A. H. BURLINGAME.

WHEEL PLOWS.

No. 184,583. Patented Nov. 21, 1876.

Fig 1.

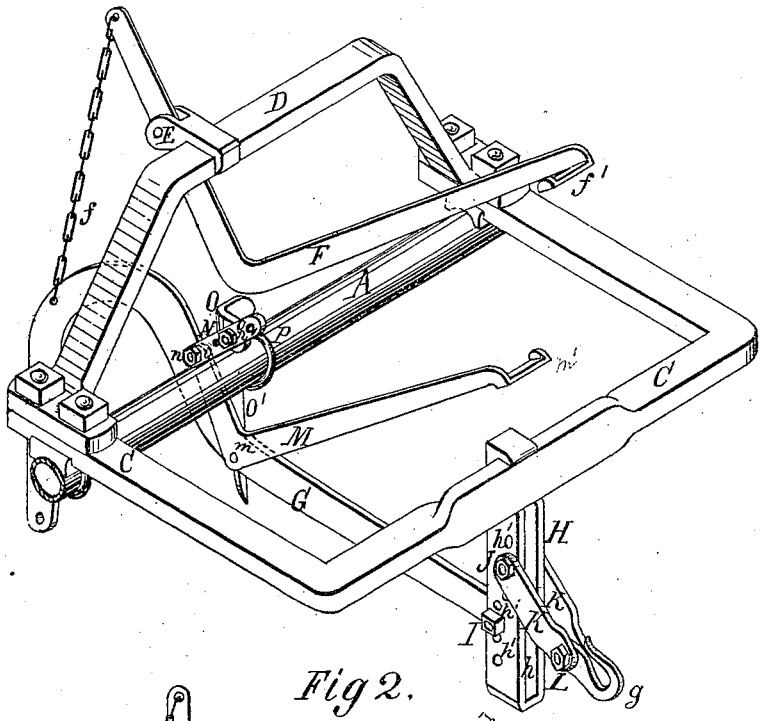
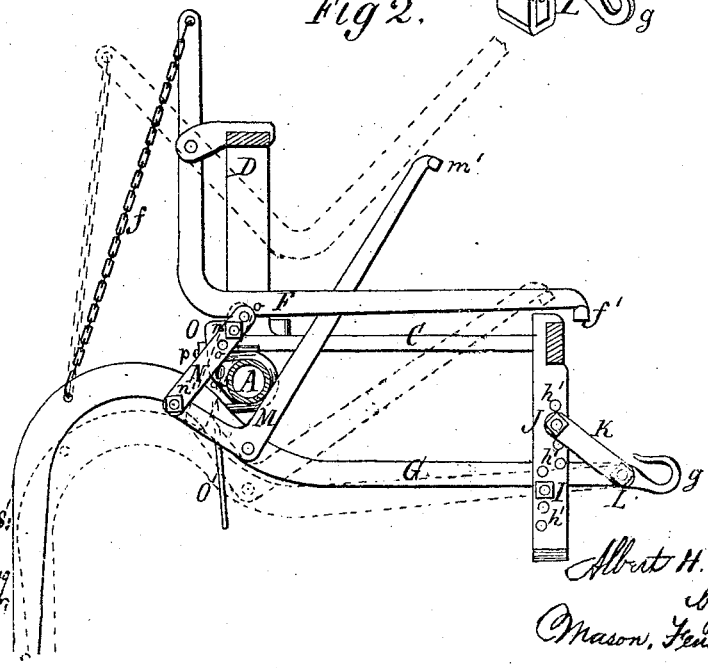


Fig 3.

Fig 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT H. BURLINGAME, OF SPARTA, ILLINOIS.

IMPROVEMENT IN WHEEL-PLOWS.

Specification forming part of Letters Patent No. **184,583**, dated November 21, 1876; application filed October 20, 1876.

