

No. 785,705.

PATENTED MAR. 28, 1905.

J. T. BONER.  
PORTABLE MOLD.  
APPLICATION FILED MAY 25, 1904.

Fig. 1.

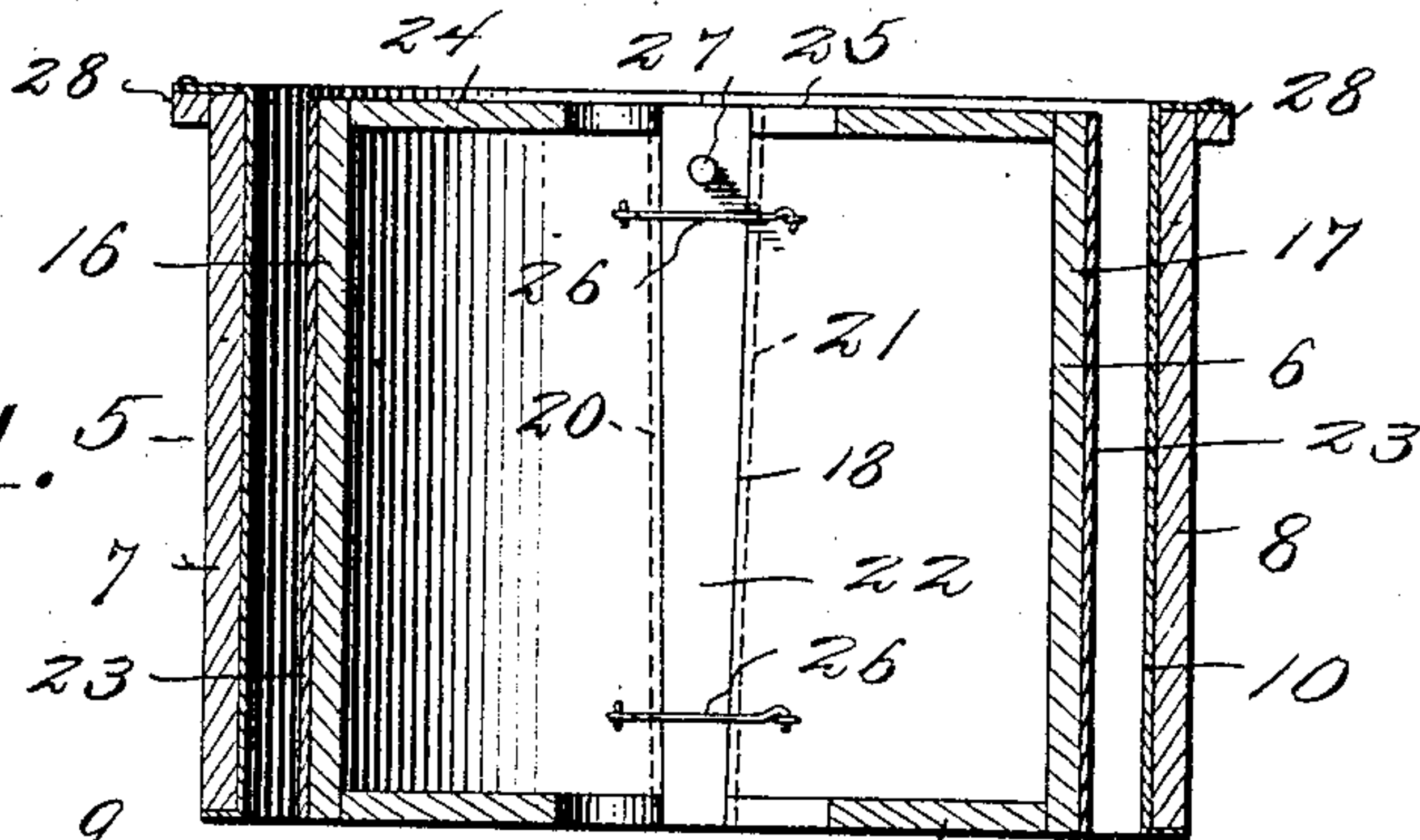


Fig. 4.

