(No Model.)

J. W. KUNZLER.

GLASS MOLD.

No. 599,939. Patented Mar. 1, 1898.

Fig. 1.

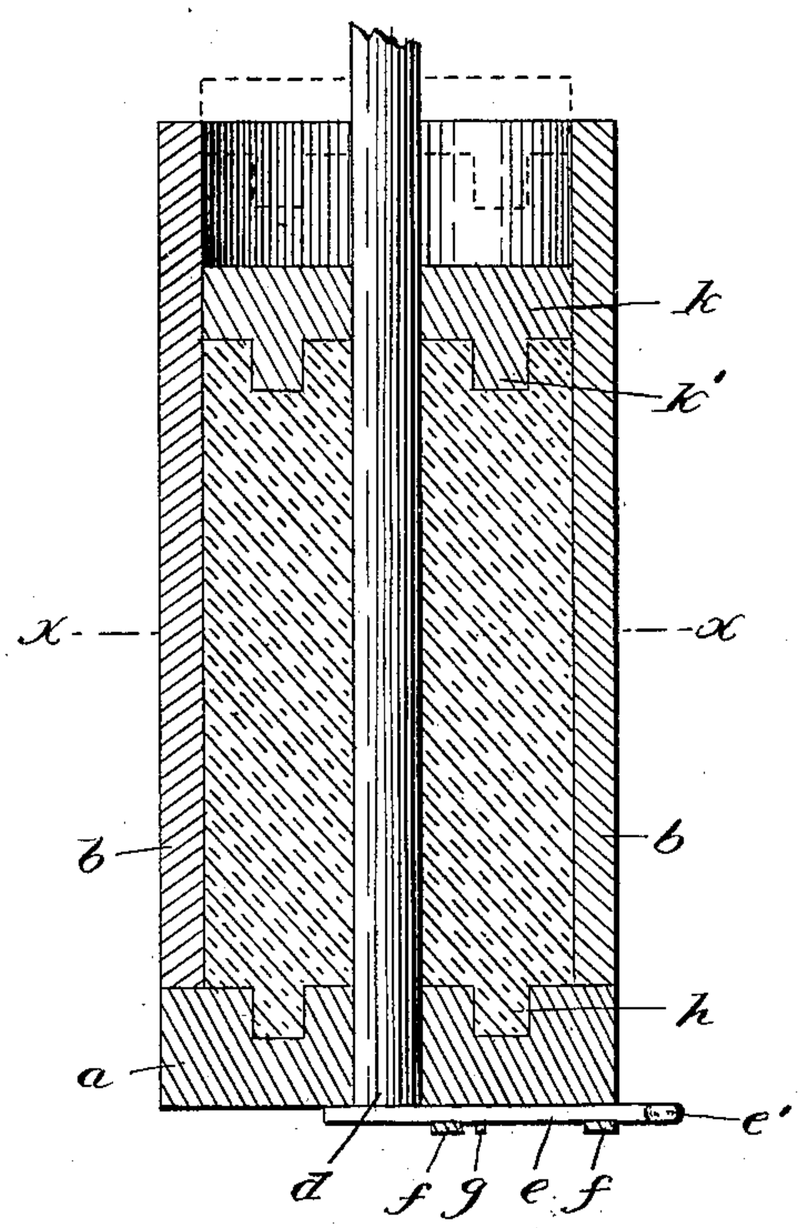


Fig. 3.

