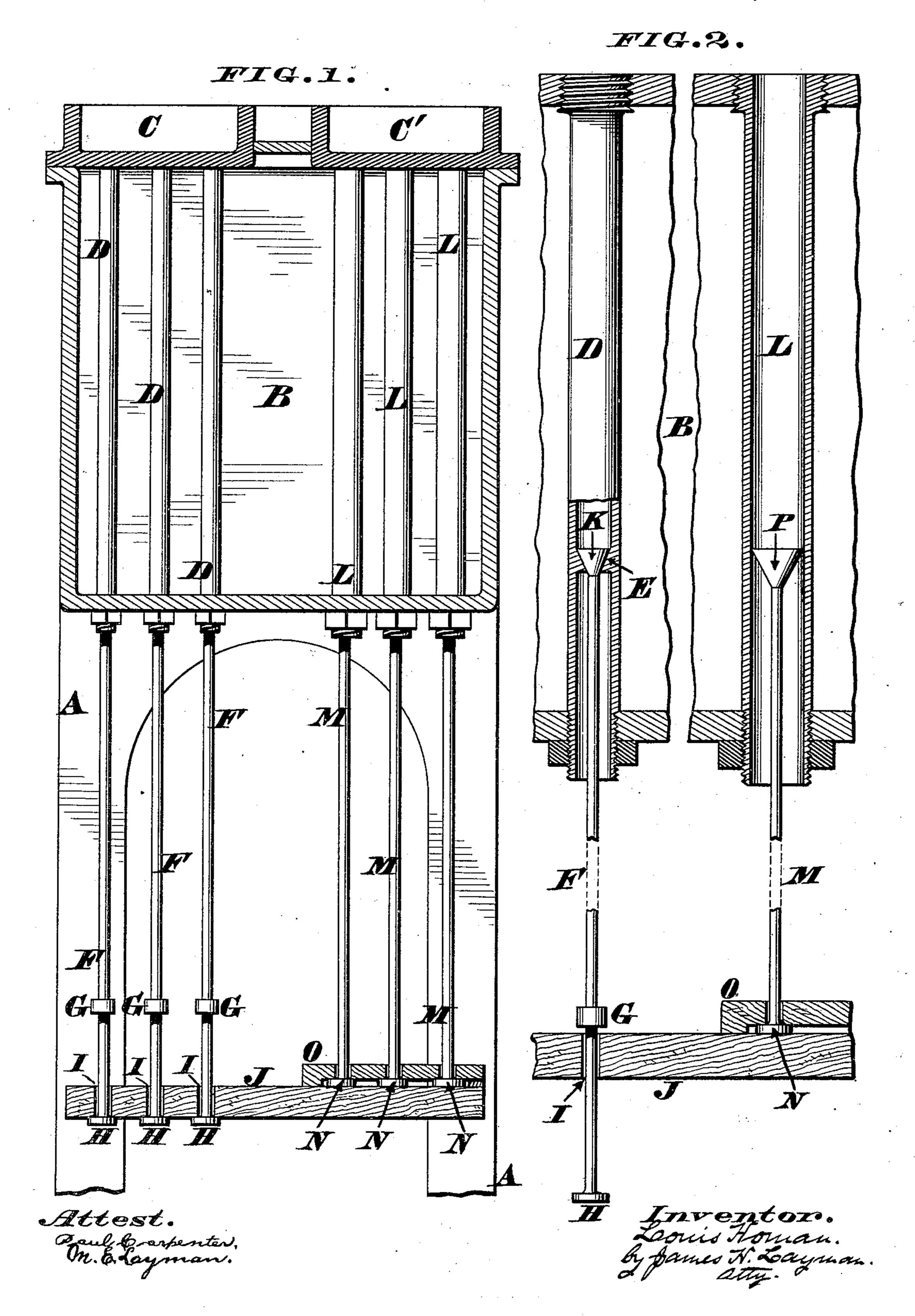
## L. HOMAN.

## CANDLE MOLDING MACHINE.

No. 397,918.

Patented Feb. 19, 1889.



## United States Patent Office.

LOUIS HOMAN, OF CINCINNATI, OHIO, ASSIGNOR TO HOMAN & CO., OF SAME PLACE.

## CANDLE-MOLDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 397,918, dated February 19, 1889.

Application filed August 31, 1888. Serial No. 284,232. (No model.)

To all whom it may concern:

Be it known that I, Louis Homan, a citizen of the United States of America, residing at Cincinnati, in the county of Hamilton and 5 State of Ohio, have invented certain new and useful Improvements in Candle-Molding Machines, of which the following is a specification, reference being had therein to the ac-

companying drawings.

