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PATENTED APR. 25, 1905.

G. H. TAYLOR.  
MOLD FOR SEWER TRAPS, &c.  
APPLICATION FILED JUNE 8, 1904.

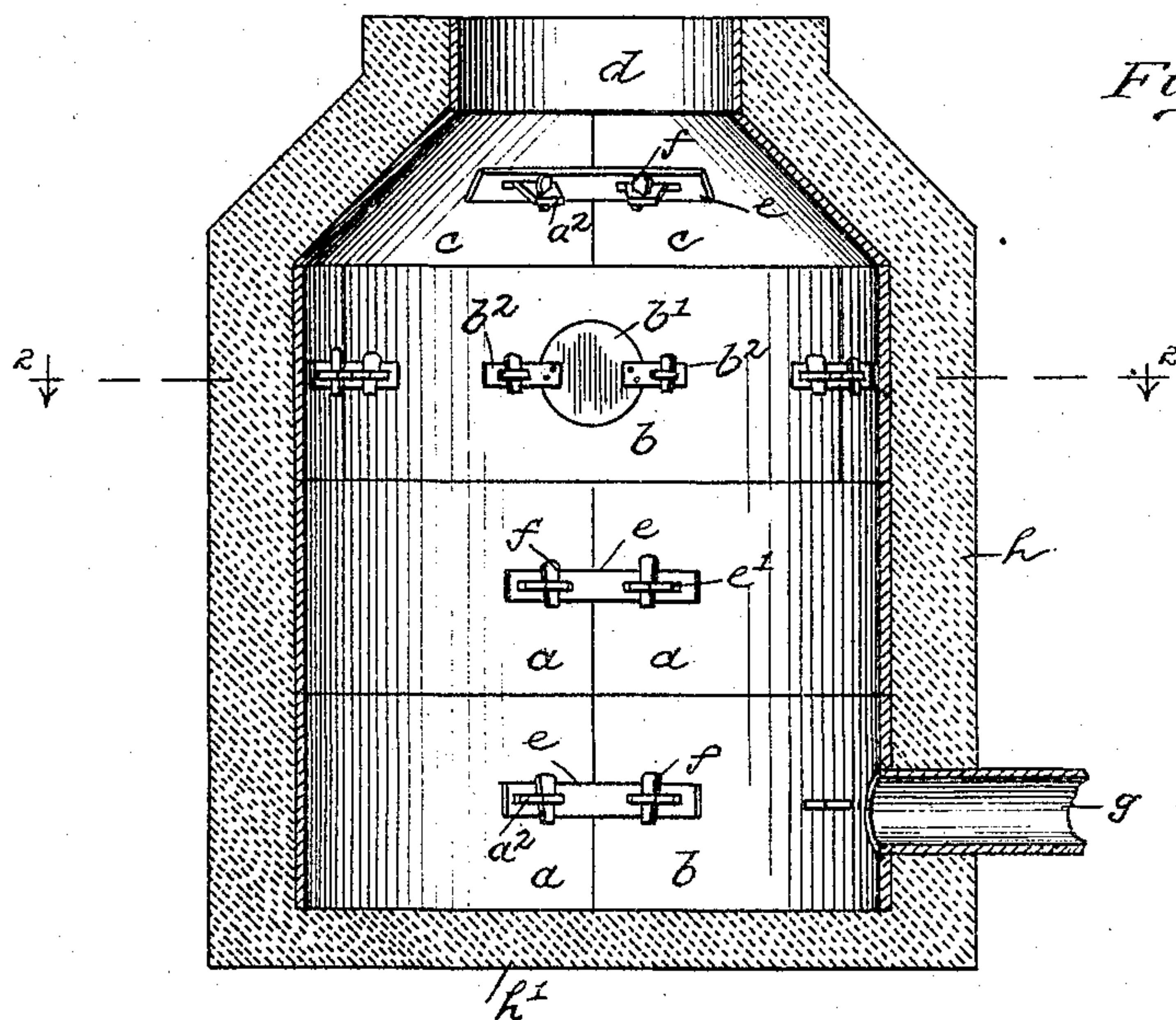


Fig. 1.

Fig. 2.

