

No. 694,285.

Patented Feb. 25, 1902.

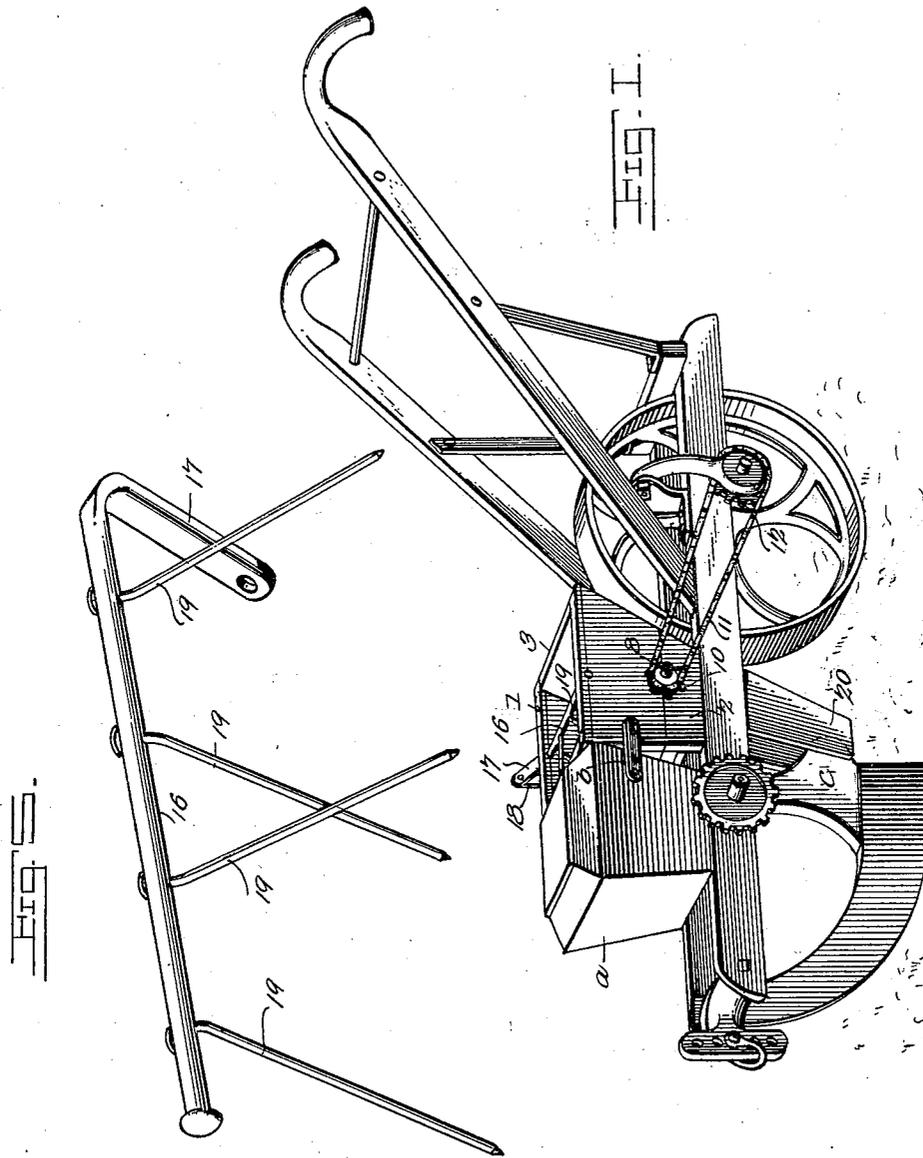
M. JOYNER & J. D. SPRINGER.

COTTON PLANTING ATTACHMENT FOR CORN PLANTERS.

