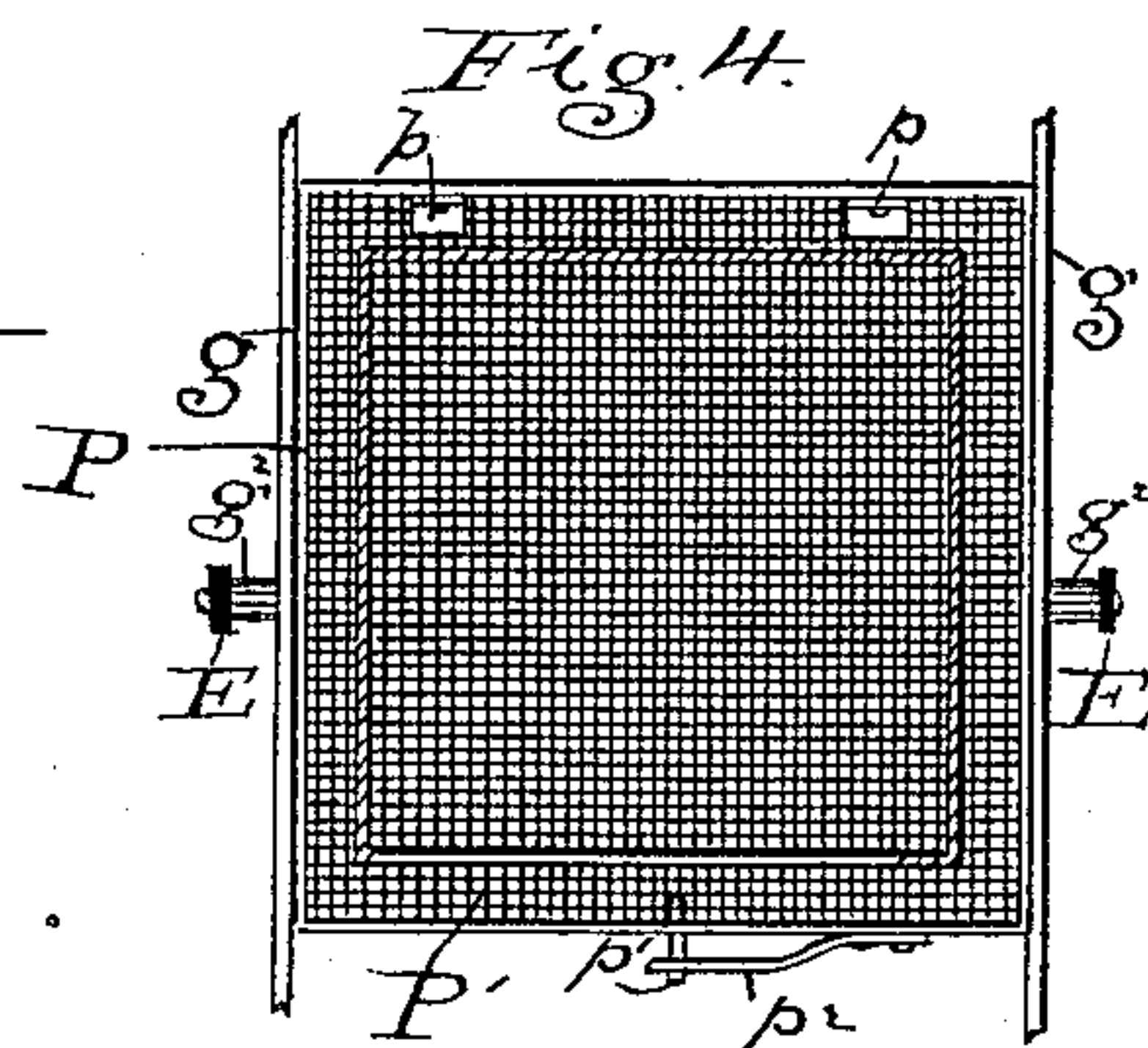
