

(No Model.)

2 Sheets—Sheet 1.

J. SEELBACH, Jr.
CORN PLANTER.

No. 462,281.

Patented Nov. 3, 1891.

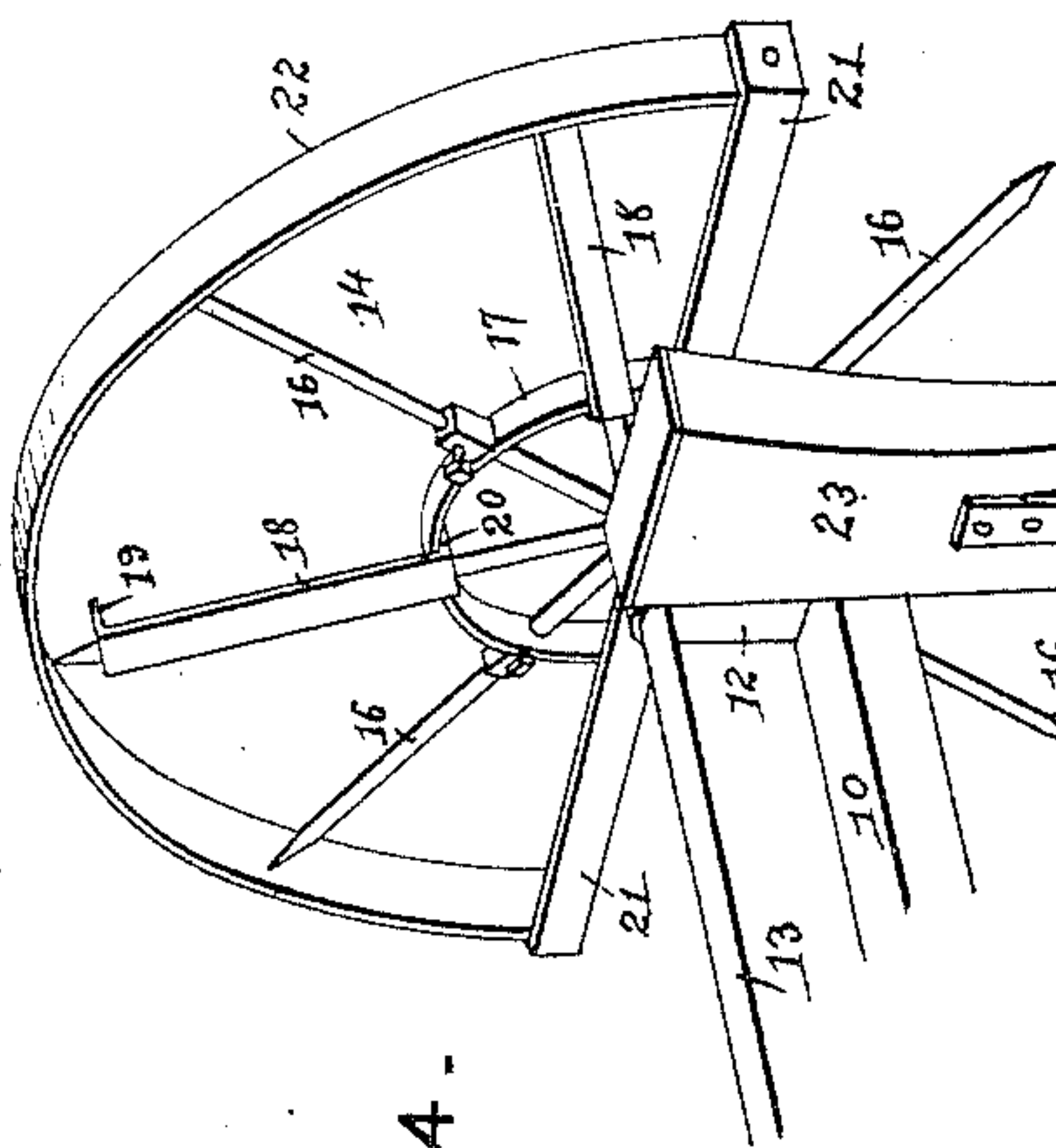


FIG. 4 -

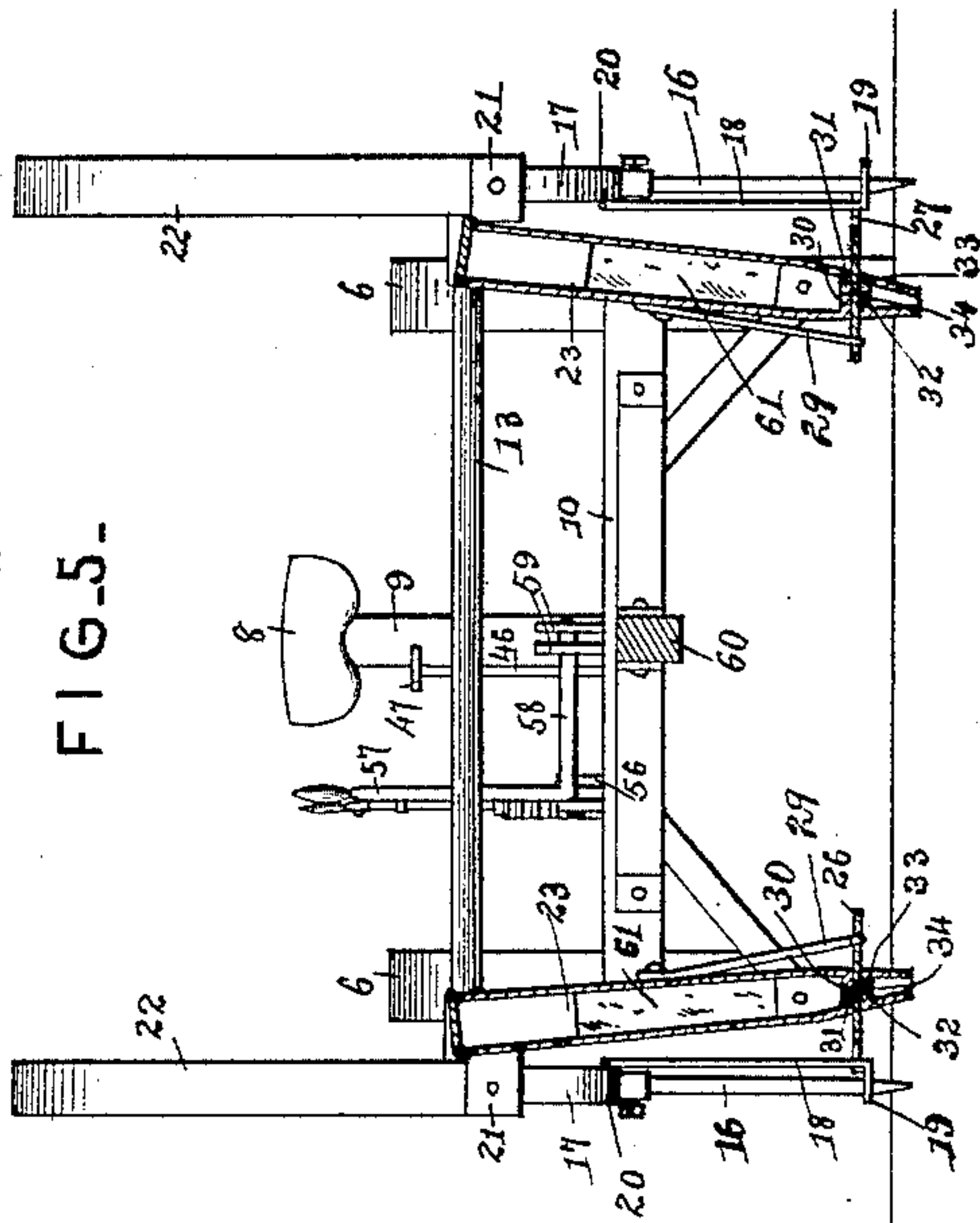


