

No. 622,096.

Patented Mar. 28, 1899.

J. McL. WRIGHT.
CULTIVATOR.

(Application filed Mar. 24, 1898.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

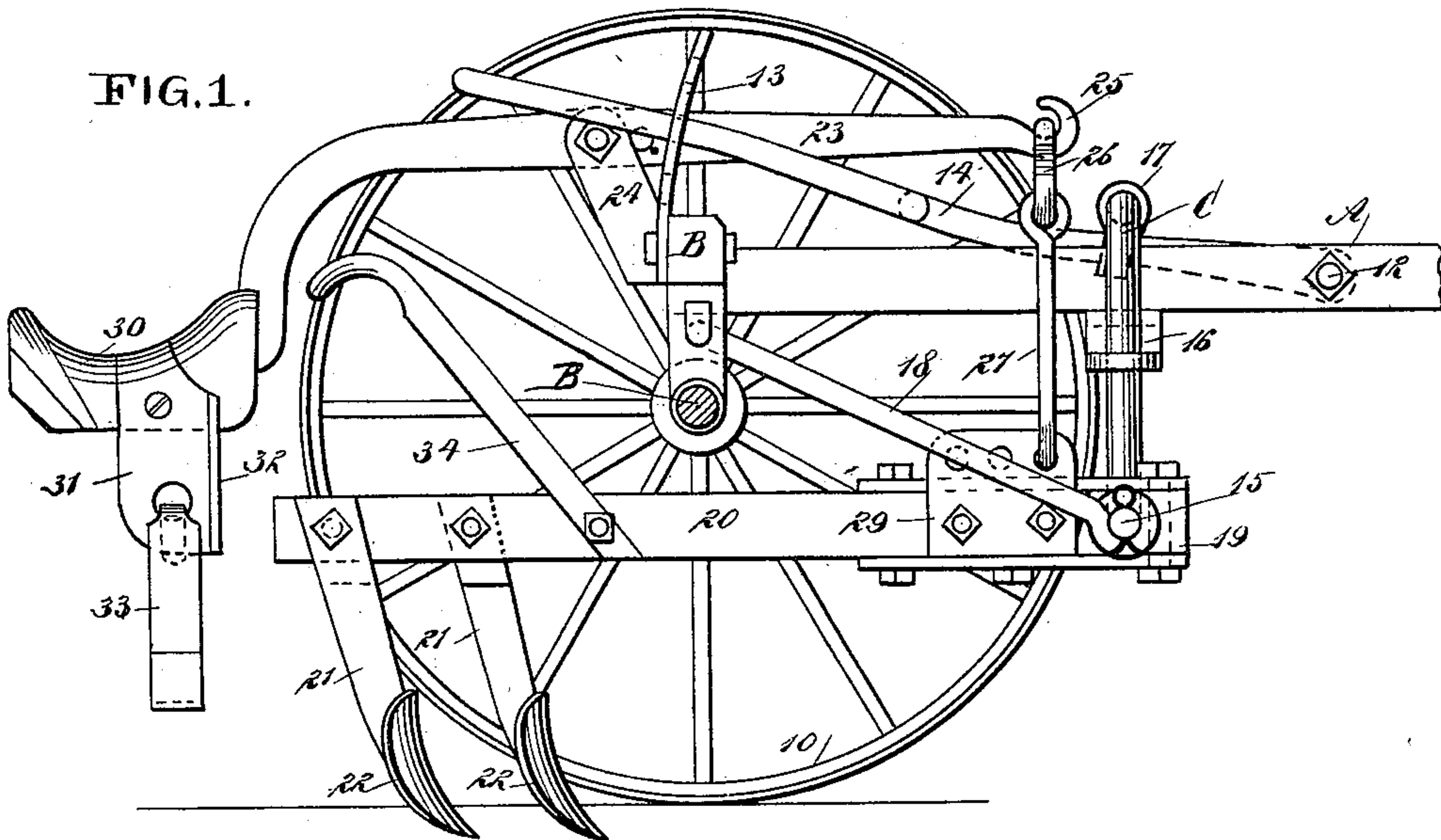
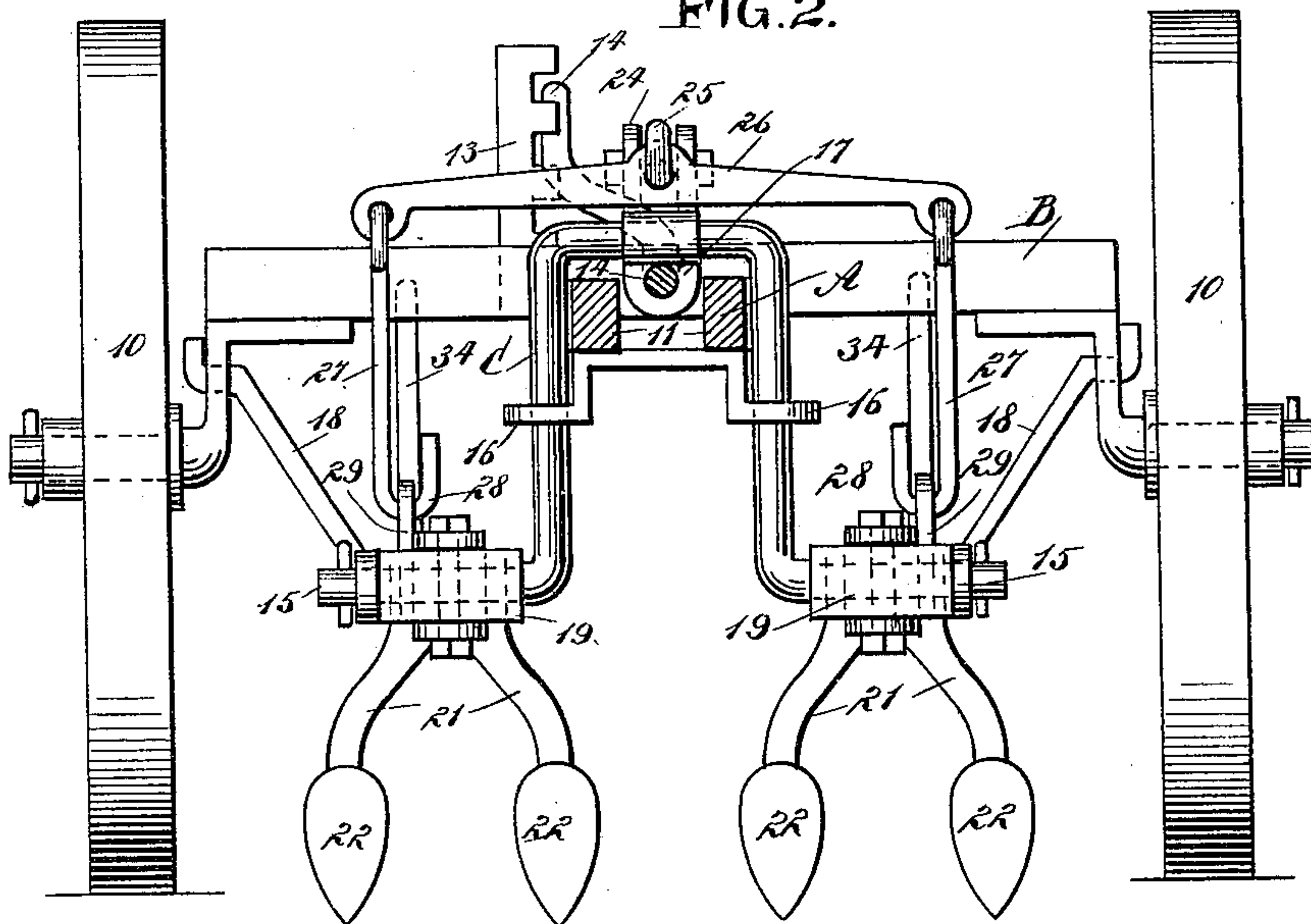


