J. F. HARRIS.

MOLD.

APPLICATION FILED OCT. 30, 1918.

1,311,122.

Patented July 22, 1919.

2 SHEETS—SHEET 1.

FIG. 1.

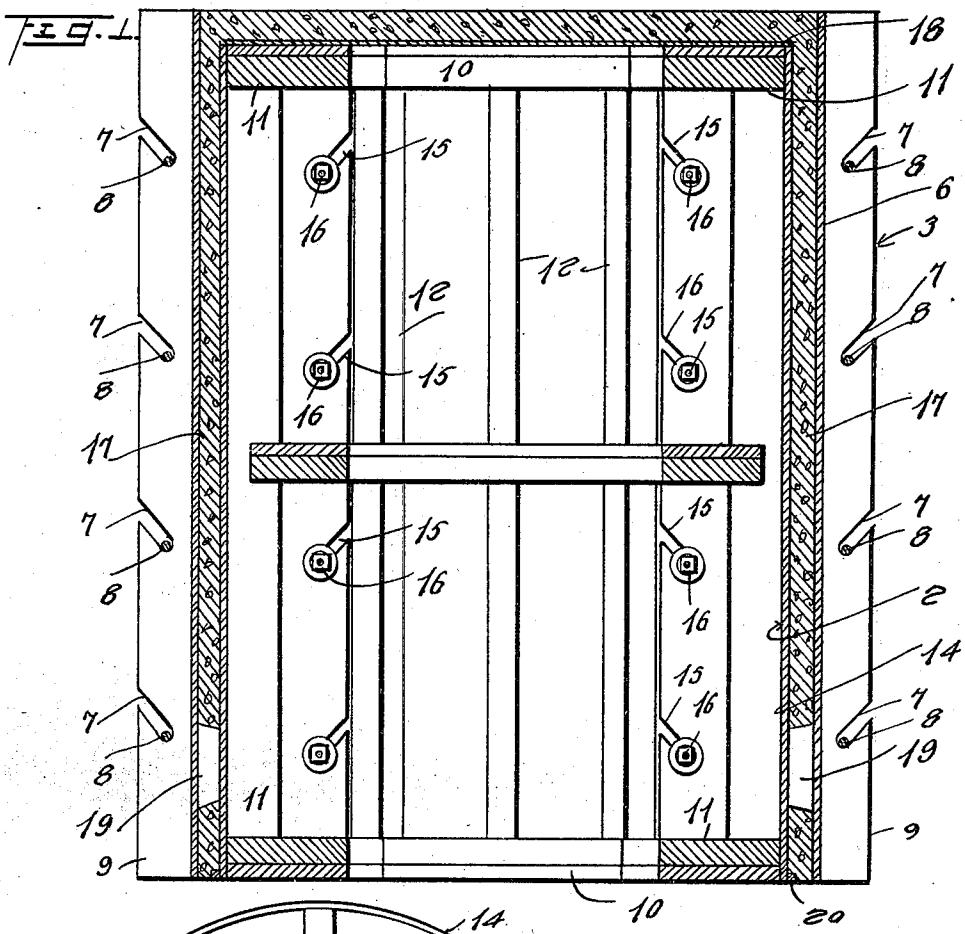
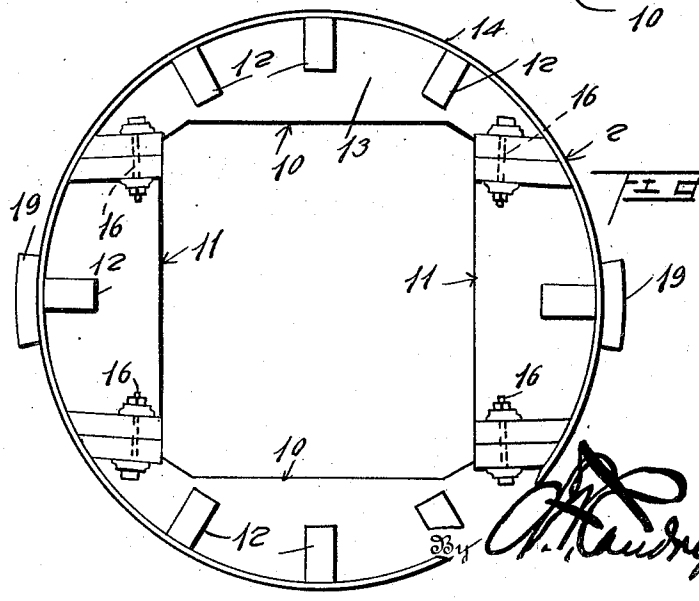


FIG. 4.



