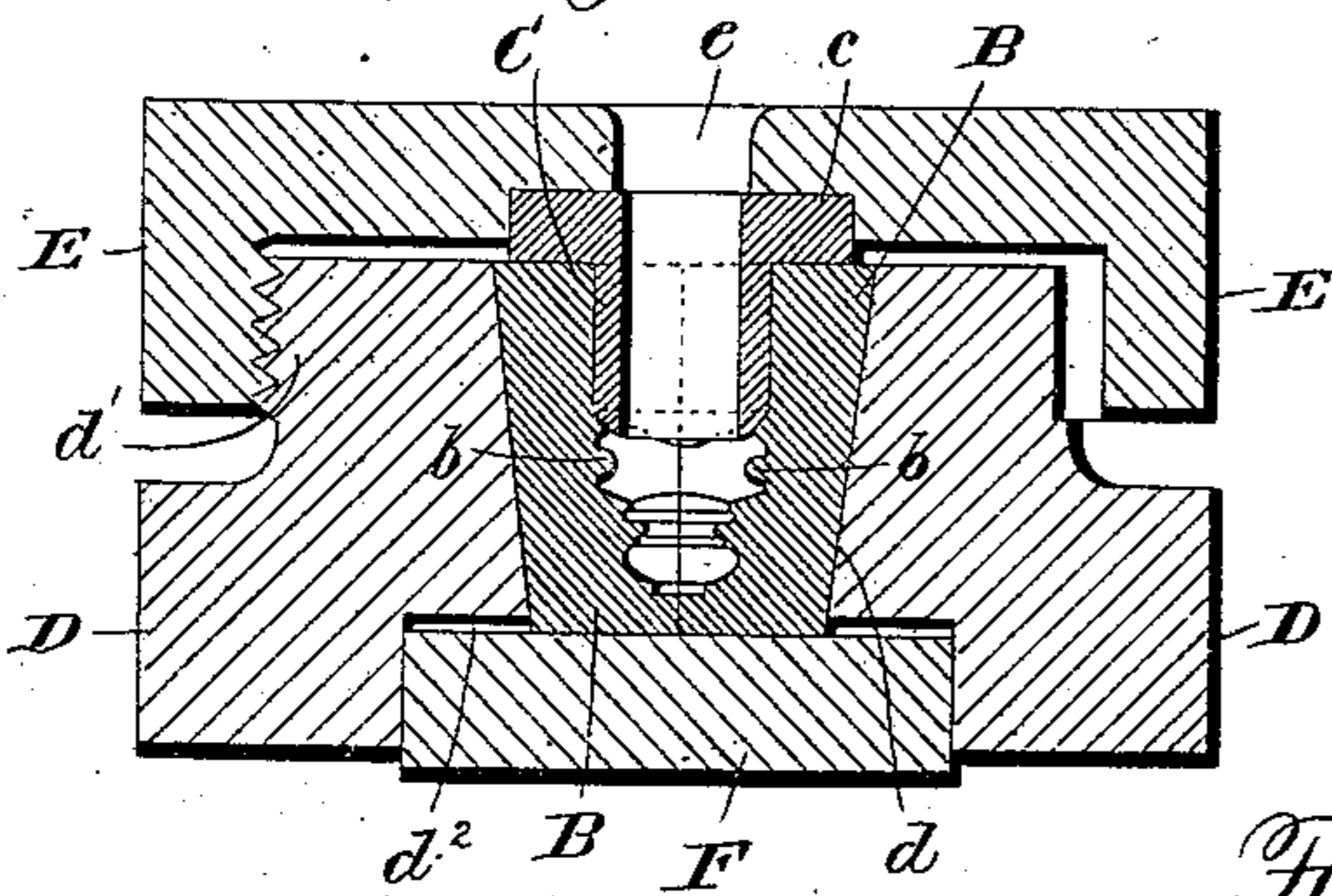


Fig. 3.