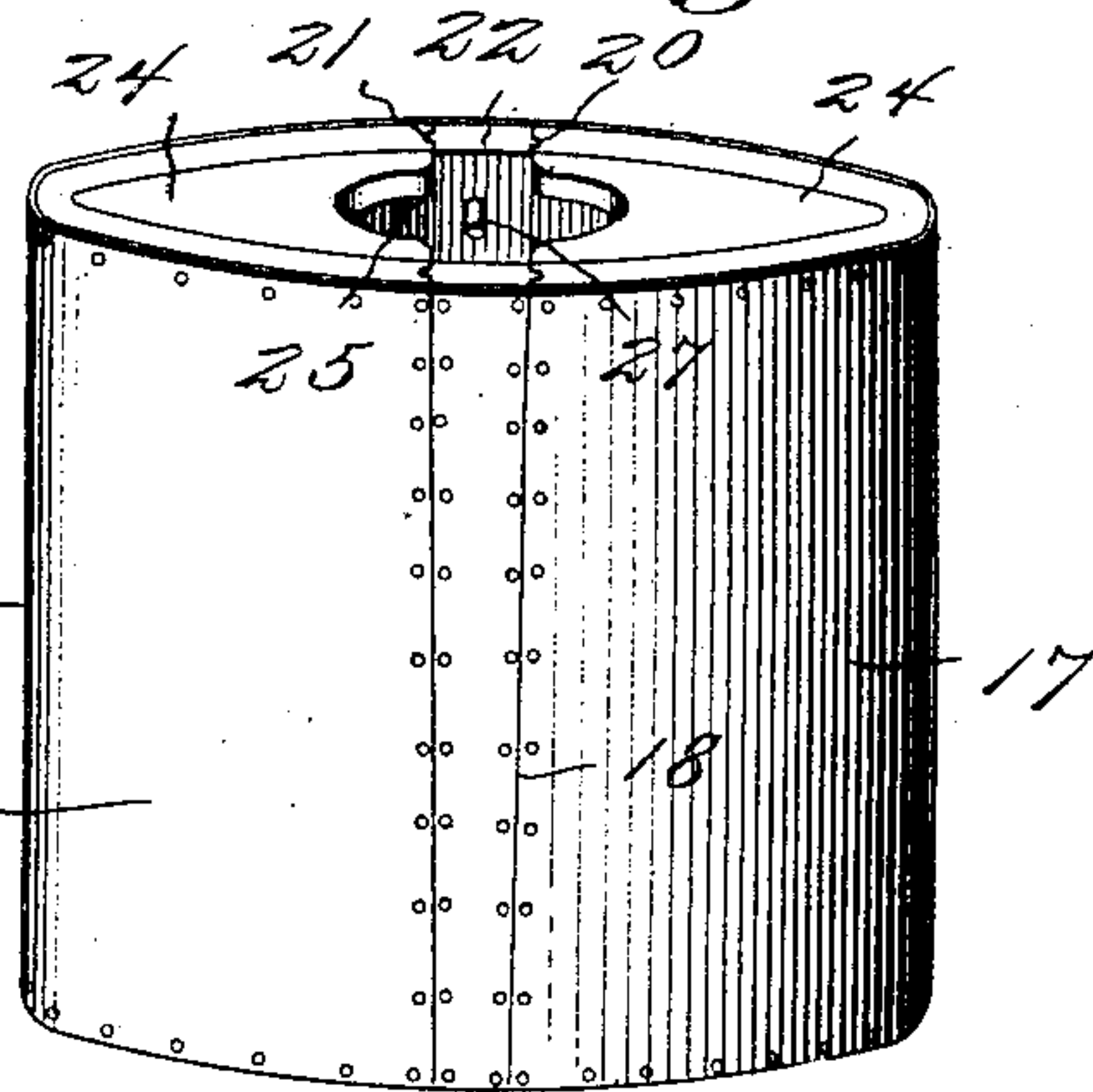


Fig. 2.

