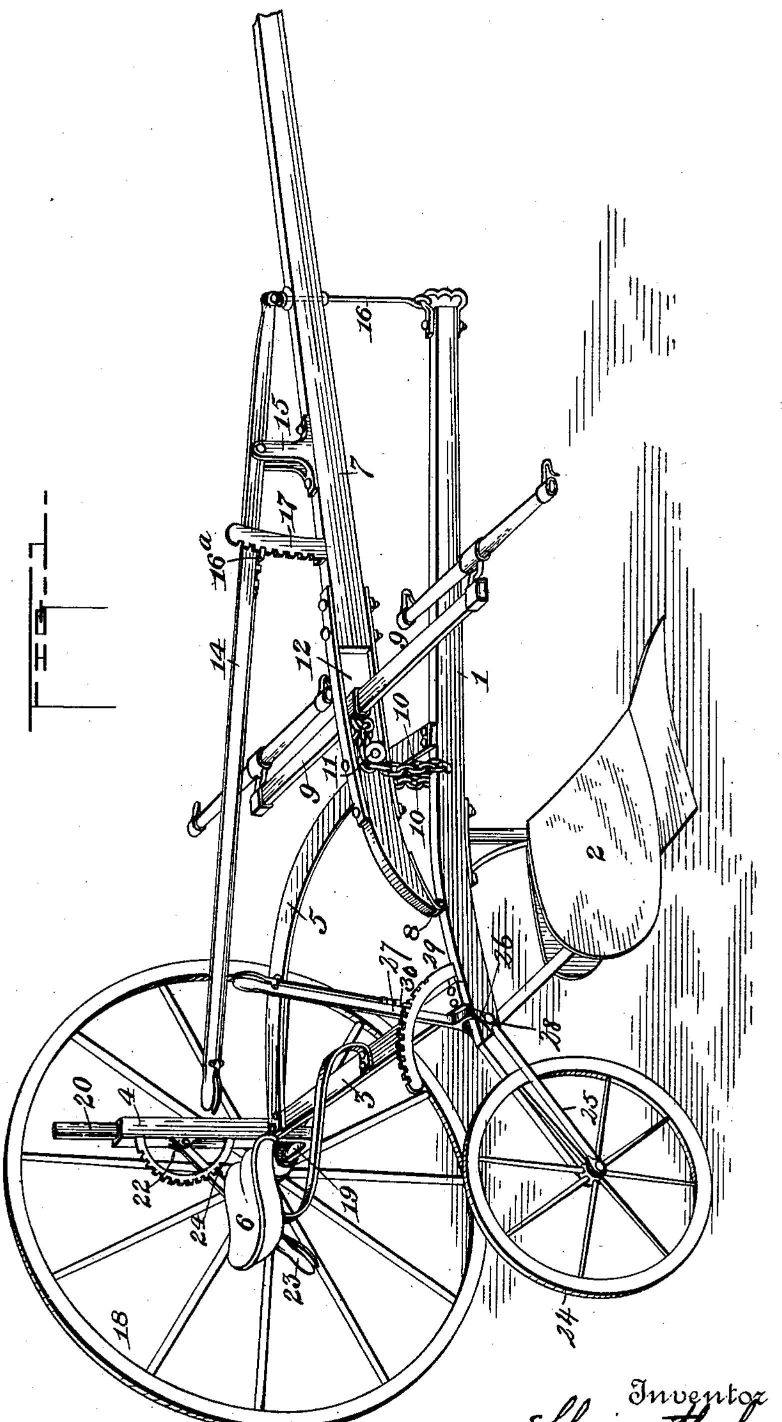
(No Model.) 2 Sheets—Sheet 1.

E. STOCK.

WHEEL PLOW.

No. 482,816. Patented Sept. 20, 1892.



Witnesses

J. C. Severance.

Arthur Aughinbaugh.

Inventor

Ephraim Stock

by

McLean, Nichols & Dorsey

his Attorneys

(No Model.) 2 Sheets—Sheet 2.

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FIG. 2.

