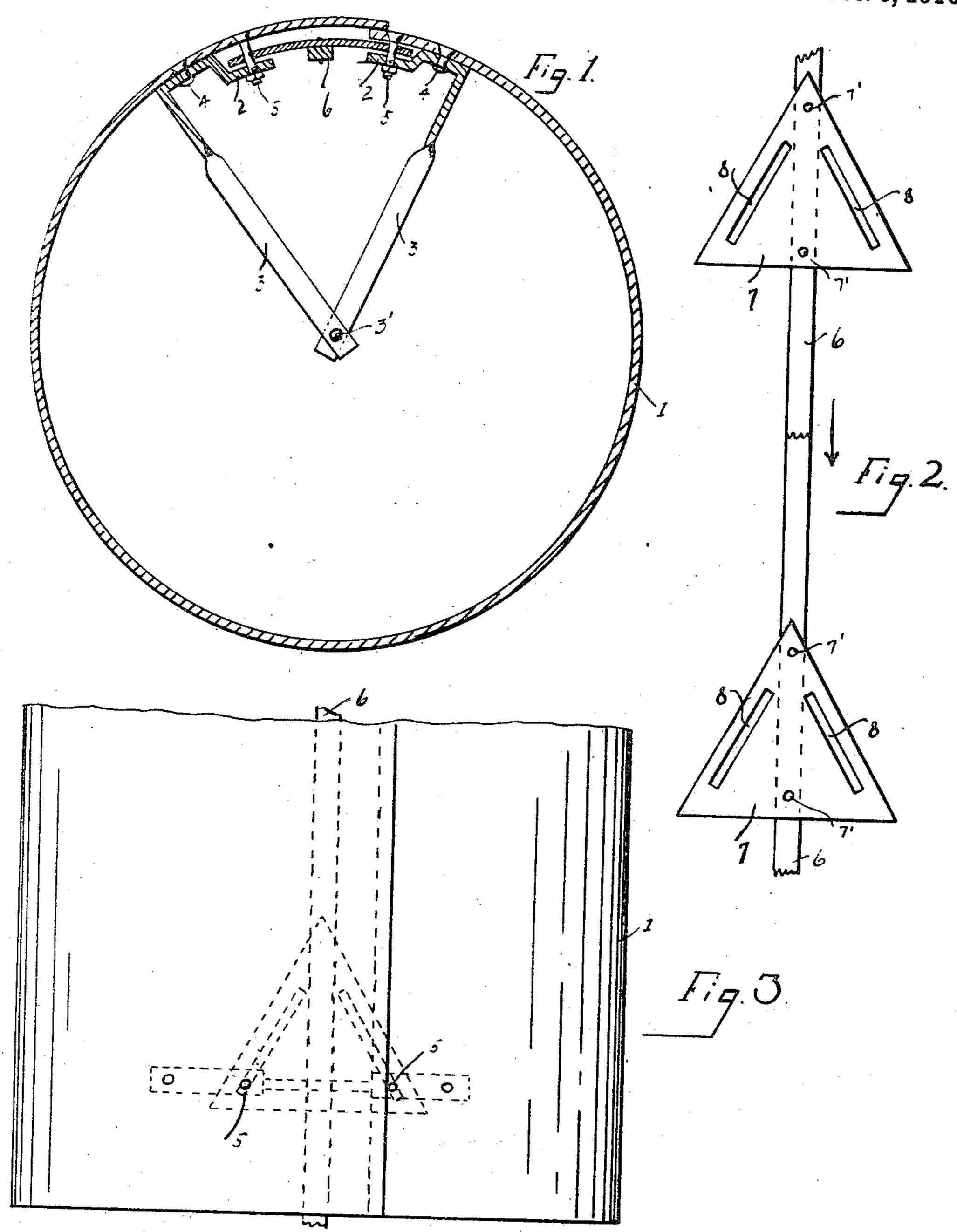
T. E. CLARK.

MOLD FOR SEWERS.

APPLICATION FILED MAR. 15, 1909.

948,540.

Patented Feb. 8, 1910.



