

(No Model.)

T. C. HARGRAVE.

WASTE PIPE TRAP.

No. 302,728.

Patented July 29, 1884.

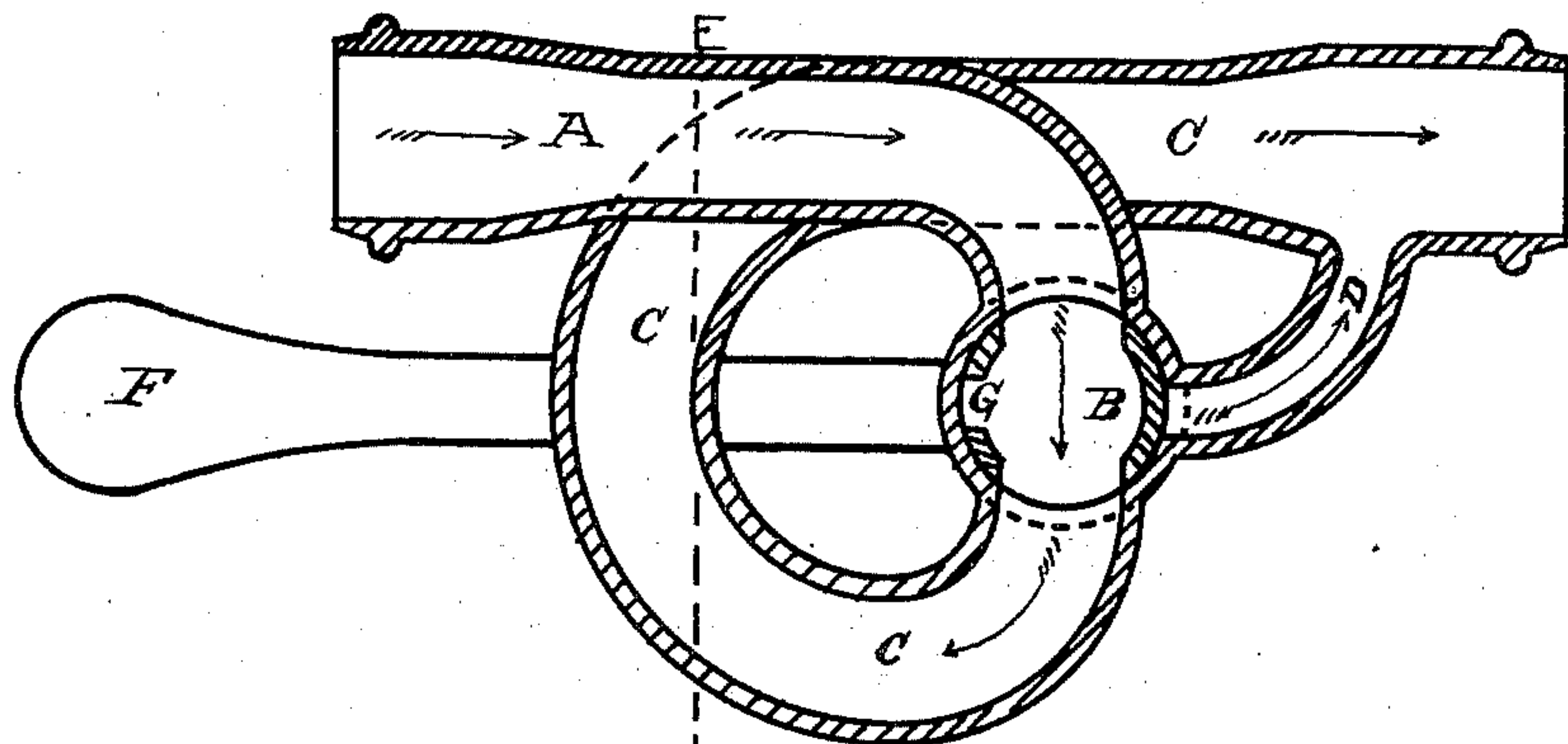


FIG-1

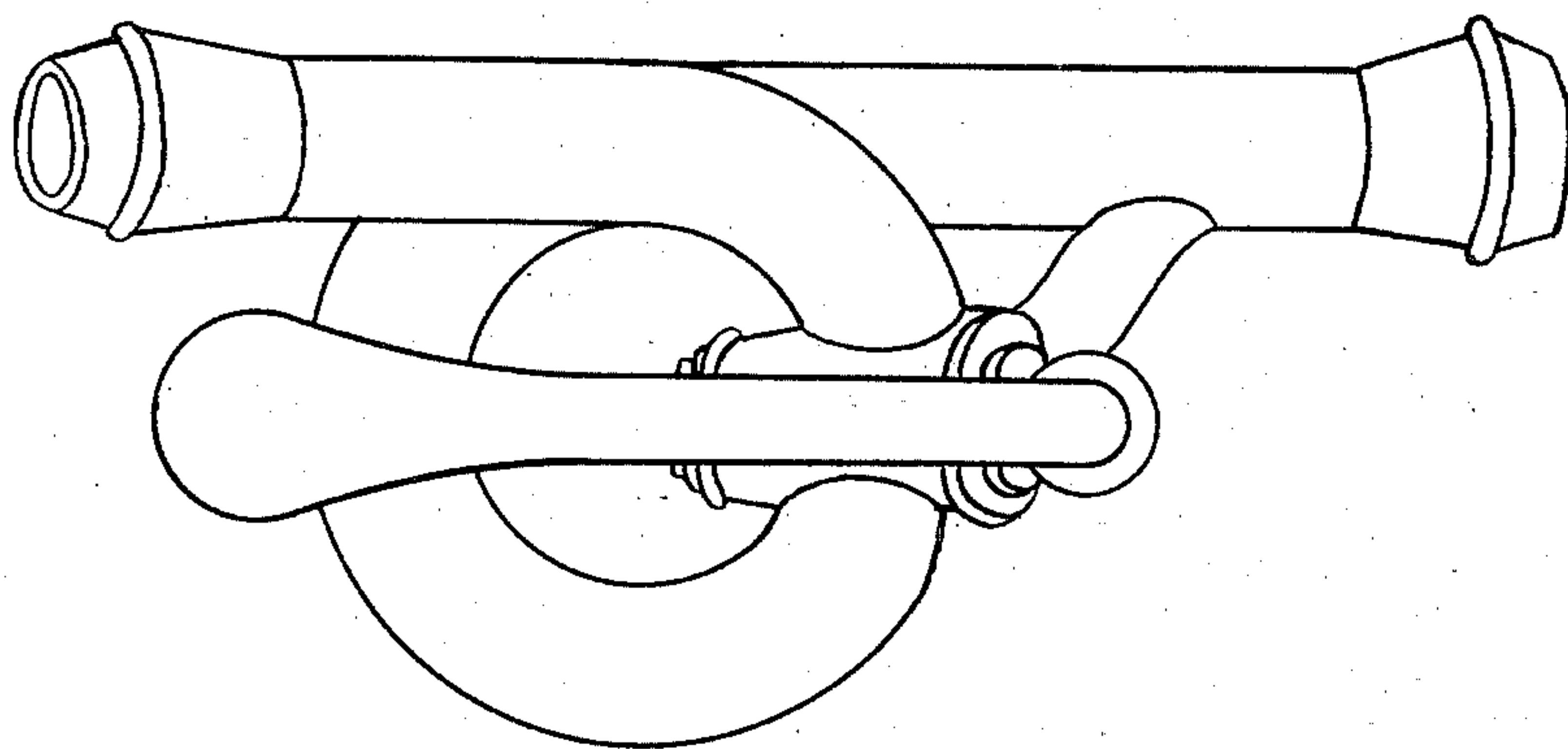


FIG-2

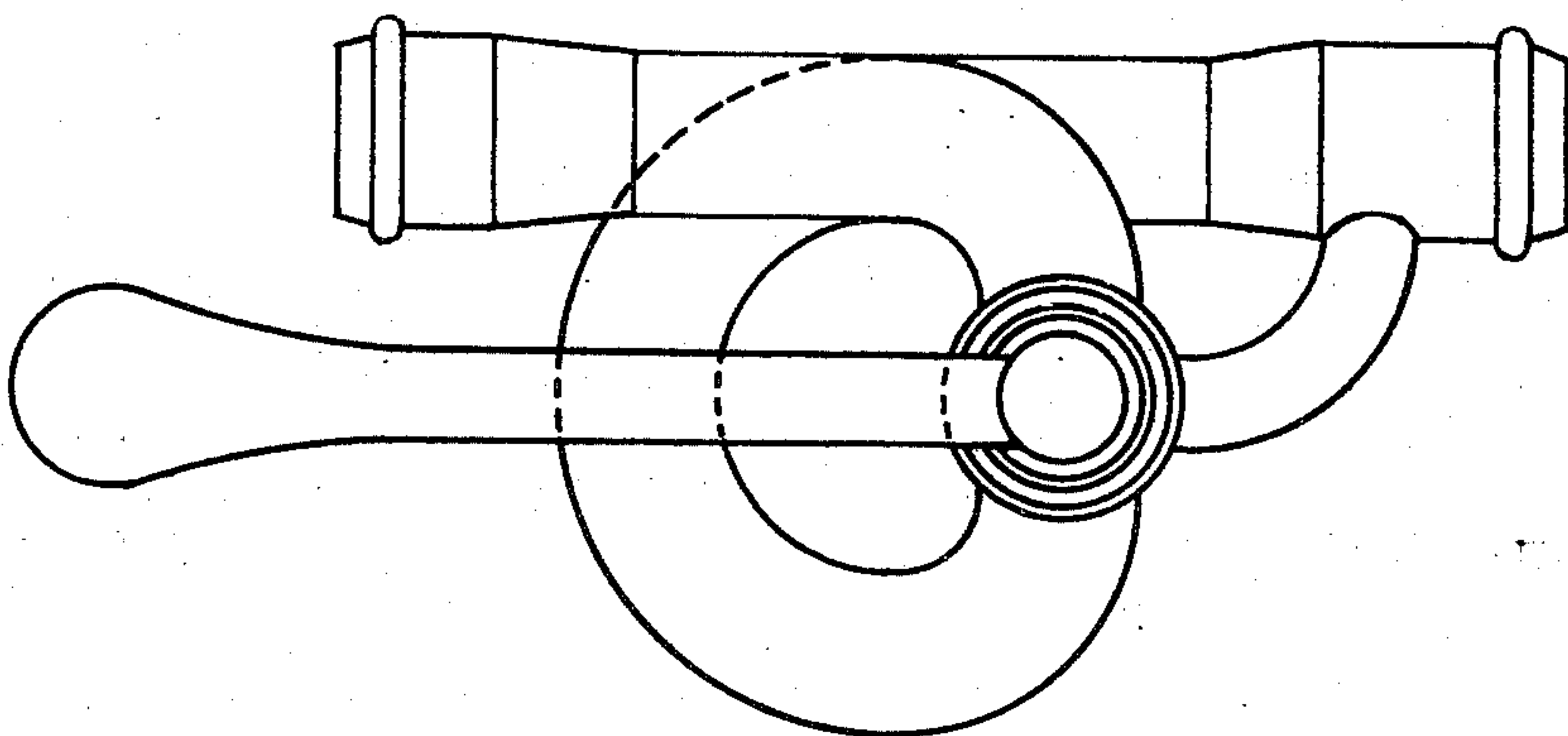


FIG-3

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## WASTE-PIPE TRAP.

SPECIFICATION forming part of Letters Patent No. 302,728, dated July 29, 1884.

Application filed January 25, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS C. HARGRAVE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Waste-Pipe Traps, of which the following is a specification.

My invention relates to improvements in waste-pipe traps of the siphon form used in connection with the discharge-pipes of wash-bowls and the like; and the object of my invention is to furnish a means of emptying the trap or siphon of its contents to prevent freezing, and also to so close the pipe that sewer-gas may not pass