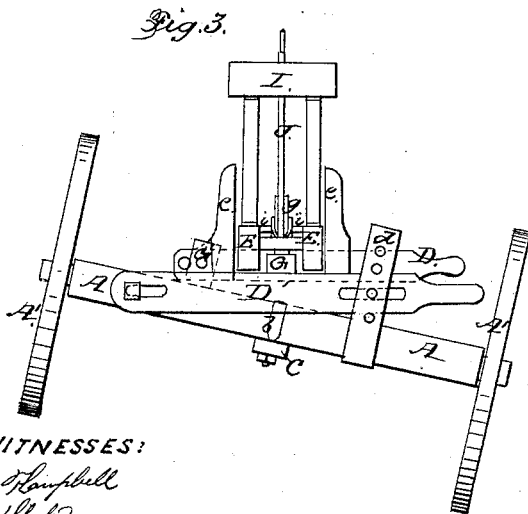
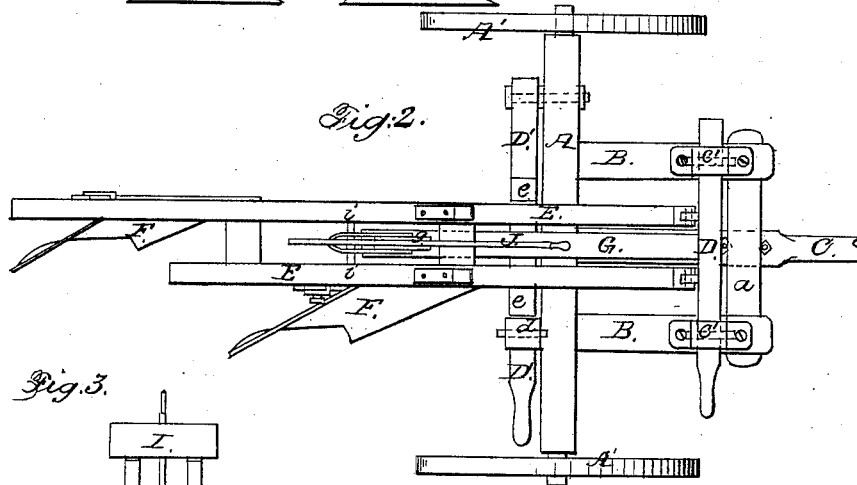
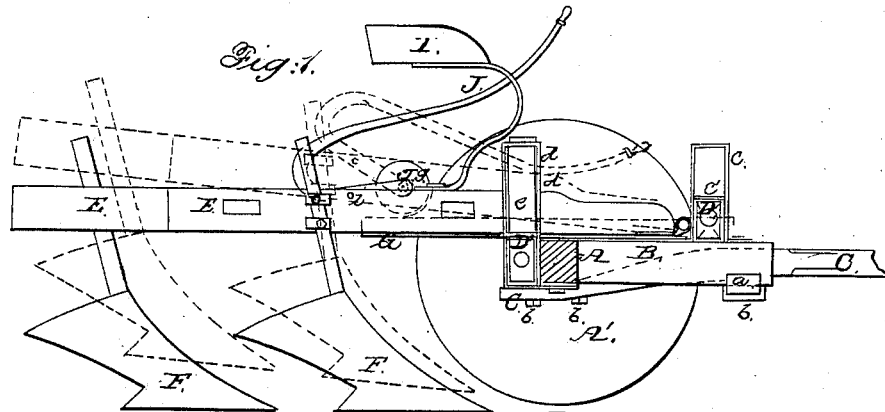


S. H. ADAMS.

Gang Plow.

No. 44,924.

Patented Nov. 8, 1864.



WITNESSES:

R. H. Campbell  
E. H. Hays

INVENTOR:

S. H. Adams  
by two attys  
Mason Lemick & Lawrence

# UNITED STATES PATENT OFFICE.

S. H. ADAMS, OF COULTERVILLE, ILLINOIS.

## IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 44,924, dated November 8, 1864.

*To all whom it may concern:*

Be it known that I, S. H. ADAMS, of Coulterville, Randolph county, 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, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of my improved plow as seen by removing one wheel. Fig. 2 is a top view of the machine with the driver's seat removed. Fig. 3 shows, in a rear end view, the manner of leveling the plows.

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

The object of my invention and improvement in gang or wheel plows is to apply the plow-supporting beams to a carriage in such manner that the former can be adjusted laterally upon the carriage either to the right or to the left, or so adjusted that the plows can be made to preserve their proper position whatever may be the inclination of the carriage, as will be hereinafter described.