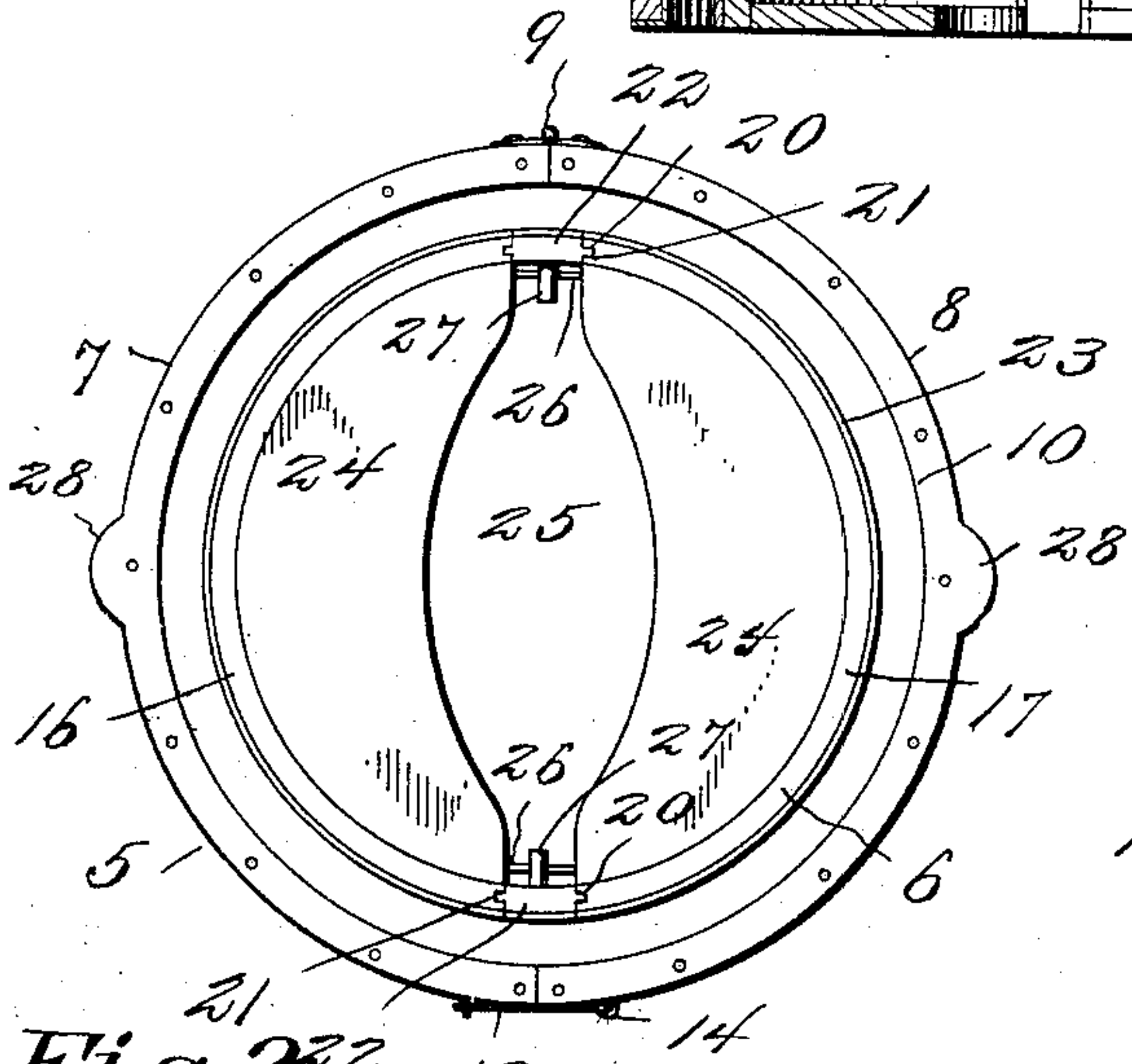
