

(No Model.)

G. GRIESER.

APPARATUS FOR FINISHING WAX CANDLES.

No. 421,700.

Patented Feb. 18, 1890.

Fig. 1

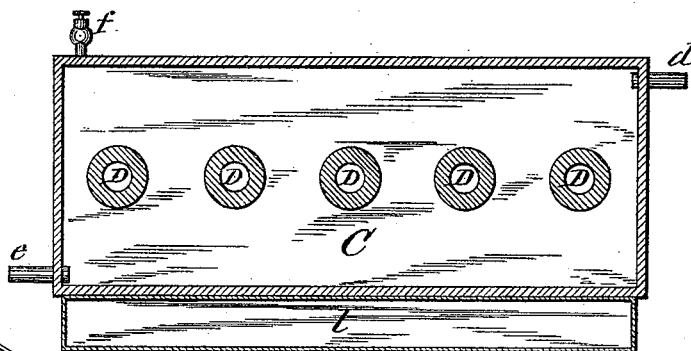
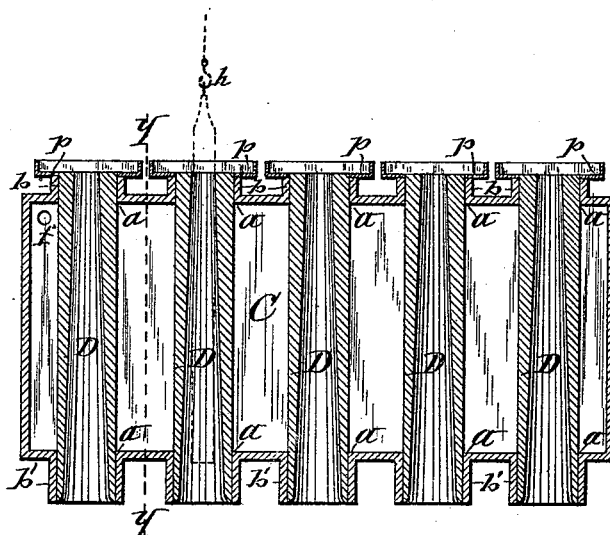


Fig. 3

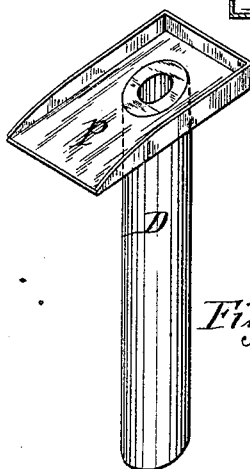


Fig. 4

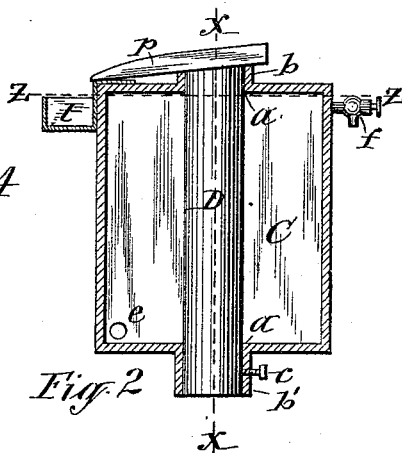


Fig. 2

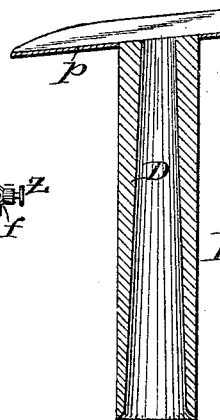


Fig. 5

WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE GRIESER, OF SYRACUSE, NEW YORK, ASSIGNOR TO FRANCIS
BAUMER, OF SAME PLACE.

APPARATUS FOR FINISHING WAX CANDLES.

SPECIFICATION forming part of Letters Patent No. 421,700, dated February 18, 1890.

Application filed September 12, 1889. Serial No. 323,723. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GRIESER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and
5 useful Improvements in Apparatus for Finishing Wax Candles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention is designed more especially for finishing hand-cast wax candles, and is a specific improvement of the machine shown and described in the Patent No. 301,328, issued to F. Baumer July 1, 1884; and the in-
15 vention consists in the improved construction and combination of parts, as hereinafter described, and specifically set forth in the claims, said improvements rendering the apparatus simpler and less expensive in construction and more efficient in its operation.

