(No Model.)

E. R. DEVERALL.

NOZZLE, &c., FOR CANS.

No. 339,533. Patented Apr. 6, 1886.

Fig. 1.

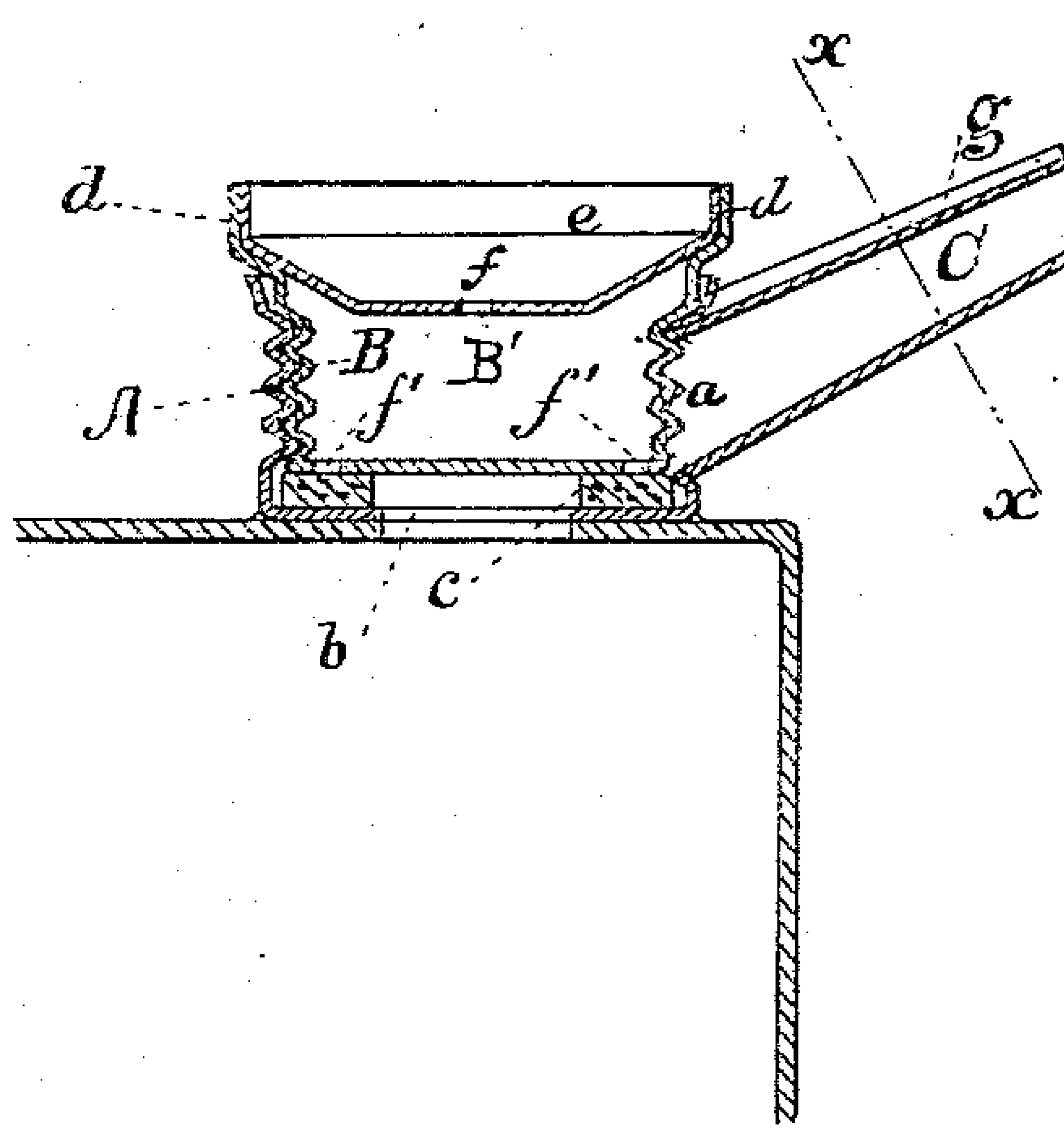


Fig. 2.

