C. SCHASCHUE.

Grain Scouring-Machine.

No. 207,307. Patented Aug. 20, 1878.

Fig. 1.

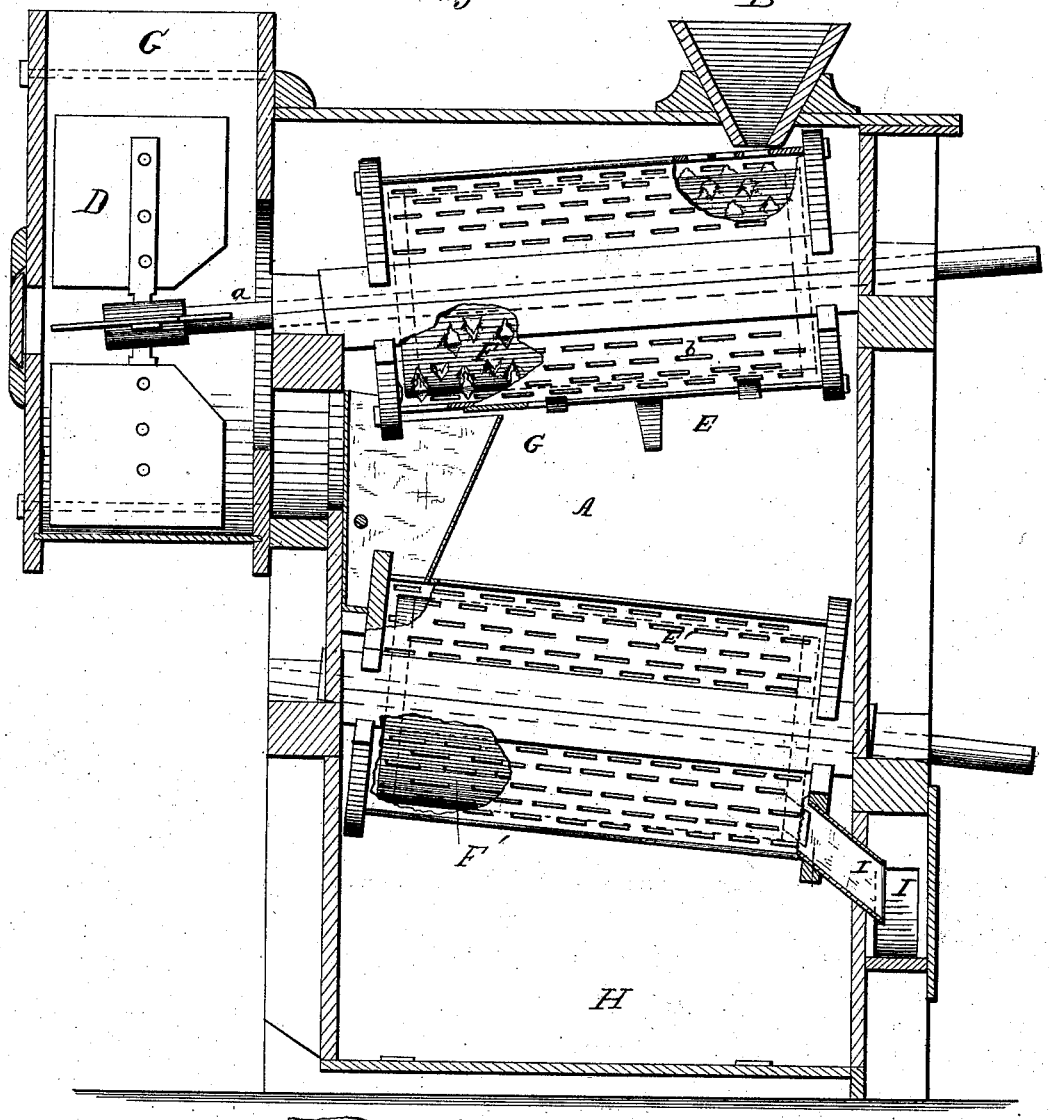


Fig. 3.

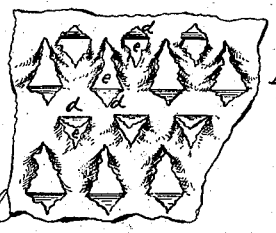
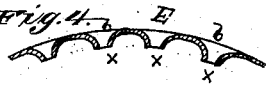


Fig. 4.



