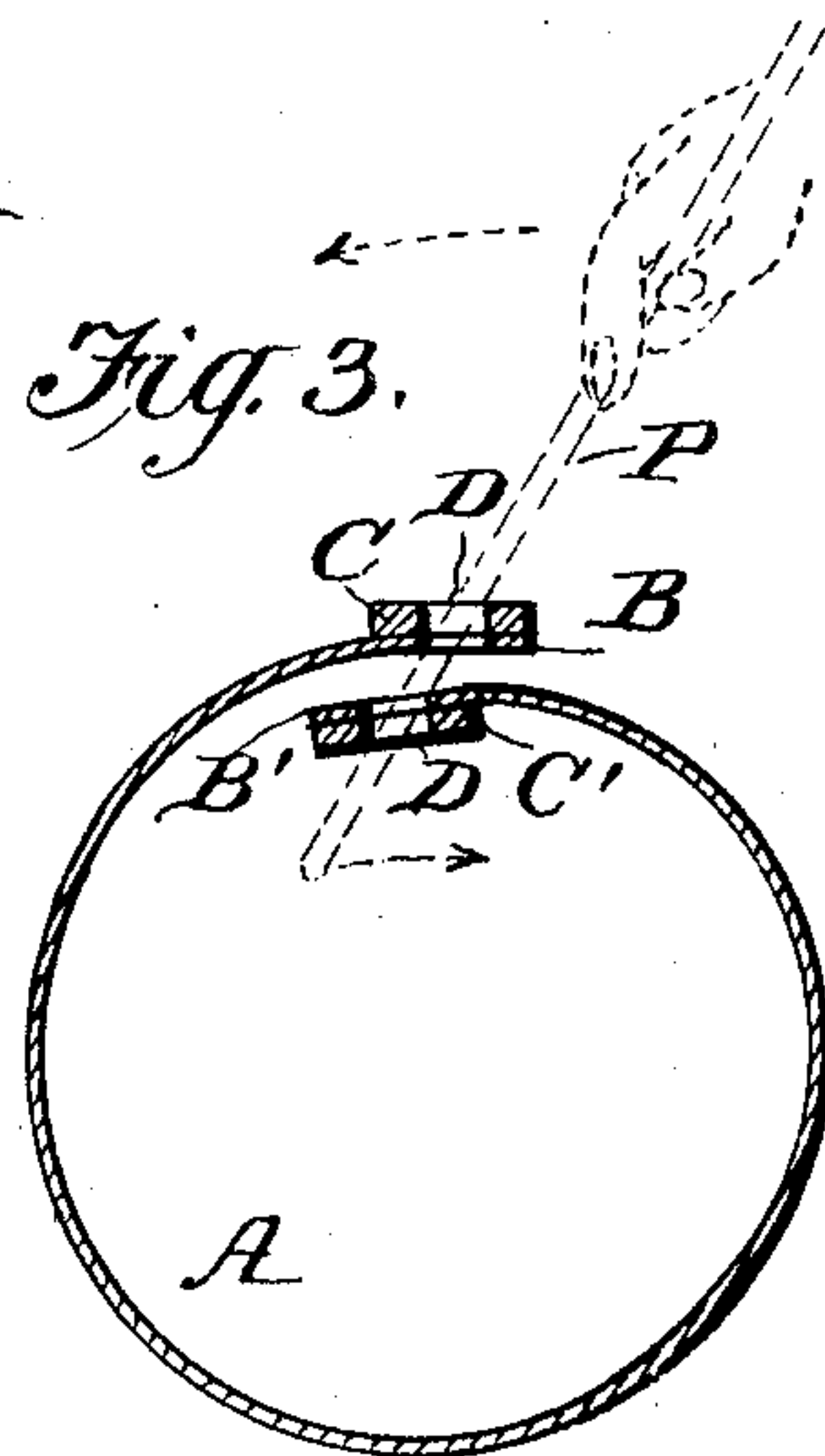
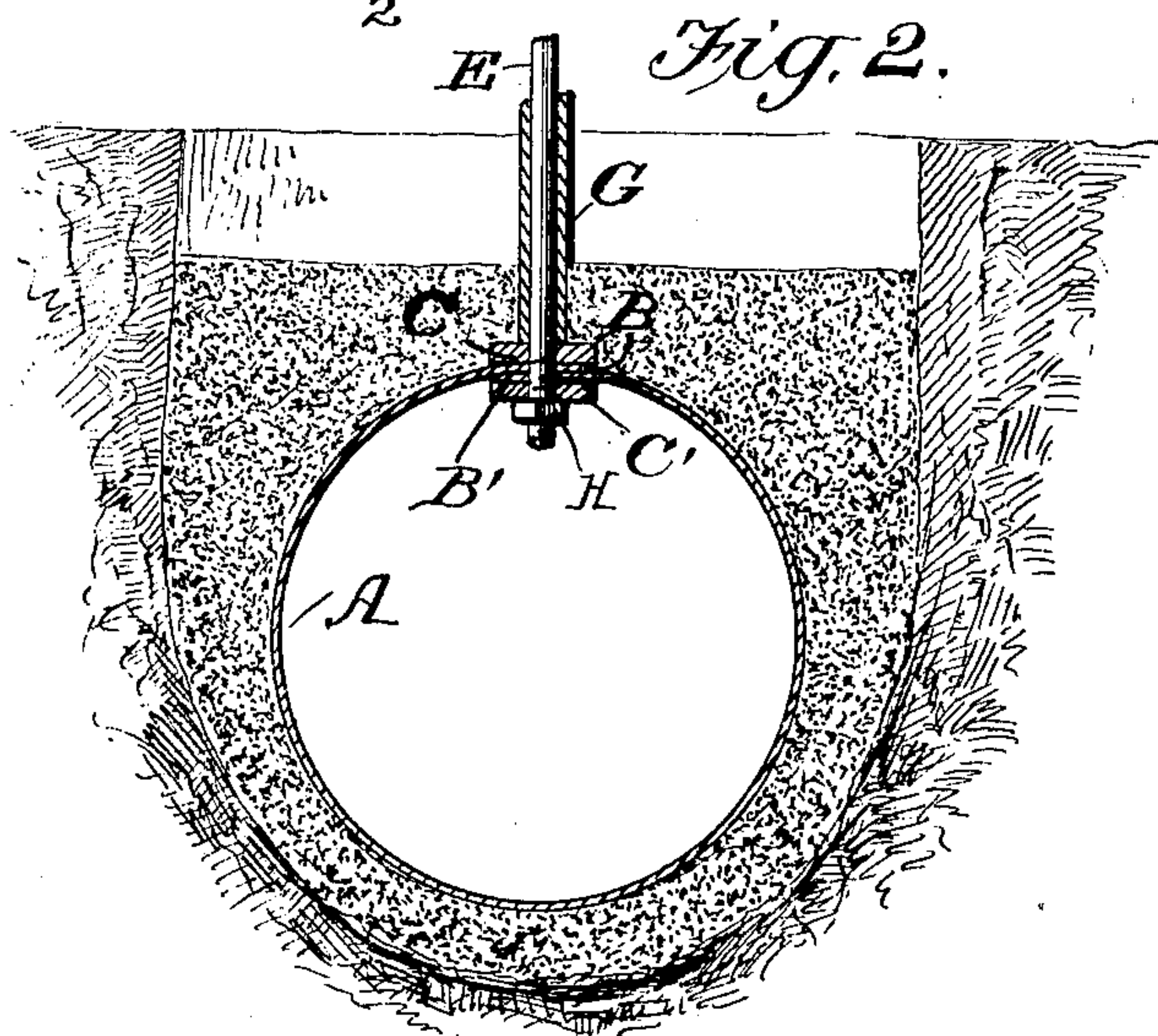