(Application filed Sept. 20, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
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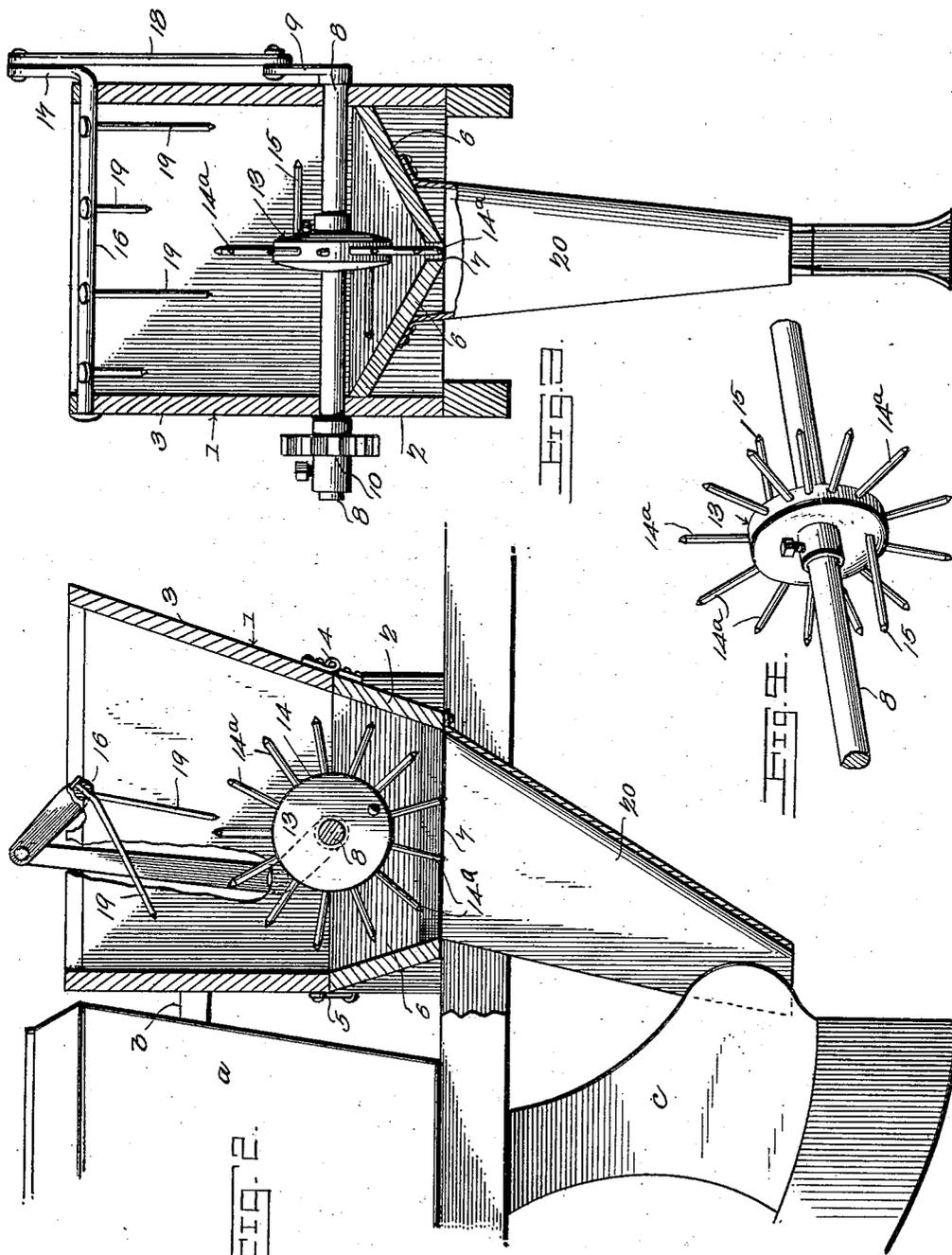
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# UNITED STATES PATENT OFFICE.

MILTON JOYNER AND JOHN D. SPRINGER, OF CLARKSBURG, TENNESSEE.

## COTTON-PLANTING ATTACHMENT FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 694,285, dated February 25, 1902.

Application filed September 20, 1901. Serial No. 75,870. (No model.)

*To all whom it may concern:*

Be it known that we, MILTON JOYNER and JOHN D. SPRINGER, citizens of the United States, residing at Clarksburg, in the county of Carroll and State of Tennessee, have invented a new and useful Cotton-Planting Attachment for Corn-Planters, of which the following is a specification.

Our invention is an improved cotton-planting attachment for corn-planters, by means of which a corn-planting machine may be also used for planting cotton; and our invention consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a corn-planting machine provided with our improved cotton-planting attachment. Fig. 2 is a vertical longitudinal sectional view of our improved cotton-planting attachment, showing the same disposed in operative position on a corn-planter, a portion of the latter being indicated in the said figure. Fig. 3 is a vertical transverse sectional view of the same. Fig. 4 is a detail perspective view of the cotton-seed wheel. Fig. 5 is a similar view of the oscillating stirrer.

