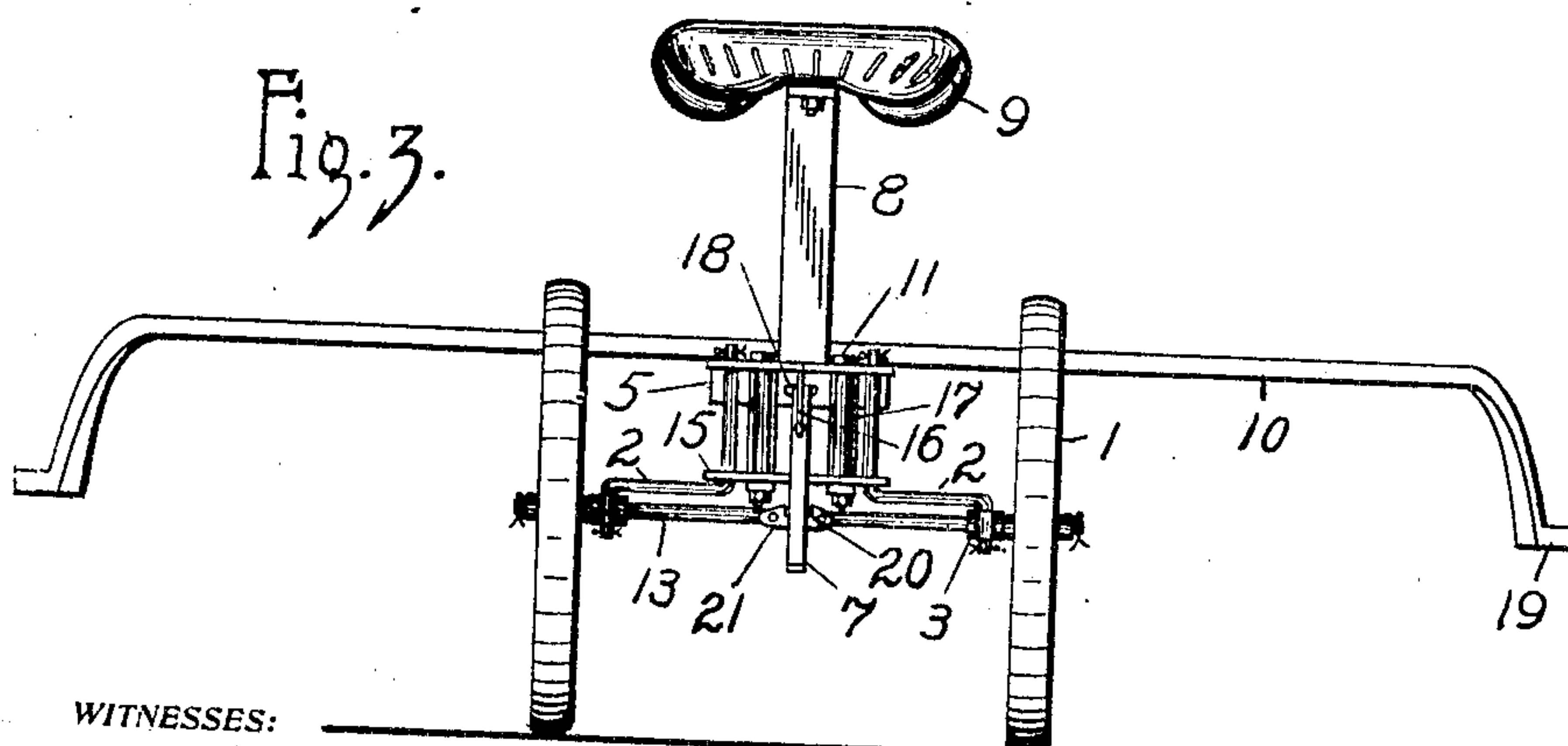
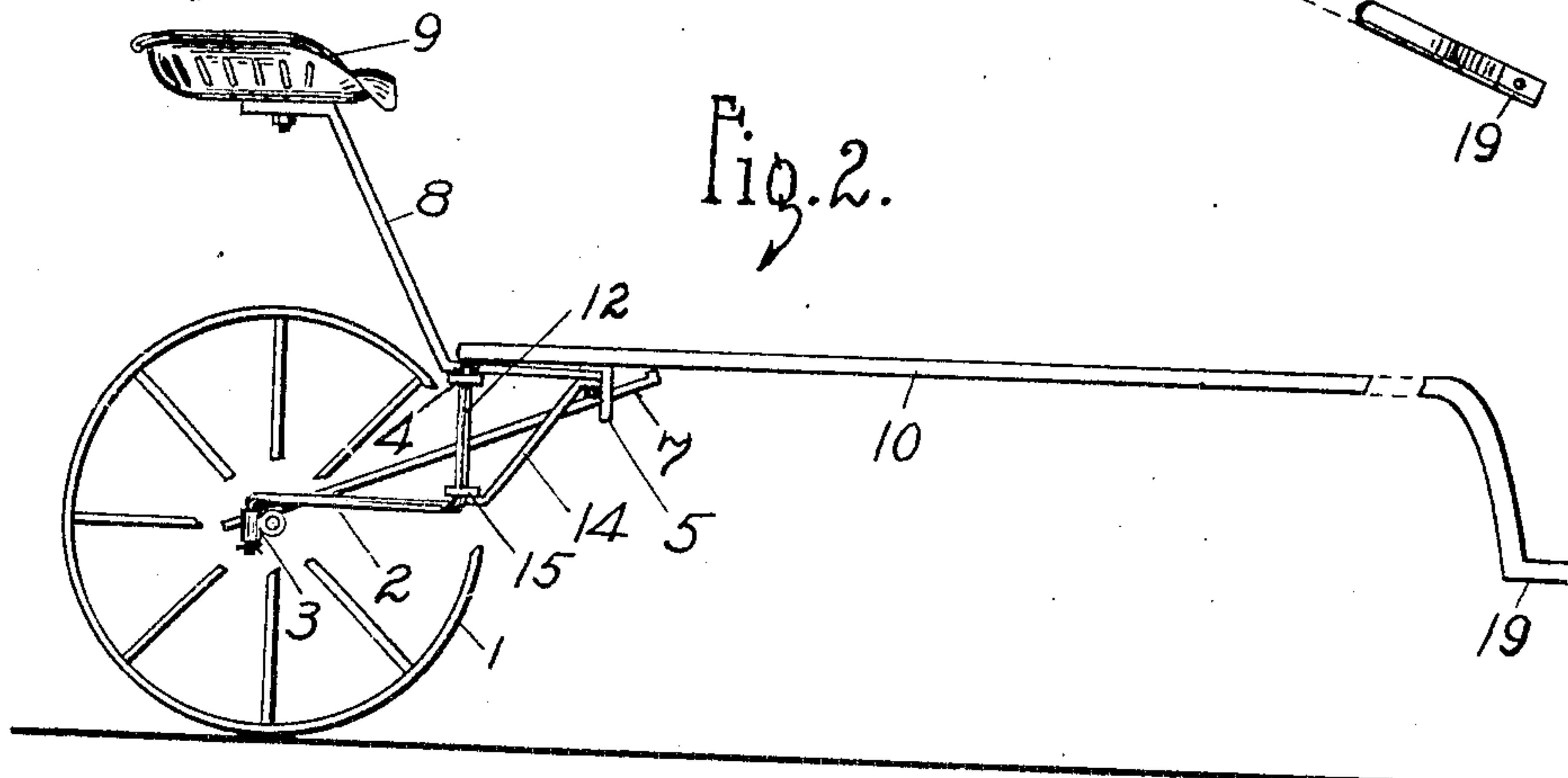