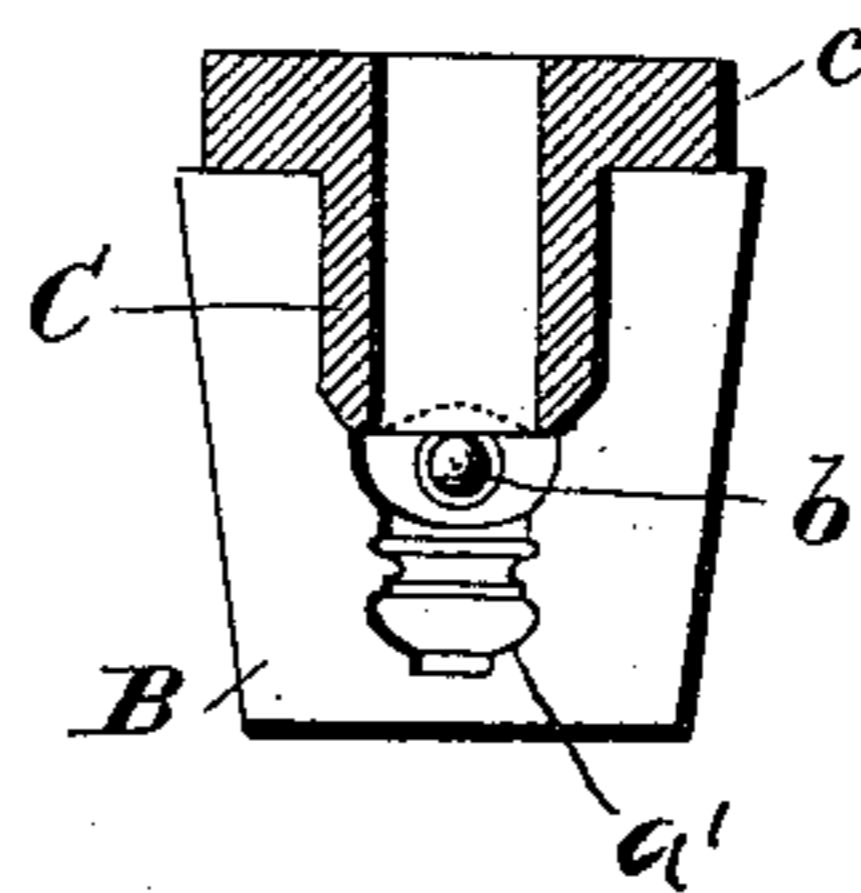
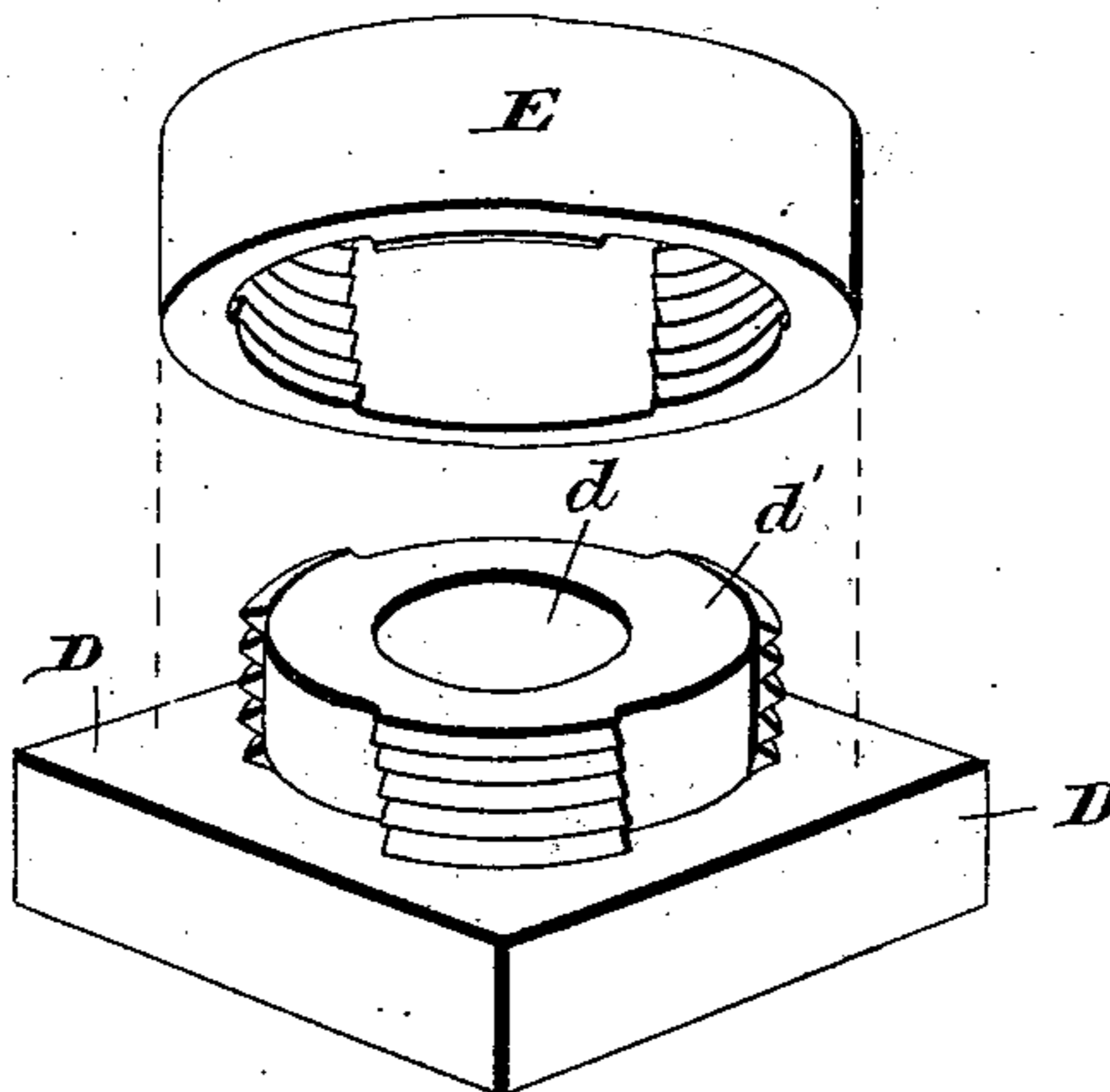


