

F. K. LATHROP.
WHEEL TRUCK FOR DISK HARROWS.
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Patented Nov. 10, 1908.

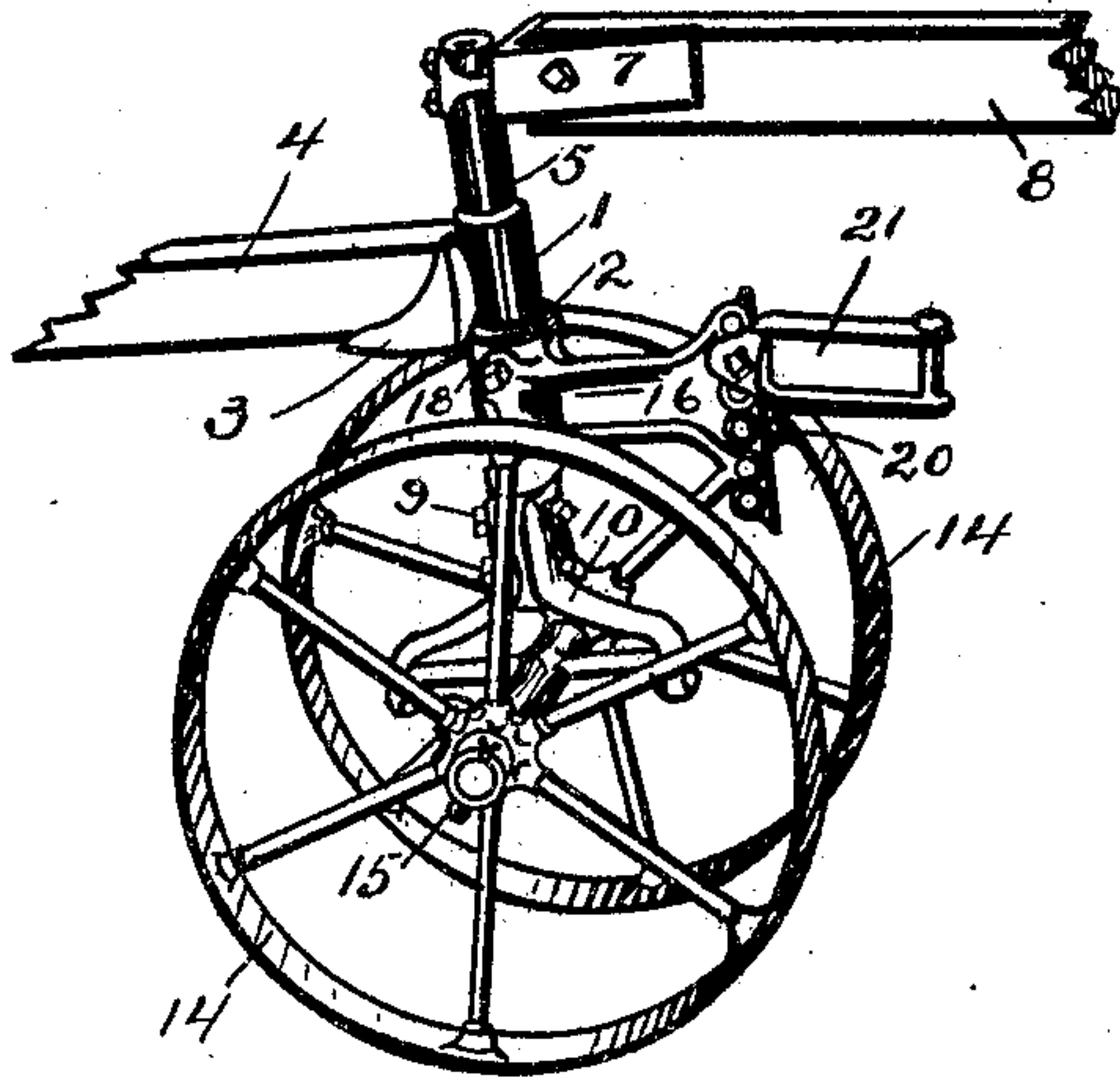


Fig. 1.

