(No Model.)

J. Q. MANN.

ATTACHMENT FOR SULKY PLOWS.

No. 569,291. Patented Oct. 13, 1896.

Fig. 1.

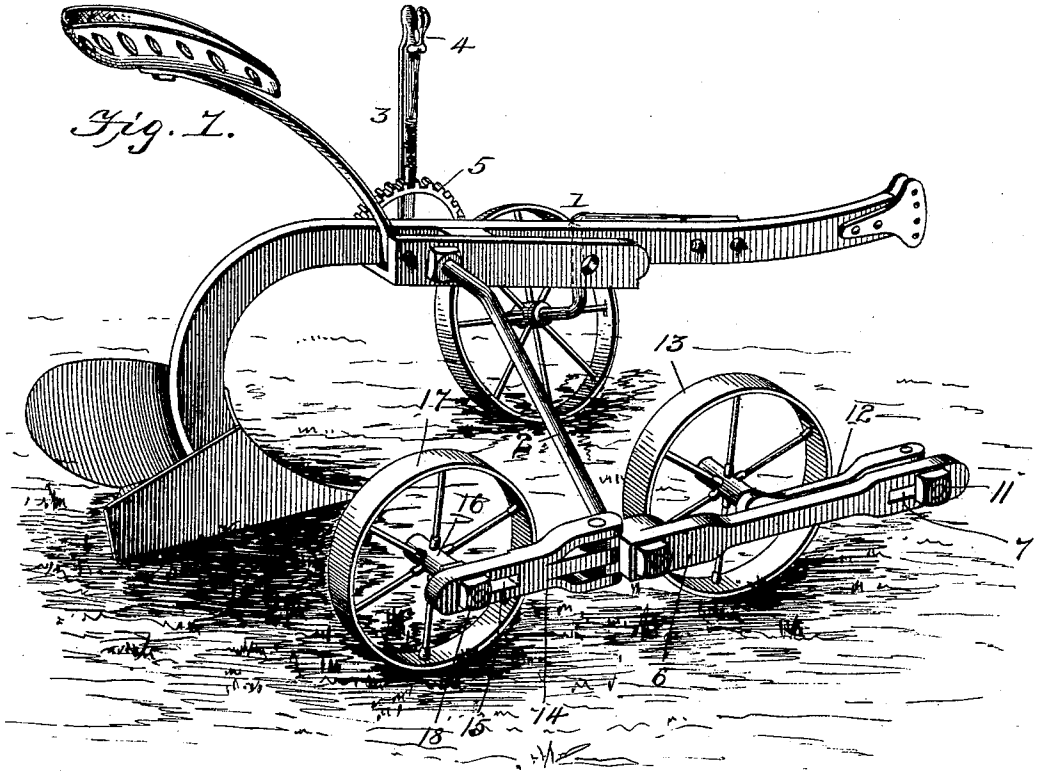


Fig. 2.

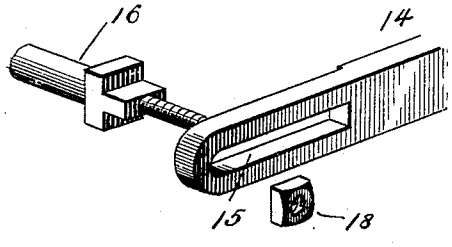
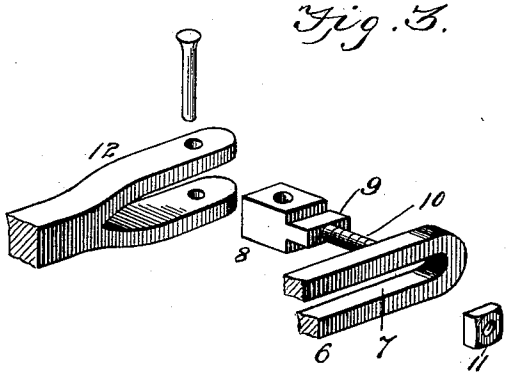


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN QUINCY MANN, OF PURSLEY, TEXAS.

ATTACHMENT FOR SULKY-PLOWS.

SPECIFICATION forming part of Letters Patent No. 569,291, dated October 13, 1896.

Application filed May 12, 1896. Serial No. 591,254. (No model.)

To all whom it may concern:

Be it known that I, JOHN QUINCY MANN, a citizen of the United States, residing at Pursley, in the county of Navarro and State of Texas, have invented a new and useful Attachment for Sulky-Plows, of which the following is a specification.

This invention relates to sulky-plows, and is designed to secure an even and steady movement of the plow when turning furrows across listed ground, whereby the work is facilitated, the draft lightened, and the task of the laborer reduced.

