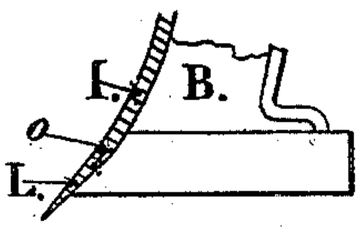
T. POWELL.
Gang Plow.

No. 232,845. Patented Oct. 5, 1880.

Fig. 1.



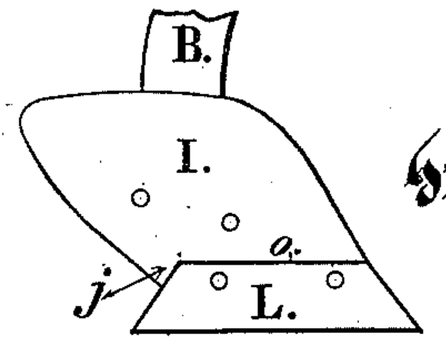


Fig. 2.

Fig. 3.

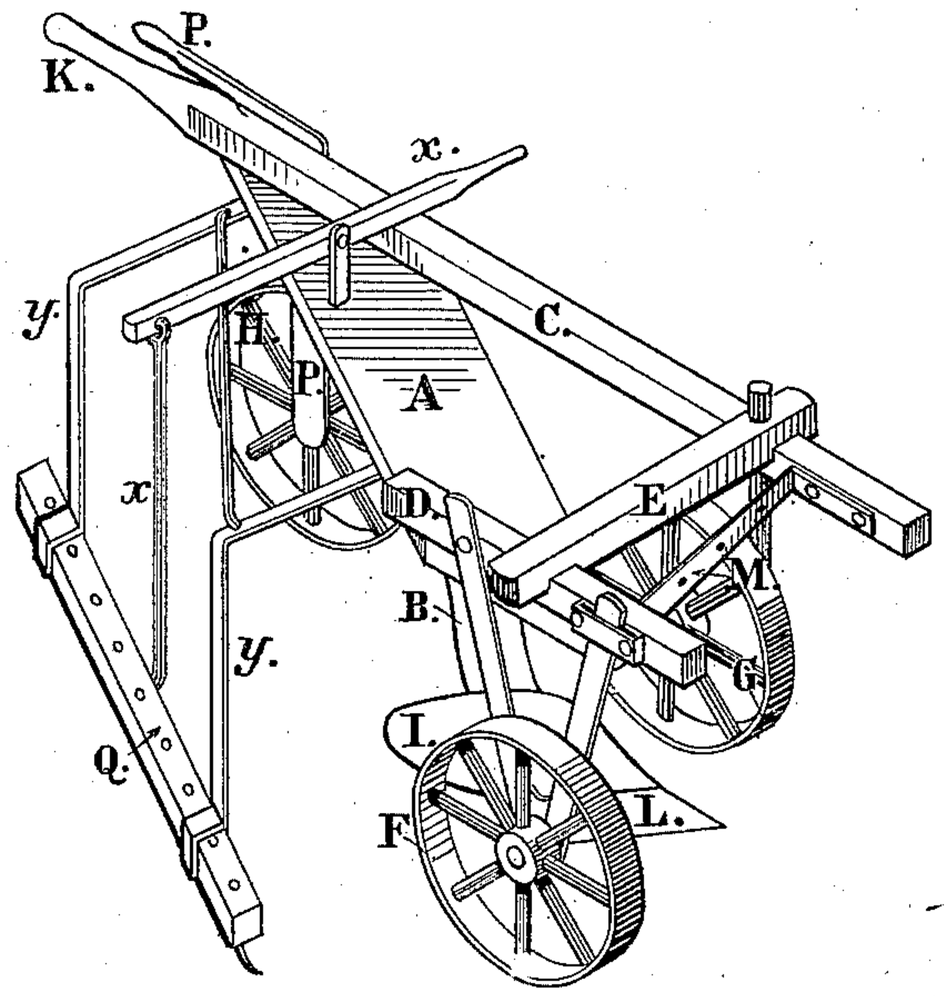
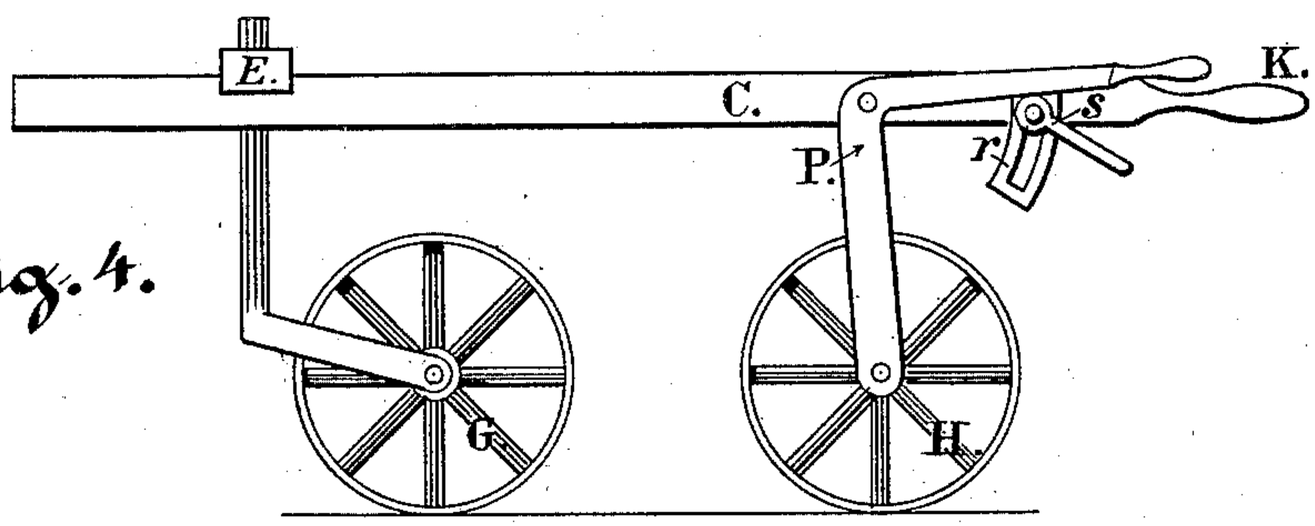


Fig. 4.



