

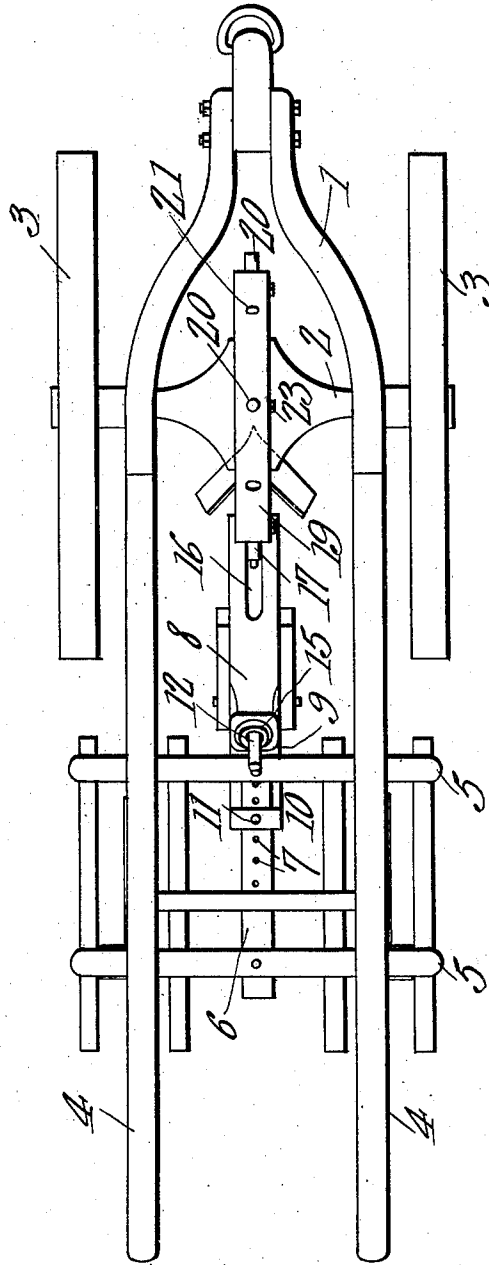
J. M. CROOK.
COTTON THINNING PLOW.
APPLICATION FILED APR. 13, 1910.

963,689.

Patented July 5, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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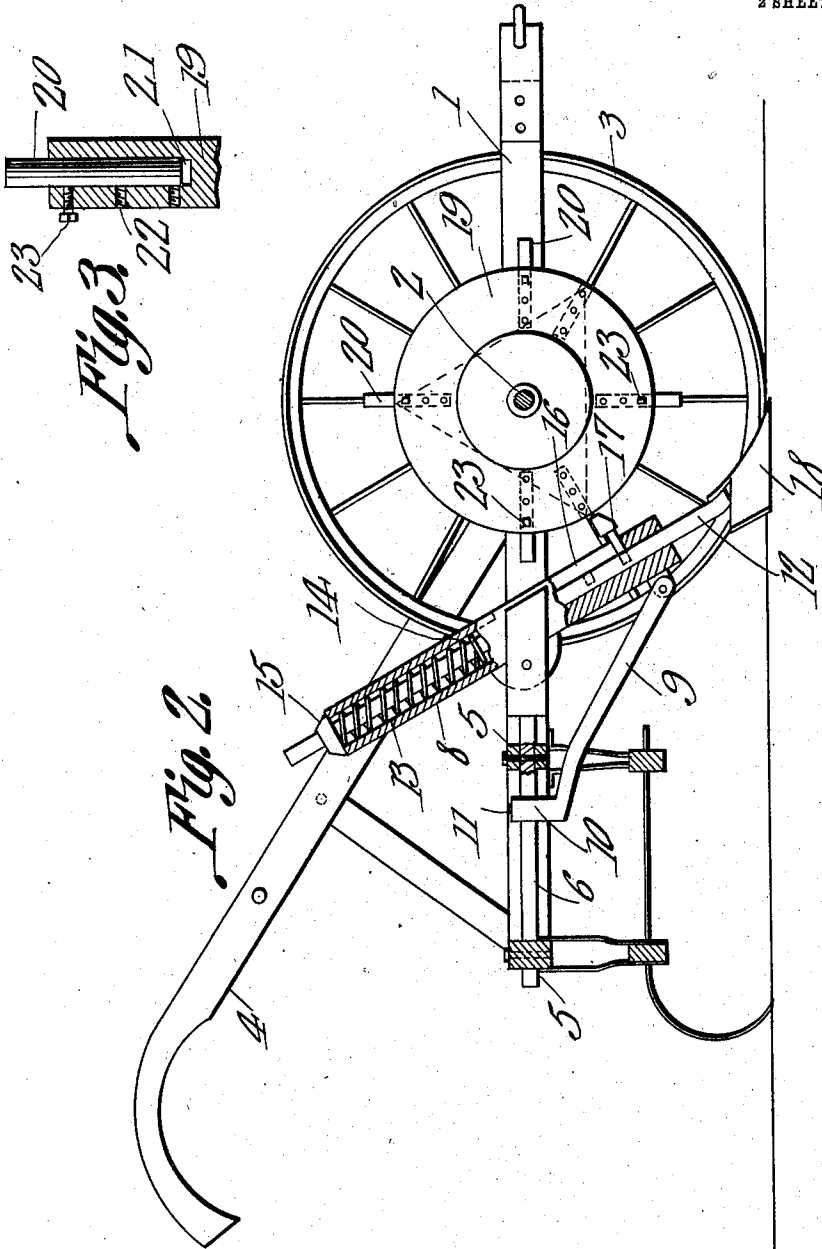
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UNITED STATES PATENT OFFICE.