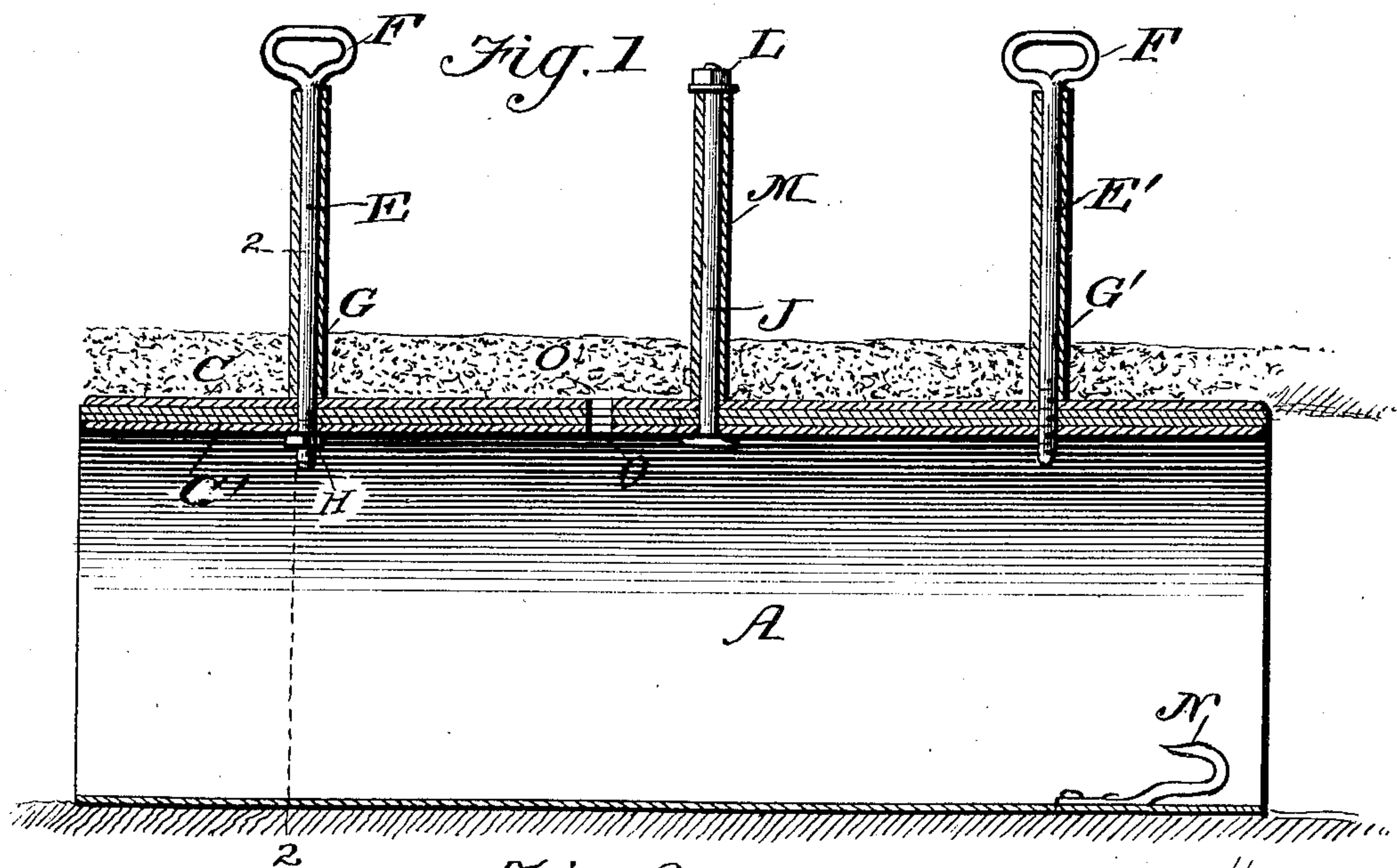