Fig. 4.



Witnesses:
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Candle and Russell, his attys.

UNITED STATES PATENT OFFICE.

FRANK MOORFIELD, OF NEWARK, NEW JERSEY.

DIE FOR MAKING WATCHCASE-PENDANTS.

SPECIFICATION forming part of Letters Patent No. 546,548, dated September 17, 1895.

Application filed April 2, 1894. Serial No. 506,037. (No model.)

To all whom it may concern:

Be it known that I, FRANK MOORFIELD, of Newark, in the county of Essex, and in the State of New Jersey, have invented certain new and useful Improvements in Dies for Making Watchcase-Pendants, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of a watchcase-pendant made in my die; Fig. 2, a section through said die and its holder; Fig. 3, a section of the die in a plane at right angles to that on which Fig. 2 is taken; Fig. 4, a perspective view of the parts of the holder separated from each other.

Letters of like name and kind refer to like parts in the several figures.

20 The design of my invention is to provide a die for the manufacture of watchcase-pendants, and to this end said invention consists in the die constructed substantially as and for the purpose hereinafter specified.

25 In Fig. 1, I show the kind of pendant for whose manufacture my die has been especially invented, said pendant being of the design known as the "antique," which is characterized by an oval-shaped enlargement *a* upon and entirely surrounding the body of the 30 pendant just below the crown and to whose small ends the watch bow or ring is pivoted.

Heretofore the part *a* has been formed separately from the body portion of the pendant and an opening drilled through it for placing 35 it upon the pendant to which it was soldered. To accommodate the lower portion of the winding-crown the upper end of such opening would be enlarged by beveling it outward, and this, where filled material has been employed, 40 was highly objectionable, as it caused the exposure of the base metal at this point. By means of my die the enlargement *a* can be formed integrally with the pendant and the required cavity is provided for the reception 45 of the lower portion of the crown without any impairment of the integrity of the external fine metal and consequent exposure of the base metal.

