

C. Sauter,

Degerminating Malt.

No. 111,686.

Patented Feb. 7. 1871.

Witnesses.
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Inventor.
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Attorneys.

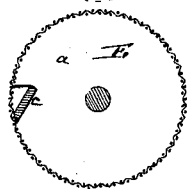
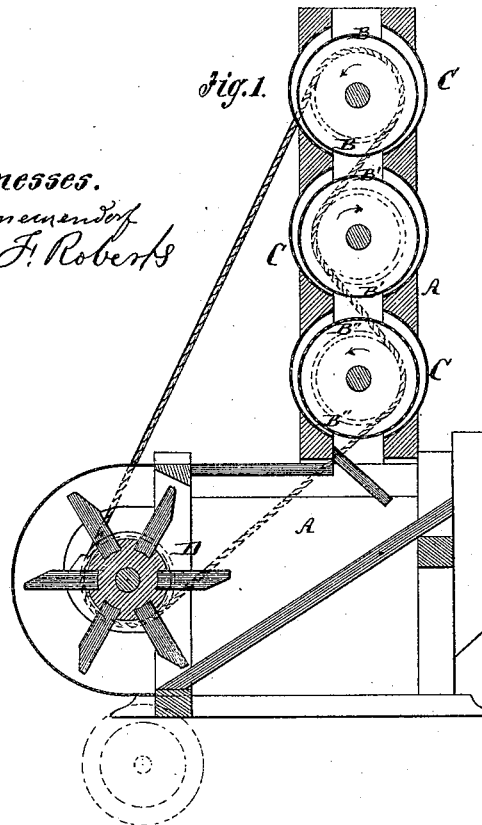


Fig. 2.

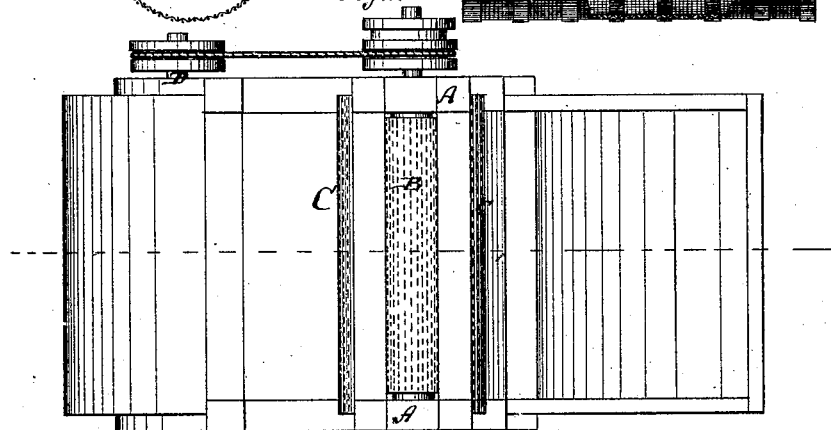


Fig. 3.

United States Patent Office.

CHARLES SAUTER, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
G. SCHÜTZ, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 111,686, dated February 7, 1871.

IMPROVEMENT IN MACHINES FOR DEGERMINATING MALT.

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, CHARLES SAUTER, of the city of New York, in the county and State of New York, have invented a new and Improved Machine for Degerminating Malt; 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.

Figure 1 represents a vertical transverse section of my improved degerminating machine.

Figure 2 is a plan or top view of the same.

Figure 3 is a detail side view, partly in section, of the separating-cylinder.

Similar letters of reference indicate corresponding parts.

This invention has for its object to construct a machine whereby the germs sprouting from grain during the conversion of the same into malt, can be conveniently broken off and separated from the grain, so that they will not enter the still during the process of brewing.

The invention consists chiefly in the use of a series of perforated cylinders revolving in opposite directions, for breaking off the germs, and also in the use of a peculiar distributing or separating-cylinder, for separating the malt from the germs, and from impurities with which it may have become mixed.

A in the drawing represents the frame of my improved machine.

In the upper part of the frame A are hung three or more cylinders B B' B'', made of perforated sheet-metal of that kind used on graters, with the rough surfaces on the outsides.

These cylinders are hung one above another, and are parallel with each other but revolved in opposite directions, as indicated by the arrows in fig. 1.

Each of the cylinders revolves in an outer case, C, made also of perforated sheet metal, as indicated.

The grain is, from a suitable distributor, hopper, or other apparatus, thrown upon the upper cylinder B, and is carried around by the same and thrown upon the cylinder B'. The sudden reversed motion thus imparted to the grain agitates the same to such a degree that the germs will become separated by direct

friction on the cylinder, but also by the violent contact of the several articles of grain with each other. The same effect is produced when the grain is transferred to the cylinder B'', and can be continued by the use of a suitable larger number of such cylinders.

From the cylinders aforesaid the grain drops into a suitable receptacle, being on its way separated from the germs and light impurities by the action of a rotary fan, D.

From the above apparatus the grain falls into a receptacle in which there is hung a cylinder, E, made of wire-gauze or other suitable perforated material, and divided by a series of transverse partitions *a a a*, into seven more or less compartments, of which each has a special grade of gauze.

The cylinder has at one end a dipper or scoop, *b*, by which once during each revolution the grain is dipped into the first compartment 1. There it is rotated and the particles of dust or dirt and the germs fall out through the meshes of the gauze, while the grain is, after one revolution, discharged into the next compartment 2 through an aperture in the partition.

To this aperture the grain is conducted by a transverse slanting plate, *c*, shown in fig. 3. In the same manner the grain is passed through all the compartments of the cylinder E, and finally discharged through an opening, *e*, in a perfectly clean state.

The several grades of gauze are so adjusted as to gradually separate from the grain all the impurities combined with the same.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The cylinders B B' B'', arranged one above another and rotated in opposite directions, as set forth, for the purpose of breaking the germs off the grain, substantially as specified.

2. The separating-cylinder E, divided by partitions *a*, which are perforated and connected with slanting discharge-plates *c*, substantially as herein shown and described, to operate as set forth.

CHARLES SAUTER.

Witnesses:

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