

(No Model.)

2 Sheets—Sheet 1.

C. M. FRENCH.

WHEEL PLOW.

No. 333,065.

Patented Dec. 22, 1885.

Fig. 1.

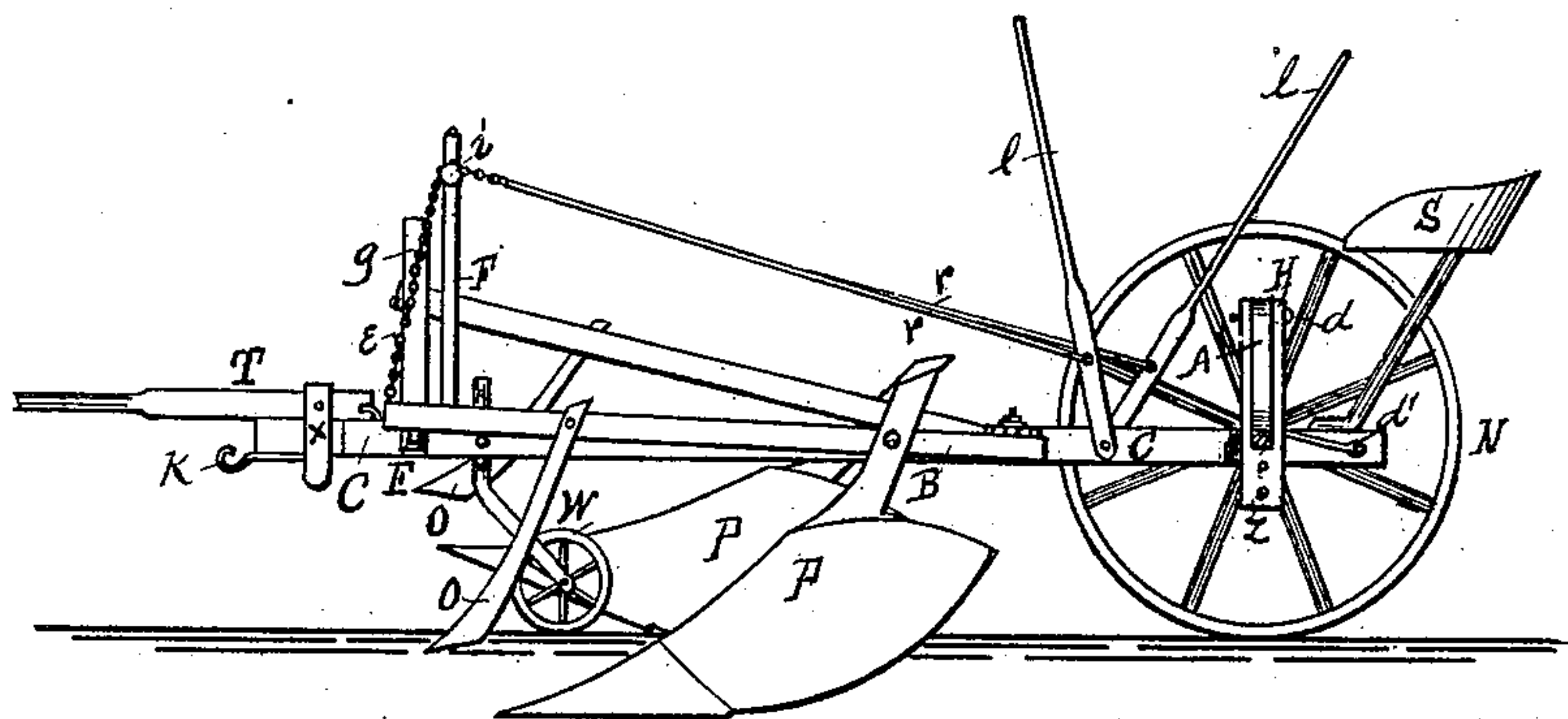


Fig. 2.

