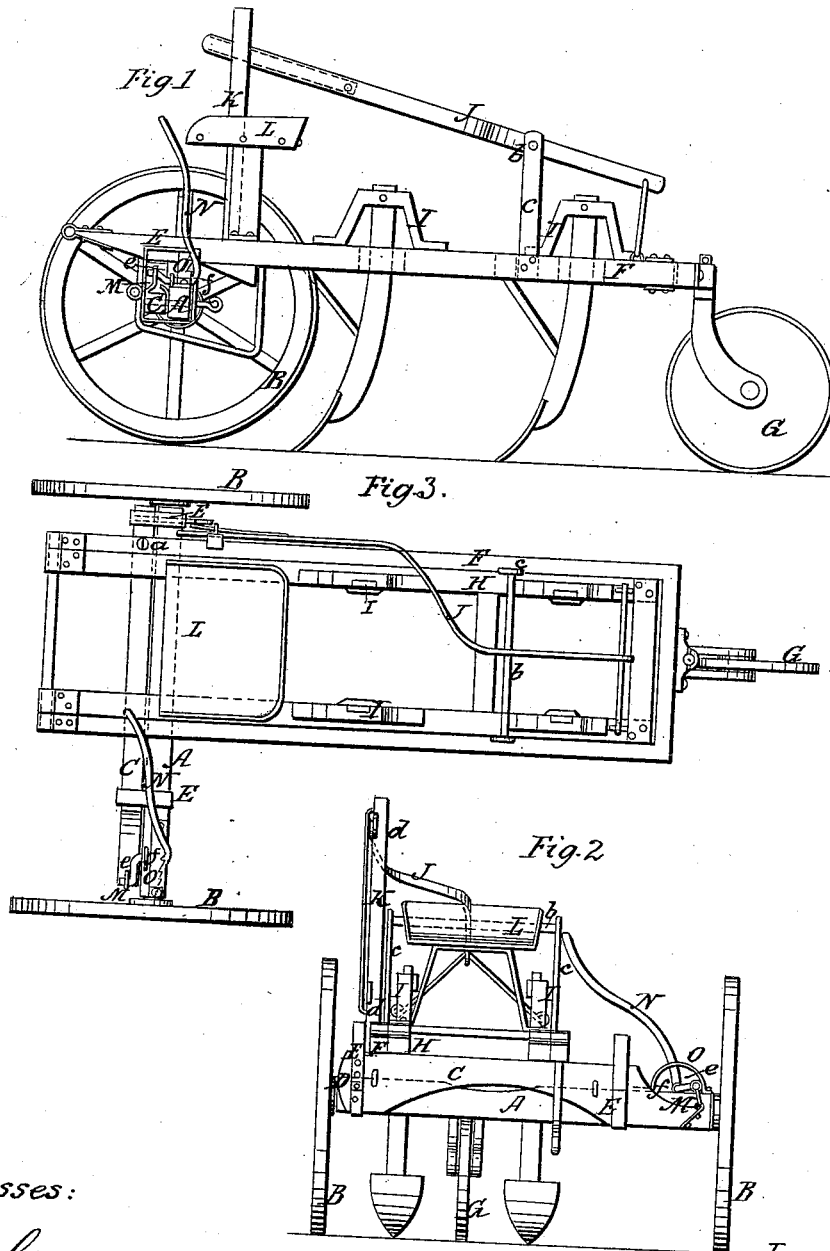


L. M. PATTERSON.

Wheel-Cultivator.

No. 53,328

Patented Mar. 20. 1866



Witnesses:

J. C. Lynn
W. F. Frewin

Inventor:
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per Munn & Co.
Atty

UNITED STATES PATENT OFFICE.

LEWIS M. PATTERSON, OF JORDAN'S GROVE, ILLINOIS.

IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 53,328, dated March 20, 1866.

To all whom it may concern:

Be it known that I, LEWIS M. PATTERSON, of Jordan's Grove, in the county of Randolph and State of Illinois, have invented a new and Improved Gang-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a front view of the same; Fig. 3, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention consists in a novel means employed for keeping the plows level or in a horizontal plane when the axle has an inclined position in consequence of one wheel running in a furrow and the other upon the unplowed land, or when the machine is operating upon uneven ground. The adjustment necessary to effect this being accomplished through the medium of a lever operated by the driver from his seat.

A represents an axle, having a wheel, B, at each end of it, and C is a bolster, which is placed at the front side of the axle A, and is secured thereto near one end by a pivot-bolt, D. (Shown in Fig. 2.) This bolster has guides E attached to it, metal hoops which extend around the axle, and are sufficiently high to admit of a requisite degree of play of the bolster, and of such a width as to keep the bolster in close proximity to the axle.

F represents a rectangular frame, the front end of which rests upon the bolster C, and is secured to it at one side by a screw, a, which admits of the axle turning in order to guide the machine. The rear end of the frame F is supported by a caster-wheel, G. Within the frame F there is fitted a similar frame, H, the front end of the latter being connected by joints or hinges to the front end of F, so that H may be raised and lowered, and elevated above or free from the ground when not required for use, and kept down in the ground while at work. This frame H has plow-standards attached to it with plows at their lower ends of any desirable form or construction. The plow-standards pass through metallic bridges I, secured on the top of frame

H, and are secured therein by pins passing through any of a series of holes in the standards, so that the plows may be adjusted higher or lower as desired.

The frame H is adjusted by means of a lever, J, having its fulcrum on a shaft, b, which is fitted in uprights c c attached to the frame F, the front end of lever J working in an upright guide, K, attached to the front part of frame F, and having two notches, d d, made in its upper and lower parts to receive the lever J, the latter, when in the lower notch, holding the plows up out of the ground, and when in the upper notch holding the plows down in the ground to their work. This lever J can be operated by the driver from his seat L on the frame H.

The bolster C, at its free or disengaged end, is connected by a link, M, with a crank, e, at the lower end of a lever, N, the fulcrum f of which is on the upper side of the axle A. This lever extends within convenient reach of the driver on seat L, so that the driver, by actuating this lever, can always keep the plows in a horizontal plane, however much the axle A may be inclined on account of uneven ground or on account of one wheel running in a furrow. The lever N is held or retained at any desired point by means of a semicircular rack, O, attached to the axle A.

The draft-pole is attached to the bolster C.

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

1. The combination of the two frames F H, one, F, being attached by a pivot bolt or screw to the pivoted bolster C, and the other, H, attached to the front end of F by a hinge or joint, and having a lever, J, connected to it, substantially as shown, for the purpose of keeping the frame H, and consequently the plows, in an elevated or a working position, substantially as set forth.

2. The bolster C, pivoted to the axle A, in combination with the frames F H and the lever N, or its equivalent, all arranged to operate in the manner substantially as and for the purpose herein set forth.

LEWIS M. PATTERSON.

Witnesses:

J. W. McMASTER,
JAMES MATTHEWS,