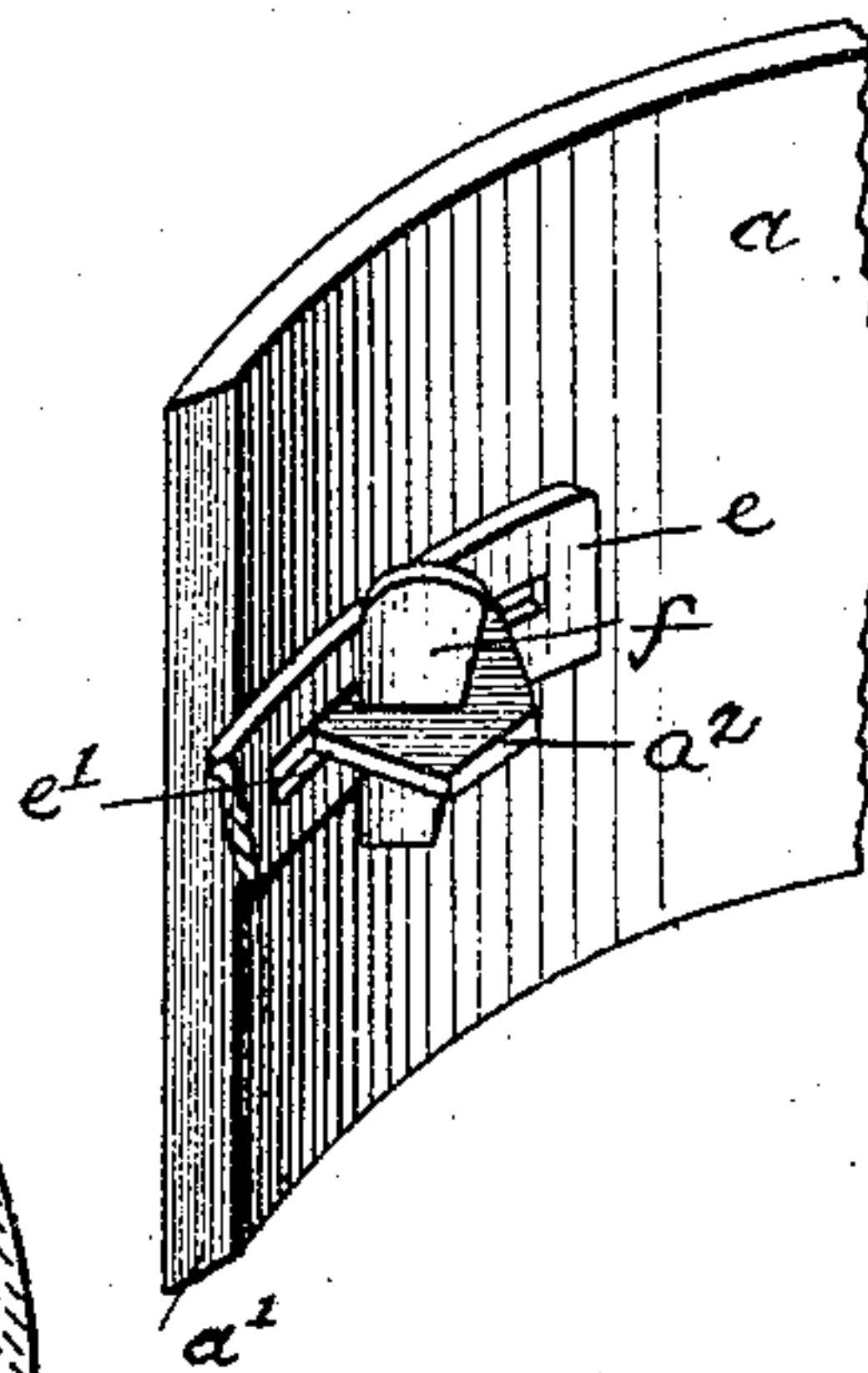
