

(No Model.)

H. PACKER.

CORN SHELLER.

No. 297,288.

Patented Apr. 22, 1884.

Fig. 1.

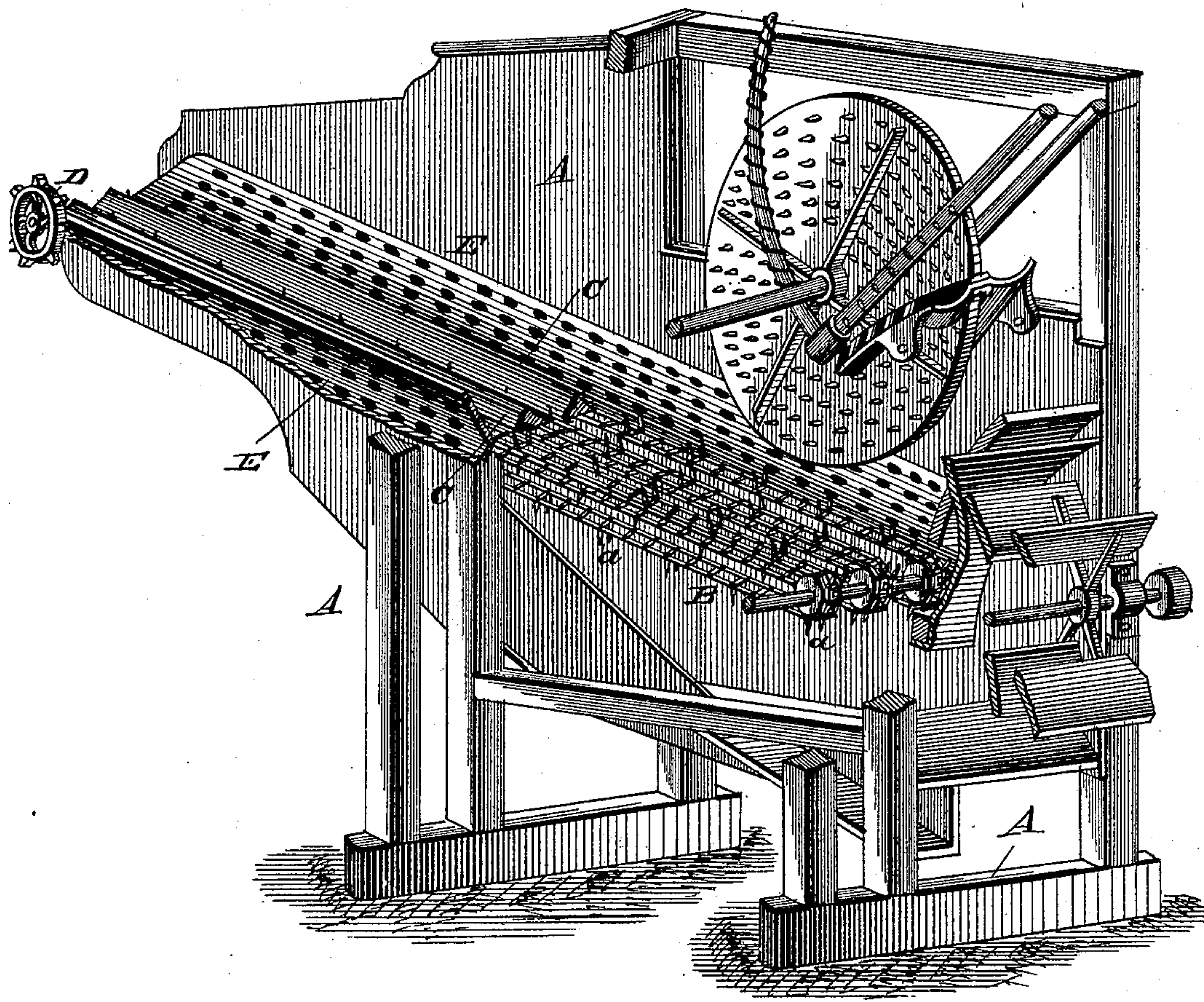
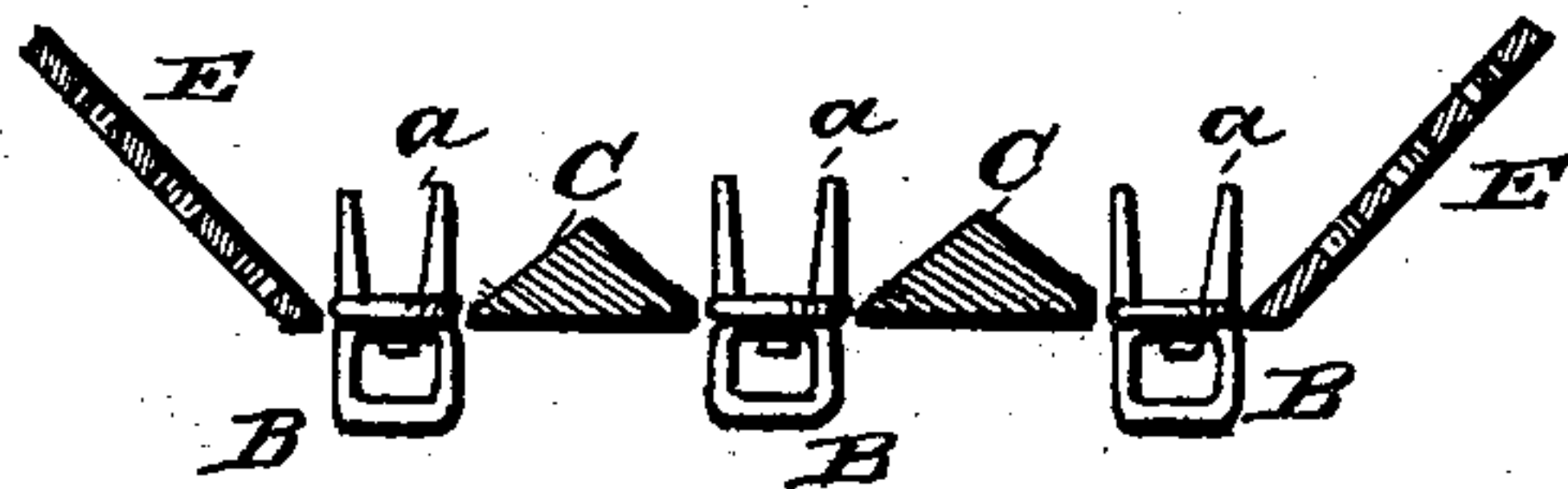


