(Model.)

F. B. MANLY.

Wheel Cultivator.

No. 238,944. Patented March 15, 1881.

Fig. 1.

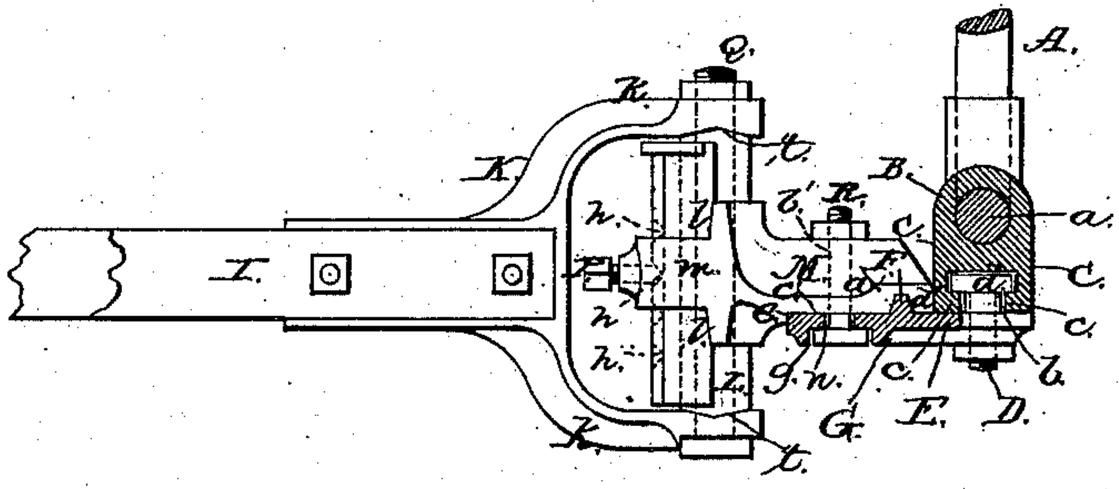

Fig. 2.

