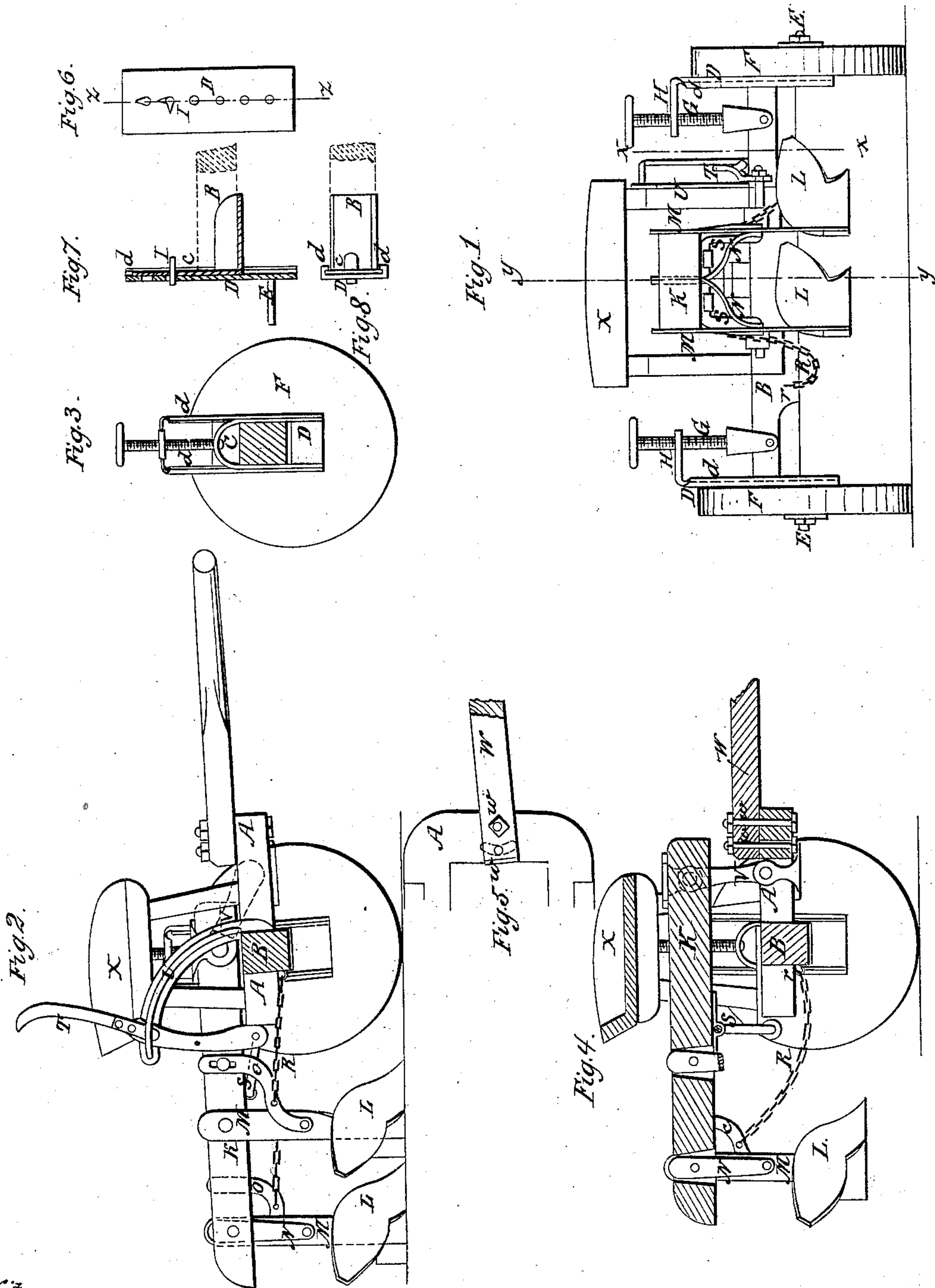


M. SATTLEY.

Gang Plow.

No. 41,449.

Patented Feb. 2, 1864.



Witnesses.
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 41,449, dated February 2, 1864.

To all whom it may concern:

Be it known that I, MARSHALL SATTLEY, of Taylorsville, in the county of Christian, State of Illinois, have invented certain new and useful Improvements in Gang-Plows; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a rear view of a gang-plow illustrating my invention. Fig. 2 is a vertical longitudinal section at $x x$, Fig. 1, looking toward the left. Fig. 3 is a section in the same plane, looking toward the right. Fig. 4 is a vertical longitudinal section thereof at $y y$, Fig. 1. Fig. 5 is a plan of a portion of the frame, illustrating the mode of adjusting the tongue. Fig. 6 is a side elevation of a device for securing and adjusting the wheels. Fig. 7 is a vertical section thereof at $z z$, Fig. 6. Fig. 8 is a plan of the same.

Similar letters of reference indicate corresponding parts in the several views.

The subject of my invention is an implement having two or more plows mounted in a single beam extended in width for this purpose and adapted to be raised or lowered at will by a crank and lever, or their equivalents.

The invention further consists in certain devices for bracing the plows longitudinally and laterally and adjusting their pitch or inclination, a device for securing the tongue at any angle horizontally, and a device for setting the frame up or down on the wheels.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

A represents the main frame of the implement, attached to an axle, B, which is provided at each end with a flange, C C, sliding in dovetailed plates D D, the edges d of which clasp the flanges C of the axle, in manner clearly shown in Fig. 8, so as to prevent motion in any but a vertical direction.

From the plates D project stud-shafts E E, upon which the conveying-wheels F F are mounted. The adjustment of the axle up or down may be effected either by hand-screws G G, swiveled at their lower ends to the axle and

threaded above in horizontal lugs H H, projecting inward from the plates D, or it may be secured in any desired position by means of keys I, passed through elongated perforations in the plates C and D, and turned to keep them from coming out.

K represents a beam formed of a flat plank of sufficient width to carry two plows, L L, the standards M M of which may occupy suitable mortises or be bolted directly to the edges of the beam, and are provided with lateral braces N N, projecting inwardly and secured in mortises near the center of the beam.

O O are longitudinal braces, attached at their lower ends to the standards M, and projecting forward and upward therefrom to the sides of the beam, when they are held by set-screws P, which occupy vertical slots in the braces, so that the plows may be set on any desired angle or pitch.

R R represent draft-chains, attached at their rear ends to the braces O or standards M, and at their front ends to hooks $r r$ on the axle B, in such position that they will be slack in the elevated position of the beam and plows, but will be drawn tight by lowering the plows to their working position.

The elevation of the beam to raise the plows out of the ground and adapt the implement to be transported from plane to plane is effected by a crank, S, journaled to the under side of the beam. This crank is turned by means of a lever, T, having a motion of about ninety degrees within a loop, u , and held in any position by means of a segment-rack or perforated plate, U, in order to secure the plows at any desired elevation. The horizontality of the beam at all heights is preserved by means of jointed rods V, by which its forward end is connected to the axle B. A crank may be substituted for these rods, if preferred; or pointed rods may take the place of the crank already described.

The tongue W is attached to the front of the frame by two bolts, $w w$, one of which, when its nut is loosened for this purpose, works in a slot in the frame, so as to permit the tongue to be adjusted laterally in either direction, when it may be again secured by turning down the nut.

X represents the driver's seat.

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

1. Attaching the beam K to the frame by means of cranks S V, operated by a lever, T, in the manner explained.

2. The draft-chains R R, attached adjusta-

bly to the axle B, and adapted to be drawn tight by lowering the plows to their working position.

MARSHALL SATTLEY.

Witnesses:

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