

No. 816,173.

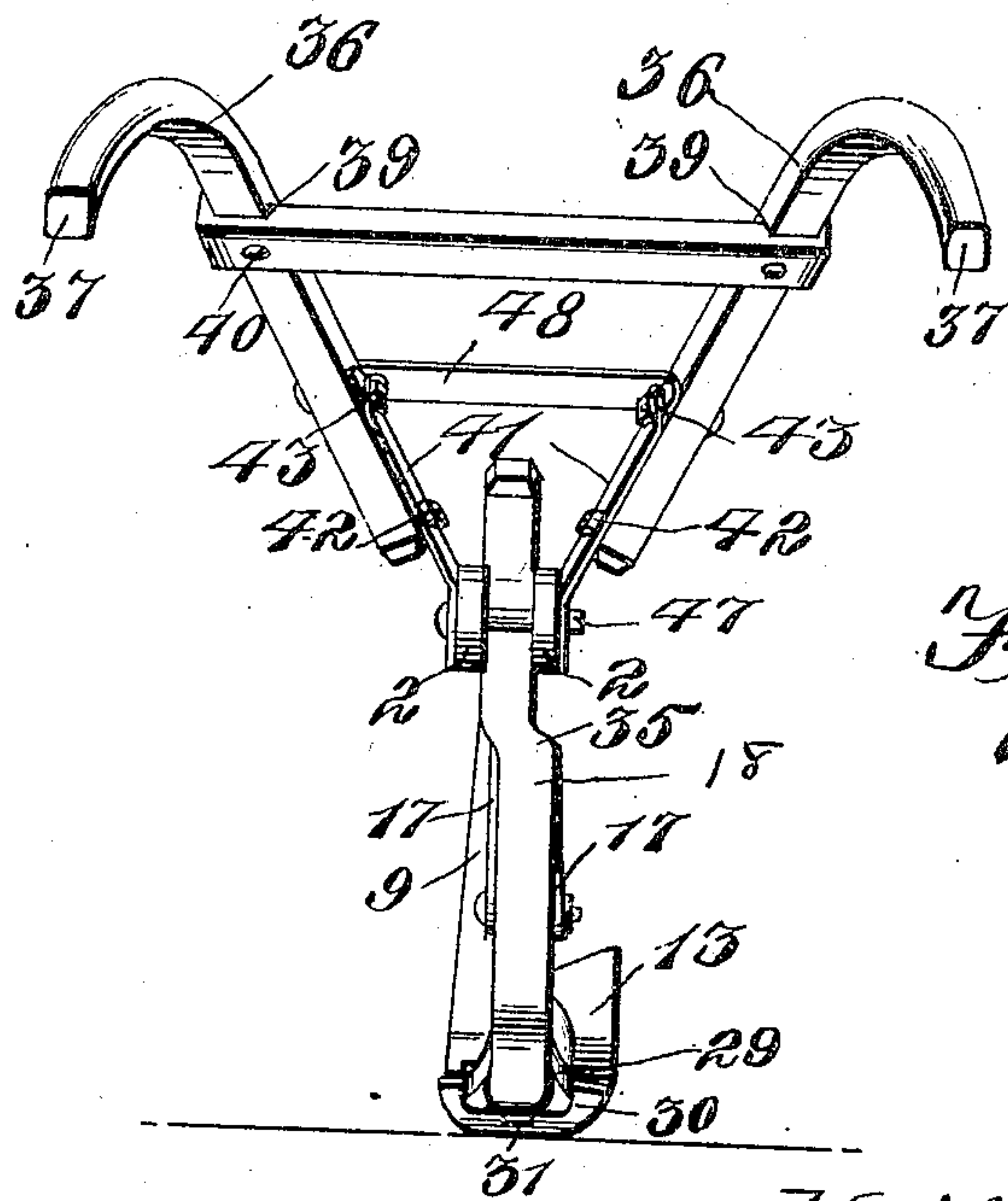
