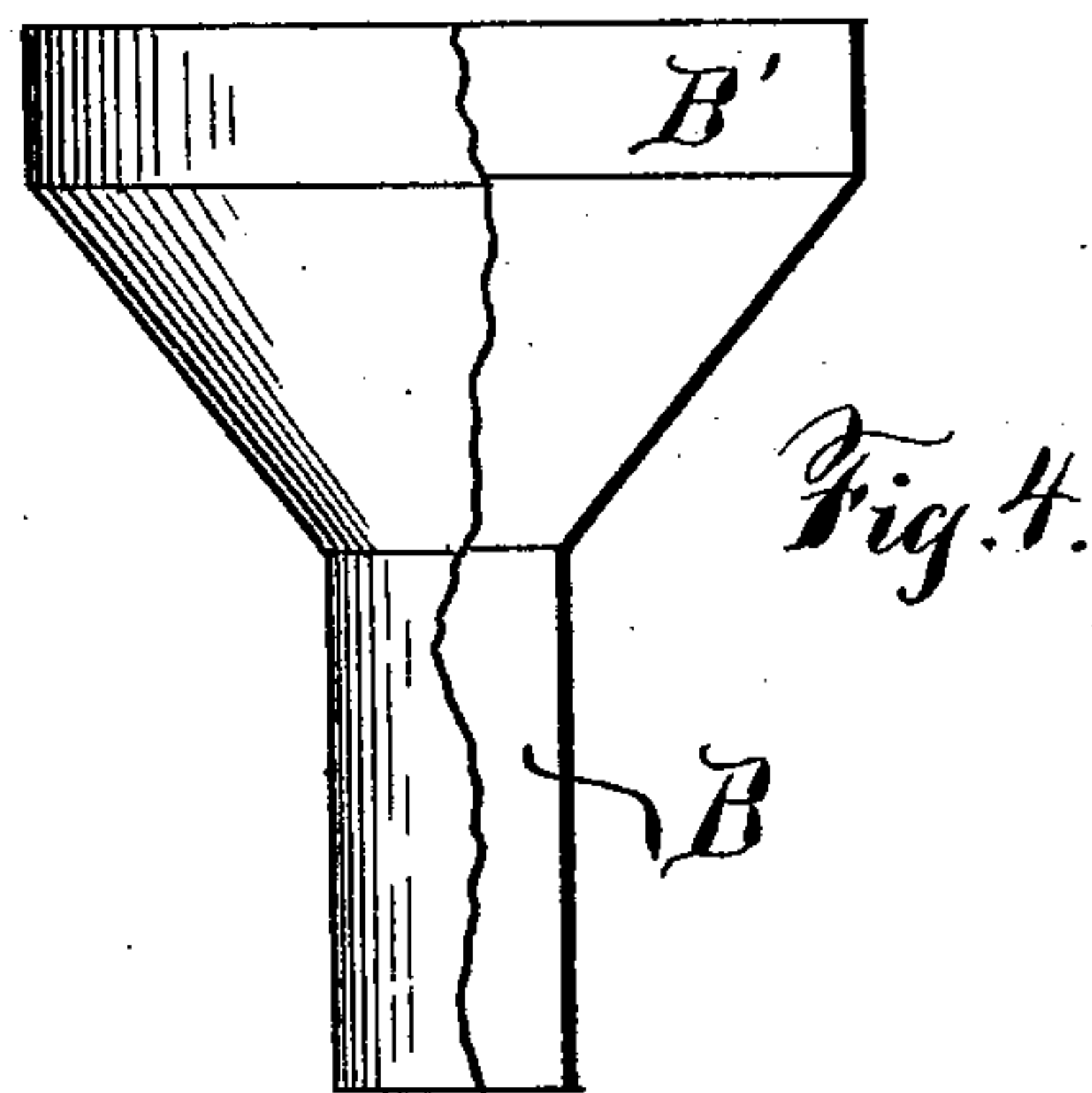
