

(No Model.)

H. R. STICKNEY & H. C. BAXTER.
MACHINE FOR SILKING CORN.

No. 509,496.

Patented Nov. 28, 1893.

Fig. 1.

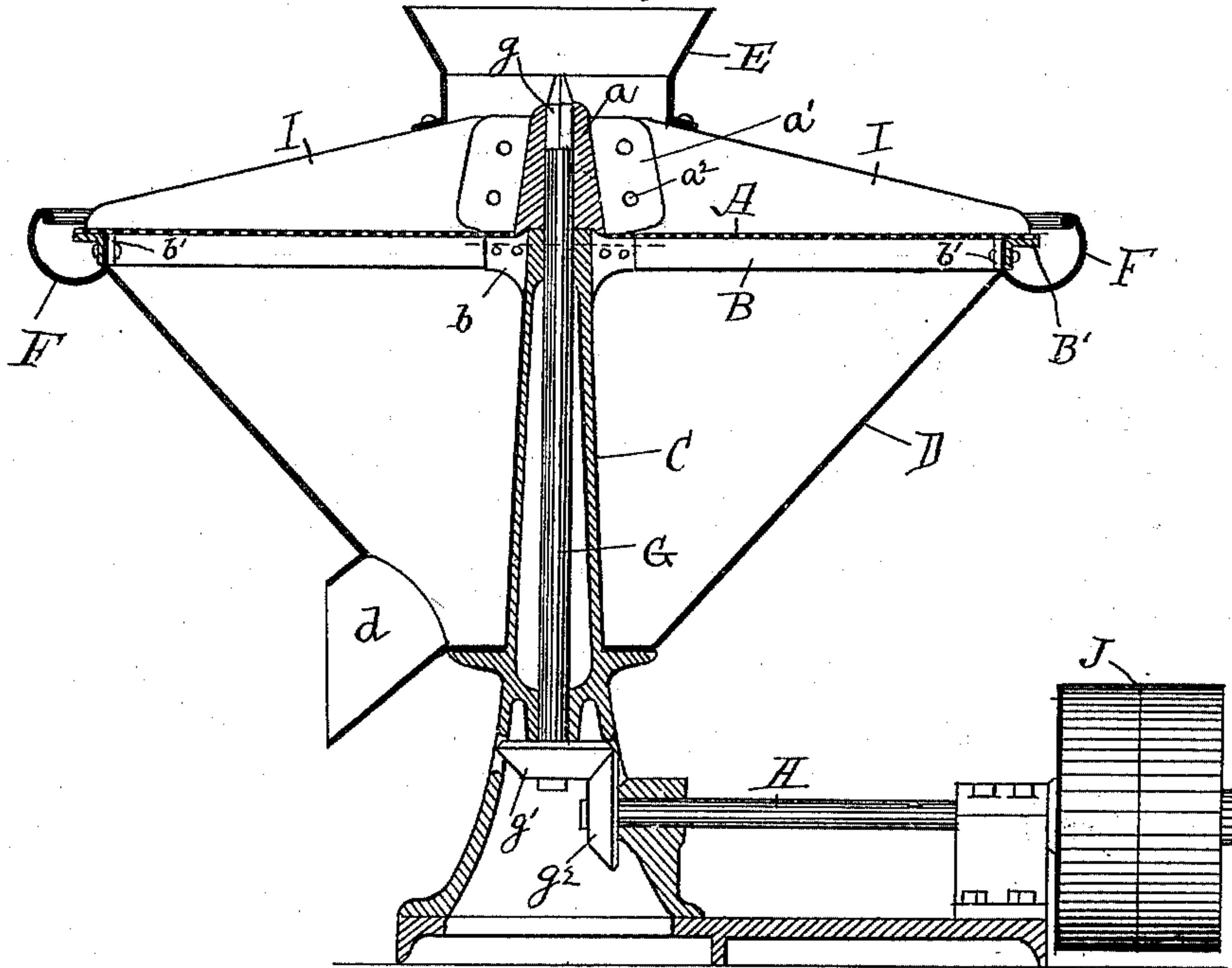
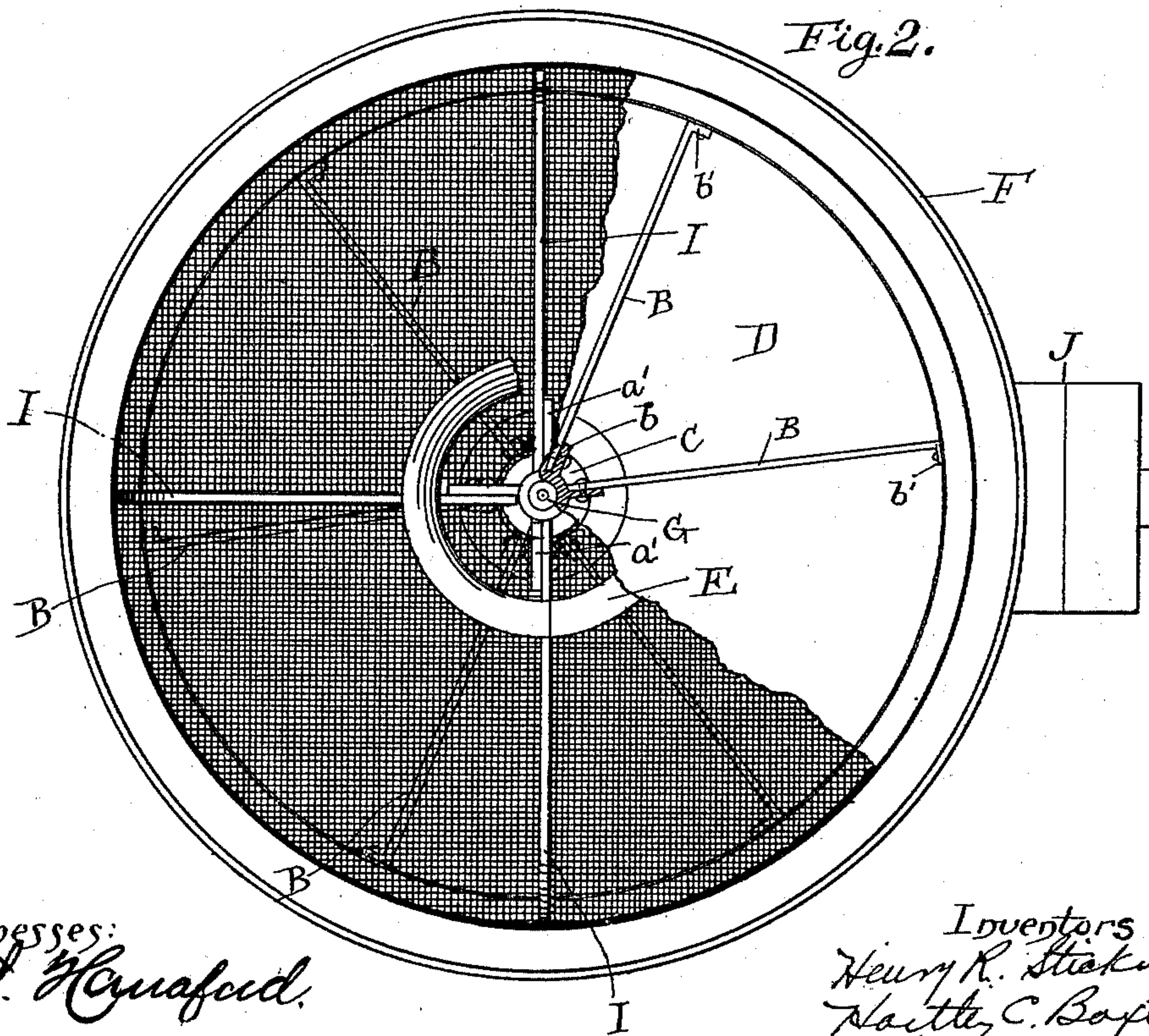


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY R. STICKNEY, OF PORTLAND, AND HARTLEY C. BAXTER, OF
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MACHINE FOR SILKING CORN.