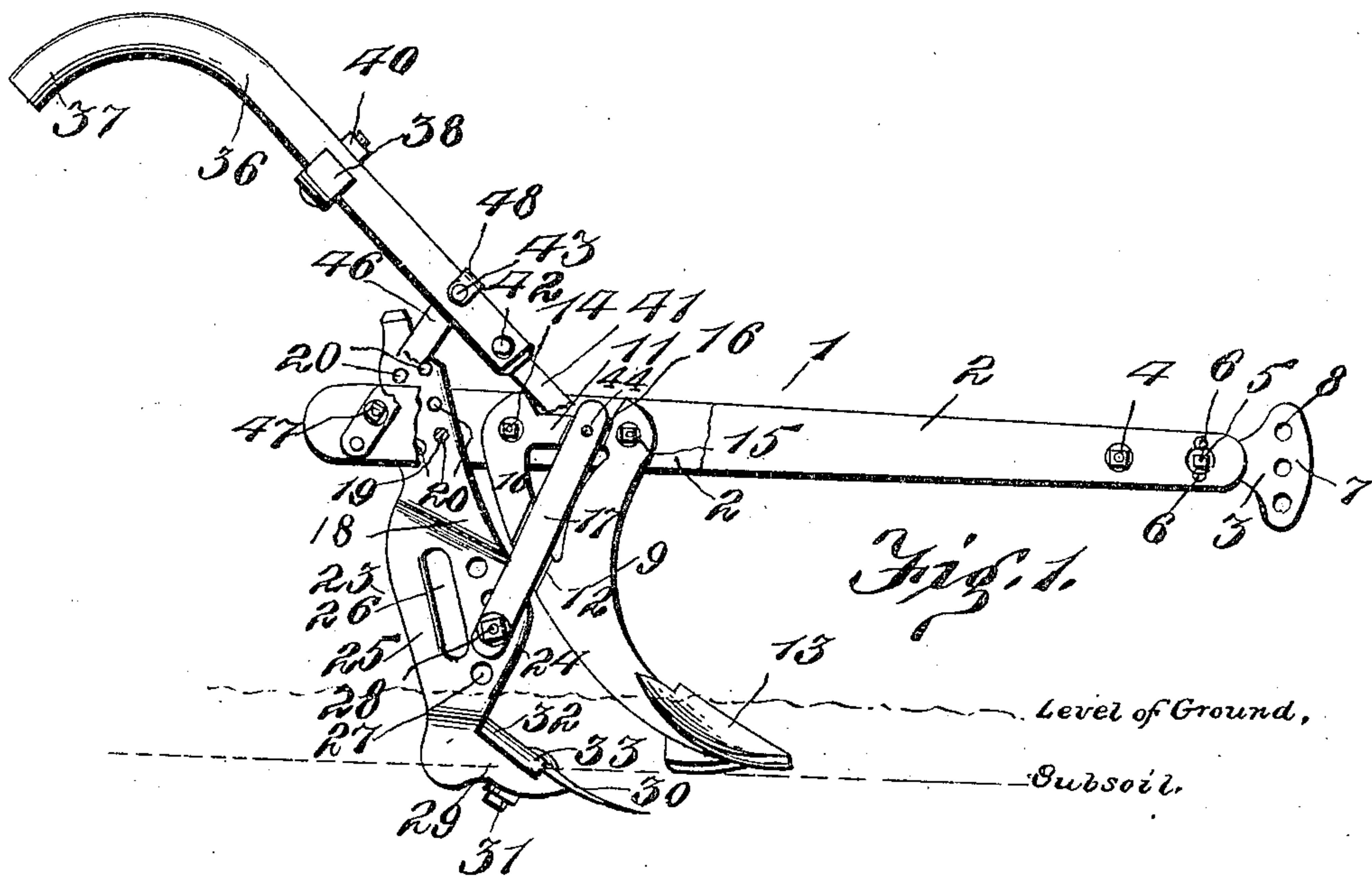
PATENTED MAR. 27, 1906.