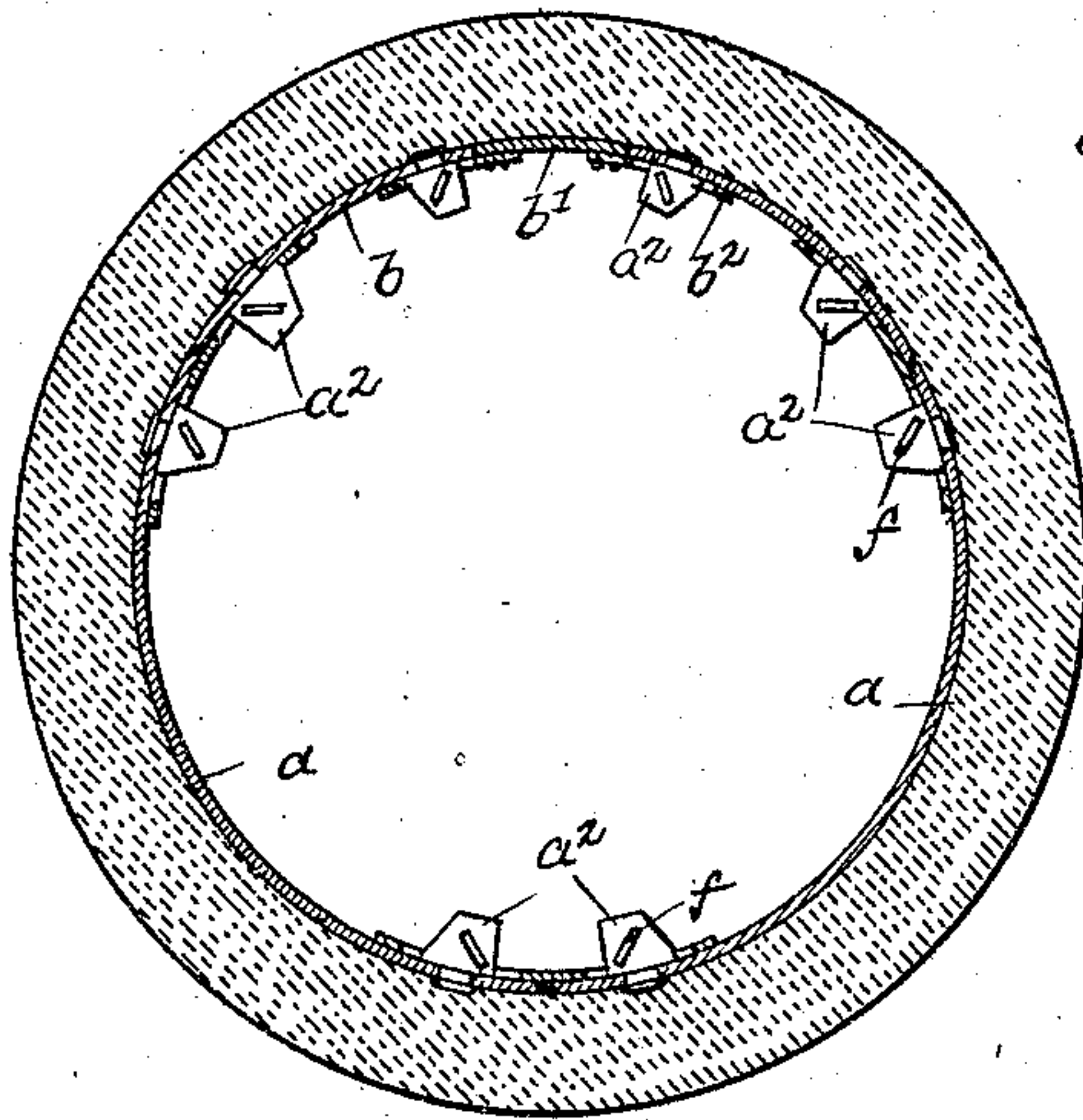


