

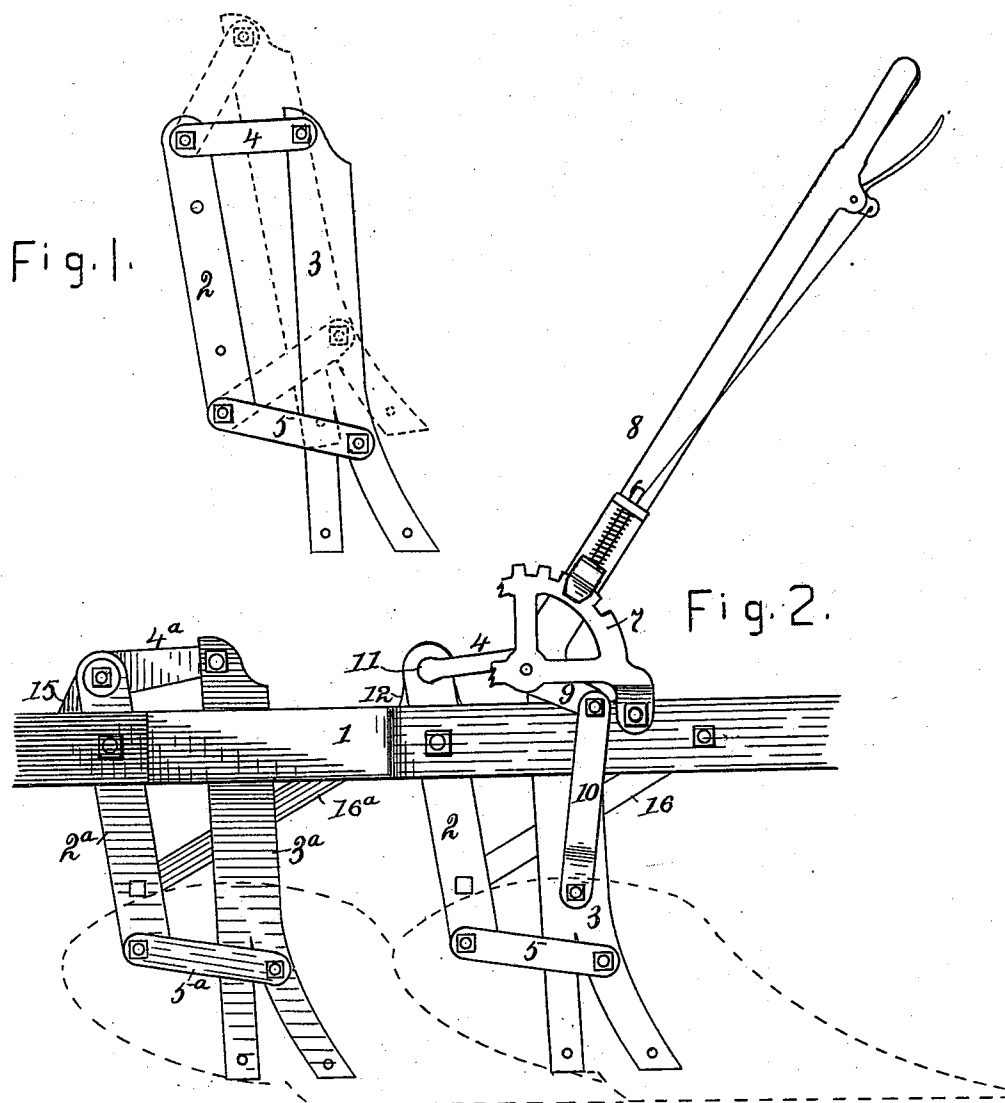
(No Model.)

2 Sheets—Sheet 1.

W. C. FULLER.
PLOW.

No. 556,344.

Patented Mar. 17, 1896.



ATTEST
Helin Graham
Ina Corinne Graham

INVENTOR
W. C. FULLER
by *L. P. Graham*
Atty.

(No Model.)

