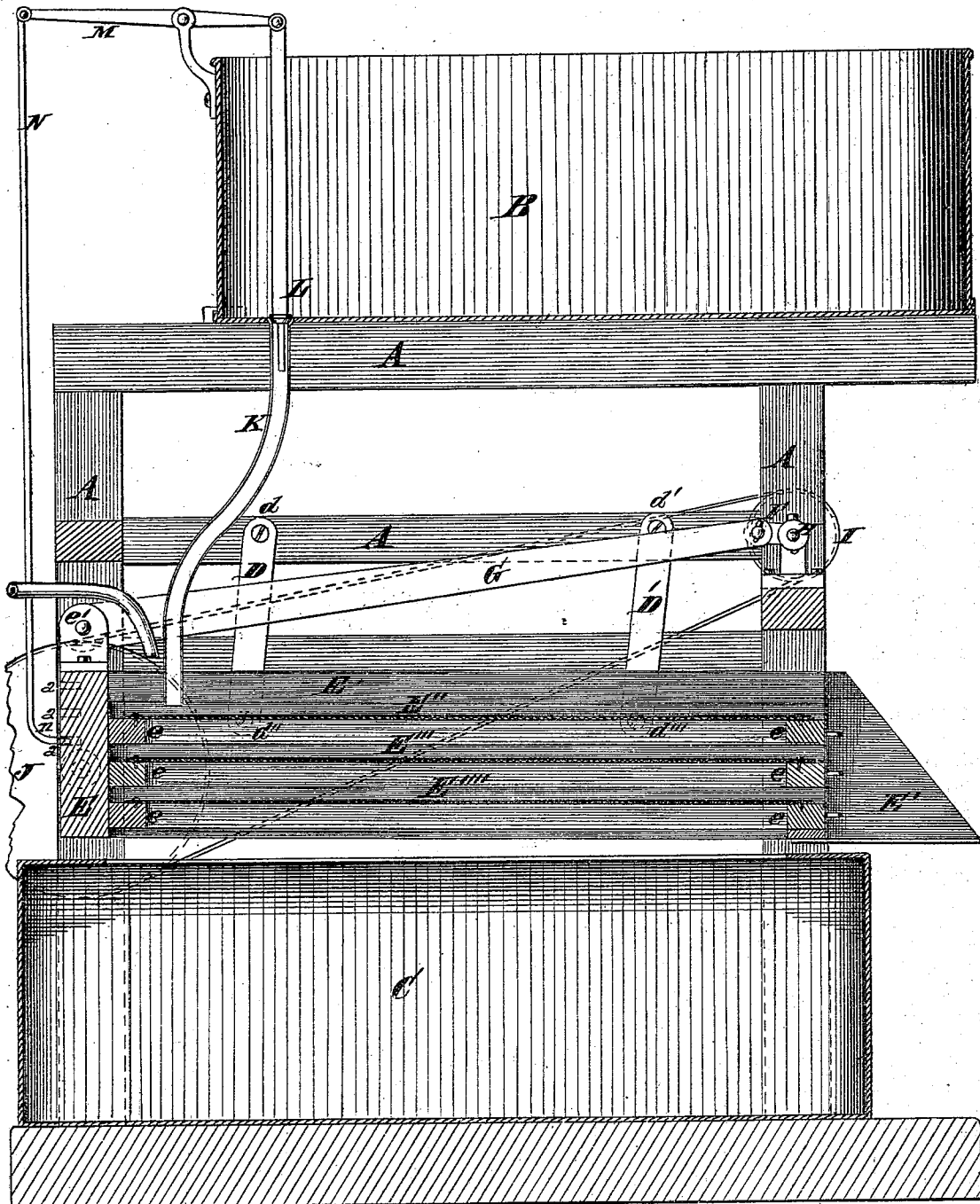


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Improvement in Apparatus for Separating and Collecting
Yeast from the Froth of Fermenting Tanks.

No. 125,945.

Patented April 23, 1872.



Attest
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UNITED STATES PATENT OFFICE.

CHARLES FLEISCHMANN, OF CINCINNATI, OHIO, ASSIGNOR TO FLEISCHMANN & CO., OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR SEPARATING AND COLLECTING YEAST FROM THE FROTH OF FERMENTING-TANKS.

Specification forming part of Letters Patent No. 124,945, dated April 23, 1872.

I, CHARLES FLEISCHMANN, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Yeast-Separator, of which the following is a specification:

Nature and Objects of Invention.

My invention relates to apparatus employed in the manufacture of yeast from the scum or froth thrown off in the fermentation of grain; and consists of a separator, which is so constructed and operated that it will separate the gluten and albumen or nitrogenized substance of the grain, constituting pure yeast, from the husks or other foreign substances contained in the froth or scum aforesaid.

Description of the Accompanying Drawing.

The accompanying drawing is a vertical section of a machine constituting my invention.

General Description.

A is the frame of the machine, which is surmounted by a vessel, B, in which the scum or froth is first received from the fermenters by pump or otherwise. C is a vessel in which the yeast is received after separation. To the swinging arms DD', which are pivoted to the frame at *d d'*, a reciprocating separator, E, is attached at points *d'' d'''*, which has a series of cross-strips, *e*, supporting a series of pans, E'' E''' E''', whose bottoms are sieves gradually increasing in fineness from the top to the bottom, the pure yeast having to pass through the finest E'''' in order to reach the vessel C. The separator is so hung that the sieves are inclined, and they all unite in a common discharging-chute, E', for the husks and other refuse matter, the rapid discharge of the said husks, &c., being facilitated by a current of water over the sieves. When necessary the flow of water may be regulated so as to admit a greater or less quantity, and if it is received from a hydrant this regulation

is effected by the adjusting of a common faucet. The water is allowed to flow onto the sieve E'' through any suitable pipe, P, the point of delivery being adjacent to the point of delivery of the scum or froth, which, as shown, is at the bottom of the pipe K. The pipe K, which conveys the scum or froth onto the sieve, is governed by a valve, L, which is operated by lever M and rod N, and retained in any position by the end *n* and series of apertures *a* in frame A. The sieves E'' E''' are made of wire-gauze, and the sieve E'''' of silk. The chute E', for the discharge of husks, &c., is arranged to empty into or communicate with any suitable receptacle. The separator E has a rapid reciprocating motion imparted to it by means of pitman G connected to the separator at *e'*, crank F, shaft H, pulleys I J, and suitable power, and the action of the same may be regulated, in the matter of the time required to separate a given quantity, by degree of inclination given to the sieves, or the speed of the reciprocating motion.

Claim.

A reciprocating sieve-separator, E, operating, in connection with suitable vessels for delivering the froth or scum thrown off in the fermentation of grain and receiving the pure yeast, in such a way as to separate the gluten and albumen or nitrogenized substance of the grain, constituting the pure yeast aforesaid, from the husks or other refuse matter, substantially as set forth.

In testimony of which invention I hereunto set my hand.

CHAS. FLEISCHMANN.

Witnesses:

FRANK MILLWARD,
JAMES W. GOFF.