

J. Wise,

Pottery Die.

N^o 61,977.

Patented Feb 12, 1867.

Fig. 1.

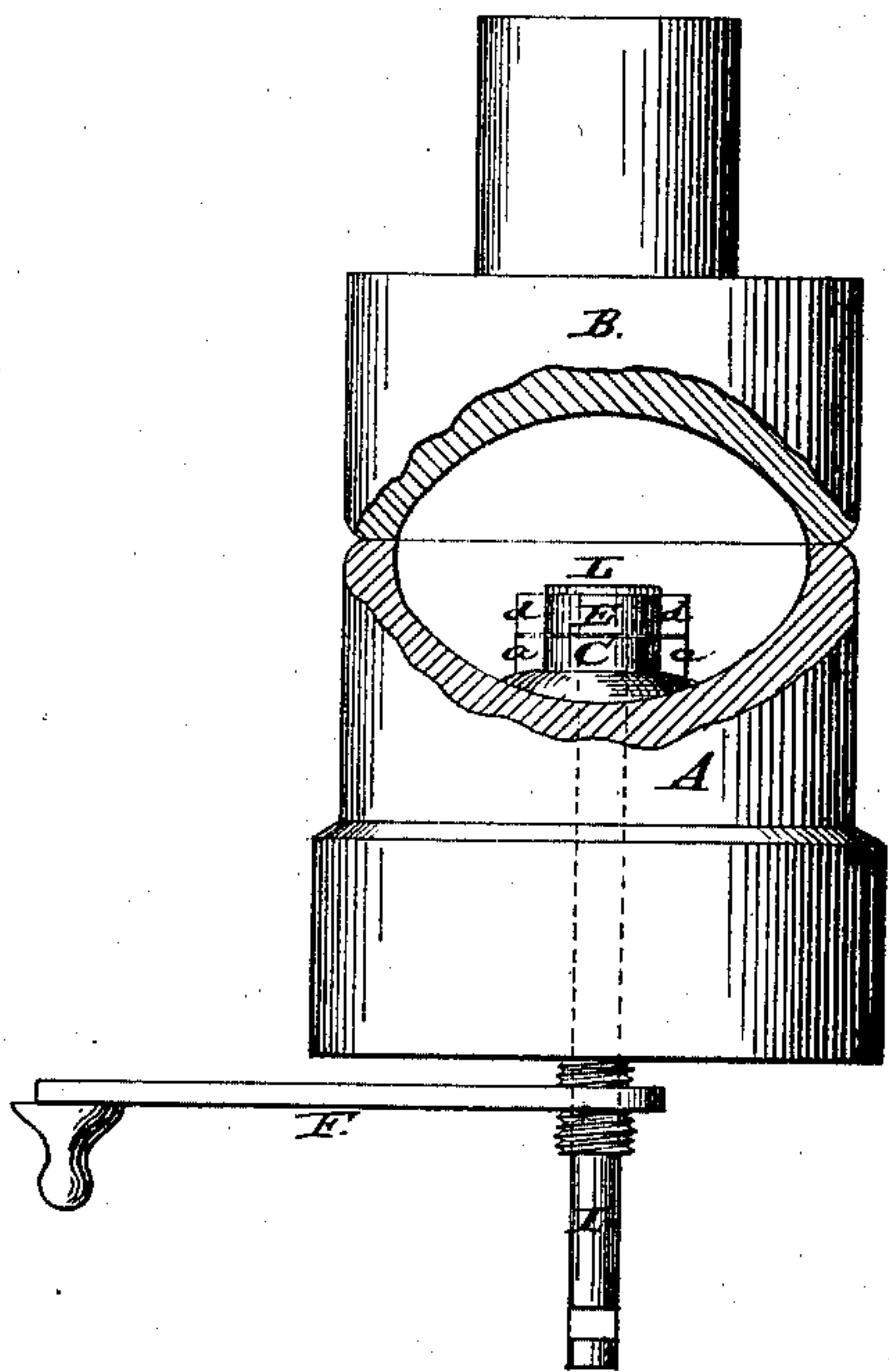


Fig. 2.

