

G. ARMSTRONG & J. ARMSTRONG, Jr.

R. ARMSTRONG, Executor of J. ARMSTRONG, Jr., dec'd

Gang-Plow.

No. 210,830.

Patented Dec. 17, 1878.

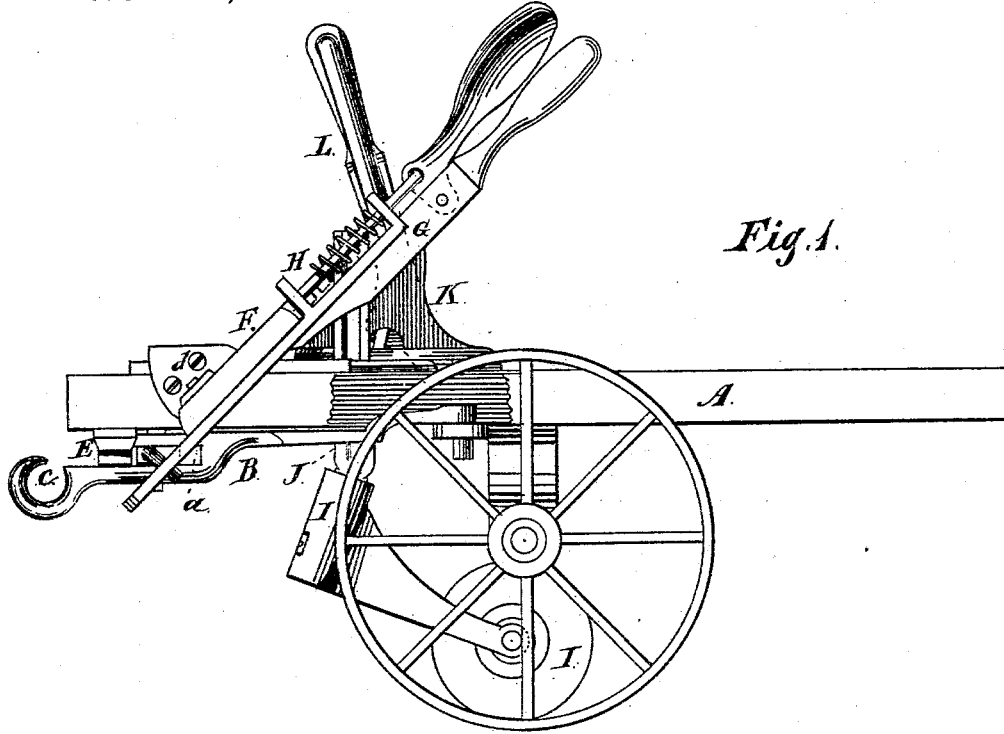


Fig. 1.