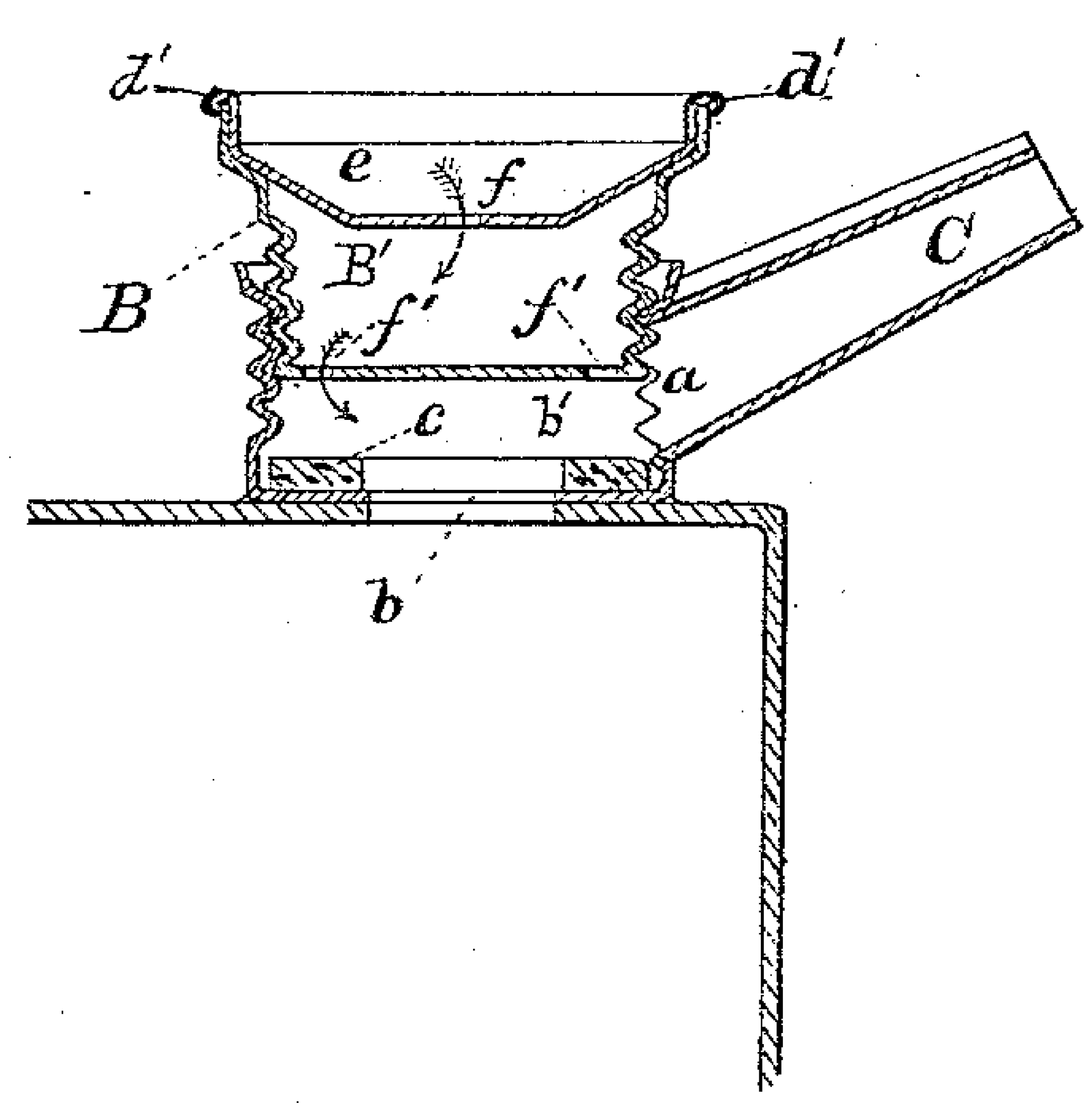


Fig. 3.