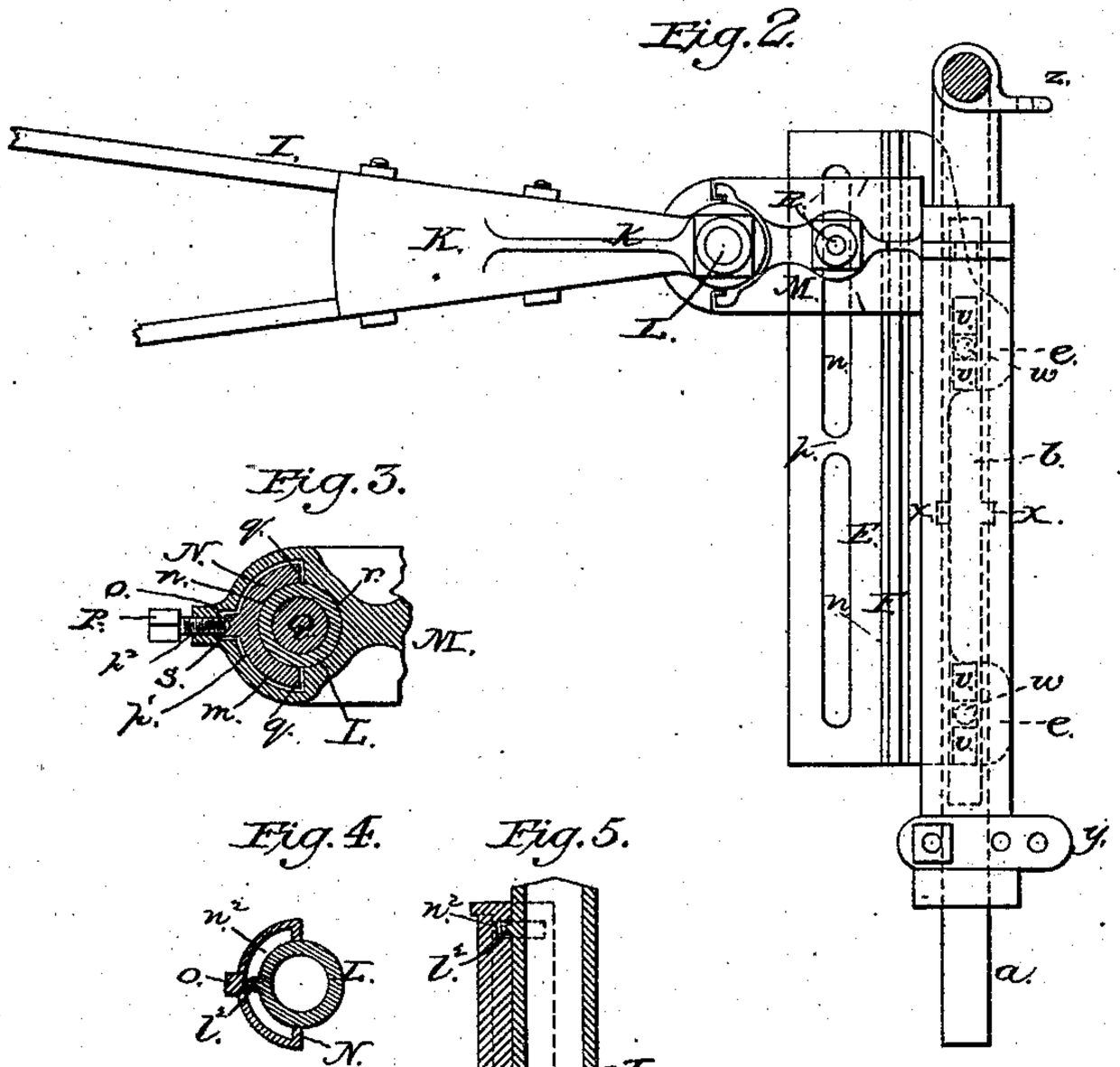

Fig. 3.

Fig. 4.

Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK B. MANLY, OF MALTA, OHIO.

WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 238,944, dated March 15, 1881.

Application filed January 22, 1881. (Model.)

To all whom it may concern:

Be it known that I, FRANK B. MANLY, a citizen of the United States, resident at Malta, in the county of Morgan and State of Ohio, have invented certain new and useful Improvements in Wheel-Cultivators; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a side view, partly in section. Fig. 2 is a top view. Figs. 3, 4, and 5 are sectional details.

This invention relates to wheel-cultivators.

The invention consists in the construction hereinafter described, and particularly pointed out in the claims.

In the drawings hereto annexed, A is the cultivator-frame, on the arms *a* of which, between cuffs *z y*, are sleeved the boxes B. These boxes have depending sides C C, with inwardly-turned flanges *c c*, forming a slot, *b*, there being at the mid-length of these flanges the opposite notches, *x x*.

D D are screw-bolts, having heads *d*, adapted to fit notches *x x*, through which said heads are slipped, and the bolts are moved along slot *b*, the heads fitting snugly the interior of the boxes.

E E are plates, having offsets *e*, one at one corner, the other near the middle of the side upon which the former is located. These offsets are perforated at *w*, and have a lug, *v*, on each side of this perforation, said lugs fitting slot *b*. Along the other edge of the plate E are two slots, *n*, with a bridge, *p*, between; or the bridge may be omitted.

On the face of the plate, with lugs *v* at the back of slots *n*, is a longitudinal rib, F, and on the other face of the plate there is a bead, G, surrounding slots *n*, and forming a seat, *g*. This plate is held to box B by bolts D D passing through perforations *w w*, lugs *v* resting in slot *b*, the plate being adjustable lengthwise on the box.

I are the plow-beams, secured in front to the yoke K, the latter having vertically-diverging arms *k k*, provided at the ends on the inside with seats *t t*. Seated in these seats *t t* is the post L, having the stop-pin l^2.

M is a swivel-plate, having an eye, *m*, rounded at the rear, and having at the middle of the curve a groove, *s*, said eye also having a smaller curve, *r*, in front and rabbets *q* on each end of this curve, the rear of the eye being smaller than the front, forming shoulders *l*.

N is a bearing-block, having a concave face, *u*, fitting post L, and a convex back, *p'*, fitting the rear of eye *m*, provided with a rib, *o*, suited to groove *s*, this rib having a series of holes, *h*. n^2 is a groove in this block for stop-pin l^2.

P is a set-screw to pass through a hole, p^2, in the rear of eye *m*.

Q is a bolt passing through post L.

The forward part of plate M is a lip, *a'*, having therethrough the hole *b'*, the seat *c'* underneath, with groove *d'* and shoulder *e'*, the groove fitting rib F on plate E.

R is a bolt for holding plate M to plate E.

Post L, with bearing-block N at the rear, is slipped into eye *m*, the plate M being held at any point by screw P. The post is then placed in the seats *t t* and all held by bolt Q. The plate is made fast at the front to plate E by bolt R passing through slot *n* and hole *b'*, its head resting in seat *g*, the bolt being held by a nut on top. By this means the plate M is lengthwise adjustable on plate E.

The object of the construction described is to form a device which provides a very nice degree of lateral adjustment to plows, at the same time giving a large range of movement. The adjustment of plates E on boxes B, of plates M on plates E, and the swiveling of the plow-beams on the post L, easily and readily permits the accomplishment of this object.

What I claim is—

1. Swivel-plate M, having groove *d'*, hole *b'*, and shoulder *e'*, in combination with plate E, having rib F and slot *n*, and bolt R, substantially as described.

2. Box B, having flanges *c c* and slot *b*, in

combination with bolts D D and plate E, having lugs *v* and holes *w*, substantially as described.

3. In a wheel-cultivator, the combination of the yoke K, provided with the seats *t t*, with post L, having stop-pin l^2, and the swivel-plate M, having groove *s*, block N, having groove n^2 and rib *o*, bolt Q, and set-screw P, substantially as and for the purposes set forth.

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

FRANK B. MANLY.

Witnesses:

JOHN BROWN,

JAMES MANLY.