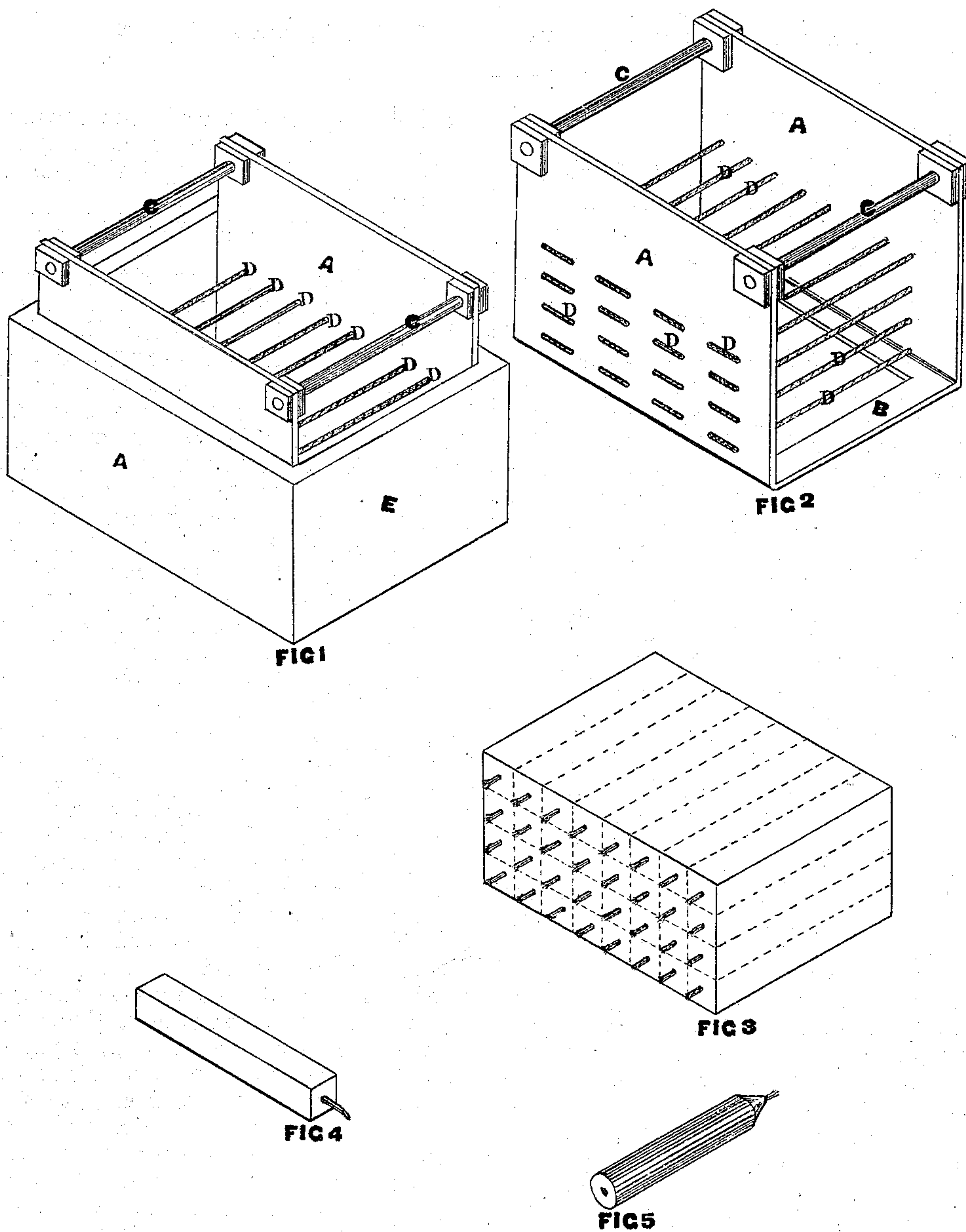


JOHN K. TRUAX.

Improvement in the Manufacture of Candles.

No. 125,632.

Patented April 9, 1872.



Witnesses:

R. C. Wrenshull  
James I. Day

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# UNITED STATES PATENT OFFICE.

JOHN K. TRUAX, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN THE MANUFACTURE OF CANDLES.

Specification forming part of Letters Patent No. 125,632, dated April 9, 1872.

