

(No Model.)

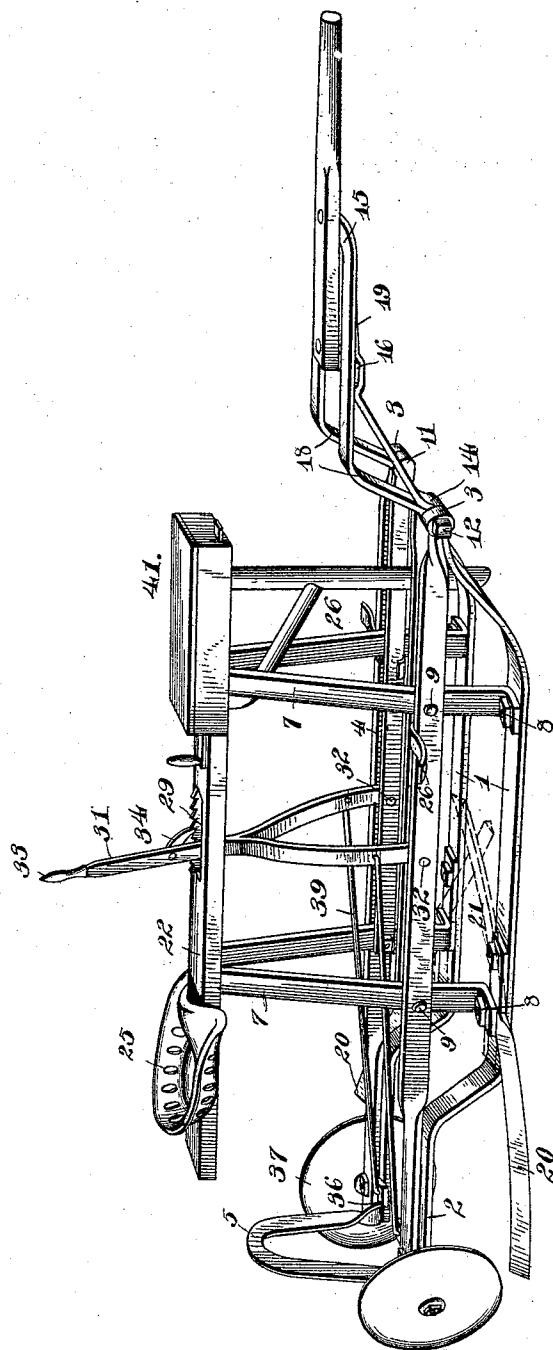
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G. K. JACKSON.
CULTIVATOR.

No. 498,656.

Patented May 30, 1893.

Fig. 1.



Witnesses:

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

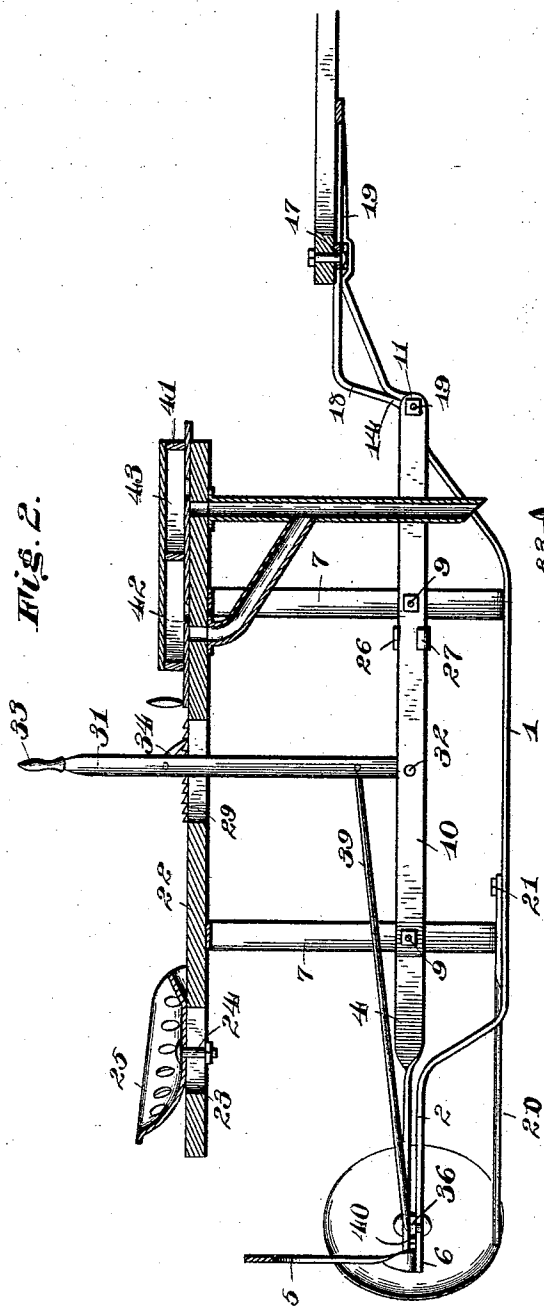


Fig. 3.