FIG. 5 -

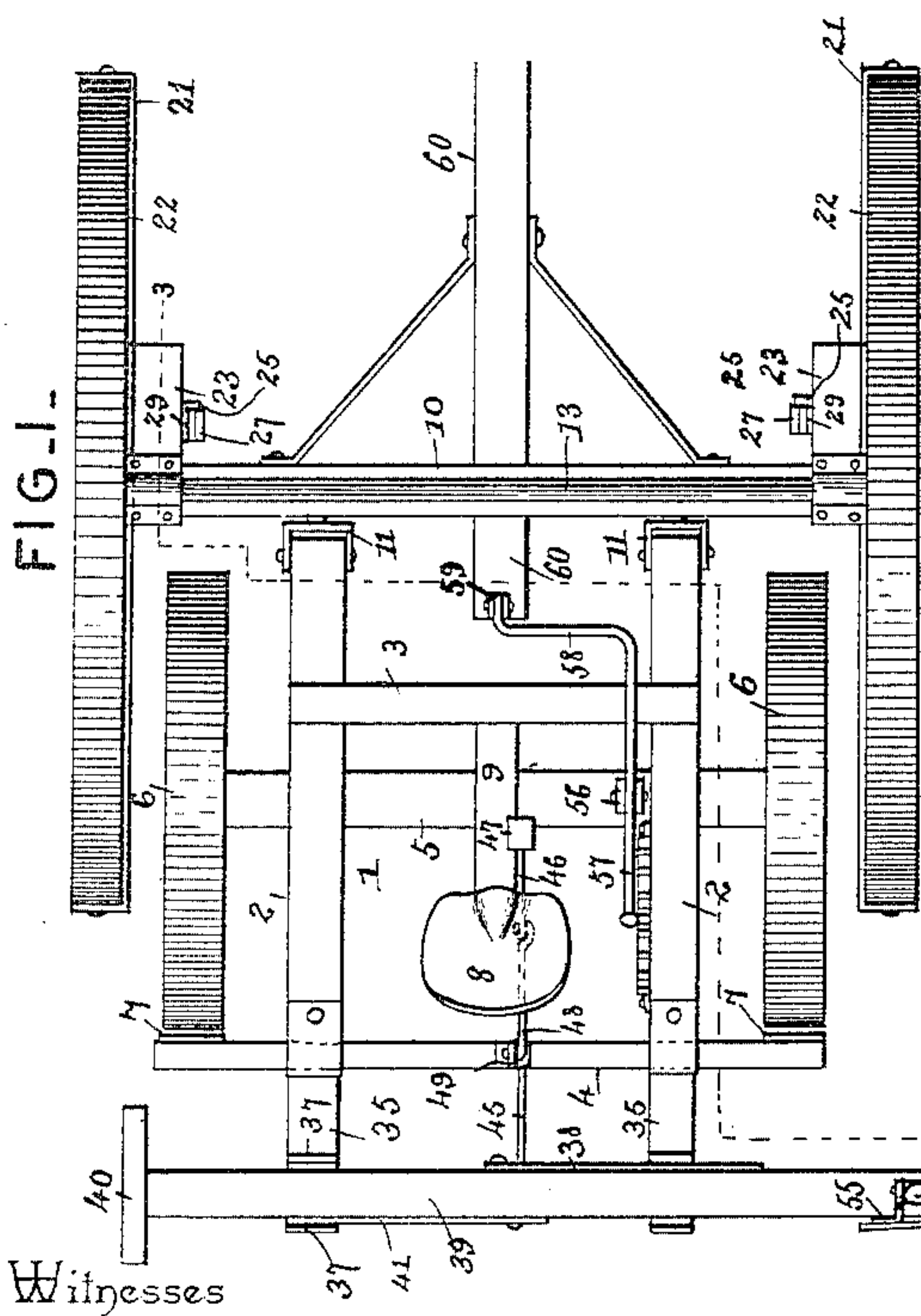


FIG. 1 -

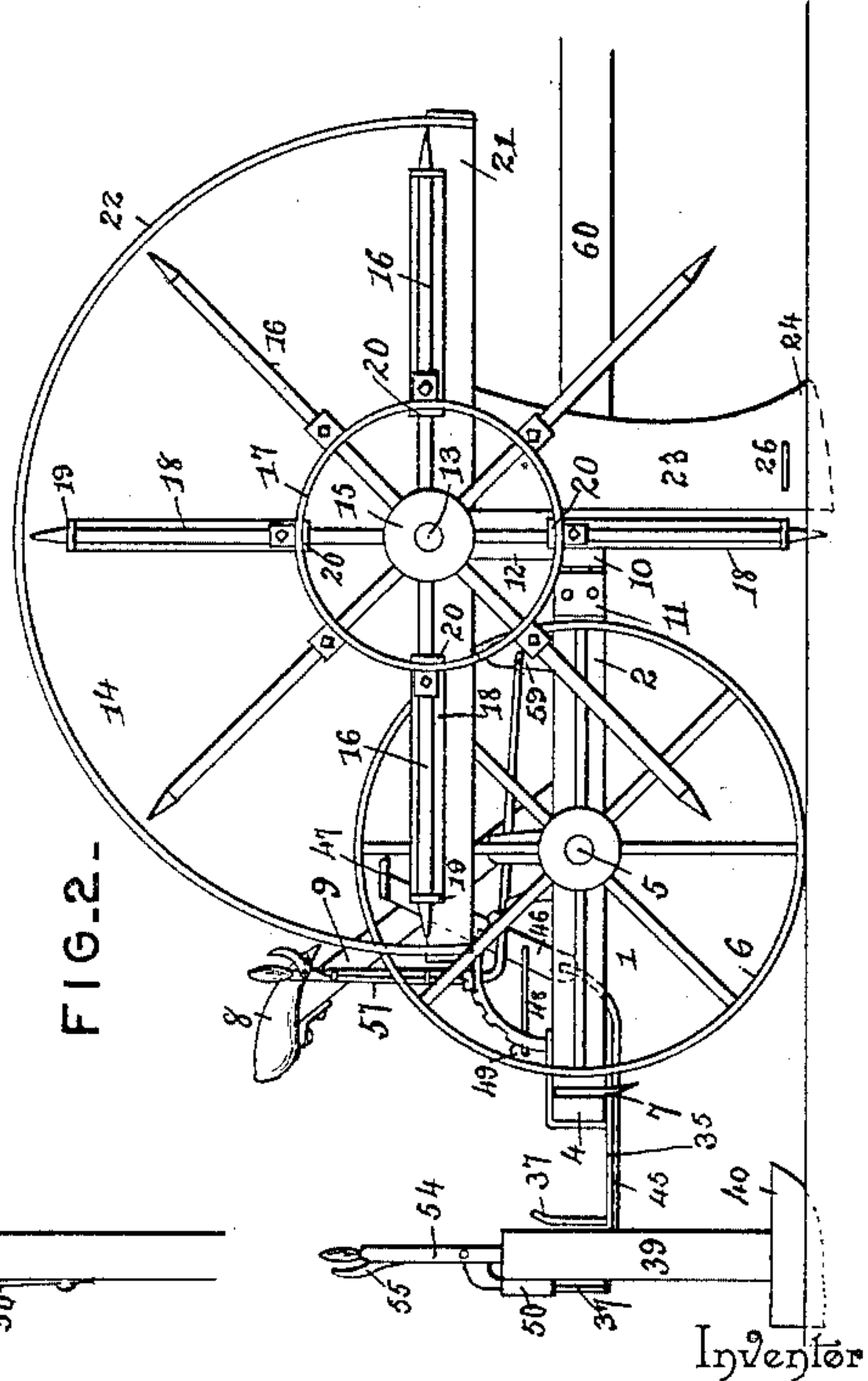