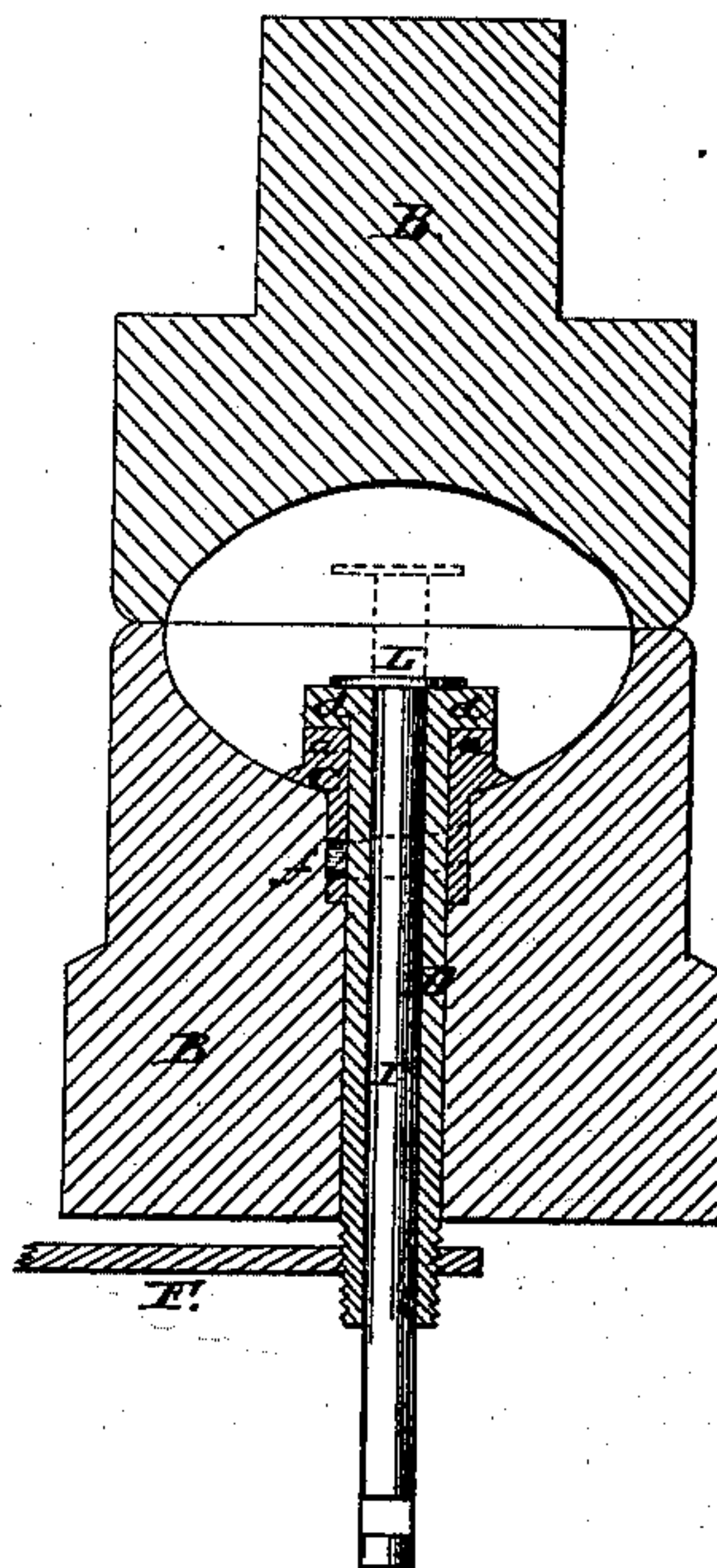


Fig. 3.

