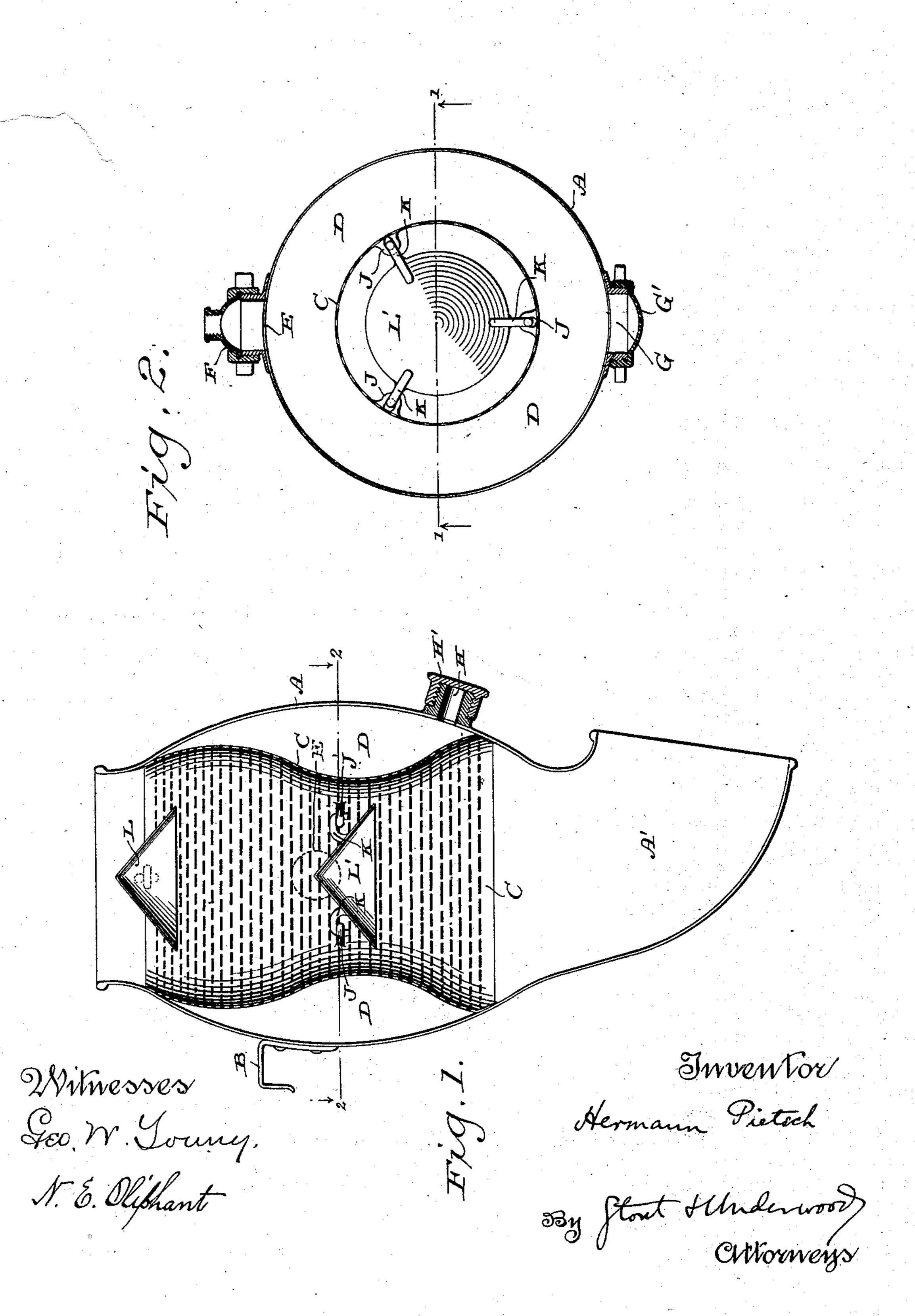
(No Model.)

## H. PIETSCH. DEVICE FOR MASHING MALT.

No. 410,019.

Patented Aug. 27, 1889.



## United States Patent Office.

HERMANN PIETSCH, OF MILWAUKEE, WISCONSIN.

## DEVICE FOR MASHING MALT.

SPECIFICATION forming part of Letters Patent No. 410,019, dated August 27, 1889.

Application filed January 14, 1889. Serial No. 296,222. (No model.)

To all whom it may concern:

Be it known that I, HERMANN PIETSCH, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Devices for Mashing Malt, and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to devices employed ro in the operation of converting malt into mash; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently 15 claimed.

In the drawings, Figure 1 represents a vertical transverse section of a device constructed according to my invention, the section being taken on line 1 1 of Fig. 2, and 20 Fig. 2 a horizontal section taken on line 2 2 of Fig. 1.

Referring by letter to the drawings, A represents a barrel-shaped shell, preferably constructed of durable copper strengthened 25 in any suitable manner, said shell being open at the top and terminated at the bottom in a spout A', the latter being either straight or curved, as may be most desirable. As ordinarily constructed, the shell A is provided 30 with a hook B, by which my device may be suspended from the upper edge of a mash-tub.

Secured to the interior of the shell A is a perforated tube C, that occupies as much space as the bulge of said shell will permit. The 35 greater portion of the perforated tube C is preferably curved in a direction opposite to the curve of the shell A, and in connection with the latter forms a chamber or receptacle D for mash-water, that is admitted under 40 pressure through a port E, surrounded by a pipe-coupling F, as illustrated in Fig. 2.

The shell A is also provided with openings GH, that are respectively closed by caps G' H', the former one of these openings serving as a means of ingress for the purpose of cleaning the chamber while any sediment or other particles too coarse to pass through the perforations in the tube C during the cleaning operation may be drawn off through the latter 50 opening.

At different stages within the interior of my device I arrange a series of eyes J for engagement with hooks K on cone-shaped spreaders L L', this construction being best 55 illustrated in Fig. 1.

Malt is spouted into the top of my device to be distributed by the upper cone L of the cone-shaped spreaders, and is then subjected to the action of the mash-water that pours through the perforated tube C at various an- 60 gles with considerable force, and thus the malt receives a thorough soaking and turning, while any of the partially-soaked malt that is forced in toward the center of the device will fall upon the lower cone-shaped 65 spreader L', to be again distributed and acted upon by the mash-water, whereby a pulp-like mass free from lumps is discharged through the spout A' into a mash-tub.

By a device constructed as above de-70 scribed I am enabled to obtain the best possible results in the least possible time without danger of scalding the malt or clogging up of the perforations in the tube.

Having thus fully described my invention, 75 what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a barrel-shaped shell open at its upper end and terminated at its lower end in a spout, a perforated tube ar- 80 ranged within the shell to occupy as much space as the bulge of the latter will permit and form a chamber therewith, a series of eyes arranged at different stages within the perforated tube, a series of cone-shaped 85 spreaders provided with hooks for engagement with the eyes, and a pipe-coupling arranged to surround a port in the shell, substantially as set forth.

2. The combination of the shell A, provided 90 with the spout A', hook B, the perforated tube secured within the shell and provided with eyes J, the port E, leading into the space between the shell and perforated tube, the pipe-coupling F, surrounding the port, 95 the openings G H in said shell, the caps G' H', for closing the latter openings, and the spreaders L L', having hooks K for engagement with said eyes, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee. in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

HERMANN PIETSCH.

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Witnesses: HENRY KNUCKE, N. E. OLIPHANT.