FIG. 2.



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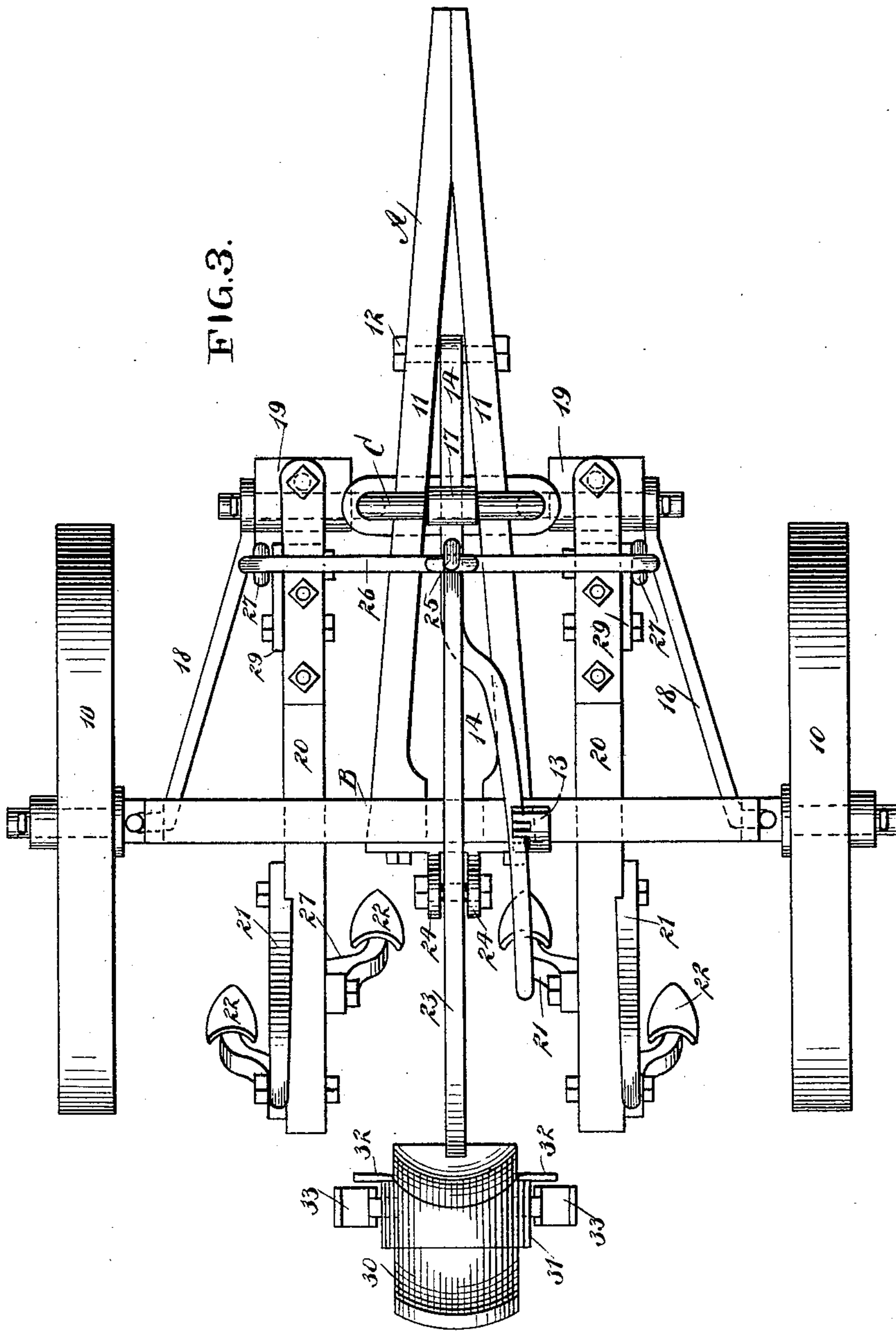
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UNITED STATES PATENT OFFICE.

JOHN MCL. WRIGHT, OF OBERLIN, KANSAS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 622,096, dated March 28, 1899.

Application filed March 24, 1898. Serial No. 674,968. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCL. WRIGHT, of Oberlin, in the county of Decatur and State of Kansas, have invented a new and Improved
5 Cultivator, of which the following is a full, clear, and exact description.

The object of my invention is to so construct the cultivator that the weight of the driver will act to normally hold the shares
10 out of contact with the ground and whereby the operator while seated in a saddle forming a portion of the machine may operate one or two beams carrying shares without difficulty and in a most convenient manner.

15 Another object of the invention is to provide a simple means whereby the plows of the cultivator may be regulated as to the depth they shall travel in the soil.

20 The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification,
25 in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section through one of the axles of the machine, taken close to one of the wheels and illustrating the operative
30 portions of the machine in side elevation. Fig. 2 is a vertical section through the tongue, taken in front of the regulating-yoke; and Fig. 3 is a plan view of the machine.

The pole A is comprised of two diverging
35 members 11, and the said pole is attached to the central portion of the body of a crank-axle B, the spindles of which axle carry supporting-wheels 10. The body portion of the axle is provided with a rack 13, and a lever
40 14 is pivoted at the forward portion of the tongue on a bolt 12, which extends horizontally through the tongue, as is best shown in Fig. 3. The lever 14 is carried rearward a predetermined distance in a straight line and
45 is then bent laterally, and preferably the rear portion of the lever is somewhat curved, the lever being adapted at its rear end for engagement with the rack 13. An adjusting-yoke C spans the tongue or pole A at the rear
50 of the pivot pin or bolt 12, and the said adjusting-yoke C is provided with horizontal

spindle-sections 15, which extend in opposite directions from the members of the yoke, as is best illustrated in Fig. 2.

