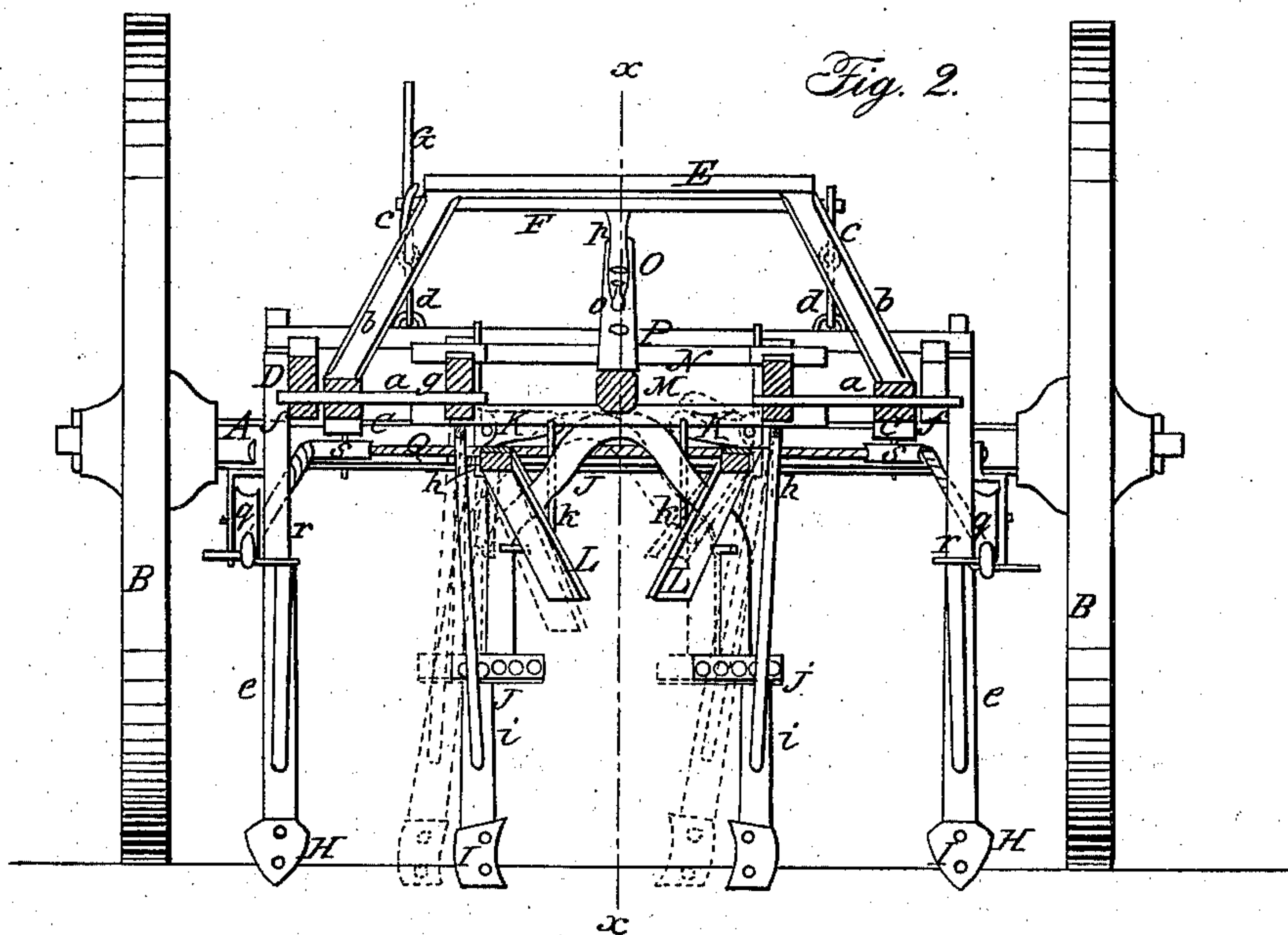
