2 Sheets—Sheet 1

J. F. GLIDDEN & P. W. VAUGHAN.

Sulky-Plow.

No. 202,538. Patented April 16, 1878.

Fig. 1.

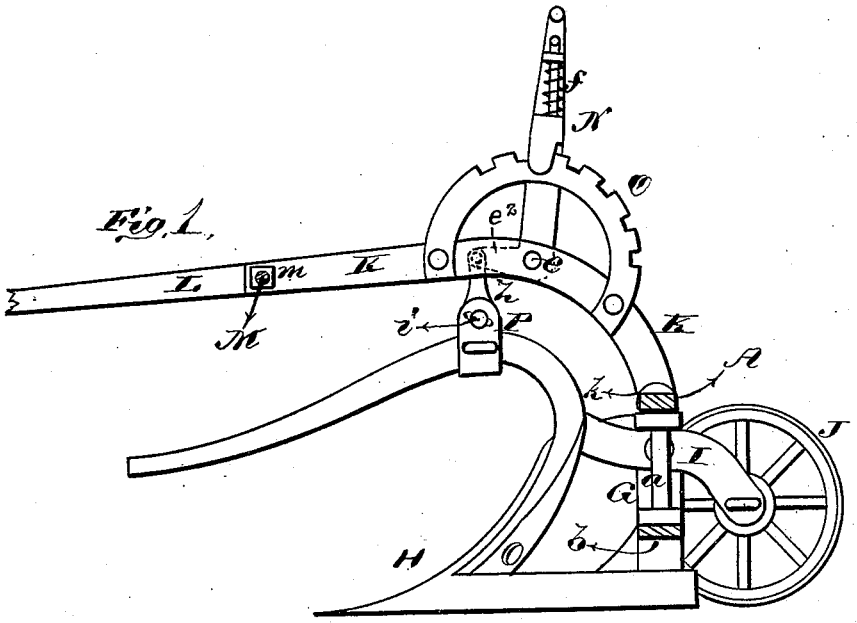
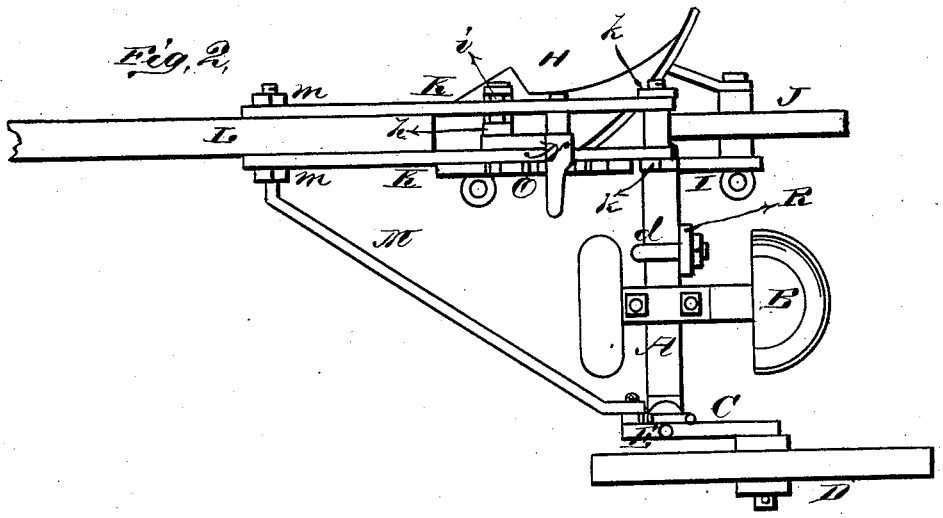


Fig. 2.



WITNESSES
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2 Sheets—Sheet 2.

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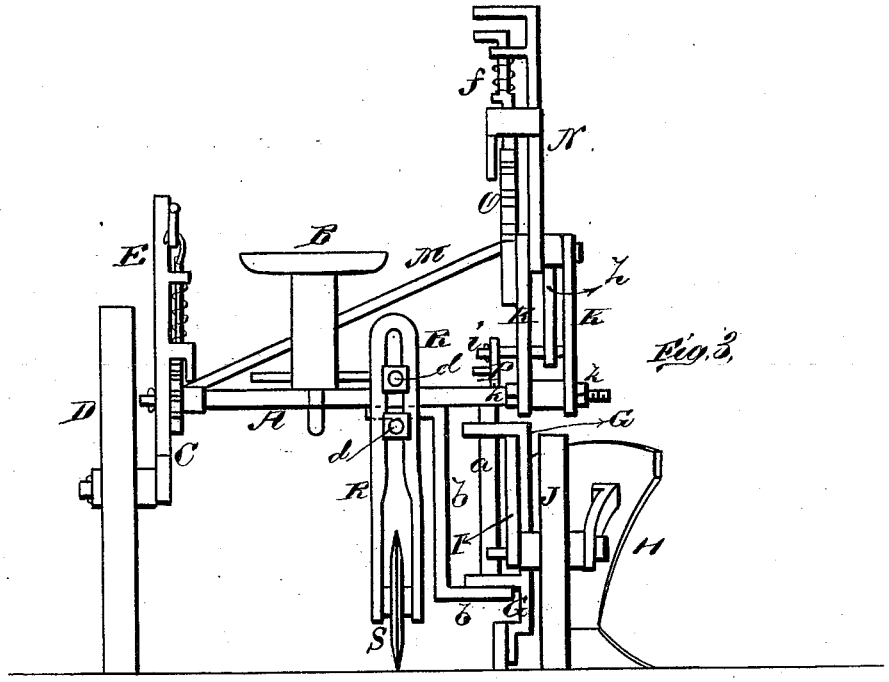