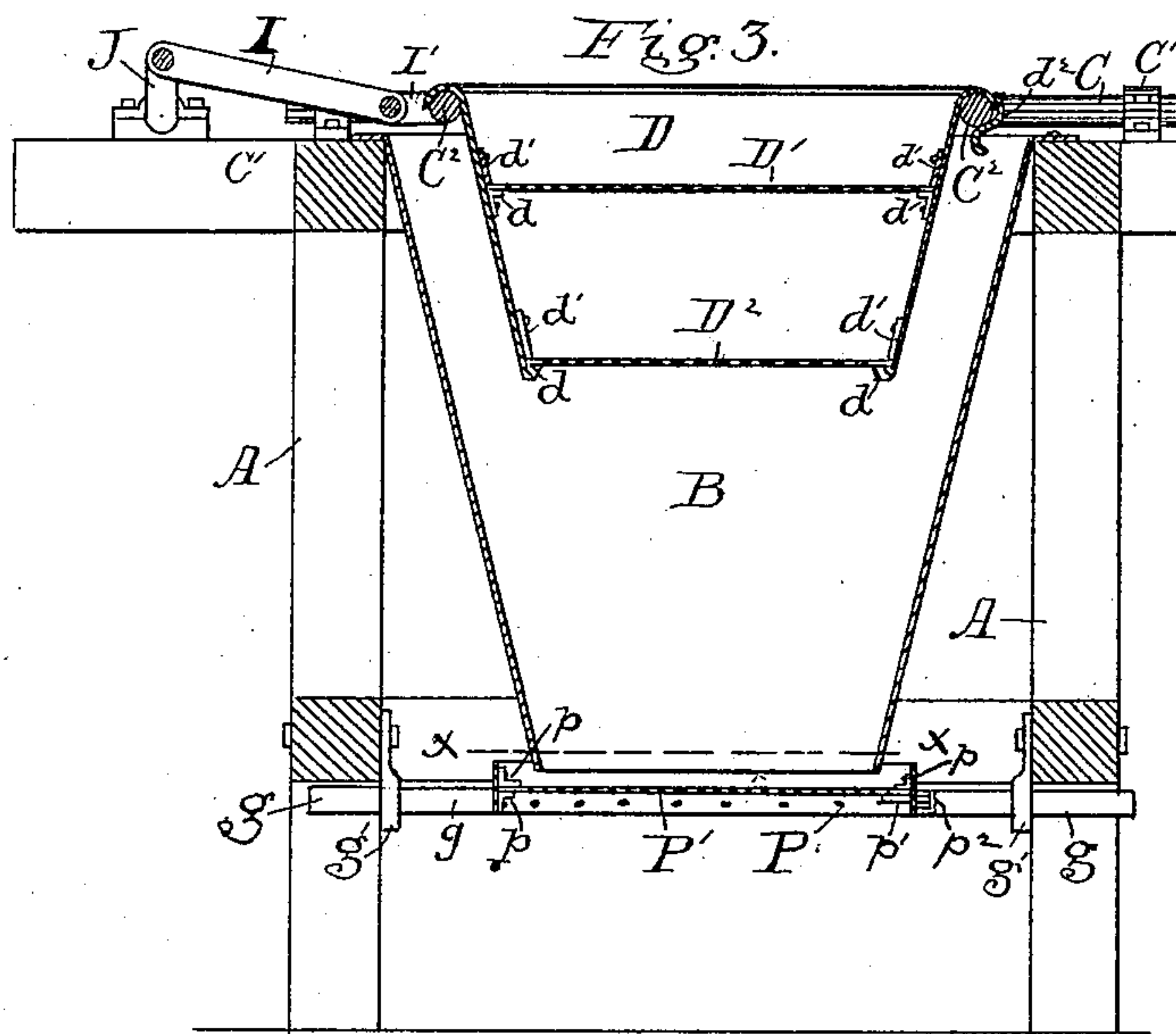
