(No Model.)

W. AGER.

GRAIN DECORTICATING APPARATUS.

No. 258,341. Patented May 23, 1882.

Fig 1.

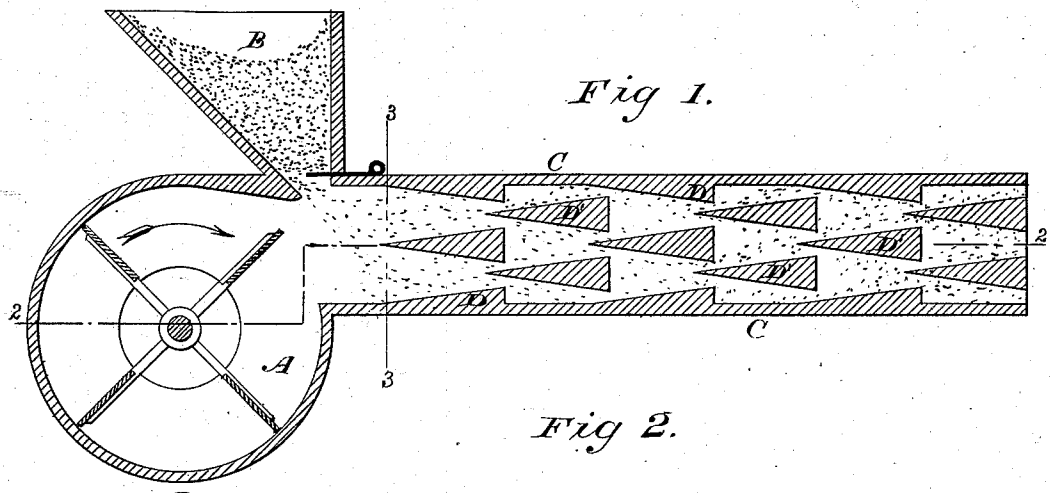


Fig 2.

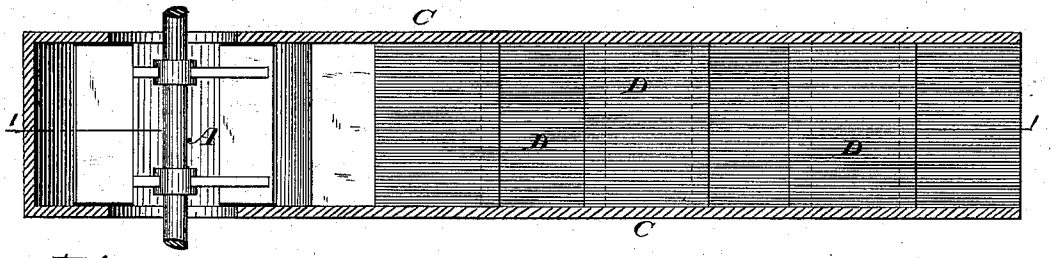


Fig 3

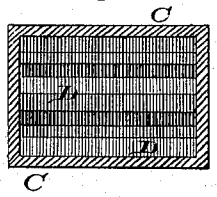


Fig. 6.

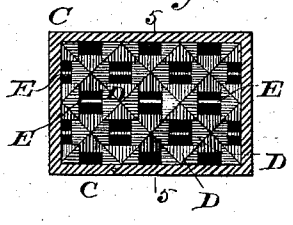


Fig 5.

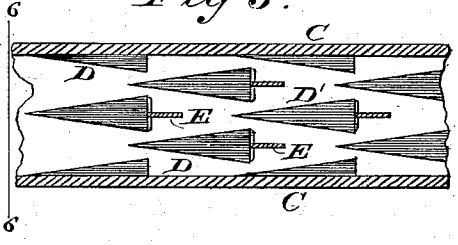


Fig 4.

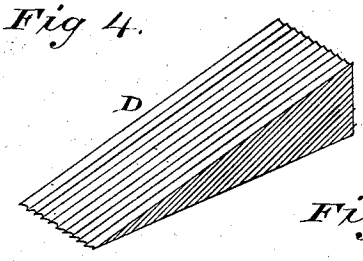


Fig 7.

