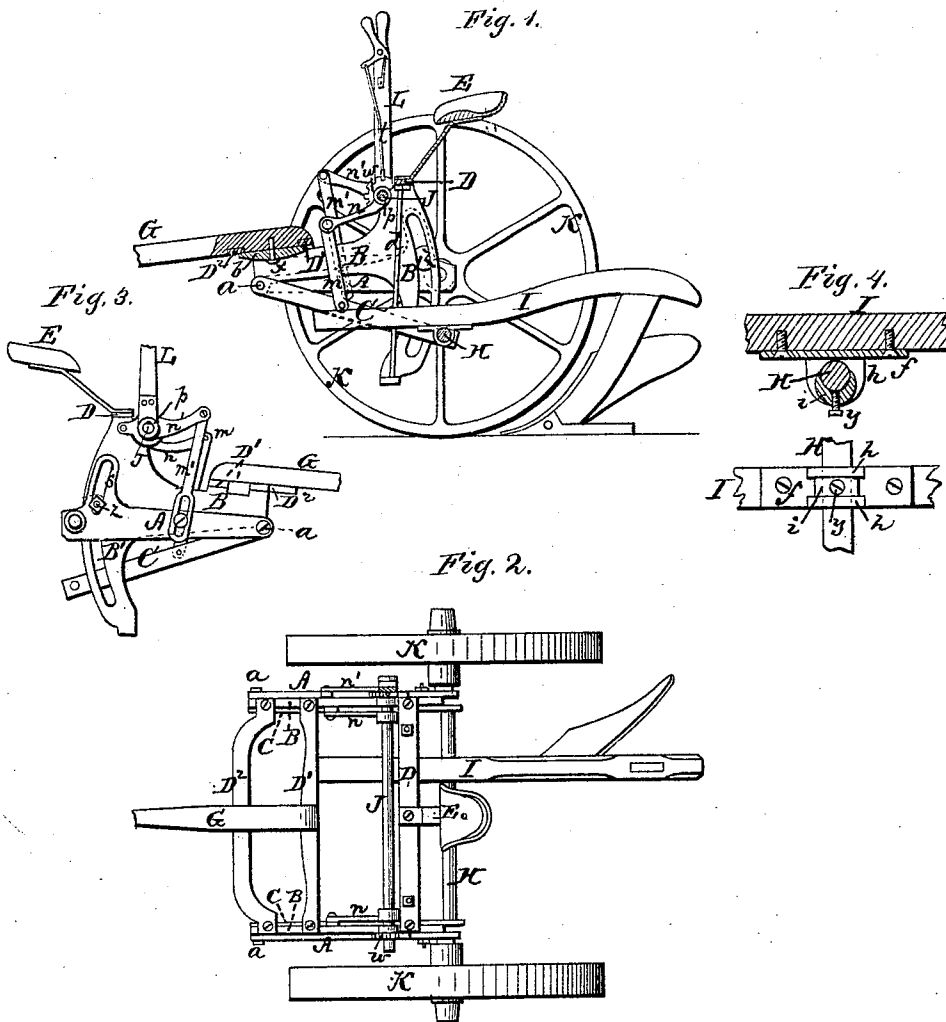


J. D. HARRISON.
Plow-Sulkies.

No. 150,034.

Patented April 21, 1874.



WITNESSES.

Henry N. Miller
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By

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UNITED STATES PATENT OFFICE.

JOHN D. HARRISON, OF MIDDLETOWN, OHIO, ASSIGNOR OF ONE-FOURTH HIS RIGHT TO P. P. LA TOURRETTE, OF SAME PLACE.

IMPROVEMENT IN PLOW-SULKIES.

Specification forming part of Letters Patent No. **150,031**, dated April 21, 1874; application filed October 3, 1873.

