

J. C. HUNT.
Apparatus for Steaming Grain.

No. 142,237.

Patented August 26, 1873.

Fig. 2

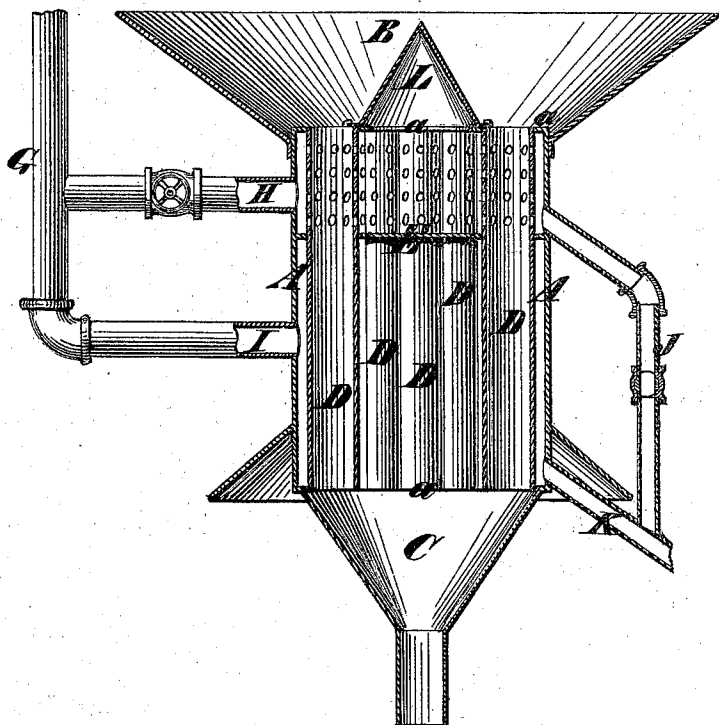
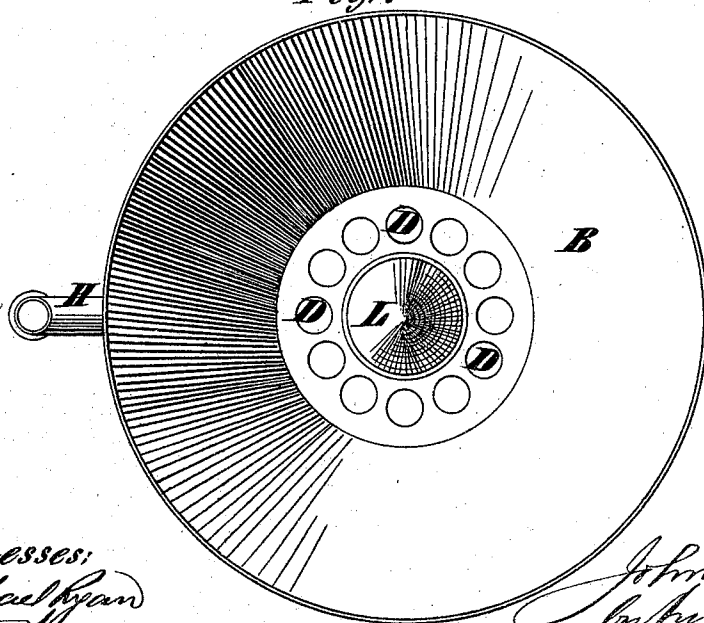


Fig. 1



Witnesses:
Michael Ryan
Fred Wyma

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UNITED STATES PATENT OFFICE.

JOHN C. HUNT, OF SIOUX CITY, IOWA.

IMPROVEMENT IN APPARATUS FOR STEAMING GRAIN.

Specification forming part of Letters Patent No. **142,237**, dated August 26, 1873; application filed July 2, 1873.

To all whom it may concern:

Be it known that I, JOHN C. HUNT, of Sioux City, in the county of Woodbury and State of Iowa, have invented certain Improvements in Apparatus for Steaming Grain, of which the following is a specification:

This invention relates to an apparatus for which was granted me Letters Patent No. 130,430, dated August 13, 1872. The improvement consists in the combination, with the steam-drum and the perforated pipes which the grain traverses, of a partition arranged just below the perforated portion of the pipes just mentioned, and suitable steam-induction pipes leading, one above the other, below said partition, whereby, on simply turning a valve or cock in the induction-pipes, the circulation of steam may be confined to the steam-drum, or may be allowed to enter the pipes that receive the grain, and the management of the machine is much simplified and facilitated.

In the accompanying drawing, Figure 1 is a top view of my improved grain-steaming apparatus, and Fig. 2 a central vertical section of the same.

Similar letters of reference indicate corresponding parts in both figures.

A is the steam-drum. It is of cylindric form, and is closed at the bottom and top by two heads, *a a*. At its top is a large funnel-shaped hopper, B, for receiving the grain as it is delivered from the garner, and at the bottom is a funnel, C, for conducting the grain on its exit from the cylinder to the eye of the millstones. A number of pipes, D D, arranged in a circle, extend longitudinally through the steam-drum from one of its heads to the other. It is through these that the grain traverses while being steamed or heated by the steam admitted to the drum. A cone, L, situated on the top of the steam-drum, just within the circle of grain-pipes D D, sheds the grain, as it is delivered from the garner, uniformly

into said pipes. A partition or diaphragm, E, arranged transversely across the upper part of the steam-drum, divides it into two parts. The pipes D D are perforated above this diaphragm, but are intact below it, so that steam admitted to the lower part of the drum merely circulates around the pipes and heats the grain passing through them; but steam admitted to the upper part will enter the perforations in the pipes and come into direct contact with the grain so as to "steam" it. The induction of the steam to produce these different results is attained by means of connecting the steam-pipe G with the steam-drum by two branches, H and I, leading, respectively, to its upper and lower compartments. The branch H is furnished with a cock to provide for stopping the ingress of steam through it. Pipes to convey away the water of condensation are arranged on the drum in corresponding manner. Branches J and K lead from the bottom portion of the compartments, and the one, J, that leads from the upper compartment is provided with a cock to control the escape of water from it. The bottom of the steam-drum rests on a frame arranged on the curb which incloses the millstones. By means of this improvement the steam may be admitted to all the grain-pipes by one and the same operation.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the diaphragm E, dividing the steam-drum A into two compartments, the steam-induction pipes H and I, and the perforated pipes D D, through which the grain traverses, substantially as and for the purpose herein set forth.

JOHN C. HUNT.

Witnesses:

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