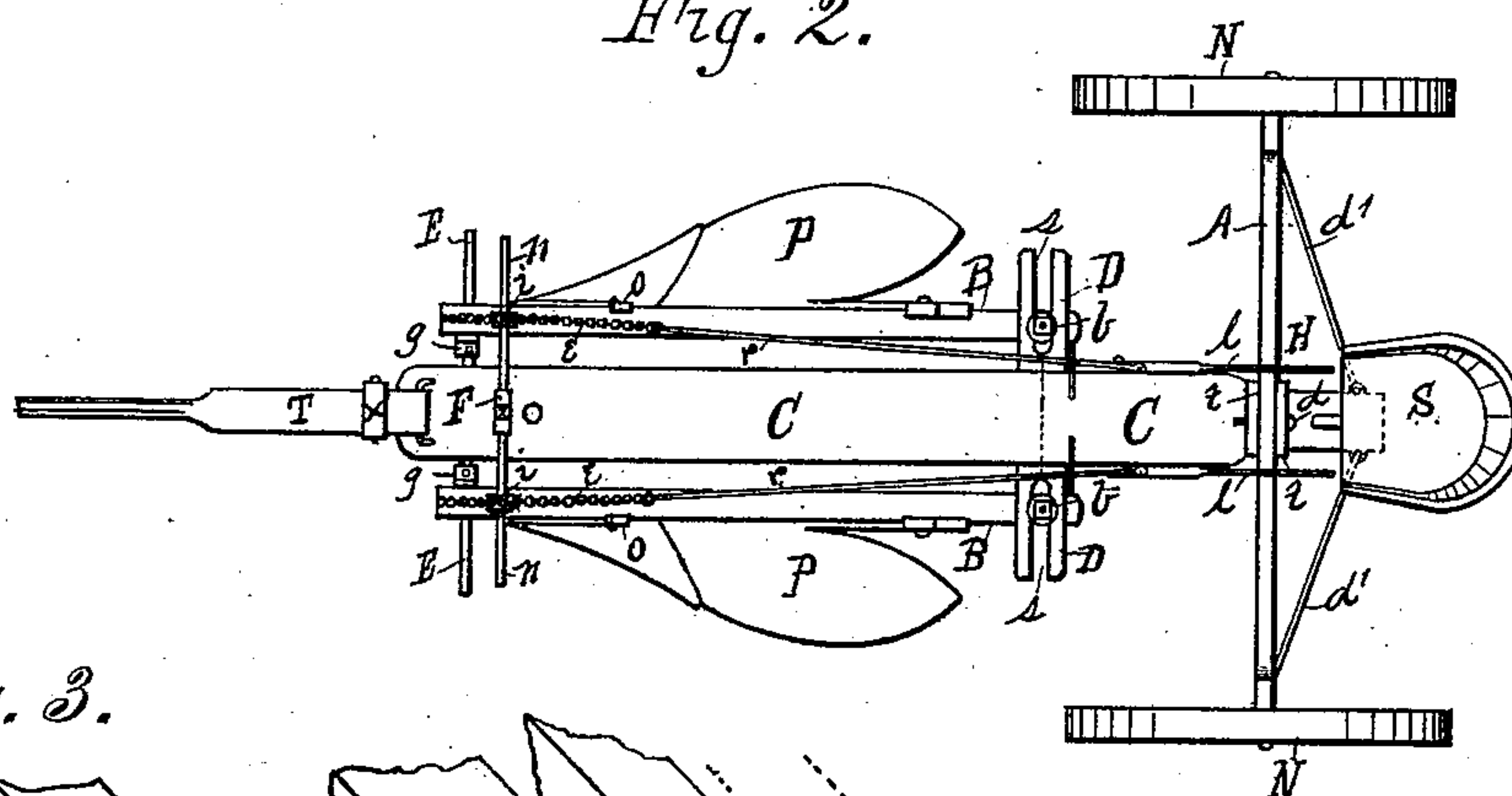
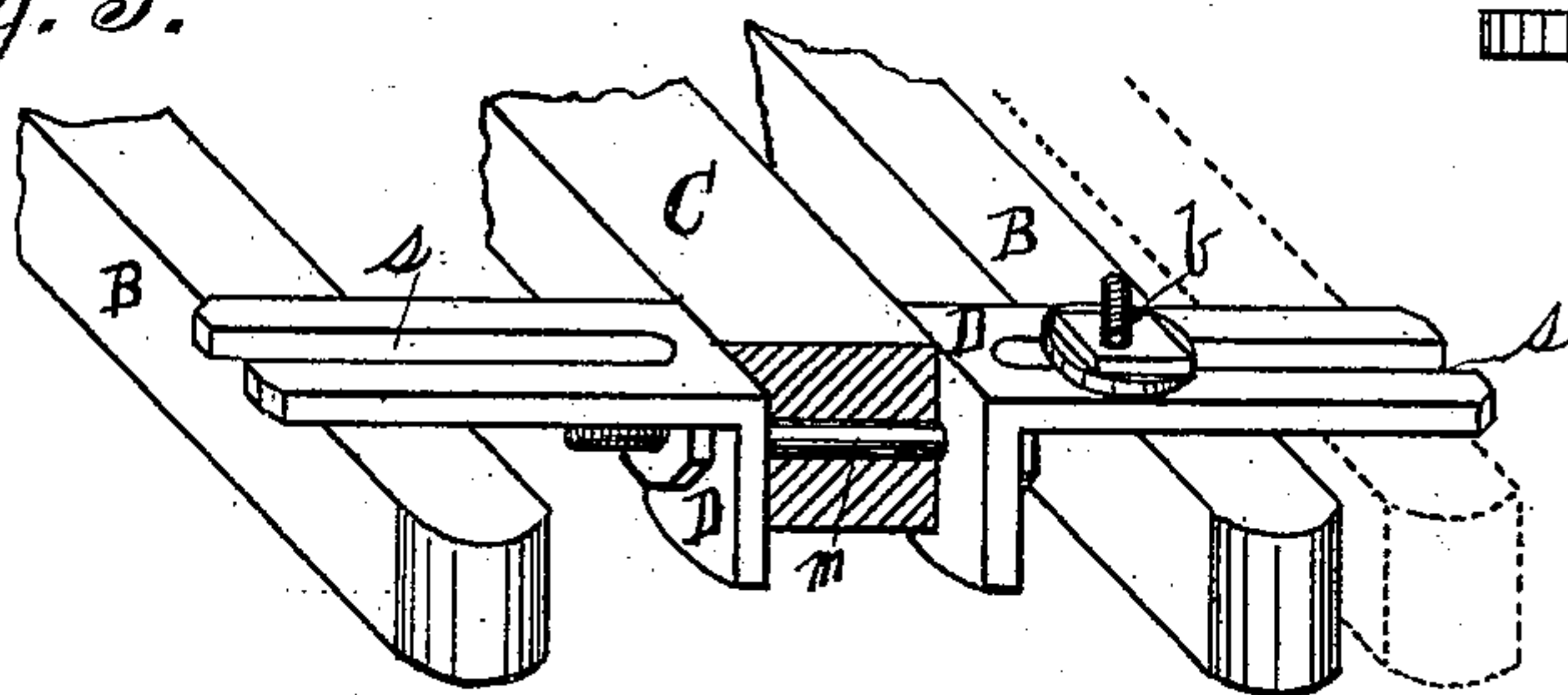