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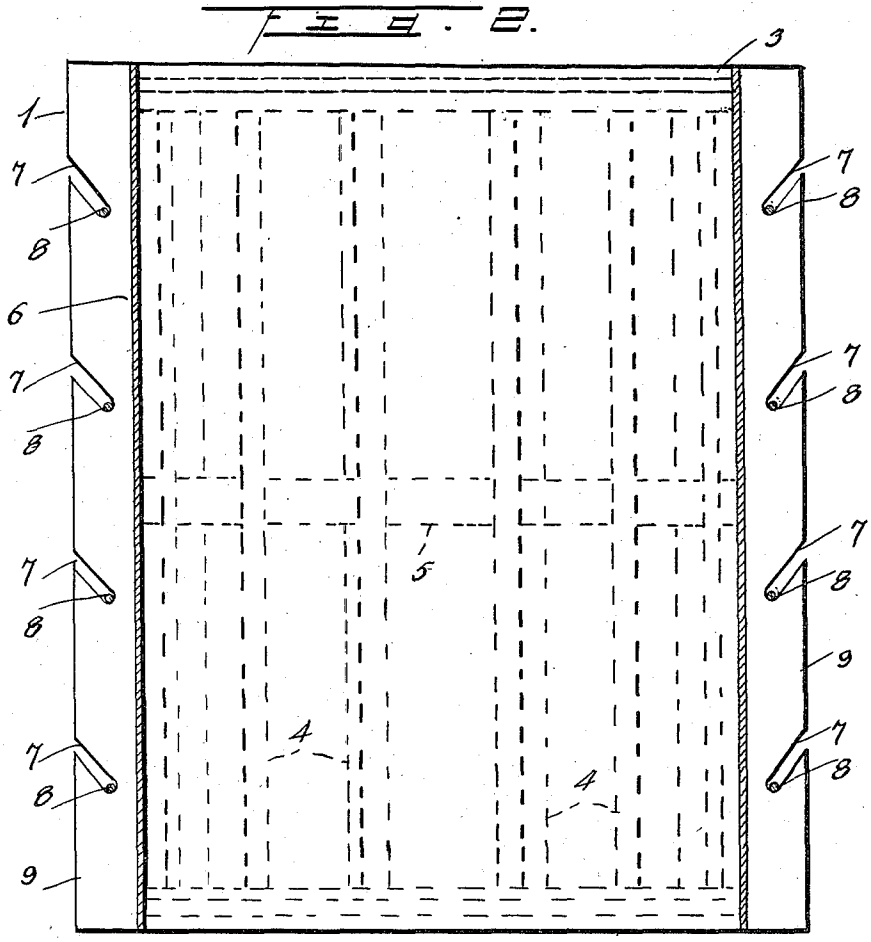
2 SHEETS—SHEET 2.

FIG. 2.



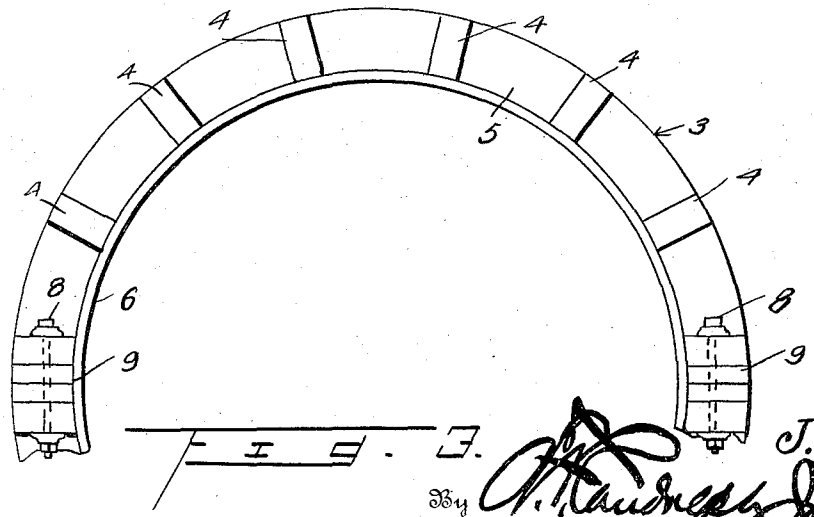


FIG. 3.

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UNITED STATES PATENT OFFICE.

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MOLD.

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To all whom it may concern:

Be it known that I, JOHN F. HARRIS, a citizen of the United States, residing at Wilmington, in the county of New Hanover and State of North Carolina, have invented certain new and useful Improvements in Molds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in molds especially adapted for making or forming effluent and sludge tanks for sewage systems and has for one of its objects the provision of a device of this character whereby the device can be readily assembled and later disassembled after the plastic material or cement has set without the liability of injuring the molded article, and also whereby the core or shell can be removed first from the article.

Another object of this invention is the provision of a mold of the above stated character, which shall be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description, and accompanying drawings, in which:—

Figure 1 is a vertical sectional view of a mold constructed in accordance with my invention,

Fig. 2 is a vertical sectional view of the shell,

Fig. 3 is a fragmentary plan view of the same, and

Fig. 4 is a plan view of the core.

