July 10, 1934. A. MAHAN 1,965,927

PLOW

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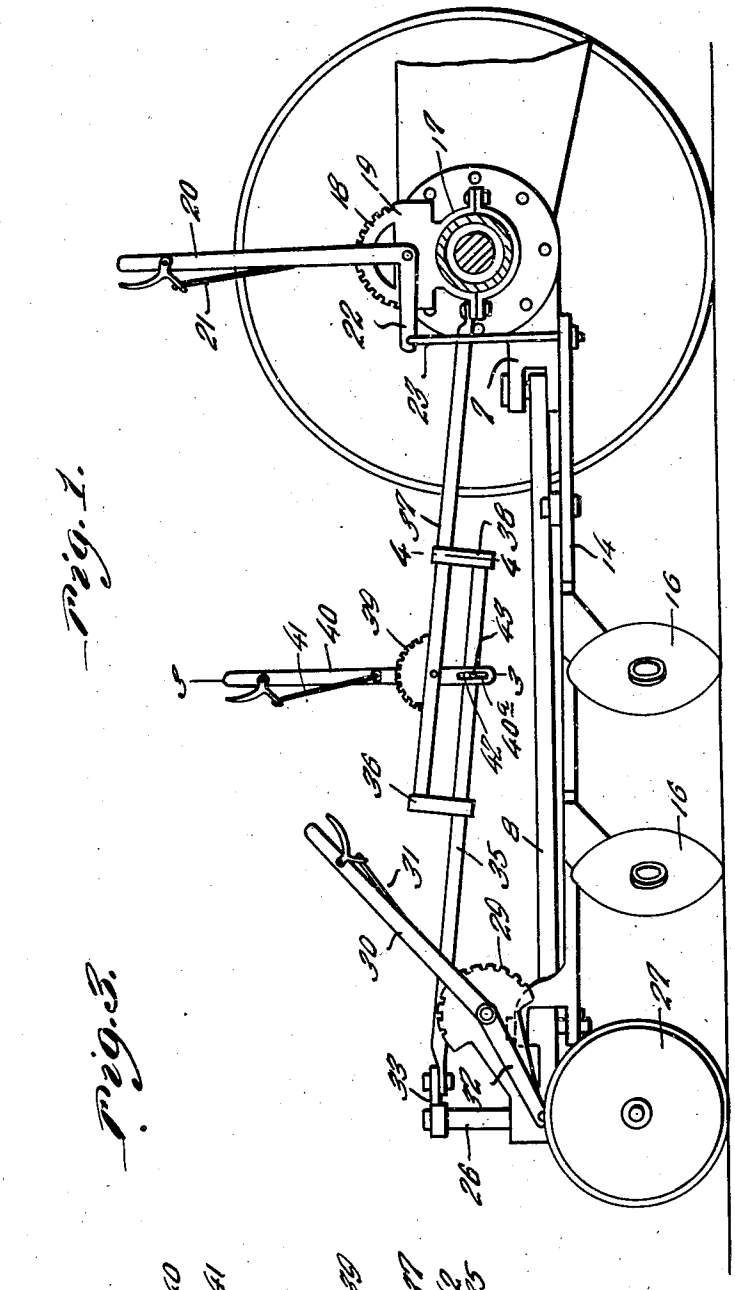


Fig. 1.

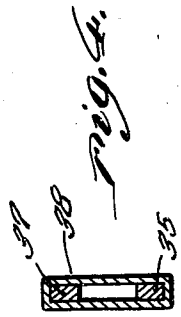


Fig. 4.

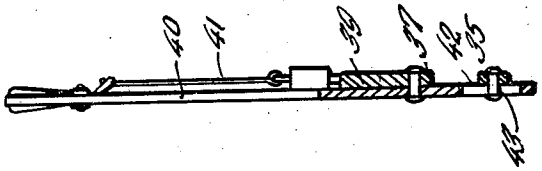


Fig. 5.