FIG. 2 -

Witnesses

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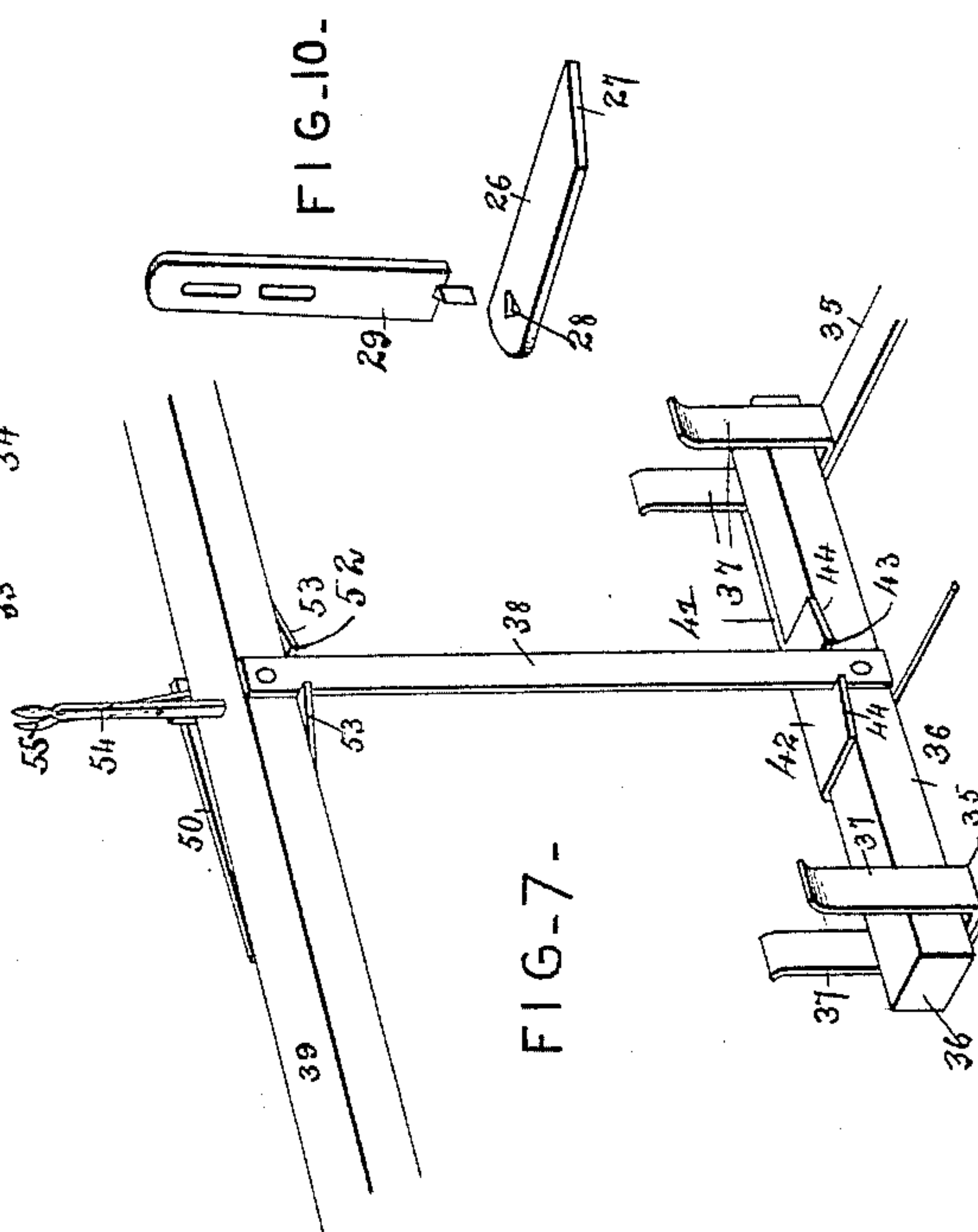