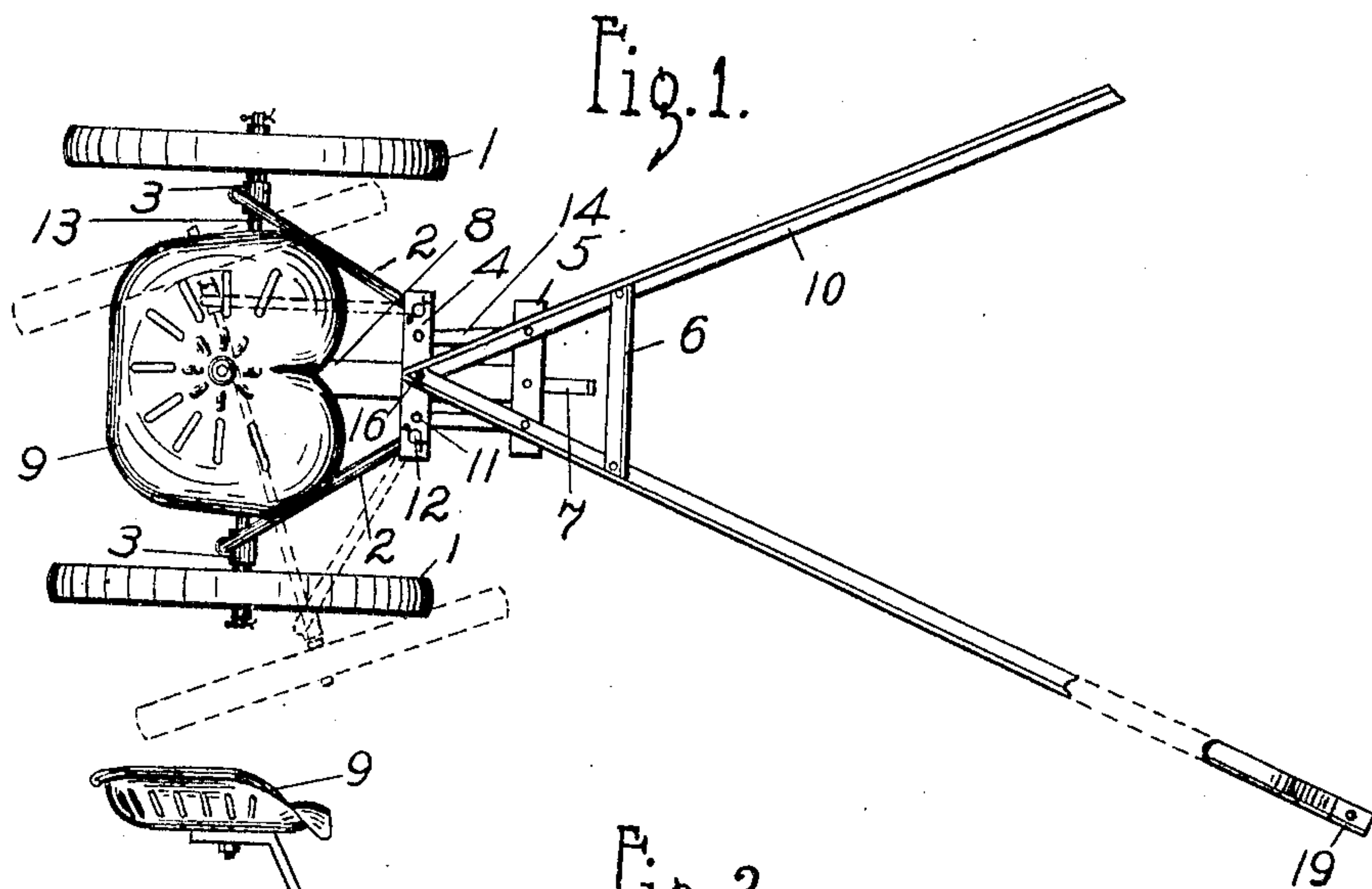