No. 828,766.

PATENTED AUG. 14, 1906.

C. W. OVERTURF.  
COLLAPSIBLE MOLD.

APPLICATION FILED DEC. 14, 1905.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLEY WALACE OVERTURE, OF DUMONT, IOWA.

## COLLAPSIBLE MOLD.

No. 828,766.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed December 14, 1905. Serial No. 291,726.

*To all whom it may concern:*

Be it known that I, CHARLEY WALACE OVERTURE, a citizen of the United States, residing at Dumont, in the county of Butler and State of Iowa, have invented certain new and useful Improvements in Collapsible Molds, of which the following is a specification.

My invention relates to molds for forming concrete or other plastic composition pipes, culverts, and similar passage-ways.

The object had in view is to construct a mold of the general character stated which shall be new, useful, and simple in construction.

The invention consists of the novel construction shown by the accompanying drawings and hereinafter described in detail.

In the drawings, Figure 1 is a vertical sectional view taken longitudinally through my improved mold. Fig. 2 is a transverse sectional view with the mold shown placed in an excavation and covered with material of which the culvert or other passage-way is constructed, and Fig. 3 is a transverse sectional view showing the mold collapsed and also illustrating means whereby to facilitate adjusting the collapsed parts to molding condition.

The broad idea characterizing my invention is a peculiar mold adapted for use in the construction of plastic passage-ways, the same being constructed collapsible, whereby to facilitate its removal when the plastic is sufficiently set.