This invention relates to those machines which comprise a box or chest inclosing a series of tubular candle-molds traversed by hollow pistons attached to a common follower, which latter is adapted to be raised and low-15 ered as occasion requires; and my improvement consists in constructing these machines in such a manner as to enable them to produce candles of two or more different lengths. To accomplish this result the molds for the 20 short candles are provided with pistons capable of being arrested at a certain level, the lower ends of the pistons being passed through holes in the follower, in order that the latter may have a regular predetermined stroke 25 without actuating said pistons; but the pistons for the long candle-molds are securely fastened to the follower, so as to travel uniformly therewith, thus causing the long candles to emerge from the upper ends of said 30 molds the instant said follower is elevated. A still further ascent of the follower causes it to come in contact with certain bearings of the pistons of the short-candle molds, thereby ejecting the short candles from said molds, as 35 hereinafter more fully described.

In the annexed drawings, Figure 1 is a transverse section of the upper portion of a candlemolding machine embodying my invention, the follower being lowered. Fig: 2 is an en-40 larged axial section of a pair of the molds of said machine, the follower being elevated and about to come in contact with the bearing of the short-candle piston, and the central portions of both pistons being broken away.

A represents the upper part of the frame of an ordinary candle-molding machine, and B is a box or chest supported thereon, said chest being covered with a cap having a pair of horizontal troughs, CC', into which the melted 50 tallow or other stock is poured, so as to run

freely into the mouths of the various molds, of which latter any suitable number may be used.

The molds D, communicating with the trough C, are designed for the production of 55 short candles, and are provided with an internal shoulder or other suitable stop, as seen at E in Fig. 2, said molds being traversed by hollow pistons F, through which the wicks are passed. Each piston has a fixed collar or 60 other immovable bearing, G, near its lower end, and at the bottom of the piston a disk or head, H, is secured. Those portions of the pistons included between the bearings G and heads H are adapted to pass freely through 65 perforations I of the follower J, which is raised and lowered by racks and pinions in the customary manner. The upper end of each piston has a conical socket, K, to impart the usual tapering tip to the candle.

The molds L, communicating with the trough C', being for the production of long candles, are somewhat larger in diameter than the other molds, D, but are destitute of stops, the pistons M of said molds L being secured 75 to the follower by disks or heads N, fastened. under a grooved keeper, O. Furthermore, each of the pistons has a conical socket at its upper end, one of said sockets being seen at P in Fig. 2. When the machine is in its nor- 80 mal position, the follower J is lowered, as seen in Fig. 1, thereby bringing the conical sockets P of pistons M down to the bottom of molds L, but permitting the sockets K of the other pistons, F, to rest upon the stops E. The 85 wicks from the various bobbins are then passed up through the respective pistons and molds, and secured at the top of the machine in the usual manner, after which preparation the melted tallow or other stock is poured into the 90 troughs C C' and runs down into said molds until arrested by the conical sockets K P, thereby forming the candles. The surplus stock is speedily cut away from the troughs C C' after being sufficiently cooled and hard- 95 ened, so as to leave each candle at liberty to be raised out of the molds, which is readily effected by elevating the follower J. The instant this follower begins to ascend, the candles commence to emerge from the molds L, 100

because the pistons M are attached to said follower and have a simultaneous movement therewith; but the follower must rise some distance before coming in contact with the 5 collars G of pistons F, and then the candles commence to emerge from the molds D, the continued ascent of said follower ejecting both the long and short candles from their respective molds. As they emerge the molded can-10 dles are delivered into racks and clamped therein before being taken away from the machine preparatory to making a second run, which is accomplished, as above described, after lowering the follower. The pistons M 15 are retracted the moment the follower begins its descent; but said follower must descend stops, as E, being arranged within the shortstill farther and strike the heads H before | candle molds D, for the purpose described. the other pistons, F, will be actuated.

From this description it is evident that by | presence of two witnesses. 20 properly arranging the stops E and collars G the length of the short candles will be regulated accordingly, and in some machines the molds and pistons may be so constructed as i to produce three or more candles of various !

25 lengths.

By providing the box B with ninety-six molds each run of stock will produce fortyeight short candles and an equal number of long candles, and as these various sizes are molded in a single machine the invention will .30 effect a great saving in small factories.

I claim as my invention—

The combination, in a candle-molding machine, of chest B, provided with two sets of molds, D. L., traversed, respectively, by pistons 35 FK and MP, the pistons MP being connected to the follower J, so as to travel therewith, and the pistons F K being passed loosely through holes I in said follower, and being provided with bearings G and heads H, and 40

In testimony whereof I affix my signature in

LOUIS HOMAN.

Witnesses: JAMES H. LAYMAN, SAML. S. CARPENTER.