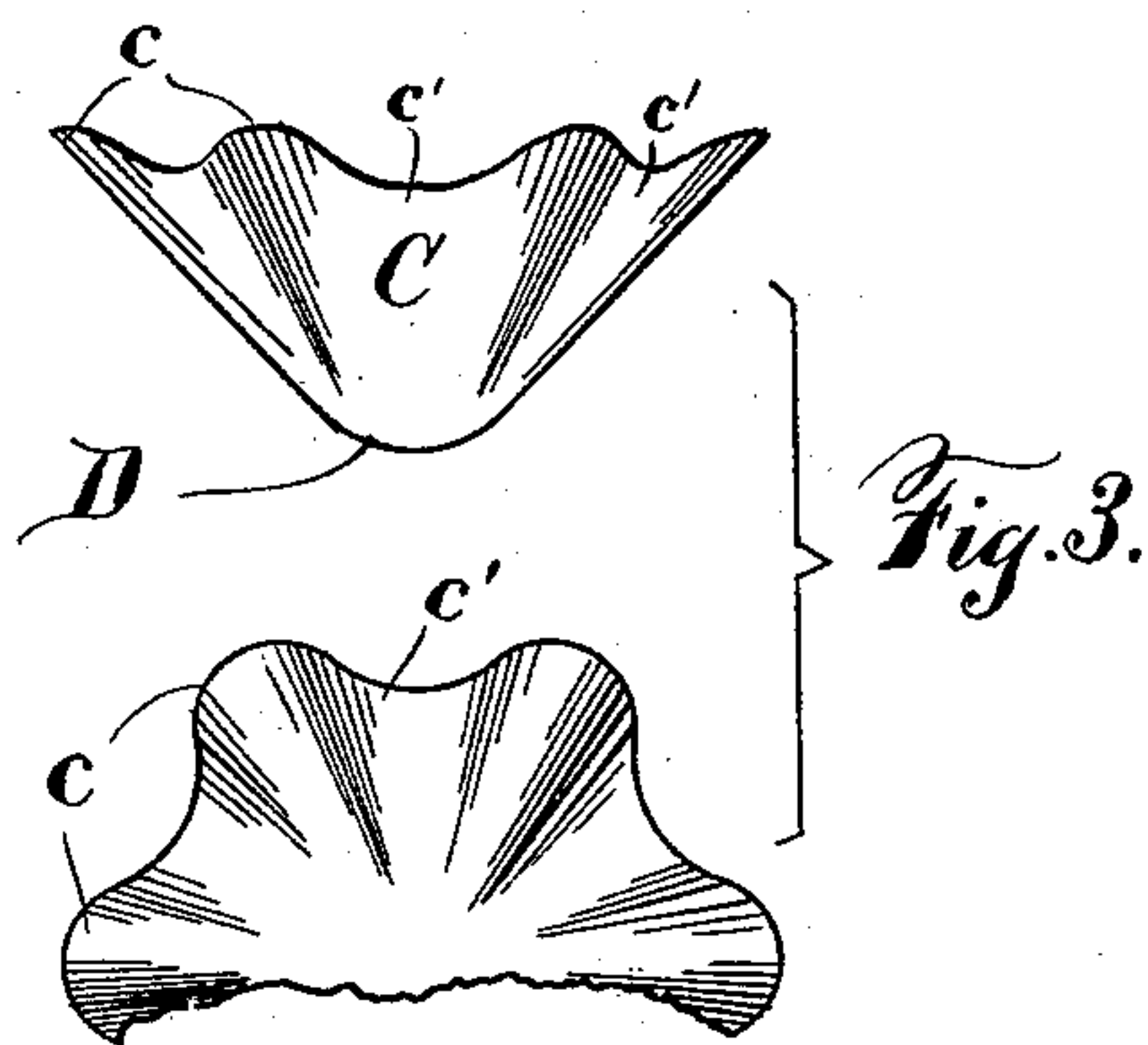