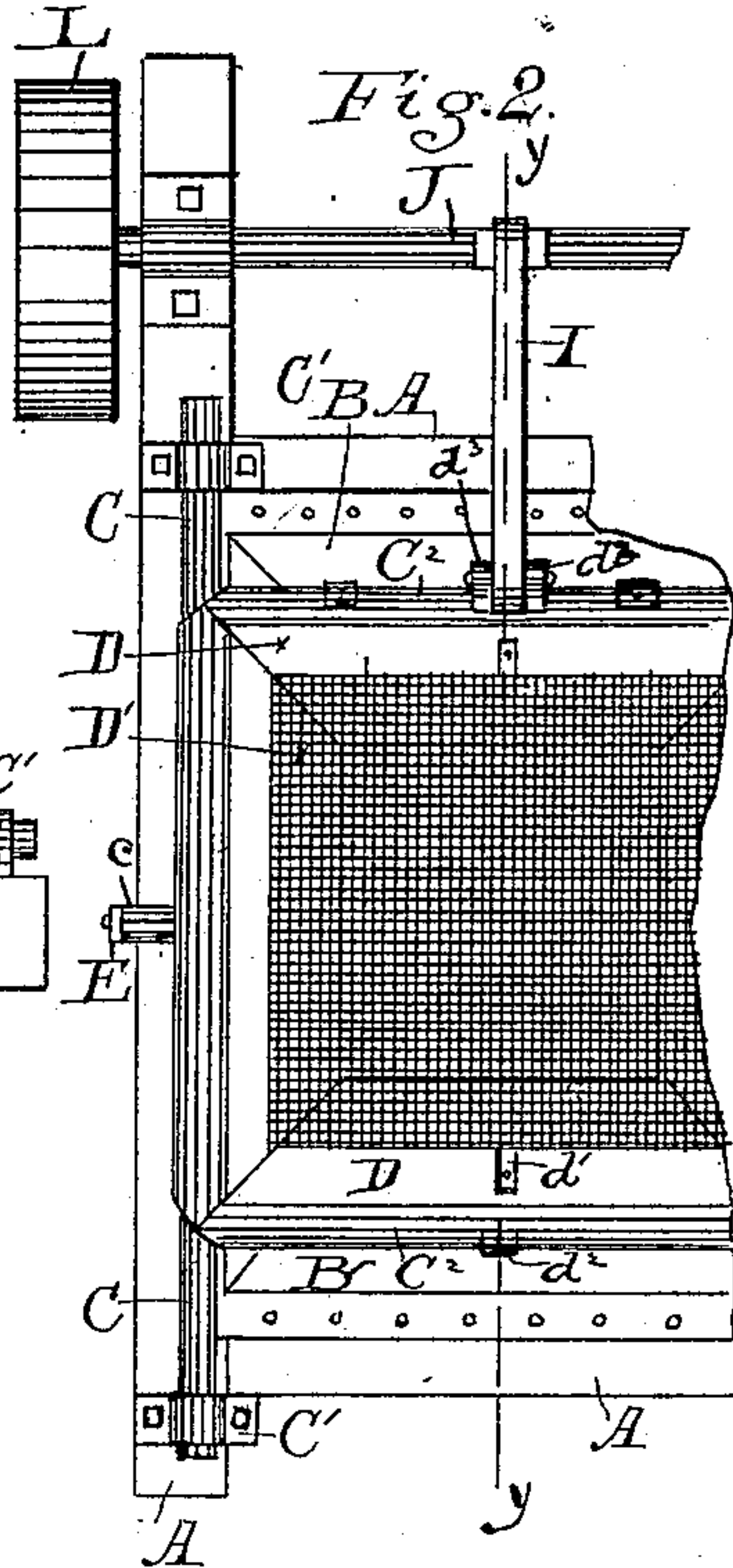