Fig. 3.



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(No Model.)

2 Sheets—Sheet 2.

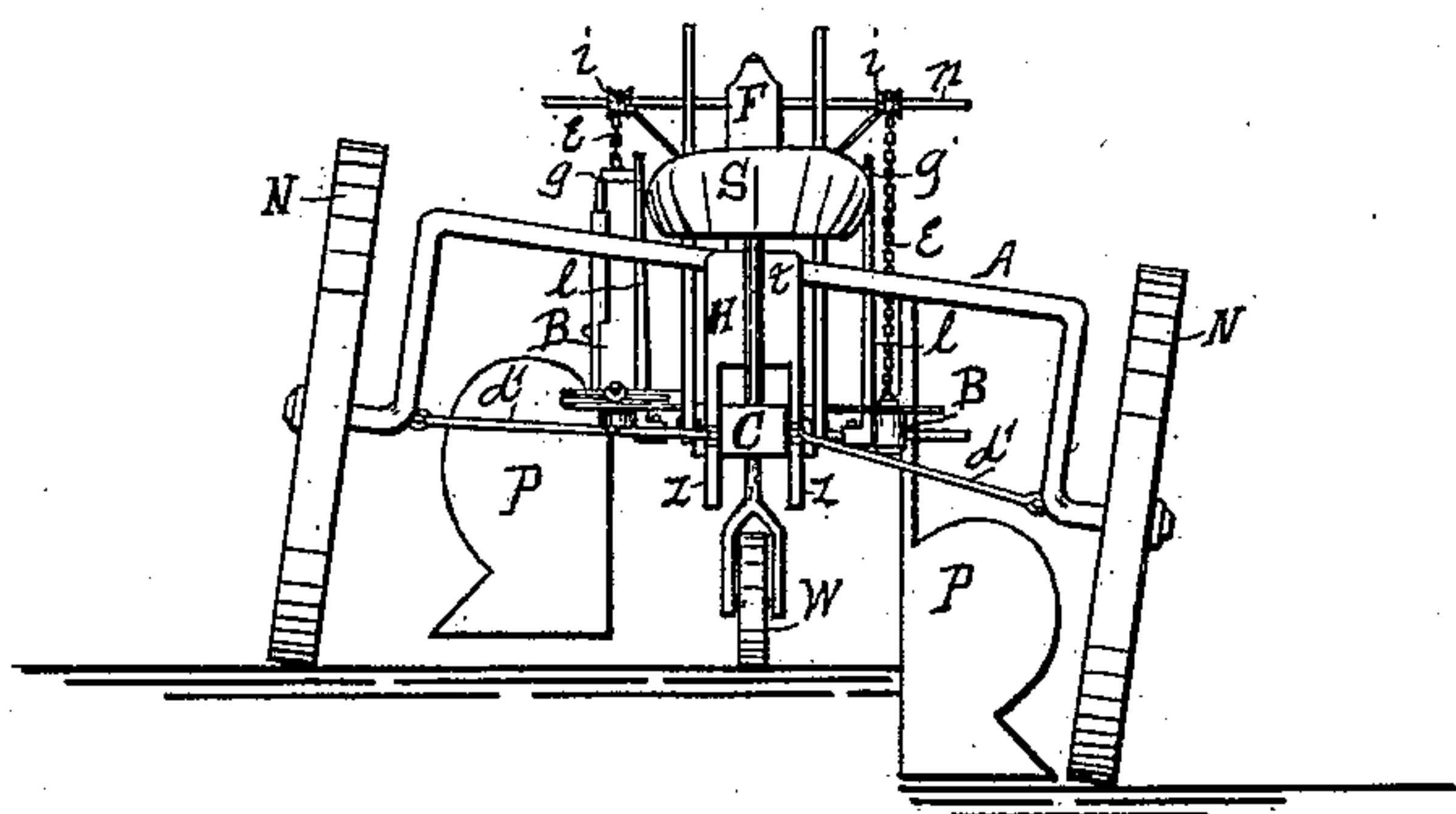
C. M. FRENCH.

WHEEL PLOW.