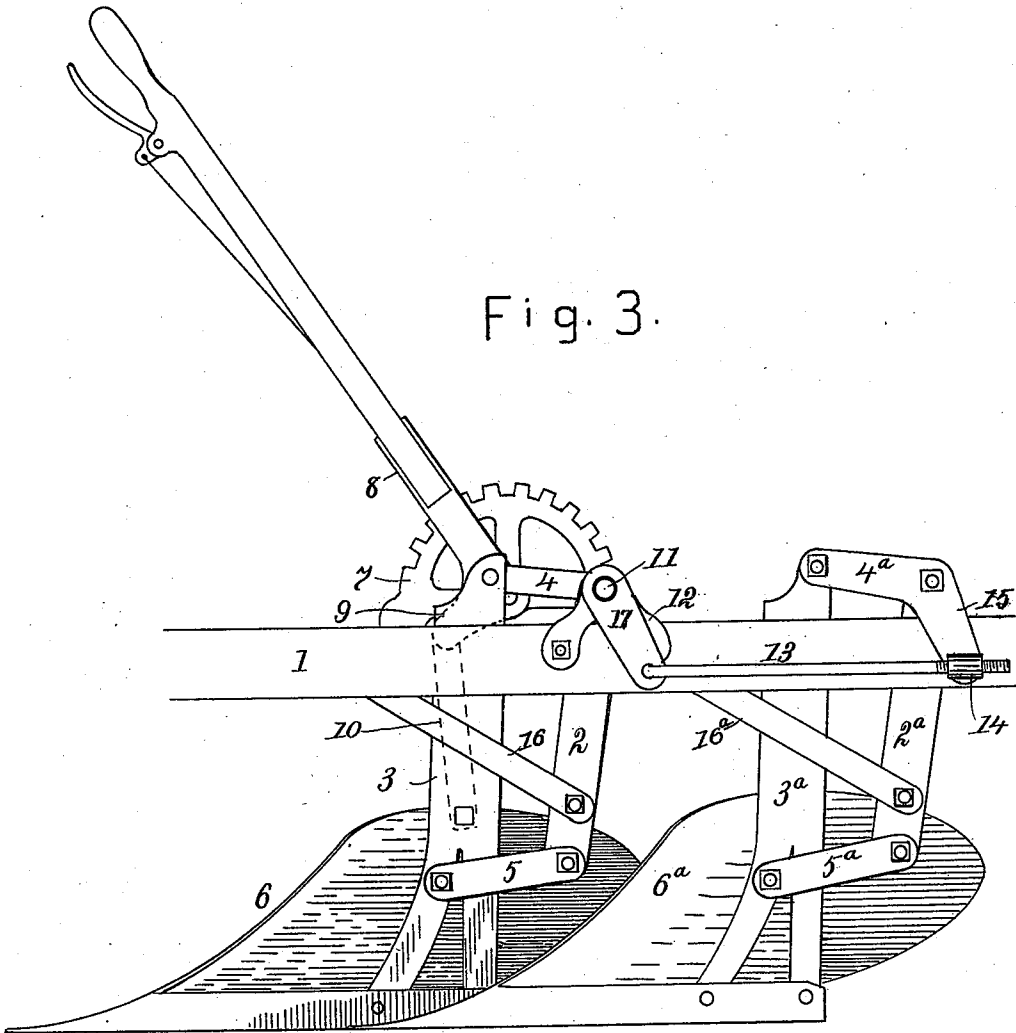
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Fig. 3.



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Helen Graham

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INVENTOR,
W. C. FULLER,
by *L. P. Graham*
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. FULLER, OF CANTON, ILLINOIS, ASSIGNOR TO THE PARLIN & ORENDORFF COMPANY, INCORPORATED, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 556,344, dated March 17, 1896.

Application filed October 26, 1895. Serial No. 567,046. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. FULLER, of Canton, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in Plows, of which the following is a specification.

This invention relates to mechanism for raising and lowering a plow or plows with relation to a carrying-frame. It is exemplified in the structure hereinafter described, and it is defined in the appended claims.

In the drawings forming part of this specification, Figure 1 is a side elevation of the mechanical elements most intimately connected with the invention, the lowered position of the parts being shown in solid lines and the raised position being shown in broken lines. Fig. 2 is a side elevation of so much of a plow-frame as is necessary to show the relation of my invention thereto, and Fig. 3 is a similar view of the opposite side of the parts illustrated in Fig. 2.