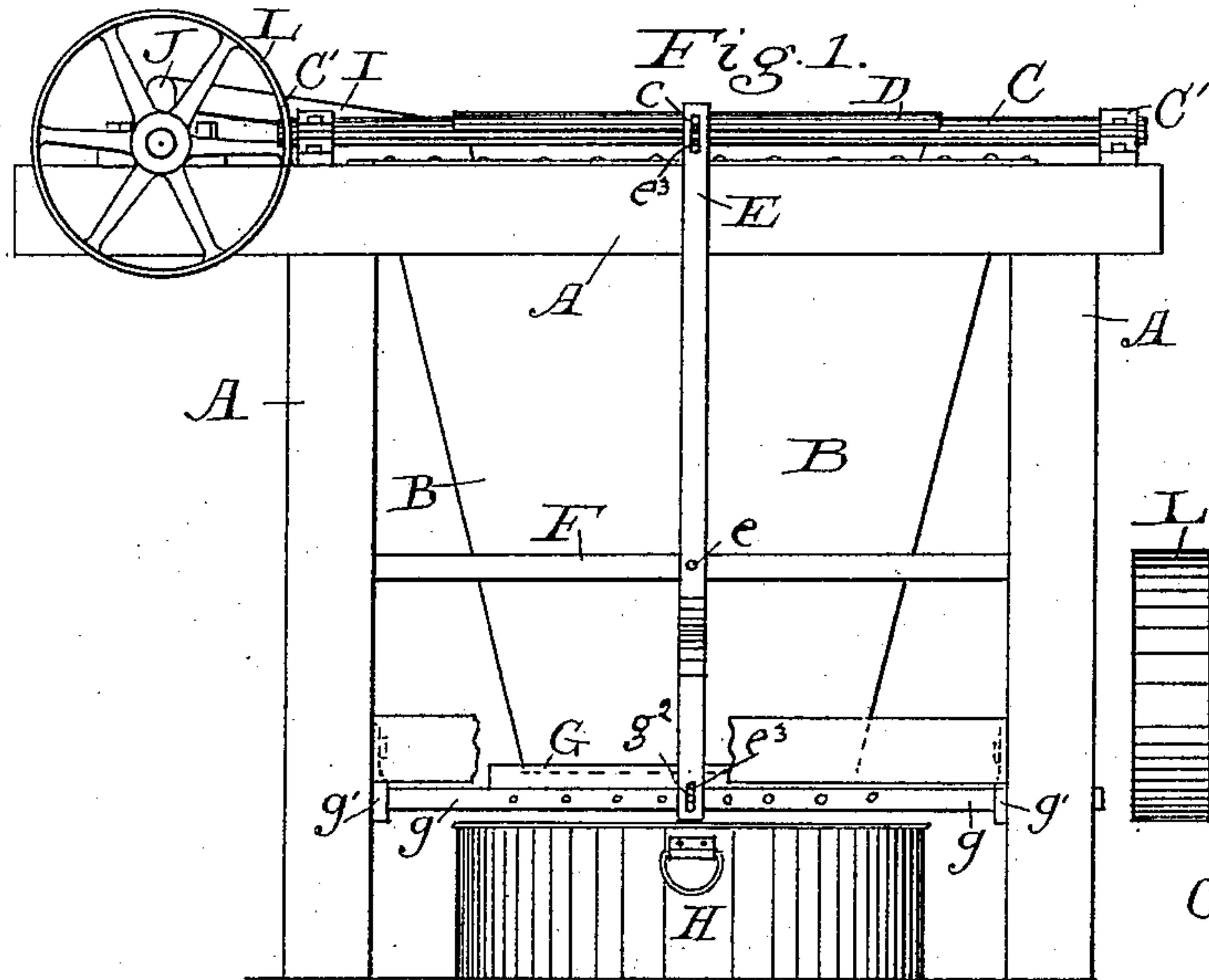


