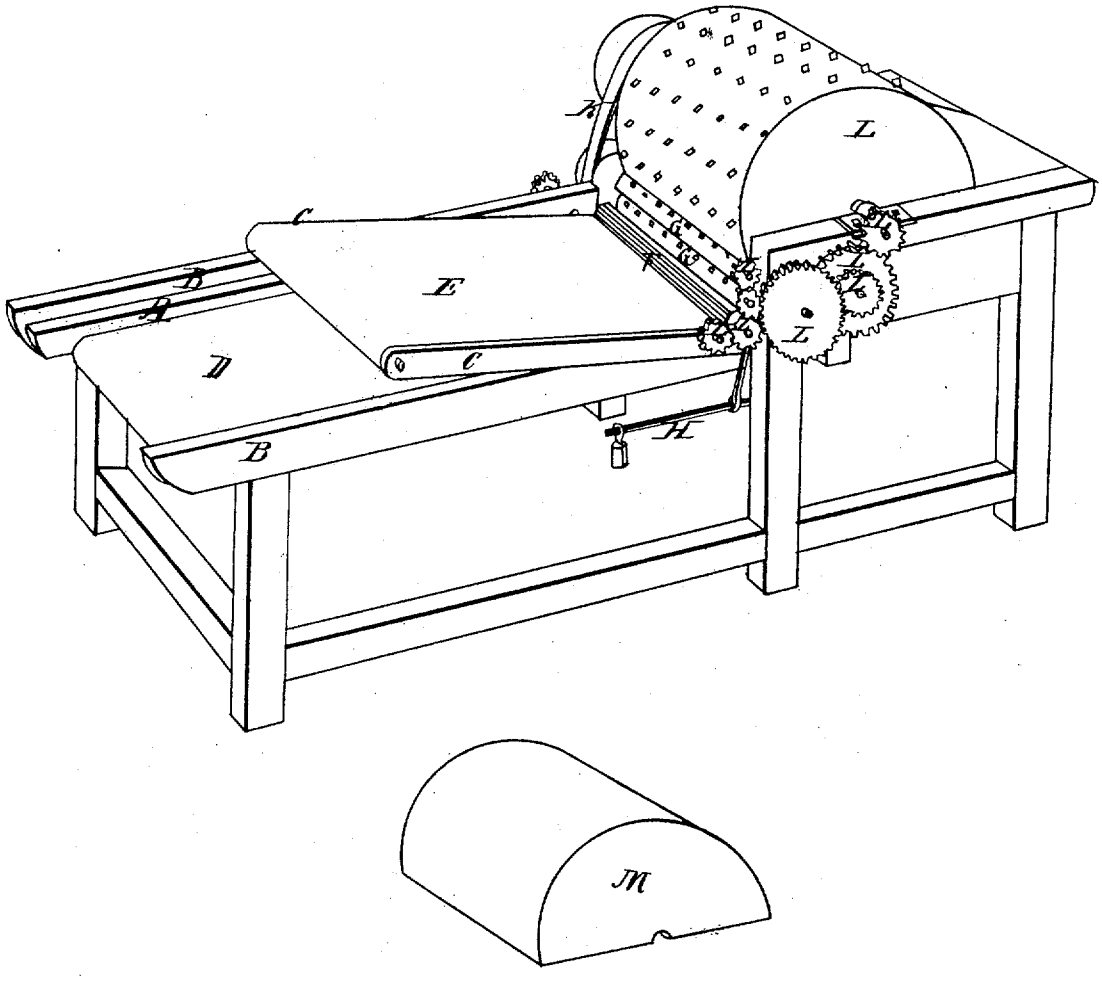
9601X

A. Barrett,

SPLITTING CORN HUSKS

Patented Apr. 21. 1836.



NO PRINTED SPECIFICATION AVAILABLE.

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Asa Barrett of Baltimore Md

Letters Patent (Dated Apl. 21. 1836)

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Asa Barrett himself of his "Improvement in Splitting Corn Husks for Matresses."

