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TWO-ROW LISTER

Filed June 6, 1927

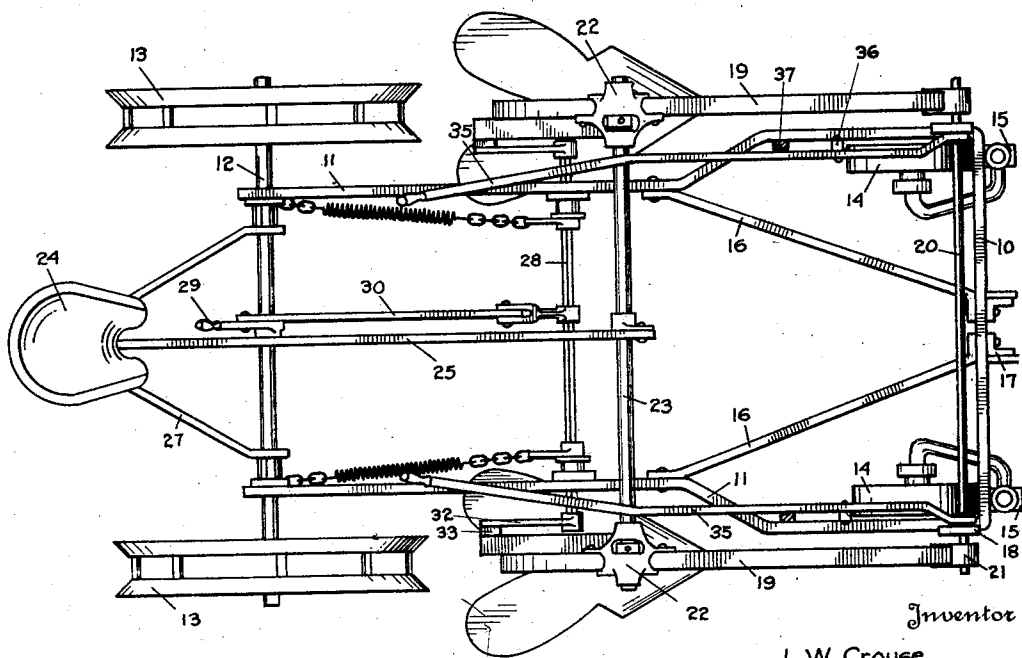
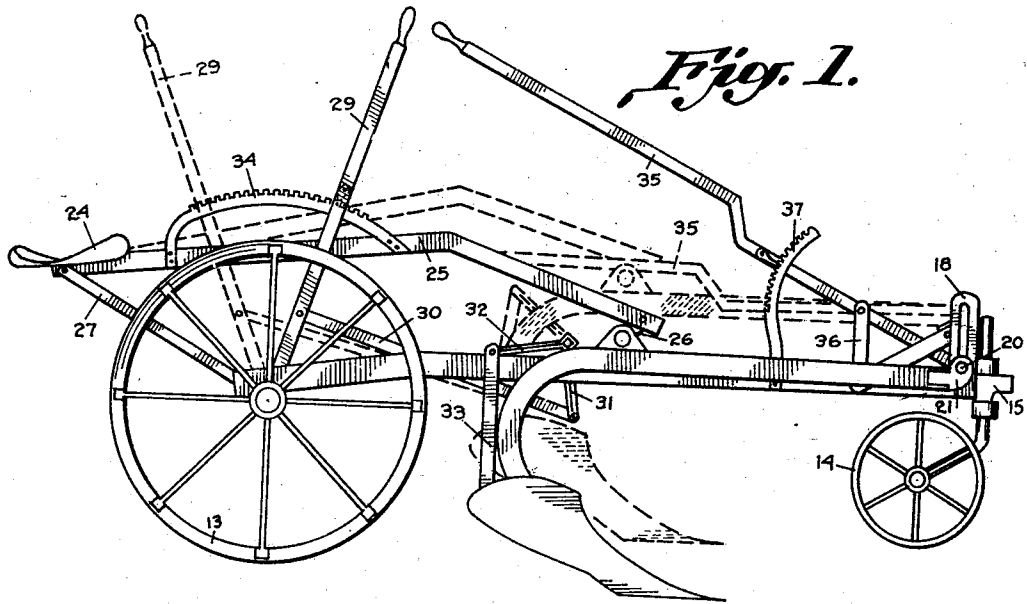


Fig. 2.

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TWO-ROW LISTER

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My invention relates to two-row listers and more particularly to means whereby the plows may be individually adjusted to meet certain conditions of the soil or topography of the field in which the plows are being used. It is also my object to provide such adjusting means of extreme simplicity of construction and having control levers which are conveniently positioned with reference to the driver's seat, the purpose being to make it possible for the driver to raise or lower both plows simultaneously or adjust either plow individually with the utmost ease.

Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawings, in which

Figure 1 is a view in side elevation of the two-row lister plow.

Figure 2 is a plan view of the same implement.

