No. 801,825. PATENTED OCT. 10, 1905.

J. CIHALEWSKI.

SIEVE.

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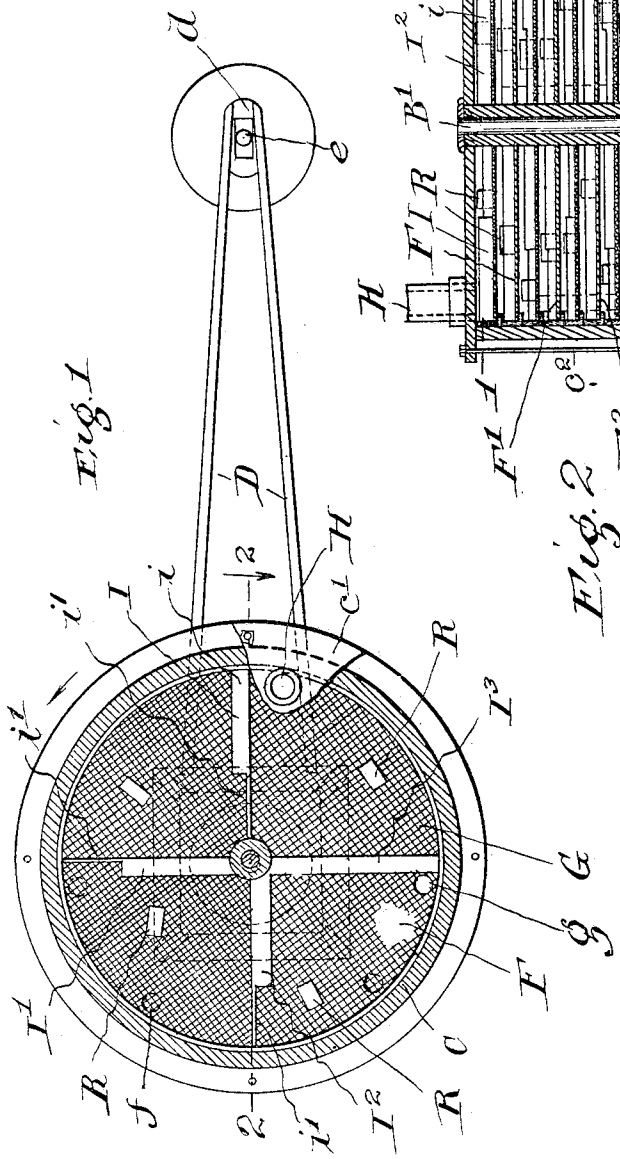

Fig. 1

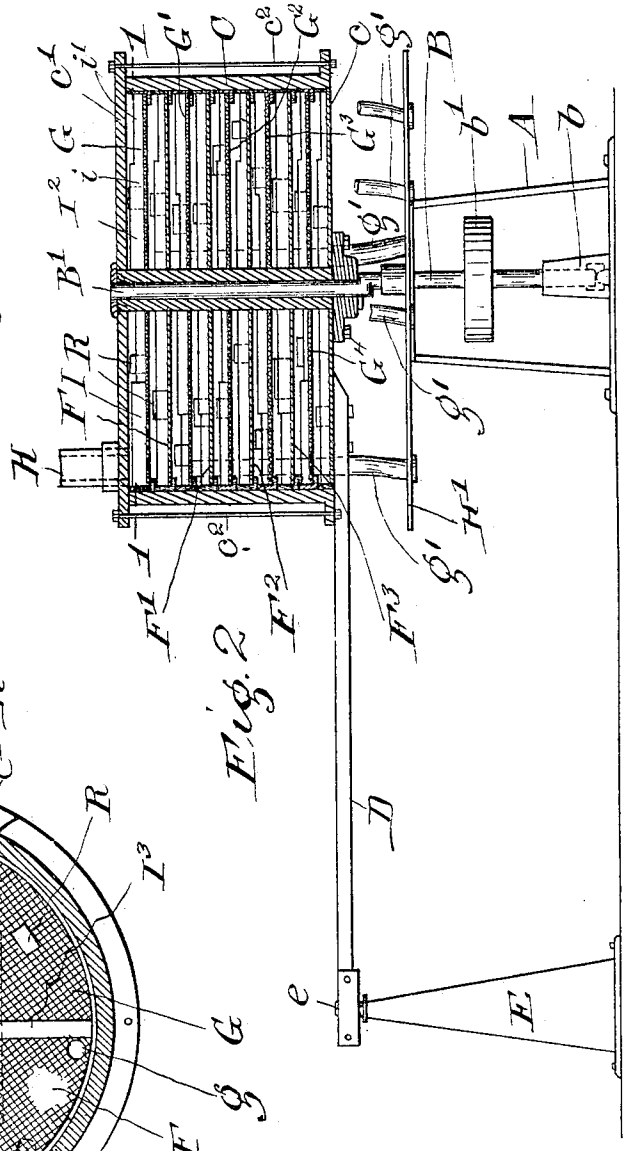

Fig. 2

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UNITED STATES PATENT OFFICE.

JULIJAN CIHALEWSKI, OF CHICAGO, ILLINOIS, ASSIGNOR TO J. CIHALEWSKI FARM MILL MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SIEVE.