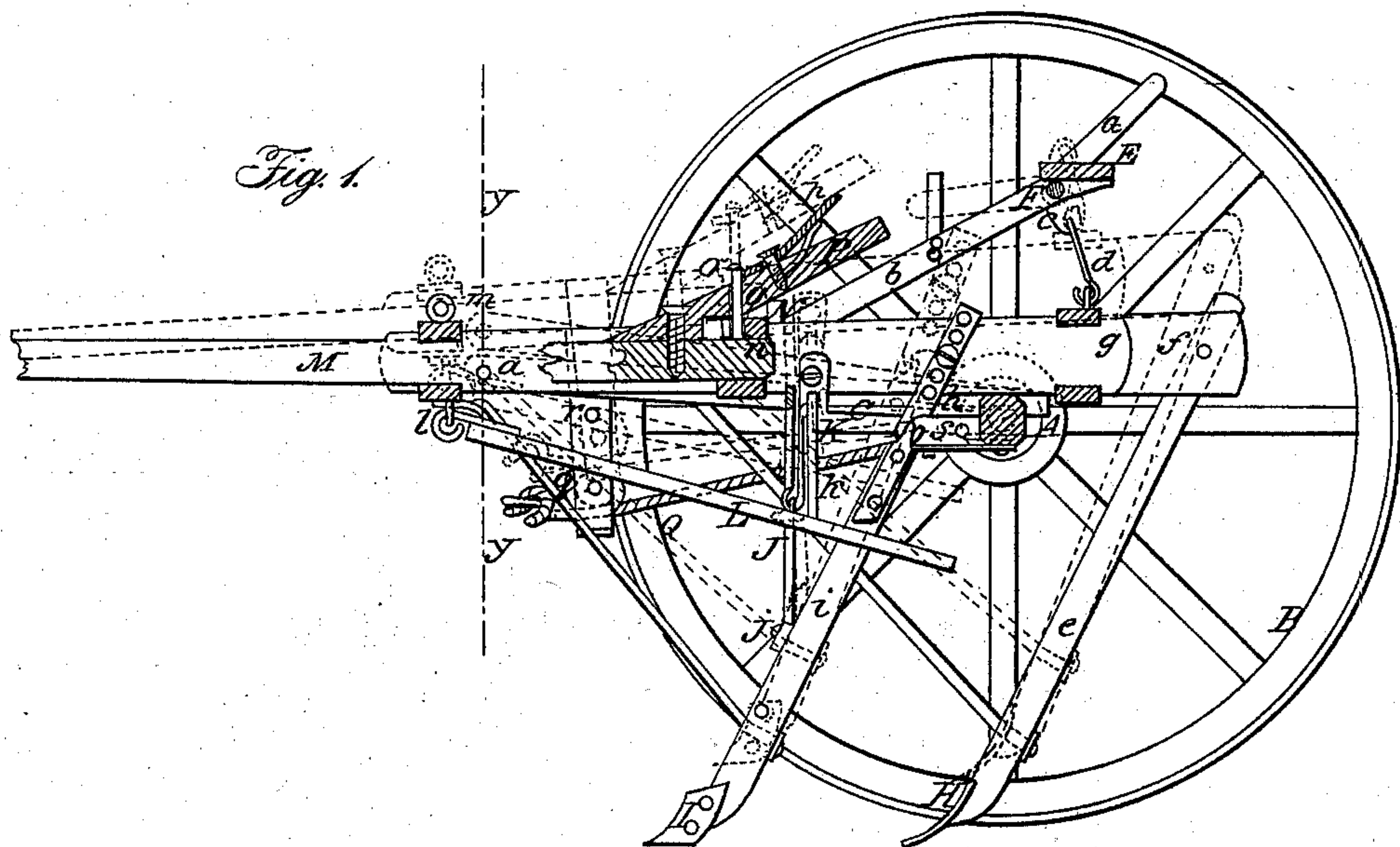


