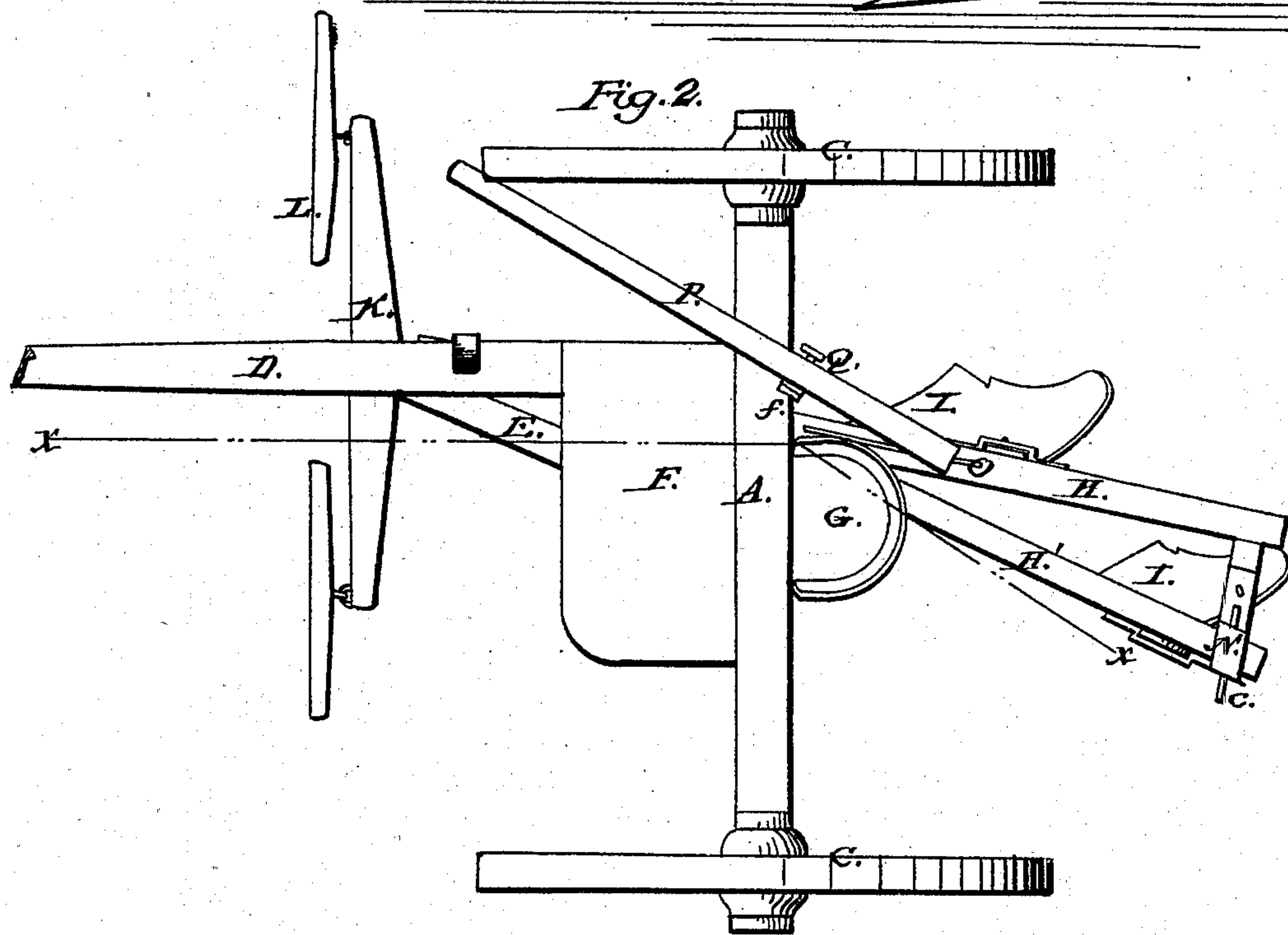
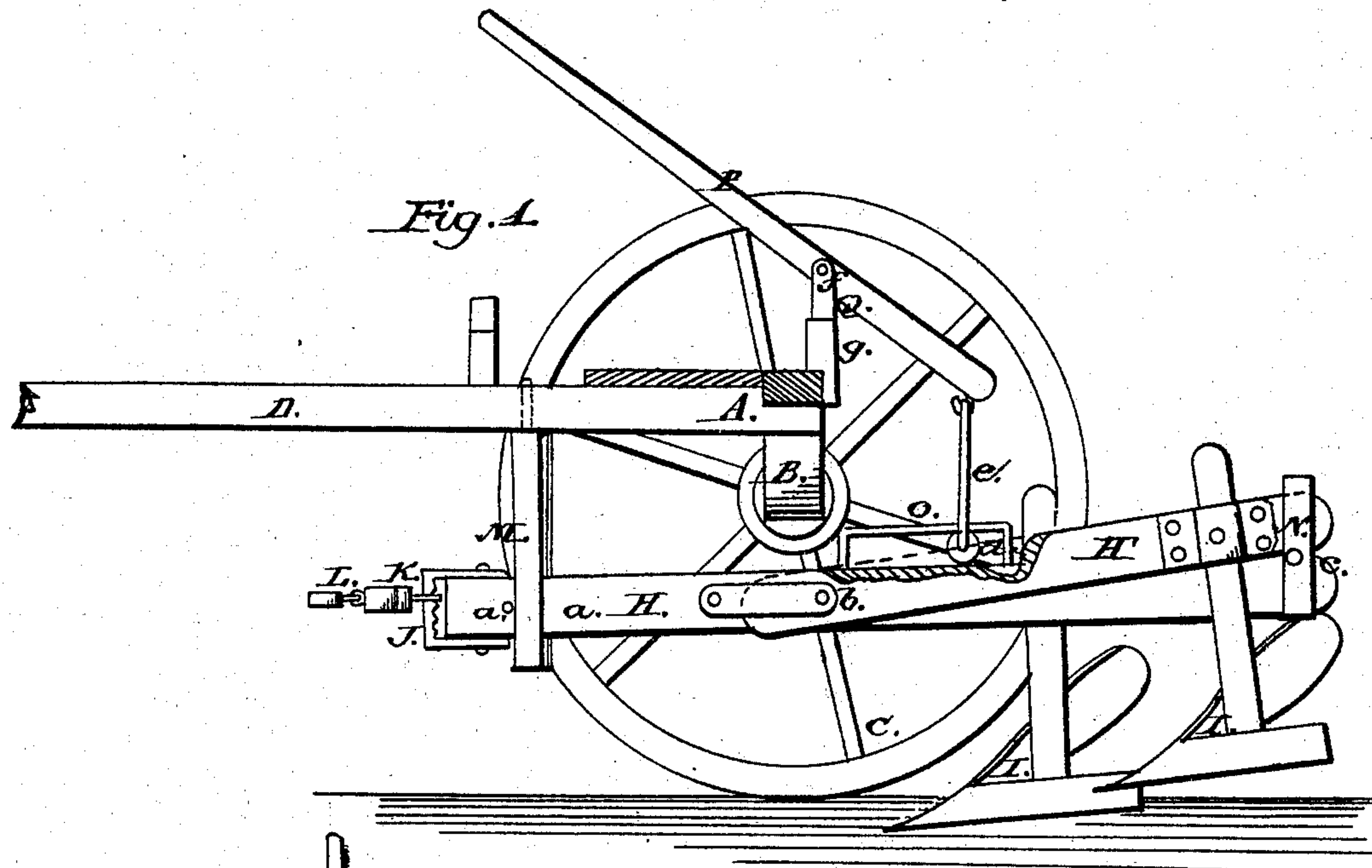


