

H. R. KUHN.
CISTERN MOLD OR FORMER.
APPLICATION FILED FEB. 13, 1905.

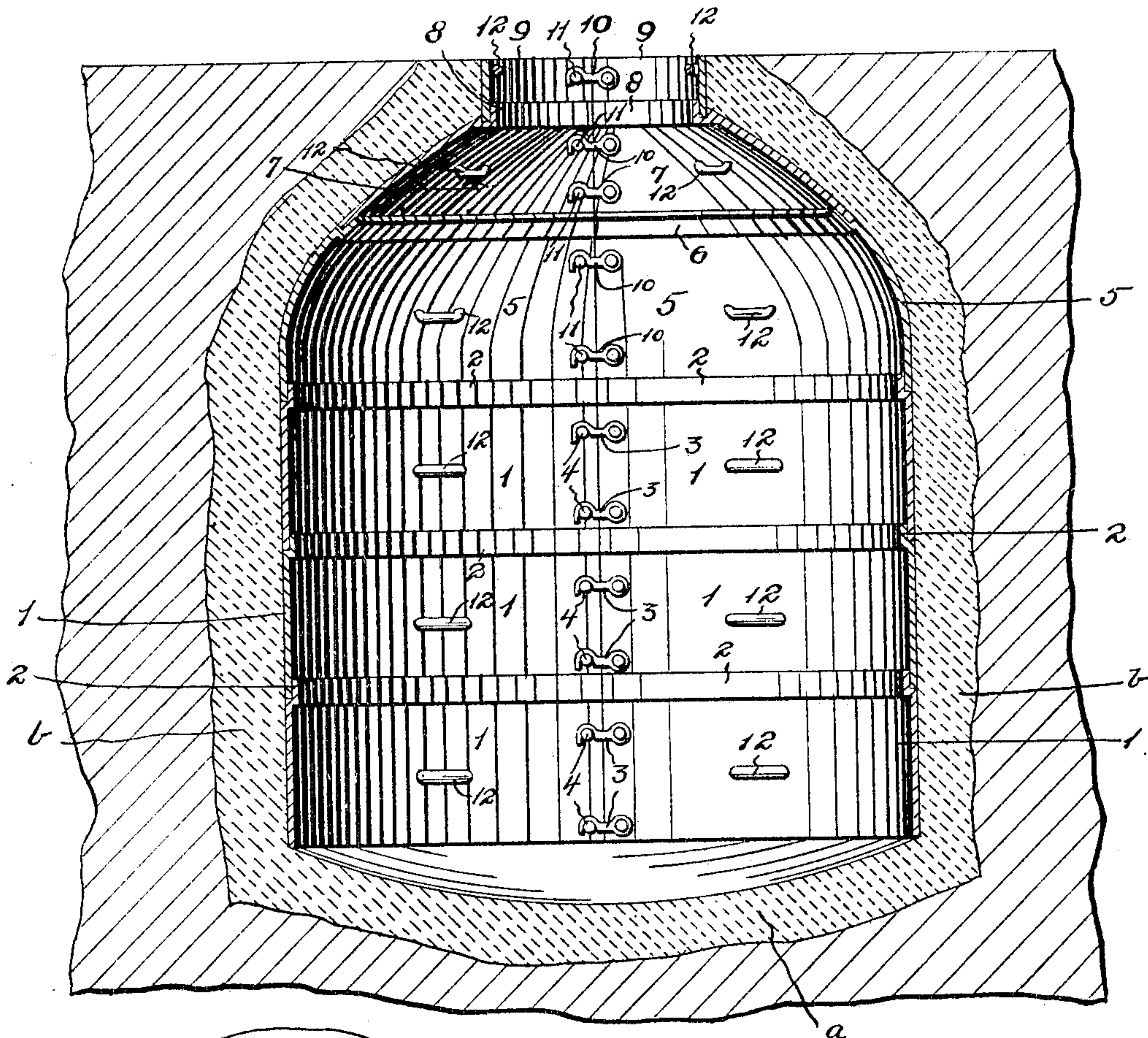


Fig. 1.