H. MORTON.

PLOW.

APPLICATION FILED MAY 5, 1905.

2 SHEETS—SHEET 1.



Witnesses  
*J. H. Smith*  
*C. H. Griesbauer*

Inventor  
*H. Morton*  
by *H. R. Wilson*  
Attorney

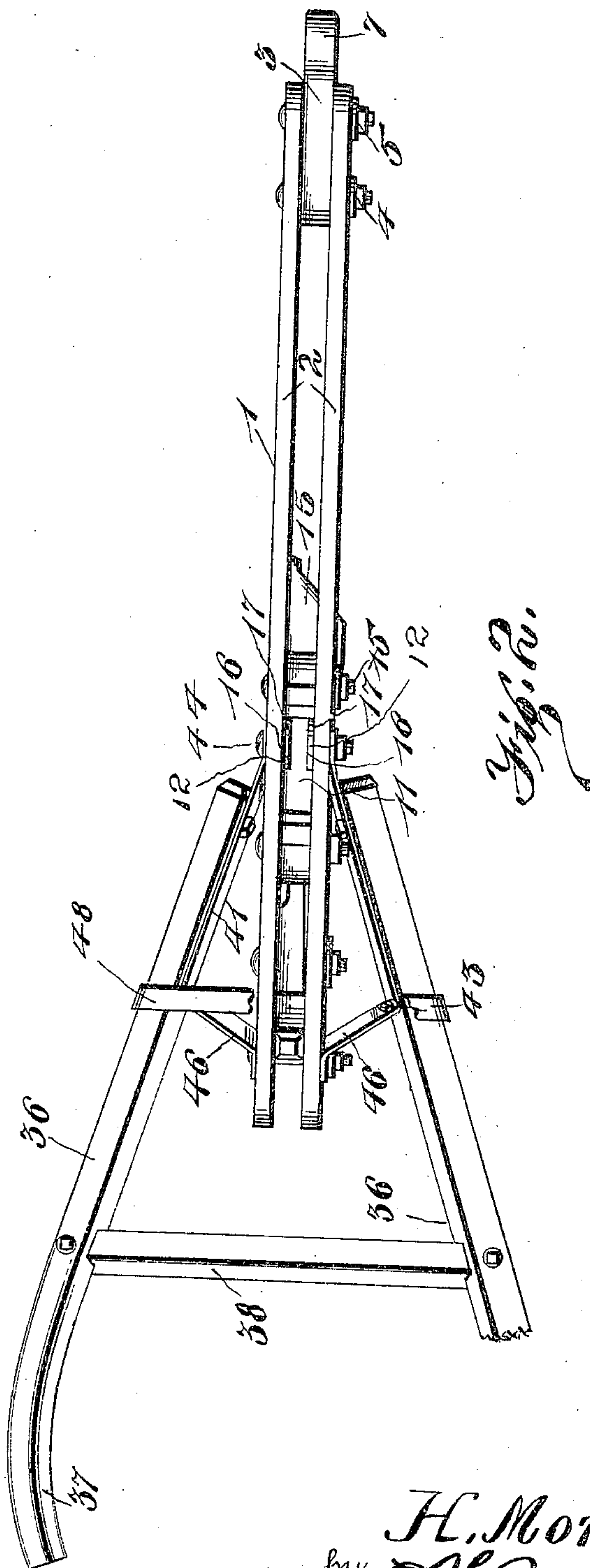
No. 816,173.

PATENTED MAR. 27, 1906.

H. MORTON.  
PLOW.

APPLICATION FILED MAY 5, 1905.

2 SHEETS—SHEET 2.



*Fig. 2.*

Witnesses  
*J. L. Smith*  
*C. H. Griesbauer*

Inventor  
*H. Morton*  
by *H. Wilson*  
Attorney



# UNITED STATES PATENT OFFICE.

HEZEKIAH MORTON, OF THOMASVILLE, NORTH CAROLINA.

