F. S. DAVENPORT.

WHEEL-PLOW.

No. 185,821. Patented Jan. 2, 1877.

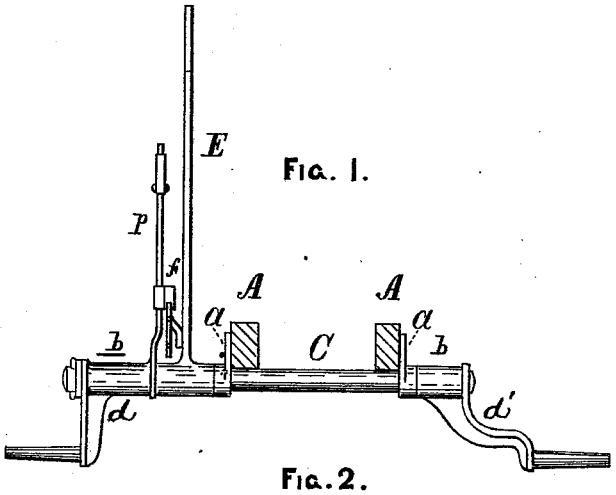

Fig. 1.

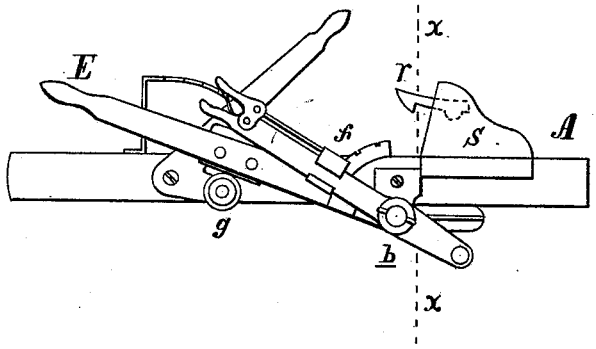

Fig. 2.

WITNESSES

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FREDERICK S. DAVENPORT, OF JERSEYVILLE, ILLINOIS.

IMPROVEMENT IN WHEEL-PLOWS.

Specification forming part of Letters Patent No. **185,821**, dated January 2, 1877; application filed October 28, 1876.

To all whom it may concern:

Be it known that I, FREDERICK S. DAVENPORT, of Jerseyville, in the county of Jersey and State of Illinois, have invented a new and useful Improvement in Wheel-Plows; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention herein described relates to wheel-plows, and is an improvement on my patent of October 9, 1866. This improvement consists, in the addition to the swing-axle shown in my patent of the above date, of certain details described in the following specification, whereby the furrow-wheel is made adjustable in reference to the opposite one, whereas in my former device above cited the furrow-wheel is adapted to only two positions—namely, one in which the axles are bolted to the same side of the hinge-board, and therefore lie in the same line, and the other in which they are bolted to opposite sides, and deviate from a line of coincidence by about the average depth of a furrow. Therefore, while the former position causes the plow to run level laterally when both wheels are on the unplowed ground, the latter position will preserve that level only when the relative angular position of the two axles about the axis of suspension differs by an amount equal to the depth of the furrow. Hence the object of the present device, by which the furrow-wheel is made adjustable to any required point situated between the two extreme positions described in reference to my former patent referred to, by which it will also be seen that what is there termed the "hinge-board" is now presented in a different form, consisting of a round bar or tube of iron, from each end of which depends an arm terminating in an axle. This change in form has been effected only for the purpose of substituting iron for the original wooden part, the essential characteristics of the former device having undergone no change whatever. It will therefore be understood that the present device is simply a new and useful feature added to the original invention, by which the degree of deviation of the axis of the furrow-wheel from a line of coincidence with the opposite wheel is placed under the control of the plowman, who can, by the details hereinafter described, adjust and lock in the required position the furrow-wheel, so that the latter will, when the axle is turned down in the horizontal position, be as much lower than the opposite one as will compensate for the depth of the furrow, and thus preserve the level of the plow, whatever may be the depth of the furrow, or even if there be no furrow at all, as is obviously the case when first opening the ground. It will be further noted that the two wheels are so connected that both are operated jointly by a single hand-lever for lowering the plow into the ground and for lifting it out.

In the drawing, Figure 1 is a front elevation of the device, showing the axle in the vertical position, and such other parts as necessarily co-operate therewith. Fig. 2 is a side elevation of the same, showing the axle turned down in the horizontal position.

A A, Fig. 1, represent sections of the plow-frame, taken in the line *x x*, Fig. 2. To each side of this frame is attached an eye or hinge, *a a*, supporting, as shown, a round bar or tube, C, from each end of which depends an axle-arm, *d d'*, the arm *d* being adapted to swing freely upon the bar C, while the arm *d'* is secured rigidly thereto, the whole designed to swing freely in the hinges *a*. The arm E is secured to the bar C, for the purpose of operating the latter. To the outside of the arm or hand-lever E is secured a notched quadrant, adapted to engage with an ordinary spring-latch, *f*, upon the small hand-lever *p*, by which the movable axle-arm *d* is actuated and locked in position with reference to the opposite arm, so that both may, after the furrow-axle has been adjusted with reference to the opposite one, be actuated by the single hand-lever E, which is retained in the vertical position by a latch, *r*, and stop-block *s*, Fig. 2.

It will be observed that the connection of the axles with the hand-lever E herein described admits the employment of the adjustable rest or stop *g*, (exhibited in my former patent and also here,) by which is obviated the necessity of regaging the depth of furrow each time the plow is lowered into the ground—an object which experience has shown to be of

importance, and which is effectually secured by the details herein described.

What I claim as new and my invention is—

The axle-arm *d*, pivoted upon the suspension-bar C, so as to admit of angular adjustment with reference to the opposite axle, and secured in position relative thereto by the locking device described, or its equivalent, so that both axles may be simultaneously actuated for either raising or lowering the plow by the single hand-lever E, the combination and operation of said parts being substantially as and for the purpose herein set forth.

This specification signed and witnessed this 23d day of October, A. D. 1876.

FREDERICK S. DAVENPORT.

Witnesses:
JOHN SNYDER,
W. H. STOECKEL.