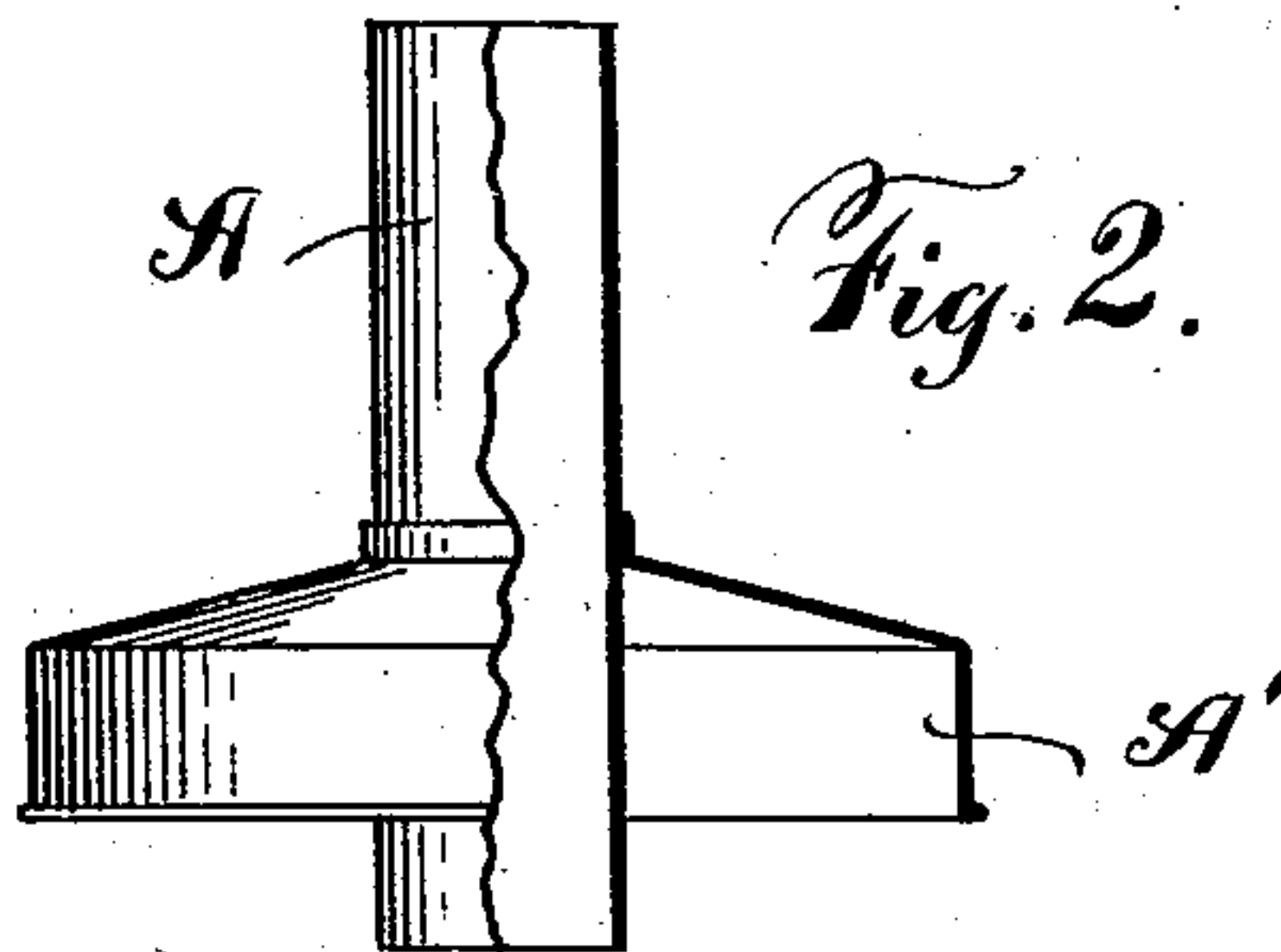