To all to whom these presents shall come, Be it known that I Asa Barrett, of the City of Baltimore and State of Maryland, have invented a new and useful machine for splitting the husks of corn for Matresses, and other purposes, where stuffing is required. The machine consists of a firm and substantial frame of timber about five and a half feet long, three feet wide, and two and a half feet high, or the dimensions may be varied to suit convenience. Upon this frame is attached by bolting another frame of smaller dimensions extending from one end to nearly the middle. Across each end of this second frame is a roller over which a cloth apron revolves for the purpose of drawing the husks into the machine. On the inner end of this second frame is another or third frame about half the length of the second, attached to it by bolting so as to form an angle with the second one of about four or more degrees, with a like roller at each end, over which another apron revolves. The front roller of each frame coming nearly in contact with the other, and being connected or geared at one end by two cog wheels moving the apron and compressing the husks so as to pass between the rollers as near to the apron rollers as may be practicable are placed two fluted iron rollers of the same size, one immediately over the other connected by two cog wheels at one end, that move at the same speed as the apron rollers. Over each end of the upper journal of the fluted rollers is a bow which is to press so as to admit a sufficient upward to suit the bulk introduced, and to compress the husks and prevent them being drawn out from between them while undergoing the operation of splitting. Nearly as possible to these rollers, and ex-

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actly over each other, are two small iron cylinders, or rollers about one inch and a fourth in diameter, into which are inserted two or more rows of steel points or knives, about three fourths of an inch long in a spiral direction, each row passing round one half the circumference of the cylinder or roller. These steel points or knives are so near together that they will split the husk into as fine fibres as may be required. These points are set one space further to the right or left on one cylinder than they are on the other, to prevent their coming in contact. These cylinders or rollers are also connected at one end, by small wheels which revolve with great speed, and are so placed when geared, that the points will just cross the husks at the upper and lower side at the same time.

Nearly as possible to these splitting cylinders, is a large cylinder, about two feet in diameter, in which are driven eight or more rows of flat points or knives, in a spiral direction, of about one fourth of the circumference, & at the same distance from each other as those in the splitting cylinders, but are set one space further to the right or left, so as to pass those of the splitting cylinders without coming in contact with them. The steel points or knives of this cylinder revolve with greater speed than those of the splitting cylinders, so as to clear the points of those cylinders from husks, and prevent their being thrown over or around round them, under the splitting cylinders, and as near as possible to the knives of the large cylinder, a bar of wood confined to the frame on each side, on which is screwed a thick plate of iron containing two rows of steel points or knives, like those of the main or large cylinder, but are set twice the distance apart from each other of those in that cylinder, and the knives in one row are exactly opposite the centre of the space between the knives of the other row, and comb those of the large cylinder. The utility of these knives is to disperse the fibres after having been split. Should any be connected at either end of the husk. From this box the main, or large cylinder is enclosed in a light case, except a small space, which is left open at the back end to discharge the husks after having passed through the machine, all

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one end of the shaft of the large cylinder, is a pulley, around which a belt passes to put the machine in operation. On the same end of the shaft between this first pulley and the cylinder, is another pulley around which a belt passes, and extends around one of very small dimensions, on the shaft of the upper scalding cylinder, giving to those cylinders a number of revolutions, to one of the large cylinder. At the other end of the shaft of this large cylinder is a very small cog wheel or pinion which plays into a cog wheel of five or six times its size. To this large wheel is attached a pinion, which gives motion to a cog wheel of about the size of the former, or large wheel. This last mentioned larger wheel, is connected with one of much smaller size, on the end of the shaft of the under fluted roller. This last also is connected with one of exactly the same size, on the end of the shaft of the upper scaling roller on which the apron revolves giving the scaling and the compressing, or fluted rollers, the same speed, and such speed as is required to feed the machine, and completing the movement of the whole. The husks are prepared by separating them from the stems and throwing out those of poor quality and all hard substances. They are then laid straight and evenly on the apron.

I claim the Structure of the machine as above described, as well as the application for the purposes, and use mentioned in this Specification

Asa Barrell

Witnesses
William Warfield
Samuel Moorryman

Patented April 21. 1836

Exd. Wm.

(1176 words) (Recd. & Bonded anew Aug. 21. 1838.)

(Drawing)