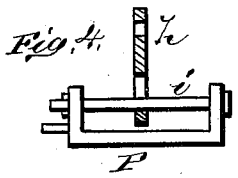

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UNITED STATES PATENT OFFICE.

JOSEPH F. GLIDDEN AND PHINEAS W. VAUGHAN, OF DE KALB, ILLINOIS.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **202,538**, dated April 16, 1878; application filed January 19, 1878.

To all whom it may concern:

Be it known that we, JOSEPH F. GLIDDEN and PHINEAS W. VAUGHAN, of De Kalb, in the county of De Kalb and State of Illinois, have invented a new and valuable Improvement in Sulky-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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of our sulky-plow. Fig. 2 is a plan view. Fig. 3 is a rear view of the same.

This invention relates to sulky-plows; and it consists in novel means, as will be hereinafter described, for forming a flexible connection between the axle of the carriage and the plow, whereby the tongue may be moved horizontally or laterally entirely independently of the plow; and, further, in a device for adjusting the tongue on or off the land, and thus adapting it to the use of a team of two or three horses, all as hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates the invention.

A represents the axle, with the driver's seat B attached thereto. At one end of the axle is an adjustable spindle-arm, C, with wheel D, said arm being adjusted by means of a lever, E, in any of the known and usual ways. Near the other end of the axle A is secured a pin or rod, *a*, extending downward at right angles with the axle, and having its lower end held in an angular bracket, *b*, which is fastened to the axle by means of a clip, *d*. On the pin or rod *a* is swiveled a frame, G, which is permanently attached to a brace, I, and also to the land-side bar of the plow H, said brace I being secured to the plow-beam, and extending rearward to form one of the bearings for the wheel J in the rear of the plow.

The construction of the plow H needs no description here, as no claim is laid thereto. In fact, any plow of suitable construction may be used.

On the end of the axle to which the plow is thus connected are pivoted two arms, K K, curved as shown, and having the tongue L secured between them. M is a brace, connecting the tongue and its arms with the wheel end of the axle, the rear end of the brace being pivoted at this point, so that the tongue can be raised and lowered at will.

Between the arms K K, upon a pin, *e*, is pivoted a lever, N, provided with a spring-pawl, *f*, to take into a ratchet, O, upon one of the arms. The lever N is at its lower end formed with a short arm, e^2, extending at, or nearly at, right angles with it, and to this arm is pivoted a link, *h*, which has an elongated hole or slot in its lower end. Through this hole or slot passes a pin, *i*, which is placed in a clip, P, securely fastened to the plow-beam.

It will readily be seen that by this construction of devices for connecting the axle of the carriage to the plow a flexible attachment is formed, whereby the tongue may be moved horizontally or laterally entirely independently of the plow, thus enabling the plow to follow directly in the line of draft to the team.

The part of the axle A upon which the arms K are placed is an elongated screw-rod, with nuts *k k* on the inner and outer sides of the arms. By this means the tongue can be adjusted on or off the land, so as to adapt it to the use of a team of two or three horses. The front end of the brace M for this purpose also forms a screw-rod passing through the tongue and arms, with nuts *m m* on opposite sides, so as to adjust the same to correspond with the adjustment of the arms K on the axle.

The clip *d*, which secures the angular bracket *b* to the axle, also holds a slotted bar, R, firmly to the axle. This bar is forked at its lower end, and carries a revolving colter, S, which can be adjusted at will on the axle. One or more additional colters may also be attached to the axle in a similar manner. These colters are for the purpose of cutting corn-stalks or other obstructions, thus clearing the way for the subsequent furrow or furrows.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a one-wheel sulky-plow, an axle, A, having at the end opposite the wheel a pin or rod, *a*, extending downward at right angles with the axle, and at its lower end supported in an angular bracket, *b*, in combination with a swiveled frame, G, and a plow, substantially as and for the purposes set forth.

2. The swiveled frame G, the lower end of which is attached to the land-side of a plow, and having the brace I secured to the plow-beam and extending rearward to form one of the bearings for the wheel J of the plow, substantially as described, and for the purposes set forth.

3. The combination of the axle A, with elongated screw-rod at the end, the arms K K, nuts *k k*, tongue L, brace M, with screw-rod and nuts *m m*, whereby the tongue can be adjusted on or off the land, for the purposes set forth.

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

JOSEPH F. GLIDDEN.
PHINEAS W. VAUGHAN.

Witnesses:
I. V. RANDALL,
CHAS. C. HINMAN.