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PLOW

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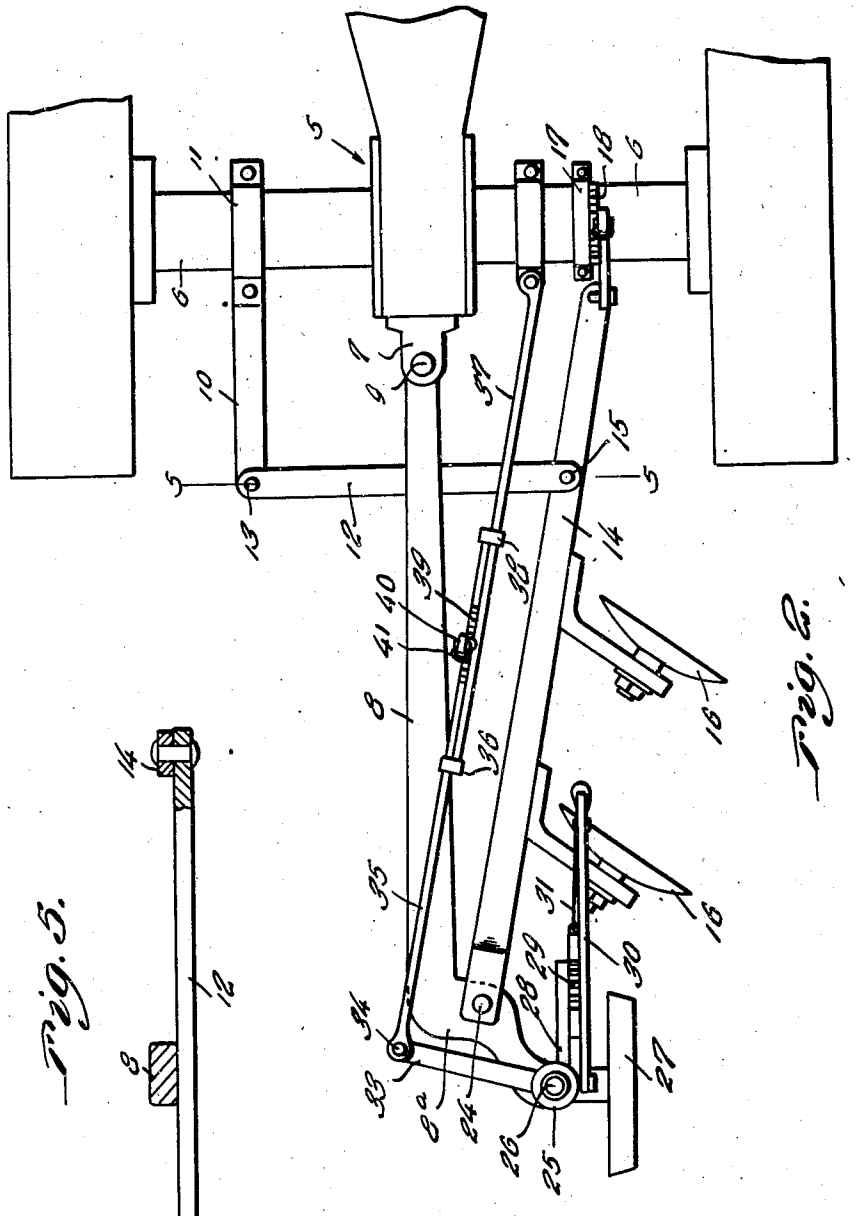


Fig. 6.



Fig. 5.

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# UNITED STATES PATENT OFFICE

1,965,927

## PLOW

Alton Mahan, Rydal, Ga.

Application October 10, 1933, Serial No. 693,013

4 Claims. (Cl. 97—47)

This invention appertains to new and useful improvements in plows, and more particularly to plows of the disk type.

The principal object of the present invention is to provide a plow in the form of an attachment for tractors, constructed in such a manner as to eliminate any tendency to cause side pull on the tractor.

Other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:—

Figure 1 represents a side elevational view of the plow.

Figure 2 represents a top plan view of the plow, shown attached to the rear of a tractor.

Figure 3 represents a vertical sectional view taken substantially on line 3—3 of Figure 1.

Figure 4 represents a sectional view taken substantially on line 4—4 of Figure 1.

Figure 5 represents a sectional view taken substantially on line 5—5 of Figure 2.

Referring to the drawings wherein like numerals designate like parts, it can be seen in Figure 2 that numeral 5 generally refers to a tractor, with numeral 6 denoting the usual rear axle housing. Numeral 7 represents the usual draft attaching boss on the tractor and from this extends the beam 8 of the plow. This beam extends into the bifurcated portion of the boss 7 and a pin 9 disposed downwardly through the boss and through the adjacent end of the beam 8 swingably connects the beam to the tractor.