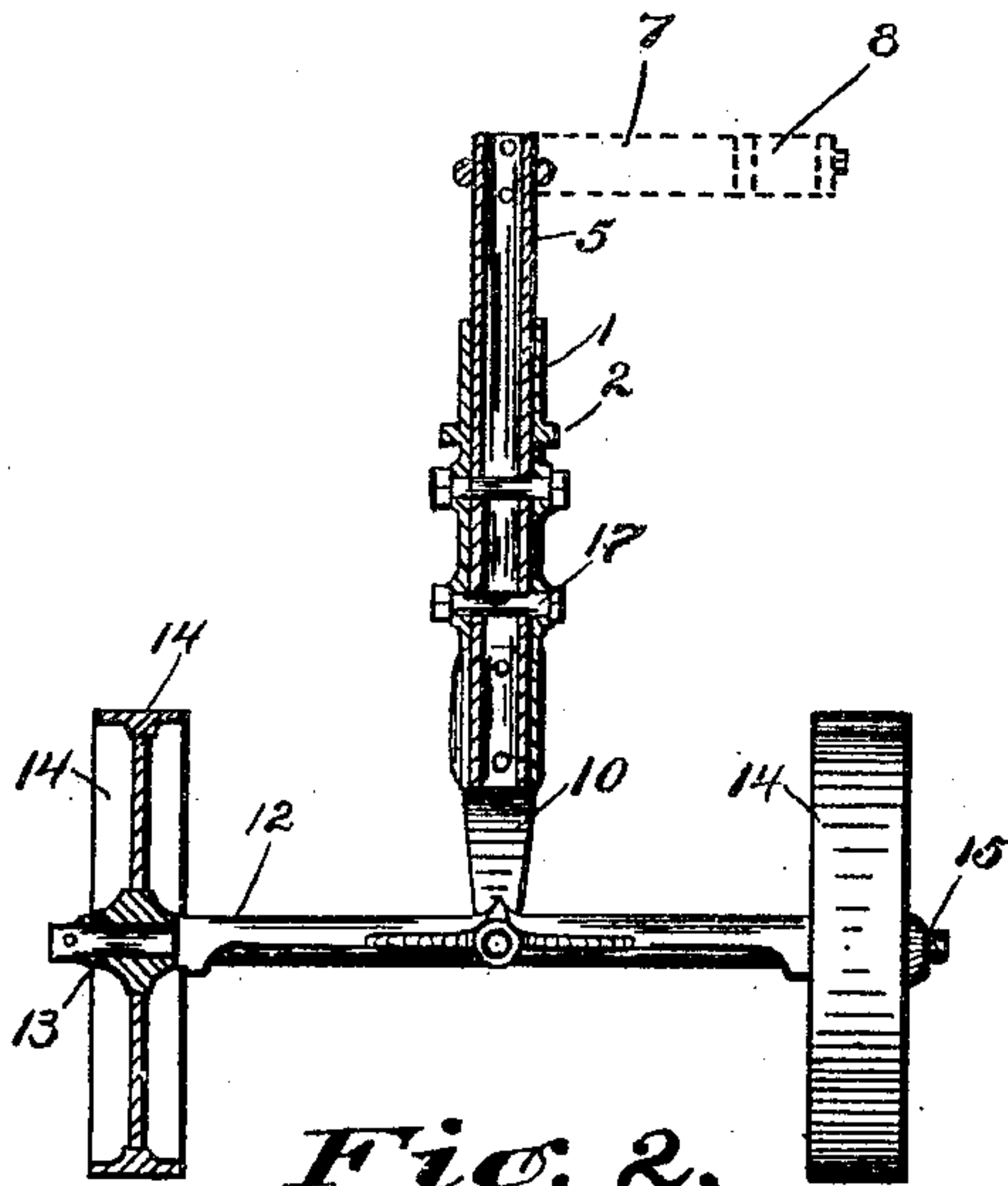


Fig. 2.

