

W. W. PUSEY.

GANG-PLOW.

No. 176,350.

Patented April 18, 1876.

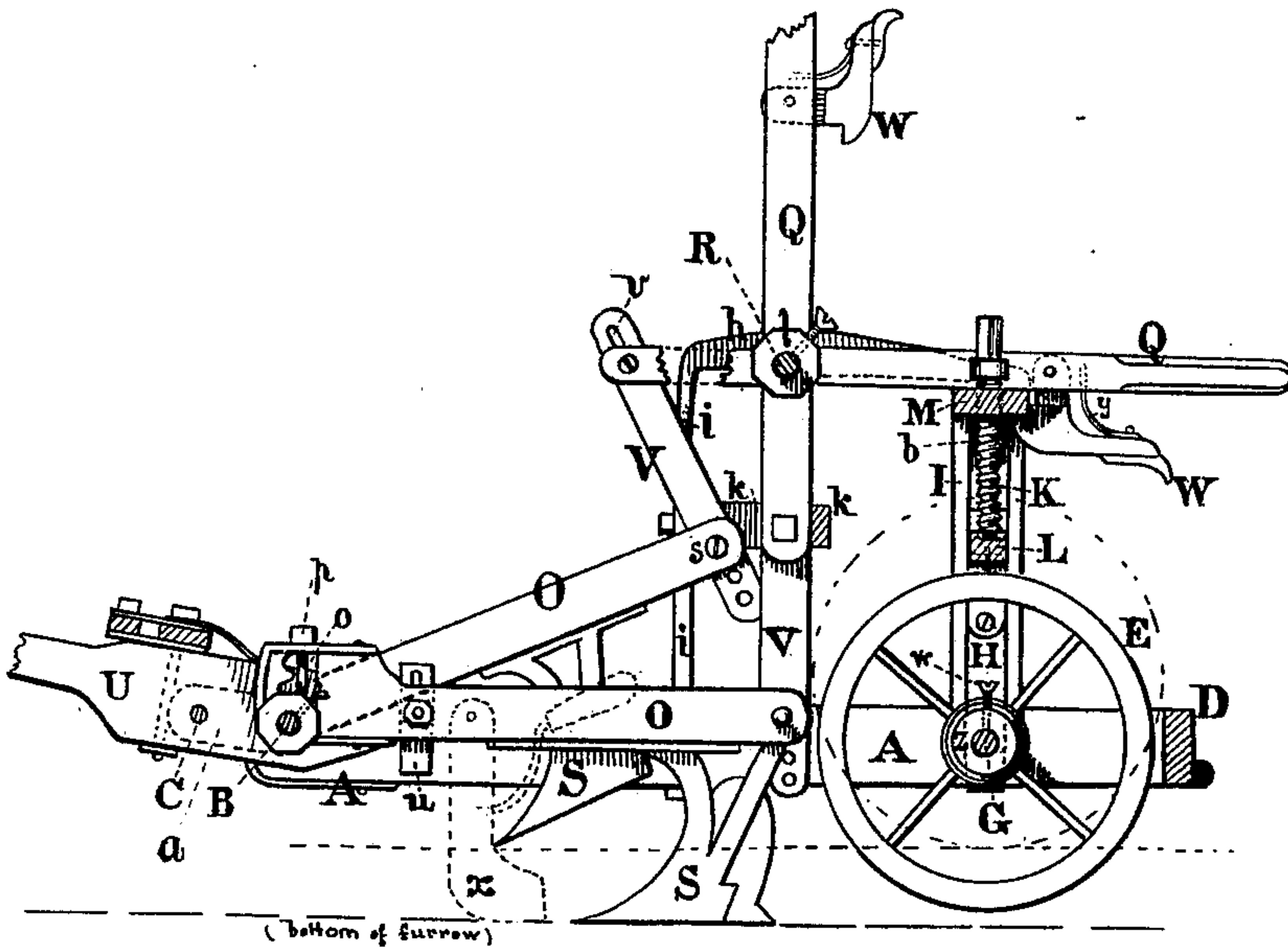


Fig. 1.

