FRANZ BLUEHER.

Apparatus for Preserving and Applying Pressure to Beer.

No. 121,577. Patented Dec. 5, 1871.

Fig: 1.

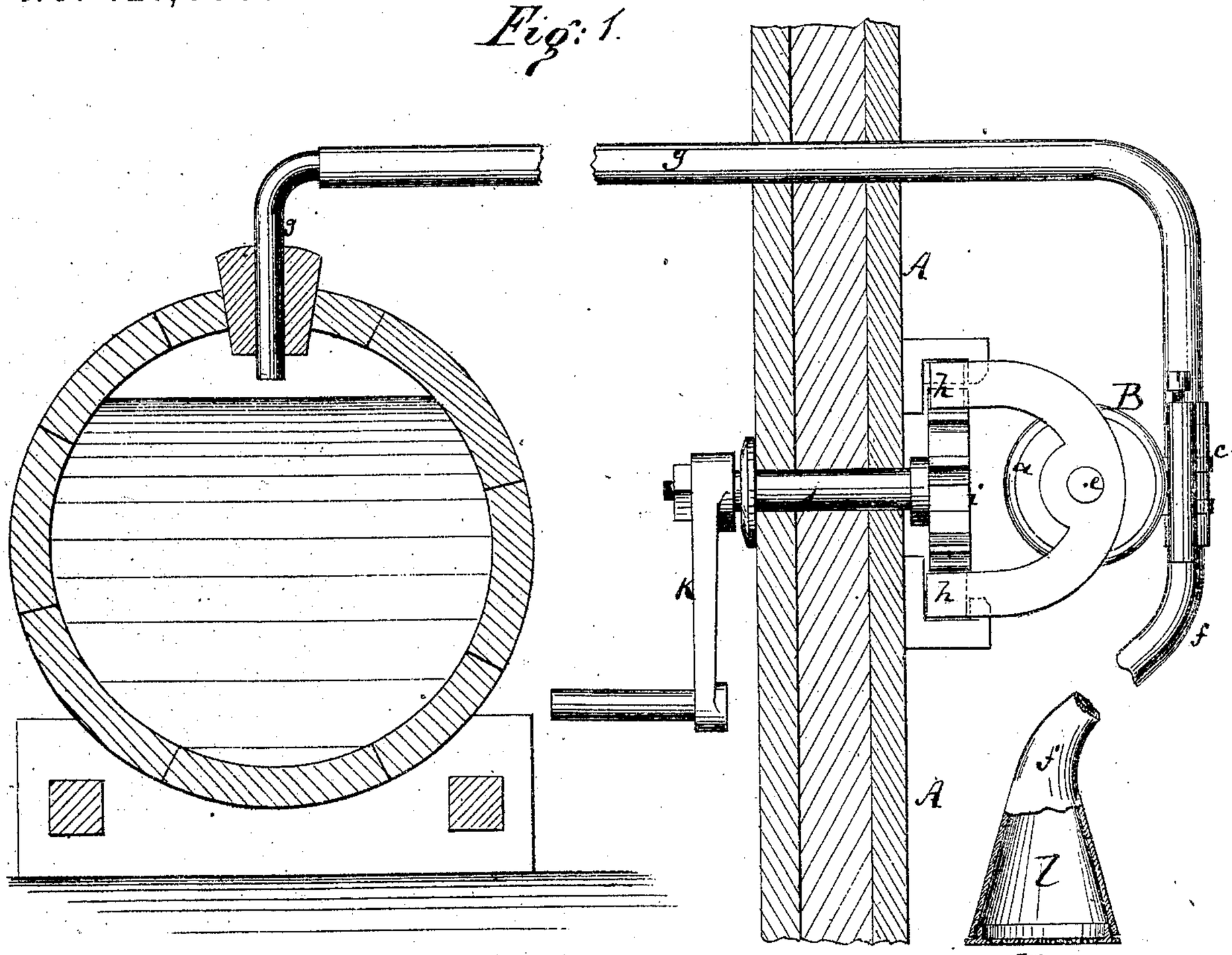
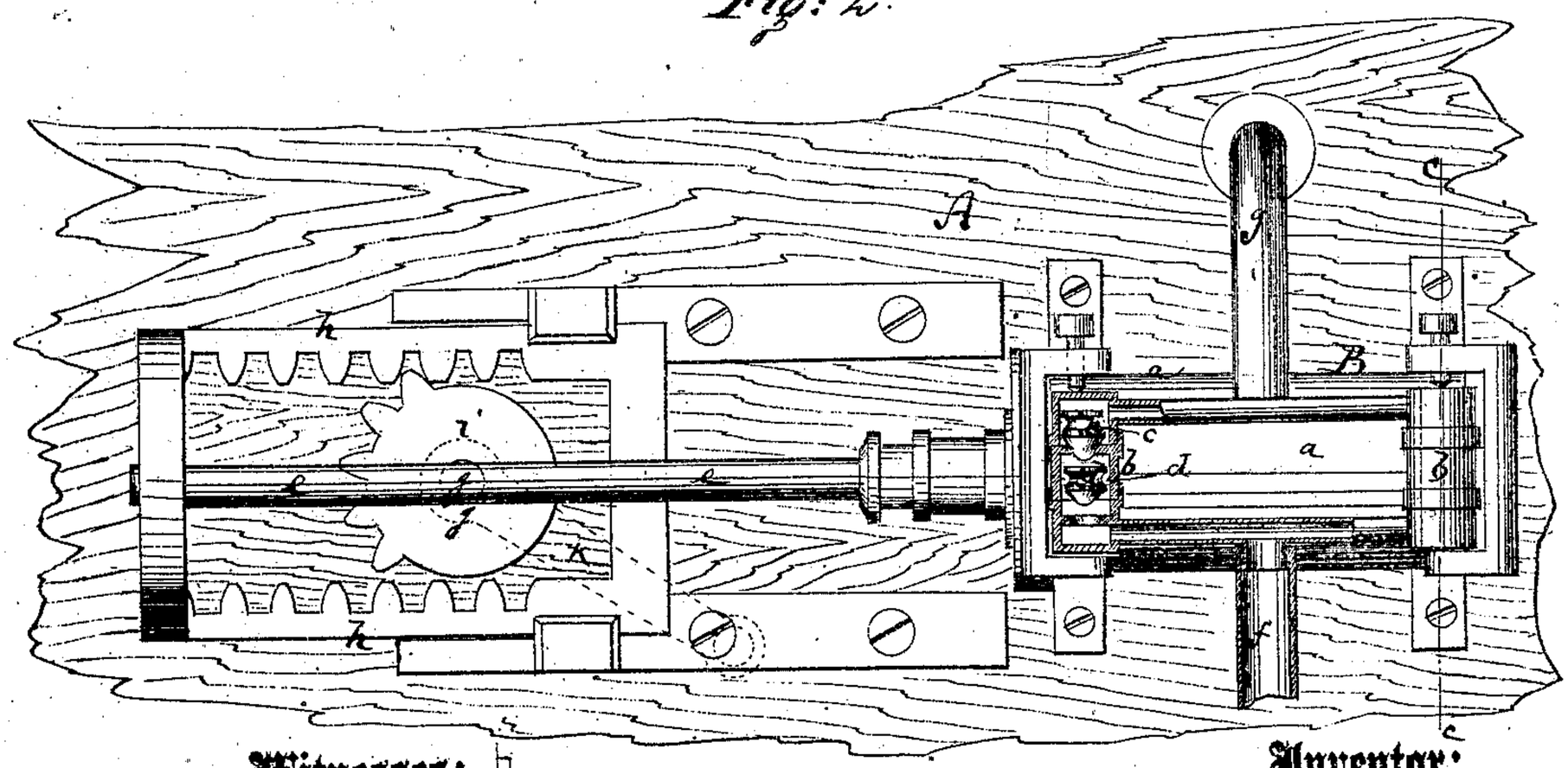


Fig: 2.