Witnesses
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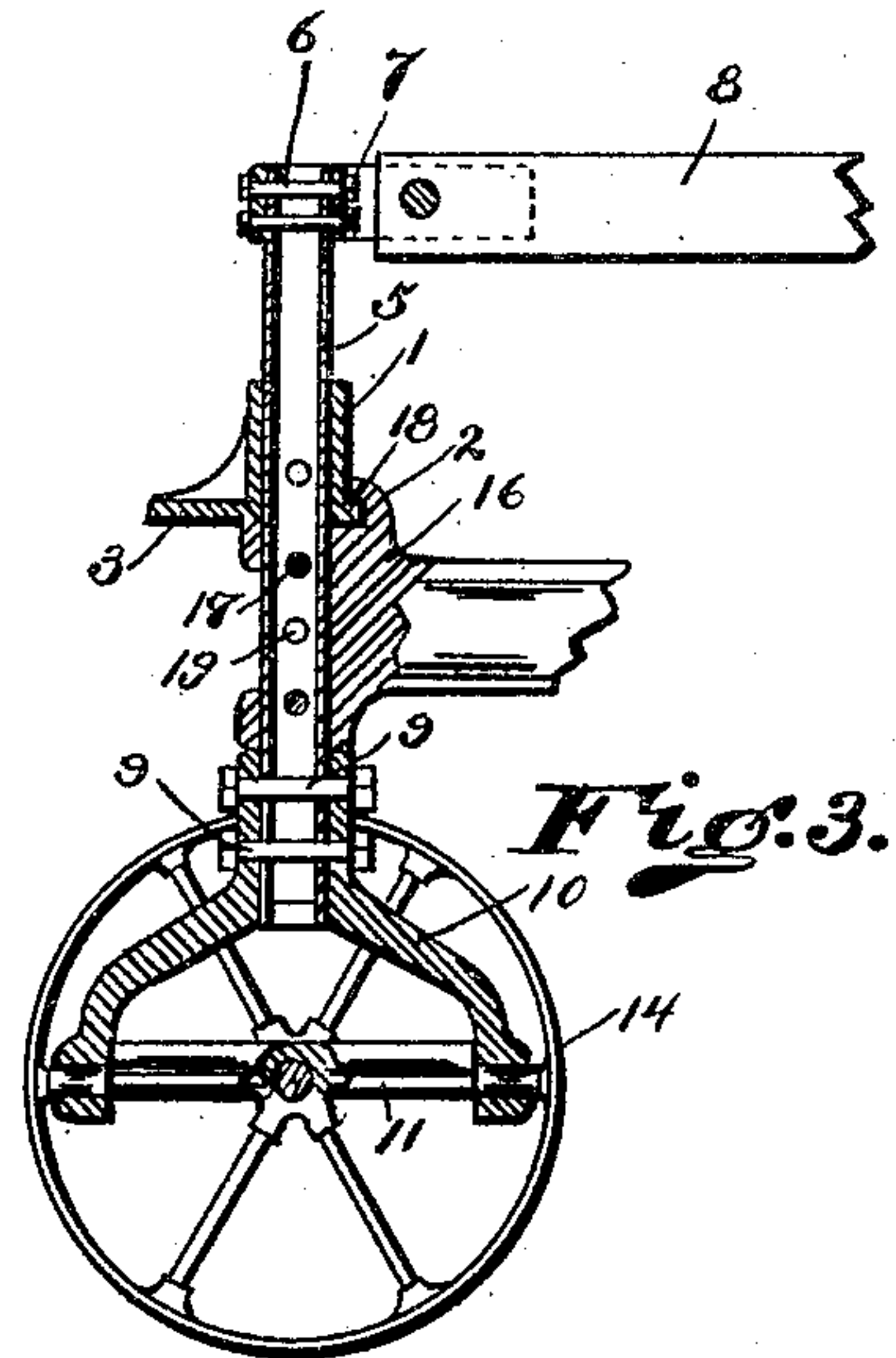


Fig. 3.

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WHEEL-TRUCK FOR DISK HARROWS.

No. 903,585.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK K. LATHROP, a citizen of the United States, residing in Dayton, county of Montgomery, and State of Ohio, have invented certain new and useful Improvements in Wheel-Trucks for Disk Harrows and the Like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The purpose of my invention is to provide wheels or trucks to support the forward end on the stub pole of a disk harrow, or like implement, in order to avoid the objections of side draft, neck weight, and the jerking motion of the pole in rough uneven ground, resulting when the draft animals are hitched directly to the stub pole of the implement, without any ground support therefor.

The invention consists of that certain novel construction and arrangement of parts to be hereinafter particularly pointed out and claimed.

In the drawings I have not thought it necessary to illustrate any construction of disk harrow, or other implement, as the invention relates only to the support on the front end of the stub pole of the implement.

In the drawings, Figure 1 is a perspective view of my improved truck. Fig. 2 is a central vertical cross section of same, and Fig. 3 is a similar longitudinal section.

1 is a sleeve formed with the bottom flange 2, around its front portion, and with the plate 3 extending rearwardly. This plate 3 is securely bolted to the front end of the stub pole 4 of the implement.

Journalled in the sleeve 1, so as to turn freely therein, is the vertical hollow pipe 5. Upon the upper end of this pipe are securely bolted by the bolts 6—6 the connecting irons 7, to which the draft pole 8 is bolted. When it is desired to provide an offset pole for three draft animals, the connecting iron 7 is extended out to one side as illustrated in Fig. 2, by dotted lines.

When it is desired to use the implement without a pole or tongue, these connecting irons and the pole are unbolted and removed from the hollow pipe.

