

No. 711,892.

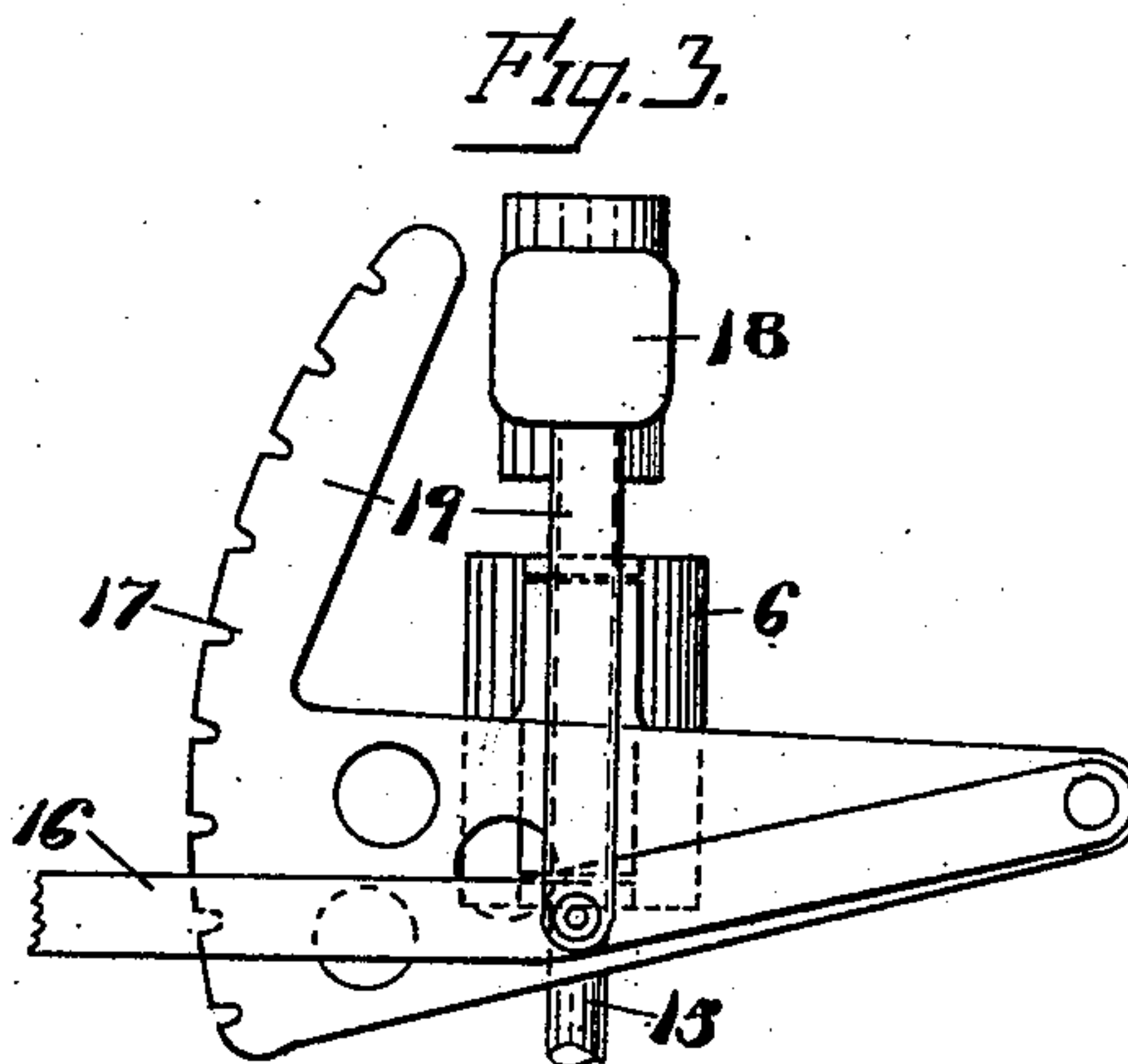
