

J. G. Robinson.

Sheet 1 of 2 Sheets.

Plow.

No. 88,413.

Patented Mar. 30, 1869.

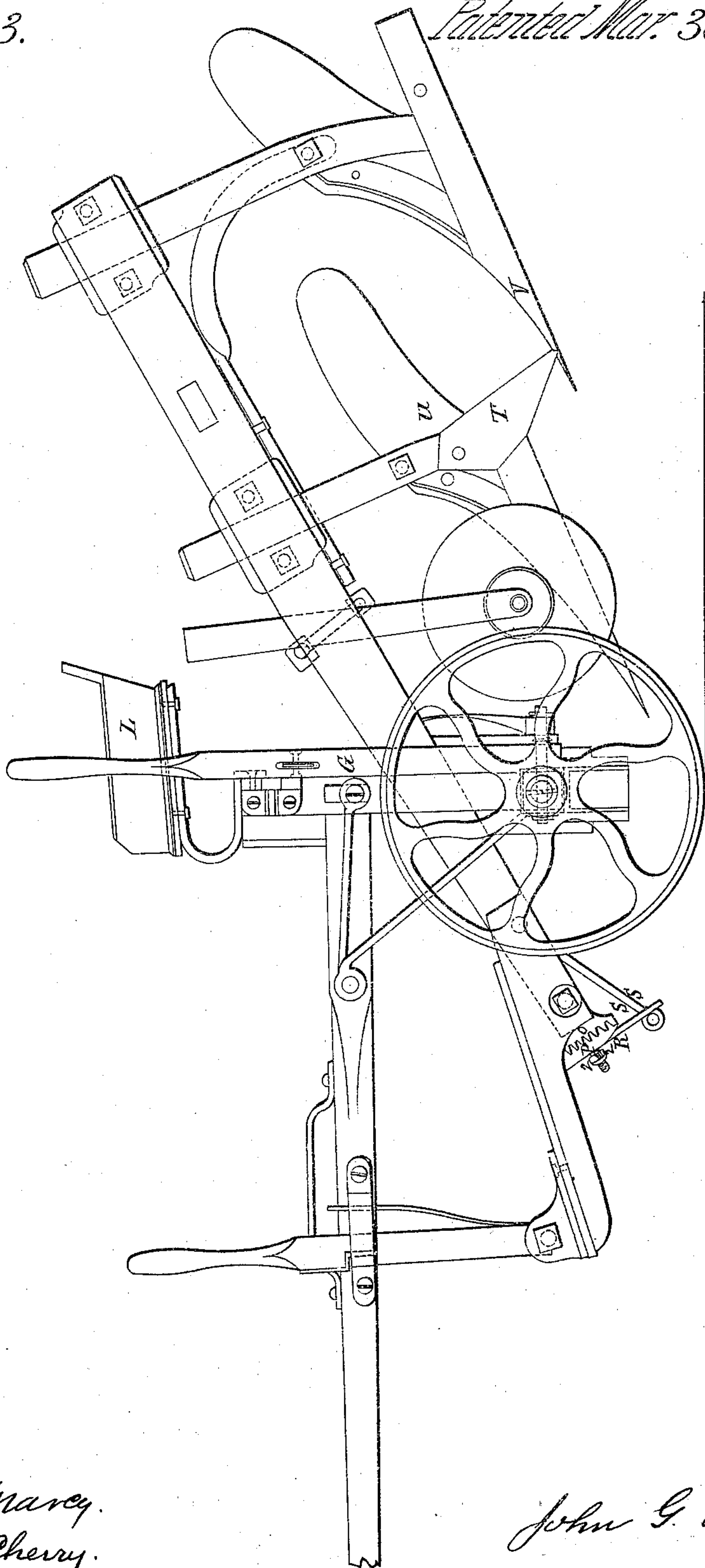


Fig. 1.

Witnesses.

Geo. O. Marcy.
John H. Cherry.

Inventor.

John G. Robinson

Sheet 2-2, Sheets.

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FIG. 2.