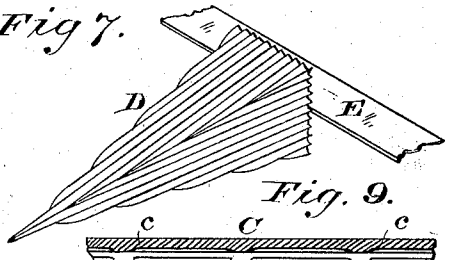


Fig 8.

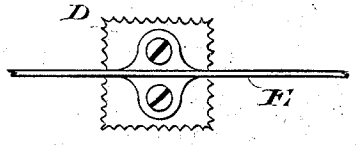
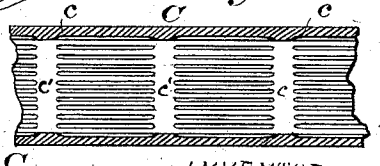


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILSON AGER, OF WASHINGTON, DISTRICT OF COLUMBIA.

GRAIN-DECORTICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 258,341, dated May 23, 1882.

Application filed January 31, 1881. Renewed November 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILSON AGER, of Washington, District of Columbia, have invented a new and useful Improvement in Apparatus for Decorticating Grain; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to certain improvements in apparatus for decorticating and cleaning grain and cereals of all descriptions and for cleaning rice and coffee.

The objects of my invention are to provide an apparatus by means of which the article to be decorticated and cleansed may be subjected to the abrasive action of a series of decorticating-surfaces, as more fully hereinafter specified. These objects I attain by the apparatus and devices illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section of my apparatus; Fig. 2, a horizontal section thereof; Fig. 3, a transverse section thereof; Fig. 4, a detached view of one of the decorticators; Fig. 5, a sectional view of a modification of my invention; Fig. 6, a transverse section of the same; Fig. 7, a detached perspective view of a modification of one of the decorticators; Fig. 8, a rear view of the same; and Fig. 9, a sectional view, showing a modification of the decorticating-surfaces.

The letter C indicates a box or chamber, which is set horizontally, and which may be of any suitable material and any desired size. The interior walls of said box or passage are provided with a series of inclined or beveled abrading-surfaces D, which are formed of emery or any other suitable decorticating or abrasive material.

The letter D′ indicates a series of pyramidal or wedge-shaped decorticators, located in the box C. These are formed of emery or other decorticating or abrasive material, and arranged, as clearly shown in Figs. 1 and 5 of the drawings, with their apices toward the hopper. The forward ends of the rear pyramids extend slightly beyond the bases of those next ahead, and so on throughout the series, the said pyramids alternating, as indicated in the drawings.

The decorticating-surfaces may be grooved or corrugated longitudinally, as indicated in Figs. 4, 7, and 8 of the drawings, and the decorticators D′ may be secured within the box or passage by means of the transverse bars E. As indicated in Fig. 9, the decorticating-corrugations are interrupted at intervals, as indicated by the letter *c′*, the terminations of such corrugations or grooves being rounded or made concave, so that the grain in rebounding from one series to the other will be thoroughly and effectively abraded on both sides and ends.

The letter B indicates a hopper through which the material is fed to the apparatus, and A a fan by means of which it is driven through the same, the blast generated and carrying the grain effectually preventing any gumming of the abrading-surfaces.

Instead of a blast-fan, it is evident that a suction-fan may be employed at the other end of the apparatus.

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

In an apparatus for decorticating rice, coffee, and cereals, the horizontal box or grain passage having a series of stationary beveled surfaces on its interior walls composed of abrasive material, and a series of stationary alternating and tapering decorticators, composed of similar material, located within the box, and a blast or exhaust fan, the whole being combined and arranged substantially as and for the purpose specified.

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

WILSON AGER.

Witnesses:

DANIEL BREED,

L. C. YOUNG.