

No. 803,846.

PATENTED NOV. 7, 1905.

J. PEREIRA.

PROCESS FOR MAKING CANDLES.

APPLICATION FILED MAY 11, 1905.

Fig. 4,

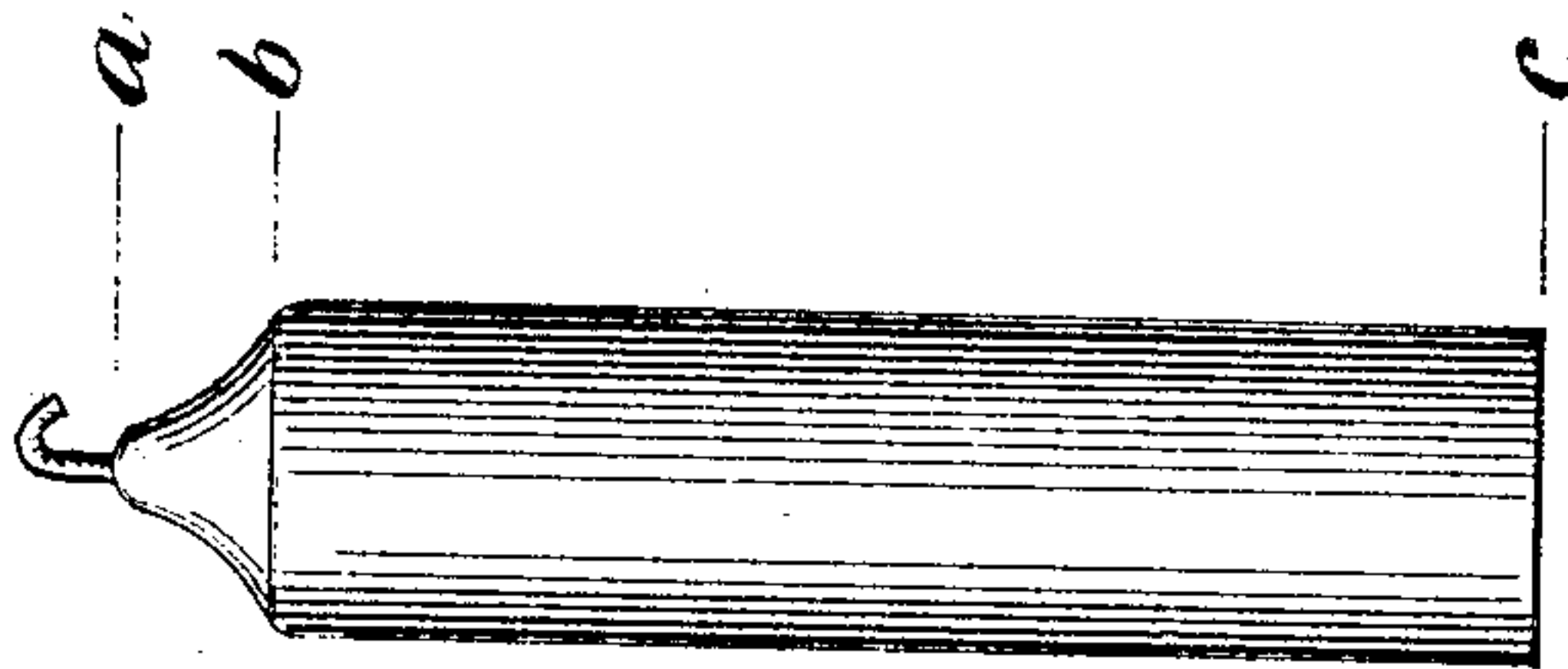


Fig. 3,

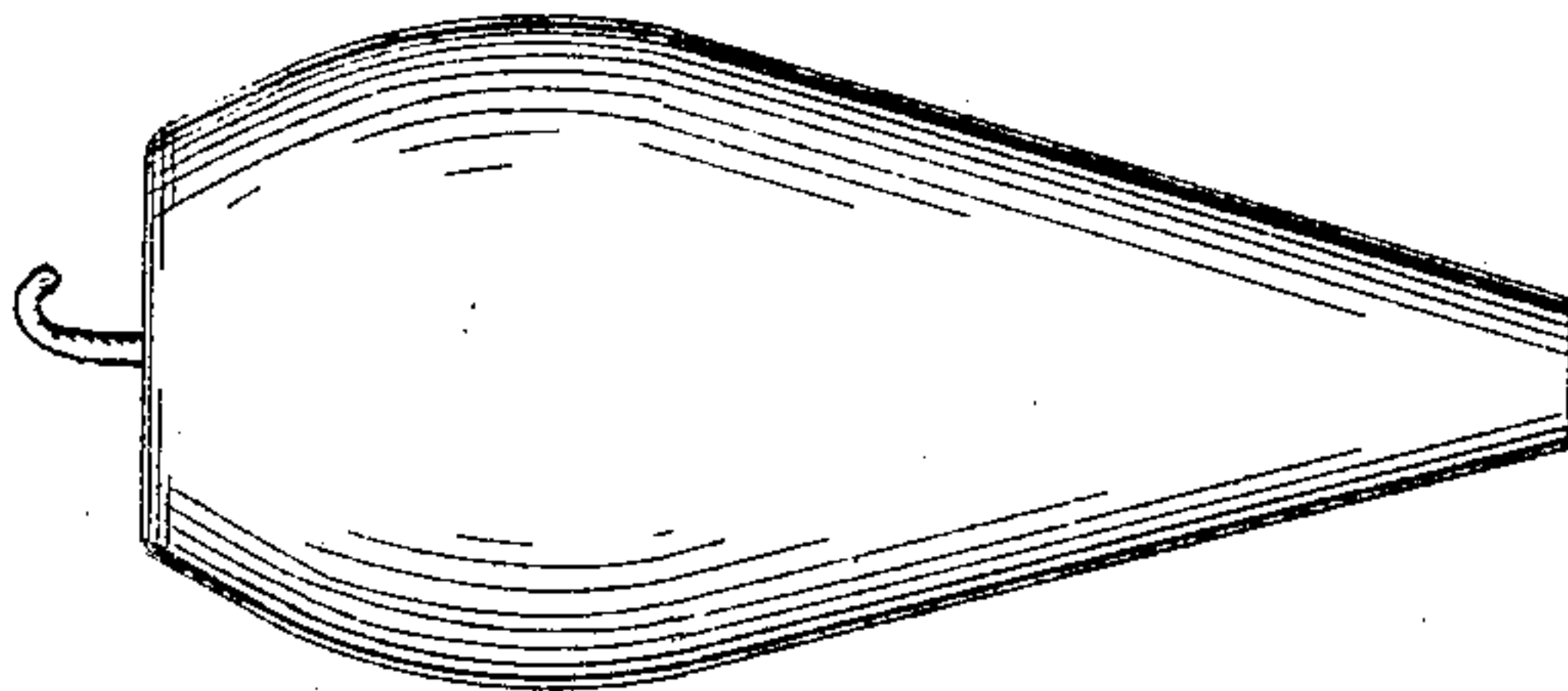