No. 871,846.

PATENTED NOV. 26, 1907.

D. K. WILSON.
RIDING ATTACHMENT FOR HARROWS.
APPLICATION FILED JULY 6, 1907.



WITNESSES:

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RIDING ATTACHMENT FOR HARROWS.

No. 871,846.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed July 5, 1907. Serial No. 382,230.

To all whom it may concern:

Be it known that I, DALTON K. WILSON, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, Iowa, have invented certain new and useful Improvements in Riding Attachments for Harrows, of which the following is a specification.

My invention relates to improvements in riding attachments for harrows, and the object of my improvements is to provide means whereby the wheels may be allowed to swing out of the direct line of movement when taking a turn, and then be automatically secured in their former position when the turn is made and they have swung back into line. This object I have accomplished by the means which are hereinafter described and claimed, and which are illustrated in the accompanying drawings, in which:—

Figure 1 is a plan view of my improved riding attachment for a harrow. Fig. 2 is a side elevation, and Fig. 3 is a rear elevation of said attachment.

Similar numbers refer to similar parts throughout the several views.

My improved riding attachment has the usual form of diverging connecting-bars with orifices 19 at their forward ends whereby they may be secured to a harrow (not shown). The rear ends of the bars 10 converge and are secured together by fixed braces 5 and 6. The cross-brace 5 has a depending flange provided with a medial horizontal slot 18 for the reception of the lock-bar 7. Underneath the brace 4 in line therewith and of the same form and dimensions is a cross-bar 15, supported by being secured to the rear end of an oblique brace 14, the forward and upper end of the latter being fixedly secured to the cross-brace 5. The bars 4 and 15 are spaced apart by cylindrical sleeves placed vertically between them, bolts 11 being passed through said sleeves and orifices in said bars to secure the latter together rigidly. A seat 9 is supported on the rear end of a bent bar 8, whose forward portion is bent downwardly and forwardly and secured to the cross-braces 4 and 5. The wheels 1 are rotatably mounted on the ends of an axle 13. On the said axle inside of the wheels 1 and near to them are fixedly secured short sleeves 3 provided with vertical bearing-sockets, and in these sockets the rear down-turned ends of the rock-levers 2