H. P. STAFFORD.  
GANG PLOW.

No. 67,814.

Patented Aug. 13, 1867.



Witnesses:  
Geo. Fische  
Wm. Frewin

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# United States Patent Office.

H. P. STAFFORD, OF DECATUR, ILLINOIS, ASSIGNOR TO HIMSELF AND  
M. C. WYKEL, OF THE SAME PLACE.

*Letters Patent No. 67,814, dated August 13, 1867.*

## IMPROVEMENT IN GANG-PLOUGHS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, H. P. STAFFORD, of Decatur, in the county of Macon, and State of Illinois, have invented a new and improved Gang-Plough, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved gang-plough, and consists in a novel plan or mode of attaching the plough-beams to the carriage, and also in a novel arrangement of the beams, mode of connecting them together, and in a peculiar application of a lever for moving them laterally and vertically, as hereinafter fully shown and described, whereby the driver or operator has full control over the ploughs, and a very simple and efficient gang-plough obtained. In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention, taken in the line *xx*, fig. 2.

Figure 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

A represents an axle, provided at each end with a crank-arm, B, on which the wheels C C are fitted, and D is a draught-pole, attached to the axle, and braced by a hound, E, a foot-board, F, being secured on the rear part of the draught-pole and the hound. G is the driver's seat, attached to an upright secured to the rear side of the axle A. H H' represent two plough-beams, having each a plough, I, attached in the usual or any proper manner. The beam H is longer than the beam H', and the longer beam H has a clevis, J, attached to its front end, in which a double-tree, K, is fitted, and has a whiffle-tree, L, at each end of it. The front part of this beam H is fitted loosely in a pendent-swivel guide, M, attached to the draught-pole, said guide M working between pins *a* in the sides of the beam, as shown in fig. 1.

By this arrangement the plough-beams, while being connected to the carriage, admit of being raised and lowered, and also moved laterally. The shorter plough-beam H' is attached by a pivot, *b*, to the beam H, and the rear part of the beam H' is fitted in a guide, N, attached to the rear of H. By this arrangement it will be seen that the plough of beam H' may be raised out of the ground when not required for use, and may be sustained in an elevated position by a pin, *c*. On the top of the beam H there is an oblong staple or loop, O, underneath which a grooved roller, *d*, works, said roller being connected by a link, *e*, with the rear end of a lever, P, the fulcrum-pin *f* of which is in a swivel, Q, in a short upright, *g*, attached to the rear of the axle A.

From the above description it will be seen that the driver from his seat G, by operating the lever P, may raise and lower the ploughs and move them to the right or left, as desired, and, in consequence of the team being attached direct to the plough-beams, the ploughs are made to run perfectly steady, and cross rows of old corn and work equally as well on uneven ground generally as on smooth ground.

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

1. The attaching of the plough-beams to the carriage, through the medium of the pendent-swivel guide M, secured to the draught-pole D and the pins *a* in the sides of the beam H, between which pins the guide is fitted, substantially as and for the purpose specified.

2. The attaching of the plough-beam H' to the beam H, by means of the pivot *b* and the guide N, substantially as and for the purpose set forth.

3. In combination with the mode of attaching the plough-beams to the carriage as shown, the application of the draught power direct to the plough-beams, substantially as and for the purpose specified.

4. The lever P, having its fulcrum-pin *f* fitted in a swivel, Q, on the axle A, and its rear end connected by a link, *e*, with a grooved roller, *d*, which works under an oblong loop or staple, O, on beam H, substantially as and for the purpose specified.

Witnesses:

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