Fig. 2.



WITNESSES
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CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 297,288, dated April 22, 1884.

Application filed January 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, HARVEY PACKER, a citizen of the United States, residing at Rock Falls, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Corn-Shellers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention has reference to that class of corn-shellers which contain apparatus for separating and cleaning the shelled corn from husks, silks, &c., and pertains more especially to certain improvements in the separating mechanism for which I was granted Letters Patent of the United States No. 263,427, dated August 29, 1882. In the operation of the mechanism last referred to it was ascertained that when the feed was very strong and the corn somewhat damp the cobs would "bridge" across, and thus lodge upon the sides of the troughs or depressions, the bottoms of which were traversed by the separating-chains; and I have discovered by actual use that slight divisions or partitions between such chains, not high enough to raise the cobs above the upward-projecting spurs of such chains, and not low enough to permit the cobs to lie directly upon the chains, (thus forming, practically, two strata of separating-surfaces,) are preferable, particularly under the conditions before named; and to secure this special construction the present invention has been made.

In the drawings, Figure 1 is an oblique view of the separating portion of a corn-sheller embodying my present invention, with certain parts broken away. Fig. 2 is a cross-section of the separating devices.

These separating devices are arranged relatively to the sheller, and are operated in the manner shown and described in my Letters Patent No. 263,427, before referred to, and to which reference is here made for greater

definiteness as to such arrangement and mode of operation.

A is the frame of the sheller.

E E are the perforated sides, forming the lateral boundary of the separator.

B B B are carrying and separating chains, having respectively their links on the same plane, and about every third link of which is provided with upward-projecting spurs or strippers *a*.

C C are divisions or partitions, placed longitudinally between the separating-chains B, and intended to support the cobs slightly above the plane of the links of such chains, to permit the more ready and rapid passage of the shelled corn through the links of such separating-chains. The spurs *a* upon the chains B extend slightly above the apices of the partitions C, and therefore, while the cobs are supported by such partitions above the general plane of the links in the separating-chains B, the spurs *a*, by reason of their projection above the partitions C, engage such cobs and carry them outward to the discharge of the separator, thus preventing the "bridging" before mentioned.

It is to be remembered that corn-shellers of this class are run at a high velocity, and shell very rapidly, sometimes over one-hundred bushels per hour. As a consequence there is precipitated from the shelling devices to and upon the cleaning and separating mechanism a large and continuous mass of shelled corn, intermixed with cobs, silks, and husks. The result sought to be attained is to tear this mass apart, to prevent the cobs, silks, and husks from "matting," and to thereby give the best possible opportunity for all of the shelled corn to fall through the separating-chains, and to thus fall as quickly as possible, so as to be out of the way of that which follows.

By the provision which I here present, and which I have thoroughly tested, I largely support the cobs above the links of the chains B, and thereby leave the latter open for the passage of the shelled corn. In addition, I prevent the cobs lodging or accumulating at any one point by continually combing them, by

means of the spurs *a*, toward their place of exit. There are in effect two coexisting and successively-operating separating-surfaces, the upper one, at the top of the partitions C, 5 to first exclude the cobs, and the chains B to separate the shelled corn from the silks, husks, and broken cobs.

What I claim as my invention, and desire to secure by Letters Patent of the United 10 States, is—

In a corn-sheller, the combination of the stationary partitions C and the intermediate

separating and carrying chains, B, said chains consisting of open links and projecting spurs, the apices of the partitions being above the 15 plane of the links of the chains and below the points of the spurs, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HARVEY PACKER.

Witnesses:

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SANFORD KINGERY.