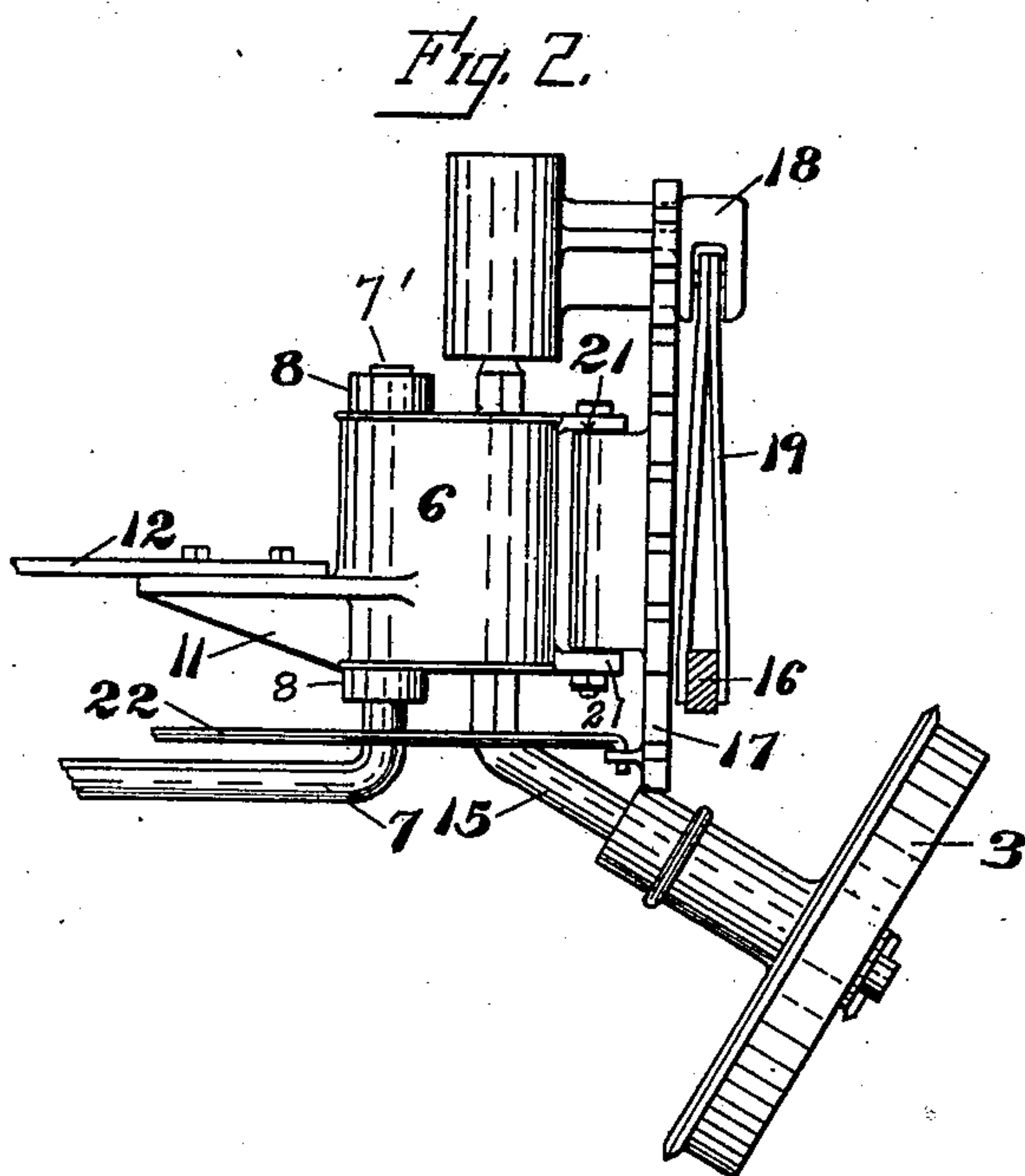