## PLOW.

No. 816,173.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed May 5, 1905. Serial No. 258,939.

*To all whom it may concern:*

Be it known that I, HEZEKIAH MORTON, a citizen of the United States, residing at Thomasville, in the county of Davidson and State of North Carolina, have invented certain new and useful Improvements in Plows; and I do 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 improvements in plows; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

One object of my invention is to provide a plow which is adapted for turning surface furrows and at the same time subsoiling under said furrows without bringing the subsoil to the surface.

A further object of my invention is to provide an improved form of subsoiling attachment for a turning-plow.

A further object of my invention is to effect improvements in the construction of the subsoiling-standard and of the subsoiling blade or point.

A further object of my invention is to effect improvements in the construction of the beam and of the draft device.

A further object of my invention is to effect improvements in the construction of the handles.

A further object of my invention is to effect improvements in the construction of the cross-bar which connects the handles together.

A further object of my invention is to provide improved means for bracing the handles and for connecting them to the beam.

In the accompanying drawings, Figure 1 is a side elevation of a plow embodying my improvements with a portion of one of the side members of the beam broken away. Fig. 2 is a detail top plan view of the same, and Fig. 3 is a rear elevation of the same.

The beam 1 of my improved plow comprises a pair of flat side bars 2, spaced apart. Between the front ends thereof is secured a draft element 3 by means of bolts 4 5, the former serving as a pivotal element for the draft element and the latter serving to adjust the front end of said draft element vertically, the side bars of the beam being provided with a plurality of adjusting-openings 6 for the said bolt 5. The front end of the draft

element is formed with a head 7, having a plurality of openings 8 to enable a swingle or double tree to be connected thereto at any desired height from the ground.

Between the side bars of the beam at a suitable distance from the rear end thereof is placed the upper end of a plow-standard 9, the upper portion of which is provided on its rear side with a brace-arm 10, the same being here shown as formed integrally with the standard and as connected at a point near its upper end to the standard and at a point near the upper end of the latter by an integral web or head 11. The said standard inclines laterally, as shown in Fig. 3, and in opposite sides of the brace-arm 10 at the lower end of the said brace-arm are recesses 12. At the foot of the standard 9 is a suitable turning-share 13, which is adapted to make comparatively shallow furrows and to turn over the surface soil without cutting into the subsoil, and which share may be run at any desired or appropriate depth. Bolts 14 15, which extend, respectively, through openings in the said bars of the beam and in the upper ends of the standard 9 and brace-arm 10, serve to secure said standard, with its brace-arm, between the said side bars of the beam. In opposite sides of the web or head 11 of the standard are recesses 16 to receive the upper portions of a pair of downwardly and rearwardly inclined metal straps 17, the lower ends of which extend in rear of the standard 9, the said straps also lying in the recesses 12 in opposite sides of the standard brace-arm 10.

In rear of the standard 9 is a subsoil-standard 18, the upper portion of which extends between the side bars 2 of the beam and is secured thereto by means of a bolt 19. The said bolt may pass through any one of a plurality of openings 20 with which the said standard is provided, said openings being disposed to provide for various adjustments of the standard. The intermediate portion of the said subsoil-standard is widened, as at 23, to form a front arm 24 and a rear brace-arm 25, an opening 26 being here shown as formed between them. The arm 24 of the subsoil-standard is provided with a plurality of adjusting-openings 27. The lower ends of the metallic straps 17 bear on opposite sides of the said arm, and a bolt 28, which passes through said strap and through one of said adjusting-openings 27, serves to secure the said subsoiling-standard to the said strap and to permit of the vertical adjustment of



said standard, so that the subsoil-plow, hereinafter described, carried thereby may be caused to operate at any required depth below the turning-share.