are pivotally mounted, and secured from withdrawal by pins inserted in orifices there-through. The rock-levers 2 extend in a horizontal plane forwardly and converge toward the ends of the cross-bar 15, and are then bent upward vertically, their vertical limbs being pivotally mounted in orifices in both of the cross-bars 15 and 4, pins being inserted in their extreme upper ends to prevent disengagement from said bars. A plate 21 is affixed to the rear middle portion of the axle 13, and has a recessed seat 20 in its upper edge with vertical inner sides, the upper edge of such plate being sloped at a small angle obliquely outward. A foot-bar 7 has its forward end passed forwardly through the slot 18 in the flange of the cross-bar 5, and extends sufficiently forward to be accessible to the operator seated on the seat 9. A rod 16 secured at its ends to the bars 4 and 15, passes through a medial orifice in the foot-bar 7, retaining it in place. The rear end of said bar 7 extends backward sufficiently to engage the recessed seat 20 in the plate 21. When the forward end of the bar 7 is depressed its rear end is lifted enough to clear the seat 20, and permit the plate 21 to slide from underneath it.

In practice, when the operator desires to swing the wheels 1 to turn a corner or change the line of direction, by depressing the forward end of said foot-bar 7, its rear end is released from the seat 20, and the draft then permits the wheels 1 to swing into such a position as is for purposes of illustration shown by the dotted lines in Fig. 1. On account of the fact that the rear ends of the pivoted levers 2 are spaced apart more widely than are their forward ends, the draft exercised by them upon the axle is positive and the leverage exerted the maximum, and transverse strain upon the wheels reduced to the minimum. When the turn has been made and the draft has caused the wheels to return to their former position, the rear end of the lever 7 rides up over the nearest sloping edge of the plate 21 and drops into the seat 20 therein, which secures the axle in its fixed relation to the rigid forward portions of the attachment, automatically.

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

1. A device of the character described, consisting of the combination with a pair of

carrying wheels rotatably mounted on an axle, of a frame having forwardly projecting arms adapted to be secured to a harrow, bearings on said axle and bearings in said frame, and rock-levers each of which has its front end pivotally mounted in a bearing in said frame, and its rear end in a bearing on said axle, the rear ends of said rock-levers being spaced more widely apart in their bearings than are their forward ends in their bearings.

2. A device of the character described, consisting of the combination with a pair of carrying wheels rotatably mounted on an axle, of a frame having forwardly extending arms adapted to be secured to a harrow, said frame being pivotally connected to said axle, a recessed bearing-seat secured to said axle, and a lever pivoted to said frame, whose rear end is adapted to be detachably seated in said recessed seat.

3. A device of the character described, consisting of the combination with a pair of carrying wheels rotatably mounted on an axle, of a frame having forwardly projecting arms adapted to be secured to a harrow, bearings on said axle and bearings in said frame, rock-levers each of which has its front end pivotally mounted in a bearing in said frame, and its rear end in a bearing in said axle, and means for detachably securing said frame to said axle.

4. A device of the character described, consisting of the combination with a pair of carrying wheels rotatably mounted on an axle, of a frame having forwardly projecting arms adapted to be secured to a harrow, bearings on said axle and bearings in said frame, rock-levers each of which has its front end pivotally mounted in a bearing in said frame, and its rear end in a bearing on said axle, and means for detachably securing said frame to said axle.

axle, a recessed bearing-seat secured to said axle, and a lever pivoted to said frame, whose rear end is adapted to be detachably seated in said recessed-seat.

5. A device of the character described, consisting of the combination with a pair of carrying wheels rotatably mounted on an axle, of a frame having forwardly extending arms adapted to be secured to a harrow, bearings on said axle and bearings in said frame, rock-levers each of which has its front end pivotally mounted in a bearing in said frame, and its rear end in a bearing on said axle, the rear ends of said rock-levers being spaced more widely apart in their bearings than are their forward ends in their bearings, and means for detachably securing said frame to said axle.

6. A device of the character described, consisting of the combination with a pair of carrying wheels rotatably mounted on an axle, of a frame having forwardly extending arms adapted to be secured to a harrow, bearings on said axle and bearings in said frame, rock-levers each of which has its front end pivotally mounted in a bearing in said frame, and its rear end in a bearing on said axle, the rear ends of said rock-levers being spaced more widely apart in their bearings than are their forward ends in their bearings, a recessed bearing-seat secured to said axle, and a lever pivoted to said frame, whose rear end is adapted to be detachably seated in said recessed-seat.

Signed at Waterloo, Iowa, this 3rd day of July, 1907.

DALTON K. WILSON.

Witnesses:

O. D. YOUNG,
G. C. KENNEDY.