The implement frame includes a front beam 10 and two side beams 11. Secured to the side beams 11 adjacent their rear extremities is an axle shaft 12 having supporting wheels 13 secured thereto. The forward end of the frame is supported on the usual caster wheels 14. The standards of these caster wheels pass through vertical apertures in the castings 15 which are secured to the forward portion of the frame so as to project forwardly therefrom and the standards are vertically adjustable in these castings by means of collars with set screws above and below the bearings in the castings. The frame is further reinforced by means of the braces 16 which extend forwardly from offset portions of the side beams 11 to the front beam 10 to which they are secured by means of bolts or rivets. The draft is applied centrally through the castings 17 which are secured to the beam 10 immediately forward of the braces 16. The frame is also provided at its forward corners with slotted members 18 projecting upwardly from the frame.

The two plows are secured to plow beams 19 which are rigidly connected together at their forward extremities by means of the rod or bar 20. The plow beams are each pro-

vided with castings 21 which project upwardly a slight distance from the plow beams and which are provided with apertures for receiving the rod or bar 20. This rod or bar 20 passes through the slots of both castings 18 and thus permits up and down movement of the forward ends of the plow beams. Secured to the plow beams at their rear portions are castings 22 which are provided with transverse aligning apertures for the reception of the rock shaft 23. The seat 24 is secured to both the implement frame and to the rock shaft 23. The seat bar 25 to which the seat 24 is rigidly secured extends forwardly over the rock shaft 23 to which it is secured by means of a link 26. The seat is further secured and supported by means of two diverging braces 27 which are secured at their lower ends to the axle 12.

The means for raising and lowering the plows include a square shaft 28 with connections to the plows and other connections to a hand lever 29. The hand lever is pivotally secured to the axle 12 and it is connected by means of a link 30 to a lever arm 31 on the square shaft 28. The shaft 28 is further provided with two lever arms 32 which are connected through links 33 with the plows. The lever 29 is conveniently positioned with reference to the driver's position and it is obvious that actuation of the lever 29 will raise or lower the plows about the rod 20 as a pivot and that the depth of plowing can be regulated by means of the lever 29 which also raises the plows out of the ground and lowers them into operative position. The lever cooperates with the rack 34 which is secured to the seat bar 25 and which permits locking the plows at any desired height.

The plows are also individually adjustable about the rock shaft 23 as a pivot so that their suck may be adjusted to meet individual conditions. For this purpose there are provided two levers 35 which are pivotally secured to the rod or bar 20 adjacent the plow beams 19. The frame has secured thereto two standards 36, the levers 35 being pivotally secured to the standards 36 at their upper extremities. The actuation of either lever 35 will, of course, raise or lower the front end of the

plow beam at its side of the implement to thus tilt both plows. The side members of the frame have arcuate racks 37 with the usual lever latching mechanism for engaging the racks 37 to latch the levers in any desired position of adjustment.

The operation of the lister plow will be readily apparent from the foregoing description. On beginning or ending the work in the row, the plows are lowered or raised simultaneously by means of the lever 29. In operating on side hills it usually becomes necessary to alter the relative adjustment of the two plows and this can readily be accomplished by the manipulation of one or the other of the levers 35. Even on level ground where the soil varies in texture and moisture, it is often found that the suck of one plow is greater than that of the other and my lister will be found to be of the utmost convenience when such conditions are encountered since the adjustments can be quickly and frequently made through the levers 35.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A two-row lister plow including a wheeled frame and a pair of lister plows secured thereto, said two plows having beams secured to said frame, means connecting the forward end portions of the beams of said plows together in spaced apart relation, and means for tilting said connecting means for individually raising or lowering the forward end portions of the beams of said plows.

2. A two-row lister plow including a wheeled frame and two lister plows, said two plows having beams secured to said frame, a transverse beam connecting said plow beams at their forward extremities, means for simultaneously raising or lowering both of said plows, and means for tilting said transverse beam for individually elevating or lowering the forward end portions of said plow beams.

3. A two-row lister plow including a frame, a pair of supporting wheels at the rear corners of said frame, a pair of lister plows positioned immediately forward of said supporting wheels and in alignment therewith, said plows being provided with forwardly projecting plow beams, a transverse beam connecting said plow beams at their forward extremities, said transverse beam being secured to said frame for vertical slidable movement at both extremities thereof, and means for tilting said transverse beam for individually raising or lowering the forward end portions of said plow beams.

4. A two-row lister plow including a rectangular frame, a pair of supporting wheels at the rear corners of said frame, a pair of

upstanding slotted brackets secured to said frame at the forward corners thereof, a transverse beam projecting through the slots of both said brackets, a pair of plow beams secured at their forward extremities to said transverse beam at the extremities thereof, said plow beam being forward of said rear supporting wheels and in alignment therewith, and a pair of levers secured to said transverse beam at the extremities thereof for tilting said transverse beam for individually raising or lowering the forward end portions of said plow beams.

In testimony whereof I affix my signature.

LAURENCE W. CROUSE.