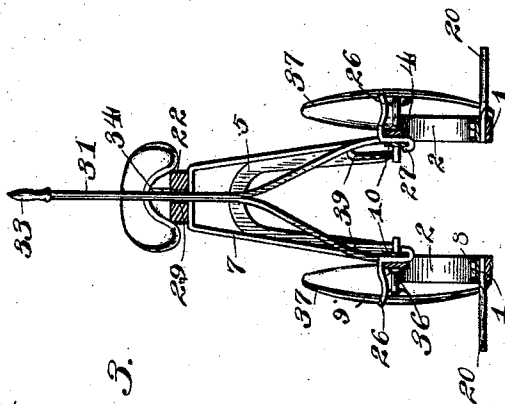
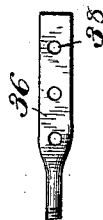


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE K. JACKSON, OF REECE, KANSAS, ASSIGNOR OF ONE-HALF TO
CHARLES H. STANARD, OF SAME PLACE.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 498,656, dated May 30, 1893.

Application filed January 26, 1893. Serial No. 459,801. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. JACKSON, a citizen of the United States, residing at Reece, in the county of Greenwood and State of Kansas, have invented a new and useful Cultivator, of which the following is a specification.

My invention relates to improvements in cultivators of that class adapted especially for cultivating listed corn; and the objects in view are to provide a machine of great simplicity, strength, and durability, adapted to run lightly over the listed-corn and to effectually cast upon the same the soil in predetermined quantities, and to effectually destroy all undergrowth and weeds that have sprung up at the sides of the corn-row.

Various other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a perspective view of a cultivator constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail of one of the stub-axles.

Like numerals of reference indicate like parts in all the figures of the drawings.

The machine comprises a pair of opposite steel runners 1, whose front and rear ends are upturned, as shown, the rear ends being provided with horizontal extensions 2. The front portions of the runners are folded upon themselves to form eyes 3 and are continued rearwardly to overlap the rear extensions 2, thus producing upper side-bars 4, which at the beginning of said extensions are given a half-twist, so as to lie flat upon the same. It will thus be seen that the runners may, if desired, be formed each of a single piece or strip of steel. An arch of inverted U-shape and designated as 5, has its lower ends laterally extended to form securing-feet, and the same are interposed between the upper and lower terminals of the runners and are bolted to position through the medium of a pair of bolts 6 passed through the feet and through perforations formed in the terminals of the runners. A pair, or it may be a greater number, of inverted U-shaped arches 7 rise from

the runners and are interposed between the upper side portions 4 thereof, the lower ends of said arches being laterally-disposed forming securing-feet which, by means of bolts 8 are fastened to position upon the runners. At the point of intersection between the upper portions of the runners or bars 4 and the arches, bolts 9 are passed through and serve to connect the same. Inner strips 10, are located at the inner sides of the terminals of the arches and through the medium of the bolts 9 are also secured in position. These strips at their front ends are perforated as at 11 in line with the perforations 3 of the runners, and through the perforations 3 and 9 at each side of the machine bolts 12 are passed. These bolts receive the rear perforated ends 14 of a U-shaped draft-bail 15, which at its front end in the present instance carries an ordinary single-tree. The bail is crossed by a bar 16, having an opening 17, and if desired an ordinary draft-tongue may be bolted in position. The bail is preferably formed of a single piece of steel, and is provided near its eyes with bent portions 18, which are suspended upon the under sides of the terminals of the bail, as indicated at 19, the whole forming braces. In this manner a very strong and durable bail is provided though it will be obvious that other forms of bails or draft-connections may be substituted for the one herein shown.

Through the medium of the bolts 8 that secure the rear standard in position upon the runners 1 there is pivoted a pair of cutters or knives 20, which may be swung in under the arches or between the runners or out from the same to any degree. These cutters or knives may be adjusted in their lateral position or held in place in an inoperative position through the medium of bolts 21 with which the runners are provided.

A seat-board 22, surmounts the arches and is secured thereto. The seat-board is provided near its rear end with a slot 23, whereby through the medium of a bolt 24, a seat 25, for the accommodation of the driver may be adjustably secured. Foot-supports or braces 26 extend from the side-bars 4 and have their inner ends bent to form hooks 27 for engaging between the strips 10 and side-

bars and under the former. These rests are adjustable as is also the seat so that the machine is adapted for both tall and short men or boys.