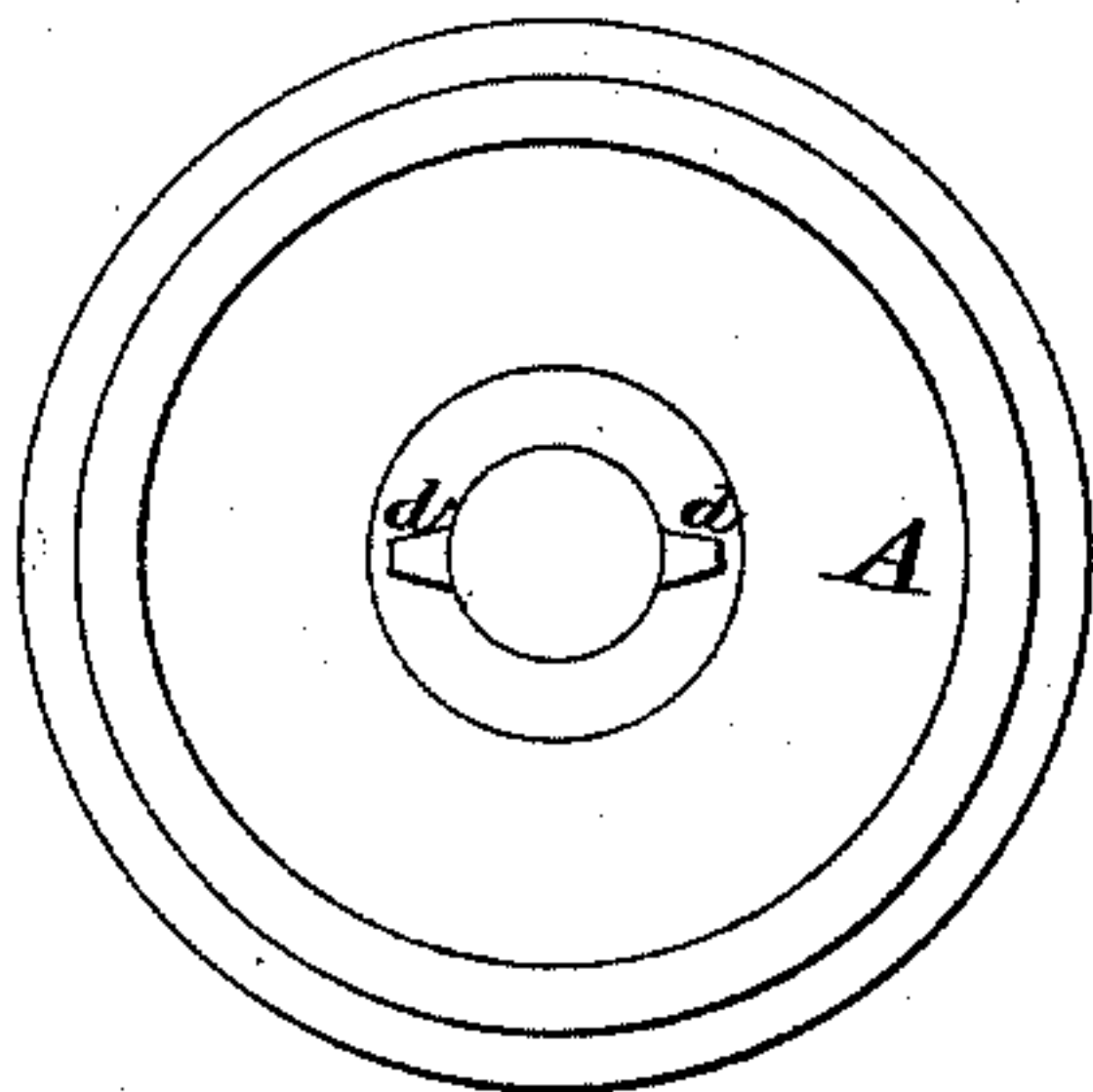


Fig. 4.

