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PATENTED MAR. 20, 1906.

L. E. LANDIS & W. S. MYERS.

PLOW ATTACHMENT.

APPLICATION FILED AUG. 24, 1905.

2 SHEETS—SHEET 1.

Fig. 3.

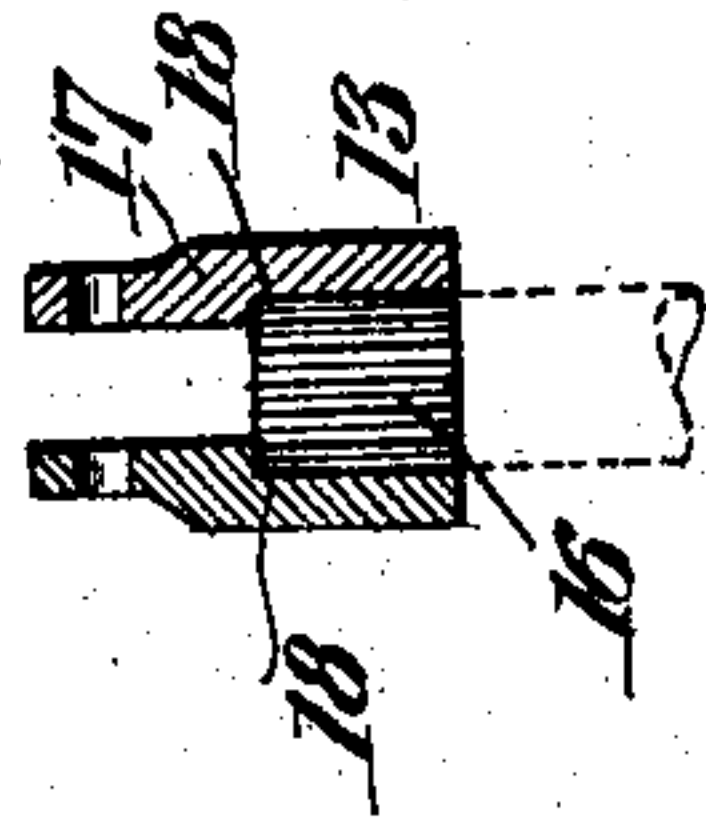
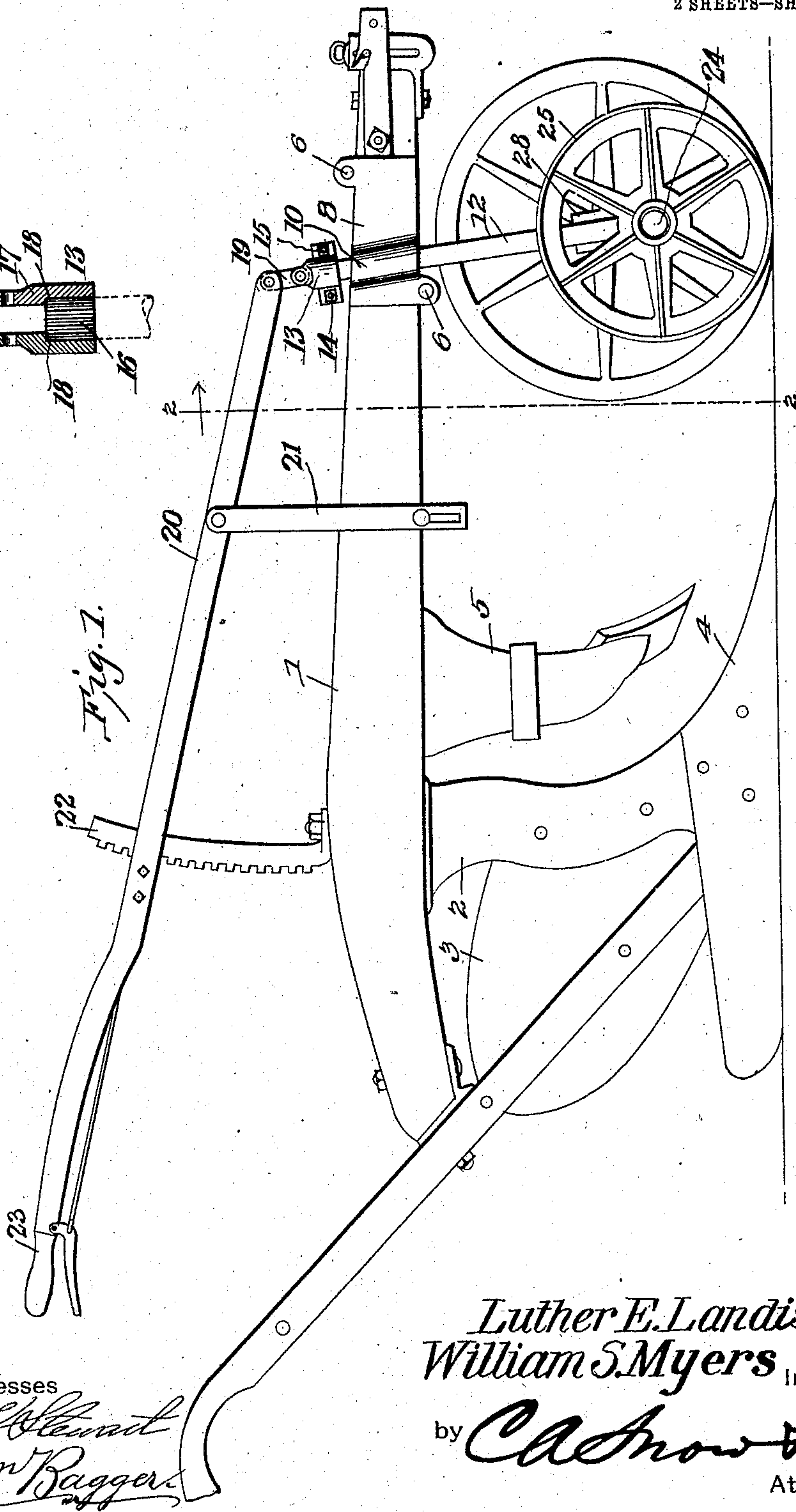