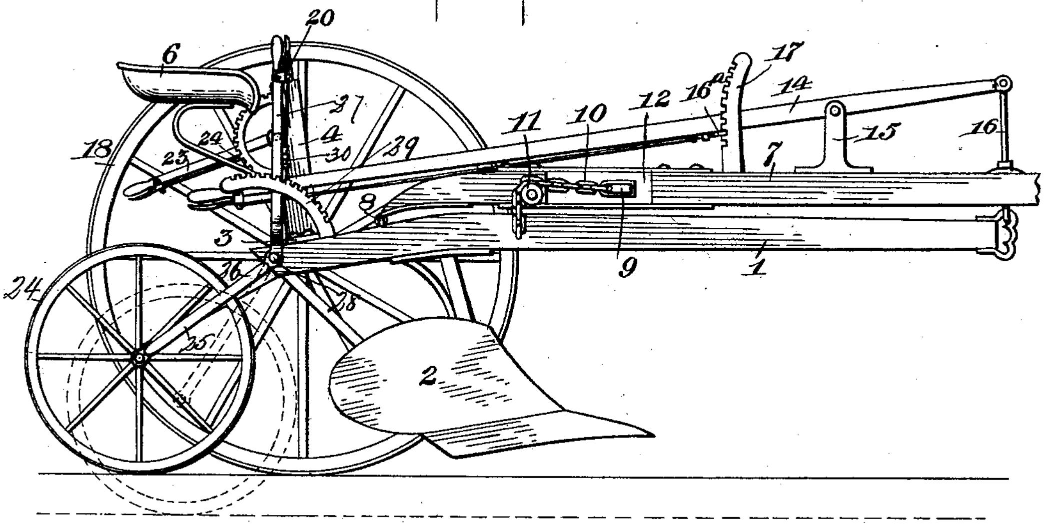
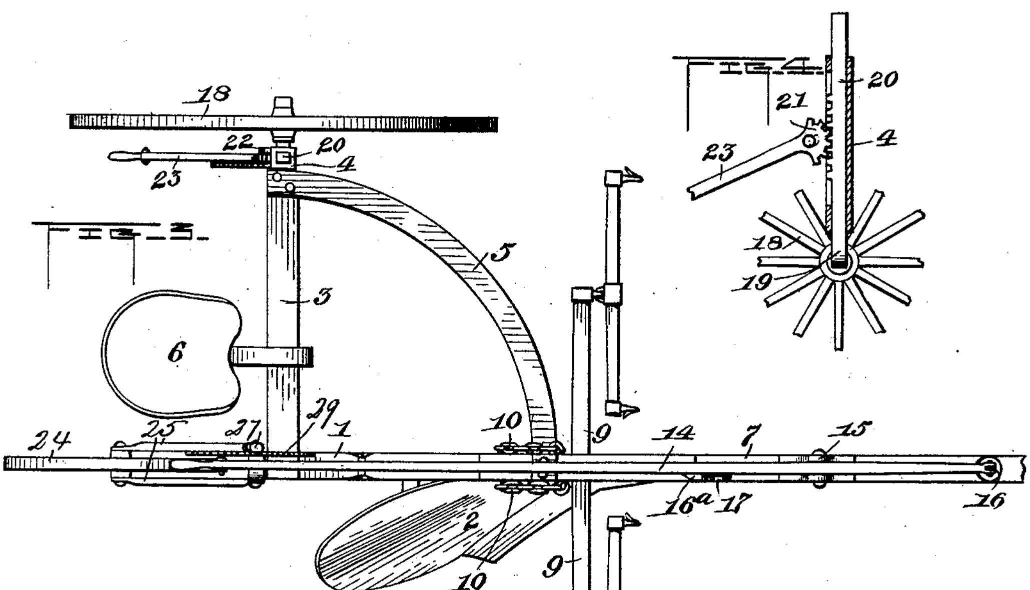


FIG. 3. FIG. 4.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EPHRAIM STOCK, OF HAINS FORKS, WYOMING.

WHEEL-PLOW.

SPECIFICATION forming part of Letters Patent No. 482,816, dated September 20, 1892.

Application filed February 16, 1892. Serial No. 421,727. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM STOCK, a citizen of the United States, residing at Hains Forks, in the county of Uinta and State of Wyoming, have invented certain new and useful Improvements in Wheeled Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in wheeled plows whereby the plowshare, if desired, may be raised by the tractive force exerted in drawing the plow and retained in such raised position; and for these purposes it consists in the construction, combination, and arrangement of the parts of which it is composed, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, in which similar parts are designated by similar letters, Figure 1 is a perspective view of the plow as it appears when ready for use. Fig. 2 is a side view thereof, showing the plowshare raised and also showing in dotted lines the position of the rear wheel when it is depressed for the purpose of raising the plow. Fig. 3 is a plan view of the plow. Fig. 4 is a detail of the standard of the frame and parts adjacent thereto.