Fig. 2,

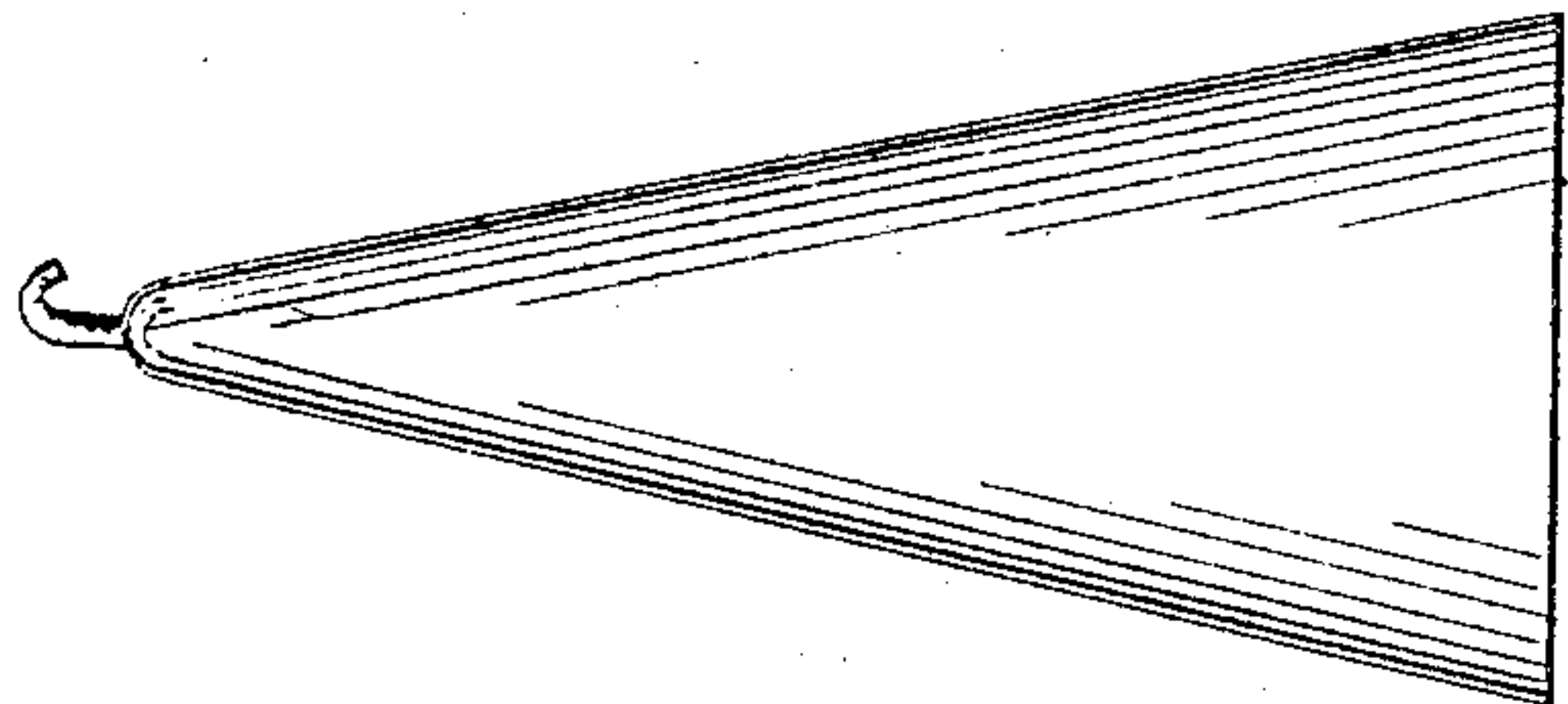
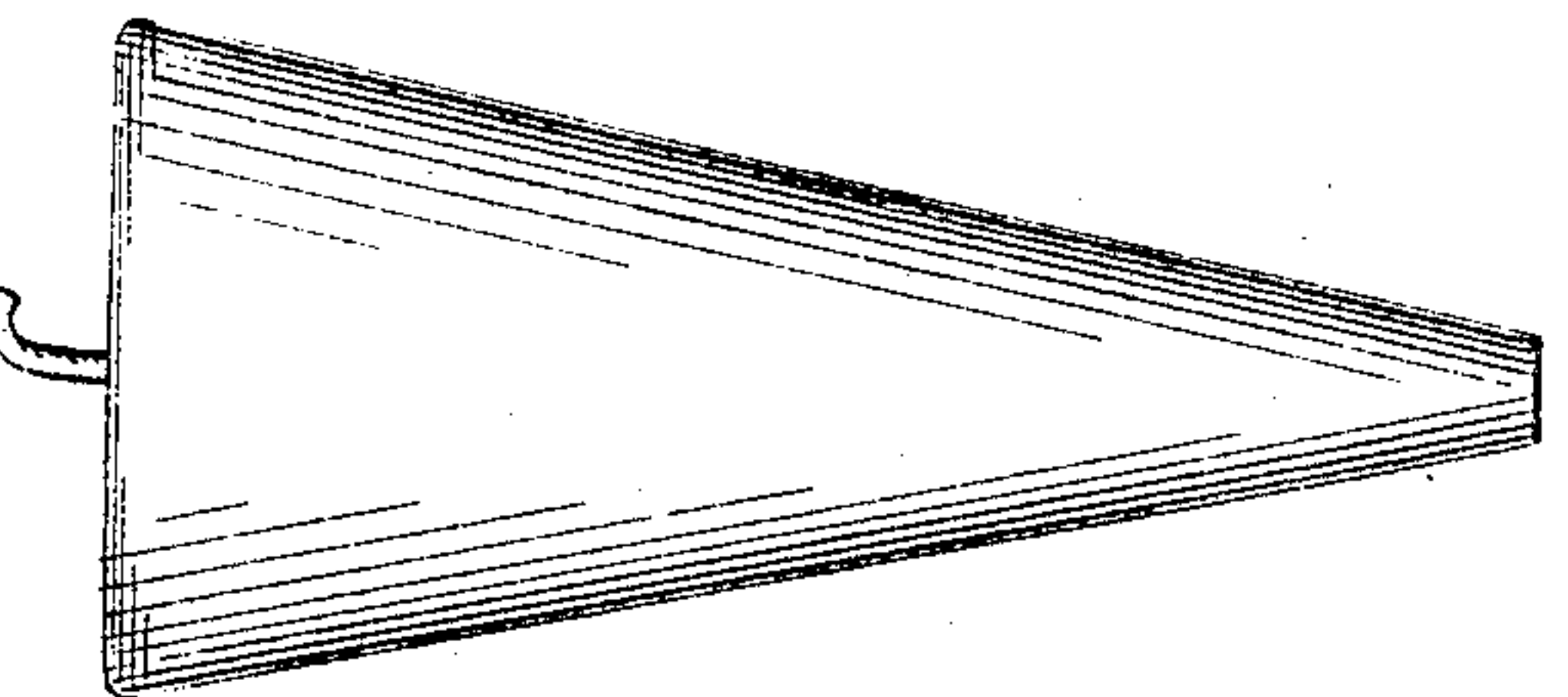