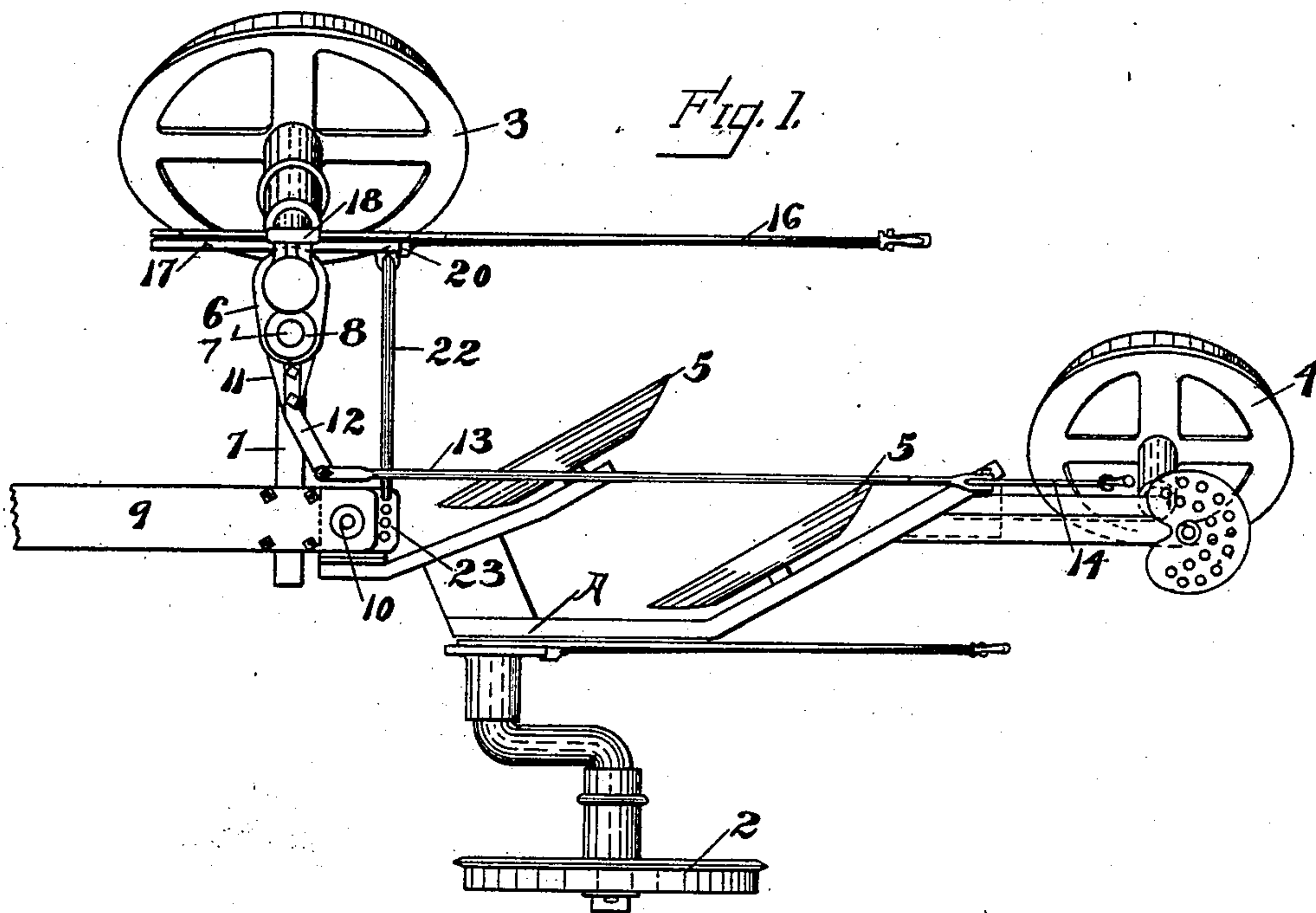
Patented Oct. 21, 1902.