20 In the annexed drawings, Figure 1 is a vertical longitudinal section on line *x x*, Fig. 2. Fig. 2 is a vertical transverse section on line *y y*, Fig. 1. Fig. 3 is a horizontal transverse section on line *z z*, Fig. 2. Fig. 4 is an enlarged detached perspective view of one of the dies, and Fig. 5 is a longitudinal section
25 of said die.

Similar letters of reference indicate corresponding parts.

30 C represents the steam-chest, by means of which the candle-finishing dies are heated. Said steam-chest I form with a single internal steam-compartment, and preferably, but
35 not arbitrarily, of a single casting of iron, which is easily accomplished, owing to the simplicity of its form and its openings, hereinafter described, through which to remove the core. The top and bottom plates of this
40 steam-chest I form with circular apertures *aa*, arranged in pairs vertically one above the other, and surrounded by collars or tubular bosses *b b'*, cast on the plates and projecting outward therefrom.

45 D D represent the candle-finishing dies, which I form of steel tubes of cylindrical form externally and tapered internally, as shown in Fig. 5 of the drawings. These dies are inserted vertically in the steam-chest C,
50 with the small ends of their bores upward,

and are of sufficient length to project with their ends into the collars *b b'* and expose their open ends to the exterior of the steam-chest to allow the candles to be inserted and removed therefrom. Through the lower col-
55 lars *b' b'* pass set-screws *c c*, which engage the sides of the dies and retain the dies attached to the steam-chest. The upper ends of the dies are beveled toward one side of the steam-chest, and plates *p p* are attached to
60 and surround said ends of the dies and are inclined likewise. The lower ends of said plates project over the side of the steam-chest, and under said ends of the plates is a trough
65 *t*, hung on the steam-chest, as shown in Fig. 2 of the drawings.

The steam is admitted to the interior of the steam-chest through a pipe *d*, attached to one end thereof, and a pipe *e*, attached to the opposite end, emits the steam. A vent
70 valve or cock *f* is attached to the upper part of the latter end of the steam-chest to allow the air to escape from the steam-chest when first introducing the steam.

The candle to be finished is inserted into
75 one of the dies D from the lower end thereof, and by means of a hook *h* inserted into the projecting loop of the wick on the tip of the candle, the operator draws the candle up
80 through the heated die in the same manner as described in the patent to F. Baumer, hereinbefore referred to. In this operation the
85 plates *p p* and trough *t* collect the melted wax which may flow from the candles as they emerge from the dies.

The advantages of my invention consist, first, in the simple construction of the steam-chest; secondly, in the construction of the dies of steel, which does not discolor the wax, and of the form of a tube which is readily
90 inserted into the steam-chest and secured thereto and as readily removed when required for repairs or renewal; thirdly, in the direct exposure of the said dies to the steam in the steam-chest, thus heating the dies more
95 quickly; fourthly, the wax which may flow from the candles emerging from the heated dies is collected, so as to prevent its waste and maintain the exterior of the steam-chest clean.

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

1. A candle-finishing apparatus consisting of a steam-chest formed with a single internal steam-compartment, and steel dies extending through said compartment and secured at opposite ends steam-tight to the shell of the steam-chest and having said ends of the dies open and exposed to the exterior of the steam-chest for the introduction and removal of the candles to and from said dies, as set forth.

2. The combination of the steam-chest formed with a single internal steam-compartment, apertures in its top and bottom plates, collars surrounding the apertures of one of the plates and projecting outward therefrom, tubular steel dies extending through the steam-chest and the aforesaid apertures and collars, and set-screws passing through the sides of said collars and engaging the sides of the dies.

3. The combination of the candle-finishing die consisting of a steel tube tapered internally and beveled to one side on the end having the small end of the bore, and a plate surrounding said end of the die and inclined correspondingly, substantially as described and shown.

4. In combination with the steam-chest C, the steel dies D D, extending through said chest and projecting above the top thereof, the plates *p p*, secured to the protruding upper ends of the dies and inclined to one side of the steam-chest, and the trough *t* under the lower ends of said plates, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 6th day of September, 1889.

GEORGE GRIESER. [L. s.]

Witnesses:

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J. J. LAASS.