

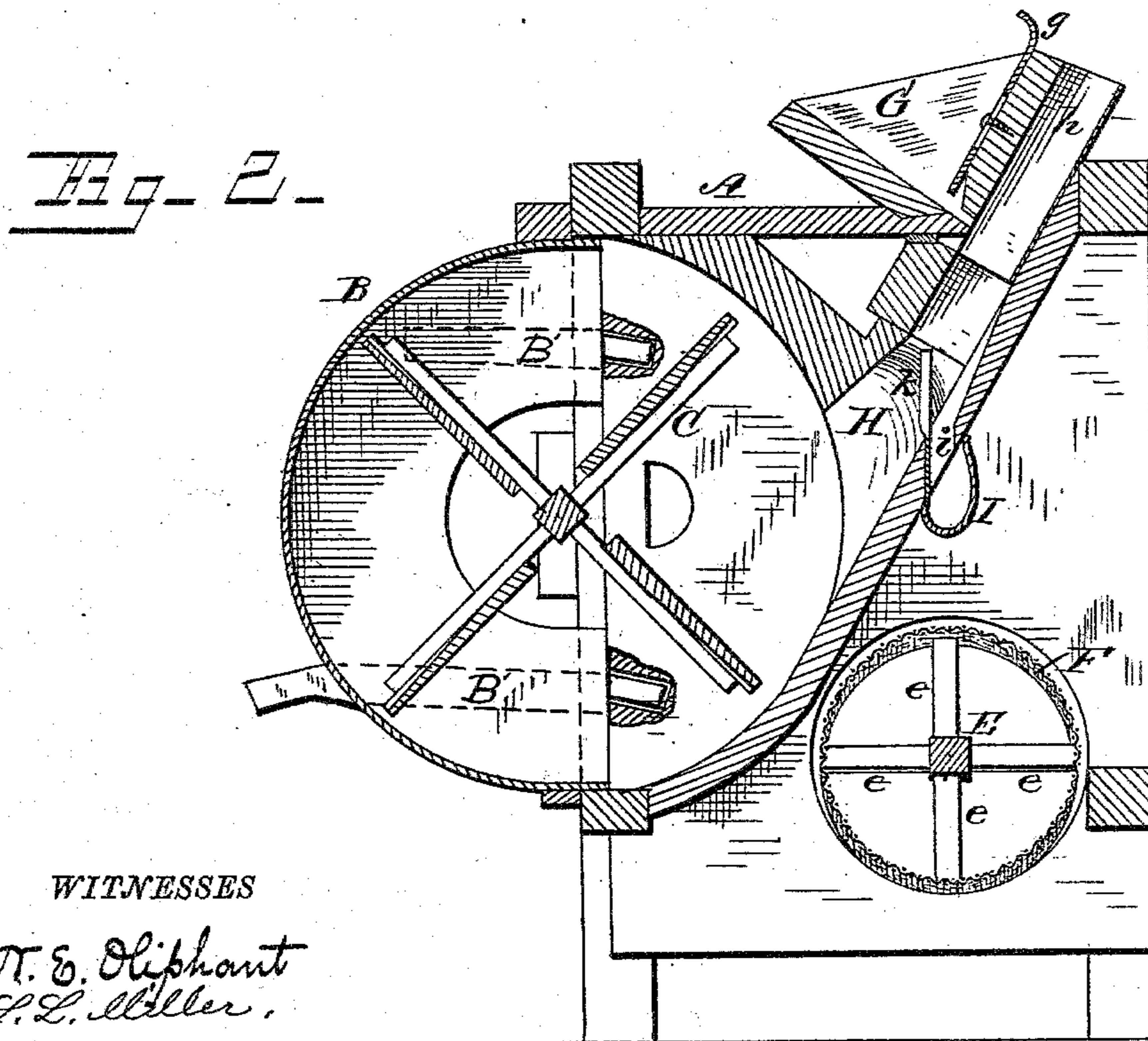
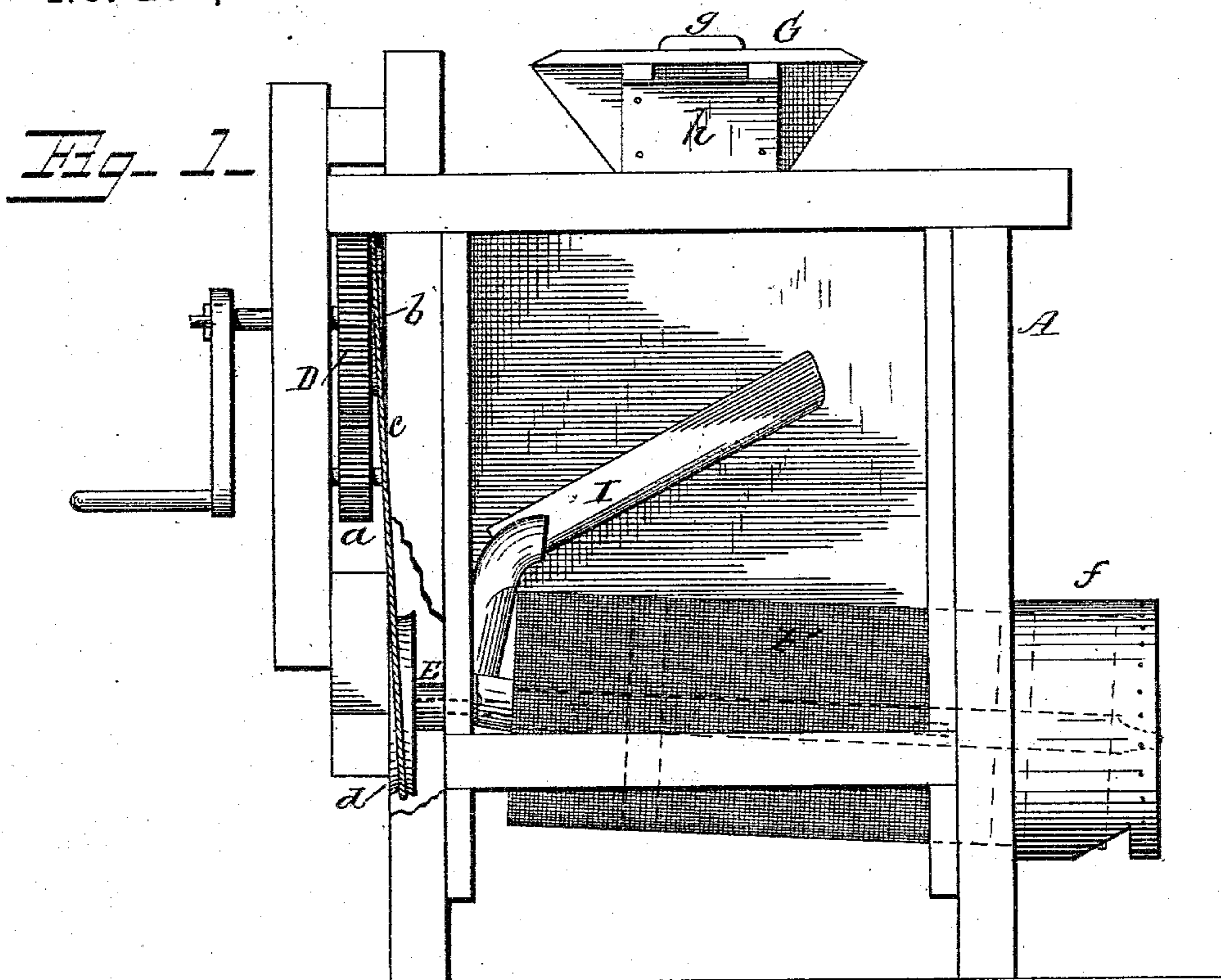
(No Model.)