Fig. 3.

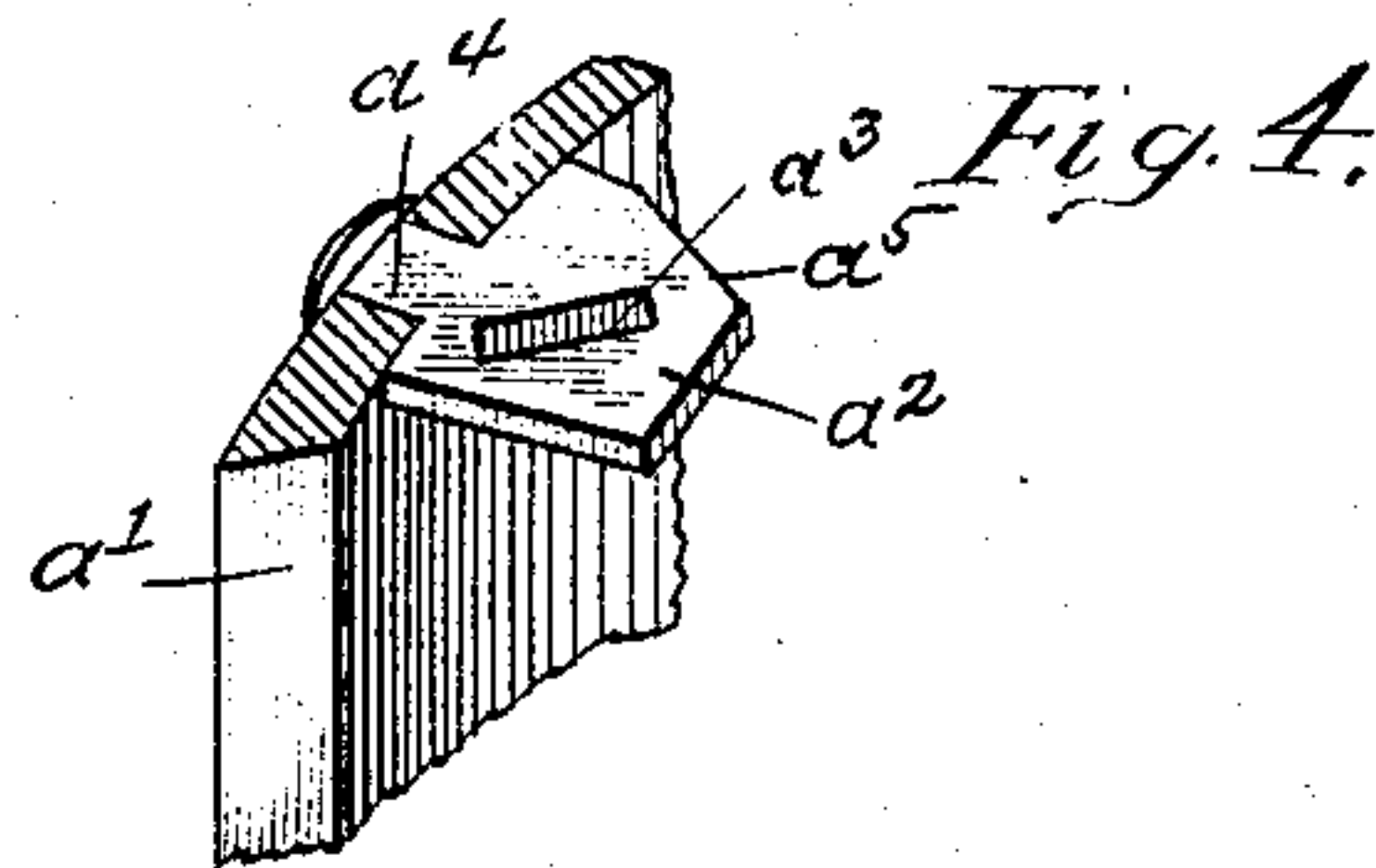


Fig. 4.

Witnesses:  
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Inventor:  
George H. Taylor,  
By Frederick P. Taylor, Atty.



# UNITED STATES PATENT OFFICE.

GEORGE H. TAYLOR, OF JOLIET, ILLINOIS.

## MOLD FOR SEWER-TRAPS, &c.

SPECIFICATION forming part of Letters Patent No. 788,175, dated April 25, 1905.

Application filed June 8, 1904. Serial No. 211,577.

*To all whom it may concern:*

Be it known that I, GEORGE H. TAYLOR, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have  
5 invented certain new and useful Improvements in Molds for Sewer-Traps, &c., of which the following is a specification.

This invention relates to improvements in molds or appliances for use in the construction of cisterns, wells, sewer-traps, catch-basins, ash and garbage receivers, or similar structures made of cement, cylindrical in form, and provided at the top with a manhole having a cross-diameter less than the corresponding diameter of the main portion of the structure.  
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The especial object of my improvements is to provide means of the character stated which can be readily conveyed from place to place and easily assembled and disassembled, that will permit the building of a smooth and unbroken interior wall, except where it may be desired to introduce inlet and outlet pipes, that will be of the fewest parts possible, and  
25 in which such parts will be of the simplest forms and capable of being cheaply produced.

