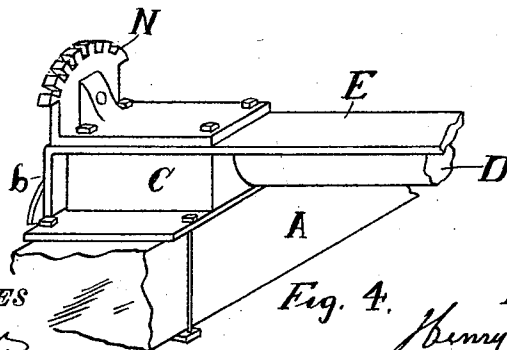
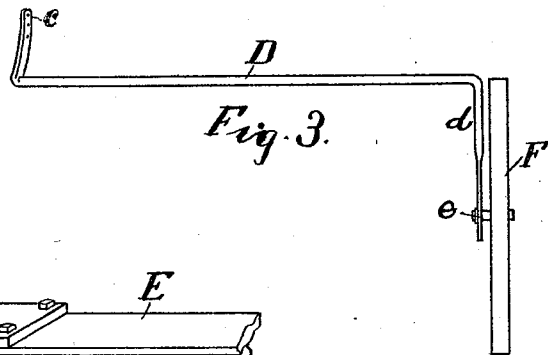
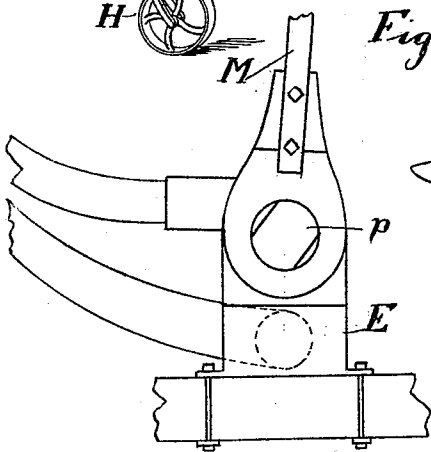
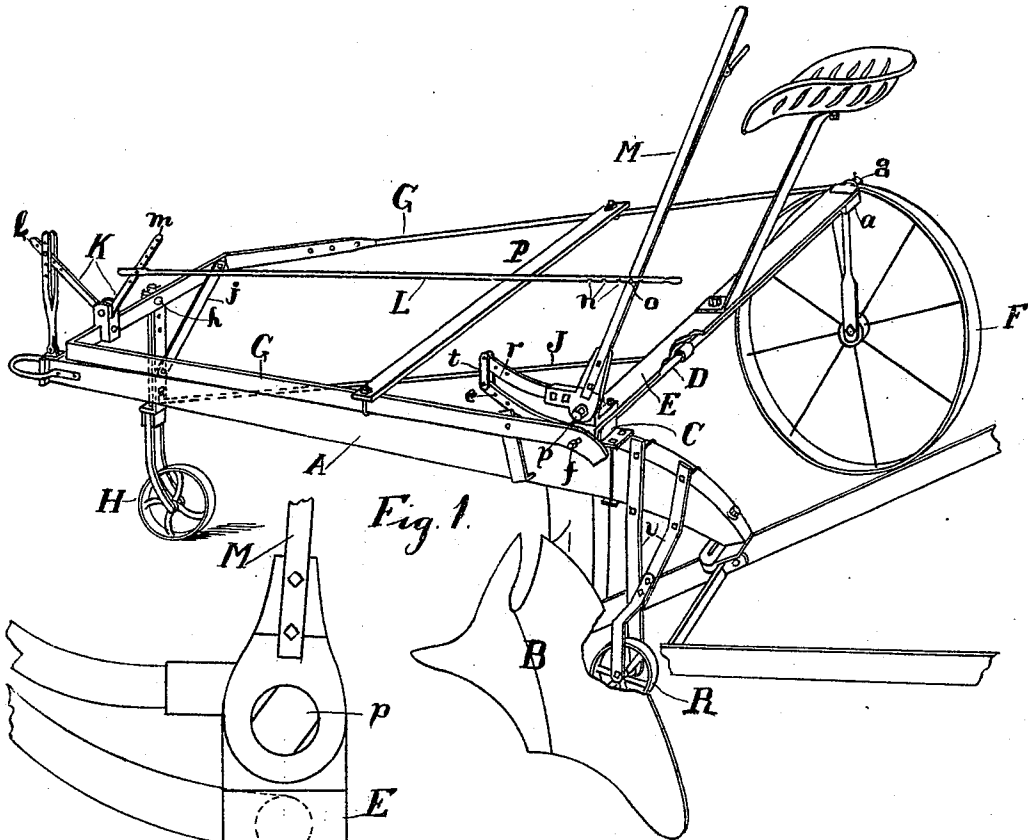


(No Model.)

H. K. HOSHOUER.
SULKY ATTACHMENT FOR PLOWS.

No. 516,536.

Patented Mar. 13, 1894.



WITNESSES
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Fig. 4. INVENTOR
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UNITED STATES PATENT OFFICE.

HENRY K. HOSHOUER, OF CANTON, OHIO.

SULKY ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 516,536, dated March 13, 1894.

Application filed September 11, 1893. Serial No. 485,223. (No model.)