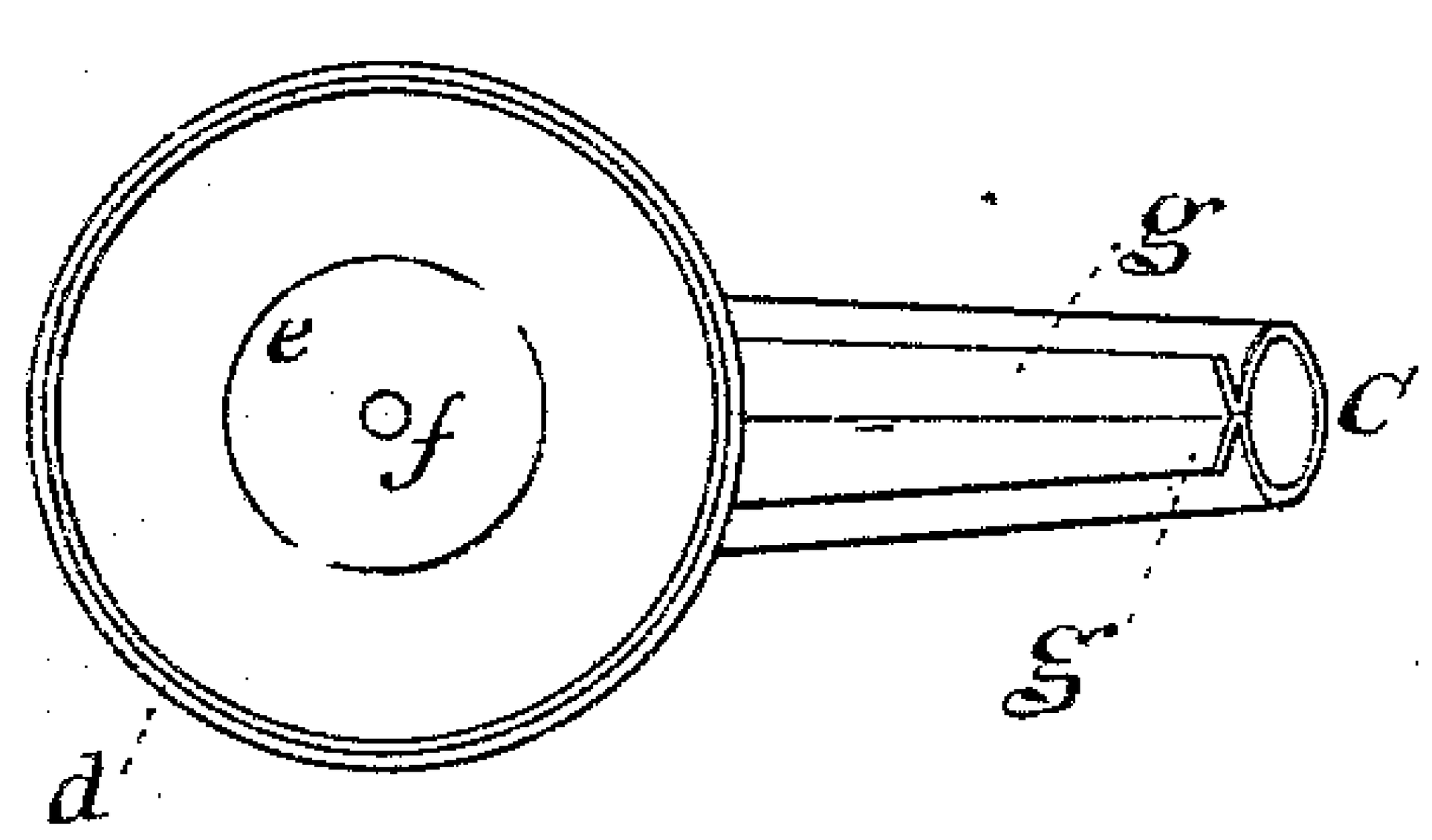
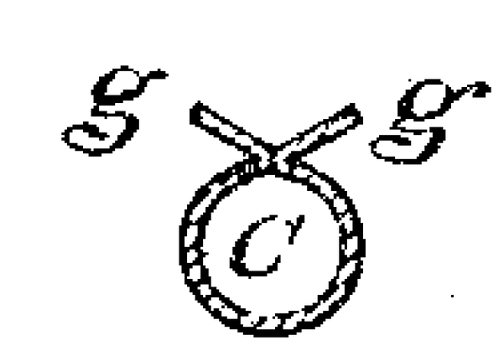


Fig. 4.



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NOZZLE, &c., FOR CANS.

