9562X

A. W. Gray.

Corn Sheller.

Patented Mar. 31. 1836.

Fig: 1.

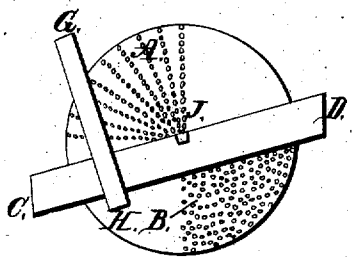


Fig: 3.

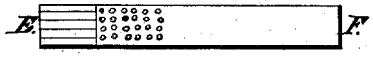
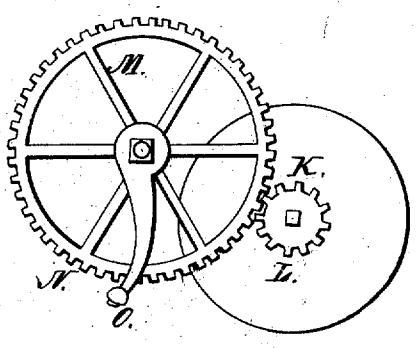


Fig: 2.



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Albert H. Gray. Middletown, Connect.

Sheller Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Albert H Gray himself of his improvement in Corn Sheller.

To all to whom these presents shall come: Be it known that I Albert H. Gray of Middletown in the County of Midland and State of Connecticut have invented a new and useful improvement in the corn sheller or in the Machine used for shelling corn and that the following is a full and exact description thereof. The machine invented by me the said Albert may be made either of wood or metal and consists of a rotary circular plate or solid wheel about fourteen inches in diameter Mounting perpendicularly on both surfaces of this plate (as shall hereinafter be described the machine) is thickly studded with pointed cones projecting from one sixteenth to three eighths of an inch. These points are placed rather irregularly tending towards the circular edge of the plate mentioned Fig 1. A) as prominently (B) and are generally about one half inch apart. Through the centre of this plate is placed a horizontal shaft (F) from four to seven inches long resting upon two bearings, on one end of this shaft is a pinion two and one half or three inches diameter. This pinion Fig 2. I. K) is moved by a perpendicular cog wheel fourteen or sixteen inches in diameter (Fig 2 M. N.) which is the handle to which the power is applied Fig 2. O.) giving motion to the rotary plate which is primarily contemplated in the application of shelling. or the power may be applied immediately to the end of the shaft (Fig 1. F) giving like motion to the plate and of course shelling the corn more slowly. It consists also of a semicircular or quadrilateral frame of wood or iron five inches long made of three pieces and open on one side. The upper and lower pieces are four parallel and far enough apart to admit ears of corn. The side is fastened at one end with a hinge so as to give the whole play or backward and forward motion. This frame is placed across the rotary plate (Fig 1. C. D.) with the open side ma

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[illegible] on the surface inclined and in such a position that cars so placed in the elevated end of the conductor in their passage through it may strike the surface of the rotary plate just above or just below a line drawn through its centre. The cars so running placed are drawn through the conductor by a draft made by the prints upon the rotary plate when in motion during the process of shelling or shelling and the cars thrown off at the depressed end of the conductor as is placed back of the movable side of the conductor (Fig 1 Gr. H.) which serves to press the ears of corn upon the surface of the rotary plate and by confining and enlarging the passage so as to adjust itself to the different sizes of different ears of corn as to shell both large and small ears entirely clean the conductor must be placed as far from the rotary plate that kernels of corn may freely upon and or down wards during the process of shelling. The bottom piece of the conductor (Fig 3. E F) is perforated and the lower end cut short so as to allow the corn when shelled to fall through but the passage is continued to the place where the cobs is discharged by means of wires placed parallel a wire each. A screw is placed so as to operate upon the spring which presses upon the movable side of the conductor giving a greater or less pressure as may be required. when the rotary plate has prints upon both sides a second conductor is placed in similar manner to the foregoing thereby making a double machine moved by the same power. The rotary plate, conductor and spring are covered generally with a box 6 by 18 inches square and 14 inches deep with a small orifice at the bottom to allow the cobs to escape. There is also an orifice at each end of the conductor made through the box at the elevated end is a hopper and at the lower end the cobs is discharged. This box may be fastened permanently or may be portable placed upon standards. It is usually put in motion by manual power but may be moved by the application of other power. The foregoing are described to be the most convenient proportions to be used in the construction of the aforesaid corn sheller but may be varied without injuring the [illegible] of the invention. To avoid the weight of the machine may also be made to shell faster by multiplying the number of rotary plates or double rotary plates upon the same shaft must have one conductor to each plate or two conductors to each double plate. The above rotary plate is deemed an improvement upon those commonly or heretofore used

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having the pivots on both sides of the plate inclined one side to surface.
I do not claim any one invention any part of said machine separately from
him except the construction and the said improvement of said rotary plate a
solid wheel. But what I do claim as my own invention and for which I
ask Letters Patent of the United States on the above described machine
is not being before known or used are. First the said conductor. Second
by the said improvement of said rotary plate. and Thirdly the following
combination of parts - viz. such a rotary plate or cylinder as the one
described moved in the manner in which said plate is moved and applied
to effect the object of shelling corn and combined with the conductor spring
hinge and screw as before described so contrived as to adjust itself to the
several sizes of the different ears of corn. and also to keep the ears of corn in
their proper place while passing across the plate giving them a proper drop
and separating the cobs from the corn combined also with the hopper as before de-
scribed so planed as to cause the ears of corn to be received and shift the rotary
rotary plate at the proper place.

Witnesses
Moses Clark
David Gilliland

Albert H. Gray.

Ford
1836

1892 Woody

Patented 31 March 1836

Drawing