To all whom it may concern:

Be it known that I, JOHN D. HARRISON, of Middletown, in the county of Butler and in the State of Ohio, have invented certain new and useful Improvements in a Plow-Sulky; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a sulky for the attachment of a breaking-plow, with which either a right or left hand plow may be used, and either two or three horses used abreast, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a section through the center of the sulky. Fig. 2 is a plan view of the same. Fig. 3 is a side view of one side of the frame; and Fig. 4 shows the mode of attaching and adjusting the plow to the sulky.

Each side of my plow-sulky is composed of three bars, A, B, and C, pivoted together at their front ends by a single bolt, *a*. The middle bars B B are connected by means of cross-bars D, D¹, and D², and the tongue G is fastened to the bars D¹ and D². The under side of the tongue at the rear end has notches or recesses cut into it, in which these bars fit, and a plate, *b*, is placed on the under side of the tongue and fastened by a screw or bolt, *x*, the ends of said plate binding against the under sides of the bars D¹ and D², thus holding the tongue G firmly in place. By loosening the screw *x* the tongue may be moved and adjusted to any portion of said cross-bars, thus accommodating the plow in using either two or three horses abreast. E represents the driver's seat, attached to and supported by the cross-bar D. The bar B has a slotted segmental bar, B', formed at its rear end, and at the lower end of this segmental bar is an

inward-projecting ear or lug connected by a rod, *d*, with the cross-bar D, and said rod *d* has a nut, *e*, upon it above and below the cross-bar. These rods *d d* strengthen and brace the frame. The rear ends of the bars C C are connected by a shaft, H, to which a plow, I, is attached in the following manner: On the under side of the plow-beam is secured a plate, *f*, provided with two downward-projecting ears, *h h*, having holes, through which the shaft H passes. On this shaft, between the ears *h h*, is placed a movable collar, secured in position by means of a set-screw, *y*, thus holding the plow in position on the shaft, and at the same time allowing it to turn on the shaft. By loosening the set-screw *y* the collar *i* and the plow may be moved on the shaft to adjust it for taking more or less land, and also adapt the sulky to either a right or left hand plow. The bars C C are, by means of pivoted bars *m m*, connected with arms *n n*, which extend forward from a shaft, J, that passes through and has its bearings in the upper ends of the segmental extensions B' B' of the bars B B. On one end of the shaft is secured a short sleeve or collar, *p*, provided with a forward-projecting arm, *n'*, which is, by a pivoted bar, *m'*, connected with the bar A on that side of the frame. Both of the bars A A have at their rear ends outward-projecting spindles, upon which the wheels K K are placed, and they are, further, immediately in front of the spindles, provided with a slotted upward projection, *s*. That bar A which is connected with the arm *n'* is, by a bolt, *z*, loosely attached to the slotted bar B', so as to allow the bar B' to slide up and down, the bolt *z* forming a slide in the slot on the bar B'. The other bar A is rigidly attached to the corresponding bar B' on the other side by a similar bolt. To the sleeve or collar *p* is attached a lever, L, provided with a spring-dog, *t*, to engage in a cogged segment, *w*, secured on the outer side at the upper end of the bar B'. By this lever being turned forward or backward the wheel is adjusted according to the depth of the furrow in which it is to run, and the depth

of the plowing is also regulated by the same, the wheel being in line with the depth of the plow. It will be noticed that in hoisting the wheel the plow is elevated out of the ground at the same time and by the same lever. The collar *p*, with its attachments, may be changed from one side of the frame to the other, and thus admit of using either a right or left hand plow with the same sulky.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The plow-sulky frame, herein described, consisting of two side pieces, each composed of three bars, A, B, and C, pivoted together at their front ends, the bars A A having spindles for the driving-wheels K K, the bars B B

connected by cross-bars D D¹ D², and the bars C C connected by a shaft, to which the plow is attached, all combined substantially as herein set forth.

2. In combination with the plow-sulky frame, herein described, the shaft J with arms *n n*, connecting-bars *m m*, and the sleeve *p* with lever L, arm *n'*, and connecting-bar *m'*, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of September, 1873.

JOHN D. HARRISON.

Witnesses:

JOHN McCLELLAN,
D. M. LA TOURRETTE.