

I. COLE.  
Candle-Mold Tips.

No. 138,380.

Patented April 29, 1873.

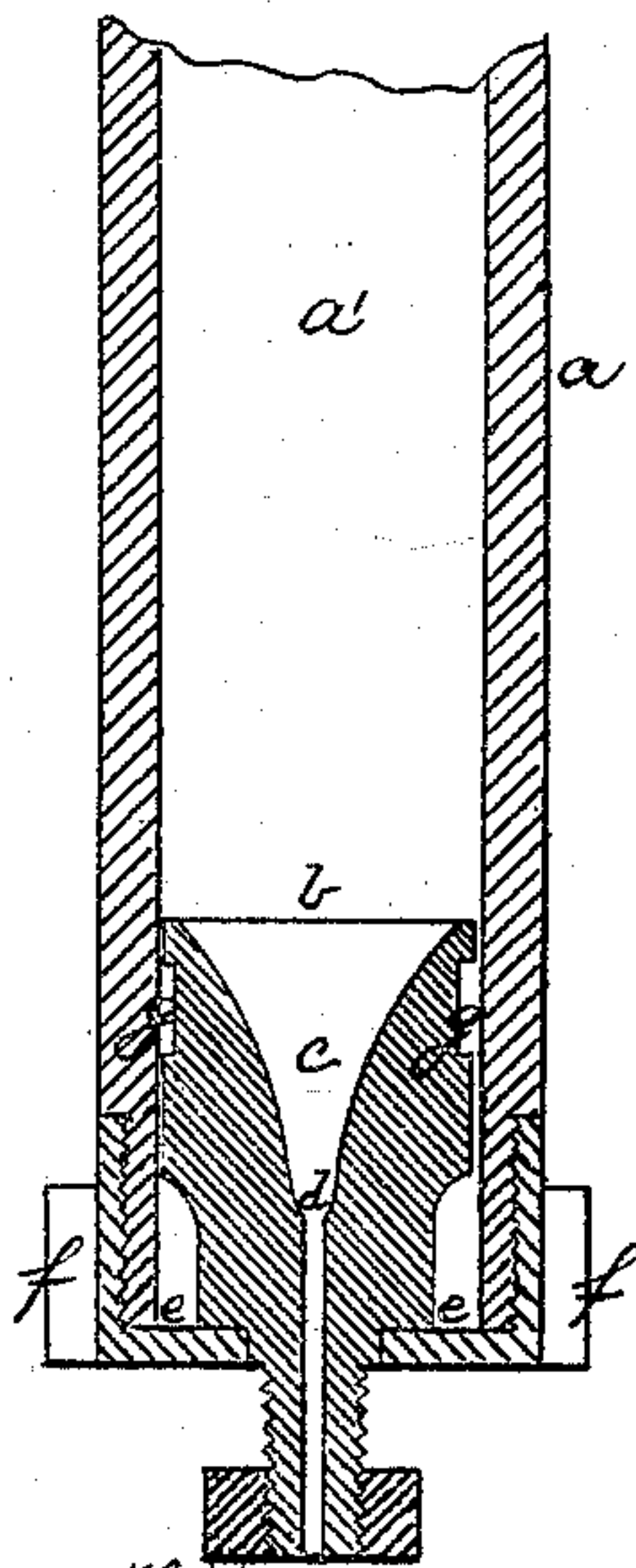


Figure 1.