through when thus emptied. I attain these objects by the arrangement of devices illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the entire trap; Fig. 2, a perspective view, and Fig. 3 an elevation.

A is a curved inlet connected with the waste-pipe leading from the bowl; B, a three-way cock, which, when in the position shown in the drawings, connects the inlet A with the curved passage C C C, thereby forming a siphon having its water-line at E E. D is a channel connecting the cock B with the siphon-pipe, and G the opening in the plug of the cock for making the connection between the channel D and passage C C C. The pipes for these passages may be round; but I prefer having them some-

what flattened horizontally, and the opening in the plug of the cock correspondingly elliptical.

In operating the device, when the cock B is in the position shown in the drawings, the liquid enters through the inlet A, passes through the cock and passage C C C to the drain or sewer. To empty the siphon, turn the handle F of the cock half-way round. This brings the opening G of the cock in connection with the channel D, through which the siphon is emptied. To close the inlet A, move the handle back from the last position one-quarter turn. This brings the solid part of the plug of the cock B over the inlet, and effectually closes it. To again make ready for use, move the handle to the upright position shown. Should an obstruction lodge in the siphon, by unscrewing the cock, a bent wire can be inserted and the obstruction removed.

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

The combination, with a siphon-trap, of a three-way cock in the lower curve of the siphon, and a channel connecting said cock with the discharging-leg of the siphon at a lower point.

THOMAS C. HARGRAVE.

Witnesses:

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