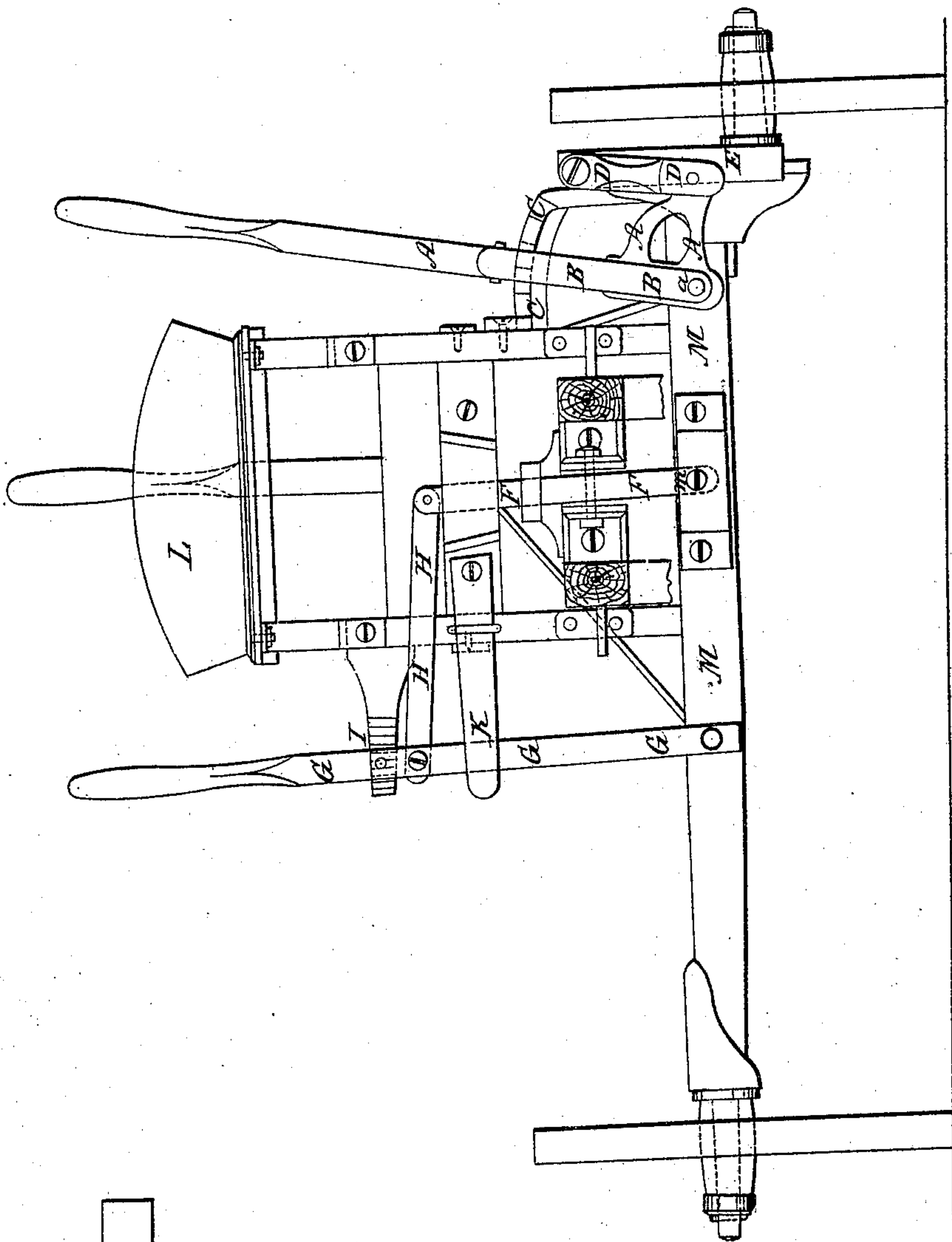
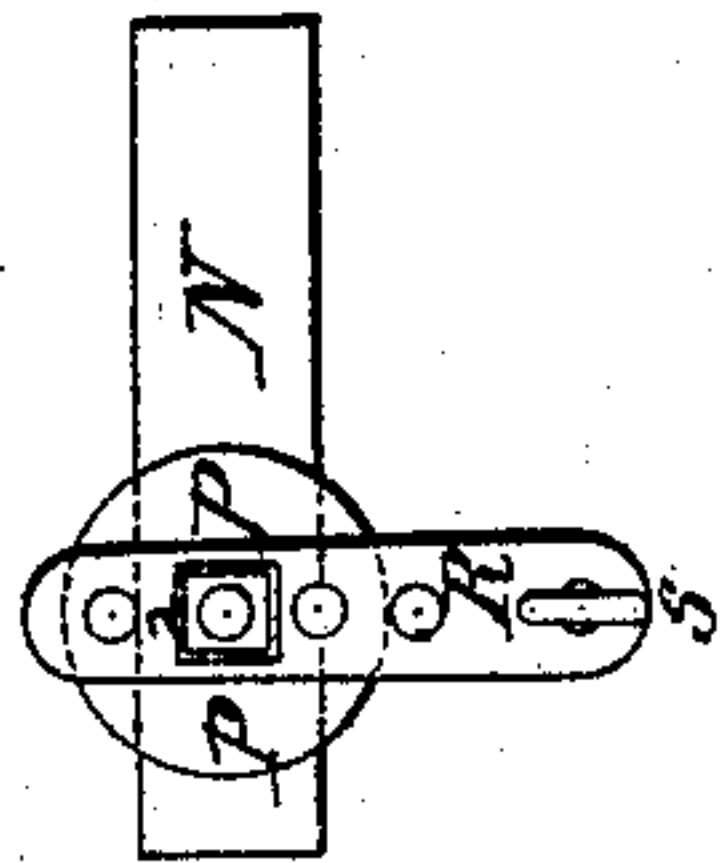


