W. S. WEIR, Jr.

Wheel Cultivator.

No. 46,285. Patented Feb. 7, 1865.

Fig. 1.

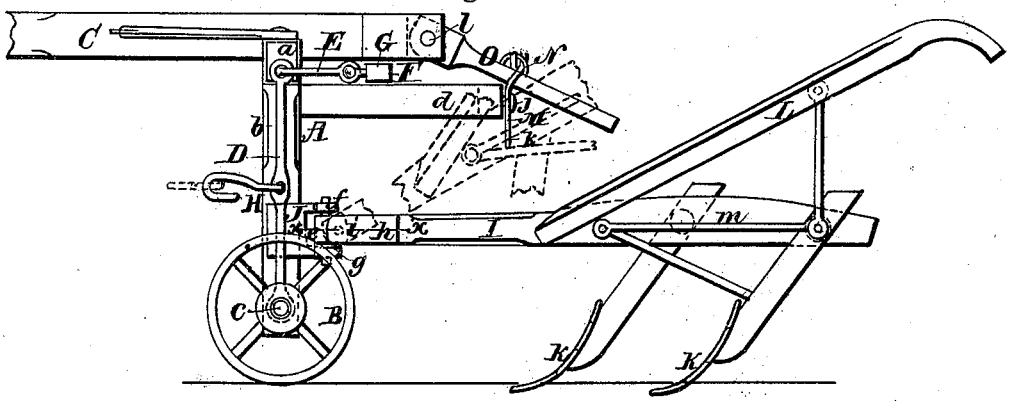


Fig. 2.

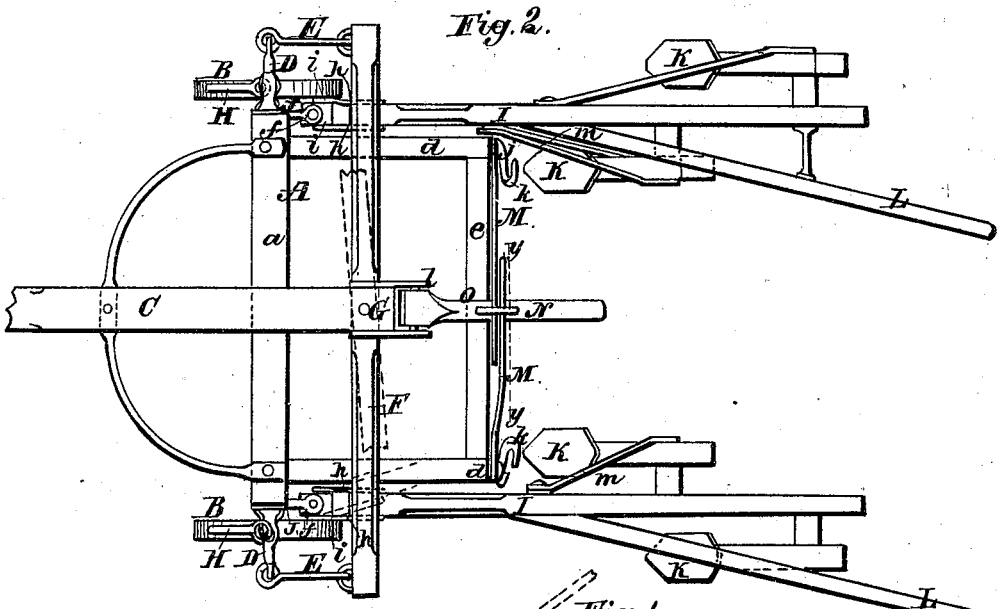


Fig. 3.

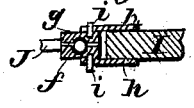
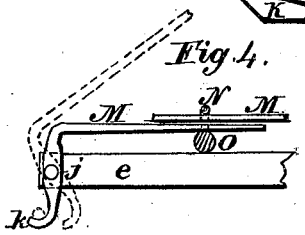


Fig. 4.



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UNITED STATES PATENT OFFICE.

WM. S. WEIR, JR., OF MONMOUTH, ILLINOIS.

IMPROVED CORN-PLOW.

Specification forming part of Letters Patent No. **46,285**, dated February 7, 1865.

To all whom it may concern:

Be it known that I, WILLIAM S. WEIR, Jr., of Monmouth, in the county of Warren and State of Illinois, have invented a new and Improved Corn-Plow; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a horizontal section of a portion of the same, taken in the line *x x*, Fig. 1; Fig. 4, a section of a portion of the same, taken in the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates, first, to a new and useful equalizing attachment for equalizing the draft of the machine; second, in an improved manner of attaching the plows to the main frame of the machine, whereby the former may be raised and lowered and adjusted laterally, as may be required, with the greatest facility; third, in a novel and improved means for holding the plows in an elevated state out of the ground when the machine is being drawn from place or place or when being turned at the ends of rows.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the main frame of the machine, which is composed of a horizontal bar, *a*, having a pendent bar, *b*, at each end, the lower parts of the latter having each an axle, *c*, attached to them, on which a wheel, B, is placed, said wheels supporting the main frame. To the upper part of each pendent bar *b* there is attached a horizontal bar, *d*, the outer ends of which are connected by a bar, *e*.

C represents a draft-pole, which is attached to the center of the bar *a;* and D D are two rods, the lower ends of which are fitted loosely on the axles *c c*. The upper ends of the rods D D are connected by links E E with the ends of a bar, F, which is secured to the under side of the back part of the draft-pole C by a bolt, G, and to each rod D, at about its center, there is attached a hook, H, to which the whiffletrees are connected. By this arrangement it will be seen that a perfect and simple draft-equalizer is obtained, and one which transfers the draft or pull to the bar F at the back end of the draft-pole, which is sufficiently elevated to be above the corn, so that the latter cannot be injured or broken down by the bar F.

I I represent two plow-beams, which are attached one to each pendent bar *b*, as follows: To each bar *b* there is attached a metal plate, J, having a rectangular slot or opening, *e'*, made in it. These plates may be constructed out of a piece of metal of single thickness; or they may be folded or bent in such a manner as to form eyes to receive pins *f*, which pass through metal blocks *g g*, said blocks being allowed to turn freely on the pins within the slots or openings *e'*. The blocks *g g* are fitted between plates *h h*, attached to opposite sides of the beams I I, the plates *h h* being secured to the blocks by pivots *i i*, as shown in Fig. 3. This mode of connecting the plow-beams I I to the pendants *b b* admits of the former being moved laterally, and also vertically, and the plows can therefore be readily adjusted or manipulated as occasion may require to suit the sinuosities of the rows of corn. The plows (designated by K) may be constructed and applied to the beams in the usual or in any proper manner, and said beams are also provided with handles L for the operator to grasp as the machine is drawn along.

To the back end of each bar *d* there is secured by a pivot, *j*, a curved rod, M, the lower ends of which are bent so as to form hooks *k*. (See Figs. 2 and 4.) The upper parts of the rods M are straight, and they pass through a loop or eye, N, on a lever, O, which is attached by a horizontal rod, *l*, to the back end of the draft-pole.

When the machine is to be drawn from place to place or turned at the ends of rows the operator raises the back ends of the beams I I, so that the hooks *k* will catch under brace-rods *m*, attached to the beams, as shown in red in Fig. 1.

The plow-beams may be let down at any time by raising the lever O, which causes the hooks *k* to be drawn inward and free from the brace-rods *m*.

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

The curved rods M, attached to the back ends of the bars *d d* and bent in the form of hooks *k* at their lower ends, in connection with the lever O, attached to the back end of the draft-pole C, all being arranged and applied substantially as and for the purpose specified.

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