Fig. 1,



WITNESSES:

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PROCESS FOR MAKING CANDLES.

No. 803,846.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed May 11, 1905. Serial No. 259,907.

To all whom it may concern:

Be it known that I, JULIUS PEREIRA, a citizen of the United States of America, and a resident of the city, county, and State of New York, have invented a certain new and Improved Process for Making Candles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to an improved process for making candles, and particularly to the making of dipped candles.

The process of making dipped candles as generally carried out consists in successive immersions of wicks into tanks containing suitable material—such as paraffin, tallow, grease, wax, or the like—while in a fluid condition. At each successive dipping or immersion a small quantity of the material adheres to the wick or nucleus of material formed thereon, so that a sufficient quantity is gradually picked up to form a complete candle. Candles thus made have been heretofore of substantially uniform diameter throughout.

My improved process contemplates the manufacture of candles by the dipping process, having varying diameters throughout their lengths, and to this end I submerge the wicks in successive dippings to varying depths, for varying periods of time, and at varying speeds.

The paraffin, tallow, grease, wax, or similar material is solid at ordinary temperatures, but liquefies at temperatures somewhat thereabove. Furthermore, as is well known, the chilling or solidification takes place very rapidly, as the material is quite sensitive to changes of temperature. In a large open bath, such as is ordinarily employed in dipping the wicks, the upper surface of the liquid, constantly exposed to atmosphere, is at a temperature quite a little below that of the material beneath it. If, then, a wick be immersed and allowed to rest for a few moments in the liquid, to be then quickly withdrawn, a larger amount of the substance will adhere to the wick nearer its upper end than near its lower end. Successive dippings of this character would produce a candle tapered throughout its length, the diameter at its upper end being the largest and that at the bottom being the smallest. To produce a candle with an opposite

taper—that is to say, one having its smallest diameter near the upper end and the largest diameter at the base—successive dippings will be made at successively decreasing depths. The result of such successive dippings at decreasing depths will be to deposit successively greater amounts of the material upon the wick from the top to the bottom, as will be well understood. Variations in the dipping—such, for instance, as dipping the wicks to successively decreasing depths for a portion of the length of the wick, while rapidly removing the wick from the bath at each time—will produce candles having varying diameters, as may be desired.

In Figure 1 of the drawings I have shown a candle dipped as first described—*i. e.*, with the top portion of the largest diameter. In Fig. 2 I have shown a candle as next described, with its top portion having the smallest diameter. In Fig. 3 I have shown a candle as last described, in which an intermediate portion has the largest diameter, the diameters reducing toward its upper and lower ends. Similarly, by careful manipulation I can produce a candle in imitation of the ordinary molded candle, as shown in Fig. 4, the portion between *a* and *b* being dipped to gradually decreasing depths, while the portion from *b* to *c* is dipped uniformly to the point *b* and withdrawn slowly from the material. Thus by regulating the duration of successive dippings, the depth of successive dippings, and the speed of dipping I can produce almost any shaped candle I desire.

What I claim is—

1. The herein-described method of making candles, which consists in dipping the wicks thereof successively to varying depths in a bath of the material of which the candle-body is to be formed.

2. The herein-described process of making candles, which consists in submerging the wicks thereof in, and withdrawing the same from, a bath of material of which the candle-body is to be formed, at varying speeds.

3. The herein-described process of making candles by the dipping process, which consists in dipping the wicks to varying depths, and withdrawing them at varying speeds.

JULIUS PEREIRA.

Witnesses:

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C. L. HALL.