

C. H. SINDERSON.
Middlings-Separator.

No. 202,198.

Patented April 9, 1878.

Fig. 1.

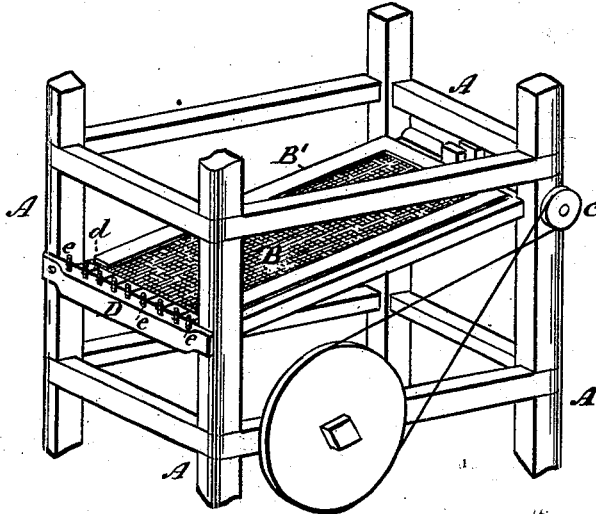


Fig. 2.

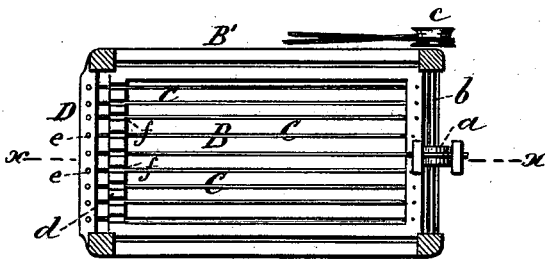
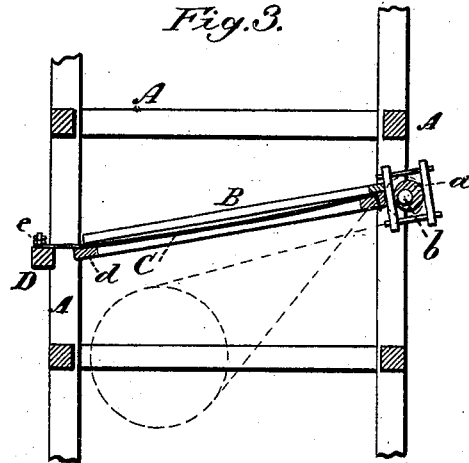


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES H. SINDERSON, OF CHEMUNG, ILLINOIS.

IMPROVEMENT IN MIDLINGS-SEPARATORS.

Specification forming part of Letters Patent No. **202,198**, dated April 9, 1878; application filed October 9, 1877.

To all whom it may concern:

Be it known that I, CHARLES H. SINDERSON, of Chemung, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Devices for Cleaning the Sieves of Middlings-Purifiers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of one of the sieves of a middlings-purifier with a portion of the frame of the purifier which has been furnished with my improvement. Fig. 2 is a view of the under side of the sieve, and Fig. 3 is a longitudinal section on the line *x x*.

Similar letters of reference indicate corresponding parts in all the figures.

My invention relates to devices for cleaning the sieves of middlings-purifiers and similar machinery of the same class used in milling and bolting, so as to prevent the sieves from getting clogged up or obstructed by coarser particles of the flour or middlings sticking in the cloth; and it consists in the combination, with the sieve, of a series of elastic beaters or whip-cords, operated by the vibrating or oscillating motion of the sieve, substantially as hereinafter more fully described, and pointed out in the claim.

In the drawings, A is the frame-work of the machine, in which the sieve B is hung in the usual manner, and operated by a cam, *a*, shaft *b*, and pulley *c*.

Suitably secured in the head of frame B' of sieve B, underneath the cloth, is a series of elastic bands or cords, (denoted by CCC,) extending the entire length of the sieve, parallel to each other, down to a cross-piece, D, in frame A, just back of the rail *d* of the sieve-frame. Into this cross-piece is inserted a number of keys, *e e e*, round which the ends of cords C are wound, so that by turning these

keys the cords may be tightened or loosened at will in the same manner as the cords in a piano-forte.

The rail *d* of the sieve-frame has a series of grooves, *f*, to allow cords C to pass under the cloth back to the keys in which they are fastened.

From the foregoing description, taken in connection with the drawings, the operation of my invention will be readily understood.

When the sieve is up to the head of the machine, the cords must be so governed by means of their keys that all the slack is out of them and they lie perfectly straight and close under the cloth. It follows that when the sieve moves down to the other end of frame against cross-piece D the cords C will have just as much slack as the sieve has play. Consequently, when the machine is in motion, these cords are at work whipping the cloth continually; and they can be made to strike the cloth lightly or heavily, as may be desired, by simply turning the keys *e* one way or the other; or they may be readily disengaged from the machine altogether, if desired.

I have found by practical experiment that, by my improvement, the capacity of a machine may be nearly doubled, as the cloth is kept clean and free from dust all the time, and clogging up is impossible; nor will there, if the whip cords are properly adjusted, be any perceptible wear on the cloth.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the sieve-frame B', elastic cords C, and cross-piece D, having keys *e*, substantially as and for the purpose herein shown and specified.

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

CHARLES HENRY SINDERSON.

Witnesses:

N. E. SLOCUM,
G. J. SINDERSON.