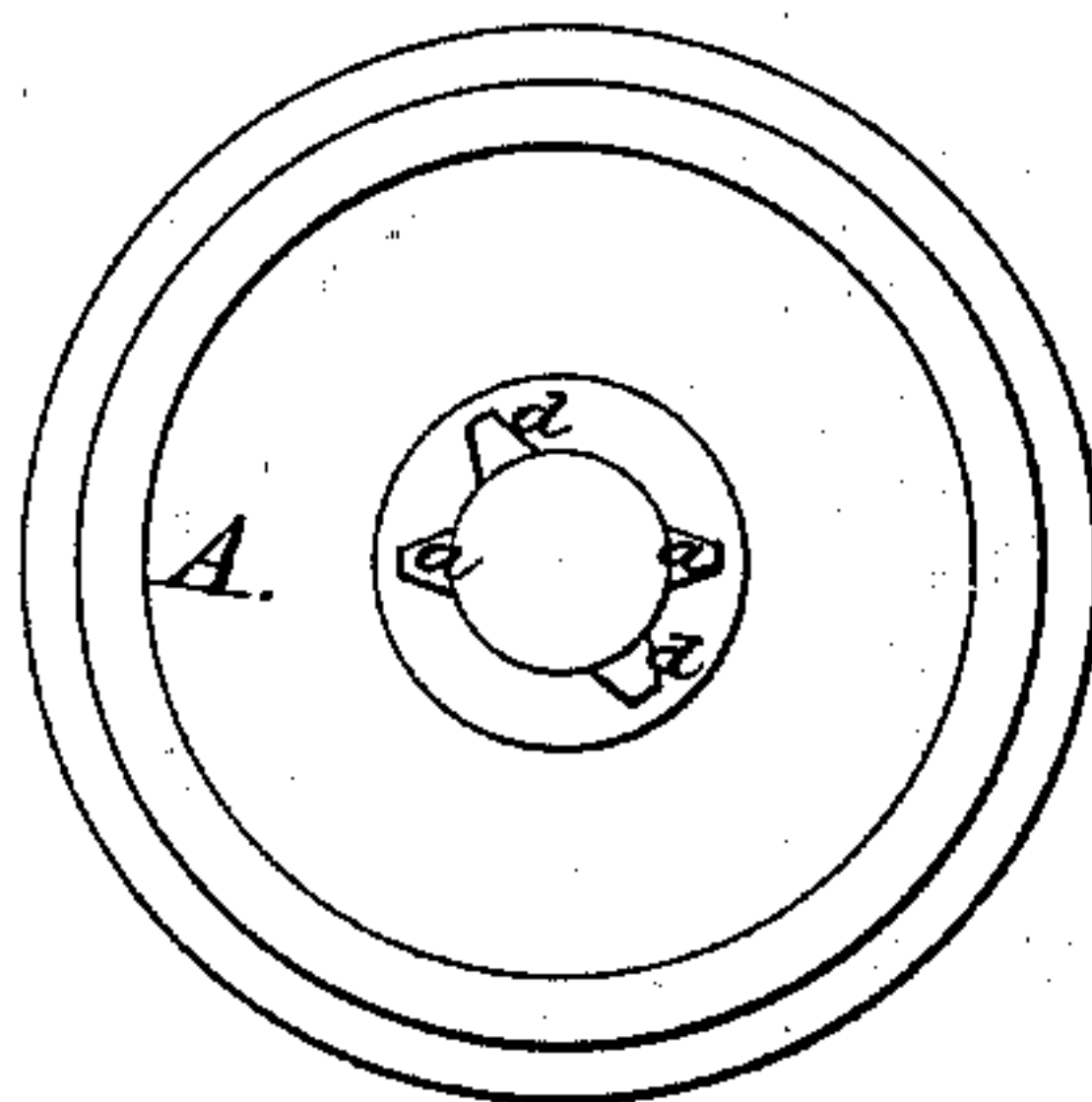


Fig. 5.

