

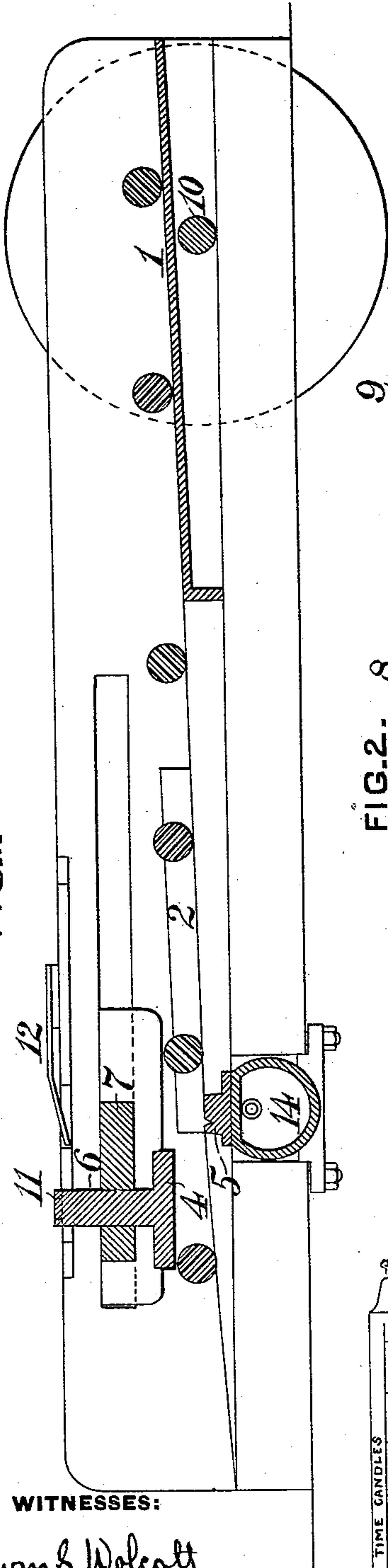
(No Model.)

T. V. FORSTER.  
ORNAMENTING CANDLES.

No. 472,945.

Patented Apr. 12, 1892.

FIG. 1.



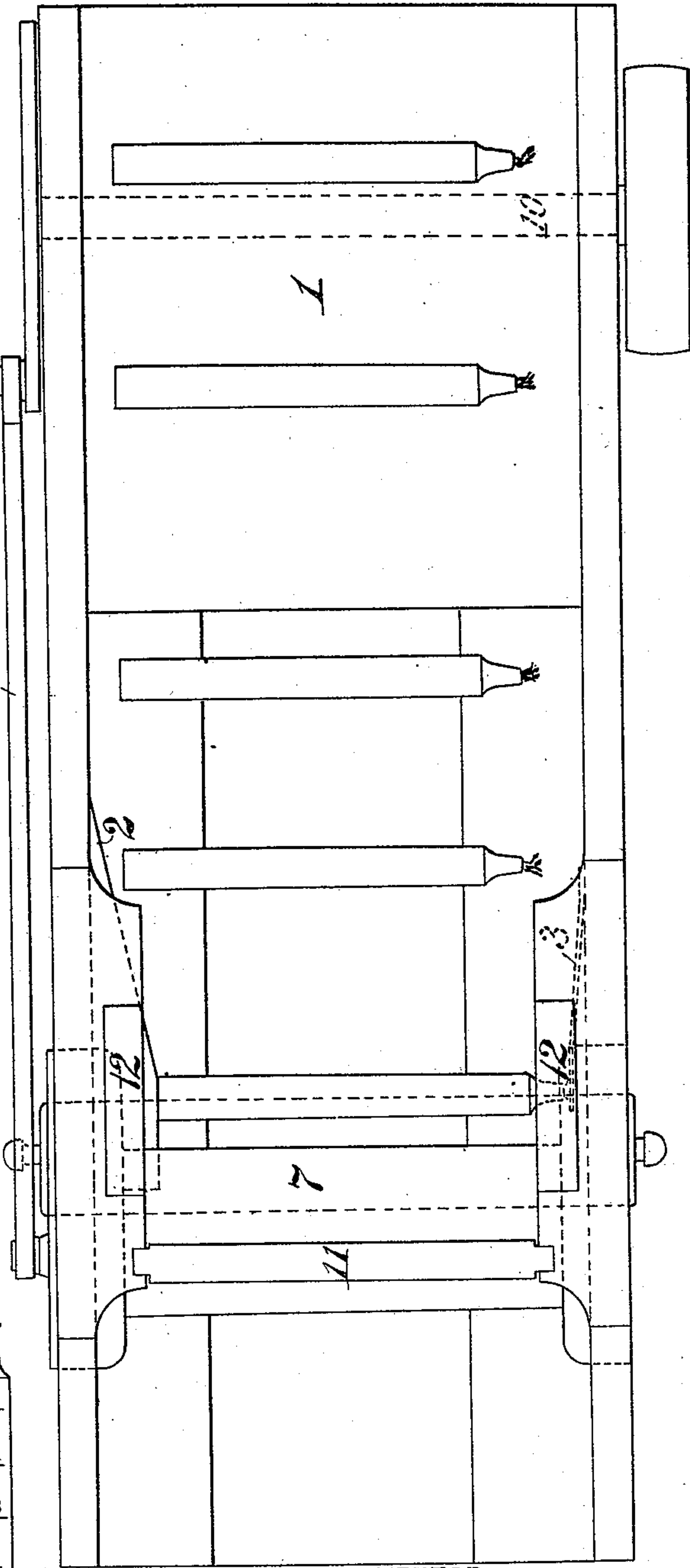
WITNESSES:

*Darius S. Wolcott*  
*F. E. Gaither.*

FIG. 3.



FIG. 2.



INVENTOR,

*Thomas V. Forster*  
*by George H. Christy*  
Att'y.

# UNITED STATES PATENT OFFICE.

THOMAS V. FORSTER, OF AVALON, ASSIGNOR TO W. & H. WALKER, OF ALLEGHENY, PENNSYLVANIA.

## ORNAMENTING CANDLES.

SPECIFICATION forming part of Letters Patent No. 472,945, dated April 12, 1892.

Application filed November 20, 1891. Serial No. 412,518. (Specimens.)

*To all whom it may concern:*

Be it known that I, THOMAS V. FORSTER, a citizen of the United States, residing at Avalon, in the county of Allegheny and State of Pennsylvania, have invented or discovered a certain new and useful Improvement in Ornamenting Candles, of which improvement the following is a specification.

In an application filed October 30, 1891, Serial No. 410,356, I have described and claimed generally a process for marking or ornamenting candles.

The invention described herein relates to certain improvements in or species of said generic process, and will be hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation of a form of machine adapted for the practice of my invention in marking candles. Fig. 2 is a plan view of the same, and Fig. 3 is a view of a marked or ornamented candle.

In the practice of my invention, in connection with the apparatus shown in the drawings, the candles are placed by an attendant upon the inclined bed 1 and roll down the same until arrested by guide-bars 2 and the spring 3, which are designed to adjust the candles longitudinally into proper position for marking. The guide-bar and spring stop the candle, so that it may be caught by the reciprocating bed 4 and rolled along the bed and over the heated type 5. The bed 4 is provided with a post or standard 6, projecting up through a cross-head 7, having its ends mounted in suitable guideways in the side pieces of the machine and connected by pitman 8 to a crank-pin on the wheels 9 on the power-shaft 10. On the upper end of the post or standard 6, which is free to move up and down in the cross-head, is secured a cross-bar 11, whose ends rest upon the side pieces of the machine. As the cross-head moves to the right in Figs. 1 and 2, and with it the bed 4 and cross-bar 11, the ends of the latter ride up on the spring-plates 12, thereby raising

the bed 4 above the bed 1 a distance greater than the diameter of the candles. As the cross-head reaches the end of its movement to the right, at which time the left-hand end of the bed 4 is over a candle held between the bar 2 and spring 3, the cross-bar 11 drops off the plates 12, and the bed 4, whose under face is covered with felt or other suitable cushion, descends upon the candle, the post 6 being made of such a length relative to the height of the side pieces of the bed 1 that the entire weight of the bed 4 will be upon the candle as the bed 4 moves to the left. As the bed is shifted to the left it rolls the candle along the bed 1 and over the type or die 5, having the reverse of the mark or ornamentation which is to be applied to the candle. The type or die is heated in any suitable manner—as, for example, by arranging it over or on a hollow block or shell 14, through which steam or other hot fluid is caused to circulate. The type or die should be made sufficiently hot to quickly melt or soften so much or such portions of the candle as come in contact with the raised parts of the type or die as the candle is rolled with comparative rapidity over the type or die. It is desirable, in order to obtain a sharp clear mark or ornamentation, that the candle should remain in contact with the type or die for a short time only, so as to prevent any undue spreading or extension of the softening or melting action of the type or die.

In treating candles or other articles containing stearic acid or other corroding material such acid or other corroding material will attack the dies when formed of metal—such as copper, brass, or other analogous metal or alloy—and form therewith a dark compound. This compound or coating is formed very quickly. In fact the action of the stearic acid on the copper or brass type or die seems almost instantaneous and is absorbed or taken up by the softened or liquefied material and stains or discolors the same.

I claim herein as my invention—

As an improvement in the art of marking or ornamenting candles and other articles, the



herein-described method, which consists in pressing a heated type or die having the desired mark or ornamentation thereon and formed of a material capable of forming a dis-  
5 coloring compound with the stearic acid of the candle or other article, said compound becoming mingled with the material of the candle or other article when softened or liquefied

by the heat of the type or die, substantially as set forth. 10

In testimony whereof I have hereunto set my hand.

THOS. V. FORSTER.

Witnesses:

R. H. WHITTLESEY,  
DARWIN S. WOLCOTT.