



# UNITED STATES PATENT OFFICE.

HUGH H. CANADAY, OF FAIRFIELD, IOWA.

## IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 188,586, dated March 20, 1877; application filed February 17, 1877.

*To all whom it may concern:*

Be it known that I, HUGH H. CANADAY, of Fairfield, in the county of Jefferson and State of Iowa, have invented a new and valuable Improvement in Gang-Plows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top view of my improved gang-plow, and Fig. 2 is a longitudinal vertical section of the same.

This invention has relation to improvements in gang-plows.

The improvement consists in certain novel devices through the medium of which the front end of the beam-frame may be raised or lowered for lessening or increasing the penetration of the plow into the soil, or adjusted to the right or left in landing, less or more, as the case may be.

The nature of my invention will be fully understood from the following description, and set forth in the claims.

In the annexed drawings, the letter A represents the wheels, and B the axle. C indicates a preferably rectangular frame, consisting of two longitudinal side bars, *a*, and a suitable number of transverse braces, *a'*. This frame extends in rear of the axle, and affords bearings in its rear end for a transverse metallic shaft, D, having two spaced projecting arms, *b*, from the extremities of which depend two chains, E, secured to the rear ends of the plow-beams F F'. Shaft D is rotated by means of a hand-lever, *c*, secured to one end of the same, and extending within reach of the driver, seated in chair E', supported on the axle by a suitable spring, S. When lever C is thrown to the front, the plows will be raised, and at the same time drawn to the rear, thus disengaging the plows from the ground. Being depressed to the full extent, thereby raising the plows clear of the ground, the said lever will engage with a catch, *d*, projecting upward from beam *a*, and will maintain this

position until disengaged therefrom. *e e* represent two spaced metallic arms, secured to and depending vertically from the axle-tree, to the lower ends of which are pivoted the rear ends of a L-shaped metallic frame, G. This frame vibrates freely on the said arms, and extends nearly to the front end of the frame C.

H represent strong metallic staples, which loosely straddle the cross-bar *f* of frame G, and are secured, in any suitable manner, to a cross-bar, *f'*, connecting the front ends of beams F F', holding them in proper relation with each other, and serving as a means of attachment of the clevis J.

Bar *f'* is connected to arms *e e* by means of a branched chain, L, and the sulky is drawn thereby.

O represents a metallic shaft, having its bearings on the transverse brace *a'* next the driver's seat, and having two radial arms, *i i'*, one at each end, the former serving as an operating handle, and the other as the weight-arm of the device.

P indicates a chain or rod, one end of which is secured to the end of arm *i'* and the other to the cross-bar aforesaid, connecting beams F F'.

By drawing lever *i* to the rear, the front end of the beam may be raised, more or less, thus lessening the penetration of the plow into the soil, or, when carried to its full extent, raising them completely out of, and free from, the ground, in which position it will be maintained by engaging arm *i* with a catch, *j*. At a point within convenient reach of the driver, a strong metallic bar, R, having a forked lower end, is secured to beams F F'. This lever serves to throw the front end of the beam-frame to the right or left, thus taking less or more land; and that this may be the more readily accomplished the said lever will have a projecting foot-rest, *k*, bearing forcibly against which with the foot the driver is able to attain this purpose with comparatively little exertion.

It is evident that the same results may be attained by the use of the same devices with a single plow.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the vertically-vibrating frame G, and the beam-frame F F' f', having staples H, with shaft D, arms b b, chains E, levers c O i i', and chain P, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HUGH H. CANADAY.

Witnesses:

G. DORCAS,  
J. H. TITUS.