

*W. Gee,*  
*Beer Cooler.*  
*No. 106,686.*      *Patented Aug. 23, 1870.*

FIG. 1

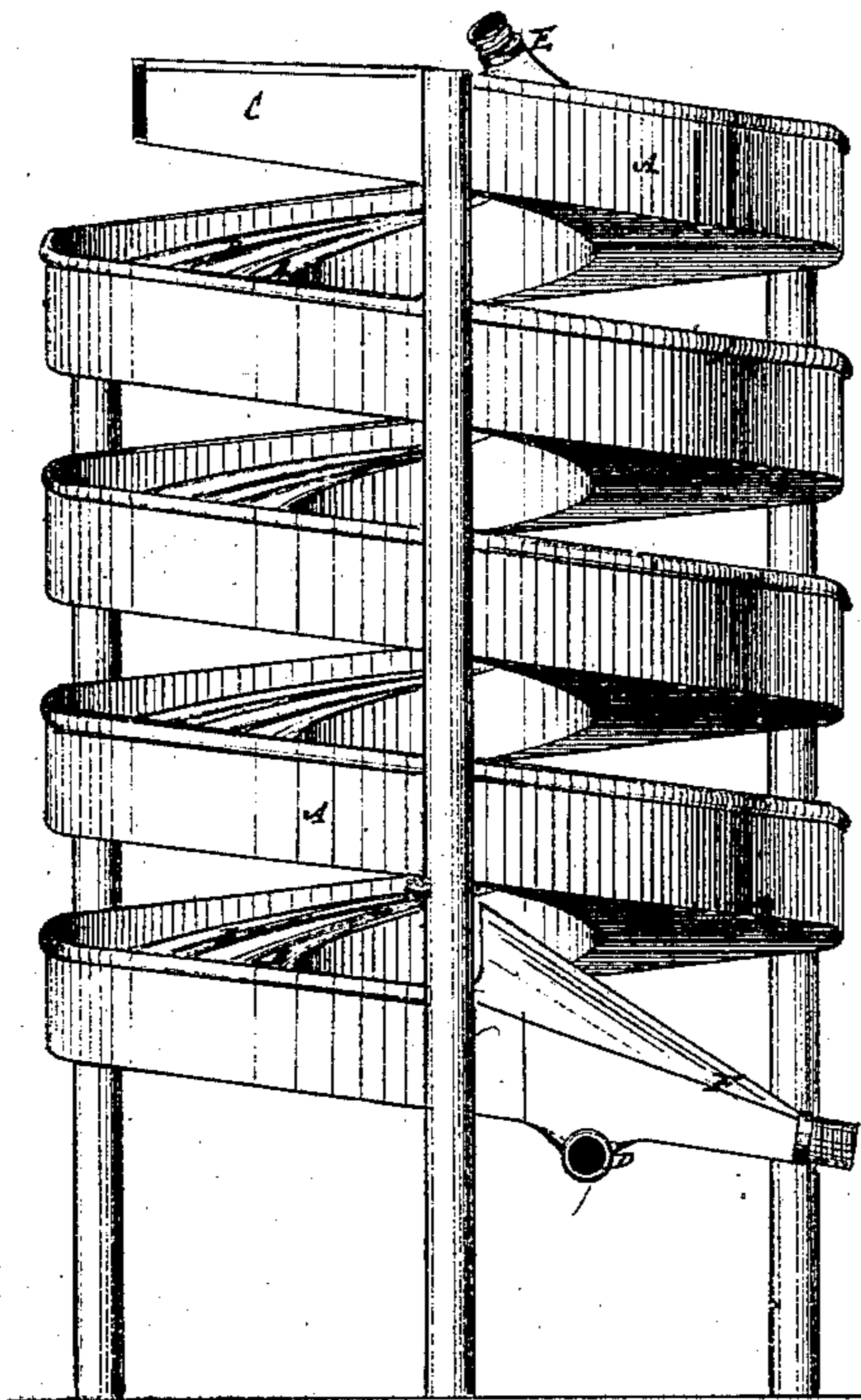