J. E. CUMMINS.

GRAIN CLEANER.

No. 274,468.

Patented Mar. 27, 1883.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN E. CUMMINS, OF ARLINGTON, KENTUCKY.

## GRAIN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 274,468, dated March 27, 1883.

Application filed January 10, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN E. CUMMINS, a citizen of the United States, residing at Arlington, in the county of Ballard and State of Kentucky, have invented certain new and useful Improvements in Grain-Cleaners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is an end view of my invention in elevation, and Fig. 2 a longitudinal vertical section of the same.

This invention relates to certain new and useful improvements in machines for cleansing grain, its object being to provide a device of this character whereby the smut, cheat, cockle, weevil, and other impurities may be thoroughly removed therefrom at one operation, and at the same time separate the small and faulty kernels from the larger, thereby leaving the grain in the best possible condition for grinding. These objects I attain by the construction substantially as illustrated in the accompanying drawings and hereinafter described.

In the drawings, A represents a suitable frame or box provided with a removable hood, B, said hood having arms B' upon its sides, which enter slots formed in the frame to support the hood, and also admit of its being detached from the frame when required. Revolving within this frame and hood is the usual fan, C, having at one end of its shaft a small gear-wheel, *a*, meshing with a larger or driving gear-wheel, D, provided with a belt-pulley, *b*, over which passes a belt, *c*, operating a pulley, *d*, connected rigidly in any suitable manner, either keyed or otherwise, to an inclined shaft, E, at the lower end of the frame or box A. This shaft E is provided with radial arms *e*, having secured thereto and rotating therewith a suitable sieve, F, extending outwardly from one side of the frame or box a suitable distance, and this extension protected by a cap, *f*, open upon its under side to allow the cleansed grain to fall into a receptacle placed thereunder.

The grain to be cleansed is placed in a hopper, G, set in the top of the frame or box, and its feed regulated by means of a slide, *g*, upon the interior of said hopper. This hopper G is also provided with an extension, *h*, registering with and forming part of a chute H, through which the current of air caused by the rapid revolution of the fan finds its exit, carrying with it the chaff, cheat, smut, and other light impurities as the grain descends from the hopper and falls through an outlet, *i*, into an inclined spout, I, by which it finds its way into a rotating sieve, F, a suitable screen, consisting of a series of fingers, *k*, extending upward into the chute at its outlet *i* to the spout, said screen being in the form of a comb, so as to more readily cause the grain to fall into said spout and at the same time not impede the blast from the fan. The grain, after entering the rotating sieve F, is separated from the cockle and other impurities not removed by the blast, and at the same time the small and faulty kernels are shook out through the meshes of the sieve, while the larger ones pass out at the outer protected end thereof into a receptacle placed there for their reception, said grain being thus thoroughly cleansed of all impurities and imperfections and left in the best possible condition for grinding at one operation, the machine being driven by a crank or other suitable power.

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

In a grain-cleaner, the chute H, having an outlet, *i*, and an interposed upwardly-extending screen, *k*, in combination with the frame or box A, hopper G, inclined spout I, sieve F, and fan C, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN E. CUMMINS.

Witnesses:

SAMUEL H. JENKINS,  
S. P. VAUGHN.