

C. WUERZ.
Cut-offs for Cisterns, &c.

No. 142,832.

Patented September 16, 1873.

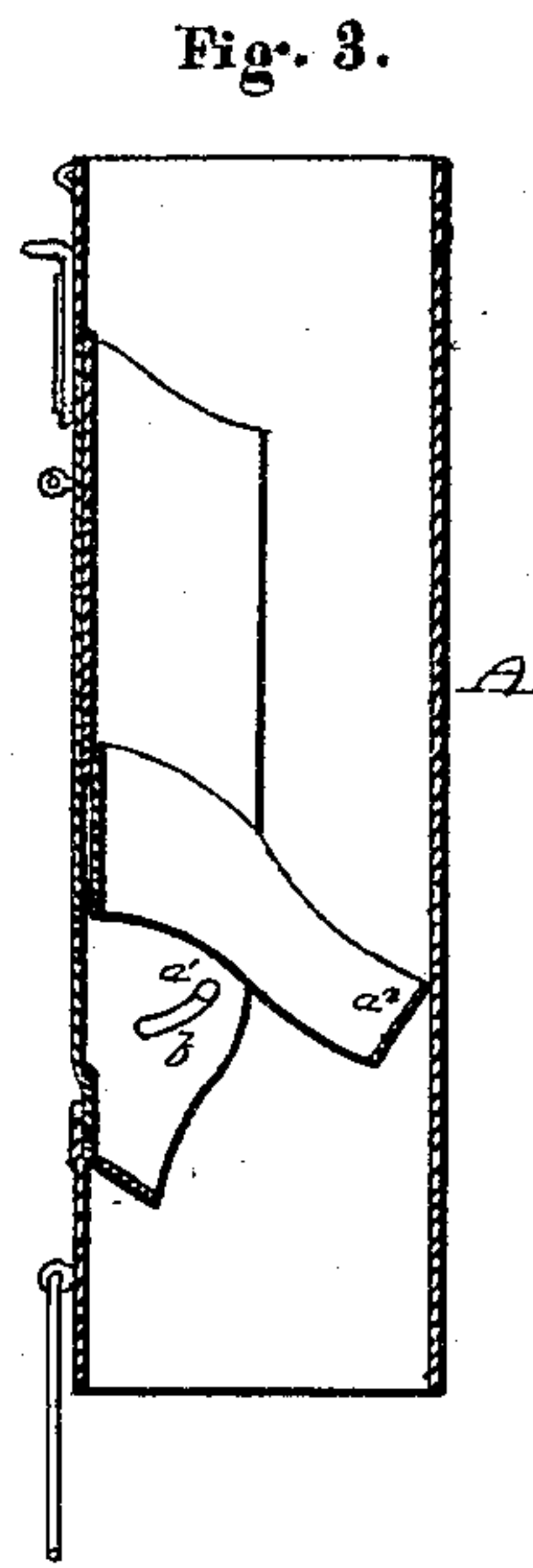
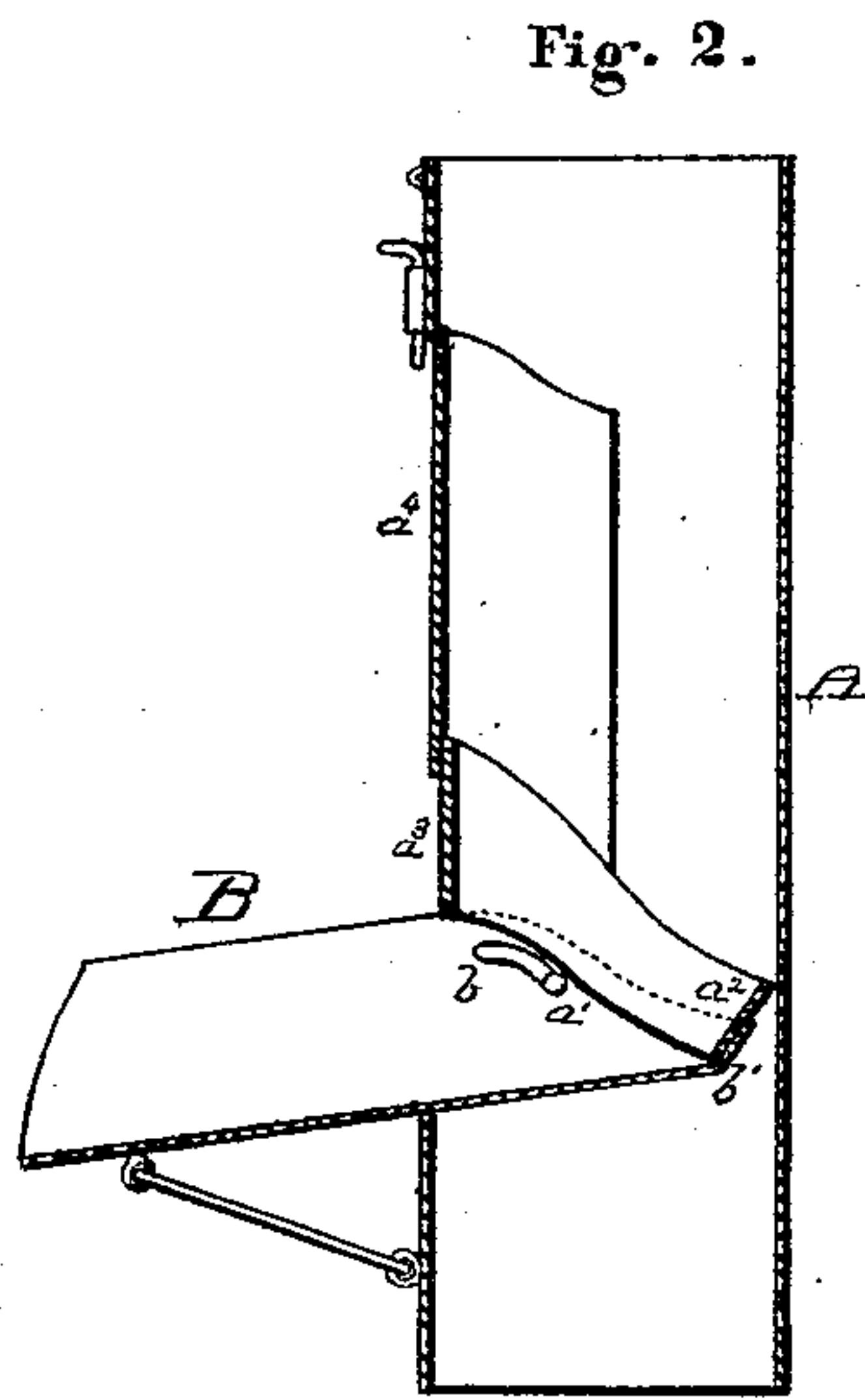
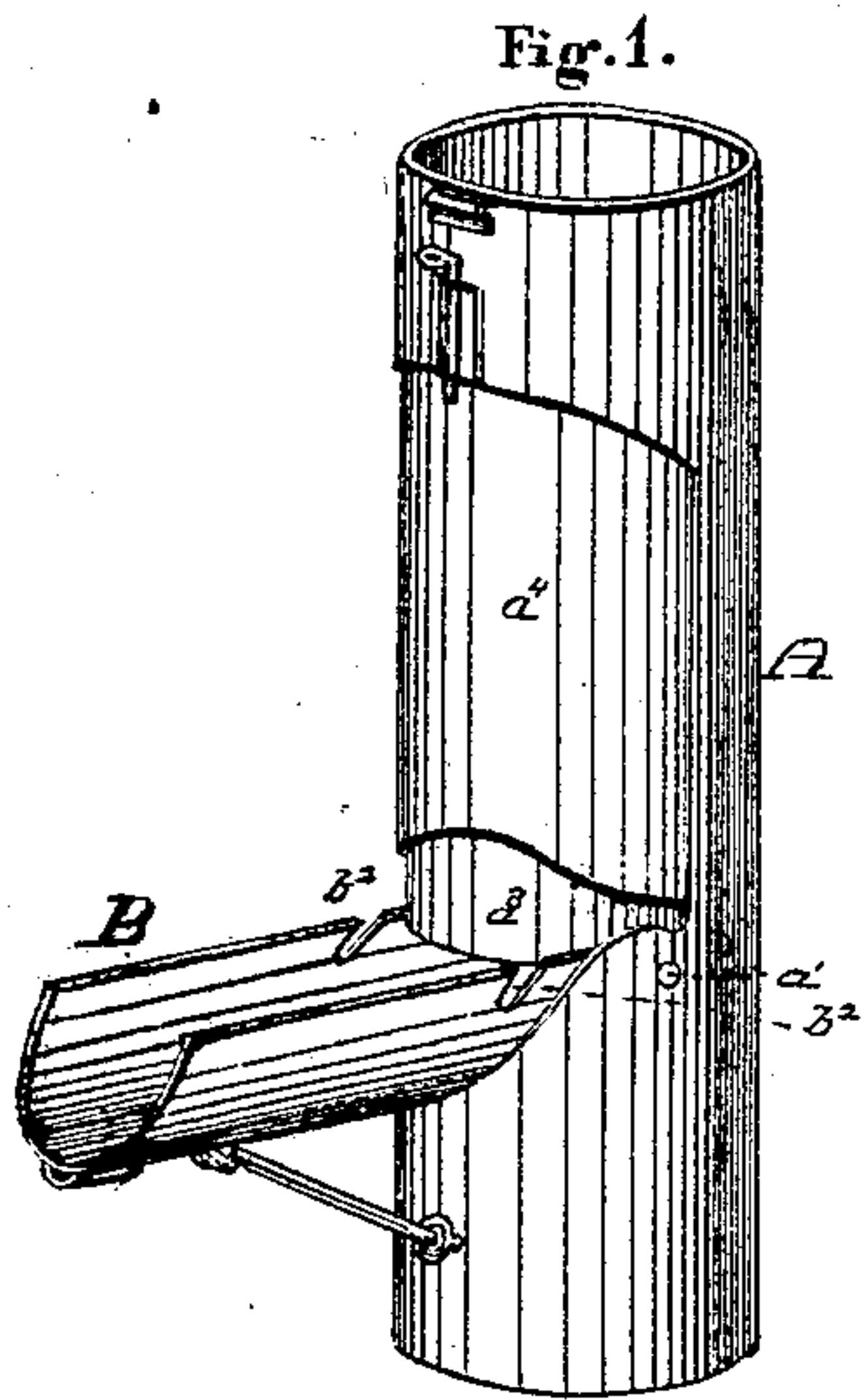