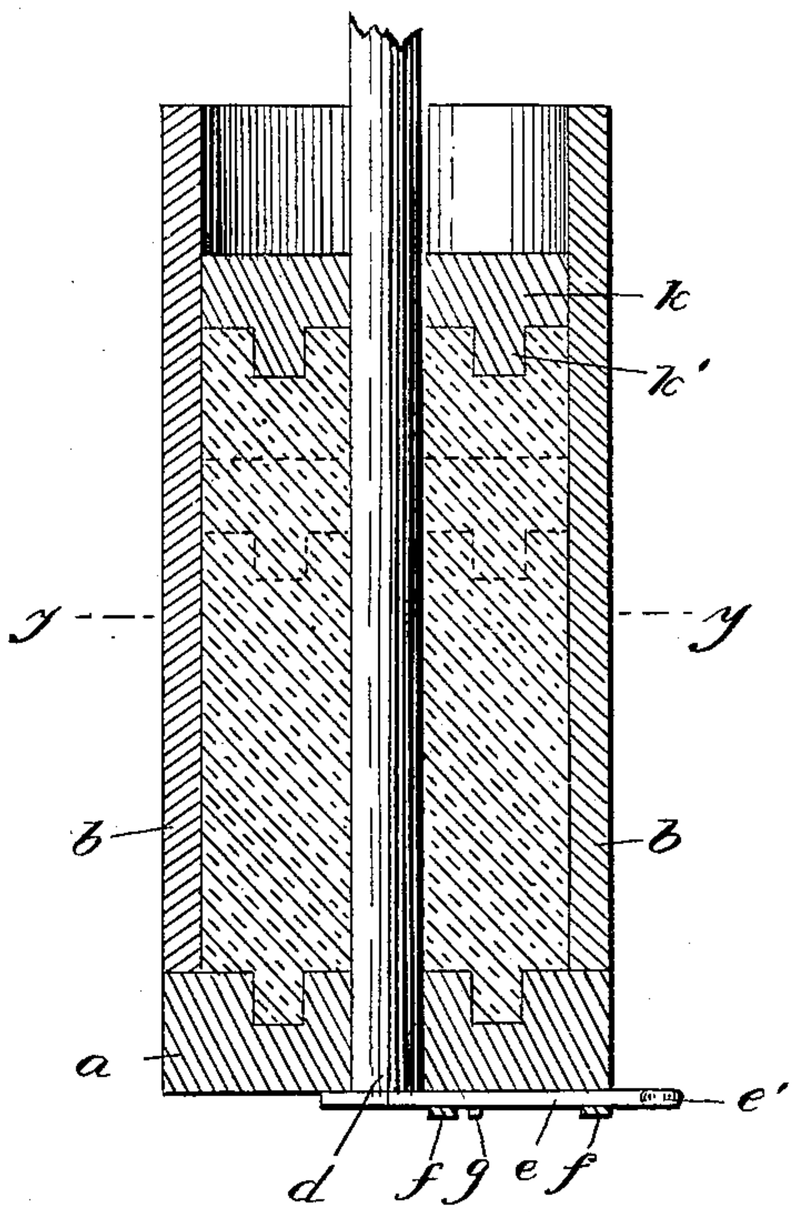


Fig. 2.

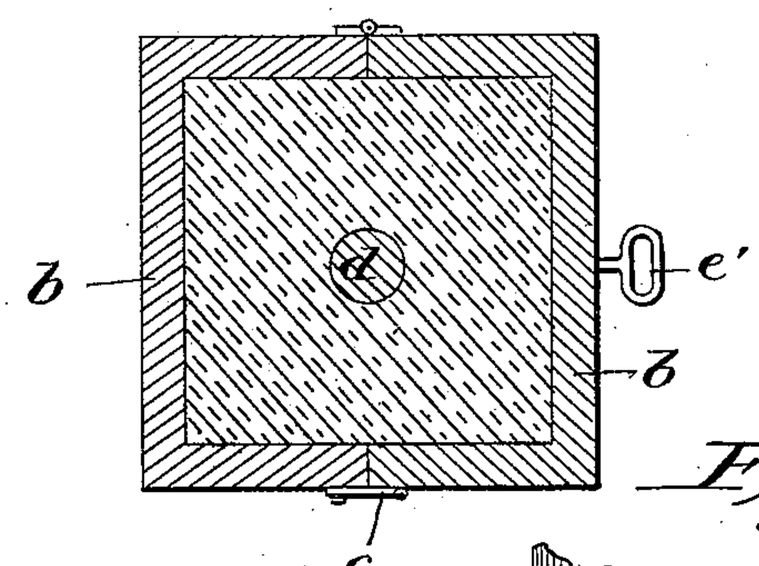


Fig. 4.

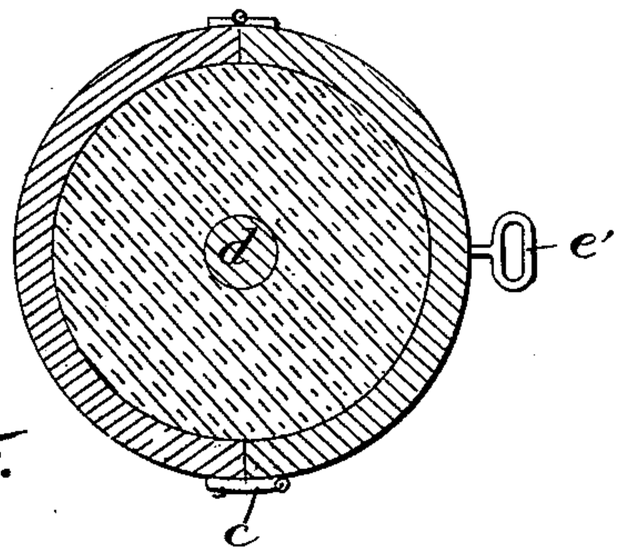
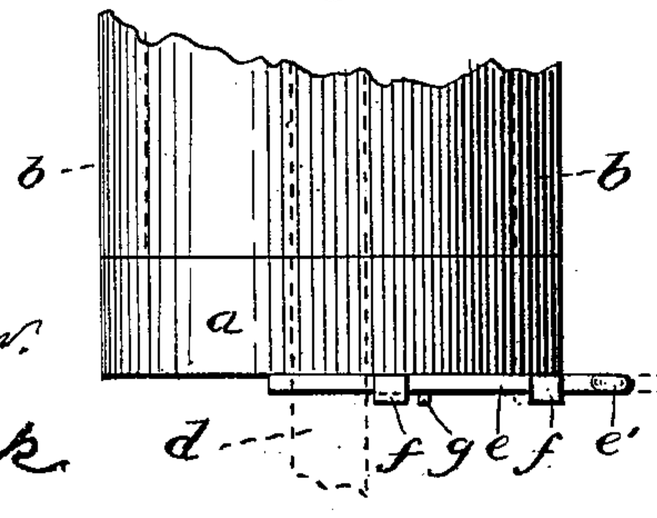