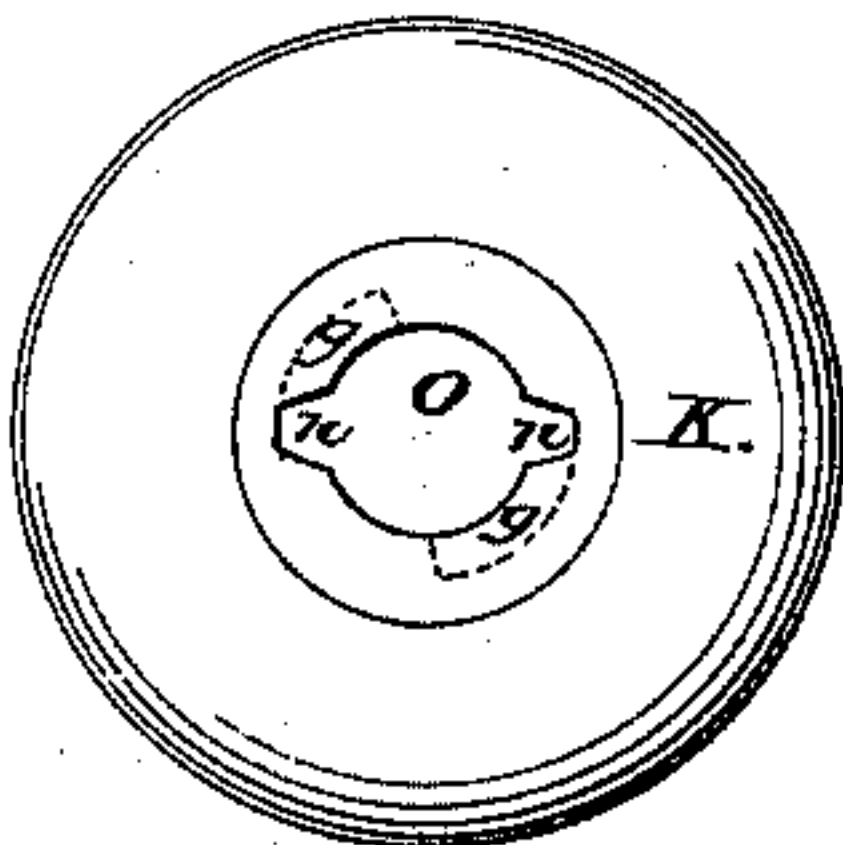


Fig. 6.



Witnesses:
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JOSEPH WISE OF BRANFORD, CONNECTICUT, ASSIGNOR TO THOMAS KENNEDY, OF SAME PLACE.

Letters Patent No. 61,977, dated February 12, 1867.

IMPROVED DIES FOR MAKING KNOBS.

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, JOSEPH WISE, of Branford, in the county of New Haven, and State of Connecticut, have invented a new improvement in Dies for Making Knobs; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, a portion of the die broken away to show the mechanism.

Figure 2, a vertical central section.

Figures 3 and 4, a top view of the under part of the die to illustrate my improvement.

Figure 5, the knob; and in

Figure 6, the neck.

My invention relates to an improvement in dies for making knobs from any substance formed in a plastic state, and designed especially for the manufacture of the knobs patented to Thomas Kennedy, January 10, 1865, and consists in the arrangement or mechanism for forming the groove in the knob for the purpose of securing the neck thereto.

To enable others skilled in the art to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

Before proceeding to a full description of the apparatus I will first briefly describe the peculiarity of the knob for which my invention is especially designed, and represented in fig. 5. K is the knob, and O is a recess formed to receive the neck, having two notches, *n* and *n*, extending down to nearly the bottom of the recess and communicating with a groove, *g*, as denoted in broken lines in said fig. 5. The neck N of the knob, as seen in fig. 6, is provided on opposite sides with projections *p*, corresponding to the notches *n*, and so that when the neck is inserted into the knob the neck may be turned and the projections enter the groove *g*, in the knob, and then the space around the neck is filled in the usual manner to secure the knob within the neck, the grooves and projections preventing the detachment of the knob from the neck without destroying the knob. It is to form the notches *n* and the grooves *g* that my invention is specially designed.

A is the lower, and B the upper, part of the die, having a recess formed in each to receive and compress the material from which the knob is to be formed. In the part A of the die is fixed a socket, C, of the size required for the opening in the knob, and provided with projections *a*, corresponding to the notch *n* in the knob, as seen in fig. 4. Through the said socket is passed a spindle, D, its upper end, E, resting upon the socket C, and provided with projections *d*, corresponding to the projections *a* on the socket. To the spindle D below the die is attached a lever, F, by which the said spindle may be turned, moving the projection *d* as from the position in fig. 3, to that in fig. 4; therefore, when in the position in figs. 1 and 3, the die is filled in the usual manner, the projections *a* form the notches in the knob, and by turning the lever F the projections *d* are moved within the knob and form the groove *g*; then return the lever and the spindle D to the first position, so that the projections *d* and *a* correspond, the knob may be removed from the die. I find it advantageous to give to the grooves *g* a spiral form; this I do by a pin, *f*, on the spindle D, moving in a spiral groove in the socket C, as denoted in fig. 2. To remove the knob from the die, I arrange a spindle I, passing down through the spindle D, and provided with a head, L, so that when the knob is complete and the upper part B of the knob removed, raises the spindle I, as denoted in red, and the knob is easily removed.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the socket C, and spindle D, provided respectively with projections *a* and *d*, and arranged to operate substantially in the manner described.
2. In combination with the above I claim the arrangement of the spindle I, as and for the purpose specified.

JOSEPH WISE.

Witnesses:

JOHN H. ROYALL,

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