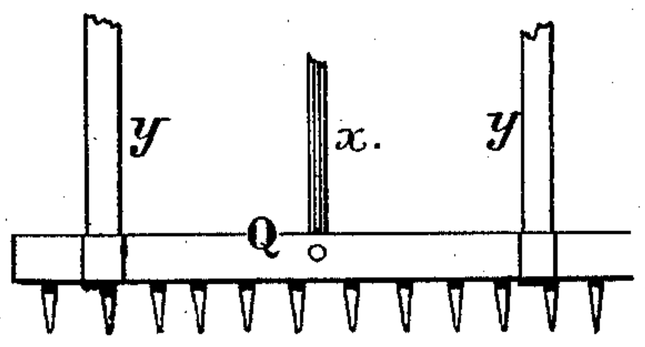


Fig. 5.

Witnesses:
W. Floyd Duckett
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UNITED STATES PATENT OFFICE.

THOMAS POWELL, OF STOCKTON, CALIFORNIA.

GANG-PLOW.

SPECIFICATION forming part of Letters Patent No. 232,845, dated October 5, 1880.

Application filed June 11, 1879.

To all whom it may concern:

Be it known that I, THOMAS POWELL, of the city of Stockton, county of San Joaquin, and State of California, have invented an Improved Gang-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the drawings accompanying this specification and forming a part of the same.

Referring to the accompanying drawings, Figures 1 and 2 are detached views of the mold-board and reversible share-piece of my improved plow. Fig. 3 is a perspective of the plow. Fig. 4 is a side elevation of the plow, and Fig. 5 is a detached view of the movable harrow-bar.

Let A represent the diagonal beam to which the upper ends of the plow-standards B are secured. In this class of gang-plows a number of plows are secured to the beam at a short distance apart, so as to form a diagonal series; but in the present instance I have only represented a single plow, it being sufficient for the purpose of this specification.

C D are the two parallel timbers of the plow-frame, which are secured upon the opposite ends of the diagonal beam A. The timber C, which is attached to the rear end of the diagonal beam, extends forward as far as the beam A, while its rear end projects backward, so as form a handle, K, for the plowman to hold while running the plow. The short beam D is secured upon the forward end of the diagonal beam, and the two timbers are connected by the cross-bar E.

The bearing-wheels F G are arranged to support the forward end of the plow-frame in the usual way, while a single wheel, H, supports the rear of the frame. M is the draft-bar.

In the plow, I is the mold-board, the lower edge of which is straight, except a downward-projecting angular corner, *j*, at its heel or rear corner.

L is the reversible share. It is made with its upper and lower edges straight and parallel. Its lower edge is longer than its upper edge, and its ends are made angular in opposite directions. The share L is adapted to be reversed end for end to permit either end to serve as the plowing-point, said ends being formed alike.

The rear bearing-wheel, H, is mounted at the end of one arm of a crank-lever, P. The angle of this crank-lever is bolted to the rear end of the timber C, while one arm projects backward and forms a handle for raising or lowering the rear end of the plow-frame by adjusting the angle of the wheel-arm.

A pendent slotted plate or link, *r*, is secured to the lever-arm so as to extend down outside the beam C, and a fixed screw projects from the timber through the slot. A nut, *s*, is turned upon this screw so as to bind the link or plate against the timber in whatever position it is moved to. By loosening the nut the plate is released, so that the lever can be moved up or down, the pin moving in the slot, thus adjusting the lever and raising or lowering the wheel. This handle or lever is within easy reach of the plowman when he is holding the main handle K of the plow, so that he can raise or lower the plows when they are plowing to accommodate uneven surfaces, or even to raise them entirely out of the ground.

In this class of plows a harrow-bar, Q, which is provided with harrow-teeth, is sometimes mounted parallel with the diagonal beam A, so as to harrow the ground in rear of the plows. This harrow-bar has usually been made permanent; but I attach the arms *y y* which support it to the diagonal beam by means of hinges or other flexible connection, so that it will be free to move up or down in order to permit it to accommodate itself to the plowed surface. I also apply a lever, *x*, by means of which it can be raised entirely free from the ground and fastened, so as to remain out of action when it is not desired to use the harrow, or to raise it above obstructions while the plow is being moved from place to place.

I am aware that it is old, broadly, to combine with a gang-plow a harrow or pulverizer connected obliquely to the plow-frame and so arranged therewith as to travel over and cause its teeth to pulverize the plowed ground, and adapted to be vertically adjusted.

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

In a gang-plow and harrow combined, the combination, with the oblique beam A, connected to the side parallel bars or beams, C D, and having the angular lever-arm P H, of the harrow Q, having their right-angled bars *y y* hinged or pivoted to the beam A, and having the operating-lever *x x*, as and for the purpose set forth.

In witness whereof I hereunto attach my hand and seal.

THOMAS POWELL. [L. S.]

Witnesses:
L. M. COHN,
CHAS. E. KELLY.