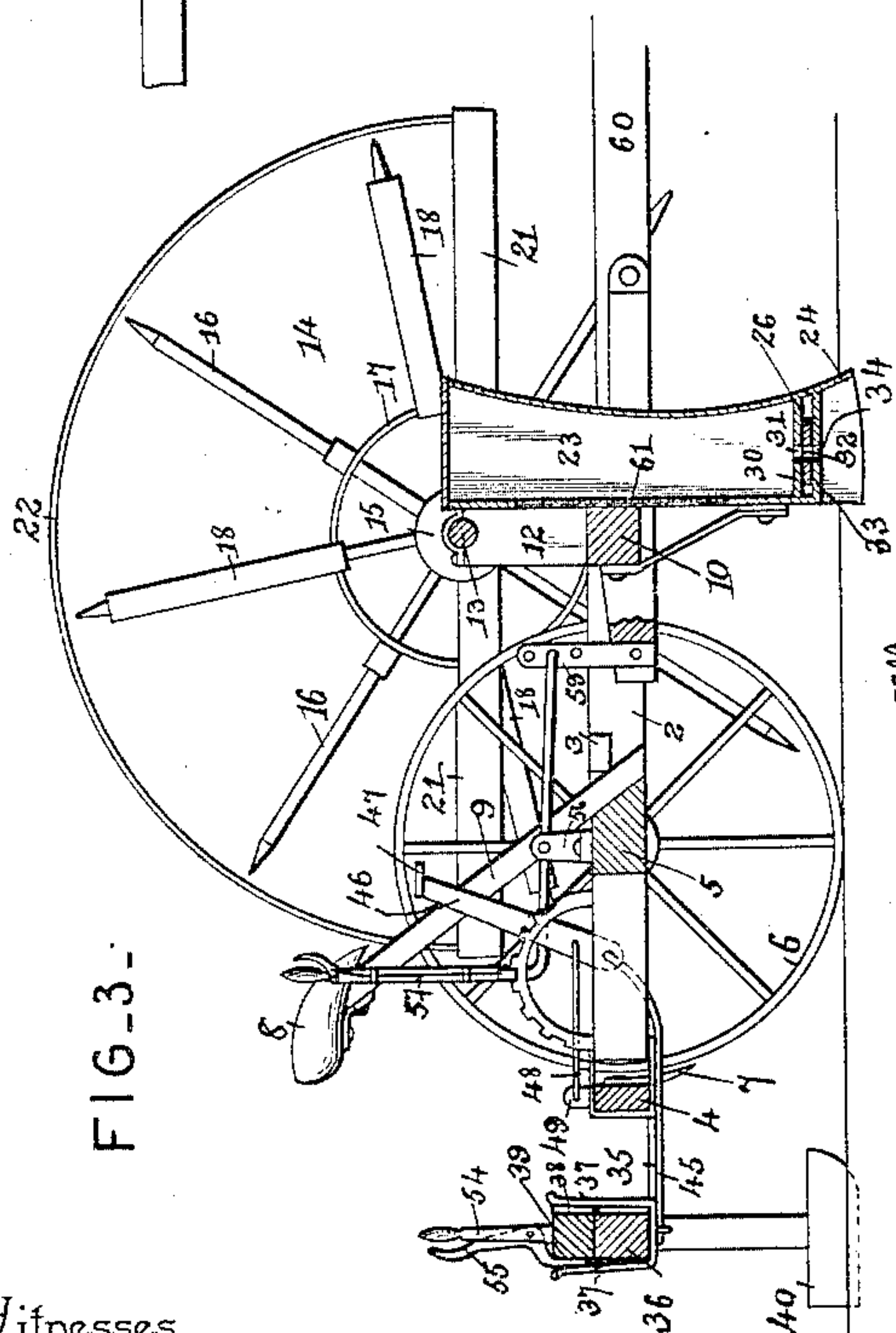
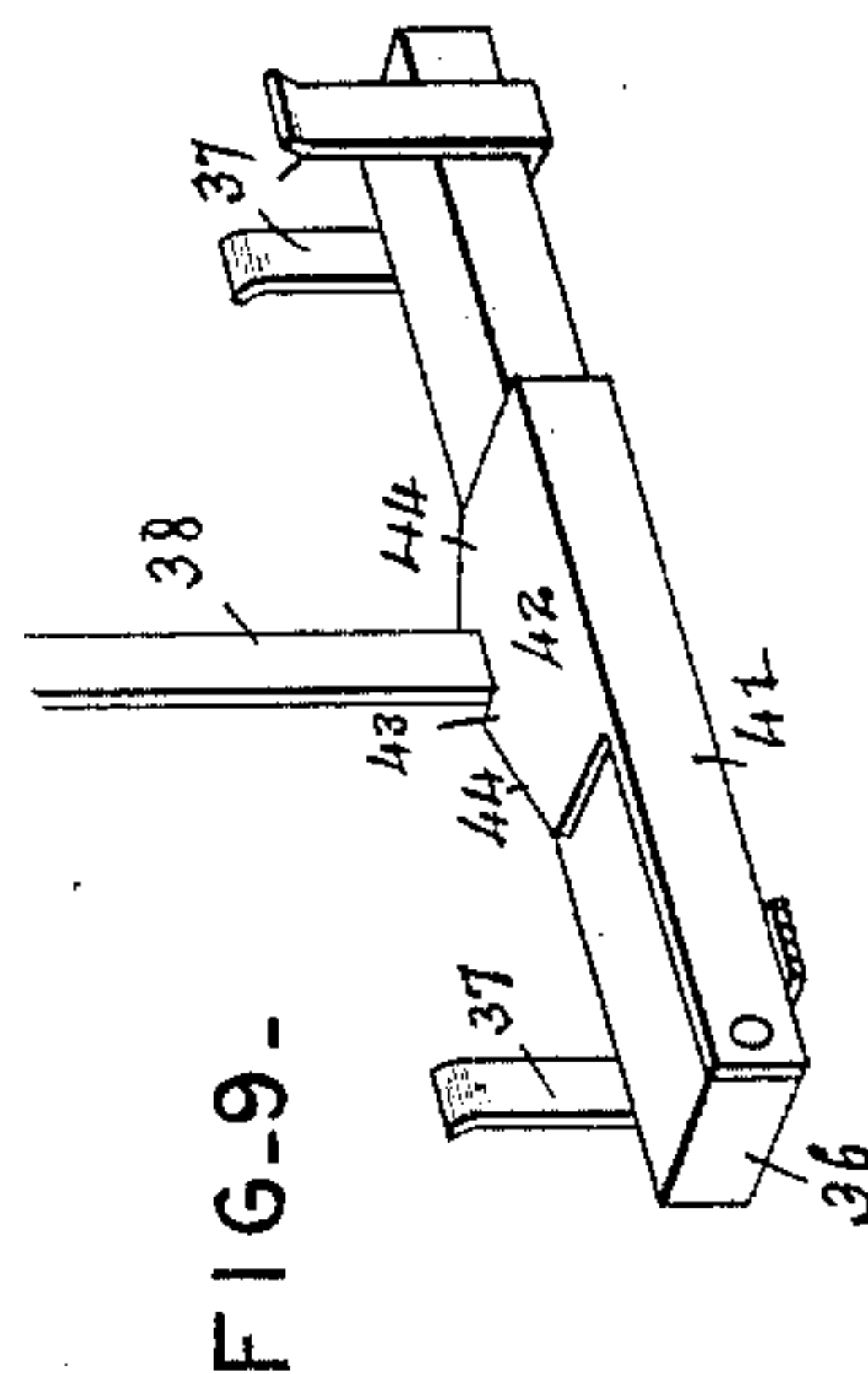