No. 801,825. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed December 29, 1904. Serial No. 238,717.

To all whom it may concern:

Be it known that I, JULIJAN CIHALEWSKI, a subject of the Emperor of Austria-Hungary, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sieves, of which the following is a specification.

My invention relates to certain new and useful improvements in sieves; and its object is to produce a device of this class which shall have certain advantages which will appear more fully and at large in the course of this specification.

To this end my invention consists in certain novel features which are shown in the accompanying drawings as embodied in my preferred form of construction.

In the aforesaid drawings, Figure 1 is a view, partly in plan and partly in horizontal section, the line of section being indicated at line 1 1 of Fig 2; and Fig. 2 is a vertical longitudinal section taken in the line 2 2 of Fig. 1 looking in the direction of the arrow.

In the views, A represents a standard in which is journaled a shaft B, a thrust-bearing *b* being provided at the lower end of the standard to receive the shaft. A pulley *b'* is mounted upon the shaft by means of which the sieve is operated. Eccentrically disposed with reference to the shaft B is a crank-shaft B', which extends through a sleeve of the sieve proper and gives it its gyroscopic action. The framework of this sieve consists in a cylindrical casing C, having a bottom *c* and a removable top *c'*, bolted thereto by means of bolts c^2. To the bottom of the casing are secured two flexible arms D, which converge toward each other and are connected by a block *d*, which is slotted to receive a pin *e*, extending upward from a standard E. The rotation of the shaft B will gyrate the sieve, the arms D preventing its rotation upon the shaft.

Within the casing C are a series of false bottoms F F' F^2 F^3, each of which is provided with an opening *f*, through which the grain or meal may run out onto the sieve below. Between these false bottoms are sieves G G' G^2 G^3 G^4, the uppermost sieve G being of very coarse mesh, the lowest one of fine mesh, and the ones in between graduating from the coarsest to the finest mesh. In each sieve is an opening *g*, connected with a flexible tube *g'*, adapted to conduct the coarser parts away which do not sift through the sieve, so that from each sieve the coarse material will be separated and carried away into suitable receptacles therefor.

H represents the inlet-pipe through which the material is fed to the sieve, and H' a table through which the outlet-tubes pass.

I I' I^2 I^3 are radially-extending arms lying above the sieves, the portions *i* of which extend almost to the false bottoms above, and the portions *i'* of which are narrower than the portions *i*, thereby affording a restricted passage from one side of the arm to the other.

Upon the false bottoms are laid cubes R, of rubber or other like material, which roll around in the meal and bump against the sieves, so as to agitate or jolt them.

The device is used for separating grain or meal, and the operation is as follows: The grain flows in through the inlet H onto the sieve G, where it is shaken through the gyration of the sieve, and the finer particles pass through the sieve, which is of course the coarsest one of the series, while part of the mass which flows onto the sieve works its way through the restricted passages formed by the arms I I' I^2 until the coarser portions which are unable to pass through the sieve reach the opening *g* and pass out through the tube *g'* and into any suitable receptacle provided therefor. The mass which has passed through the finest sieve shakes around upon the bottom F and eventually passes through the opening *f* therein and onto the sieve G', which is a finer sieve than the sieve G, and the operation at this point is exactly as it was in the sieve above, the coarser stuff passing out through the opening *g* in the sieve and out through outlet-tubes. In this way different grades of grain or meal are separated from each other and pass out through the outlet-tubes, the coarsest passing out from the uppermost sieve and the finest from the lowest sieve.

I realize that considerable variation is possible in the details of this construction without departing from the spirit of the invention, and I therefore do not intend to limit myself to the specific form herein shown and described.

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

1. In a device of the class described, the combination with a standard, of a vertical shaft journaled therein, a separating-sieve eccentrically mounted upon said shaft, sieves of varying mesh graduating from a coarse mesh at the top to a fine mesh at the bottom supported in said sieve, means for conducting the coarser material away from each sieve, a radially-extending guiding-arm and a guide upon which the end of said arm is guided.

2. In a device of the class described, the combination with a standard, of a vertical shaft journaled therein, a separating-sieve eccentrically mounted upon said shaft, sieves of varying mesh graduating from a coarse mesh at the top to a fine mesh at the bottom supported in said sieve, means for conducting the coarser material away from each sieve, a radially-extending arm provided with a slot in its end and a standard having a pin entering the slot and adapted to guide the movement of the arm.

3. In a device of the class described, the combination with a standard, of a vertical shaft journaled therein, a separating-sieve eccentrically mounted upon said shaft, sieves of varying mesh graduating from a coarse mesh at the top to a fine mesh at the bottom supported in said sieve, means for conducting the coarser material away from each sieve, a radially-extending flexible arm provided with a slot in its end and a standard having a pin running in said slot and adapted to guide the movement of said arm.

In witness whereof I have signed the above application for Letters Patent, at Chicago, in the county of Cook and State of Illinois, this 27th day of December, A. D. 1904.

JULIJAN CIHALEWSKI.

Witnesses:

GEO. M. MAYER,

CHAS. O. SHERVEY.