L. H. CASTOR.
Wheel Cultivator.

No 43,288.

Patented June 28, 1864.



Witnesses:

Jas Coombs
Henry Morris

Inventor:

L. H. Castor
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UNITED STATES PATENT OFFICE.

L. H. CASTOR, OF EDINGTON, ILLINOIS.

IMPROVEMENT IN CORN-PLOWS.

Specification forming part of Letters Patent No. 43,288, dated June 28, 1864.

To all whom it may concern:

Be it known that I, L. H. CASTOR, of Edington, in the county of Rock Island 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 sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a front sectional view of the same, taken in the line *y y*, Fig. 1.

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

This invention relates to a new and improved means for adjusting or moving the plows laterally, so that the same may be made to conform to the sinuosities of the rows of corn to prevent plants being plowed out of the ground while the implement is being drawn along; and the invention also relates to an improved means for raising the plows out of the ground when desired.

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

A represents an axle having a wheel, B, on each end of it, to which two bars, C C, are permanently attached, said bars projecting in front of the axle, and having a rectangular frame, D, attached to them by pins *a a*, said frame extending back over the axle A, and being allowed to work freely on the pins *a a*.

E represents the driver's seat, which is attached to inclined bars *b b*, the front ends of which are secured one to each bar C, and at the back parts of the bars *b b*, underneath the driver's seat E, there is a shaft, F, the ends of which have arms *c c* attached, to which the back part of the frame D is connected by links *d d*. One of the arms *c* has a lever, G, attached, said lever extending forward so as to be within convenient reaching distance of the driver on the seat E. The frame D has plow-standards *e* attached to it, to which plows H of the usual or any proper form are secured, said plows being stationary or having no movement independently of the frame D. The standards *e* are attached to the outer longitudinal bars, *f*, of the frame, and to inner parallel bars, *g*, of said frame there are attached by

joints *h* standards *i*, which joints admit of a lateral movement of the standards *i* and plows I, which are secured to them. The plows I are designed for plowing near to the rows of corn, the plows H loosening the earth and eradicating weeds between the rows. The two plow-standards *i i* are connected by a bail-shaped bar, J, the form of which is shown in Fig. 2, the lower ends of the bar J being connected to the standards *i* by pivots *j*, also shown in Fig. 2.

To each bar *g* of the frame D there is attached a bent lever, K, the lower ends of which are bent and notched so as to receive the inner edge of the bar J. The upper ends of the levers K are connected by links *k* to treadles L, the front ends of which are connected to the front end of the frame D by joints *l*. The back ends of the treadles L are within reach of the feet of the driver on the seat E, and it will be seen that by actuating these treadles the levers K will be moved and made to bear against the bar J, and the standards *i i* and plows I consequently moved laterally either to the right or left, as may be desired. In order to raise all the plows entirely out of the ground, the driver presses down the front end of the lever G, which causes the shaft F to turn, and the arms *c c* and links *d d* will elevate the back part of the frame D. Thus by this simple and efficient arrangement the plows may be operated or adjusted with the greatest facility.

M represents the draft-pole, which is secured centrally in the front part of the frame D by a bolt, *m*. The back end of the draft-pole works underneath a plate, N, on the frame D, which is perforated with holes *n*, and a catch, O, which is attached to an inclined arm, P, on the back part of the draft-pole, secures the latter in different positions, as may be desired, said catch being composed of a pin, *o*, which passes through the arm P and through any of the holes *n* in the plate N, the pin being attached to a spring-lever, *p*, on the arm P. (See Fig. 1.) By shifting the draft-pole the machine may be greatly assisted in turning, and also guided with greater facility than usual.

The whiffletrees are attached to the end of a rope or chain, Q, which passes underneath pulleys *q q*, fitted to pendants *r* at each side of the frame D, said rope extending around pul-

leys *s s* at the back parts of the bars *C C*. By this arrangement a simple and efficient draft-equalizer is obtained.

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

1. Moving the standards *i i* of the plows *I* laterally by means of the bail-shaped bar *J*, bent levers *K K*, and treadles *L L*, all arranged substantially as herein set forth.

2. The combination of the bars *C C*, frame *D*, driver's seat *E*, rock-shaft *F*, links *d d*, and levers *G c*, all constructed, arranged, and employed substantially as described, for raising the plows when required.

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Witnesses:

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