To all whom it may concern,

Be it known that I, HENRY K. HOSHOUER, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have invented a new and useful Improvement in Sulky Attachments for Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to improvements in sulky attachments for plows, and consists in providing a riding attachment that is efficient and that may be quickly attached or detached to any of the well known follow plows.

With this object in view my invention relates to certain features of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

Figure 1, of the accompanying drawings is a view in perspective of a sulky attachment for a plow illustrating my invention. Fig. 2, is a side elevation showing manner of connecting to plow beam, the end of the rock or wheel shaft and a fragment of the levers by which the wheel shaft is rocked. Fig. 3, is a rear elevation showing the wheel shaft and wheel attached. Fig. 4, is a perspective of a portion of the wheel shaft supporting frame, journal box and lever support.

Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

A, represents the plow beams and B, the plow. To the beam A, there is clamped a journal box C, that forms a support for the inner end of the wheel shaft D, and supporting frame E. At the outer end of the frame E, is provided a supporting journal box *a* in which the wheel shaft D, is rotated to raise or lower the outer end of the frame E. The left hand end of the frame E, is projected a distance over the box C, and turned down a distance from the box as shown at *b*, the end of the shaft D, is passed through the box C, and into the space between the turned down end of the frame E, and the box C, and on the end of the shaft is secured or may be integral therewith the lever portion *c* as shown. The outer end of the shaft D, is turned down as shown and to the turned down portion *d* is secured a spindle *e* for the supporting wheel F.

To the end portions of the frame E, is piv-

otally secured the rear end portions of a U shaped frame G, as shown by the letters *f* and *g*; this frame extends from its pivotal connection with the frame E, to the front end portion of the plow beam A, and at the front end of the frame G, is provided and adjustably secured thereto, a caster wheel H, the swivel support of which is made adjustable with the front end of the frame as shown at *h* by which the front end of the frame G, may be adjusted vertically. A push bar J, is hinged about the shaft D, as shown and to the swivel portion of the support for wheel H. A side brace *j* is also provided as shown by which lateral movement of the wheel support is prevented.

At the front end of the frame G, is pivotally secured a bell crank K, the forward arm *l* pivotally secured to a stake secured to the forward end of the plow beam A, and to the rear arm *m* is pivotally secured a connecting link L, by which the actuating lever M, is connected with the bell crank K. At the rear end portion of the link L, is provided a series of notches *n*, and at the side of the lever M, is provided a pin *o* to engage the notches *n* thereby connecting and holding the bell crank and lever at desired adjustment.

The lever M, is pivotally secured to the notched segment N, the stud *p* serving as a pivotal support or fulcrum, the lower and forwardly projected portion *r* of the lever is connected to the lever portion *c* of the shaft D by a link *t*.

The driver's seat is secured to and supported by the frame E as shown and the cross bar P, serves as a support for the sides of the frame G and the feet of the driver.

The supporting wheel R, is secured to the rear portion of the beam A as shown, by the arms U the tread of the wheel to be in line with the bottom of the plow in the bottom of the furrow.

In operation the driver or plow-man may change the depth of the plow by operating the hand lever M. If the lever is pressed forward its connection through the link L, bell crank K and its connection with the front of the beam it may be depressed and the plow sent deeper into the ground, and a reverse movement will raise the beam to shallow the furrow or throw the plow out of the ground.

When desired the link L may be released from the pin *o* and the wheel F raised or lowered as the case may be to adjust the plow to the land without affecting the depth of the furrow. The link L disengaged from the lever, it may be operated freely and by its connection with the cranked portion or lever *c* of the axle or shaft D, the wheel may be raised or lowered for the purpose hereinbefore stated and the link L re-engaged with the lever at a point determined by the desired adjustment.

Having thus fully described the nature and object of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the plow and beam A having secured thereto the supporting wheel R, of the journal or shaft box C, frame E shaft D wheel F and the hand lever M, having a connection by bell crank *r*, and links *t*, *c* with the shaft whereby the shaft may be rocked in its bearings to raise or lower the outer end of the frame E, substantially as described and for the purpose set forth.

2. The combination with the plow and beam A, and the supporting wheel R secured to the rear portion thereof to travel in the furrow at the rear of the standard, of the frame E, rigidly secured to the beam the frame G, pivotally secured to the end portions of the frame

E, the supporting wheel H secured to the front portion of the frame G, a bell crank K connecting the front end portion of the frame G with the beam A, and a link L connecting the bell crank K with the lever M, whereby the front end of the beam may be raised or depressed to regulate the depth of the furrow to be plowed, substantially as described and for the purpose set forth.

3. The combination with a plow and beam A, of the wheel R secured to the rear portion of the beam A, of the frame piece rigidly secured to the beam, the shaft D journaled to said frame, supporting wheel F, frame G, supporting wheel H, bell crank K, a link L connecting the bell crank and thereby the front end of the beam with the lever M, whereby the shaft D may be rotated to raise or lower the outer end of the frame E, and to depress or raise the end of the beam, or to raise or lower the frame E independently of the beam, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand, this 5th day of September, A. D. 1893.

HENRY K. HOSHOUER.

Witnesses:

W. K. MILLER,

BURT A. MILLER.