Fig. 1.



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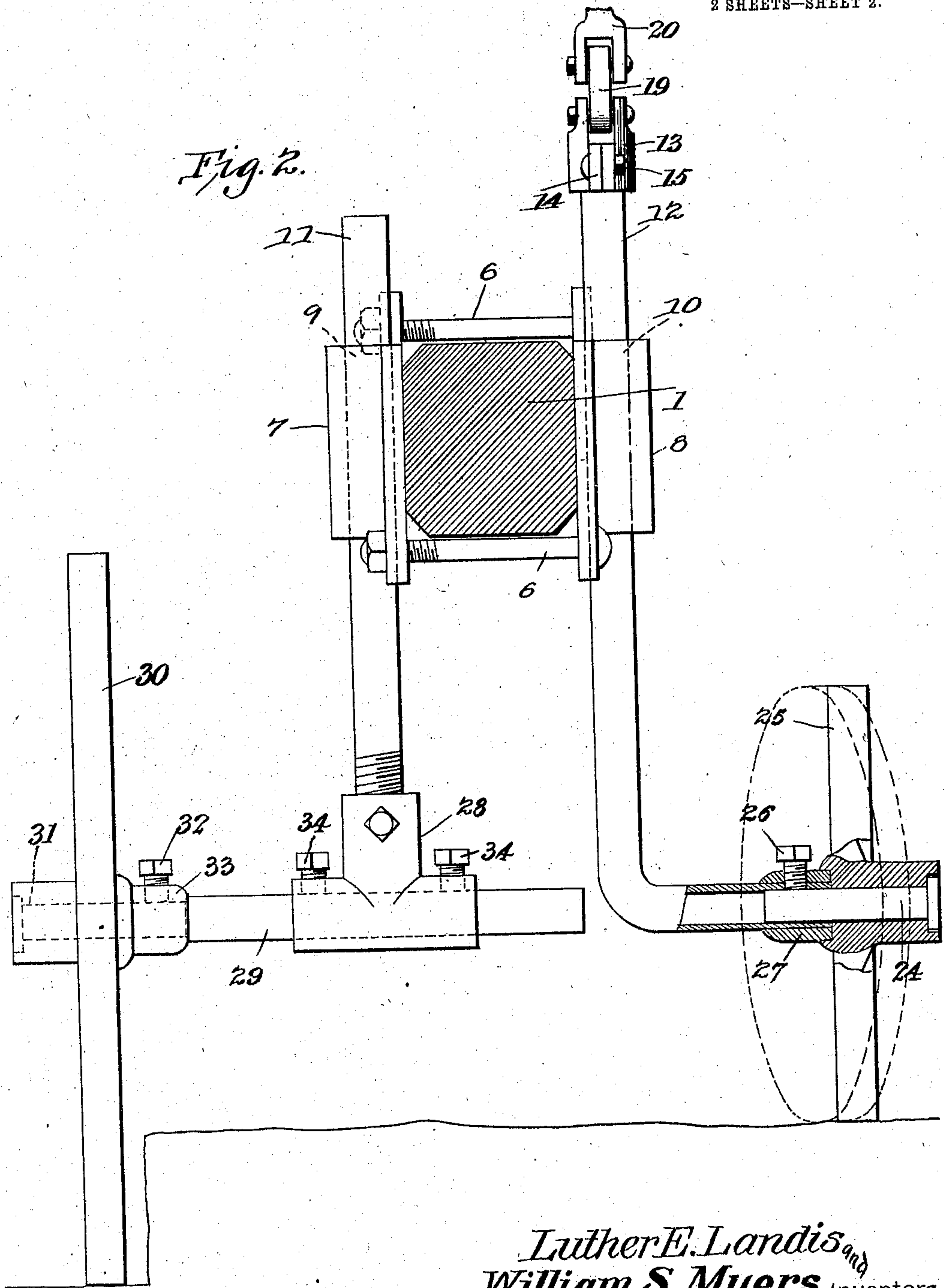
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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PLOW ATTACHMENT.

No. 815,441.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed August 24, 1905. Serial No. 275,621.

To all whom it may concern:

Be it known that we, LUTHER E. LANDIS and WILLIAM S. MYERS, citizens of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a new and useful Plow Attachment, of which the following is a specification.

This invention relates to plow attachments; and it has among its objects to present an attachment of simple and inexpensive construction whereby the plow may be guided, whereby the plow may be gaged to enter into the ground to various depths, which shall be useful in correcting any tendency to side draft, and which shall also be useful in assisting the turning of the plow at the ends of the furrows.

Further objects of the invention are to simplify and improve the construction and operation of this class of devices.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a side elevation of a plow equipped with the improved attachment. Fig. 2 is a transverse sectional view, enlarged, taken on the plane indicated by the line 2 2 in Fig. 1. Fig. 3 is a sectional detail view.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