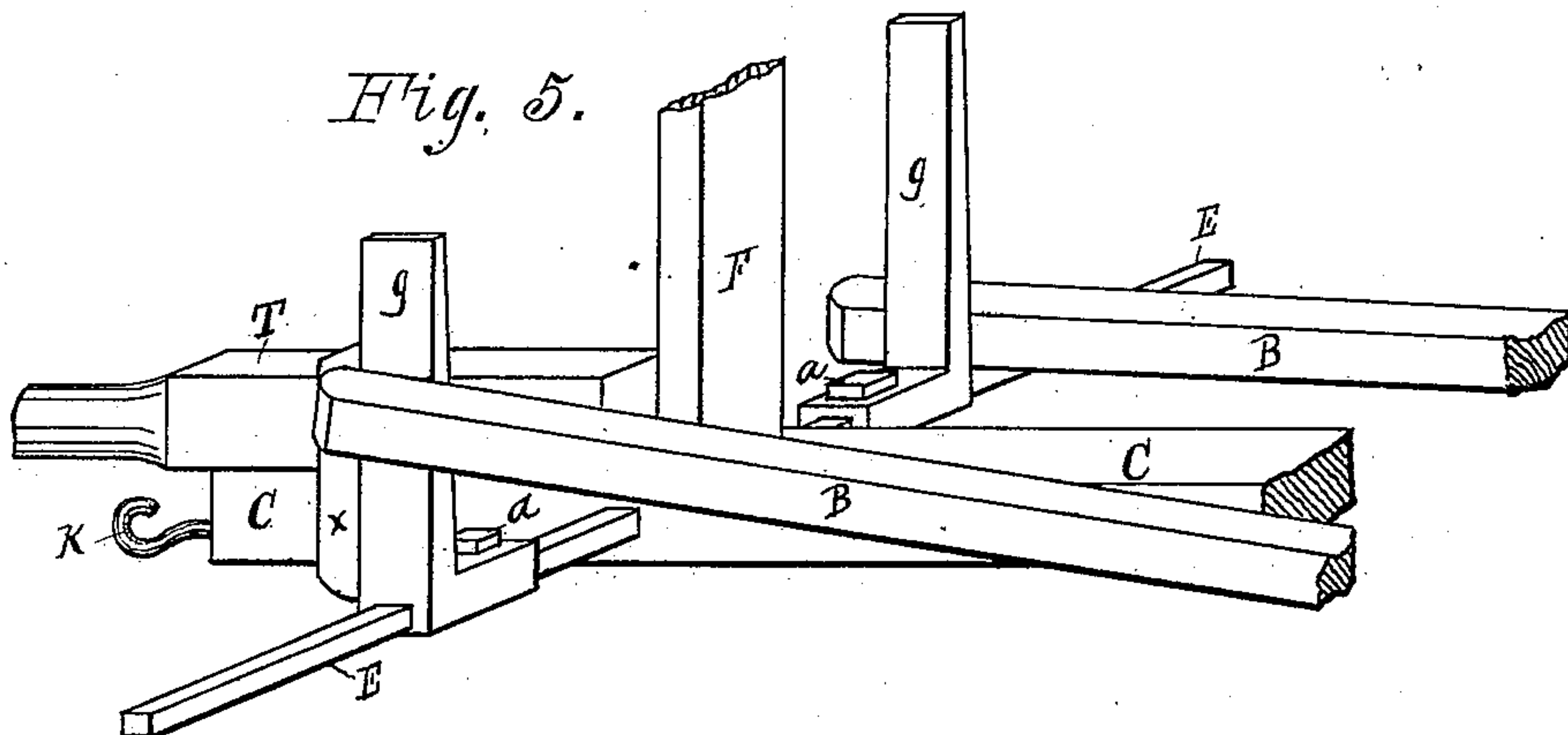
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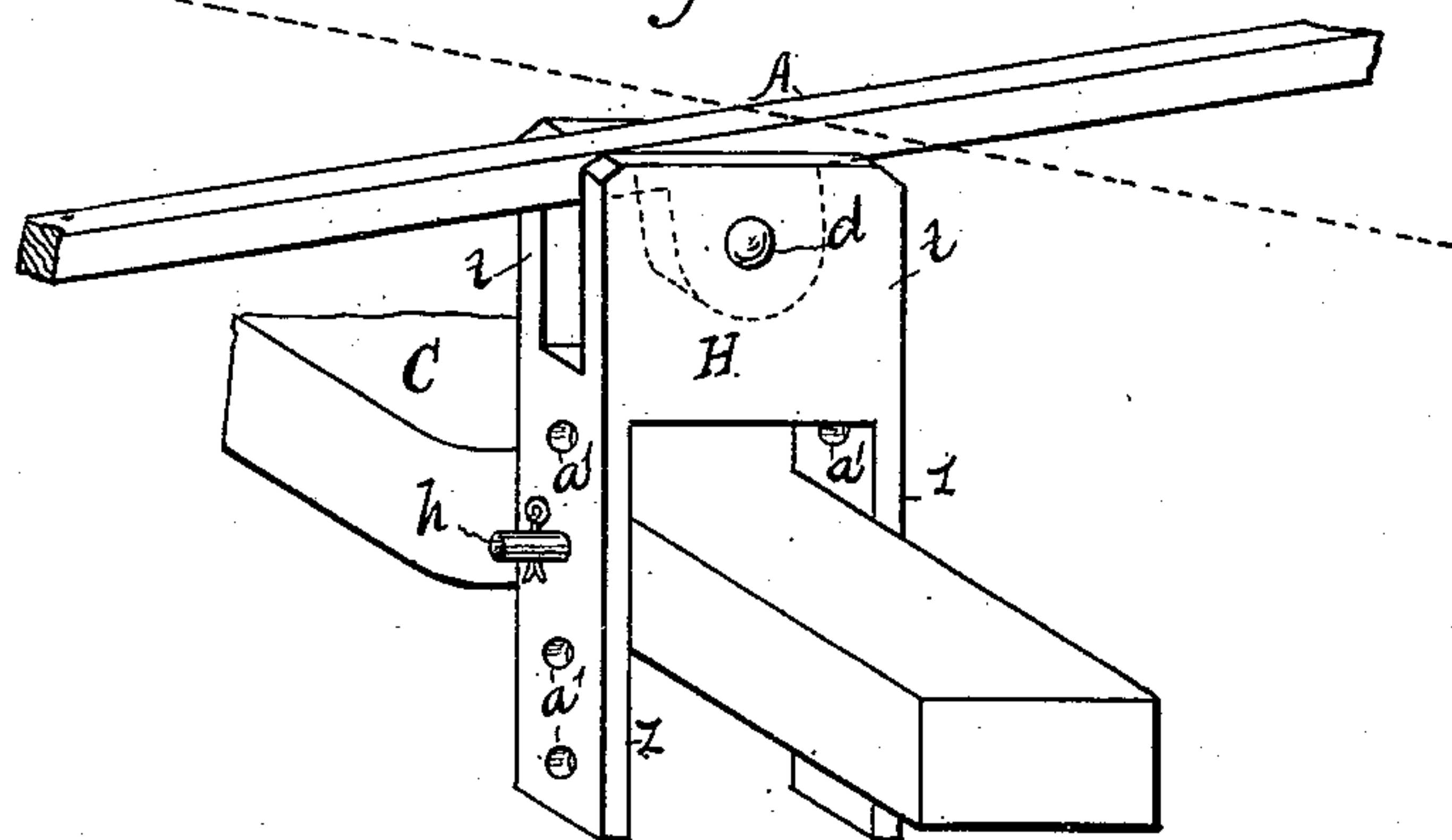
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CARMI M. FRENCH, OF WATERFORD, MICHIGAN, ASSIGNOR OF ONE-HALF  
TO MORISON BEARDSLY, OF SAME PLACE.