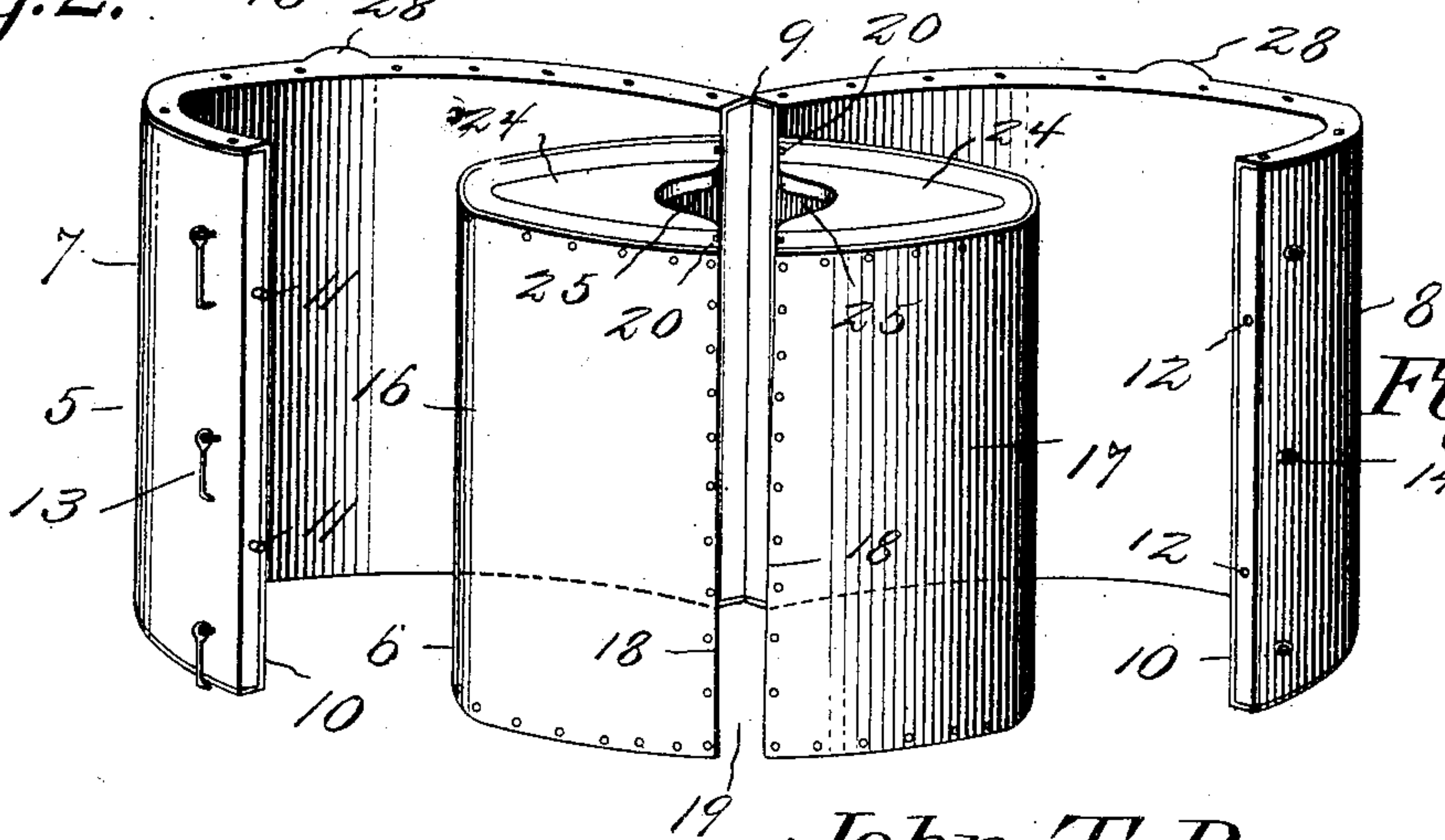