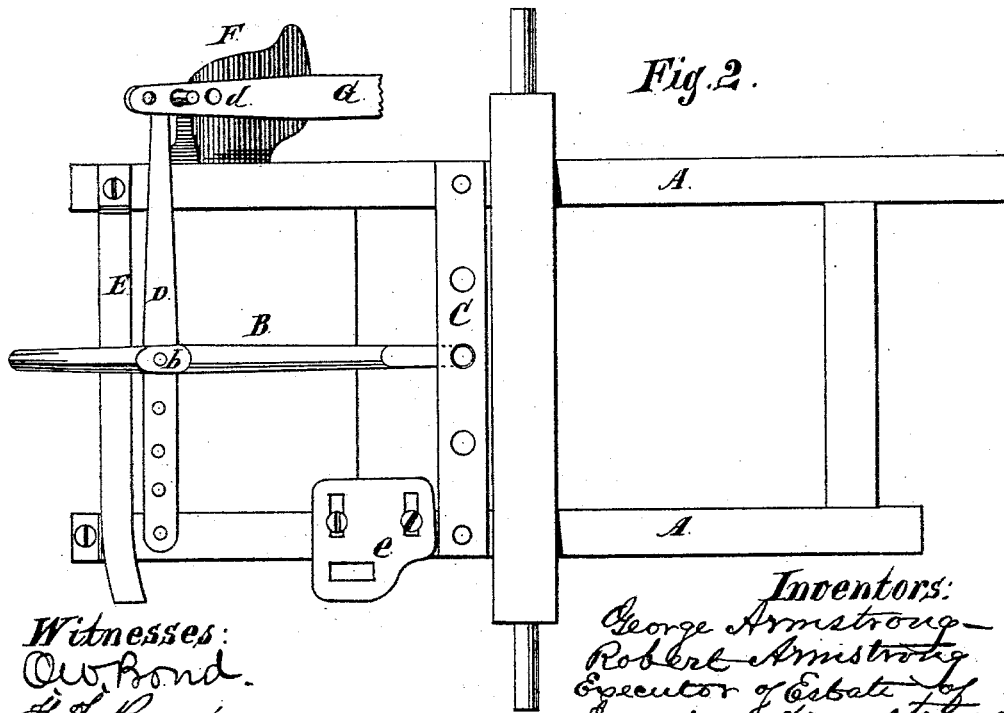


Fig. 2.

Witnesses:
O. Bond.
H. F. Burns.

Inventors:
George Armstrong—
Robert Armstrong
Executor of Estate of
James Armstrong.
By Mel Bond Atty.

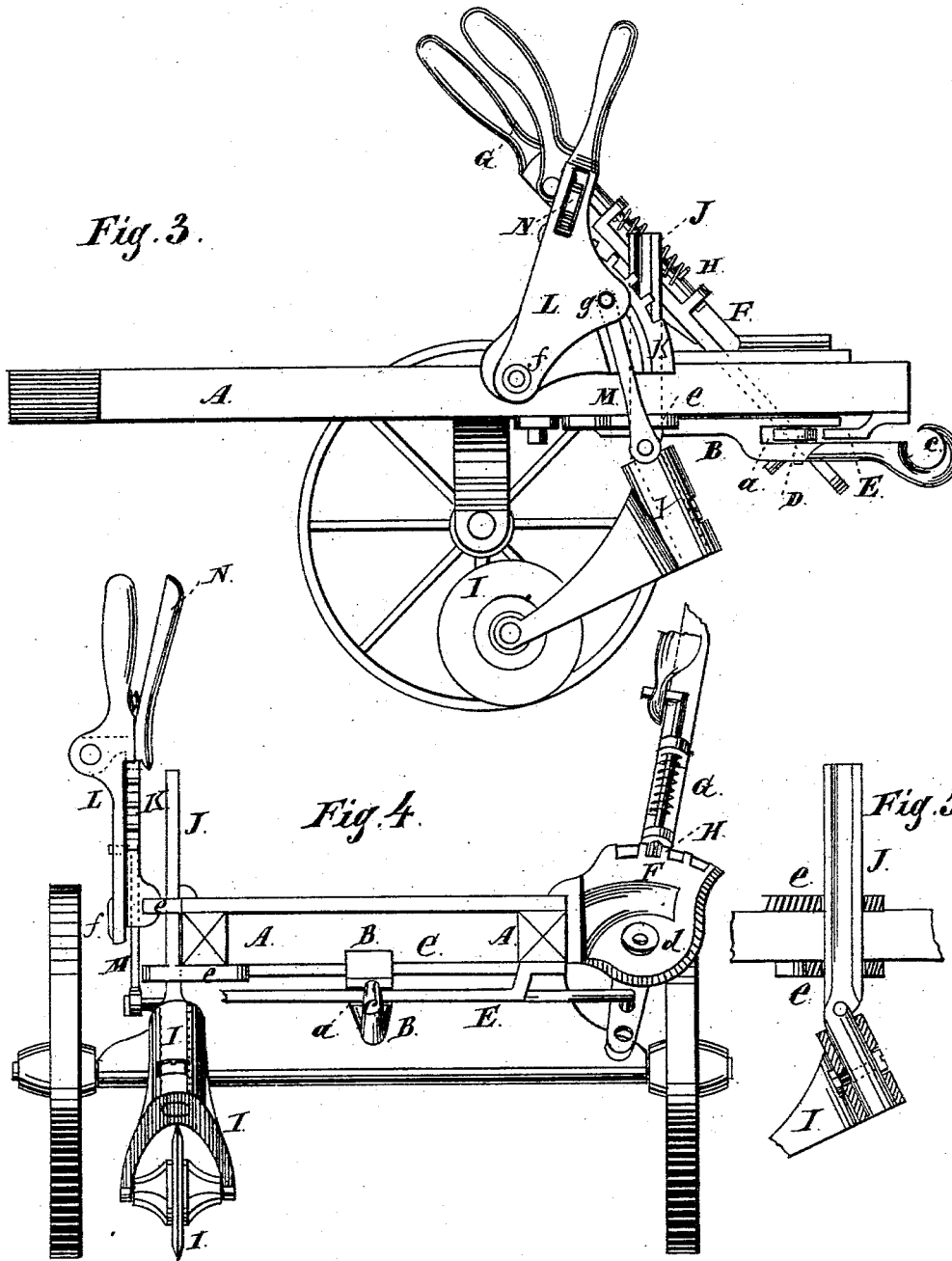
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 By *Wm. H. Bond* Atty.