SPECIFICATION forming part of Letters Patent No. 509,496, dated November 28, 1893.

Application filed July 15, 1891. Serial No. 399,559. (No model.)

To all whom it may concern:

Be it known that we, HENRY R. STICKNEY, of Portland, in the county of Cumberland and State of Maine, and HARTLEY C. BAXTER, of Brunswick, in said county and State, citizens of the United States, have invented certain new and useful Improvements in Machines for Silking Corn; and we 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.

Our invention relates to machines for removing silk from corn after the latter has been cut from the cob in the process of packing or canning. So far as we are aware the machines hitherto devised for this work have consisted principally of one or more screens having a vibratory or reciprocating motion. This motion caused the silk to work through the meshes of the screen along with the corn.

According to our present invention we make use of a screen which, as we have here illustrated, is stationary and has on its upper surface radial arms which rest against it, these arms having a rotating motion. The corn being deposited in the center by means of a hopper or otherwise, is moved or spread by these arms, passes through the meshes of the screen, while the silk and husks remain on the surface and are drawn or straightened out on the screen so that it is impossible for them to work through. They are gradually worked outward from the center by the action of the arms until finally they are pushed off the edge of the screen into an annular receptacle which is provided to receive them. It will thus be seen that our silker cleans itself of silk and husks automatically and delivers the corn entirely free from these things.

In the accompanying drawings we have illustrated a machine which embodies my invention.

In the drawings Figure 1 is a vertical section through the machine; and Fig. 2 is a top view or plan with portions broken away.

C represents a standard which supports the working parts of the machine, and this may be of any suitable construction. Secured to the upper end of the standard are radial ribs

B fixed to lugs *b* formed on the end of the upright. To the outer ends of the ribs B is secured an annular angle iron B'. Flanges *b'* on the ends of the ribs B secure them to the angle piece B'. The ribs B and angle iron B' form a rest or support upon which rests the screen A which is circular in form. On this screen A there are a number of radial arms I secured to a central hub *a* having lugs *a'*. The hub and its lugs are preferably of metal while the arms I are of wood and are bolted to the lugs by bolts *a*². The hub *a* is on the upper end of a vertical shaft G, the extreme end of which is left square to prevent the hub from turning on the shaft. The shaft G imparts a rotating movement to the radial arms, and on its lower end is a miter gear *g'* which engages a corresponding miter gear *g*² on a horizontal shaft H. Secured to the angle piece B' and extending beneath the screen A is a receptacle D for the corn, here shown as hopper-shaped and having a discharge spout or opening *d*. A receptacle F for the silk, cobs, &c., is provided outside of the outer edge of the circular screen. This receptacle is in the form of a gutter or channel and extends entirely around the edge of the screen. A hopper is provided for delivering the corn into the center of the screen and this hopper E as we here show it is secured to the arms I and rotates with them.

As already explained, the corn is deposited in the center of the screen through the hopper E. It is rotated in a body and moved toward the ends of the arms, but when properly fed it will all pass through the screen before any of it is forced off the edge of the screen. The particles of silk will be drawn out and laid flat on the surface of the screen, and there being no vibratory motion they will not work through and fall with the corn. Gradually the silk and other debris will be pushed off the screen into the spout F so that the silker will keep itself free at all times and will not require to be stopped for the purpose of being cleaned.

It is evident that the screen may be made to rotate while the arms are held stationary, or both may revolve in opposite directions, producing the same effect in substantially

the same way as in the present machine. Other modifications may be made without departing from the spirit of our invention.

We claim—

- 5 In a machine for silking corn, the combination, with a central supporting-standard, of a circular receptacle supported thereon and carrying on its upper portion a series of ribs supporting a stationary horizontal screen,
10 a shaft journaled within the standard and carrying at its upper end a hub, radial arms secured to the hub and supporting a feed-hopper, an annular trough secured to the re-

ceptacle and extending above the screen and the outer ends of the said arms, and means 15 for imparting motion to the said shaft.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY R. STICKNEY.
HARTLEY C. BAXTER.

Witnesses to H. R. S.:

S. W. BATES,
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