In the practice of my invention I preferably employ a galvanized-metal sheet and fashion same into a tubular body portion A with longitudinal detached edges B B'. The body portion A should possess tension-effecting contracting action, whereby when its longitudinal edges B B' are free its transverse section will be reduced and the said longitudinal edges drawn to position one beyond the other, adjusting the body portion to the collapsed condition shown by Fig. 3. The edges B B' of the body portion of the mold are reinforced by suitably-secured bars C C', preferably arranged one, C, on the outer side of the edge B and the other, C', on the under side of the edge B'. Openings D are made in the bars C C' and the same extended through the longitudinal edges B B' of the body portion A, substantially as shown by Figs. 1 and 3.

E E' denote rods having any suitable

heads F and with their other ends adapted to enter the openings D, disposed along the longitudinal free edges B B' of the body portion. In connection with the rods E E', I employ tubular or other suitable forms of supports G, into which the rods E E' are arranged, with their lower ends extended, projecting through the openings D, leaving the lower end of the tubular supports G resting upon the bar C, as shown. The lower end of the rods E E' are provided with suitable securing means—such, for instance, as a simple nut H, shown screw-threaded on the inner projecting end of the rod E or by providing the opening D in the bar C' with screw-thread adapted for reception of similar thread I on the lower end of the rod E'. (See Fig. 1.) In some instances it may be desirable to introduce rods similar to E E' from the inside of the mold. In such instances I employ a rod J, having a head K on its lower end and with its upper end screw-threaded, adapting same for use of a clamping-nut L. (See Fig. 1.) With the latter form of rod, as J, a tubular or other form of support M is employed.

The particular use or object of the tubular supports G G' M will be understood from the statement hereinafter made.

N denotes any suitable form of device secured on the inner side of the mold or body portion A, and the object thereof is to provide means whereby the mold may be engaged and drawn along to another position.

The construction of my invention will be understood from the above description. In describing its use—as, for instance, in the construction of cross-road culvert or other passage-way—an excavation is made substantially as illustrated in Fig. 2. Now the mold is arranged in the excavation just mentioned and concrete or other material placed in the excavation and filled around the mold and to a level suitably above the mold-body, leaving the upper ends of the rods exposed, as will be understood upon reference to Fig. 2 of my drawings. When the concrete filling has sufficiently set, the rods E E' J when unfastened are withdrawn from the holes D in the body portion and also from the tubular supports G G' M. Now it is apparent that when body-portion edges B B' have been released, as upon withdrawing the rods E E' J from the holes D, through contracting tension of the body portion A same will roll up into the collapsed form shown by Fig. 3, thereby freeing itself from the surrounding



body of concrete filling. Obviously the mold in its collapsed condition may be freely withdrawn and the culvert or passage-way thus formed have its ends finished by suitably-constructed heads or abutments well understood.

In some instances it may be necessary to provide means whereby to assist in reexpanding or restoring the body portion to molding condition and for rearrangement of the rods E E' J in the holes D in the edges of the body portion. To the end just stated suitable openings O are provided in both edges of the body portion A, wherein a suitable tool P may be introduced (see Fig. 3) and by prying action therewith draw the adjacent openings D D into registering position adapted for insertion of the rods E E' J, when the same may be secured, as hereinbefore described.

I would have it understood that while I have shown applied and described three forms of securing-rods on one section it is intended to use only one form thereof on the same section or body portion and also that I do not desire to be restricted in the number of supporting-rods employed nor to the simple use of one form thereof on the same body portion.

What I claim is—

1. A collapsible mold, consisting of a self-contracting body portion, having longitudinal attachable edges, means for securing the

longitudinal edges of the body portion, the securing means consisting of elongated devices, extending outwardly from the body portion, and means for supporting said securing elongated devices, substantially as described.

2. A collapsible mold, consisting of a self-contracting body portion, having separable longitudinal lapping edges, and with coinciding openings in said edges, elongated rods with one end adapted to enter said openings, means for securing the rods in the openings, and supporting means on the outer portion of the rods, substantially as described.

3. The combination in a collapsible mold, employing a body portion constructed of a sheet fashioned into tubular form under tension, leaving longitudinal separate edges, with the latter adapted to be lapped, the lapped edges having coinciding openings therethrough, elongated rods having one end arranged in said openings, means for securing the rods in the openings, the rods being extended beyond the outer surface of the body portion and provided with a suitable enlargement at one end thereof, and tubular supports on the outer portion of the rods, substantially as described.

CHARLEY WALACE OVERTURE.

Witnesses:

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