

F. CRAMME.
Washing-Machine for Brewers' Use.

No. 164,906.

Patented June 29, 1875.

Fig. 1.

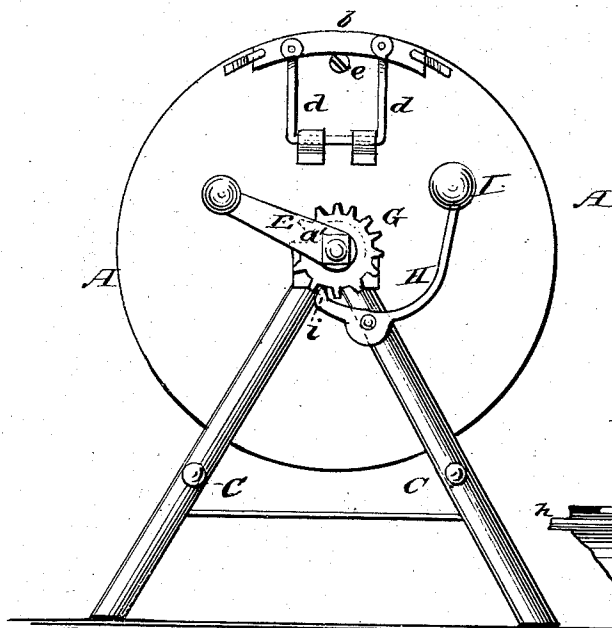


Fig. 3.

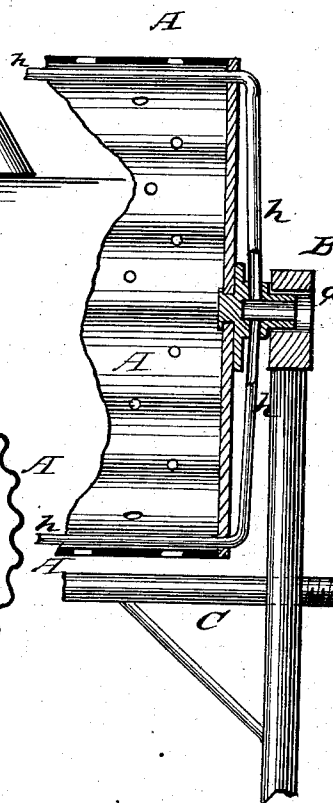
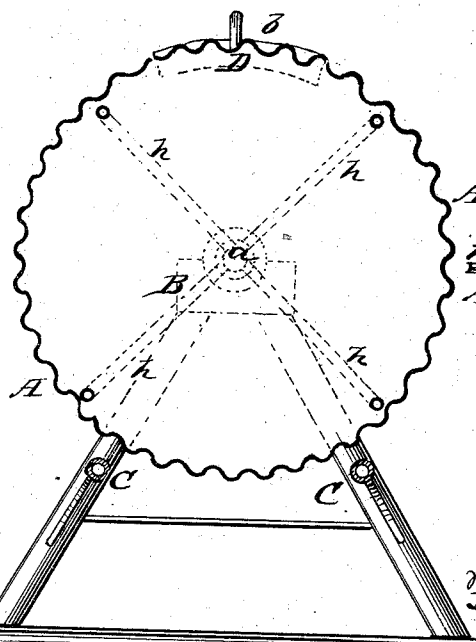


Fig. 2.



WITNESSES:

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IMPROVEMENT IN WASHING-MACHINES FOR BREWERS' USE.

Specification forming part of Letters Patent No. **164,906**, dated June 29, 1875; application filed April 27, 1875.

To all whom it may concern:

Be it known that I, FRIEDRICH CRAMME, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Washing-Machine for Brewers; 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 which it pertains to make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a washing-machine for brewers' use, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is an end elevation of my machine. Fig. 2 is a transverse vertical section of the same; and Fig. 3 is a part of an enlarged vertical section of the same.

A represents a cylinder of any suitable dimensions, made of corrugated sheet metal, and perforated with a suitable number of small perforations or holes, the heads of the cylinder being made of plain metal, and provided in their centers with projecting journals *a a'*. These journals are held or supported in bearings or boxes B B, into each of which are serewed two tubular legs, C C. The legs are connected by suitable braces, forming thereby a stand for supporting the boxes in which the cylinder A revolves.

The cylinder is provided with a door or dump, D, extending the entire length of the cylinder, and held by means of flanged castings *b b* at its ends. One of these castings is permanently secured to the end of the cylinder, while the other is fastened to hinged arms *d d*, and held in place for locking the dump by means of a button, *e*.

The journal *a* of the cylinder A is hollow from the outer end inward, for a suitable distance, and from this journal extend four pipes, *h h*, radially at equal distances apart, to near the circumference of the cylinder, where the pipes are provided with elbows, and pass longitudinally through the cylinder to the opposite end. The portions of the pipes *h* within the cylinder are perforated for the escape of

the water, which is admitted through suitable connecting-pipes and couplings to the hollow journal *a*, and passes from thence into and through the pipes *h h*, into the cylinder.

The journal *a'* of the cylinder is solid, and projects beyond the outer side of its box B, for the reception of a cog-wheel, G, and crank E.

On one of the legs C, immediately below the cog-wheel G, is pivoted a lever, H, the shorter end of which forms a pawl, *i*, to take into said cog-wheel, and the other end is provided with a weight, I, to hold the pawl in the cog-wheel.

By means of the crank E, the cylinder is revolved in one direction, the weighted lever and pawl holding it from turning in the opposite direction.

This machine is used for washing wood shavings, such as used for making the beer bitter, which wood shavings are often used when hops are very expensive.

The shavings are placed in the cylinder or drum, and the same is then revolved by the crank, the water passing through the pipes, as above described, which thoroughly cleans the shavings.

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

1. In a washing-machine for brewers' use, the revolving cylinder A, provided with the hollow journal *a*, and the pipes *h h* leading therefrom to near the periphery of the cylinder, and then longitudinally through the same, the portions within the cylinder being perforated, all substantially as and for the purposes herein set forth.

2. The combination, with the perforated revolving cylinder A, of the door or dump D, flanged castings *b b*, hinged arms *d d*, and button *e*, as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FRIEDRICH CRAMME.

Witnesses:

ROBERT WETSLICH,
HERMAN SCHRANE.