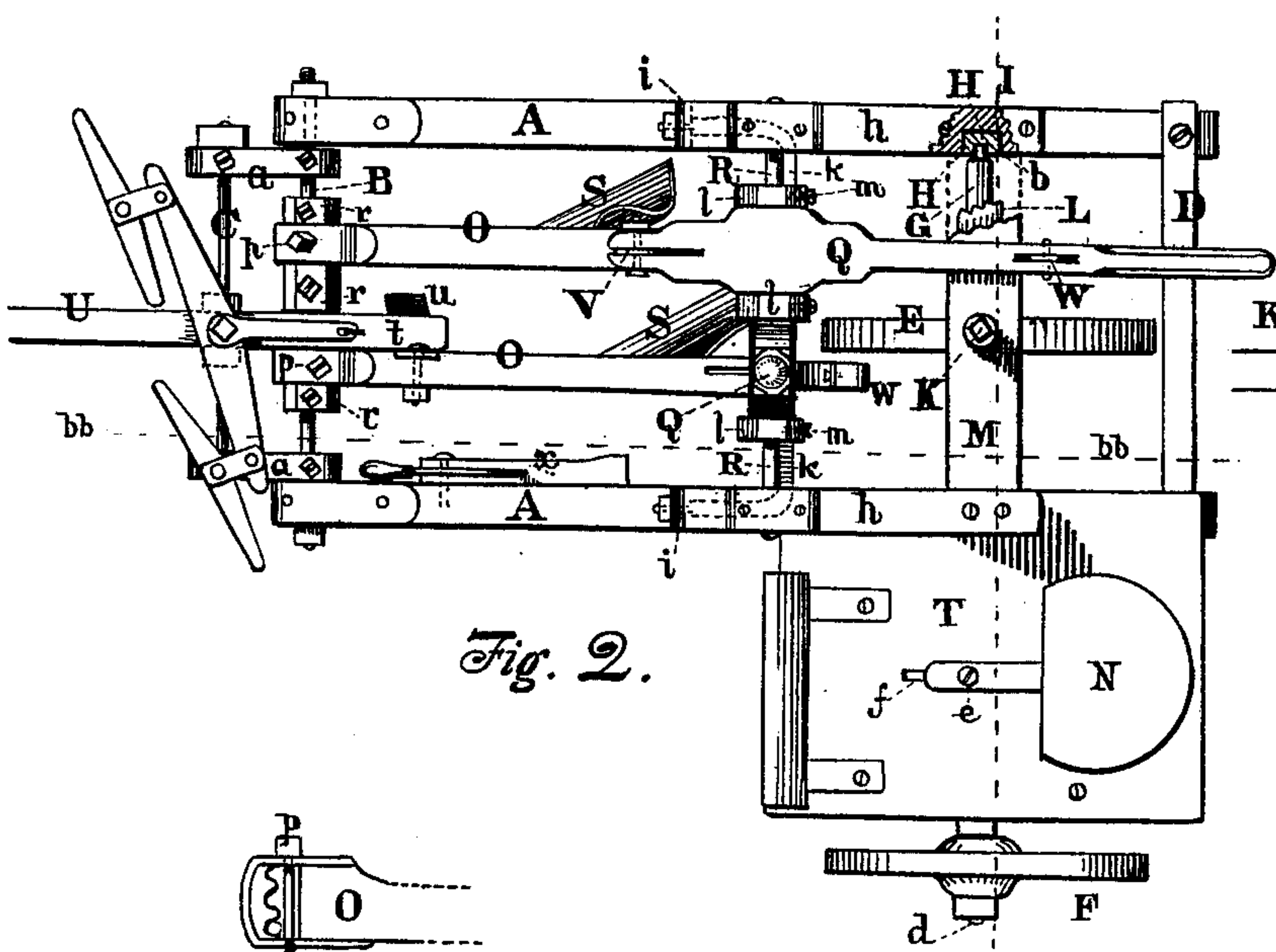


Fig. 2.

