

F. IHLENFELDT.

Smut Mill.

No. 103,049.

Patented May 17, 1870.

Fig. 1.

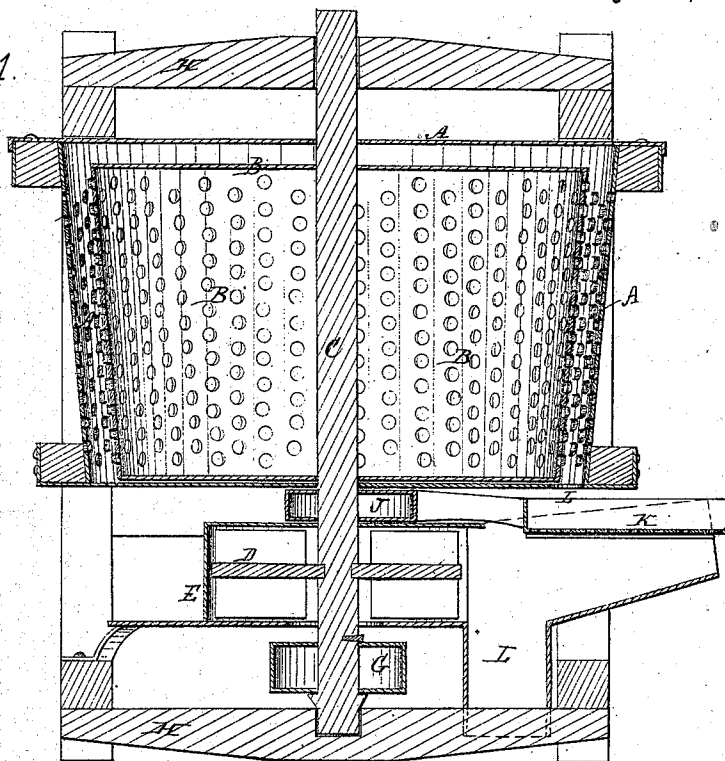
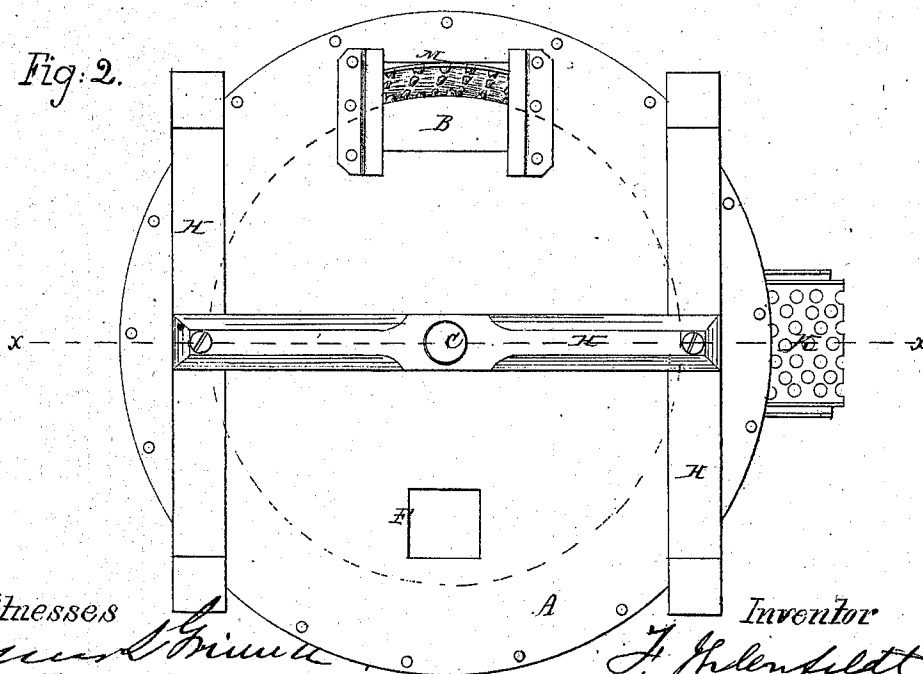


Fig. 2.



Witnesses
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FRED IHLENFELDT, OF LE ROY, ILLINOIS.

Letters Patent No. 103,049, dated May 17, 1870.

IMPROVEMENT IN SMUT-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FRED IHLENFELDT, of the town of Le Roy, county of McLean and State of Illinois, have invented a new and useful Improvement in Smut-Machines; and I do hereby declare that the following is a clear, full, and exact description of the construction and operation of the same, reference being had to the accompanying drawings and letters of reference marked thereon, in which drawings—

Figure 1 is a vertical section through the center of machine, taken at the line *x x*, fig. 2.

Figure 2 is a top view of the same.

The nature of my invention relates to an improved arrangement of parts, and which parts consist principally of a drum or external case, of a conical shape, with an interior revolving cylinder of like shape, but of smaller diameter, a sifter, fan, pulley, eccentric cam, and operating-shaft.

To enable others skilled in the art to make and use said invention, I will proceed to describe the various parts in detail of which it is composed, and my improved arrangement of the same for operation, as hereinafter described.

A, in the drawings represents the outer case or drum, burred inwardly.

B, the revolving cylinder, burred outwardly.

C, vertical spindle or shaft, terminating in bearings in the frame-work H.

E, fan-case.

D, fans.

G, band-pulley, attached to the shaft, operated in the usual manner by horse or other power, communicating revolving motion to the inner cylinder B.

J, eccentric upon said shaft C, connecting with and imparting a compound vibratory motion to the sifter K.

L, aperture in the bottom of the drum, directly above the sifter, through which the grain passes, where, by the fan-blower D, it is cleansed of chaff and other impurities, the grain now passing through the perforations of the sifter K, and entering through the funnel or tube L into a receptacle below.

The operation is as follows:

The grain to be scoured is passed into the opening M on the top of the drum, passing down through the circular inclined burred chamber, formed between the drum and revolving cylinder, where it comes into repeated contact, in its passage downward, with the burs of each, necessarily and effectually scouring it, a portion of the lighter impurities, such as dust, &c., being driven by the upward current of air out through the opening F on the top of the drum, and the remainder being thoroughly sifted and separated from the grain, and thrown off from the sifter K by means of fan D, and the compound reciprocal and vibratory motion of said sifter imparted to it through the medium of cam J on shaft C.

Having thus fully described my invention,

I wish it to be distinctly understood that I do not claim as new the several devices above described, nor any general combination of the same; but

What I do claim as new, and desire to secure by Letters Patent, is—

The improved arrangement, in relation to the stationary drum A, revolving cylinder B, shaft C, fan-blower D, and pulley G, of the cam J and sifter K, operating in the manner and for the purpose set forth and described.

FRED IHLENFELDT.

Witnesses:

W. H. SOMERS,
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