5 The subsoil-standard is formed at its lower end with a forwardly-extending foot 29, the sides of which diverge forwardly and the upper side of which is inclined rearwardly, as shown. The comparatively flat subsoiling share or point 30 is secured on the upper inclined side of the said foot by means of a bolt 31 and has a rearwardly-extending shank 32, provided with downturned side flanges 33, which bear against opposite sides 10 of the said foot. It will be observed by reference to Fig. 3 that the subsoiling-standard is provided with a lateral offset 35, so that the said subsoil-standard is disposed in a vertical plane which is slightly to the mold side 20 of the plane in which the lower portion of the turning-share standard lies.

The handles 36 are square in cross-section, and their rear downturned portions 37 lie in the same plane as the handles. The latter 25 are connected together at a suitable distance from their rear ends by a cross-bar 38, which is provided with notches 39 on its upper side to receive the lower portions of the handles, bolts 40 being employed to secure said cross-bar and handles together. To the inner sides 30 of the handles at their front portions are secured metallic straps 41 by means of bolts 42 43. The lower front ends of said straps 41 are secured on opposite sides of the beam by means of a bolt 44, which also serves to secure the upper ends of the straps 17 between 35 the beam, side bars, and the web or head 15 of the standard 9. Braces 46 have their lower ends secured to the standard by a bolt 40 47 and their upper ends secured to the handles by the bolts 43. In connection with the handles I also employ a brace-strap 48, which lies on the upper side of the handles at a suitable distance from their front ends and 45 has its ends turned down to bear against the outer sides of the handles, the said downturned ends of the brace-strap being secured to the handles by the said bolts 43.

In the operation of my improved plow the 50 turning-share serves to furrow the surface soil to a suitable depth, and the subsoiling-plow, which runs in rear of and to a greater depth than the turning-share, serves to break up and loosen the subsoil without bringing it 55 to the surface.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation. 60

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of 65 this invention.

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

1. A beam, a plow-standard connected therewith and having opposite recesses in the 70 sides thereof, a subsoil-standard connected with the beam in rear of the plow-standard, and straps connecting the beam with the subsoil-standard and engaging the recesses in the sides of the plow-standard. 75

2. A beam consisting of spaced bars, a plow-standard secured between said bars and having an upwardly and a rearwardly inclined brace provided with recesses in the 80 sides thereof and a web connecting said brace with the standard proper, a subsoil-standard connected with the beam in rear of the plow-standard, and braces connecting the beam with the subsoil-standard and engaging the 85 recesses in the inclined brace of the plow-standard.

3. A plow having a beam comprising a pair of spaced side bars, a standard having its upper end secured between said side bars and provided on its rear side with an upwardly- 90 extending brace-arm, the upper end of which is also secured between said side bars, said brace-arm having recesses in opposite sides, rearwardly and downwardly extending straps lying in said recesses of said brace-arm and 95 having their upper ends secured to the beam, and a subsoil-standard having its upper portion secured to the beam and its lower portion disposed between and secured to the lower ends of said straps, substantially as described. 100

4. A plow having a beam comprising a pair of spaced side bars, a standard having its upper end secured between said side bars and provided on its rear side with an upwardly- 105 extending brace-arm, the upper end of which is also secured between said side bars, said brace-arm having recesses in opposite sides, rearwardly and downwardly extending straps lying in said recesses of said brace-arm and 110 having their upper ends secured to the beam, and a subsoil-standard having its upper portion secured to the beam and its lower portion disposed between and secured to the lower end of said straps, said subsoil-standard being 115 connected to the beam for vertical adjustment and also connected to the said straps for vertical adjustment.

5. A plow of the class described having a standard inclined laterally in one direction, and a subsoil-standard offset laterally in the 120 opposite direction and disposed in rear of the first-mentioned standard.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HEZEKIAH MORTON.

Witnesses:

S. C. GRIMES,  
J. P. LONG.