FIG. 2

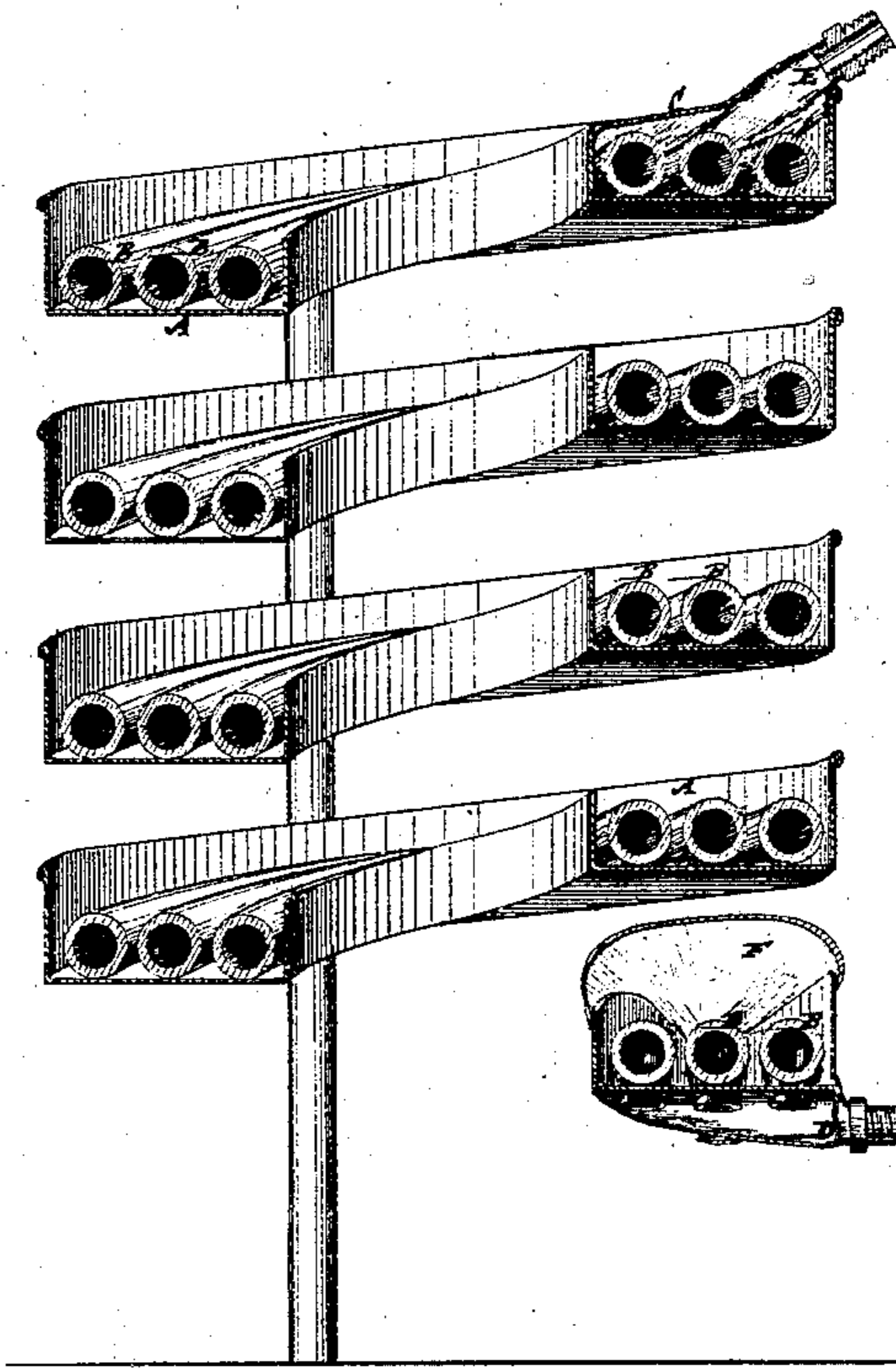
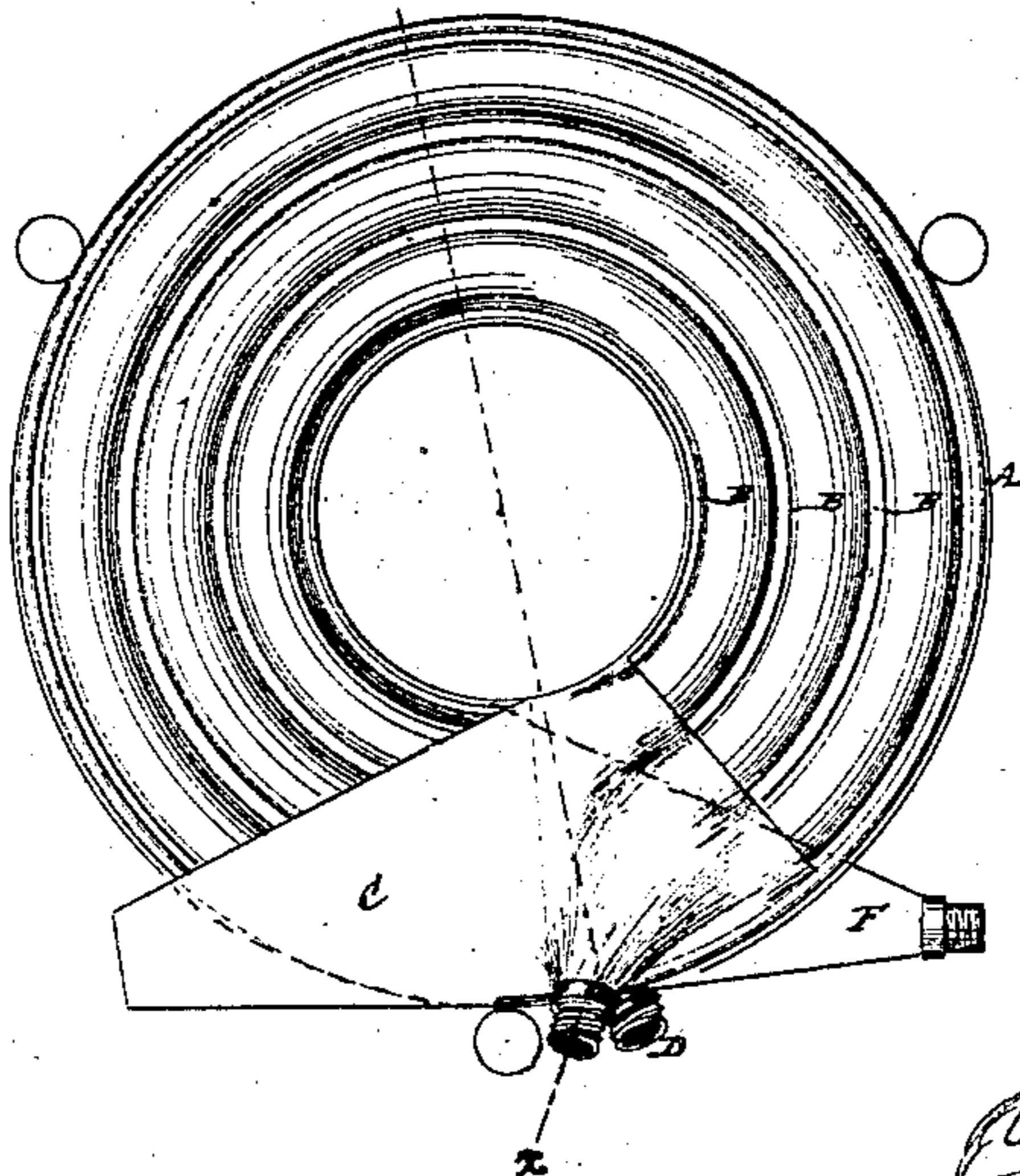