50 The die proper consists of the two similar parts B and B and the tubular part C, each of the two former having half of a matrix with a configuration corresponding to the

beaded end portion of the pendant that adjoins the case center and to the oval enlargement *a*, while the tubular part C has an internal diameter corresponding to the external 55 diameter of the cylindrical body portion of the pendant. Preferably, teats or projections *b* and *b* are provided at the portions of the matrix, which form the small ends of the 60 enlargements, to produce in such ends cavities or recesses for the reception of the ends of the watch bow or ring.

The die parts B and B have enlarged openings to receive the tubular part *c*, and such 65 openings have flared or beveled shoulders at their inner ends to conform to the beveled inner end of the part C, which abuts against said shoulders and projects sufficiently into the matrix of said parts B and B to form the 70 crown-end receiving-cavity *a'* in the upper side of the oval enlargement *a*, as clearly shown in Fig. 2.

The exterior of the die parts B and B is made tapering, so that when they are placed 75 in the tapering opening *d* of a holder D and subjected to pressure, as by a screw-cap E, said parts will be forced tightly together and make a fluid-tight joint. Said cap does not directly engage the outer ends of the parts 80 B and B, but bears against an annular flange *c* on the outer end of the part C that overhangs and engages said ends. By this construction, the inner beveled end of the part C is tightly forced against the beveled shoulders 85 of said parts B and B at the same time and by the same means that cause the parts B and B to be pressed together.

The cap E has an opening *e* registering with that of the part C for the introduction 90 of a fluid—such as water—to the interior of a suitable blank to cause it to take the configuration of the die in the manner set forth in my pending application, Serial No. 506,036, filed April 2, 1894. 95

To enable the quick uniting and separation of the holder D and cap E, the screw-thread of the latter and of an annular boss or projection *d* of the holder is not continuous, but is 100 arranged in segments which alternate with segmental blank spaces of greater angular measurement, so that by a partial rotation of the cap it is engaged with or disengaged from the holder.

The small ends of the parts B and B project slightly into a cavity d in the holder D and abut against the face of a plate F in said cavity, so that by knocking or pressing against the latter said parts can be readily forced out of the opening d when the cap E has been removed.

By my die an antique pendant can be made having the oval enlargement a an integral part, and besides the superiority by reason of this in comparison with the old construction of pendant, in which the enlargement is separately made and then secured to the body, antique pendants can be more rapidly and economically manufactured.

Such features of my invention as are practicable of other uses than the manufacture of the designated type of pendants I deem myself entitled to and therefore do not limit the same only to the production of said pendants.

I do not claim the pendant and the method of making the same in this application, as the same form the subject-matter of another application filed of an even date with this.

Having thus described my invention, what I claim is—

1. A die for making watch case pendants that is shaped to form the same with an enlargement extending around the body portion and which comprises similar sections and a tubular part that has a cylindrical interior which conforms to the cylindrical body of the pendant, and at its inner end projects into the enlargement forming portion of the matrix to produce in such enlargement an annular cavity to receive the lower end of a winding crown, substantially as and for the purpose specified.

2. A die for making watch case pendants

that is shaped to form the same with an enlargement extending around the body portion, and comprising similar sections and a tubular part having a beveled inner end that extends into the enlargement forming portion of the matrix, to produce in said enlargement a cavity to receive the lower end of a winding crown, substantially as and for the purpose shown.

3. A die for making watch case pendants comprising similar sections having shouldered openings and a tubular part whose end abuts against the shoulders, substantially as and for the purpose described.

4. The combination of the tapering die parts, a holder having a tapering opening, to receive said parts and through which the small ends thereof project, substantially as and for the purpose specified.

5. The combination of the tapering die parts, a holder having a tapering opening to receive said parts and through which the smaller ends thereof project, a block against which said ends abut, and means to force and hold said parts in said opening, substantially as and for the purpose shown.

6. The combination of the tapering die parts having shouldered openings, a flanged tubular part extending into the latter, a holder having a tapered opening, and a cap to engage the flanged portion of the tubular part, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of March, 1894.

FRANK MOORFIELD.

Witnesses:

AUGUST W. ROSINGER,
DAVID W. BATES.