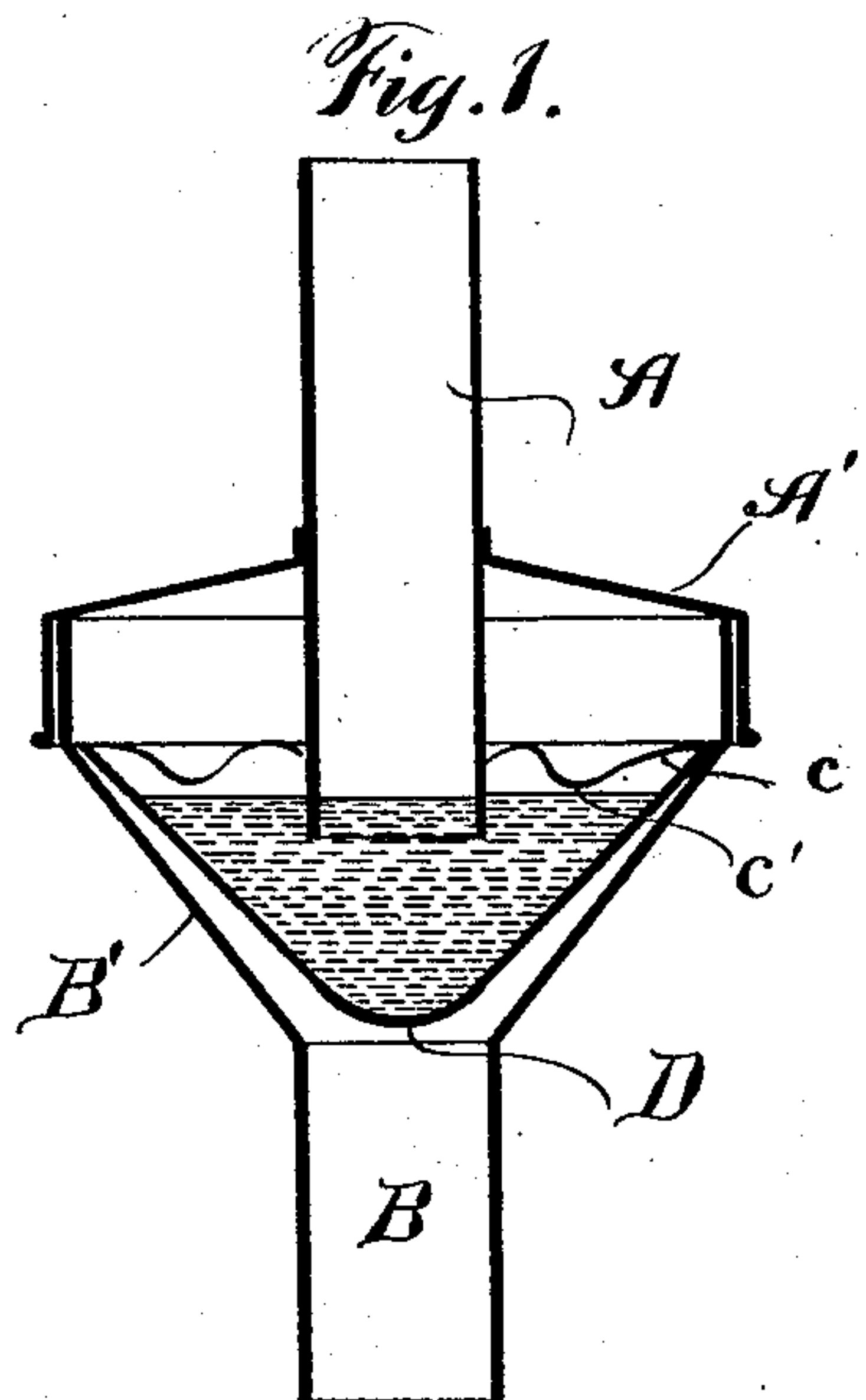