WITNESSES:

E. a. Stickney So. Carpenter INVENTOR Theodore Elbourth Chark

## NITED STATES PATENT OFFICE.

THEODORE ELLSWORTH CLARK, OF SACRAMENTO, CALIFORNIA 三大人名 人名英格兰人姓氏格特 建氯甲基酚糖合金

MOLD FOR SEWERS.

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Application filed March 15, 1909. Serial No. 483,556.

To all whom it may concern:

Be it known that I, THEODORE ELLSWORTH Clark, a citizen of the United States, residing at Sacramento, in the county of Sac-5 ramento and State of California, have invented new and useful Improvements in Molds for Sewers, of which the following is

a specification.

My invention relates to improvements in 10 molds for sewers, conduits, etc., which are constructed of cement, concrete, or other suitable building materials, and the object of my invention is to provide a mold that may readily be removed from the sewer-15 pipe or conduit after the said pipe has been constructed about.it.

On December 2nd, 1908, I filed an application for Letters Patent, Serial Number 465,660, on a mold for sewers; the means 20 shown in that application were particularly

adapted for molds of say eighteen inches in diameter and larger. In the present application, the means employed are better suited for molds of smaller diameter, though I do 25 not wish it understood that I limit the application to molds of any particular size.

I attain the objects specified, and others which are apparent, by the mechanism described in this specification and illustrated 30 in the accompanying drawings which form part thereof and in which similar letters or figures refer to similar parts throughout.

Figure 1 is a cross sectional view of the mold. Fig. 2 is a top view of the means 35 used for contracting the mold. Fig. 3 is a

top view of the mold.

In the drawings, 1 is a flexible sheet steel or iron tubular shell with its longitudinal seam left unriveted or unfastened together. ...40 one edge overlapping the other as shown.

2-2 are lugs securely fastened to the inner surface of the shell by bolts or rivets 4; 3-3 are radial arms integral with the lugs 2 and which are rotatably joined at 45 their outer ends where they cross each other, by the bolt 3'. The object of these arms is to keep the over-lapping edges of the shell close together when the shell is contracted, otherwise they would have a tendency to 50 separate.

5-5 are draw-bolts passing through the

shell 1 and the lugs 2, and their use will be further explained.

6 is a bar extending approximately the length of the mold; securely fastened to this 55 bar by bolts or rivets 7' are a number of triangular shaped plates 7 having slotted openings 8-8 parallel with two convergent sides of the triangular plates, see Fig. 2. There may be any number of these plates 60 dependent upon the length of the mold, and the mold may be any desired length consistent with the ease with which it may be handled. There are as many sets or pairs of lugs 2 as there are plates 7 and the lugs 65 2 are placed at such a distance apart along on the inner surface of the shell as to correspond with the distance apart of the plates 7. It is obvious that when the bar 6 is drawn out in the direction as indicated by 70 the arrow in Fig. 2, the draw-bolts 5-5 will be forced to traverse the slots 8—8 and be drawn nearer together as they approach the vertex of the plates 7, resulting in the edges of the shell over-lapping each other 75 still further and producing thereby a contraction of the diameter of the mold. The mold therefore may readily be withdrawn from the sewer-pipe or conduit after the same has been formed about it. It is also 80 obvious that when the bar 6 is forced in the opposite direction to that indicated, the mold will be restored to its original diameter.

It will be noted that various changes may 85 be made in the form, proportion and minor details of construction without departing in any way from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what 90 I claim as new and desire by Letters Patent

to secure, is—

An adjustable mold of the character described, comprising a split shell formed of flexible material with its edges overlapping; 95 a series of brackets arranged in pairs rigidly secured to the free overlapping edges on the inner surface of the shell, one end of the brackets in each pair extending inwardly and rotatably connected together near the 100 central portion of the shell, the other end of the bracket in each pair being bent and

formed concentric with the shell and provided with draw-bolts; a bar extending approximately the length of the mold; triangular plates on said bar, and slotted openings in said plates parallel with two convergent sides thereof through which the draw-bolts above mentioned pass and are in slidable relation thereto.

In testimony whereof I have signed my name to this specification in the presence of 10 two subscribing witnesses.

THEODORE ELLSWORTH &LARK.

Witnesses:

Edgar Allen Stickney, Joseph Clarence Carpenter.