The members of the adjusting-yoke are 55 made to pass through guide-eyes 16, attached to the pole, as is also shown in Fig. 2, and at the central portion of the bow-section of the yoke C a downwardly-extending flange 17 is pivoted, through which flange the lever 14 is 60 passed, as is likewise illustrated in Fig. 2. The spindle-sections of the adjusting-yoke C are pivotally connected by bars 18 with the crank portions of the axle B, and upon each spindle-section of the adjusting-yoke a block 65 19 is pivoted.

A beam 20 is carried by each block 19, the forward ends of the beams being pivoted to said blocks, extending, preferably, across the top and across the bottom. Each beam at its 70 rear end is provided with downwardly-extending shanks 21, and each shank is adapted to carry a plowshare 22 of any desired construction. The shanks of the plowshares are usually arranged at each side of the beam. 75

The depth to which the plowshares shall enter the ground is regulated through the medium of the lever 14, which lever when elevated carries the adjusting-yoke C upward, consequently carrying in an upward direction 80 the pivot ends of the beams, and when the lever 14 is carried downward the beams are dropped, and the beams may be held in their adjusted position by the engagement of the lever 14 with the rack 13. 85

A bar 23 is adjustably pivoted at or near its center between ears 24, which usually extend rearwardly and upwardly from the rear portion of the body of the axle B at or near the center. The bar 23 is arched at its rear 90 end and is provided with a foot-section at the rear and with a hook 25 or its equivalent at the front, the said hook 25 being adapted to pivotally engage with the central portion of a cross-bar 26, from the ends of which cross- 95 bar links 27 are carried downward, terminating in hooks 28 at their lower extremities, the said hooks being adjustably connected with plates 29 or their equivalents attached to the forward portion of the beams 20, as illustrated 100 in Figs. 1 and 2. A saddle 30 is attached to the foot of the arched bar 23, and from each

side of the saddle a plate or a shield 31 is carried downwardly, having at its forward edge an outwardly-extending flange, so as to protect the legs of the driver seated in the saddle from contact with wet stalks or with damp plants that are being cultivated.

A stirrup 33 is attached to each pendent portion 31 of the saddle, and the operator when standing in said stirrups will stand as firmly as on the ground and may manipulate the handles 34, attached to the beams, and guide the said beams laterally or vertically, as occasion may demand, the rear arching of the bar 23 permitting the handles of the beam to be carried under said bar.

When the operator does not exert downward pressure upon the handles 34 of the beams, the weight of the rider in the saddle will be sufficient to raise the forward end of the arched bar, and thus carry the plow-beams upward, so that the shares will be removed from contact with the ground. Under such an arrangement the operator may drive to or from the field or to any point on the field without bringing the plows to working engagement with the ground; but the moment such an engagement is desired by standing in the stirrups and pressing downward on the handles 34 the shares may be buried in the ground the distance permitted by the adjusting-yoke C.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a cultivator, the combination, with a frame, and a yoke adjustable upon the said frame, the said yoke being provided with spindles at the extremities of its members, of plow-beams pivoted on the spindles of the said yoke, a lever connected with the yoke, being arranged to raise and lower the same,

and a locking device for the lever, for the purpose set forth.

2. In a cultivator, the combination with a frame, a vertically-extending yoke having horizontal transverse pivots at its extremities and guides upon the frame engaging the body of the yoke, of a lever pivoted to the frame and the yoke, and a toothed bar upon the frame adapted to engage and hold the lever.

3. In a cultivator, the combination of a frame, plow-beams having a pivotal connection of their forward ends with the frame, said connections being movable up or down with a lever pivoted upon the frame and carrying a seat at its rear end and connections from the front end of the lever to the plow-beams.

4. In a cultivator, the combination of a frame, and plow-beams having vertically-adjustable pivots carried by the frame, and handles upon the beams, with a lever pivoted upon the frame and carrying a seat at its rear end where the rider may engage the handles, and connections from the front end of the lever to the plow-beam.

5. In a cultivator, the combination of a frame, a yoke held in guides thereon to move vertically, a lever connected to the yoke, and a locking device for the lever with plows having their beams pivoted upon the yokes, a lever pivoted upon the frame and carrying a seat upon its rear end where the rider may engage the plow-handles, a cross-bar centrally pivoted upon the forward end of the seat-lever, and links connecting the ends of the cross-bar with the beams back of their pivots.

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Witnesses:

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