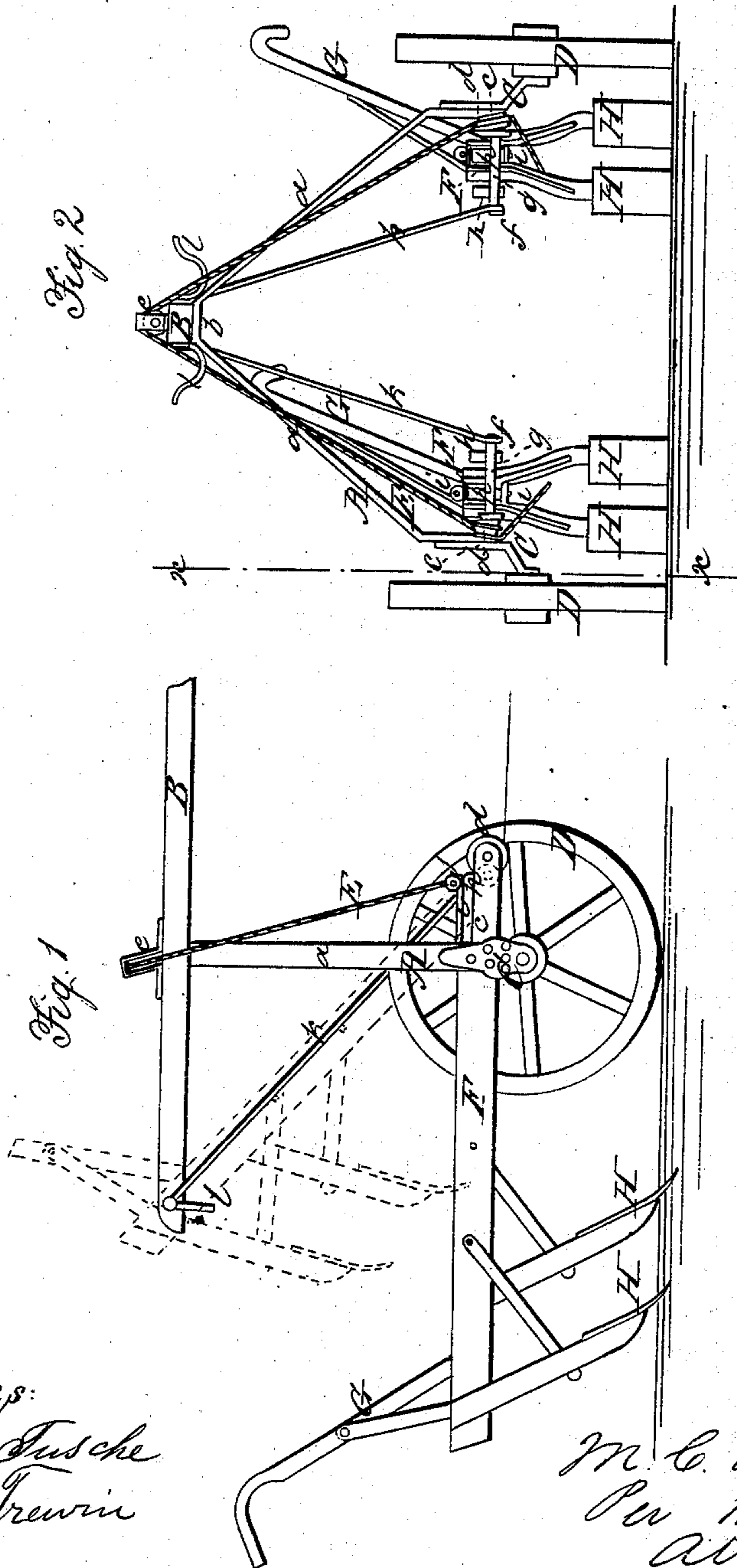


M. C. BUFFINGTON.

Wheel-Cultivator.

No. 69,071.

Patented Sept. 24, 1867.



Witnesses:  
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# United States Patent Office.

M. C. BUFFINGTON, OF LA HARPE, ILLINOIS.

Letters Patent No. 69,071, dated September 24, 1867.