(No Model.)

W. J. VIERCK.  
TRAP.

No. 507,190.

Patented Oct. 24, 1893.



Witnesses.

*Thos. F. Shindan*  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. VIERCK, OF MUSKEGON, MICHIGAN, ASSIGNOR TO THE ALASKA REFRIGERATOR COMPANY, OF SAME PLACE.

## TRAP.

SPECIFICATION forming part of Letters Patent No. 507,190, dated October 24, 1893.

Application filed August 12, 1892. Serial No. 442,920. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. VIERCK, a citizen of the United States, residing at Muskegon, Muskegon county, Michigan, have invented certain new and useful Improvements in Traps, of which the following is a specification.

The object of my invention is more particularly to provide a trap for use in refrigerators, which shall avoid all condensation, that, as such traps are now made, is liable to drip into the provision chamber; and my invention consists of the features and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a vertical section of my improved trap. Fig. 2 is a side elevation of the upper portion of the same, with a part broken away. Fig. 3 is a side elevation and a plan view of portions of the drip cup; and Fig. 4 is a side elevation of the lower portion of the trap, with a part broken away.

Heretofore the construction of traps to carry off the water arising from the melting of ice in the ice chamber, has been such as that the water passing through the trap and off through the pipe, and which is at a temperature but little higher than the ice itself, has caused the pipe passing through the provision chamber to be so cold that the moisture and vapors arising from the articles stored in the provision chamber have condensed on the outside of the pipe and then fallen into the provision chamber. It is to obviate the liability to this objection that I have especially in mind, in the construction and arrangement of my trap.

In making my improved trap, whether for use in refrigerators or other places, I make an upper portion consisting of a section of pipe, A, and a depending cap, A', fastened thereto in any desirable manner. The section of pipe leads from the ice chamber, so that the cap is supported beneath the ice chamber and in the provision chamber of the refrigerator. I make a lower portion consisting of a pipe B, and preferably a funnel-shaped head B', that is intended to be of a diameter to fit the interior of the depending cap on the upper portion of the trap with suf-

ficient closeness. I arrange within the head B' of the trap a drip cup, C, preferably provided with corrugations, as shown particularly in Fig. 3, and which may be made of metal by stamping or in any other desired way. By providing the drip cup with corrugations, its upper edge will only contact with the funnel-shaped head B' at certain points, as c, leaving intervals where the edge of the cup is not in contact with the head, as at c', though the same result may be secured, if desired, in other ways. This arrangement causes the upper edge of the drip cup, at the points where it does not contact against the head, to be lower than at the points where it does contact with it.

When the upper and lower portions of the trap are put together, the lower end of the section of pipe A, extends into the drip cup enough to be below the lowest points of the edge of the drip cup. The water rising from the melting of the ice in the ice chamber passes down through the section of pipe A, and flows into the drip cup C, and accumulates therein until its upper surface rises above the lower end of the section of pipe A, so as to form a water seal, and until it can flow over the edge of the drip cup at the points c'. As it flows over at these points it does not come into contact with the head B' of the lower portion of the trap, but flows along the under surface of the drip cup, inwardly, until it reaches the lowest point or apex, D, of the cup, and drops off, falling down through the center of the pipe B, which is extended through the bottom of the provision chamber, so that the water is constantly kept out of contact with the pipe B, or its flaring head B', so as not to cool such parts and cause the moisture or vapors in the provision chamber to condense on their outside, to be permitted to drip into the provision chamber.

By my construction of trap, and by the arrangement of the pipes in alignment with each other, cleansing the trap, as may be necessary from time to time, is greatly facilitated. All that is necessary is to remove the trap, when it can be taken apart and the pipes cleaned out and the pipe that leads down from the trap through the bottom of the provision



chamber can be cleaned from above, by pushing something down through it to remove any impurities or accumulations that may be therein.

5 What I regard as new, and and desire to secure by Letters Patent, is—

1. In a trap, the combination of an upper portion comprising an inlet pipe and a depending cap arranged thereon, a lower funnel-shaped portion adapted to easily fit within  
10 the depending cap, and a drip cup arranged within the funnel-shaped portion and contacting therewith at several points, so as to leave alternate spaces for the overflow of liquids,  
15 substantially as described.

2. In a trap, the combination of an upper portion comprising an inlet pipe and a depending cap arranged thereon, a lower funnel-shaped portion adapted to easily fit within the depending cap, and a corrugated drip cup  
20 arranged within the funnel-shaped portion and contacting therewith at several points, so as to leave alternate spaces, formed by the corrugations, for the overflow of liquids, substantially as described.

WILLIAM J. VIERCK.

Witnesses:

M. J. WILSON,  
C. F. ROSS.