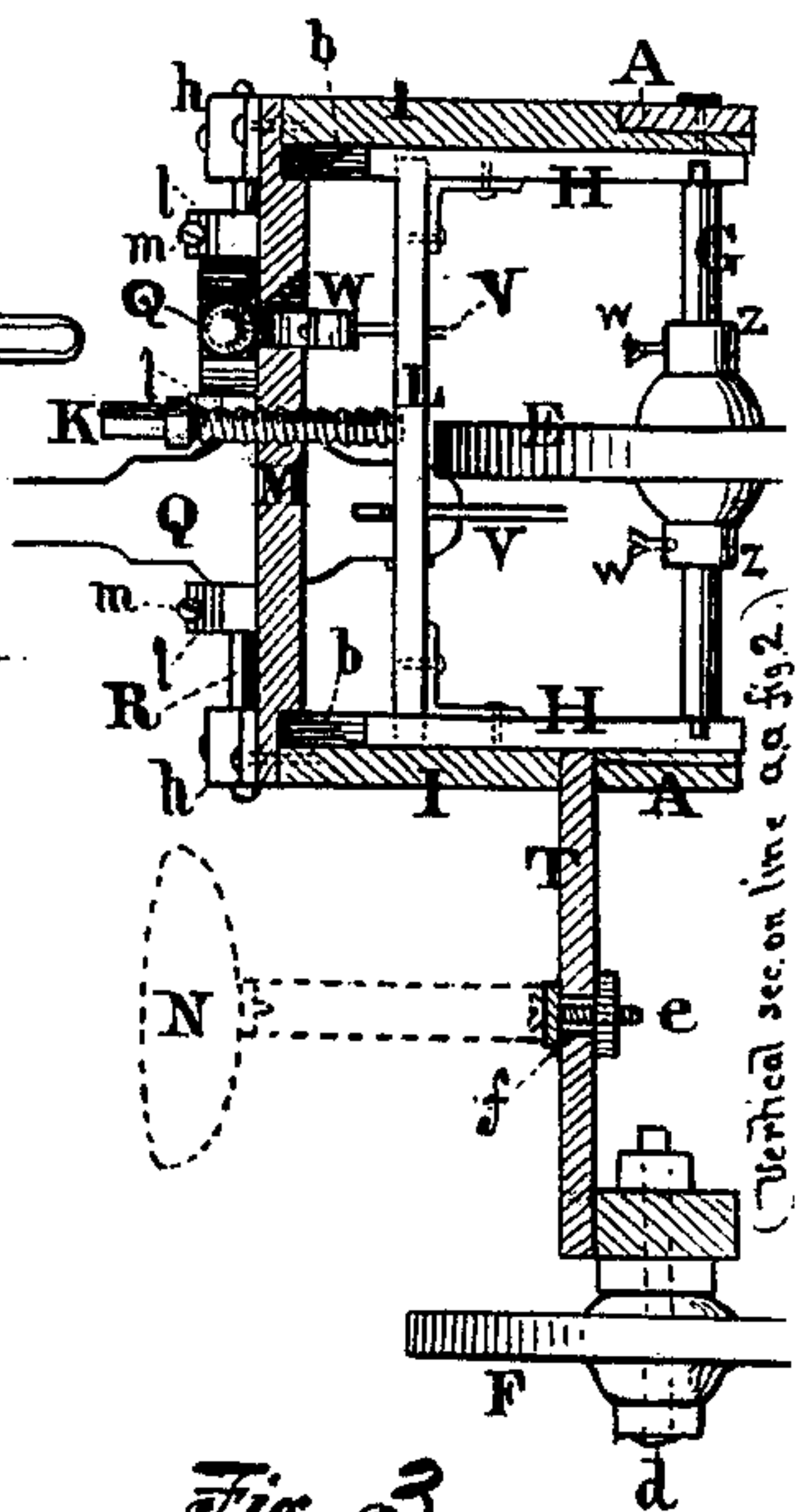


Fig. 3.