Securely bolted by the bolts 9—9 to the lower end of the pipe 5 is the yoke 10, and pivoted or journalled in the lower ends of the arms of this yoke are the ends of the right

angular extensions 11 from the middle portion of the tubular box or casing 12, which carries the axle 13, upon which are mounted the truck wheels 14—14. These wheels are preferably provided with a wide tire, metal spokes, and dust proof journal boxes, the wheels being held on the axle by the cotter pins 15.

Between the sleeve 1 and the yoke 9 on the pipe 5 is the draft-arm clevis casting 16, which is secured to the pipe by bolts 17. This clevis casting carries the upwardly extending arm 18, provided with a groove to engage the flange 2 on the sleeve 1, and a series of holes 19 are provided through the pipe 5, so that this clevis casting can be raised or lowered which will raise or lower the sleeve 1, and thus raise or lower the stub pole of the implement. The forwardly extending end of the clevis casting 16 is provided with a series of holes 20 for attaching at any desired height the hitching clevis 21.

It will be seen from the foregoing description that the carrying wheels can tip in the yoke 10 to conform to any unevenness in the ground, and that the height of the carrying wheels is such that they can always turn under the stub pole 4 of the implement, so that a square turn at right angles may very readily be made.

By providing a yoke which carries journal bearings for the axle of the truck, which are transverse to the axis of the truck wheels, or disposed in a line with the travel of the implement, I not only provide a rigid substantial construction, but am able to secure the tongue of the implement, when a tongue is desired, on a line with or above the stub pole.

Heretofore in truck constructions, in which provision is made for both vertical and horizontal pivotal movement, it has been disadvantageous to secure the tongue in this position because the pivotal mounting of the truck has not been transverse to the axis of wheels, and with such constructions, in turning, the truck is very apt to creel or tip, even lifting one of the wheels from the ground. With my construction I am able to secure the tongue on a line with or above the stub pole, because I provide for the truck, by means of my yoke, a wide transverse bearing in a line with the travel of the implement, which effectually prevents the tipping.

Having thus described my invention what

I claim as new and desire to secure by Letters Patent, is:—

1. In a wheel truck for agricultural implements, the combination with an implement having a stub pole, of a vertical shaft longitudinally adjustable and means for mounting same on said pole to rotate on a vertical axis, a yoke secured to the lower end of said shaft, with journal bearings on said yoke for the truck in a line with the line of travel of the implement and approximately at the axis of the wheels of the truck and a clevis casting for holding the hitching clevis, adjustably mounted on said shaft, with connection between said clevis casting and the stub pole, whereby the stub pole will be raised and lowered upon adjusting the clevis casting.

2. In a wheel truck for agricultural implements, the combination with the stub pole of the implement, and a vertically disposed sleeve secured to the outer end thereof, of a vertical shaft mounted to rotate in said sleeve a yoke secured to the lower end of said shaft, and an axle casing for the supporting wheels, with right angular extensions forming trunnions journaled in said yoke, a clevis casting for holding the hitching clevis adjustably mounted on said shaft, with connection between said clevis casting, and the sleeve whereby the stub pole of the implement will be raised and lowered upon adjusting the clevis casting.

3. In a wheel truck for agricultural implements, the combination, with an implement having a stub pole, of a vertical shaft, and means for mounting same on said pole to rotate on a vertical axis, a yoke secured to the lower end of said shaft, an axle casing for the supporting wheels and journal bearings therefor in said yoke in a line parallel with

the line of draft, with a clevis casting adjustably mounted on said shaft, with a connection therefor to the stub pole, whereby adjustment of the clevis casting will raise and lower the stub pole.

4. In a wheel truck for agricultural implements, the combination with a stub pole for the implement, of a vertical shaft, and means for mounting same on said pole to rotate on a vertical axis a draft pole, connecting irons for the draft pole secured to the upper end of said shaft, and a yoke secured to the lower end, an axle casing for the supporting wheels and journal bearings therefor in said yoke in a line parallel with the line of draft, with a clevis casting adjustably mounted on said shaft, with a connection therefor to the stub pole, whereby adjustment of the clevis casting will raise and lower the stub pole.

5. In a wheel truck for agricultural implements, the combination, with a stub pole for the implement, and a vertically disposed sleeve secured to the outer end thereof, of a vertical shaft mounted to rotate in said sleeve, a yoke secured to the lower end thereof, an axle casing having arms extending out at front and rear at right angles to the axle, the outer ends of the arms journaled in said yoke, a clevis casting adjustably secured on said shaft intermediate the yoke, and sleeve, a flange on the sleeve, and a groove on the casting, engaging said flange to couple the parts together, while permitting rotary movement on the vertical axis.

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Witnesses:

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