FIG. 3.



Witnesses

Geo. O'Malley

John H. Cherry.

Inventor.

John G. Robinson.



JOHN G. ROBINSON, OF SPRINGFIELD, ILLINOIS.

Letters Patent No. 88,413, dated March 30, 1869; antedated March 23, 1869.

IMPROVEMENT IN GANG AND TRENCH-PLOW.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, JOHN G. ROBINSON, of Springfield, Sangamon county, State of Illinois, have invented a new and useful Improvement on Robinson's Combined Gang and Trench-Plow, patented December 4, A. D. 1860; and I do hereby declare that the following is a full, clear, and accurate description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 gives a side elevation of the plow.

Figure 2 represents the rear elevation, with the plows and beams taken off.

My first improvement is a device for adjusting the depth of the furrows, and consists of the angular lever A, having its fulcrum in the axle-tree M, at the point a, and held in its place by the spring B.

The ratchet C is connected with it, along which the angular lever A is worked, and by which it is regulated.

D is the pitman, which connects this angular lever A with the sliding axle-tree-arm E.

Moving this angular lever A backward or forward, along the ratchet C, slides the axle-tree up or down, by the sliding axle-tree-arm E, and thus the depth of the furrow is regulated.

My second improvement is a device for adjusting the plows to a perpendicular position, when the axle-tree is on an angle, thus enabling the plows to work on a side-hill, when one end of the axle-tree is lower than the other, and also for the purpose of trimming the gang-plows, so that they will run of equal depths at all times.

This device consists of the vertical coupling F, pivoted, at the lower end, upon the axle-tree M, at the point m, connected with the vertical lever G, by the horizontal bar H, and held in place by the ratchet I and spring K.

The movement of the lever G, along the ratchet I, to the right or left, in connection with the horizontal bar H, and vertical coupling F, produces the desired result herein just before mentioned.

My third improvement consists in so adjusting the

driver's seat L, in relation to the centre of the axle-tree M, that the weight of the driver will balance the weight of the tongue, and thus take all pressure from the horse's neck. This object is obtained, by placing the seat just far enough back of the centre of the axle-tree to raise the tongue, when the weight of the driver is pressed upon the seat.

My fourth improvement is a clevis, of cast-iron, which consists of the connecting-girth N, in the forward end of the plow-frame, as shown by Figure 3, having a circular plate, O, with concentric V-shaped teeth, (this plate being cast upon the girth N,) and a disk, P, with concentric V-shaped teeth, on the inner side, and a groove on the outside, and in this groove is the perforated wrought-iron plate R, held by the bolt Q.

In the lower end of this wrought-iron plate, is the draught-rod S, to which the double-trees are attached.

By this device, the point of draught may be raised or lowered, and varied laterally or horizontally. Take the nut, to raise or lower the point of draught. To change it laterally, simply loosen the nut and move it the distance required, and then tighten it again.

This clevis is claimed to be different in construction from the clevis patented by Joseph Keech, May 5, 1863, as that one cannot be used upon my plow.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the angular lever A, ratchet C, and spring B, with the pitman D and sliding axle-tree-arm E, in the manner described, and for the purposes set forth.

2. The combination of the vertical coupling F, and pivot M, and horizontal bar H, with the vertical lever G, ratchet I, and spring K, in the manner described, and for the purposes set forth.

JOHN G. ROBINSON.

Witnesses:

GEO. O. MARCY,

J. H. CHEW.