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2 Sheets—Sheet 2

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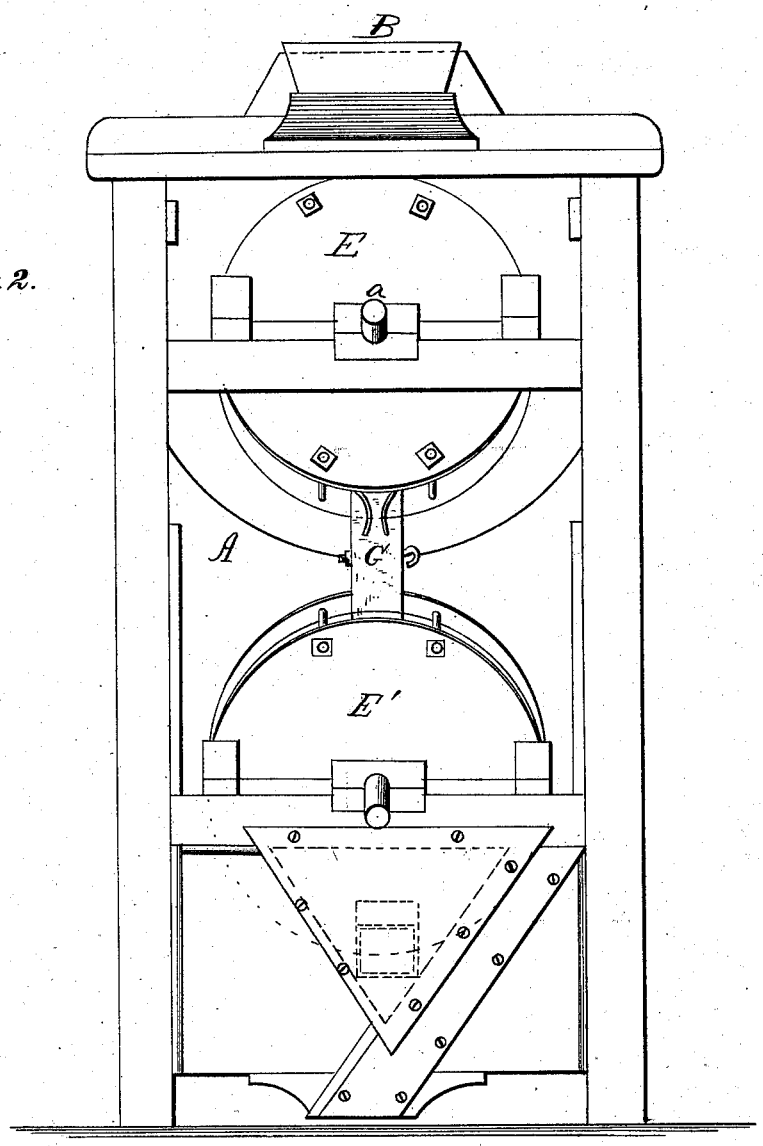
Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES SCHASCHUE, OF RONDOUT, NEW YORK.

IMPROVEMENT IN GRAIN-SCOURING MACHINES.

Specification forming part of Letters Patent No. **207,307**, dated August 20, 1878; application filed July 10, 1878.

To all whom it may concern:

Be it known that I, CHARLES SCHASCHUE, of Rondout, in the State of New York, have invented certain new and useful Improvements in Machines for Hulling Grain; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a grain-huller, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal vertical section of my machine. Fig. 2 is an end elevation of the same. Figs. 3 and 4 are detailed views.

A represents the frame-work of my machine, which is entirely closed, so that the suction of the fan can operate fully upon the grain as it passes through the machine. At the top, near one end, is the hopper B, through which the grain is fed to the machine, and at the opposite end of the frame is the fan-case C, which contains the fan D. This fan is secured on the lower end of a slightly-inclined shaft, *a*, which passes through a stationary cylinder, E, within the frame A. This cylinder is made of Russia iron and provided with longitudinal rows of elongated perforations *b b*, the rough edges of which extend inward, as shown at *x* in Fig. 4.

Within the stationary cylinder E, on the shaft *a*, is secured a wooden cylinder faced with iron at the ends and covered with English steel F, having triangular perforations *e*, the lips *d* from said perforations, as well as the rough edges, extending outward. This cylinder F revolves at a rate of from three to seven hundred revolutions per minute inside the stationary cylinder E. These cylinders are slanted enough to let the grain which enters from the hopper B at the upper end of the cylinder E pass gradually down to the opposite end, and as cleaned grain run out at that end.

Under the stationary cylinder E is a slide, G, which regulates the expulsion of the grain, and by its operation the grain can be more firmly pressed against the cylinders, as some grain requires more friction than other.

This machine has two other cylinders, E′ F′, similar to the two first and slanting in an opposite direction. The second set of cylinders is placed below the first set, and the grain passes from the upper to the lower. The inner cylinder, F′, is covered with Russia iron, with wings which drive the dust and chaff out of the cylinder, and this cylinder revolves at the rate of from three to seven hundred revolutions per minute. The cylinders can be made of any desired length, at the option of the miller.

The fan D sucks off and expels all the dust, chaff, &c.

With this machine the grain will be cleaned, scoured, and hulled, and separated from all refuse matter in a thorough and efficient manner. The cylinders being nearly horizontal give the grain more surface to go over.

The steel cylinder F, having triangular perforations, with the rough edges extending outward, and each perforation forming three or more points, which thoroughly clean the grain and direct the grain so as to go over the length of the kernel and get into the crack or indentation of the kernel, thus cleans out all dirt and other foreign substances therein.

The machine entirely divests the grain of its rough outside covering, which, if not gotten rid of, will have a deleterious effect on the flour, and will cause the millstones to become easily heated. It also removes the fuzz of the grain, which, if left with the grain, will clog and stop up the bolting-cloth.

From the lower set of cylinders the grain passes out through the spout I, while the refuse matter not drawn out by the fan collects in a bottom chamber, H.

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

1. The revolving cylinder F, provided with triangular perforations *e* and lips *d*, having their rough edges outward, in combination with the stationary cylinder E, having elongated perforations *b*, with their rough edges *x* inward, substantially as and for the purposes herein set forth.

2. The combination of the revolving cylinder F, having triangular perforations *e* and lips *d*, the exterior stationary cylinder E, having elongated perforations *b*, the cylinders E′ F′, fan D, slide G, and the frame with hoppers and spout, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES SCHASCHUE.

Witnesses:
GEORGE WEBER,
E. KEATON.