(No Model.)

J. H. CUSKLEY.
CORN SILKING MACHINE.

No. 390,948.

Patented Oct. 9, 1888.



Witnesses:
Harriet J. Lanabee,
James A. Grok.

Inventor:
John H. Cuskley,
by S. M. Bates,
his atty.

UNITED STATES PATENT OFFICE.

JOHN H. CUSKLEY, OF MINOT, MAINE.

CORN-SILKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 390,948, dated October 9, 1888.

Application filed September 17, 1887. Serial No. 249,972. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. CUSKLEY, a citizen of the United States, residing at Minot, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Corn-Silking Machines; 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.

My invention relates to machines for removing the silk from corn after the latter has been cut from the cob in the operation of packing. Previous to my invention this has been imperfectly done by screening the corn in a sieve containing coarse meshes, the screen being mounted in a frame-work and vibrated by hand. In passing through a single screen much of the silk failed to be removed from the corn. Other machines have also been used, wherein a reciprocating screen was placed over an inclined surface provided with pins.

To effect a more complete removal of the silk, I make use of my present invention, which consists of a fixed hopper in the upper part of which is a vibrating or oscillating tray provided with one or more screens, and below said hopper a vibrating screen, whereby the corn is made to pass rapidly through a series of screens, and the silk thereby is removed.

My invention also consists in certain details of construction hereinafter to be described and claimed.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my machine. Fig. 2 is a partial plan or top view. Fig. 3 is a section through $y y$ of Fig. 2. Fig. 4 is a section through $x x$ of Fig. 3.

A is a frame-work, attached to the upper portion of which is the hopper B. A tray, D, having inclined sides, is suspended in the upper part of the hopper B. The tray D is secured to a frame having two cross-bars, $C^2 C^2$, and two side bars, C C, the ends of which are prolonged beyond the tray and slide in the boxes $C' C'$. The upper edge of the tray D is turned over and rests on the frame-work in such a manner that it can be removed or lifted out, and is secured thereto by the springs or catches d^2 , which are made to clasp the under side of the cross-bars $C^2 C^2$.

The tray D is provided with two screens, D^2 and D' , placed horizontally, one at the bottom and the other near the top. These screens are removable, and they rest on stops $d d$, and are held in place by the cleats $d' d'$, pivoted at their upper ends to the sloping sides of the tray.

A crank-shaft, J, runs in suitable journal-boxes on the top of the machine and is rotated by the pulley L.

One of the cross-bars C^2 is provided with the ears d^3 , to which is pivoted one end of the link I, the other end being pivoted to the crank-shaft J.

Below the lower end of the hopper B are the two sliding bars $g g$, one on each side. These bars slide in the guides $g' g'$, secured to the frame-work of the machine. Secured to the side bars, $g g$, is the frame P, containing the screen P' . One edge of this screen is supported between two stops, $p p$, one above and one below said edge, and the opposite edge is supported by a sliding bolt, p' , which passes through the sides of the frame P, its outer end being secured to one end of the spring p^2 , of which the other end is secured to the frame. A stop, p , is secured to the frame above the bolt p' and above the edge of the screen P' .

A horizontal bar, F, is attached to each side of the machine, and pivoted to this bar at e is a lever, E, having at each end a longitudinal slot, e^3 . A pivot, c , attached to the side bar, C, passes through the upper slot, e^3 , and a similar pivot, g^2 , attached to the sliding bar g , passes through the lower slot, e^3 . By this construction it will be seen that the tray D and the frame P are connected in such a way that rectilinear reciprocation in one will produce a like reciprocation in the other.

The corn is fed into the top of the tray D, which is vibrated horizontally by the rotation of the crank-shaft J. The frame P, with its screen P' , is vibrated in an opposite direction from the tray D, motion being imparted to it by the lever E. The corn falls through the screen D' , leaving thereon the fragments of cobs, husks, &c., which have become mixed with the corn. A certain amount of the silk is also retained by the screen D' . The corn in like manner passes through the screens D^2 and P' , each retaining a portion of the silk, which clings to the screens as the corn passes through until it is deposited free from silk in the pan H.

When it is desired to clean the silker, the screens D' and D^2 are removed by turning up the catches d' and lifting the screens from the hopper. The tray D is also removed by
5 unclasping the spring d^2 . The lower screen is removed from underneath the frame P by drawing out the bolt p' and dropping down the edge of the screen. The bolt when released snaps back to its original position.

10 By the use of my device I am enabled to screen the corn with very great rapidity and to remove the silk so that the corn is entirely free from it.

The tray D may be used with one screen;
15 but I prefer to use two, as here shown.

It is evident that many of the details of construction may be changed to a considerable extent without departing from the spirit of my invention.

I claim—

20 In a corn-silking machine, the combination of a stationary hopper, a reciprocating frame above said hopper formed with cross-bars C^2 and extended side bars, C , guides for holding the extensions of said bars C in a horizontal
25 position, means for reciprocating said frame, and a removable tray secured to said frame by catches, said tray being provided with a screen, substantially as described.

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

JOHN H. CUSKLEY.

Witnesses:

F. O. PURINGTON,
JOHN F. MILLETT.