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## PORTABLE MOLD.

SPECIFICATION forming part of Letters Patent No. 785,705, dated March 28, 1905.

Application filed May 25, 1904. Serial No. 209,788.

*To all whom it may concern:*

Be it known that I, JOHN T. BONER, a citizen of the United States, residing at Napoleon, in the county of Henry and State of Ohio, have  
5 invented a new and useful Improved Portable Mold, of which the following is a specification.

This invention relates to an improved portable mold, particularly designed for use in manufacturing sections of pipe for sewers,  
10 drains, culverts, and the like.

The object of the invention is to provide a simple, inexpensive, and efficient device of this character which may be readily transported from place to place and quickly set up  
15 for use when the occasion requires.

A further object of the invention is to provide a mold comprising an outer sectional shell or jacket, an inner sectional core, and means for locking the core in position while  
20 the mold is being filled.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed  
25 out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages  
30 of this invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal sectional view of a mold constructed in accordance with my invention. Fig. 2 is a  
35 top plan view. Fig. 3 is a view showing the outer shell released. Fig. 4 is a perspective view of the sectional core detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.  
40

The device consists of an outer jacket or shell 5 and an inner sectional core 6. The outer shell 5, which may be formed of wood or other suitable material, is preferably formed  
45 in two semicircular sections 7 and 8, hinged together, as indicated at 9, said sections being provided with a metallic lining 10, so as to present a smooth surface to the cement or other material to be molded and prevent the  
50 latter from injuring said mold. The free end

of the hinged section 7 is provided with one or more dowel-pins 11, which engage corresponding recesses or sockets 12, formed in the adjacent face of the section 8, said sections being locked in closed position by means of  
55 hooks 13 engaging eyes 14, as shown.

Arranged within the outer shell 5 is the removable core member 6, the semicircular sections 16 17 of which are spaced apart and have their contiguous faces inclined or beveled, as  
60 indicated at 18, to form wedge-shaped openings 19. The inclined faces 18 of the core members are provided with longitudinal grooves 20, adapted to receive the laterally-extending tongues 21 of removable wedge-  
65 shaped slides or keys 22, which fit within the openings 19 when the core is in position for use and form a continuation of the walls thereof. The sections 16 and 17 are preferably formed of wood covered by a metal casing 23,  
70 each section being provided with oppositely-disposed heads 24, the central portion of which is recessed, as indicated at 25, so as to permit ready access to the interior of the core. As an additional means for fastening the core-  
75 sections together after the slides or keys 22 are in position I provide one or more hooks 26, fastened to the inner wall of one section and engaging corresponding eyes secured to the inner wall of the opposite section.  
80

The keys or slides 22 are preferably provided with inwardly-extending handles 27 to facilitate the insertion or withdrawal of said slides, similar handles 28 being also secured to the outer shell or jacket, as shown.  
85

In practice the outer shell or jacket 5 is placed on a temporary floor or other smooth surface and the core member properly positioned within the same, the slides or keys having first been inserted in the openings 19 and  
90 the two sections secured together by fastening the hooks 23. The cement or other material is then shoveled into the space between the core and jacket and said material tamped down to produce the required homogeneous  
95 shell forming the pipe or tile. After the cement has thoroughly set the core may be removed by unfastening the hooks 26 and withdrawing the keys or slides, thereby permitting the two sections of the core to be drawn  
100

together and lifted from the mold. By unfastening the hooks on the shell 5 the two sections of said shell may be swung rearwardly on their pivotal connections, thereby completely detaching the product from the mold and permitting the latter to be reset for a new section of pipe.

While I preferably make the two sections comprising the mold of wood and provide each section with a metallic lining, it is obvious that said mold-sections may be formed of metal, in which event the linings may be dispensed with.

Having thus described the invention, what is claimed is—

1. In a mold, an outer shell or jacket formed in two sections hinged together and adapted to swing laterally to open position, an inner removable core member comprising a plurality of hollow detachable sections, a plurality of wedge-shaped keys or slides connecting the latter sections, means for fastening the outer

shell or jacket, and an auxiliary fastening means arranged within the hollow core-sections for connecting said sections.

2. In a mold, an outer shell or jacket formed in two sections hinged together, a metallic casing surrounding the inner walls of said shell, an inner removable core member comprising a pair of detachable sections having their adjacent edges grooved or recessed, wedge-shaped keys or slides provided with corresponding tongues adapted to engage said grooves or recesses, a metallic casing surrounding the outer walls of the core member, and means for fastening the sections comprising the outer shell or jacket.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN T. BONER.

Witnesses:

THOMAS MULCAHY,  
MADGE YEAGER.