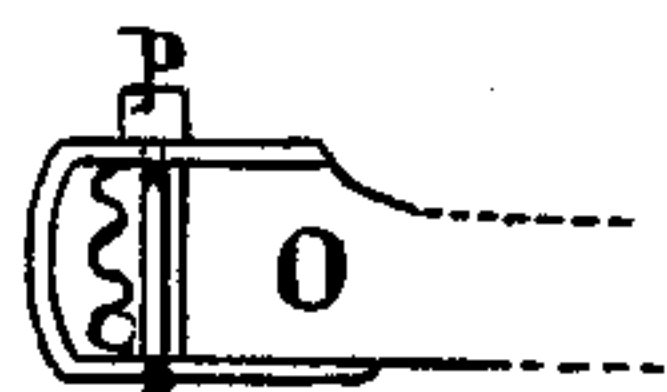


Fig. 4.

Witnesses
Edward Anthony,
Charles E. W. Richmond

William W. Pusey
by E. Thurston, his Atty. in Fact.

UNITED STATES PATENT OFFICE.

WILLIAM W. PUSEY, OF CUBA, ILL., ASSIGNOR OF ONE-HALF HIS RIGHT
TO FRANCIS M. SNIVELY AND WILLIAM H. WILSON, OF SAME PLACE.

*IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. **176,350**, dated April 18, 1876; application filed
February 29, 1876.

To all whom it may concern:

Be it known that I, WILLIAM W. PUSEY, of Cuba, in the county of Fulton and State of Illinois, have invented an Improvement in Gang-Plows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a side elevation or vertical section along dotted line *b b*, Fig. 2, one plow being raised to show the working parts; Fig. 2, a superficial view; Fig. 3, a vertical cross-section (from the rear) on dotted line *a a*, Fig. 2; Fig. 4, an elevation of the head of one of the plow-beams.

This improvement consists, first, in placing the plows and their beams in advance of the supporting-wheels, to enable the operator to view his work and govern the machine better, as well as to obtain lightness of draft by attaching the draft-animals directly to the beams or the frame. It consists, second, in a locking of the heel of the tongue to one of the beams, to support the plow-frame and plows in turning. It consists, third, in the use of separate elevating-levers for each plow, by which each is raised at its heel, so as to draw the point of the plow backward in raising it. It consists, fourth, in employing a slot in the suspension-link of each beam, where said links join their respective lifting-levers.

In the drawings, which represent one of the forms in which I make the plow, A represents the side beams of the frame, which are braced together in front by a cross-rod, B, (the common pivot of all the plow-beams O O and tongue U,) and a second parallel rod, C, in front also passing through the tongue, and braced at each end to the first rod B by means of the braces or brackets *a a* next to the frame A A. The rear end of said frame is braced together by a cross-bar, D, which also forms the rear end of a small frame or platform, T, which carries the driver's seat N, all in the rear of plows and opposite the furrow-wheel E, which, with the wheel F under this platform, supports said frame and platform. Said furrow-wheel E revolves on a sta-

tionary axle, G, detained at either end in the vertically-sliding frame H H L (sliding in the grooves *b b*) in the inside of the respective standards I I of the main frame. This wheel is adjusted at any desired point on the axle G, to regulate the draft or travel behind either plow, by means of shifting-blocks *z z*, provided with set-screws or similar detents. The adjusting slide or frame H H L is managed by means of the set-screw K in the cross-piece M, which connects the standards I I, (which carry the frame H H L,) said screw being attached to the upper or cross head L of said frame. The second wheel F is set on an independent axle in a line with the wheel G. On said platform T the seat N is adjustably attached by means of a set-screw, *e*, in a slot, *f*, running fore and aft of said platform, and by which the draft and balancing of the frame are adjusted. The heels of the respective plow-beams O O are each adjustably pivoted to a link, V V, each of which, in turn, is pivoted above to the front end of separate levers Q Q by means of a bolt and slot, *v*, which allows each beam O to rise when its respective beam strikes an obstacle. Each lever is mounted on a cross-rod, R, common to both, allowing them to be independently oscillated vertically to raise or lower the plow-beams. Said rod R is supported at either end in braces *h h*, which rest on the standards I I, and on the supports *i i* in front of the latter, which rise from the beams A A of the frame. The supports *i i* are connected or braced by a stay, *k*, against which the ends of the levers Q Q rest when elevated. (See Fig. 1.) Each of said levers is provided with a detent, W, (to hold the same horizontally when the plows are not in use,) operating by means of a spring, *y*. Each lever is adjustable at any point on said rod R, in a line with their respective plow-beams O O, by means of adjusting-blocks *l l l*, provided with set-screws *m m m*, or other simple device. The plow-beams O O (several of which may be used, one to each plow) are each attached to their common shaft B by means of a vertical slot, *o o*, whose front edge is notched with several recesses to admit said shaft B, and to elevate or depress the head of the beam, said shaft or rod being confined to