A part of a carrying-frame, which may be constructed in any desirable manner and mounted on the customary wheels, is designated at 1.

At 2 and 2^a are shown standards rigidly secured to the frame and extending below the same.

At 3 and 3^a are shown shanks with which plows 6 and 6^a are respectively connected. Stiff swinging links 4 and 4^a connect the upper ends of the standards with the upper ends of the shanks, and similar links 5 and 5^a connect the lower ends of the standards with the lower parts of the shanks. The upper links are somewhat shorter than the lower in this particular instance, and each pair of links diverge from a standard toward the adjacent shank. A rack 7 is fastened to the frame, and it supplies a pivot for lift-lever 8, which has an arm 9. A link 10 connects the arm of the lever with shank 3, and thereby provides means for raising and lowering the plow or plows by movements of the lever. Link 4 is fixed or formed on one end of a shaft 11, which crosses the frame horizontally and is journaled at one side thereof in standard 2 and at the other side in bracket 12. Arm 17 (see Fig. 3) is fixed on the end of shaft 11 oppo-

site link 4, and a link-rod 13 connects arm 17 with an arm 15, formed on link 4^a. Braces 16 and 16^a extend obliquely from the standards to the frame, their function being to stiffen the standards with relation to the frame, and they are simple mechanical devices that have no bearing on the principle of the invention.

In operating the device the lever is used to lower the plows into the ground, the force being imparted to shank 3 through link 10 and to shank 3^a through the further intervention of link 4, shaft 11, arm 17, link-rod 13, and arm 15 on link 4^a, and the swing of the links connecting the shanks with the standards imparts a downward pitch to the plow-points. When the motion of the lever is reversed, the points of the plows are inclined upward by the rising motion, and when entirely raised are elevated well above the ground and inclined upward in a manner to avoid striking obstacles—as stumps, stones, and the like—and also to avoid gathering trash.

The plow-frame may have but one plow, as 6, and in that case arm 17 and the link-rod 13 will of course be omitted.

As herein shown and described, link 4 is shorter than link 5, and the distance between the pivots of the links is shorter on the standard than on the shank. These peculiarities combine in this instance to give the desired inclination to the plow-point in rising and falling; but either may be used separately to at least approximate the required effect.

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

1. The combination, in a plow, of a carrying-frame, a standard fixed to the frame, a plow-shank approximately parallel with the standard, a stiff, swinging link connecting the lower end of the standard with the lower part of the shank, and a shorter, stiff, swinging link connecting the upper end of the standard with the upper end of the shank, substantially as set forth.

2. The combination, in a plow, of a carrying-frame, a standard fixed to the frame, a plow-shank approximately parallel with the standard, and stiff, swinging links connecting the shank with the standard at two dif-

ferent points and diverging toward the shank, substantially as set forth.

3. The combination, in a plow, of a carrying-frame, a standard fixed to the frame, a
5 plow-shank approximately parallel with the standard, a stiff, swinging link connecting the lower end of the standard with the lower part of the shank, and a shorter, stiff, swinging link connecting the upper end of the
10 standard with the upper end of the shank, said links diverging toward the shank, substantially as set forth.

4. The combination, in a plow, of a carrying-frame, a standard fixed to the frame, a
15 plow-shank approximately parallel with the standard, stiff, swinging links connecting the shank with the standard at two different points, a lever pivoted on the frame, and a

link connecting the shank with the lever, substantially as set forth.

5. The combination, in a plow, of a frame, 20
as 1, standards, as 2 and 2^a fixed to the frame, plow-shanks as 3 and 3^a connected with the standards by links 4 and 5 and 4^a and 5^a respectively, a lever as 8 connecting with shank 25
3 through link 10, a shaft, 11, extending across the frame from link 4, and arm 17 on shaft 11, an arm 15 on link 4^a and a link-rod 13 connecting arm 17 with arm 15, substantially as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

W. C. FULLER.

Attest:

JEAN B. HOFFMAN,
U. G. ORENDORFF.