5 The seat-board is further provided between the arches with a slot 29 at one side of which there is located a notched locking-standard 30. A bifurcated lever 31 has its terminals bolted or pivoted as at 32 between the strips 10 and upper portions of the runners or side-bars 4, and the upper end of said lever projects through the slot 29 where it is provided with a handle 33, within convenient reach of the driver. A locking-pawl 34, is carried by 15 the lever and is designed to engage with the teeth of the locking-standard, whereby the lever may be adjusted and locked in position. A pair of stub-shafts 36, carry disks 37 at their outer ends, and have their inner portions flattened and provided with a series of 20 adjusting-holes 38. These flattened-portions take between the terminals or rear ends of the runners, and said terminals are perforated for the reception of bolts through the 25 medium of which the stub-shafts may be adjusted to or from said runners, and thus the disks spread apart the desired distance.

Rods 39 are removably engaged with either the inner or outer perforations of the stub-shafts and at their front ends engage with 30 perforations formed in the terminals of the bifurcated lever 30. In order to effect such engagement in a removable and convenient manner the ends of the rod are bent into hook-shape, as shown at 40.

The front end of the seat-board has secured thereto a hopper 41, which, as shown, is divided into compartments 42 and 43, one 35 for the accommodation of corn and the other for the accommodation of smaller seed. The hopper is provided with a seed-spout of ordinary construction and with a slide, the same being controlled by an ordinary handle extending to a point convenient to the operator, 40 so that at the same time the cultivation of the corn or other cereal takes place, the operator may supply any deficiency in the planting theretofore carried on, or in other words, plant in any places that the planter 45 may have skipped, and which will now be obvious by the plant not appearing at such point.

In operation the knives are adjusted laterally from the machine, in contradistinction 55 to the position they occupy within the machine when the latter is not in operation, and the disks having been adjusted to throw more or less corn, the machine is started, straddling the row. It will be seen that the disks 60 operate upon the usual principle throwing more or less soil as may be desired upon the growing corn, thus forming a ridge, and the knives or cutters projecting a desired distance and being inclined will serve to sever 65 and destroy all undergrowth or weeds that would otherwise be likely to choke or impede the growth of the young corn.

Although I have herein shown and described various details of construction which form parts of my invention yet I do not limit 70 the same to such minute details, but hold that I may vary them to any extent and manner within the skill of the ordinary mechanic, without departing from the spirit of my invention. 75

Having described my invention, what I claim is—

1. In a cultivator of the class described, the combination with the opposite runners, arches rising therefrom, the seat-board carried by the 80 arches, draft-appliances at the front of the runners and connecting-devices between the runners, of a lever pivoted within the frame, rear stub-axles having inner flattened ends provided with a series of adjusting-holes, 85 bolts for adjusting the axles upon the rear ends of the runners, disks on the outer ends of the axles, and a pair of connecting-rods removably engaging holes in the axles and perforations in the lever, substantially as specified. 90

2. In a cultivator of the class described, the combination with the opposite runners, the arches rising therefrom, the disks at the rear 95 ends of the runners, and means for adjusting the same, of the bent knives pivoted at their bends to the runners, and the removable stub-bolts secured to the runners and adapted to secure the knives either in an operative or inoperative position, substantially as specified. 100

3. In a cultivator of the class described, the combination with the runners having their rear ends upwardly and rearwardly bent to form extensions and their front portions bent 105 upon themselves to form front eyes and extending rearwardly over the extensions; an arch connecting the same, front arches secured to the runners and to the upper portions of said runners; a seat-board carried by the arches, a bifurcated lever pivoted to said 110 upper portions of the runners and extending through a slot in the seat-board, means for locking the lever, disk-carrying stub-axles pivoted between the terminals of the runners, and connecting-rods between the bifurcated 115 lever and stub-axles, substantially as specified.

4. In a cultivator of the class described, the combination with the opposite runners, the superimposed side-bars, a draft-bail at the front ends of the runners, a stub-axle adjust- 120 ably mounted between the side bars and rear ends of the runners, cutters carried by the runners, and arches rising from the runners and secured to the side bars, of a seat-board supported by the arches; a seat adjustably 125 mounted thereon, disk-carrying axles pivoted between the side-bars and runners, a bifurcated lever pivoted at its lower ends to the side-bars, and connecting-rods between the bifurcations of the lever and axles, substan- 130 tially as specified.

5. In a cultivator, the combination with the opposite side-bars, the runners, the arches rising from the runners and secured to the side-

bars, and the strips secured to the inner faces
of the arches, of a superimposed seat-board,
an adjustable seat carried thereby, the culti-
vating-disks, and the foot-rests located at op-
5 posite sides of the machine and having their
inner ends bent into hook-shape for engaging
between the side-bars and strips and taking
under the latter, substantially as specified.

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

GEORGE K. JACKSON.

Witnesses:

A. G. EVERETT,
BENJ. H. JOHNSON.