Other objects and advantages result from the peculiar construction of the attachment, and will appear as the nature and details of the same are unfolded in the following description, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a sulky-plow of ordinary construction, showing the attachment applied. Fig. 2 is a detail view of the rear spindle, showing the manner of adjustably connecting it with its supporting-arm. Fig. 3 is a detail view of the front horizontally-swinging arm, showing the manner of adjustably connecting it with the carrying-bar.

Similar and corresponding parts are referred to in the following description and indicated in the views of the drawings by the same reference-characters.

The plow 1 may be of any approved construction, and 2 is the axle. A lever 3 is fitted to the inner end of the axle, and is provided with a hand-latch 4 to take into a tooth of a ratchet or notched segment 5, so as to adjust and hold the axle in any required position. The outer portion of the axle is bent in the form of a crank, whereby upon turning the axle relative to the plow its outer end can be raised or lowered. The outer terminal of the axle is shaped to provide a spindle, upon which is mounted a bar 6 in such a manner as to turn loosely thereon. This bar 6 projects forwardly and approximately parallel with the plow, and has a slot 7 at its front end to receive a block 8, which has adjustable connection therewith. This block 8 has a reduced portion 9, which operates in the slot 7, so as to prevent the block from turning, and terminates in a threaded portion 10, which receives a binding-nut 11, by means of which the block is secured in an adjusted position.

An arm 12 is cleft at its front end to receive the block 8, and is pivoted to the latter so as to swing horizontally, and is provided at its rear end with a spindle, upon which is mounted a ground-wheel 13. A second arm 14 has pivotal connection with the rear end of the bar 6, so as to swing horizontally, and is formed at its rear end with a longitudinal slot 15, in which is adjustably secured a spindle 16, carrying a ground-wheel 17. The outer end of the spindle 16 is reduced and terminates in a threaded portion, the reduced part operating in the slot 15 and the threaded extremity receiving a binding-nut 18, by means of which the spindle is held in an adjusted position.

The relative elevation of the ground-wheels is attained by a proper adjustment of the axle 2, and the ground-wheels can be separated or brought closer together by reason of the adjustable connections herein set forth.

It is well understood that a plow in service is subjected to side lurches, and to obviate the side draft or thrust being imparted to the ground-wheels the latter are applied to laterally-swinging arms, as set forth, thereby avoiding any lateral sliding of the ground-wheels upon the ground when the plow receives a side thrust in either direction. To attain the benefits of this invention, the ground-wheels must be spaced apart half the distance between the ridges or rows to be plowed, so that when one ground-wheel is on the crest of a ridge the other ground-wheel will be in the valley, and when one ground-wheel is rolling down a sloping side the other one will be ascending a corresponding slope, thereby causing the plow to run level and steady and to plow a furrow of uniform depth.

The invention can be applied to any style of plow and can be located either upon the right or the left hand side of the plow, as desired. Hence it is to be understood that in adapting the attachment for a particular style of plow or for any special purpose various changes in the form, proportion, and the minor details of construction may be resorted to with-

out departing from the principle or sacrificing any of the advantages of the invention.

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

1. An attachment for plows, comprising an axle, a bar mounted upon the axle so as to tilt vertically, front and rear arms having connection with the bar and capable of swinging horizontally, and ground-wheels mounted upon spindles carried by the said arms, substantially as and for the purpose set forth.

2. An attachment for plows, comprising an axle, a bar mounted upon the axle and capable of tilting vertically, arms having pivotal connection with the bar and adapted to swing horizontally, and ground-wheels supported by the laterally-swinging arms and capable of being separated or brought together, substantially in the manner set forth for the purpose described.

3. The combination with a plow, of an axle having a crank portion, means for turning the axle relative to the plow and securing it in an adjusted position, a bar mounted upon the outer end of the axle and capable of tilting vertically, and ground-wheels operatively connected with the bar, substantially in the manner set forth for the purpose described.

4. In a plow attachment, the combination of a bar capable of tilting vertically, a laterally-swinging arm having adjustable connection with the bar and bearing a ground-wheel, a second arm having pivotal connection with the bar and adapted to swing horizontally, and a spindle bearing a ground-wheel and adjustably connected with the last-mentioned arm, substantially as set forth for the purpose described.

5. The combination with a plow, and an axle having a crank portion and provided with means to secure it in an adjusted position, of a bar mounted upon the axle so as to tilt vertically and having a slot at its front end, a block adjustably connected with the bar by means of the slot, a laterally-swinging arm having connection with the block and bearing a ground-wheel, a rear arm having pivotal connection with the said bar so as to swing horizontally and having a longitudinal slot in its rear portion, and a spindle adjustably secured in the longitudinal slot of the rear arm and bearing a ground-wheel, substantially as set forth for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN QUINCY MANN.

Witnesses:

V. CLARK,

R. L. PURSLEY.