An arm 10 is secured to the axle housing 6 adjacent one end by a clamp 11 and to the rear end of this arm 10 a link member 12 is pivotally connected, as at 13. This link 12 also connects to an intermediate point of the bar 14 by a pivot pin 15 and this bar 14 supports the plow disks 16—16.

A clamp structure 17 on the opposite end portion of the housing 6 supports the segmental gear 18 formed from the body 19 and swingably connected to the body 19 is the handle 20 having the detent 21 thereon engaging with the teeth of the said segmental rack 18. This hand lever 20 is provided with a laterally disposed foot 22, the outer end of which is connected by a rod 23 to the adjacent end of the disk bar 14. The rear end of the disk bar 14 is swingably connected, as at 24, to the offset portion $8^a$ at the rear end of the beam 8, and at the rear extremity of the beam 8 is located the bearing 25, upwardly through which extends the spindle 26 of the supporting wheel 27. An arm 28 extends forwardly from the bearing 25 and has a segmental gear 29 thereon. Swingably connected to this gear 29 is the hand lever 30 having a detent 31 thereon engageable with the teeth of the rack 29. This handle 20 is provided with an extension 32 which is engaged with the spindle 26 so that by adjusting this handle 20, the rear end of the beam 8 can be properly adjusted.

The steering gear consists of a lever 33 extending laterally from the top of the spindle 26 and pivotally connected to this at 34 is the bar section 35 which is slidably disposed through the guide loop 36 on the rear end of the bar section 37, while the forward end of the bar section 35 is provided with a guide loop 38 through which the bar section 37 is guided.

On the rear end portion of the bar section 37 is a segmental rack 39 and swingably mounted on this rack is the hand lever 40 having a detent 41 engageable with the teeth of the rack 39. This hand lever 40 is provided with a downwardly extending portion $40^a$ having a longitudinally extending slot 42 therein and this receives the pin 43 which projects laterally from the forward end portion of the bar section 35.

Thus the steering action of the plow can be set by adjusting the hand lever 40 which will contract or extend the bar sections 35—37.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:—

1. In combination, a tractor, a plow assembly, said plow assembly comprising a beam pivotally connected to the rear of the tractor, an elongated bar pivotally connected at its rear end to the rear end portion of the beam, a vertically adjustable connection between the forward end of the bar and the tractor, means for holding said bar against lateral movement, plow elements on the said bar, and a supporting wheel at the rear end of the said beam.

2. In combination, a tractor, a plow assembly, said plow assembly comprising a beam pivotally connected to the rear of the tractor, an elongated bar pivotally connected at its rear end to the rear end portion of the beam, a vertically adjustable connection between the forward end of the bar and the tractor, means for holding said bar against lateral movement, plow elements on the

said bar, a supporting wheel at the rear end of the said beam, said supporting wheel being swivelly mounted, and means whereby the said wheel can be steered.

3. In combination, a tractor, a plow assembly, said plow assembly comprising a beam pivotally connected to the rear of the tractor, an elongated bar pivotally connected at its rear end to the rear end portion of the beam, a vertically adjustable connection between the forward end of the bar and the tractor, means for holding said bar against lateral movement, plow elements on the said bar, a supporting wheel at the rear end of the said beam, said supporting wheel being swivelly mounted, means whereby the said wheel can be steered, said last mentioned means comprising a pair of bar sections, one of said bar sections being secured at one end to the tractor, the other bar section being secured at one end to the wheel, and adjustable means between the remaining ends of the said bar sections.

4. In combination, a tractor, a plow assembly, said plow assembly comprising a beam pivotally connected to the rear of the tractor, an elongated bar pivotally connected at its rear end to the rear end portion of the beam, a vertically adjustable connection between the forward end of the bar and the tractor, means for holding said bar against lateral movement, plow elements on the said bar, a supporting wheel at the rear end of the said beam, said supporting wheel being swivelly mounted, means whereby the said wheel can be steered, said last mentioned means comprising a pair of bar sections, one of said bar sections being secured at one end to the tractor, the other bar section being secured at one end to the wheel, adjustable means between the remaining ends of the said bar sections, said adjustable means comprising a hand lever mounted on one of the said bars and having a slot therein, a pin on the other bar section projecting into the said slot, a rack on the bar supporting the hand lever, and a detent on the hand lever engageable with the said rack.

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