In the embodiment of our invention we provide a cotton-seed hopper or box 1, which comprises a base-section 2 and an upper section 3, the latter being disposed on the former and hinged thereto at its rear side, as at 4. A hook or other suitable device 5 is provided on the front side of the hopper to secure the sections thereof together, as shown in Fig. 2. The bottom of the hopper is formed by a pair of oppositely-disposed laterally-inclined downwardly-converging bottom boards 6, between the lower edges of which, at the center of the hopper, is formed a longitudinal discharge-opening 7. The said hopper 1 is adapted to be secured on the beams or frame of a corn-planter, such as is shown in Fig. 1, immediately in rear of the seedbox *a*, and our improved hopper 1 is secured to the said seedbox *a* by a pair of link-plates *b*, which are bolted or otherwise secured to the sides of said hopper and said seedbox. Within the scope of our invention, however, the said hopper 1 may be secured to the corn-planting machine by any suitable means.

A revoluble shaft 8 is journaled in bearings

in the sides of the hopper 1, which bearings are coincident with the joints between the upper and lower sections of the hopper, so that when the upper section of the hopper is opened or swung back upon its hinges from the lower section the said shaft 8 may be readily removed from its bearings. At one end of the said shaft is a crank-arm 9, and at the opposite end thereof is a sprocket-wheel 10, which is removable therefrom and may be replaced by one of a different size. In practice we provide a number of the wheels 10 of varying sizes, for the purpose presently described. An endless sprocket-chain 11 connects the wheel 10 to a sprocket-wheel 12, with which the corn-planter is provided, and hence power is communicated to the shaft 8 and the latter rotated when the planter is in motion. By using a wheel 10 of appropriate size the shaft 8 may be caused to rotate at any desired rate of speed, as will be readily understood.

On the central portion of the shaft 8 is secured a cotton-seed feed-wheel 13. The same comprises a central hub or disk 14, having a series of radial feed-spurs 14<sup>a</sup>, which operate successively in the opening 7 in the bottom of the hopper, and laterally-extending stirring-spurs 15, which project from opposite sides of said hub or disk and operate immediately above the laterally-inclined bottom boards of the hopper and serve to prevent the cotton-seeds from becoming lodged on the bottom of the hopper. The feed-spurs, as will be understood, engage the cotton-seeds, and by the rotary motion imparted to said feed-spurs the latter cause the cotton-seeds to be dropped through the opening 7 in the bottom of the hopper. The inclination of the laterally-inclined bottom boards 6 of the hopper is such as, in connection with the stirring-spurs 15, to greatly facilitate the feed of the cotton-seeds to the opening 7.

In the sides of the upper section 3 of the hopper 1 is journaled a rock-shaft 16. The same is provided at one end with a rock-arm 17, which is connected to crank-arm 9 of shaft 8 by a pitman 18. Said rock-shaft 16 is provided with a series of radial stirring-spurs 19, which extend downwardly in the hopper. It will be understood that oscillating motion is imparted to the shaft 16 and the stirring-spurs 19 thereof and that said stirring-spurs

19 prevent the cotton-seeds from packing and becoming lodged in the hopper.

A spout 20 depends from the bottom of the hopper 1 and conveys the cotton-seeds to the furrow opened by the runner of the planter. As here shown, the spout 20 is disposed in rear of the corn-spout *c* and discharges at the heel thereof.

Having thus described our invention, we claim—

In a cotton-planting attachment for corn-planters, a hopper having oppositely-disposed downwardly - converging laterally - inclined bottom boards 6 with a discharge-opening 7 formed between them, with a revoluble shaft journaled in the sides of said hopper above said bottom boards, said shaft having a crank-arm at one end and a sprocket-wheel at the opposite end, a stirring and feed wheel on said shaft, and comprising a hub-disk, radial

feed-spurs projecting therefrom and adapted to operate in said discharge-opening, and laterally - extending stirring - spurs projecting from opposite sides of said hub-disk and operating above said laterally-inclined bottom boards; a rock-shaft journaled in the sides of the hopper and having a crank-arm at one end, said rock-shaft being further provided with projecting stirring-spurs, and a pitman connecting the crank-arms of said respective shafts, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

MILTON JOYNER.  
JOHN D. SPRINGER.

Witnesses:

W. J. BRECHEEN,  
A. L. TOSH.