## WHEEL-PLOW.

SPECIFICATION forming part of Letters Patent No. 333,065, dated December 22, 1885.

Application filed June 1, 1885. Serial No. 167,229. (No model.)

*To all whom it may concern:*

Be it known that I, CARMI M. FRENCH, a citizen of the United States, residing at Waterford, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Wheel-Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains, to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My present invention relates to the mounting upon a central supporting-beam having transporting-wheels, a right and left hand plow, of which but one plow labors at a time; and my invention consists in the general arrangement of parts and in the means for adjusting, supporting, and operating said plows, as hereinafter fully set forth, and pointed out in the claims.

Figure 1 is a side elevation having one wheel removed. Fig. 2 is a top plan. Fig. 3 is an enlarged detail. Fig. 4 is a rear elevation showing right-hand plow down and the left elevated. Figs. 5 and 6 are enlarged details.

P P represent the plows, which may be of any well-known form, except that one must be right-hand and the other a left-hand plow. Said plows are mounted upon independent beams B B. Said beams are attached at the rear ends to the central supporting-beam, C, by means of the pivoted elbow-shaped arms D D. Said arms are provided with slots S S, (see Figs. 2 and 3,) and by a bolt and nut, *b*, said beams are held and adapted to be adjusted on said arms, as shown by dotted lines of Fig. 3, for the purposes hereinafter set forth. The arms D D are pivotally attached to the central beam by the bolt *m*. (See Fig. 3.) The front ends of the beams B B are supported, when down, by the transverse bar E, which passes through the central beam. (See Figs. 1, 2, and 5.) I attach to said bar two L-shaped upright guides, *g g*, which slide on said bar, and are held in position by the set-screws *a a*. (See Fig. 5.) The guides are to take the side-pressure of the plow-beams when

