(No Model.)

D. E. SIBLEY.

GRAIN SCOURING MACHINE.

No. 457,380. Patented Aug. 11, 1891.

Fig. 1.

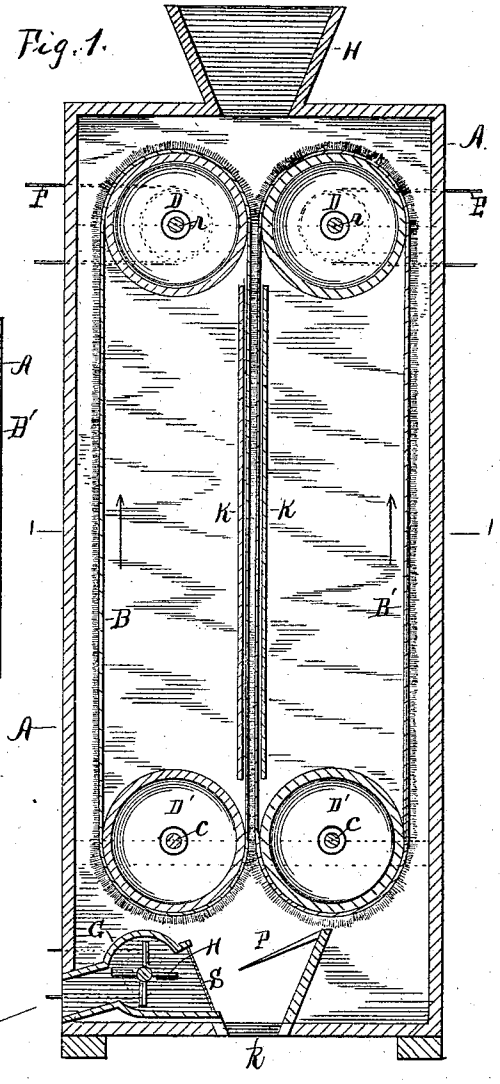


Fig. 2.

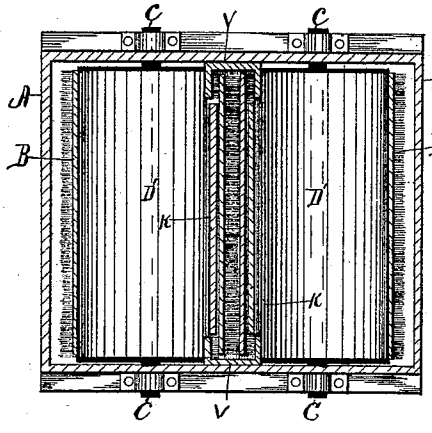
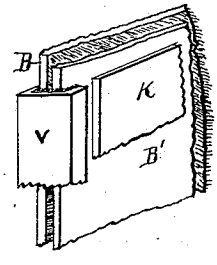


Fig. 3.



Witnesses
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DENNIS E. SIBLEY, OF CHICAGO, ILLINOIS.

GRAIN-SCOURING MACHINE.

SPECIFICATION forming part of Letters Patent No. 457,380, dated August 11, 1891.

Application filed April 20, 1891. Serial No. 389,539. (No model.)

To all whom it may concern:

Be it known that I, DENNIS E. SIBLEY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grain-Scouring Machines, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a central vertical section. Fig. 2 is a central horizontal section looking down; and Fig. 3 is a detail perspective view showing a section of the two brush-belts, the back board, and of the grooved inclosing strip for inclosing the two edges of the brush-belts.

This invention relates to certain improvements in grain-scouring machines, which improvements are fully set forth and explained in the following specification and claim.

Referring to the drawings, A represents the outer case of the machine, having an inlet-hopper H at its upper end and an exit R at its lower end for exit of the grain.

D D are a pair of drums or rollers arranged in the upper part of the machine and parallel with each other and a short distance apart. The outer ends of their respective shafts *r r* are provided with pulleys, (shown in the broken lines,) over which pass, respectively, the belts E and F for driving said drums D D. D′ D′ are a pair of similar drums arranged, respectively, parallel with drums D and in the lower part of the machine on their shafts *c*.

B and B′ are brush-belts arranged in a vertical line on the said drums D and D′ and in such close proximity with each other that their brushes intermesh with each other, and K K are back boards arranged, respectively, at the back of the brush-belts in their part, having their brushes intermeshed for the purpose of holding said brush-belts in contact with each other.

V V are grooved strips arranged so as to inclose, respectively, the two edges of the brush-belts in their part that is in contact for the purpose of preventing escape of grain from between the two brush-belts. These grooved strips are provided with brushes in their part in contact with the brush-belts to assist in scouring any grain that may come in contact with their brushes, and they are intended to be of sufficient length to inclose all that part of said belt-brushes that is in contact with each other and where grain is between them. The grain as it falls from between the brush-belts falls on a series of downwardly-inclined arms P, for the purpose of separating it and causing it to be deflected against a screen S, behind which is located a suction-fan H in a case G for the purpose of removing the scourings from the grain as it is descending through the exit R. It is intended that the brush-belts B and B′ shall be driven in the directions indicated by the arrows and that one shall be driven at a very much higher speed than the other and that their brushes shall be made of wire or other like stiff material, so as to have a decided action on the grain that passes between them.

In operation grain to be scoured is let into the machine from the inlet-hopper H, from which it falls between the two brush-belts B B′ and is carried down between them by the action of the brushes to the exit R below. As it is being carried down by means of said brushes it receives a very thorough and effective scouring in consequence of one of said brush-belts traveling at a much higher speed than the other. If desired, one of the brush-belts might travel in the opposite direction; but in such case it should travel slower than the other, so that it would not prevent the grain from being carried downward, as stated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

In the grain-scouring machine shown and described, the combination of the drums D D D′ D′, brush-belts B B′, back boards K K, and grooved brush-strips V for inclosing the edges of said brush-belts, substantially as and for the purpose set forth.

DENNIS E. SIBLEY.

Attest:

O. A. FAIREX,

DENNIS O'DAY.