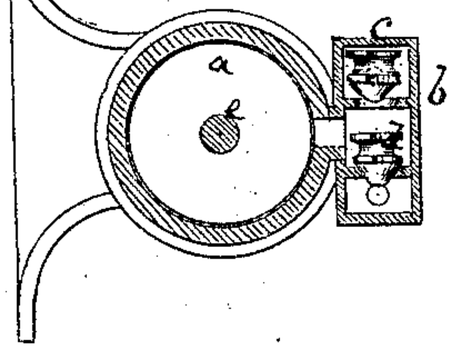


Witnesses:

Chas. Nida

Francis McArdle.

Fig: 3.



Inventor:

Franz Blueher,

PER Munn & Co

Attorneys.

121,577

UNITED STATES PATENT OFFICE.

FRANZ BLUEHER, OF MASCOUTAH, ILLINOIS.

IMPROVEMENT IN APPARATUS FOR PRESERVING AND FORCING BEER WITH COLD AIR.

Specification forming part of Letters Patent No. 121,577, dated December 5, 1871.

To all whom it may concern:

Be it known that I, FRANZ BLUEHER, of Mascoutah, in the county of St. Clair and State of Illinois, have invented a new and Improved Apparatus for Preserving and Applying Pressure to Beer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a vertical transverse section of my invention, showing it applied to a refrigerator and barrel. Fig. 2 is a side view, partly in section, of the same. Fig. 3 is a vertical transverse section of the pump, taken on the plane of the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention consists in improved means for injecting cold air into beer barrels, as hereinafter fully described and subsequently pointed out in the claims.

A in the drawing represents a portion of the wall of an ice-box or refrigerator. To the inner side of the same is securely fastened, by means of screws or otherwise, an air-pump, B, which consists of a barrel or cylinder, *a*, valve-chambers *b b*, valves *c d*, piston, piston-rod *e*, inlet-pipe *f*, and discharge-pipe *g*. The piston-rod is connected with a double rack, *h*, into which the teeth of a segment, *i*, mesh, as shown in Fig. 2. The segment is mounted upon an arbor, *j*, which is hung in the ice-box and extends through the front of same, being provided with a crank-handle, *k*, whereby it can be revolved. When turned the segment imparts reciprocating motion to the piston-rod and piston, and serves thereby so to move the valves in the chambers *b b* that air will be drawn in through the pipe *f* and expelled through the pipe *g*. The lower end of the pipe *f* is connected with a cone-shaped case or enlargement, *l*, which is filled with powdered charcoal or other purifier, and provided with a perforated bottom through which the air is drawn. The pipe *f* is flexible, and is let into the lower part of the ice-box or ice-receptacle, where the air is coldest. The pump thus draws the cold air, and discharges it through the pipe *g* into the barrel. The end of the last-named pipe is inserted through the bung into the barrel. When beer has been drawn from the barrel in such amount as to require a supply of air on its top for necessary pressure, the crank-handle is turned until the necessary amount of air has been pumped. The air, being taken from the coldest part of the box and further purified in the enlargement *l*, is of the proper quality for preserving the beer, besides applying pressure.

Small dealers, or parties who use a barrel for a considerable length of time before entirely emptying it, will by this invention be enabled to always keep the beer fresh and cool, where hitherto it was rapidly destroyed when kept in a barrel but partly filled.

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

1. The crank *k*, arbor *j*, segment *i*, and double-rack *h*, combined with a piston-rod *e*, as and for the purpose specified.

2. The cylinder *a*, piston-rod *e*, and pipes *f g* of an air-pump combined with valve-chambers *b b* and valves *c d*, arranged as described, for the purpose specified.

3. The cone-shaped enlargement *l* with perforated bottom, and filled with charcoal, when applied to pipe *f*, as and for the purpose specified.

4. The combination of mechanism *h i j k*, an ice-box A, and the particular air-pump *a b c d e f g* arranged in said ice-box, as and for the purpose specified.

Witnesses: FRANZ BLUEHER.
FRIDOLIN GLAFFNEY,
HENRY MAGER.

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