

(No Model.)

F. B. GIESLER.
GRAIN TREATING APPARATUS.

No. 482,790.

Patented Sept. 20, 1892.

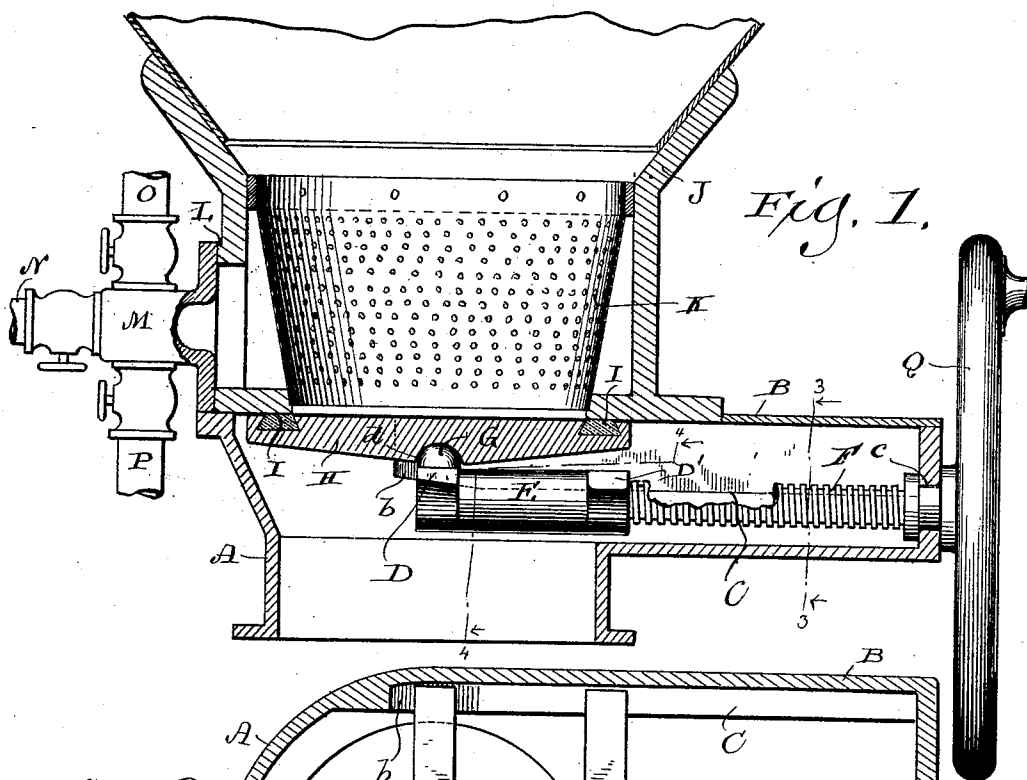


Fig. 2.

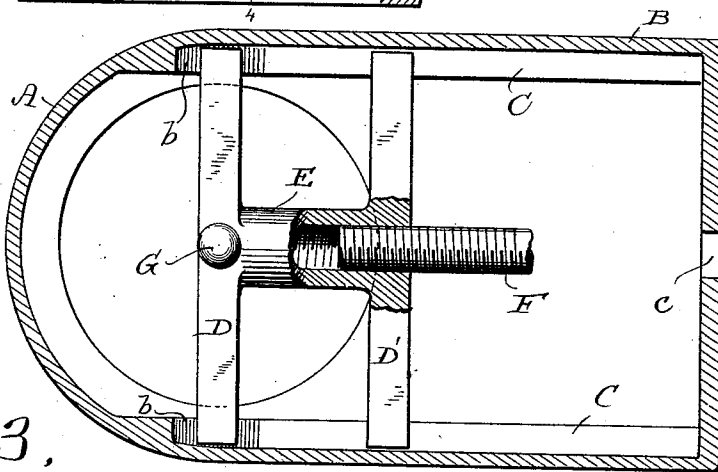


Fig. 3.

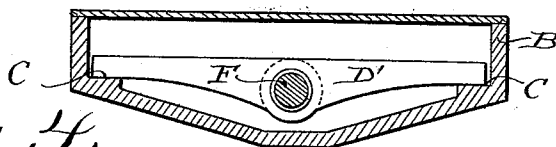
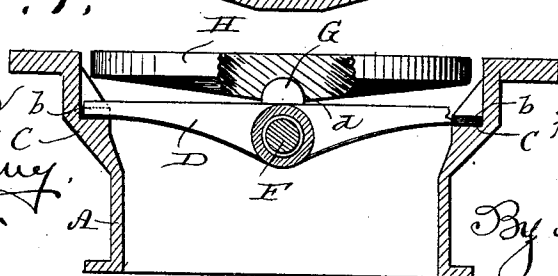


Fig. 4.