It also has for its object the raising or lowering of the plows, whether the machine be in motion or at rest, by means of a lever contrivance constructed and applied to the machine, as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the axle-tree of two carriage-wheels, A' A'.

B B are two beams, which project from the front side of said axle, and which are secured together at their forward ends by means of an under brace, *a*, which latter serves as the forward support for the draft-pole C. The draft-pole is connected to the transverse brace *a*, and also to the axle-tree A, by means of stirrups *b b*, which, on being loosened, will allow the draft-pole to be adjusted laterally, and thus move the line of draft nearer to or farther from the land.

Near the forward ends of the beams B B are two looped standards, *c c'*, and through these standards passes a lever, D, which is pivoted on the land side of the machine to standard *c'* by means of a pin which passes through an oblong slot in this lever, and which is connected to the opposite standard, *c*, by means of

a pin which passes above said lever or through the same, as circumstances may require. Behind the axle-tree A is another lever, D', which is supported and guided in standard *d* and pivoted on the land side of the machine to the axle, as shown clearly in Figs. 2 and 3. The pivotal connections of both levers D D' are such as will admit of the these levers being adjusted endwise, and the standard-guides *c d* are provided with a number of holes through them for receiving the pins which are used to hold the levers D D' in an inclined position with respect to the axle-tree, as shown in Fig. 3, when it is desired to level the plows, as will be hereinafter described.

The two parallel plow-beams E E are secured together by transverse braces, and pivoted or hinged at their forward ends to the forward lever, D, as shown in Figs. 2 and 3. These beams extend over the axle and behind the same suitable distances, and receive the standards of the plows F F, as shown in Fig. 1. When the back lever, D', is in a line with the axle the plow-beams rest on the axle; but when the machine is in operation and the plows properly leveled these beams rest upon the back lever, as shown in Fig. 3. The plow-beams are prevented from being thrust out of place laterally by means of the two side standards, which project perpendicularly from the upper surface of the lever D'. These standards, which are lettered *e e*, are carried up a sufficient height to admit of the rising and falling movements of the plow-beams without allowing these beams to get out of place. A strong beam, G, is rigidly secured to the forward lever, D, between the plow-beams, and this lever extends back some distance behind the axle-tree and rests upon this axle, as shown in the three figures.

J represents a curved lever, which carries on its rear end a wheel, *g*, that rests upon the rear end of the beam G. Lever J is pivoted at *i* to the beams E E, and thence curved upward and forward, as shown in Fig. 1. The driver's seat I is mounted on the plow-beams over the lever J, and the driver, while sitting in his seat, can elevate or depress the forward end of said lever either by his hand or his feet, whichever may be found most convenient.

The operation of my invention is as follows: In that class of plows to which my invention especially belongs it is necessary to provide for the difference in the height of the unplowed

ground and the furrows, which has been done by making the wheel on the land side of the machine somewhat smaller in diameter than the wheel which runs in the furrows.

Instead of making a difference in the diameters of the wheels, I am enabled to level the plows and their supports by means of the levers D D', the outer ends of which are raised or depressed and secured in the desired position, as above described.

By means of the same levers which I use to level the plows I am enabled to move the plows and their beams laterally—i. e., either toward the land side or farther from this side of the machine, as occasion requires—slots being made in said levers for this purpose.

It will be seen by reference to Figs. 1 and 2 that I have pivoted the lever J considerably in rear of its forward bearing, and carried the long arm of this lever forward of the driver's seat, thus enabling the driver to operate this lever by means of his feet, if he desires to have his hands free to manage the team.

The intermediate beam, G, may be carried as far in rear of the axle as may be required to obtain a bearing for the short arm of the lever J and to enable the driver by a very little expenditure of power on his part to raise the plows free from the ground.

One of the advantages of my invention over the wheel-plows hitherto essayed is that when the depth which it is desired to run the plows

is known the machine can be leveled accordingly, and when the depth of the furrow is changed the leveling-levers can be readily adapted to the change.

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

1. Pivoting the forward ends of the plow-beams E E to a slotted lever, D, and supporting the rear portions of said beams upon a slotted lever, D', both levers D and D' being capable of receiving a lateral or endwise adjustment, substantially as and for the purposes described.

2. The combination of the intermediate beam, G, lever D, and hinged plow-beams E E with the adjusting-lever J, substantially as described.

3. The laterally and vertically adjustable levers D D', pivoted to the supporting-frame A B, and adapted to form a forward pivot-connection and a rear support for the plow-beams, substantially as described.

4. The vertical guides *ee*, applied to the laterally-adjustable lever D', in combination with the pivoted plow-beams E E and lever D, substantially as described.

S. H. ADAMS.

Witnesses:

J. J. SLOAN,

R. H. WOODSIDE.