Fig. 4.

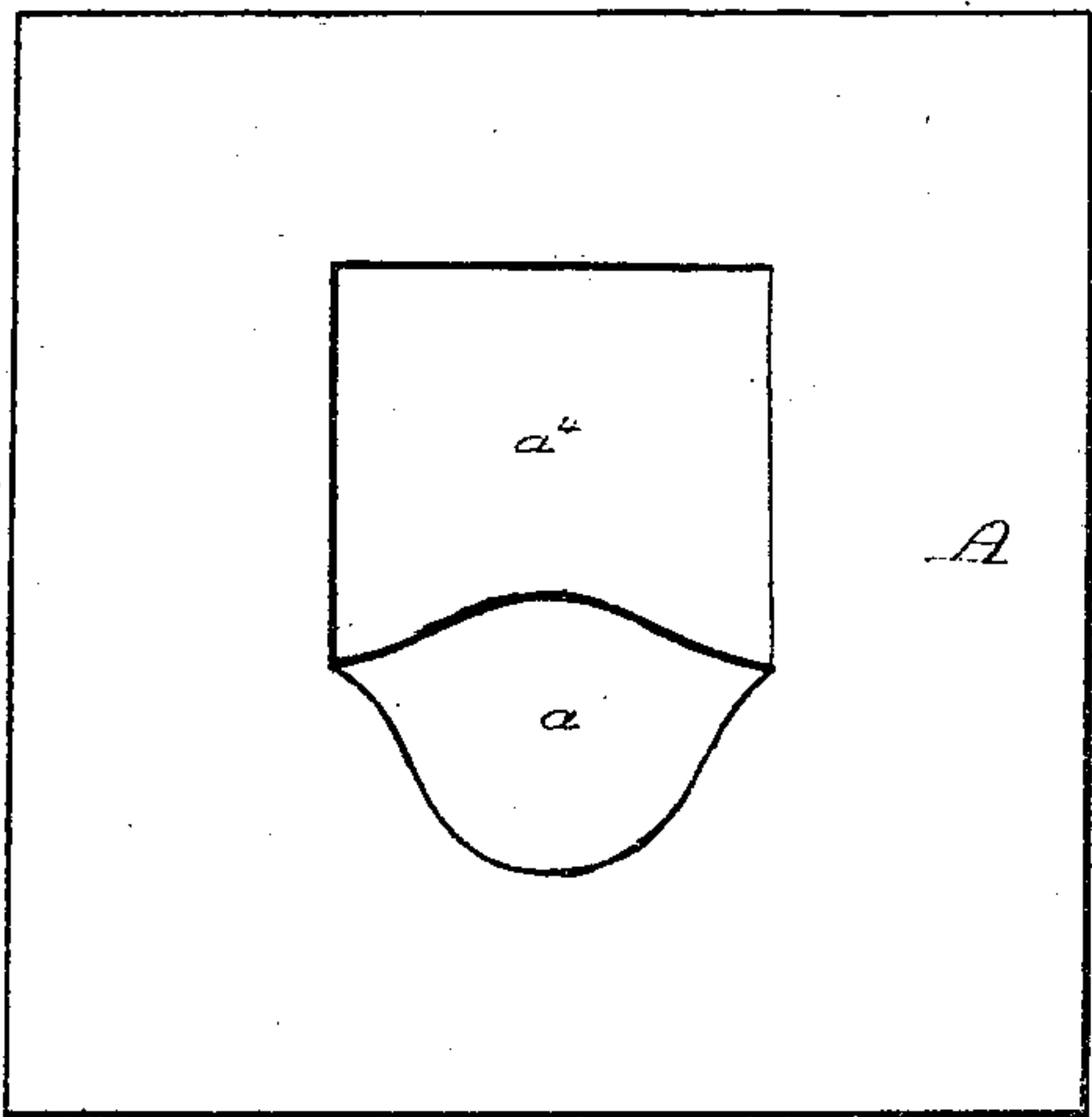
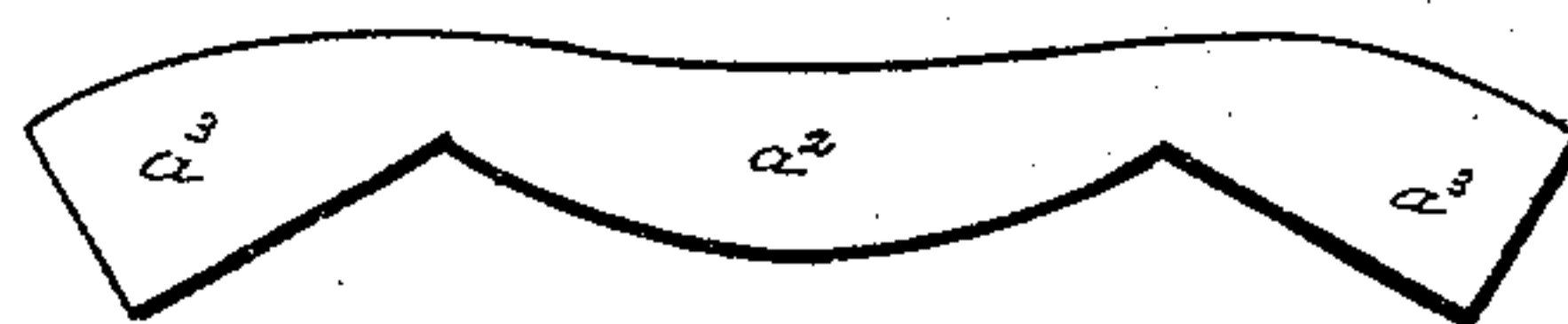


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

CONRAD WUERZ, OF KIMMSWICK, MISSOURI.

IMPROVEMENT IN CUT-OFFS FOR CISTERNS, &c.

Specification forming part of Letters Patent No. **142,832**, dated September 16, 1873; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, CONRAD WUERZ, of Kimmswick, county of Jefferson, State of Missouri, have invented a new and useful Improvement in Cut-Offs for Cistern-Leaders, of which the following is a full, clear, and exact description, reference being had to the annexed drawing making a part of the specification, in which—

Figure 1 is a general view in perspective. Fig. 2 is a vertical section, the spout being turned down and the leader closed. Fig. 3 is a vertical section, the spout being turned up and the leader opened. Fig. 4 is a development of the joint of the leader-pipe to which the spout is attached. Fig. 5 is a development of the inner ring that constitutes the front and rear deflectors.