FIG. 3



WITNESSES  
*Fred. Haynes*  
*R. H. Rabeau*

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# United States Patent Office.

WILLIAM GEE, OF NEW YORK, N. Y.

Letters Patent No. 106,686, dated August 23, 1870.

## IMPROVEMENT IN APPARATUS FOR COOLING BEER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM GEE, of the city, county, and State of New York, have invented a new and useful Improvement in Apparatus for Cooling Beer and other Liquids, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents an outside elevation of an apparatus constructed in accordance with my improvement, and

Figure 2, a sectional elevation thereof, taken as indicated by the line *x x*, in Figure 3, which is a plan of the same.

Similar letters of reference indicate corresponding parts.

My invention consists in a cooler made up of a series of spiral pipes, arranged with their coils one within another, within a spiral trough, down through which latter the beer or liquid to be cooled is allowed to run, while the cooling water passes, in an opposite direction, up or through the pipes, that combine strength with a large area of cooling surface, and, being independent of the bottom of the beer-trough, provide for the more perfect cleaning of the latter.

Referring to the accompanying drawing—

A represents a spirally-constructed trough, preferably made plain and single, as regards its sides and bottom, but containing within it a series of spiral pipes or tubes, B B, arranged with their coils one within another, said pipes terminating, at their upper ends, in a nozzle, C, which is common to the several pipes, and connecting at their lower ends with a branch, D, that serves as an inlet, while the upper nozzle C answers as an outlet for the cooling water,

which is made to pass up through the pipes B B of the cooler.

The beer or liquid to be cooled, entering by a nozzle or inlet, E, passes in a downward direction through the spiral trough A, and is discharged by a delivery-nozzle or outlet, F, the flow of the two liquids through the apparatus being continuous, and an air-vent or passage being provided up the center of the apparatus, as in other coolers.

The construction, as herein described, of the apparatus is not only cheap, the spiral trough requiring no false bottom or double structure liable to warp, and the spiral passages for flow of the water consisting of simple pipes spirally arranged, with their coils one within another, but such construction also combines strength with efficiency, the pipes B B presenting an enlarged cooling surface for the beer, which, in its passage down through the spiral trough, surrounds the pipes.

Increased facility likewise is afforded for cleaning the trough or apparatus generally, by reason of the separate construction and exposed arrangement of the beer and water-ducts or passages, together with great convenience as regards repair, either of the pipes, or trough in which the pipes lie.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the spirally-arranged pipes B B, in independent series, within the spirally-constructed trough A, together with their several inlets and outlets, substantially as specified.

WILLIAM GEE.

Witnesses :

FRED. HAYNES,  
R. E. RABEAU.