J. Drummond.

Candle Mold.

No. 4,389. Patented Feb. 20, 1846.

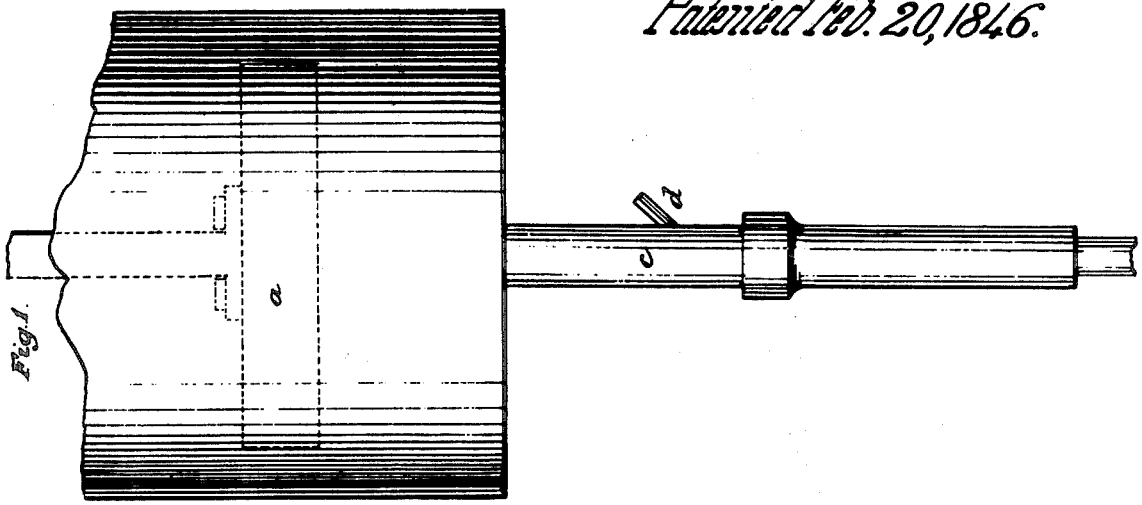

Fig. 1.

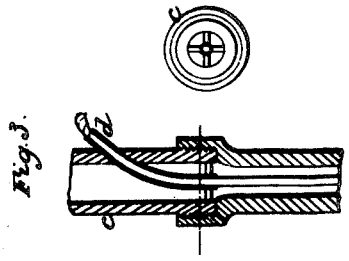

Fig. 3.

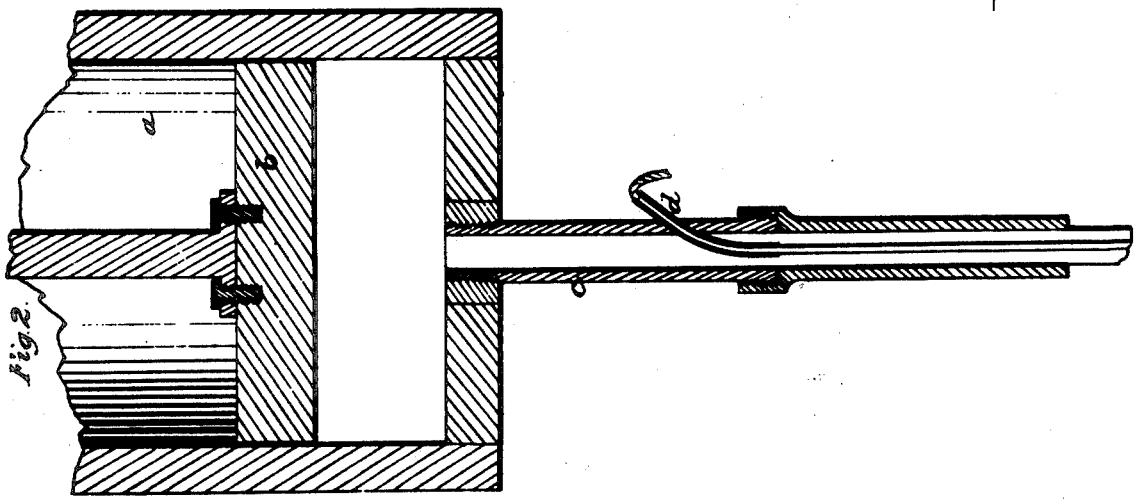

Fig. 2.

UNITED STATES PATENT OFFICE.

JNO. DRUMMOND, OF NEW YORK, N. Y.

CANDLE-MOLDING

Specification of Letters Patent No. 4,389, dated February 20, 1846.

To all whom it may concern:

Be it known that I, JOHN DRUMMOND, of the city, county, and State of New York, have invented a new and useful Method of Making Candles, and that the following is a full, clear, and exact description of the principle or character thereof which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation of the apparatus, and Fig. 2, a vertical section thereof.

The same letters indicate like parts in all the figures.

The nature of my invention consists, in forming candles of tallow, (or other concrete fats), by forcing it in the liquid or solid state through a tube, and around the wicking, which is introduced through a small tube, having its delivery end concentric with, and the upper end carried through the side of the outer or forming tube, thus causing it (the tallow) to unite to the wicking and to be discharged from the lower end of the molding tube in a cylindrical form and in the solid state, so that it can be cut into the required lengths for candles.

In the accompanying drawings (*a*) represents a cylinder into which the solid or melted tallow, or other fat, is put, and (*b*), a plunger or piston fitted to it to force, by any adequate power, the tallow therefrom, and through a molding tube (*c*) at the lower end. The inner diameter of this molding tube (*c*) is equal to the required size of the candles, and should be so connected with the lower end of the cylinder (*a*), by screwing or otherwise, as to admit of being easily changed when desired to make candles of different size. And for the purpose of introducing the wicking around which the tallow is to unite, a small tube (*d*), passes in through the side of the molding tube, with its lower or delivery end concentric with it. As the tallow is forced down by the plunger or piston it is separated in passing the small tube (*d*), (where it passes out through the side of the molding tube (*c*)) and then by pressure reunites around and to the wicking, with which it is discharged in the completed cylindrical form at the lower end, ready to be cut, by any appropriate means, into the required lengths.

The capacity of the cylinder must of course be governed by the quantity of tallow desired to be worked at each charge, and the length of the molding tube should be governed to suit the condition of the tallow; if, for instance, the candles are to be made of melted tallow the tube should be made longer than when forced through in the solid state, to permit the tallow to solidify before it escapes from the lower end; but the same end may be attained by surrounding the lower part of the tube with an outer casing in such manner as to admit of the circulation of a current of water to cool the tallow. The length indicated by the drawings is adapted to the making of candles with unmelted tallow.

If desired, the lower end of the small tube through which the wick is introduced may be preserved in its proper central position by arms or a perforated bidge as exhibited in Fig. 3, and when thus made (and if desired under all other circumstances) the molding tube should be of smaller diameter below the wicking tube to compress the tallow. Instead of passing the wicking tube through the side of the molding tube, it may pass up through the cylinder, and a hole therefor in the center of the piston. In short various minor modifications may be introduced without changing the principle of my invention so long as the tallow is passed through a molding tube combined with the inner tube for supplying the wicking.

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

The method of making candles by forcing the tallow or other suitable material through a molding tube when this is combined with a small tube within it through which the wicking is introduced, to cause the tallow to unite around the wicking, substantially, as herein described.

JOHN DRUMMOND, [L. S.]

Witnessed by—
THOMAS JEWELL,
BERIAH S. HORTON.