UNITED STATES PATENT OFFICE.

GEORGE ARMSTRONG AND ROBERT ARMSTRONG, (EXECUTOR OF JAMES ARMSTRONG, JR., DECEASED,) OF ELMIRA, ILLINOIS; SAID ROBERT ARMSTRONG ASSIGNOR TO SAID GEORGE ARMSTRONG.

IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 210,830, dated December 17, 1878; application filed February 25, 1878.

To all whom it may concern:

Be it known that GEORGE ARMSTRONG, of Elmira, Stark county, State of Illinois, and JAMES ARMSTRONG, Jr., late of Elmira, Stark county, State of Illinois, now deceased, invented new and useful Improvements in Gang-Plows, of which the following is a full description, reference being had to the accompanying drawing, in which—

Figure 1 is a side elevation; Fig. 2, a bottom view, the wheels, colter, and its operating devices being removed; Fig. 3, a side elevation, showing the side opposite from that in Fig. 1; Fig. 4, an end view; Fig. 5, a detail of the colter attachment.

This improvement relates to devices for regulating the width of furrow to be cut.

In the drawings, A represents any suitable frame, mounted, in the usual manner, upon an axle and wheels. B is a draw-bar, the rear end of which is pivoted either at the center or to either side of the center of a cross-bar, C, properly secured to the frame. As shown, this draw-bar is slotted at *a*, and is pivoted at *b* to a movable bar, D.

E is a cross-bar secured to the frame, which serves to support the draw-bar to prevent it from dropping down. *c* is a hook on the forward end of the draw-bar to receive the double-tree. F is a segmental rack, secured to the side of the frame. G is a lever, pivoted at *d* to E. One end of the movable bar D is pivoted at or near the lower end of this lever G.

H is a spring pawl or lock, which is connected to the lever G, and engages with the segmental rack to hold the lever in place. The bar D is provided with a series of holes, in either one of which the pin which pivots the draw-bar to D may be placed.

The plows are to be attached to the rear of the machine, as usual, but are not shown.

The forward end of the draw-bar can be located at the center of the machine, or can be thrown over either to the right or left by means of the lever G, the movement of which throws the bar D to the right or left, carrying

with it the draw-bar, without changing the location of the rear end thereof; and by so changing the position of the front end of the draw-bar the plows can be made to cut furrows of different widths at pleasure.

I is a caster-colter, pivoted upon the lower end of an upright bar, J, which slides up and down in suitable guides *e*, attached to the frame of the machine. K is a segmental rack, secured to the frame of the machine. L is a lever pivoted at the lower end, *f*, to the plate, upon which is the rack K. M is a short arm or lever, the lower end of which is pivoted upon a projection from J, while the upper end is pivoted to the lever L at *g*. N is a spring pawl or stop, pivoted to the lever L, and engaging with the rack K, to hold the lever L in place.

In use, the driver can raise or lower the colter by means of the lever L, through which and the arm M of the bar J, to the lower end of which the colter is connected, the colter can be made to slide up and down.

This device is an improvement upon patents heretofore granted to J. and G. Armstrong.

We do not claim, broadly, either devices for adjusting the plows to cut furrows of different widths, or devices for raising and lowering the colter; but

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

In a gang-plow, the combination of the perforated cross-bar C, the adjustably-pivoted draw-bar B, the perforated movable bar D, pivoted lever G, and segmental rack K, all substantially as and for the purposes herein set forth.

GEORGE ARMSTRONG.
ROBERT ARMSTRONG,

Executor of the estate of James Armstrong, Jr., deceased.

Witnesses:

T. T. WRIGHT,
AMZY ALLARD.