

Witnesses

Inventor Sohn Worrell S. Bymuson,

1、"大","一","大","大","一","大","大"的基础的"全"等"这","大","大","大","大"。

UNITED STATES PATENT OFFICE.

JOHN WORRELL AND JAMES H. RYNERSON, OF CLAYTON, INDIANA.

IMPROVEMENT IN SULKY ATTACHMENTS FOR PLOWS.

Specification forming part of Letters Patent No. 120,560, dated October 31, 1871.

To all whom it may concern:

Be it known that we, John Worrell and James H. Rynerson, of Clayton, in the county of Hendricks and State of Indiana, have invented a new and valuable Improvement in Sulky Attachments for Plows; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a plan view of our invention. Fig. 2 is a vertical section of the same.

This invention has relation to an improved sulky attachment to plows; and consists in the application of novel devices, hereinafter described, for controlling both the front and rear ends of the plow-beam, in order to regulate the depth of the furrows. This invention has also reference to certain peculiarities of the wheels and axle, so that a right or left-hand plow may be used at pleasure.

In the accompanying drawing illustrating the nature of these improvements, A represents the axle, raised in the middle part; BB', the wheels, of different diameters. The smaller wheel runs in one of the completed furrows to guide the plow. C C' shows a pair of arms pivoted to the vertical parts of the axle A and projecting to the rear, where they are connected by the transverse bar D, which may be a continuation of the bars C C'. E represents the longitudinal plowbeam, supported in the rear to the bar D by a hinge, F, the swinging plate of which is rigidly secured to said bar by bolts. E' is the plow. The bar C' extends forward of the axle A, and is formed into a foot-piece, c, by pressing upon which the plow-beam and plows are elevated. G represents the draft-beam, to which the curved

rack H and double-armed or elbow-lever H' are pivoted. The rear arm of this lever is swiveled by a transverse pin, h, to a long vertical loop, I, to which the forward end of the plow-beam is hung by an eye-bolt, i. The teeth of the rack H face the lever H', as shown in the drawing. The object of the lever H' is to raise the points of the plow, and by this means regulate the depth of a furrow. The foot-lever C' is intended for the purpose of raising the plow entirely out of the furrow or out of contact with the ground. The plow, when raised by the lever H', is kept in place by the rack H, which is made to engage with the pin h at the proper point of elevation. K represents the driver's seat supported in an elevated position upon a standard, K'.

The devices herein described are simple, will work easily, and they may be made of sufficient strength to bear heavy plows without being of inconvenient size.

The sulky-attachment for plows above described is intended to be an improvement upon our patents of July 26, 1870, and March 28, 1871, and the particular improvements consist mainly in the construction of the curved rack H and hinge F above mentioned.

Having fully described our invention, we claim—

The curved rack H and hinge F, in combination with the lever H', beam E, bar D, and arms C C', when constructed and arranged substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JOHN WORRELL.
JAMES H. RYNERSON.

Witnesses:

G. W. McClure, W. A. Rogers.

(114)