### SPECIFICATION.

*To all whom it may concern:*

Be it known that I, JOHN K. TRUAX, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Candles; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the process of manufacture of candles, such as have heretofore been made by casting in molds, from which they are delivered by means of pistons; and is applicable to candles made of wax, paraffine, spermaceti, and any other material which is sufficiently hard when cold to be subjected to the treatment which I am about to describe. My invention is designed to obviate the necessity of using candle-molds or candle-machines, in which the shape of each candle is given by a matrix within which the melted material is poured. My improvement consists in making candles having the appearance and finish of mould-made candles, by first casting a cubical or other parallel-sided block of paraffine, wax, spermaceti, or other material, in a frame or box traversed by the wicking placed in parallel lines at suitable distances apart, so that the block so cast may contain as many wicks as the number of candles which can be cut out of the block. The block thus cast is then cut into rectangular strips having four equal sides with a wick in the center, by means of a gang of saws or other suitable machines. These pieces or candle-blanks are then separately run through an annular shaving tool, which rapidly turns off the square pieces into the usual cylindrical shape of candles.

The machinery used for cutting the cubical blocks into candle-blanks, and the machinery for turning or shaving the candle-blanks into candles will form the subject matter of separate application, and need not be further described in this specification.

In this specification I will describe the apparatus used by me for molding the blocks from which the candle-blanks are to be made.

In the accompanying drawing forming part of this specification, Figure 1 represents the wick-frame and box in which the candle-blocks are cast. Fig. 2 represents the wick-frame detached from its box. Fig. 3 represents the

candle-block, showing by dotted lines the candle-blanks to be cut therefrom. Fig. 4 represents a candle-blank. Fig. 5 represents a finished candle.

Like letters of reference indicate like parts of each.

The wick-frame consists of two parallel end pieces, A A', which are connected at their lower ends to a bottom frame, B. The wick-frame may be made of cast-iron, wood, or other suitable material. If preferred, the bottom frame B may be a solid piece extending all the way across without any opening. The side pieces and frame may be made of one piece, if constructed of any material which will allow the sides to spring apart for the easy removal of the block of paraffine, or other material of which the candles are to be made; but if made of cast-iron or other rigid substance, the side pieces A A' should be hinged or otherwise so connected with the bottom frame B as to allow of the sides being spread apart or removed. The side pieces A A' are connected together at the top by transverse bars C C, fastened by screw-nuts or otherwise so as to be easily removed. The side pieces of the wick-frame are pierced with small holes opposite to each other, in rows parallel to each other, both longitudinally and vertically, and distant from each other a little more than the required diameter of the candles to be made. The wicking D is then passed through these holes across the wick-frame, being laced backward and forward, as shown in the drawing, Fig. 2. The wick-frame, being thus constructed and furnished with wicking, is placed in a box, E, of cast-iron, wood, or other suitable material in which it fits closely, as shown in Fig. 1. Into this box E the melted paraffine, wax, sperm, or other candle material is poured, care being taken that no air bubbles are mixed with the melted material as it is being poured in. This object may be easily attained by filling the box E by a gate entering the bottom of the box and leading from a heated receiver containing the melted paraffine, wax, &c. The melted paraffine or wax, &c., is run into the box until the top row of wicks is covered to a sufficient depth. If preferred, pressure may be applied to the surface of the material poured into the box E after the casting is complete, so as to solidify the contents, although this



is not usually necessary. When the paraffine or wax, &c., is sufficiently cool and solid to be removed, the wick-frame is withdrawn from the box E and the sides A A', being separated or removed by the removal of the transverse bars C C, the wicks being cut on the outsides of the frame so as to enable the cast block to be removed from the frame; the cast block is then taken to the sawing or cutting machine, by which the block is cut up, first longitudinally and then vertically parallel with the wicks, into a number of parallelopiped or candle blanks, which will be square in cross-section, each having a wick in the center. The piece of wicking which passes through the sides of the wick-frame serves as the top of the wick, by which the candle is lighted. The square-shaped candle-blanks are then separately passed through the shaving-machine, or otherwise turned, so as to remove the square corners and give the desired cylindrical shape to the candle, which is then ready for sale or use.

The cuttings or shaving from the sawing and shaving machines are collected in suitable receptacles and melted over again.

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

The process hereinbefore described of making candles by casting the paraffine, wax, sperm, or other material for candles in a frame traversed by wicking at suitable distances apart, cutting the cast block thus obtained, by saws or otherwise, into rectangular candle-blanks, each having a wick in its center, and removing the surplus material, so as to give the required cylindrical shape to the candles, substantially as described.

In testimony whereof I, the said JOHN K. TRUAX, have hereunto set my hand.

JNO. K. TRUAX.

Witnesses:

W. N. PAXTON,  
JAMES J. KAY.