SPECIFICATION forming part of Letters Patent No. 339,533, dated April 6, 1886.

Application filed May 19, 1885. Serial No. 165,995. (No model.)

To all whom it may concern:

Be it known that I, EDWIN R. DEVERALL, of the city, county, and State of New York, have invented a new and useful Nozzle and Stopper for Cans for Holding Fluids, and Specially Adapted to Cans for Shipping Petroleum-Oil; and I do declare the following to be a full, clear, and correct description of my invention, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a sectional view of my improvement, showing the nozzle and stopper closed; Fig. 2, a sectional view showing the stopper partially open. Fig. 3 is a top view showing more particularly the spout. Fig. 4 is a sectional view of the spout on the line *x x*, Fig. 1.

In the drawings like parts of the invention are designated by the same letters of reference.

The nature of the present invention relates to improvements, as more fully hereinafter set forth, in the construction of a nozzle and stopper for cans for holding fluids, and specially adapted to cans for shipping petroleum-oil, the object of the invention being the production of a nozzle and stopper for cans for holding fluids so that the can to which it is applied can be readily filled with fluids or the fluids be turned from the same, and at the same time any escape of the contents of the can in handling or transportation is prevented, thus diminishing the cost of packing fluids in cans, and in the case of petroleum-oil rendering the package more safe and enabling the can to be emptied with little or no danger of explosion.

To enable others skilled in the arts to make and use my invention, I will describe the same.

A shows the nozzle, formed of a circular cap screw-threaded upon its interior, and provided with a side opening, *a*, in which a spout, C, is inserted, and with a central opening, *b*, for the entrance and exit of the fluid or oil. This cap may be provided at its base with an interior lining or gasket of cork, *c*, forming a seat upon which the lower portion of the stopper B rests when the same is depressed or screwed down into position to close the can.

B shows the stopper, formed of a second circular cap, screw-threaded and made smaller in diameter than the nozzle A, so that it may be received within the same and be screwed or unscrewed, as may be desired, by the engagement of the screw-thread formed upon it with the screw-thread formed upon the cap A.

The metal is continued in course of manufacture to form a projecting circular rim, *d*, within which is received the concave top *e*, which may be soldered therein, as seen in Fig. 1, or held in position by spinning over it the edge of the rim *d*, as seen in Fig. 2. The top *e* is provided with an air-hole, *f*, placed in it centrally, and the cap is provided with the air-inlets *f' f'* in the bottom of the same. By this construction of the stopper B there is formed an air-chamber, B', which is open to the outer air by the orifice *f*, and whenever the stopper is unscrewed to any extent the air can enter from B' to the lower space, *b'*, through one of the orifices *f''*, to ventilate the can.

C shows a spout, forming as it were a continuation of the side opening, *a*, being soldered over the same upon the nozzle A.

The metal is continued in the manufacture of the spout to form wings *g*, extending sidewise over the center of the spout, as seen in section, Fig. 4. Through this spout C the fluid or oil is discharged from the can to which the invention has been applied.

The operation is as follows: The nozzle A is soldered upon the upper or top side of the can, an opening being made in the same which, when the nozzle is soldered thereto, shall be in line with the opening *b* in the nozzle. The can is filled by pouring the fluid or oil into it through these openings. After being filled the stopper B is screwed into position within the nozzle A until its bottom or under portion rests upon the cork gaskets already described.

To empty the can the stopper B is unscrewed a short distance and the can turned into the ordinary position for emptying, and the fluid or oil will leave the can through the spout C, the stopper B when raised from its seat *c* leaving an opening, which necessarily directs the fluid or oil to the spout C. The wings upon the spout C serve as a gutter to allow any fluid or oil that in pouring may escape over the top of the can to collect there, and pass thence into the vessel being filled with the fluid or oil poured from the can.

Having now set forth my improvement, I claim—

1. The stopper B, having air-holes *f* and *f'* *f'*, and constructed to form an air-chamber, B', in combination with a nozzle, A, having a seat for the stopper, all constructed and operated substantially as set forth.

2. The winged spout C, in combination with the nozzle A and stopper B, constructed substantially as and for the purpose described.

EDWIN R. DEVERALL.

In presence of—

WILLIAM V. H. HICKS,
HENRY C. EIBS.