In the accompanying drawings, which form a part of this application, Figure 1 is a vertical section taken through a sewer-trap, showing the elements which constitute my invention in operative position. Fig. 2 is a cross-section on the line 2 2 of Fig. 1. Fig. 3 is a fragmentary detail on an enlarged scale, showing one end of one of the ring-sections and the manner of coupling the sections; and Fig. 4 is a similar detail showing one of the coupling-lugs as secured to the ring-sections.  
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Referring to the details of the drawings, *a* represents one of the curved sections or segments of sheet metal, of which three are shown as constituting a ring when assembled and coupled together. The ends of each segment are beveled, as at *a'*, thus facilitating the separation and removal of the sections, as will be  
45 more fully described.

*b* represents a special form of section which is used where it is desired to insert an inlet or outlet through the wall of the structure, and same is provided with a circular opening, through which may extend the inner end of  
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a pipe, as *g*. When it is not desired to so utilize such opening, it is closed by a circular plate *b'*, fitted therein and secured in place by a form of coupling similar to that employed for the segmental plates.  
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*c* represents the dome segmental plates, which are in all respects like the plates *a*, except that they are inclined inwardly, as shown in Fig. 1, so as to permit the converging of the walls of the structure, thus forming its dome or roof. The top plate may be in a single piece forming a ring, as *d*, or it may be made in two or more sections, depending on the size of the manhole which is to be provided in the structure and which is built  
65 around said plate.

Near the vertical edges of each of the segments lugs *a*<sup>2</sup> are secured. Each lug consists of a small flat plate formed with a shank *a*<sup>4</sup>, which is inserted through a suitable opening in the segment and headed over. Through the lug is an opening *a*<sup>3</sup>, which is formed diagonally across the lug, as shown in Fig. 4, and the outer edge *a*<sup>5</sup> is inclined, so that the base is wider than the end of the lug.  
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As one of the coupling elements I provide metal strap-links *e*, each of which is provided with slots *e'* near its opposite ends, through which the lugs extend when the parts are assembled. When the links are in place, wedges  
80 *f* are inserted in the openings through the lugs, and upon being driven in tightly the inner edge of each wedge will bear against the outer face of the link, and thereby force the contiguous edges of two segments together, it  
85 being understood that the driving force of the wedge will be communicated to the segments through the frictional engagement between the latter and the adjacent face of the link.

The circular plate *b'* has secured thereto wings *b*<sup>2</sup>, which are slotted in the same manner as the links *e* and are coupled to lugs *a*<sup>2</sup>, secured to the segment *b* at opposite sides of the openings, for which the plate *b'* is used as a closure in exactly the same way as the said  
95 links are secured to the segmental plates, thus permitting the quick attachment and detachment of said plate.

In the use of my improved appliances for building a cistern or sewer-trap the ground is  
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excavated for a suitable depth and cross-diameter, and a cement bottom or floor, as  $h'$ , is laid in the usual manner, and the segmental plates  $a$  and  $b$  are coupled together in the manner described to form rings, which are superimposed on each other as the laying of the cement wall  $h$  on the outside of said rings progresses. When the vertical wall has reached the desired height, the dome-segments  $c$  are set in place, and the cement roof or dome is then constructed, and the structure is finished by setting the ring  $d$  on the upper edge of the coupled segments  $c$ , and the manhole is then formed. After the composition has set or hardened sufficiently the ring  $d$  is removed, the wedges are knocked up, and the coupling-links removed, beginning with the dome-sections, which are then disassembled and taken out through the manhole, and so on until all the sections have been removed.

It will be apparent that the beveled contiguous edges of the segments will permit the sliding or wedging together of the plates, and

thus effect a tight joint, which will prevent any of the cement working in between the edges. The beveled edges also permit the separation of the plates, which would not be possible if the edges were square with the face of the plates, as will be readily understood.

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

In a mold for hollow cylindric structures of the class described, a series of segmental plates, each provided near its ends with lugs  $a^2$  having a slot extending diagonally thereof substantially as described, and formed with an inclined edge, a slotted link adapted to engage said lugs and a wedge adapted to fit the slot in the lug, for the purpose set forth.

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

GEORGE H. TAYLOR.

Witnesses:

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F. BENJAMIN.