To all whom it may concern:

Be it known that I, A. H. BURLINGAME, of Sparta, in the county of Randolph and State of Illinois, have invented certain new and useful Improvements in Plow Attachments, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved plow attachment. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a detailed view of a brace and side bearing for the plow-beam.

The nature of my invention consists in certain constructions, combinations, and arrangements of parts, hereinafter fully described and specifically claimed, whereby a sulky-plow is produced having a direct draft, which, from an attached frame on wheels, may either be raised from the ground or forced therein.

In the drawings, A represents an axle supported by wheels, and connected by suitable means with a horizontal frame, C, to which the tongue or shaft of the vehicle is rigidly attached. An arched brace, D, fastened to the frame C and axle A, supports the seat of the driver, and the fulcrum E of a foot-lever, F, which, by means of a chain, *f*, operates the plow-beam G below in a vertical direction.

So far I have shown and described some of the parts of an improvement for which I obtained a patent in the year 1874. The plow-beam G extends beyond the front part of the frame C, and ends with a clevis, *g*, to which the double-tree of the team is attached. In rear of the clevis *g* the plow-beam is guided in a vertical slot, *h*, formed in a brace, H, which is fastened to the front of the frame C, and provided with a number of holes, *h'*. The said holes *h'* serve for the reception of two bolts, I and J, the former of which serves as a support for the plow-beam G, while by the latter two links, K, are attached to the brace H, the forward ends of which links are secured by a bolt, L, to the plow-beam. By means of the links K the draft is communicated from the plow-beam to the frame C or the support of the plow-beam, so that the frame C, with axle and wheels attached, is dragged along by the plow-beam. The bolt I prevents the front part of the plow-beam from dropping too low, and causing the plow to become anchored in the ground. Below the axle A the plow-beam G has a foot-lever, M, attached to it by means of a fulcrum-pin, *m*, and the short arm of the said foot-lever is connected, by means of an adjustable link, N, and bolts *n n'*, to a guide-clamp, O. The adjustability of the link N consists in a number of exchange-holes, *o*, for the bolt *n'*, whereby the rear part of the plow-beam may be operated at a lower or higher level. The guide-clamp O is fastened by means of a U-shaped bolt, P, nuts *p*, and an interposed bearing-block, Q, to the axle A, and it has a downward extension, O', which serves as a side bearing of the land-side of the plow-beam. The lever F has a foot-bearing, *f'*, and the lever M has a similar foot-bearing, *m'*.

Operation: The driver keeps his feet upon the foot-bearings *f'* and *m'*, and when he wants to raise the plow he bears sufficiently upon the bearing *f'* to move it down as much as necessary. When the plow is required to enter the ground the driver releases his force upon the bearing *f'* and applies it to the bearing *m'*, thereby forcing the plow into the ground.

It is readily seen that the force applied to the plow-beam by the lever M may be increased to such degree that the plow has to bear the weight of the whole machine, including the driver. This weight has, in all my experiments with the said machine, proved sufficient for plowing the toughest kind of soil, while the thereby increased power of draft does not affect the links K, nor the brace H, nor frame C in a like degree. The guide-extension Q' keeps the plow-beam, and, consequently, the plow, always in line with the frame by preventing it from swaying toward the land-side when the mold-board meets with great resistance.

It will be seen that the bolt J, which holds the link K in position, can, with the link, be lowered when it is desirable to have the bolt J act upon the top of the beam G, and that the bolt I, below the beam G, acts as a temper-pin to keep the plow at a regular depth during the act of shallow plowing.

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

1. The wheeled frame C, as described, in combination with the lever F, having a lifting-chain, *f*, the plow-beam G, having a draft-clevis, *g*, and links K, and the lever M, substantially as set forth.

2. The wheeled frame C, as described, in combination with the lever M, having a link, N, the plow-beam G, having a draft-clevis, *g*, and links K, substantially as set forth.

Witness my hand in the matter of my application for a patent for a plow attachment this 17th day of October, 1876.

ALBERT H. BURLINGAME.

Witnesses:
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