V. T. GILCHRIST.

LAND GAGE ATTACHMENT FOR PLOWS.

(Application filed July 30, 1902.)

(No Model.)



-Witnesses,
Dudley Moss.
H. Morse

Vincent T. Gilchrist ^{Inventor,}
By ^{By} Percy Strong & Co. atty

UNITED STATES PATENT OFFICE.

VINCENT T. GILCHRIST, OF BENICIA, CALIFORNIA, ASSIGNOR TO BAKER & HAMILTON, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

LAND-GAGE ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 711,892, dated October 21, 1902.

Application filed July 30, 1902. Serial No. 117,637. (No model.)

To all whom it may concern:

Be it known that I, VINCENT T. GILCHRIST, a citizen of the United States, residing at Benicia, county of Solano, State of California, have invented an Improvement in Land-Gage Attachments for Plows; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in plows which are supported upon wheeled carriages, and particularly to that class known as "disk" plows.

The object of my invention is to provide a simple means of changing the line of the furrow-wheels in relation to the draft and of raising and lowering the frame in order to regulate the width and depth of cut of the plows.

The invention consists of the mechanism hereinafter described, having reference to the accompanying drawings, in which—

Figure 1 is a plan view of plow. Fig. 2 is an end view of gage mechanism. Fig. 3 is a side view of gage mechanism.

A represents a frame having the usual land-wheel 2 and the respective staggered front and rear furrow-wheels 3 and 4, by which the disk plows 5 are held up to their work.

The invention resides in the manner of mounting and operating the front furrow-wheel 3, whereby it is adjustable either vertically or laterally in relation to the frame.

6 is a sleeve-casting turnable about the vertical portion 7' of the axle 7 and held in place thereon by means of the collars 8. The axle 7 has a horizontal portion by which it is secured adjustably to the pole 9. The latter is pivoted to the frame at 10, and the axle and casting are movable with the pole. The sleeve has a projection 11, to which is secured an arm 12, and a rod 13 connects the end of this arm with any well-known and suitable hand-lever mechanism 14, by which the turning of the sleeve is effected. The vertical portion of the bent axle 15 of wheel 3 is slidable in the sleeve-casting and is made square in cross-section to prevent its turning therein. The movement of the sleeve on the axle 15 to raise or lower the front end of the plow-frame is effected by means of a lever 16, pivoted to a rack 17, having a lug pivoted be-

tween lugs 21 on the sleeve-casting, said rack being connected with an adjustable rod 22 and said lever being connected with a projection 18 on the end of the axle by link 19. The lever carries a pawl 20, engaging the teeth in the rack. Thus it will be seen in operation that the furrow-wheel 3 may be adjusted laterally to vary the width of cut of the plows by means of the lever 14 and its connections with the sleeve, and the wheel is adjustable vertically to raise or lower the front end of the frame to vary the depth of cut by means of the lever 16.

By having the rack 17 pivoted to the sleeve and by reason of the adjustable supporting-rod 22 the lever 16 does not partake of the rotary movement of the sleeve about the axis of the latter, but remains always at the same angle in relation to the longitudinal axis of the machine, except as the end of the rod 22 may be shifted in one or other of the perforations in plate 23 to bring the lever more conveniently in reach of the operator.

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

1. The combination in a plow of the character described of a tongue pivoted to the frame, a vertical axle supported thereon and turnable therewith, a sleeve rotatable about said axle, and a wheel having a non-rotatable vertical standard slidable in said sleeve.

2. The combination in a plow of the character described, of a tongue pivoted to the frame, a vertical axle supported thereon and turnable therewith, a wheel having a vertical standard slidable in said sleeve, and rack-lever mechanism pivoted on said sleeve by which the sleeve is raised and lowered on said standard.

3. The combination in a plow of the character described, of a sleeve turnable about a vertical axis, a wheel having a non-rotatable standard slidable in said sleeve, a rack-lever mechanism pivotally supported on said sleeve, and connections between said lever and standard whereby the sleeve is raised and lowered on said standard to vary the depth of cut of the plows.

4. The combination with a plow-frame of a

plow of the character described, of a sleeve turnable about a vertical axis, a wheel having a standard slidable in said sleeve, a rack pivotally supported on said sleeve, a lever 5 fulcrumed on said rack, connections between said lever and standards, and connections between the rack and plow-frame by which the plane of the rack and lever in reference to the axis of the machine remains relatively 10 the same irrespective of the rotary movement of the sleeve about its axis.

5. A land-gage attachment for plows comprising in combination a tongue pivoted to the plow-frame, a vertical axle adjustably 15 supported on said tongue and movable therewith, a sleeve-casting turnable about said axle, a non-rotatable wheel-standard slid-

able in said casting, lever mechanism by which said casting is turned on its axis, a segmental rack pivoted on said casting, a lever 20 fulcrumed on said rack, connections between said lever and the wheel-standard whereby the sleeve is raised or lowered, and accordingly the plow-frame, to vary the depth of cut of the plows, and an adjustable pivotal 25 connection between the plow-frame and said rack.

In witness whereof I have hereunto set my hand.

VINCENT T. GILCHRIST.

Witnesses:

M. HAYNES,
J. HARDY.