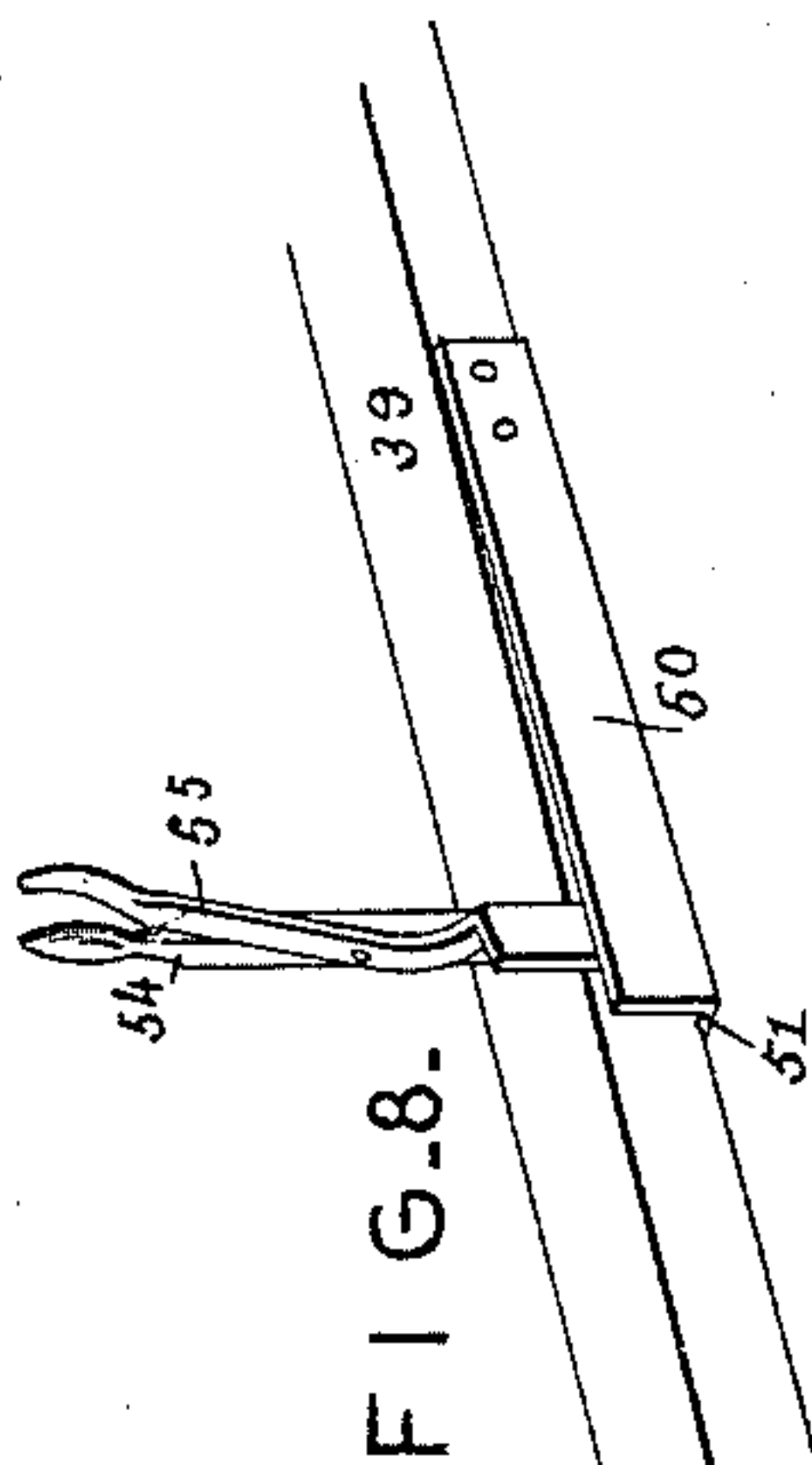
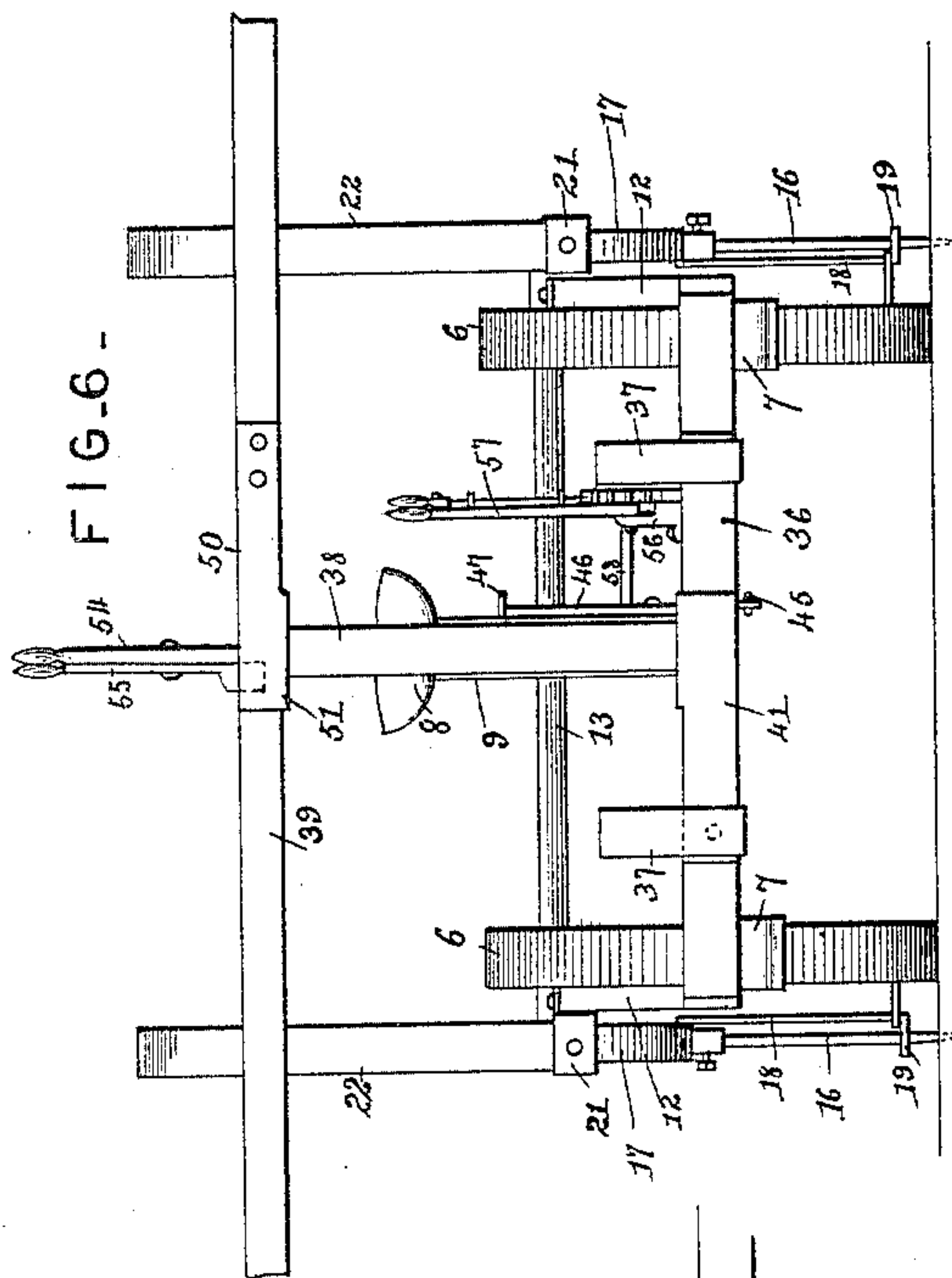
By his Attorneys,