Witnesses
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FRANKLIN B. GIESLER, OF MILWAUKEE, WISCONSIN.

GRAIN-TREATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 482,790, dated September 20, 1892.

Application filed July 11, 1891. Serial No. 399,157. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN B. GIESLER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Grain-Treating Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object the accomplishment of results hereinafter described; and it consists in certain peculiarities of construction and combination of parts to be specified in connection with the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a vertical transverse section of a portion of a grain-steeping tank provided with my improvements, certain of the parts being broken for the purpose of better illustration; Fig. 2, a horizontal section of the lower portion of the structure having certain of the parts broken; and Figs. 3 and 4, sections, respectively, taken on lines 3-3 and 4-4 of Fig. 1.

Referring by letter to the drawings, A represents a cylindrical base provided with an angular extension B, the latter having horizontal guide-tracks C for transverse bars D D', that are united by an internally-screw-threaded sleeve E to form what may be termed a "cross-head." The inner ends *b* of the tracks C are given a rise for a certain distance, and the sleeve E of the cross-head engages a screw-rod F, the outer non-threaded end of this rod being loose in a bearing *c* in the adjacent end of the base extension B above described.

Centrally arranged on the bar D of the cross-head is a knob G for engagement with a corresponding recess *d* in the under side of a plate H, and fitted in the upper side of this plate is a gasket I, of any suitable material, said plate and the gasket forming a valve for the open lower end of a hopper, tank, or other receptacle J, that is supported on the base A, above described.

The receptacle J shown in the drawings is designed as a tank for grain that is to be steeped in the process of malting, and this tank is provided at the bottom with an in-

closed but removable open-ended draining-section K of suitable foraminous material. The lower portion of the tank is also provided with a nozzle L, the latter being connected to one branch of cross-shaped coupling M, the remaining branches of this coupling being joined to pipes N O P.

The pipe N is designed for connection with a source of water-supply, the pipe O with a source of compressed-air supply, while the pipe P is for the purpose of carrying off waste water from the tank.

The cross-head-actuating screw-rod F is shown in Fig. 1 as being provided with a crank or wheel Q, and the latter being rotated said rod, having no movement in a longitudinal direction, will by its revolution draw or push upon the cross-head on which the plate or valve H is supported. When the cross-head is moved in, the risers *b* on the tracks C will cause it to cant sufficiently to force the valve H tight against the bottom of the opposing receptacle; but on the reverse movement said cross-head comes to a horizontal position, and thus said valve will be loosened from its seat and free to move outward with the aforesaid cross-head. By having the valve move transverse to the flow of material from the adjacent receptacle said flow may be cut off at any time, this being a very great advantage over ordinary grain-valves. The valve being again against its seat and the tank J filled with grain to be cleaned and steeped, water is let on through the pipe N and nozzle L, and this water rising through the foraminous section K into said tank carries with it the dirt and light particles to a suitable overflow, (not shown,) after which the water is cut off, and after the grain has steeped for a certain time compressed air is let on through the pipe O and said nozzle to cause an agitation of the grain, whereby the impurities and scum are brought to the surface. This latter operation being completed, the compressed air is cut off and water again let on to rinse the grain, after which the water is again cut off and the waste-pipe P opened to drain the tank. The water having drained from the grain, the valve H is actuated to open the lower end of the tank

and said grain discharges itself by gravity. By having the foraminous section of the tank removable it can be readily cleaned in case the openings therein become clogged.

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

1. The receptacle having a discharge-opening and tracks beyond the latter, in combination with a cross-head consisting of parallel bars mounted on the tracks and joined by a screw-threaded sleeve, a knob on one of the cross-head bars, a valve for said opening having a recess engaged by the knob, and a screw-rod engaging the sleeve, substantially as set forth.

2. The receptacle having a recess-opening and tracks beyond the latter, provided at one end with risers, in combination with a cross-head consisting of parallel bars mounted on the tracks and joined by a screw-threaded sleeve, a knob on one of the cross-head bars,

a valve for said opening having a recess engaged by a knob, and a screw-rod engaging the sleeve, substantially as set forth.

3. The combination of a grain-receptacle having an open-ended and inclosed foraminous portion as well as a valve-controlled discharge-opening below this foraminous portion, in combination with a water-pipe and air-pipe having a common inlet to the receptacle adjacent to said foraminous portion thereof, and a waste-pipe also in communication with the inlet for the water and air pipes, 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.

FRANKLIN B. GIESLER.

Witnesses:

H. G. UNDERWOOD,
WM. KLUG.