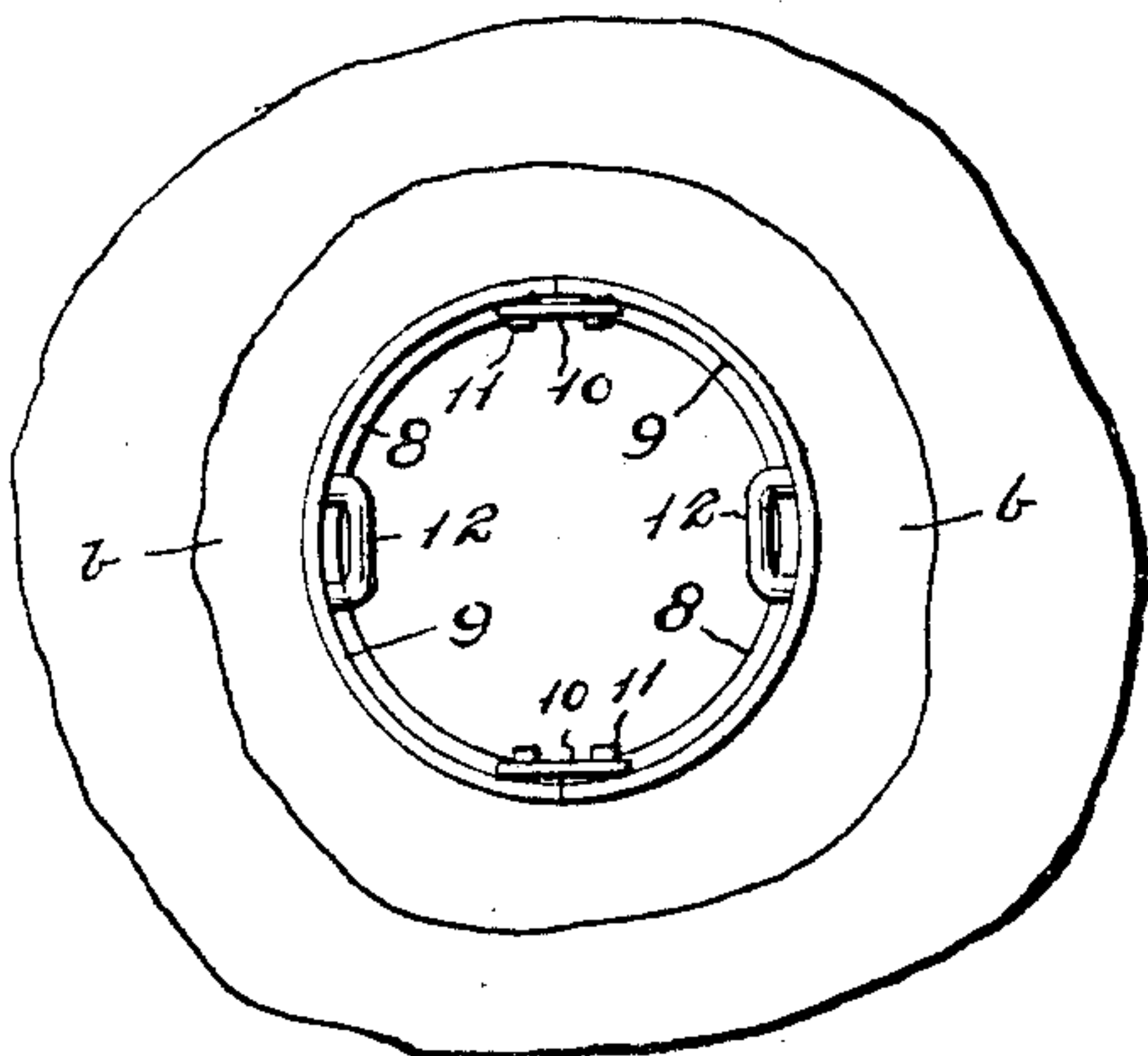


Fig. 2.