C. A. Snow & Co.

2 Sheets—Sheet 2.

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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN SEELBACH, JR., OF PALMER, ILLINOIS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 462,281, dated November 3, 1891.

Application filed May 27, 1891. Serial No. 394,292. (No model.)

To all whom it may concern:

Be it known that I, JOHN SEELBACH, Jr., a citizen of the United States, residing at Palmer, in the county of Christian and State of Illinois, have invented a new and useful Corn-Planter, of which the following is a specification.

This invention relates to check-row corn-planters; and it has for its object to provide a machine of this class which shall be simple in construction, durable and efficient in operation, and in which the check-row marks may be made without the use of a check-row wire.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view of a check-row corn-planter constructed in accordance with my invention. Fig. 2 is a side view of the same. Fig. 3 is a vertical longitudinal sectional view taken on the line 3 3 in Fig. 1. Fig. 4 is a perspective view of one of the hoppers and runners, showing also a portion of the adjacent walking-wheel whereby the seed-dropping mechanism is operated. Fig. 5 is a transverse sectional view taken through the hopper and runner and showing the seed-dropping mechanism. Fig. 6 is a rear elevation showing the marker in a raised position. Fig. 7 is a perspective detail view showing the adjusting and holding mechanism of the marker. Figs. 8 and 9 are detail views of the adjusting mechanism of the marker. Fig. 10 is a detail view of the seed-slide and the operating-spring of the same.

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

1 designates the main frame of my improved corn-planter, which is composed of the side pieces 2 2, connected by the front and rear cross-pieces 3 and 4 and having the axle 5, upon which the transporting-wheels 6 are mounted. The ends of the rear cross-bar 4, which project beyond the sides of the frame, are provided with scrapers 7, adapted to bear against the peripheries of the supporting-wheels to keep the latter free from dirt. A seat 8 for the driver is suitably mounted upon a supporting-bar 9, attached to this frame.

The seeder-frame is composed, mainly, of a cross-bar 10, which is connected by hinged clips 11 to the front ends of the side bars 2 2 of the main frame. The ends of the cross-bar 10 is provided with blocks 12, supporting the axle or shaft 13, upon the ends of which are mounted the walking-wheels 14, each of which is composed of a hub 15, having a series of radially-extending pointed spokes 16, which are connected at a suitable distance from the hub by an annular rim or brace 17. Such of the spokes 16 as are desired to actuate the seed-dropping mechanism are provided with cam-plates 18, having intumed perforated flanges 19 and 20, whereby they are mounted upon the spokes, the flanges 20 being inside of the rim 17, whereby the said guard-plates are held in position upon the spokes. In the drawings hereto annexed every alternate spoke is thus equipped. Set-screws or other suitable devices may also be employed, when desired, to retain the guard-plates in position upon the spokes. The flanges 19 at the outer ends of the guard-plates form markers to indicate the points where the seed is dropped or deposited in the ground.

Suitably attached to the blocks or bearings 12, in which the shaft or axle 13 is journaled, are the arms or brackets 21, supporting the semi-circular guards 22, which extend over the walking-wheels and protect the latter.

The seed boxes or hoppers 23 are secured to the front sides of the hinged cross-bar 10 at the ends of the latter. Each of said seed-boxes terminates at its lower end in a runner or furrow-opener 24, and it has upon its inner side a vertically-arranged fender or guard 25. The sides of each hopper are slotted to accommodate the seed-slide 26, the outer end of which is beveled or cam-shaped, as will be seen at 27, (see Fig. 10,) and the inner end of which has a slot or opening 28 to receive the point of a spring 29, which is suitably secured to the inner side of the box or hopper. The latter is provided above the seed-slide with a bottom 30, having a perforation 31, which is normally in line with the opening or seed-cup 32 in the seed-slide. Below the latter is arranged a bottom or cut-off 33, having an opening 34 for the passage of the seed when the seed-cup 32 of the slide is brought into alignment therewith. The seed-slide is

operated by the guard-plates 18 upon the spokes of the walking-wheels, which, when they pass into engagement with the beveled end of the seed-slide, push the latter against the tension of the spring 29, thus operating the seed-dropping mechanism. It is obvious that the distance between the hills may be regulated by the arrangement of the guard-plates 18 upon the spokes of the walking-wheels.

Extending rearwardly from the main frame 1 of the machine are brackets 35, supporting a cross-bar 36, which is provided at its ends with upwardly-extending arms 37. Pivoted centrally to the cross-bar 36 is an arm or lever 38, at the upper end of which is pivoted the marker-rod 39, which is provided at its ends with the shoes or markers 40. To the rear side of the cross-bar 36 is attached a spring 41, having a flange 42, which projects forwardly over the top of said cross-bar, and which is provided at its front edge with a notch 43 and with beveled ends 44, which will enable the arm or lever 38 to pass into engagement with the notch 43 of the flange 42, which latter constitutes a spring-catch or holding device adapted to sustain the arm or lever 38 in an upright position. The spring 41 is connected by a rod 45 with a lever 46, pivoted to the seat-support and having a treadle 47, by means of which it may be operated. The said lever is also connected by a rod 48 with a lug 49, extending upwardly from the rear frame-bar 4, which is mounted as a rock-shaft in suitable bearings, and which may thus, by means of the lever 46, be oscillated so as to throw the scrapers 7 into engagement with the periphery of the transporting-wheels. A spring-catch composed of a spring 50, having a forwardly-extending flange 51, provided with a notch 52 and beveled ends 53, is also secured to the rear side of the marker-rod, and the latter is provided with an upright 54, to which is pivoted a lever 55, adapted to bear against the spring 50 to throw the spring-catch out of engagement with the arm or lever which it may engage when said arm or lever occupies a vertical position.