The plow-beam 1 has the plowshare 2, of any approved construction, hung therefrom, while the beam is secured at about the center of the plowshare to one end of a cross-piece 3, the opposite end of which is bent upward, forming a standard 4, I by preference making the cross-piece 3 and standard 4 of metal. A curved horizontal brace 5 has its opposite ends secured to the bent end of the cross-piece 3 and the plow-beam in front of the plowshare, while a seat 6 is carried upon the central part of the cross-piece. The rear end of the tongue 7 is pivoted or hinged to the upper surface of the plow-beam, in front of the cross-bar, as at 8, while the front end thereof extends sufficiently forward to permit the attachment of horses, for which purpose the single and double trees 9 are provided. The trees are secured to the tongue by the flexible couplings or chains 10, one on each side of the latter, each of the said chains being secured to the plow-beam in front of the plowshare and after passing around a pulley 11 on each of the sides of the tongue has its opposite end secured to the doubletree, the center of which plays in a yoke 12, formed in the tongue. It will thus be seen that the tractive force exerted on the doubletree will tend to pull the chains 10, and thus lift the plowshare out of the ground, and to regulate and to retain the plowshare at any depth that may be desired a rod or plunger 16 passes up through the center of the tongue, the lower end of the said rod being secured to the forward end of the plow-beam, while the upper end thereof is attached to the forward end of the lever 14, which is pivoted in a standard 15, rising from the upper surface of the tongue, the rear end or handle of the lever being in a position to be operated by an operator on the seat 6, the lever being adapted to be locked in any position by the sliding dog 16^a, carried thereby, engaging the segmental rack 17, as is well known. By this construction it will be noticed the entire power of lifting the plowshare is furnished by the draft-animals and that by locking the lever 14 in in any position by the dog 16^a and rack 17 the plow-beam and share will be locked in a position corresponding thereto, the entire tractive strain being now utilized to move the plow forward.

In order to adjust a plow to a hillside, I place one 18 of the two wheels which carry the cross-bar at the projecting end of the latter and adjustably secure it thereto, whereby the wheel 18 may be raised or lowered in relation to the cross-bar, as may be needed to level the plow. This adjustability is secured by bringing the inner end of the axle 19 of the wheel upward and placing teeth upon its sides, whereby it is converted in a vertical rack-bar 20, which is contained within the hollow standard 4 and which is adapted to be engaged by a toothed segment 21, pivoted in ears 22 on the standard, the said segment being actuated by a hand-lever 23, provided with a sliding dog 24, which by engaging the rack 24 is adapted to hold the rack-bar 20 and wheel 18, carried thereby, in any position in which they may be placed by the operation of the lever 23.

As it is desirable to lift the plowshare from off the ground, I place the second wheel 24 of

the plow behind the plow-beam and pivot it in the rear end of the forks 25 of the angled frame 26, the upper member of which frame forms a lever 27. The frame is pivoted at its elbow 28 to the cross-bar 3 in the rear of the plowshare, and it will thus be seen that by drawing the lever 27 backward the forks 25 will be made to assume a more or less vertical position, thus raising the cross-bar, and with it the plowshare. In order to retain the lever 27 in this position, a rack 29 is secured to the cross-bar, which is adapted to be engaged by a sliding dog 30, of the usual construction, and it will thus be seen that by altering the position of the lever 27 the plowshare may be raised from or lowered to the ground, as may be desired by the operator.

Having thus described my invention, what I claim as my invention is—

1. The combination, with a plow-beam carrying a plowshare, of a tongue having a bearing thereon pivoted to the said beam and a flexible coupling connected to the said beam and passing over the said bearing on the tongue, to which coupling draft strains may be applied, as described.

2. The combination, with a plow-beam carrying a plowshare, of a tongue having a bearing thereon pivoted to the said beam, a flexible coupling connected to the said beam and passing over the said bearing on the tongue, to which coupling draft strains may be applied, and means whereby the said plow-beam and tongue may be locked in any desired position, as described.

3. The combination, with a plow-beam carrying a plowshare, of a tongue having a bearing thereon pivoted to the said beam, a flexible coupling connected to the said beam and passing over the said bearing on the tongue, to which coupling draft strains may be applied, a cross-bar having its one end secured to the tongue and its opposite end bent upwardly, a rack-bar contained in the said upwardly-bent end of the cross-bar, a wheel carried on the lower end of the said cross-bar, a segmental rack engaging the said rack-bar, means for locking the said rack in any desired position, an L-frame pivoted in the rear of the said cross-bar, one arm thereof being bifurcated and the opposite arm being provided with a suitable lock, and a wheel mounted within the bifurcated arm of the said frame, as described.

In testimony whereof I affix my signature in presence of two witnesses.

EPHRAIM STOCK.

Witnesses:

HYRUM NELSON,

SUSANNA STOCK.