Like letters of like kind indicate like parts.

The object of the present invention is to provide means by which cut-offs for cistern-leaders can be economically and accurately made in a tubular form; and consists chiefly in forming the cut-off of peculiarly-constructed blanks or pieces of sheet metal, which are stamped out in wholesale quantities by ordinary stamping-machinery, and then, by the retail trade, readily put together.

In the accompanying drawing, A, Figs. 1, 2, and 3, represents a joint of leader-pipe of ordinary shape and proportions, saving that a portion of peculiar shape is removed from it, leaving the opening *a*. B represents an adjustable spout that is connected with the joint A at the opening *a*. Its curvature corresponds to that of the leader-pipe. Its inner end extends through the opening *a*, and, when turned down, nearly across the leader. Toward the inner end, and on either side, the spout is provided with a peculiarly-curved slot, *b b*, Figs. 2 and 3. In the joint A and near the corners of the opening *a* are two studs, *a*¹ *a*¹, Figs. 1, 2, and 3, one at either side, projecting inwardly, which, engaging in the slots *b b*, enable the spout B to be turned up or down. The spout is further provided at its inner end with an upwardly-projecting flange, *b*¹, which, when the spout is turned down, presses closely up against the rear side of the leader and behind a deflector, *a*², Figs. 2 and 3, that is attached to the rear side of the leader a little

above the position of the inner end of the spout when it is turned down. The spout is further provided with suitable fastenings to hold it securely in either of its positions. The joint A is also provided with a deflector, *a*³, Figs. 1, 2, 3, and 5, that is attached to its front side just above the opening *a*. It projects downward and inward slightly. All of the above-described parts, saving such as the fastenings and the studs *a*¹ *a*¹, are readily and economically constructed by stamping them out of ordinary sheet metal.

The course of manufacture is, preferably, as follows, viz: The joint A is made by stamping from a sheet of metal of suitable proportions the peculiarly-shaped piece that leaves the opening *a*. At the same operation a portion, *a*⁴, Figs. 1 and 2, is depressed slightly for the purpose of forming a recess, in which to receive the outer end of the spout when it is turned up. This sheet is left flat until it reaches the retailer, as shown in Fig. 4. The spout is formed by stamping it from ordinary sheet metal. The slots *b b* and also the slots *b*² *b*² are cut out, and then its curvature is given and the flange *b*¹ formed by another stamping operation. The front and rear deflectors *a*³ and *a*² are, preferably, by stamping, in one piece, and in shape shown in Fig. 5. In these shapes they are easily packed and sent out at a low cost to the retail trade, and by them put together.

In operation, to cut off the discharge into the cistern, the spout B is turned down, as in Figs. 1 and 2. Owing to its curvature, and the curvature of the opening *a*, a close joint is readily formed. The rear deflector *a*² prevents the water from leaking past the rear end of the spout, and the front deflector *a*³ prevents any spattering out of the leader and over the sides of the spout.

By means of the slots *b b* the spout can be drawn tightly down, and its inner end thrown closely against the rear side of the leader.

To direct the water into the cistern the spout is turned up, the curvature of its inner end and that of the opening *a* and of the leader A being of such correspondence as to insure a tight joint in that position also.

By means of the slots *b*² *b*² in the upper edge of the spout B, and near the point of attach-

ment to the leader, a provision is made for the springing slightly of the metal when the spout is turned up, thus securing an easy movement and a close fit. The depression a^4 in the front of the leader A enables the pipe to present a neat appearance when the spout is turned up.

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

1. The blank A, provided with the opening a and depression a^4 , for the purpose described and shown.

2. The blank $a^2 a^3$, for the purpose described and shown.

3. The blank A provided with the opening a and depression a^4 , the spout B provided with the slots $b b$, the flange b^1 , and the slots $b^2 b^2$, and the blank $a^2 a^3$, and the studs $a^1 a^1$, all combined, arranged, and operating as described and shown, and for the purposes of a cut-off.

In testimony whereof I have hereunto set my hand this 5th day of March, 1873.

CONRAD WUERZ.

In presence of—

JACOB FINK,
MARTIN MEYER.