either notch by means of a bolt or slide, *p*, which passes into said slot along the entrance of each recess. The beams are each adjustable on said shaft B by means of several sliding blocks, *r r r*, provided with set-screws. The rear of each plow-beam is adjustable at various depths for its plow by means of a set-screw, *s*, in the end of its respective link V. The heel *t* of the tongue U forms a means of supporting the front of the frame and beams in turning (the plows being elevated) by bringing the foot-piece *u*, attached to one of the beams O, against the under side of said tongue-heel by depressing one of the levers Q to a horizontal position.

The operation of this plow is as follows: The driver views the plows and their work by a forward glance, without having to turn his head, and his seat H is movable backward or forward, to balance the draft or the frame, by means of the slot *f* and screw *e*. Two, three, or more plow-beams can be placed abreast on the shaft or rod B, and on which they can be raised or lowered, to suit the depth of the furrow, by means of the notched slots *o* in each beam-head, and by means of the set-screws *s s* in the lower ends of the respective supporting-links V V. The levers Q Q raise or depress their respective beams O O, and are detained horizontally by the catches W W when holding the plows aloft. The wheel E behind the plows is adjusted to the depth of the furrow by means of the sliding frame H H and set-screw K, and is also adjustable, to travel behind either plow, by means of set-screws *w w* and blocks *z z* on either side of the wheel-hub, by which the wheel E is moved along its axle. Either of the plow-beams O O is enabled to rise, on striking an obstruction, by means of the slot *v* in the upper end of the respective links V V. To support the frame A A when the plows are elevated, an adjustable leg, *x*, pivoted to one of the beams O, is turned

downward. Finally, by the arrangement of the supporting-wheels of the frame and the plows in the rear of the plow-beams, greater lightness of draft is obtained by attaching the animals directly to the head of the beams, combined with facility of managing the plows, from the fact that these are placed in front of the driver, whose seat is behind the plow-beams.

What I claim as my invention is—

1. The plow-frame A A D B, provided with standards I I, cross-piece M, carrying the adjustable wheel-frame H H L, screw K, and wheel E, substantially as and for the purposes described.

2. The combination, with the plow-frame, of the plow-beams O O, pivoted at their front ends upon the cross-rod B, the adjustable links V, levers Q, and horizontal locking-detents W, as and for the purposes described.

3. The tongue U, having the heel *t*, and pivoted upon the cross-rod B, in combination with the plow-beam O, provided with the stirrup *u* and the lever Q, locking upon the cross-bar M of the frame, whereby the plows are held above the ground, as shown and described.

4. The combination, with the levers Q Q and plow-beams O O, (laterally adjustable upon the pivot-rods B R,) of the elevated frame I M *i h* and cross-brace *k*, as and for the purposes described.

5. The slotted recessed clevis or pivotal recess *o o* and slide or bolt *p*, substantially as and for the purposes described.

In testimony that I claim the foregoing gang-plow I have hereunto set my hand this 16th day of February, A. D. 1876.

WILLIAM W. PUSEY.

Witnesses:

H. W. WELLS,
JAS. M. MORSE.