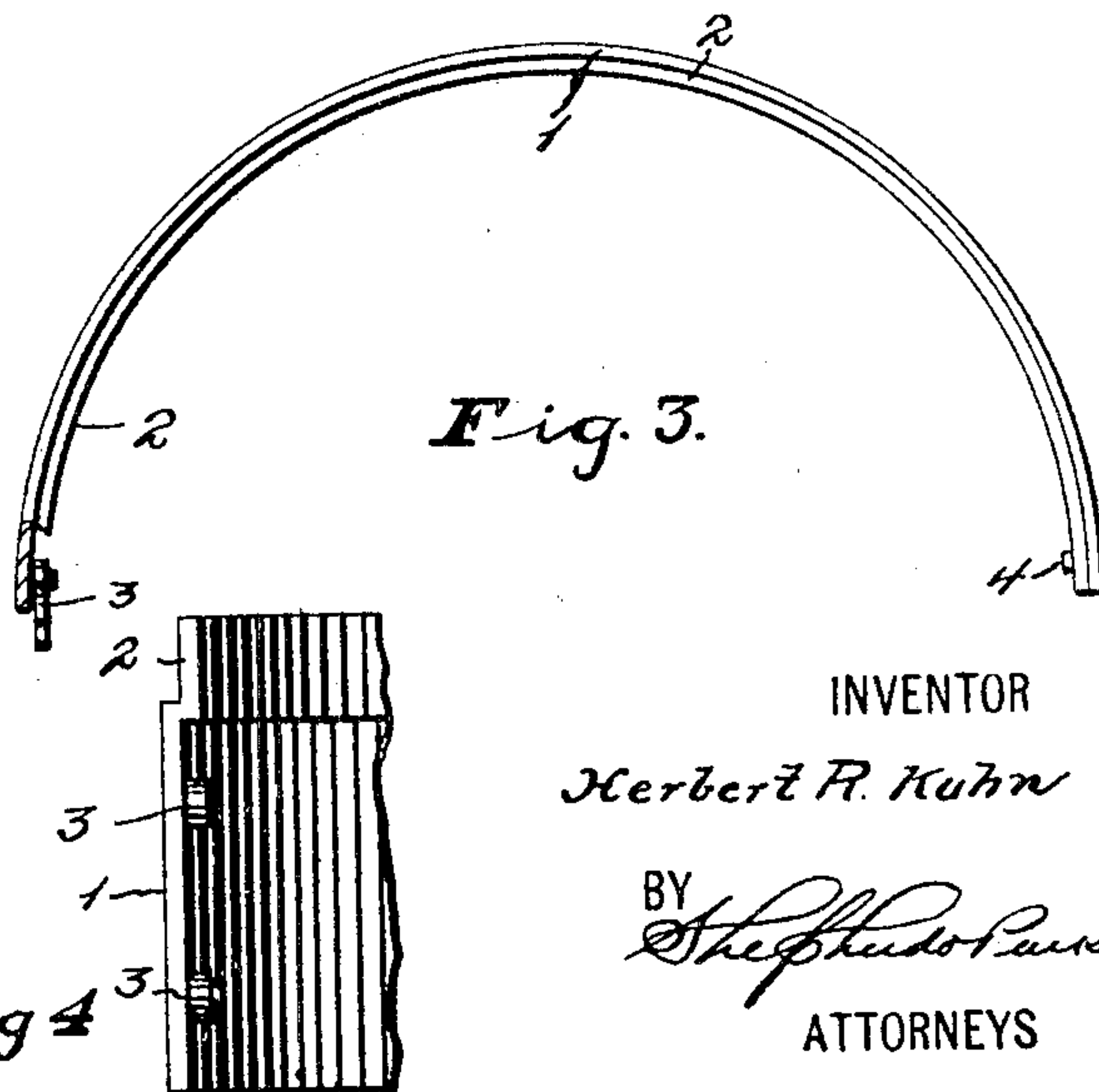


Fig. 3.

Fig. 4.

WITNESSES:

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HERBERT R. KUHN, OF COLUMBUS, OHIO.

CISTERN MOLD OR FORMER.

No. 799,171.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed February 13, 1905. Serial No. 245,430.

To all whom it may concern:

Be it known that I, HERBERT R. KUHN, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Cistern Molds or Formers, of which the following is a specification.

My invention relates to a new and useful improvement in knockdown molds or formers for cisterns and the like.

The object of the invention is to provide a simple sectional or knockdown mold to be used in building concrete or cement cisterns.

Finally, the object of the invention is to provide a device of the character described that will be strong, durable, and efficient, and simple and comparatively inexpensive to make.