In the drawings the invention has been shown as applied to a plow of ordinary construction, including the beam 1, standard 2, carrying the moldboard 3 and landside 4, and a colter 5, preceding the standard. It is to be understood that the invention is not by any means confined to this type of a plow, but that it may be applied to almost any modern turning-plow.

Upon the sides of the beam, near the front end of the latter, are secured, by means of transverse clamping-bolts 6, a pair of plates 7 and 8, having boxes or bearings 9 and 10 for a pair of shafts 11 and 12, both of which are slightly inclined in a downward and forward direction and normally slidable as well as rotatable in their bearings. Upon the upper

end of the shaft 12 is fitted a clamping device which includes a pair of side members or half-boxes 13, each provided with laterally-extending ears 14, perforated for the passage of connecting and tightening bolts 15, whereby said half-boxes, which are provided with interior longitudinal serrations or corrugations 16, may be clamped securely upon the upper end of the shaft 12. The half-boxes 13 are provided at their upper ends with cap-pieces or lugs 17, the inner portions of which extend to form stops 18, adapted to rest upon the upper extremity of the shaft 12. Between the lugs 17 is pivoted a link 19, the upper end of which is pivoted in the bifurcated front end of a lever 20, which is fulcrumed upon an upright 21, rising from the beam and provided with a stop member adapted to engage a rack-bar 22, whereby the lever and its related parts may be retained in adjusted position, the handle end 23 of said lever being conveniently accessible to the operator.