When the machine is in operation, the marker-rod is supported upon the cross-bar 36, and it will then be seen that said marker-rod will project a suitable distance beyond the frame of the machine to cause the shoe at its outer end to make a thorough or mark in the ground. When the end of the field is reached and the machine is to be turned, the operator without leaving his seat may grasp the upright or handle 54 of the marker-rod and raise the latter until the arm or lever 38 assumes a vertical position and engages the notches 43 and 52 of the spring-catches upon the supporting-bar 36 and marker-rod 39, respectively. The marker-rod will thus be supported in an elevated position while the machine is being turned, it being evenly balanced, so as to avoid excessive strain. After the machine has been turned the operator

again grasps the handle 54, together with the lever 55, which latter is operated to disengage the notch 52 from the upper end of the arm or lever 38, while the treadle 47 of lever 46 is at the same time manipulated so as to disengage the notch 43 of the lower spring-catch from the lower end of the arm or lever 38. The marker-rod is then free to swing down upon the supporting-bar 36, care being taken to lower it to the side opposite to that from which it was lifted, thus placing the said marker-rod again in position for operation.

The main frame is provided with a lug 56, to which is pivoted a hand-lever 57, having an arm 58, which is connected by a link 59 with the rear end of the tongue 60, which is secured to the hinged cross-bar 10 at the front end of the main frame. By means of this lever the tongue may be adjusted so as to regulate the draft in an upward or downward direction, as may be found expedient.

The operation and advantages of my invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The seeding mechanism is exceedingly simple in construction and certain in operation. It is my intention to provide small panes of glass, as 61, in the rear sides of the seed boxes or hoppers directly above the runners, so as to enable the driver to observe the dropping of the seed. When the end of the field is reached, the driver may without leaving his seat adjust the marker-rod to an elevated position, where it is suspended while the machine is being turned, after which the said marker-rod may be easily and quickly restored to its operative position.

Having thus described my invention, what I claim is—

1. In a check-row corn-planter, the combination of a main frame, the clips hinged at the front ends of the side bars of said frame, the cross-bar connected with said clips and having supporting blocks or boxes, one at each end, the shaft journaled in said boxes and having the walking-wheels, and the flanged cam-plates mounted longitudinally upon the spokes of said walking-wheels and adapted to actuate the seeding mechanism, substantially as set forth.

2. In a check-row corn-planter, the combination, with the main frame, of the hinged cross-bar, the shaft journaled in the latter and carrying the walking-wheels, the seed-boxes at the ends of said cross-bar having the transversely-reciprocating spring-actuated slides with beveled outer ends, and the cam-plates mounted upon the spokes of the walking-wheels to engage the beveled ends of the seed-slides, substantially as set forth.

3. The seed-boxes terminating at their lower ends in integrally-edged runners or furrow-openers, in combination with the transversely-reciprocating slides having beveled outer ends, the springs secured to the inner sides

of the seed-boxes and engaging slots or notches in the inner ends of the slides, and the fenders secured to the inner sides of the seed-boxes in front of said springs and slides, substantially as set forth.

4. In a machine of the class described, the combination, with the main frame having rearwardly-extending brackets, of the cross-bar supported thereon and having upwardly-extending arms, a lever pivoted centrally to said cross-bar, and a marker-rod pivoted to the free end of said lever and having shoes at its outer ends, substantially as set forth.

5. In a check-row corn-planter, the combination, with the main frame, of a cross-bar supported upon brackets extending rearwardly from the same and having upwardly-extending arms, a lever pivoted centrally to said cross-bar, the marker-rod pivoted at the free end of said lever, and spring-catches to retain said lever in a vertical position with relation to the supporting-bar, and the marker-rod in a horizontal position with relation to the latter, substantially as set forth.

6. In a check-row corn-planter, the combination, with the main frame, of a supporting-bar having upwardly-extending arms, a lever pivoted centrally to said supporting-bar, the marker-rod pivoted at the free end of said lever, the springs secured to the rear sides of the supporting-bar and the marker-rod and having forwardly-extending flanges provided with central notches and with beveled ends, said notches being adapted to engage the lever when the latter is in a vertical position, and means for disengaging the spring-catches thus formed from said lever, substantially as set forth.

7. In a device of the class described, the combination of the main frame having the supporting-bar provided with upwardly-extending arms, the lever pivoted centrally to said supporting-bar, the marker-rod pivoted at the free end of said lever, the spring-catches attached to the supporting-bar and to the marker-rod and having notches adapted to engage the lever when the latter is in a vertical position, an upright mounted upon the marker-rod and having a lever adapted to engage the spring-catch secured to said marker-rod, and a rod or link connecting the spring-catch secured to the supporting-bar with a lever pivoted to the seat-support, substantially as set forth.

8. The main frame having the supporting-wheels and provided with a rock-shaft mounted in suitable bearings at its rear end and having scrapers adapted to engage the supporting-wheels, the supporting-bar having a lever carrying the marker-rod and a spring-catch adapted to engage said lever, a lever or treadle pivoted to the said support, and links or rods connecting said lever or treadle with a lug extending upward from the rock-shaft having the scrapers and with the spring-catch upon the supporting-bar, whereby said spring-catch and rock-shaft may be simultaneously operated, substantially as set forth.

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

JOHN SEELBACH, JR.

Witnesses:

JOHN NEWBERRY,
J. W. LEIGH.