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN W. KUNZLER, OF PITTSBURG, PENNSYLVANIA.

GLASS-MOLD.

SPECIFICATION forming part of Letters Patent No. 599,939, dated March 1, 1898.

Application filed March 13, 1897. Serial No. 627,380. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. KUNZLER, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Glass-Molds, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in molds, and relates more particularly to a mold adapted to be employed for forming conduits for general purposes, the object being to provide a perfectly air and water proof non-insulating conduit and that will also be perfectly flush at the joints, thus practically making a continuous conduit.

The invention aims to accomplish the above results by means of the peculiarly-constructed mold, which is adapted to receive the molten substance from which the conduit is to be formed and mold the same into the particular form or design, and to provide simple and efficient means for unlocking and opening the mold, so as to permit the removal of the section of conduit without injury to the same, the invention further residing in the novel construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claim.

A still further object of my invention is to provide a mold which will form a finished conduit regardless of the quantity of glass used.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a vertical sectional view of my improved mold. Fig. 2 is a cross-sectional view taken on the line X X of Fig. 1. Fig. 3 is a vertical sectional view of the mold, showing the same constructed to form a circular conduit. Fig. 4 is a cross-sectional view taken on the line Y Y of Fig. 3. Fig. 5 is a view showing the supporting-bar.

Referring now to the drawings by reference-letters, *a* represents the base, which supports the side walls *b b*, which are preferably formed in two sections, hinged together and secured by means of a latch *c*. The base *a* is centrally apertured to receive a core *d*, which extends upward above the mold a short distance and is supported at its lower end by a bar *e*, operating in keepers *f f*, carried by the underneath face of the base, said bar being provided with a handle *e'* on its outer end and also having a lug *g* to limit the movement of the bar when withdrawn. The base *a* is provided on its upper face with a circumferential groove *h*, which forms an annular flange on the one end of the conduit, while the other end of the conduit is formed with a groove to receive said flange by means of a die *k*, having on its engaging face an annular flange *k'* and being centrally apertured to receive the core *d*.

The glass or other molten material from which the conduit is to be formed is poured into the mold after the mold has been closed and the parts arranged as heretofore described, and when a sufficient quantity of the molten glass or other material from which the conduit is being formed has been admitted to the mold the die *k* is forced down into contact with the material in the mold and forms the one end of the conduit, while the opposite end is formed by the base *a*. When the material has cooled sufficiently to remove the same from the mold, the bar *e* is withdrawn and the core *d* forced out of the material, when the mold may be opened and the conduit removed.

The core is preferably arranged so as to permit the easy removal of the same, as shown, and to permit the use of another core for the succeeding operation, as in case the same core were employed for each section of conduit this core would soon become heated to such an extent as to cause the same to become injurious to the conduit, and it will be observed that by the arrangement of the flange on the one end of the conduit and a groove on the opposite end which corresponds to the flange the sections may be readily fitted together, so that when this is done a perfectly flush joint is obtained, which will be air and water tight as well.

It will of course be understood that the mold may be constructed so as to form any shape or style of conduit desired, a perfect

section being made with each operation of the mold, and it will also be noted that the base *a* and the die *k* may be constructed so as to form any joint that may be desired, as a screw, shoulder, double shoulder, socket, slip, or other joint may be readily formed on the ends of the sections of the conduit as the joint that is herein shown. It will also be observed that as many cores may be arranged in the mold as may be desired and that the joints may, if desired, be strengthened by constructing the mold so as to form a groove around the conduit to receive a wire, band, or other suitable fastening.

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

In a mold for conduits and similar articles, consisting of a base provided with an opening, said base also forming a die, sides hinged together and provided with suitable fastening means, a slide operating in guideways secured to the under side of the base, a core held in the opening in the base and extending upwardly above the sides, a die provided with an opening adapted to fit in top of the mold to form one end of the conduit, and means for releasing the core to permit the same to be removed, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. KUNZLER.

Witnesses:
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