said plows are turning the soil, and act as a guide when the free ends of said beams are raised or lowered, as hereinafter set forth. I attach to the central or supporting beam, C, the upright F, which supports the shaft *n*, carrying pulleys *i i*. The chains *e e* pass over said pulleys, and are attached to the free ends of the plow-beams and to the rods *r r*. Said rods are connected to the hand-levers *l l*. (See Figs. 1, 2, and 3.) At the front I attach to the beam C the common plow-wheel W, having suitable means for raising and lowering the beam over said wheel to regulate the depth cut by the plow. O O are the colters, which may be of any desired form. The tongue T is pivoted to the central beam, C, as shown in Figs. 1 and 2, the yoke *x* passing over said beam. The rear end of the central beam is reduced or narrowed, and is pivoted within the double yoke H by the bolt *h*, passing through the holes *a'* of the arms *z*. (See Fig. 6.) Between the upper arms, *t t*, of said yoke I pivot at *d* the crank-axle A. (See Figs. 2, 4, and 6.) Upon said axle I mount the transporting-wheels N N. Extending from the lower bends in the axle to the rear end of the central beam, C, are brace-rods *d' d'*. The seat S for the driver is located on the rear end of the central beam. K is the draft-hook by which the machine is drawn.

The operations of the machine are as follows: To set the plows to cut a narrow furrow, the plow-beams B B are placed near the central beam, C, as shown in Fig. 2, and to cut a wide furrow the bolts and nuts *b* are loosened, and the plow-beams are forced out from the central beam, when said bolts and nuts are tightened. The dotted position shown in Fig. 3 illustrates the change or adjustment of beam. The guides *g g* are also adjusted upon the bar E, so that the beams B B when properly set will stand parallel with the central beam, C, as shown in Fig. 2. Said central beam, which supports the plow-beams, is raised and lowered to give the depth of cut by adjusting the wheel W, and raising or lowering the rear end of said beam by passing the bolt *h* through the holes *a'* of the yoke H. (See Fig. 6.) When the foregoing parts are properly adjusted, the right-hand lever, *l*, is forced forward, let-



ting down the right-hand beam until the front end of said beam drops upon the bar E, when the right-hand plow will enter the soil, as shown in Fig. 4. As the wheel N drops into the furrow, the central beam swings to a horizontal position upon the pivot *d* of the axle A. (See Figs. 4 and 6.) As soon as the machine has crossed the field, the lever *l* is drawn back, forcing the plow out of the ground; the team is turned about, when the lever *l* of the left-hand plow is forced forward, letting down the left-hand plow, as shown in Fig. 1, when the team is driven back directly over the line traveled, and so on until the plowing is finished. It will be observed by this arrangement no plowed ground is traveled over by the turning around of the team, as in common plows; also, that I avoid dead-furrows, which are detrimental, as reapers and mowers work badly over them in cutting grain.

Having thus fully set forth my present invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wheel-plow, the combination of a central beam, the front end supported by a wheel, and the rear end pivoted within the double yoke, said yoke pivotally attached to the crank-axle having transporting-wheels, said central beam supporting adjustably the

plow-beams carrying right and left hand plows, as specified, and means for raising and lowering said plows, substantially as set forth.

2. In a wheel-plow, the combination of the central beam supported upon wheels, as set forth, the plow-beams attached to said central beam by means of the L-shaped couplings D, with the guides *g g*, mounted upon the transverse bar E, and adapted to support the free ends of said plow-beams, as specified, the upright F, supporting the bar *n*, its pulleys, and the chains and levers for operating said plows, substantially as and for the purposes set forth.

3. In a wheel-plow, the combination of the crank-axle, the double yoke H, pivotally attached thereto, said yoke adapted to receive the rear end of the central beam, with means for raising and lowering said beam within the forks of said yoke, and the brace-rods *d' d'*, connecting said beam with said crank-axle, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CARMI M. FRENCH.

Witnesses:

DANIEL S. HILDEBRAND,  
MORRISON BEARDSLEE.