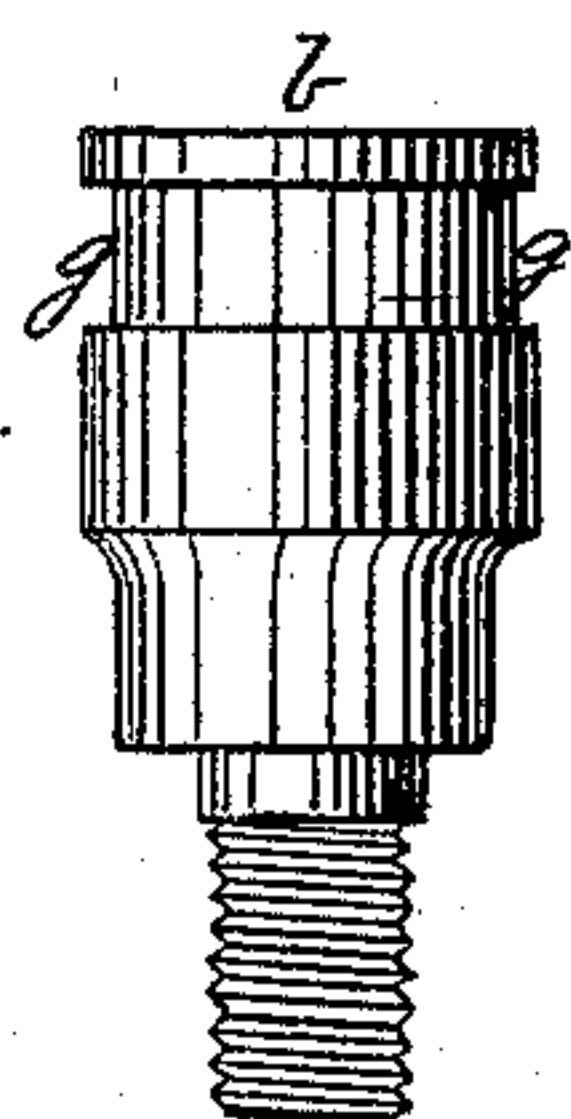


Figure 2.

WITNESSES

R. C. Henderson,

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INVENTOR

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by Bakewell & Briskly, Attys  
His attys

# UNITED STATES PATENT OFFICE.

ISAAC COLE, OF BROOKLYN, NEW YORK, ASSIGNOR TO C. C. BEGGS & CO.,  
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## IMPROVEMENT IN CANDLE-MOLD TIPS.

Specification forming part of Letters Patent No. **138,380**, dated April 29, 1873; application filed  
March 29, 1873.

*To all whom it may concern:*

Be it known that I, ISAAC COLE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Candle-Molds; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a sectional view of the lower end of a candle-mold fitted with my improved plug or mandrel. Fig. 2 is a detached view of the plug.

Like letters of reference indicate like parts in each.

My invention consists in an improvement in the manner of packing the movable bottoms of candle-molds to prevent the exudation of wax around the sides of the same.

To enable others skilled in the art to make and use my invention, I will describe its construction and mode of operation.

The mold *a* has its bore or opening *a'* extended clear through from end to end, and is closed at its lower end by the inserted plug or mandrel *b*. The inside, *c*, of the mandrel *b* is cone-shaped for forming the candle-tip, and the mandrel is tapped or perforated, as at *d*, so as to allow the candle-wick to pass through it into the mold. The parts are all old and well known in the construction of candle-machines.

Heretofore various ways of packing the device or part which forms the bottom of the mold (which, in this case, is the mandrel *b*) have been practised, but with varying success. It has been exceedingly difficult to prevent a slight film of the heated wax from entering between the sides of the movable bottom and the mold, which when it "sets" causes

the bottom to stick, and thereby materially retards or affects the operation of the machine. One of the ways practiced is to place a packing-ring upon the flange *e* of the removable cap *f* of the mold, and to have a corresponding shoulder on the movable bottom, which seats upon the packed flange.

To overcome this difficulty, I make a groove, *g*, around the plug or mandrel *b* and fill it with any suitable packing so as to close the end of the mold sufficiently to prevent the exudation of the wax from between the mold and the plug, but not so tight as to prevent the movement of the plug when starting or "popping" the candle. The plug *b* is designed, as before said, to start or pop the candle from the mold, so that it may be drawn out by the wick or butt end, which then protrudes from the top of the mold. When the wax which forms the candle becomes set it adheres to the sides of the mold, and the candle requires to be started so as to free it from the mold. This is the function of the movable plug *b*. The movement of the plug for this purpose is but slight, being at most only about one and one-quarter inches. This movement is communicated to the plug in various ways well known to those skilled in the art.

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

The groove *g* in the side of the plug or movable bottom *b*, adjacent to the sides of the mold *a*, for the reception of packing, substantially as and for the purposes described.

In testimony whereof I, the said ISAAC COLE, have hereunto set my hand.

ISAAC COLE.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.