## IMPROVEMENT IN CORN-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, M. C. BUFFINGTON, of La Harpe, in the county of Hancock, and State of Illinois, have invented a new and improved Corn-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 corn-plough or cultivator, and consists in a novel construction of the same, as hereinafter fully shown and described, whereby the draught-pole is elevated above the corn so as to prevent the same being broken down and injured, and a draught obtained which will admit of the draught-pole being balanced so as to avoid any undue pressure on the necks of the draught animals, while the ploughs are rendered capable of adjustment as circumstances may require. In the accompanying sheet of drawings—

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

Figure 2, a front view of the same.

Similar letters of reference indicate like parts.

A represents the axle of the machine, which is bent so as to have inclined sides *a a* gradually converging toward each other from their lower ends to the top, a horizontal portion, *b*, being at the top, to which the draught-pole B is secured by a bolt. The lower ends of the axle are bent forward, as shown at *c*, and have each a pulley, *d*, attached, a similar pulley, *e*, being secured on the draught-pole about over the top of the axle. In practice the pulley *e* is designed to be adjustable so that it may be moved further forward or backward, as desired.

C C represent the arms of the axle, on which the wheels D D are fitted loosely. These arms are secured to the lower parts of the axle A at the angles formed by the bent horizontal ends *c*, and it is designed in practice to have the arms attached to the axle by bolts passing through any one of a series of holes in the arms to admit of the latter being secured higher or lower in position, and further forward or backward, as occasion may require.

It will be seen, from the above description, that the wheels D D may be of medium diameter, and the draught-pole quite elevated, sufficiently so to clear or be above the corn, so that the latter will not be injured or broken down by it as the machine is drawn along.

Over the pulleys *d d* and *e* a chain or rope, E, passes, the latter having a whiffle-tree at each end, to which the horses are attached, and it will be seen that the pressure of this chain or rope on the pulley *e* will, by adjusting the pulley *e* further forward or backward, take all strain off the necks of the team; in fact, a driver's seat may be fitted on the rear part of the draught-pole, and the driver perfectly counterpoised. The machine, therefore, may be used as a sulky-plough, if desired.

F F represent two plough-beams, which are provided with handles G and ploughs H, attached or applied in the usual manner. These beams are attached to the front lower ends of the axle A, as follows: The front horizontal ends *c c* have each a rod, *f*, projecting inward from them at right angles, and on these rods tubes *g* are fitted loosely and secured by nuts or other device. Each tube *g* has two vertical tubes, *h h*, attached to it, said tubes *h* not being attached to *g* at their centres, but somewhat out of centre, as shown clearly in fig. 2. The front ends of the beams F F have metal plates *i i* attached to them, one at their upper and the other at their lower sides, between which the tubes *h* are fitted, and a pin, *j*, passing through all.

By this means a universal joint connection is obtained, which admits of the ploughs being moved up and down and sideways.

Two tubes, *h*, are attached to each tube *g*, in order to admit of the plough-beams being placed nearer together or further apart, as may be desired, and, in consequence of the tubes *h* being attached to the tubes *g* out of centre, the beams may be secured in a higher or lower position by reversing the tubes *h*, the beams, of course, being higher when the longer portions of the tubes *h* are above the tubes *g*.

The rods *f* are braced by bars or rods *k* from the rear end of the draught-pole B, and to the rear end of the draught-pole there are hooks *l* by which the rear ends of the plough-beams may be suspended above the surface of the ground when the device is being drawn from place to place.

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

1. The bent axle A, with the wheel-arms C and draught-pole B attached, as shown, in connection with the pulleys *d d e* and draught-chain or cord E, all combined and arranged to operate in the manner substantially as and for the purpose set forth.

2. The attaching of the plough-beams F to the axle A by means of the tubes *h g*, the latter being fitted on rods *f* attached to the parts *e* of the axle, and the former secured by pins *j* between plates *i i* at the front ends of the plough-beams.

3. The brace-rods or bars *k*, connected with the ends of the rods *f* and the rear end of the draught-pole B, substantially as and for the purpose specified.

4. The combination of the axle A, draught-pole B, brace-rods or bars *k*, and the universal joints which connect the plough-beams with the axle, all being arranged substantially as and for the purpose specified.

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Witnesses:

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