The lower end of the shaft 12, which is preferably constructed of steel tubing, is bent laterally in an outward direction for the reception of a headed plug 24, serving as a spindle for a small wheel 25, constituting the land-wheel or gage-wheel. The plug 24 is secured in position by means of a set-screw 26, extending through the tubular shaft 12 and through a reinforcing-sleeve 27 upon the latter.

To the lower end of the shaft 11 there is attached a T 28, the lower portion of which affords a bearing for a tubular shaft 29, upon which a furrow-wheel 30 is supported for rotation by means of a headed plug 31, which is secured by means of a set-screw 32, passing through a sleeve 33.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The land-wheel is adjustable by means of the lever 20, whereby it may be retained at various adjustments to regulate the gage of the plow or the extent to which it shall be permitted to enter into the ground. It will be observed that the shaft 12 is supported for oscillation with relation to the operating-lever 20 by means of a clamping device, which has been herein described. In other words, by loosening the clamping device the shaft 12 may be oscillated, thus causing the gage-wheel to be presented in various positions with relation to the line of draft. Thus if there should be any tendency to side draft

this may be readily corrected by twisting the land-wheel to the right or to the left, as may be required, and securing it at the desired adjustment by tightening the clamping device upon the shaft 12, whereby said shaft is connected with the operating-lever.

The shaft 11, carrying the furrow-wheel, plays freely in its box or bearing, thus imparting to said wheel automatic vertical adjustment, whereby it will adapt itself to furrows of various depths, said furrow-wheel being also laterally adjustable by moving the shaft 29 longitudinally of its bearings, where it may be secured in adjusted position, as by means of set-screws 34. The general construction of the attachment is extremely simple, and it may be easily applied to any plow of ordinary construction with satisfactory results.

The inclined boxes or bearings in which the shafts 11 and 12 are supported do not interfere with the free movement of said shafts to an objectionable or injurious extent; but they do serve to somewhat restrain or retard the movement of said shafts, so that they will not be readily displaced from their proper operative positions.

Having thus described the invention, what is claimed is—

1. In an attachment for plows, a plate having an inclined box or bearing, a shaft supported for partial rotation and for slidable movement in said bearing, means for effecting vertical adjustment of the shaft, and means for securing the latter against rotation.

2. A plow attachment including inclined

supports or bearings, shafts slidable and rotatable in said bearings, lever means for adjusting one of said shafts, means for securing the lever-adjusted shaft against rotation, a land-wheel carried by said shaft and a furrow-wheel carried by the freely-movable shaft.

3. A plow attachment including a gage-wheel, an approximately vertical supporting-shaft for said wheel adjustable in the direction of its length, a clamping member adjustable about the axis of said shaft, an adjusting-lever, and a link connection between said lever and the clamping member.

4. A gage-wheel supported for rotation, a supporting-shaft for the bearing of said wheel, a clamping device including serrated half-boxes adjustably engaging the shaft and having upwardly-extending lugs, an adjusting-lever, and a link connecting the latter with the lugs of the clamping device.

5. A box or bearing, a shaft slidable and rotatable in said bearing, a gage-wheel supported for rotation by said shaft, clamping-boxes engaging the upper end of said shaft and having lugs engaging the upper extremity of the shaft, an adjusting-lever, and a link connecting the lever with the lugs of the clamping-boxes.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

LUTHER E. LANDIS.
WILLIAM S. MYERS.

Witnesses:

C. J. ROLAND,
SARAH E. ROLAND.