Referring in detail to the drawings, the numeral 1 indicates the shell while the numeral 2 indicates the core. The shell 1 consists of a pair of semi-circular sections 3, which sections are each constructed of a plurality of vertical disposed and relatively spaced beams or members 4 provided with notches to receive semi-circular and horizontally disposed members 5 having their edges flush with the outer faces of the beams or members 4 by having notches formed therein adapted to interlock or receive the notches of the members or beams 4. A lining 6 constructed of metal, wood or other material suitable for the purpose is secured to the inner faces of the members 4 and 5. The end members or beams 4 of each of the sections are provided with upwardly and outwardly directed slots 7 which open outwardly through the outer faces of said members or beams 4 to receive attaching bolts 8. The bolts 8 are adapted to extend through the adjacent end members of the sections for securing the sections 3 of the shell 1 together. Spacing blocks 9 are provided with slots similar to the slots 7 to receive the bolts 8 and are positioned between the adjacent end members or beams 4 of the sections 3 for spacing the ends of the sections apart, and which blocks provide spaces when removed to permit an instrument to be inserted between the shell and the molded article for prying the shell away from the article.

The core 2 consists of pairs of sections 10 and 11 and the sections 10 correspond in size and shape while the sections 11 correspond in size and shape. Each of the sections 10 and 11 are identical in construction except for the size and shape thereof, and each consists of a plurality of vertically disposed members or beams 12 provided with notches to receive notches formed within horizontally disposed and relatively spaced horizontal members 13. The faces of the members 13 are flush with the faces of the members 12 and which members have secured to their outer faces a lining 14 constructed of metal, wood, or other material suitable for the purpose. The end members or beams 12 of each of the sections are provided with upwardly and inwardly directed slots 15 that open outwardly through the inner faces thereof to receive bolts 16 provided with nuts, whereby the sections 10 and 11 are detachably secured together and are adapted to be arranged within the shell 1 in spaced relation thereto to form a cement receiving space 17. The members 13 of each of the sections 10 and 11 are provided with straight faces so that when the sections are assembled a rectangular space is provided within the core 2 permitting an entrace to the interior of the core for the purpose of removing the bolts 16 when desiring to disassemble the same. A circular plate 18 is

positioned on the top of the core 2 after the same has been placed within the shell 1 for the purpose of forming the bottom to the tank. When pouring the cement or like plastic material within the space 17, the shell and core are placed upon a hard surface and the space 17 is filled with the cement or plastic material as well as the plate 18 is covered with the same to form the bottom of a cylindrical tank. Blocks 19 are secured to the inner faces of the lining 14 of the core 2 and engage the inner face of the lining 6 of the shell 1 for the purpose of forming openings in the tank 1 adjacent its upper end. The tank is molded with the bottom upward. Arcuate shaped strips 20 are secured to the lower edge of the core for forming a rabbeted joint for the upper edge of the tank.

From the foregoing description taken in connection with the accompanying drawings, it will be noted that a shell and core has been provided which can be readily and conveniently assembled and disassembled and which can be removed from a molded tank without the danger of injuring the same. It is also to be noted that the device can be disassembled into numerous parts so that the device can be stored in a comparatively small space.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim is:—

1. A mold comprising a shell including semi-circular sections, said sections having upwardly and outwardly disposed slots at the ends thereof, bolts extending through said slots for detachably securing the sections together, and a core for said shell.

2. A mold comprising a pair of semi-circular sections each including a plurality of relatively spaced slots and vertically disposed beams, horizontally disposed arcuate shaped member having notches fitting within the notches of said beams, lining secured to the inner faces of the beams and members, the ends of the beams of each section provided with upwardly and outwardly directed notches, bolts extending through said slots for connecting the sections together, and a core for said shell.

3. A mold comprising a core including pairs of arcuate shaped sections, the ends of said sections provided with upwardly and inwardly directed slots, bolts disposed within said slots for connecting the sections together, lining secured to the outer faces of said sections, and a shell surrounding said core.

4. A mold including a core consisting of a plurality of sections having vertically disposed and relatively spaced beams provided with notches, arcuate shaped members having notches fitting within the notches of said beams, the end beams of each section provided with upwardly and inwardly directed notches, bolts disposed in said notches for detachably connecting the sections together, said arcuate shaped members having straight inner surfaces to form a rectangular opening within the core, a lining secured to the outer faces of the sections, and a shell surrounding said core.

5. A mold comprising a cylindrical shell consisting of a pair of arcuate shaped sections, means detachably connecting the sections together, a core positioned within said shell, arcuate shaped strips secured to the outer face of the core adjacent its lower end.

6. A mold comprising a cylindrical shell having both ends fully open, a cylindrical core within said shell and having both ends fully open, and a plate resting upon the upper end of the core to form the bottom to the molded article.

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

JOHN F. HARRIS.

Witnesses:
HUGH A. DAWSON,
CLARENCE BALENTINE.