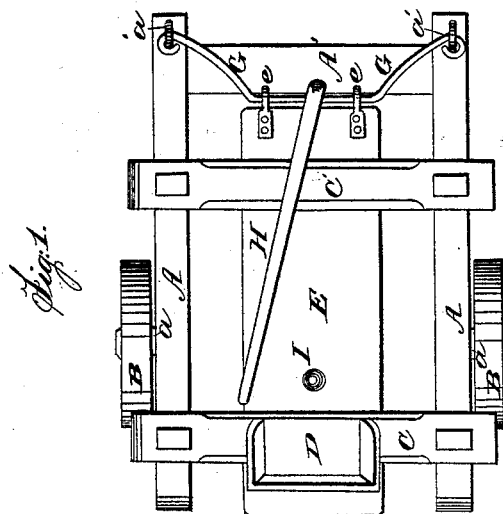
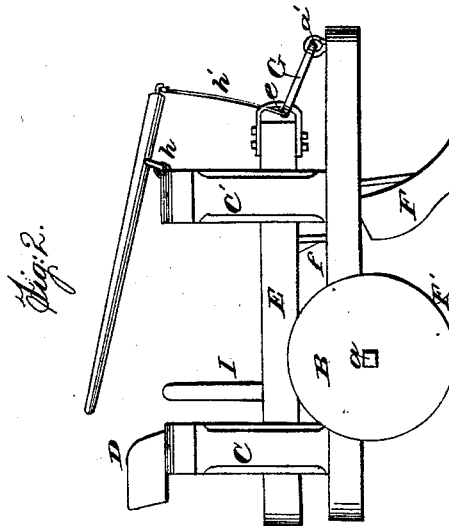


T. SHORT.
Wheel Plow.

No. 45,897.

Patented Jan. 10, 1865.



Witnesses:
Charles D. Smith
Edward H. Knight

Inventor.
Thomas Short
By Munn & Co
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS SHORT, OF FAIRMOUNT, ILLINOIS.

IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 45,897, dated January 10, 1865.

To all whom it may concern:

Be it known that I, THOMAS SHORT, of Fairmount, in the county of Vermillion and State of Illinois, have invented a new and useful Improvement 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 plan of a gang-plow illustrating my invention, and Fig. 2 is a side elevation of the same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to provide novel and simple means to facilitate the vertical and lateral adjustment of the plows in order that the driver may suspend the plowing operation or avoid obstacles which might offer such resistance to the plows as to break or injure the same, as will be hereinafter fully explained.

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.

In the accompanying drawings, A A A' represent the various parts of the main supporting-frame, which, by means of short shafts *a*, is mounted upon the carrying-wheels B B.

C represents a frame which may serve to connect the rear ends of the beams A A, and which has secured upon it the driver's seat D.

C' is a frame similar in form to the frame C, and erected at a point a little forward of the transverse center of the machine.

E represents a plow-beam, into which are securely inserted the stocks *f* of the plows F F', and which occupies a position between the beams A A, as shown clearly in Fig. 1. At its rear end the beam E has no other support than that afforded by the plow F', but at its forward end the beam E is attached to the main frame of the machine by a double-crank rod, G, which passes through clevises *e e*, which embrace and are bolted to the forward end of the beam E. The respective ends of the rod G are hook-shaped, which adapts them to be se-

cured in staples *a' a'* near the forward ends of the beams A A. The rod G has full room or space within the staples *a' a'* and clevises *e e*, so that it may readily turn therein.

H is a lever, fulcrumed at *h* upon the frame C', and connecting with the rod G through the medium of a link or rod, *h'*. This lever H, extending backward to a point in suitable proximity with the seat D, enables the driver at a moment's notice to elevate the beam, and thereby turn the points of the plows in an upward direction, to do which it is only necessary to depress the free end of the lever H. When the lever is thus depressed the rear end of the beam E is supported by the plow F', whose heel moves in contact with the ground. The free or hand end of the lever H is so much longer than the acting end that little strength need be brought into requisition to elevate the beam. The central portion of the rod H is made straight or in conformity with the forward end of the beam E; but the portions of said rod which extend beyond the sides of the beam E are deflected in such manner that no abutment is presented which might come in contact with the clevises *e e*, and thereby intercept or interfere with the upward movement of the beam E.

I is a post rising from the beam E and between the frames C C'. By grasping this post with his hand the driver may adjust the rear end of the beam and the plow affixed thereto with facility, the forward end of the beam, with its plow, being capable of lateral adjustment by the lever H.

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

The arrangement of the double-crank-shaped connecting-rod G, clevises *ee*, links *a' a'*, beam E, lever H, and post I, the whole being employed for joint operation in the manner and for the purpose specified.

The above specification of my improved gang-plow signed this 20th day of June, 1864.
THOMAS SHORT.

Witnesses:

CHARLES D. SMITH,
JAMES H. GRIDLEY.