JAMES M. CROOK, OF SELMA, ALABAMA.

COTTON-THINNING PLOW.

963,689.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed April 13, 1910. Serial No. 555,277.

To all whom it may concern:

Be it known that I, JAMES M. CROOK, a citizen of the United States, residing at Selma, in the county of Dallas and State of Alabama, have invented a new and useful Cotton-Thinning Plow, of which the following is a specification.

This invention has relation to a cotton thinning plow and consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a cotton thinning plow which includes a standard mounted for reciprocation in a sleeve and provided with a spring for holding the standard normally in a lowermost position within the sleeve. Means is also provided for raising and releasing the standard whereby the share carried at the lower end thereof may be elevated above the ground and escape plants in the row. Also means is provided for adjusting the angle of the standard with relation to the surface of the ground and an adjusting means is provided whereby the said standard may be located in close proximity or at a distance from the means which raises and releases the same.

In the accompanying drawings:—Figure 1 is a top plan view of the cotton thinning plow. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detailed view of a portion of a disk forming a part of the plow showing a tappet in position therein.

The cotton thinning plow consists of a frame 1 mounted at its forward portion upon an axle 2 which in turn is supported upon fixed ground wheels 3. Handles 4 are attached to the frame 1. The frame 1 includes at its rear portion spaced cross bars 5 which in turn support a beam 6. The beam 6 is provided with a series of perforations 7 and a sleeve 8 is pivotally connected at the forward end of the beam 6. A brace 9 is pivotally connected at its lower end with the lower forward portion of the sleeve 8 and the rear portion of the brace 9 is provided with an eye 10 which receives the intermediate portion of the beam 6. A securing bolt 11 passes vertically through the eye 10 and is adapted to pass through one of the perforations 7 provided in the beam 6. Thus it will be seen that the brace 9 may be shifted along the beam 7 and secured in an adjusted position and that thereby

means is provided for adjusting the angle of inclination of the sleeve 8 with relation to the surface of the ground.

A standard 12 is slidably mounted in the sleeve 8 and a coil spring 13 surrounds the upper portion of the said standard and is housed within the sleeve 8. One end of the said coil spring bears against a collar 14 fixed to the intermediate portion of the standard 12 and the other end of the said coil spring bears against a cap 15 located at the upper end of the sleeve 8. The spring 13 is under tension with a tendency to hold the standard 12 in a depressed position in the sleeve 8. The sleeve 8 is provided at its forward side with a longitudinally disposed slot 16 and a pin 17 is fixed to the standard 12 and projects through and beyond the slot 16 in the sleeve 8. A digging share 18 is carried at the lower end of the standard 12.

A disk 19 is concentrically positioned upon the intermediate portion of the axle 2 and is provided at its periphery with a series of tappet pins 20 into the path of movement of which the pin 17 projects. The pins 20 are at equal distances apart and may be arranged in sets of three, four or more. The disk 19 is provided at its periphery with pockets 21 which receive the inner end portions of the pins 20 and said disk is provided in its side with a series of perforations, the inner edges of which communicate with the interior of each socket 21. A set screw 23 is adapted to be screw-threaded in any one of the series of perforations 22 and is adapted to bear at its inner end against the sides of the tappet pins 20. By this arrangement it will be seen that means is provided whereby the pins 20 may be projected to a greater or less extent at their outer end portions beyond the periphery of the disk 19. It will be understood that when the sleeve 8 is adjusted in its angular position with relation to the surface of the ground that its lower portions may be relatively near or remote from the periphery of the disk 19 and consequently provision must be made for adjusting the pins 20 in the disk 19 in order that the said pins may reach the pin 17.

As the machine is drawn along a row of plants the share 18 when it is in contact with the ground will cut out the plants in the row. As the wheels 3 and axle 2 rotate the disk 19 is carried around with the said

axle and as the pins 20 successively come in contact with the pin 17 the said pin 17 is moved along the slot 16 and the standard 12 is raised in the sleeve 8 against the tension of the spring 13. As soon as the tappet pins 20 pass beyond the pin 17 the tension of the spring 13 comes into play and forces the standard 12 down and the share 18 is thus again brought in contact with the ground. When the share 18 is lifted as above indicated it will pass above the top of the plants and thus at the intervals at which the said share is lifted plants are left standing in the row. Therefore it will be seen that a simple and effective cotton thinning plow is provided.

Having described the invention, what I claim as new and desire to secure by Letters Patent is:—

20 1. A thinning plow comprising a frame, an axle, wheels supporting the axle and adapted to rotate the same, a disk mounted upon the axle, tappet pins carried by the disk and adapted to be adjusted longitudinally thereon, a sleeve pivotally mounted upon the frame, means for securing the sleeve in an adjusted position, said sleeve hav-

ing an elongated slot, a spring pressed standard located in the sleeve, a pin carried by the standard and projecting through the slot 30 of the sleeve into the path of movement of the pins and a share carried by the standard.

2. A thinning plow comprising a frame, an axle, wheels supporting the axle and adapted to rotate the same, a disk carried 35 by the axle, adjustable tappet pins carried by the disk, a beam mounted upon the frame, a sleeve adjusted to the beam, said sleeve having an elongated slot, a spring pressed standard located in the sleeve, a pin 40 carried by the standard and projecting through the slot in the sleeve into the path of movement of the tappet pins, a share carried by the standard, a brace pivotally connected to the sleeve and means for fixing 45 the brace to the beam.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES M. CROOK.

Witnesses:

C. Y. FINN,
R. P. CAMPBELL.