With the above and other objects in view the invention consists of the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the accompanying drawings, wherein—

Figure 1 is a vertical sectional view taken through a completed cistern and the surrounding earth and showing my improved mold or former in position. Fig. 2 is a plan view of the parts shown in Fig. 1. Fig. 3 is a plan view of one of the half-sections, having one of its corners broken away to illustrate one of the fastening-hooks; and Fig. 4 is a partial end elevation of one of the half-sections.

In the drawings the numeral 1 designates the lower half-sections, of which any number may be employed, according to the height of the cistern. The half-sections 1 are preferably semicircular in plan, and two are used in every course or story of the mold. The sections are each provided with inwardly-offset vertical flanges 2, behind which the lower end of the next upper adjacent section fits. In order to hold the half-sections together, each section is provided on its inner opposite ends with hook-latches 3 at one end and inwardly-projecting studs 4 at the opposite ends, so that the latches of one section being engaged with the studs of the other section securely fastens the said sections together.

It is to be understood that the concrete or cement bottom *a* of the cistern is first formed and then the lowermost half-sections 1, constituting the first story or course, are placed in position, and the cement composing the side walls *b* of the cistern is filled in about said sections, and the sections are built up one above

the other and the concrete or cement filled about them until the straight portion is finished. Above the uppermost half-sections 1 I arrange the two concaved dome-sections 5, provided at their upper ends with a flange 6, like the flanges 2, which is adapted to receive the lower ends of the cap-sections 7, which are also each formed with an inset vertical flange 8. A collar formed of two semicircular half-sections 9 is engaged with the cap-sections 7 behind the flange 8 and constitutes the upper and last section or course of the mold. The dome-sections 5, cap-sections 6, and collar-sections 9 are fastened together by means of latches 10 and studs 11, like the latches 3 and studs 4, hereinbefore referred to.

It is apparent that the mold may be readily built up in courses or stories and the cement forming the cistern placed thereabout until the upper surface is reached, when the cistern may be covered and the cement allowed to set. For the purpose of handling the different parts of the mold or former I secure on the inner surfaces of the same a plurality of suitable handles 12, which may be grasped by the workmen in placing the different sections or parts.

When the cement has set and it is desired to remove the mold or former, the latches 10 of the collar-sections 9 are first disengaged from the studs 11 and the said sections lifted out. It is to be understood that the several half-sections, dome-sections, and collar-sections are formed of thin pliable metal, so that the same may be readily sprung into and out of position to facilitate their placing and removal. After the collar-sections 9 have been removed the latches 10 of the cap-sections 7 are disengaged from the studs 11 and the said sections moved and worked until they are passed out of the opening at the upper end of the cistern. The dome-sections 5 are next removed, the latches 10 having of course been first disengaged. The half-sections 1 are next encountered, and after the latches 3 have been disengaged from the studs 4 the half-sections may be readily removed, and thus the mold or former removed from the cistern.

Owing to the extreme thinness and springy nature of the metal employed, the various sections may be forced inward or outward or twisted, as may be necessary, to remove them, and the workmen by using the handles 12 may readily disengage the various parts.

It is apparent from the foregoing that a very simple and substantial mold is produced

and owing to the obviating of all cross-braces or horizontal supports a free access to the interior of the cistern while the same is being constructed is had.

5 I do not wish to limit myself to the exact details of construction and operation herein set forth, as I may make various changes in the same wholly within the scope of the claims and without departing from the spirit of the
10 invention.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A cistern mold or former composed of
15 built-up courses or sections comprising a plurality of horizontal sections formed to fit together, horizontal dome-sections formed to fit on the uppermost of the first-named sections, horizontal cap-sections adapted to fit on the
20 dome-sections, vertically-extending collar-sections adapted to fit on the cap-sections, and projections provided on each of the sections

except the collar-sections for receiving and holding in place the next uppermost sections.

2. A cistern mold or former composed of 25 built-up courses or sections comprising a plurality of horizontal sections formed to fit together, horizontal dome-sections formed to fit on the uppermost of the first-named sections, horizontal cap-sections adapted to fit on the 30 dome-sections, vertically-extending collar-sections adapted to fit on the cap-sections, projections provided on each of the sections except the collar-sections for receiving and holding in place the next uppermost sections, and 35 means for fastening the ends of the sections together.

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

HERBERT R. KUHN.

Witnesses:

A. L. PHELPS,
M. B. SCHLEY.