

(Model.)

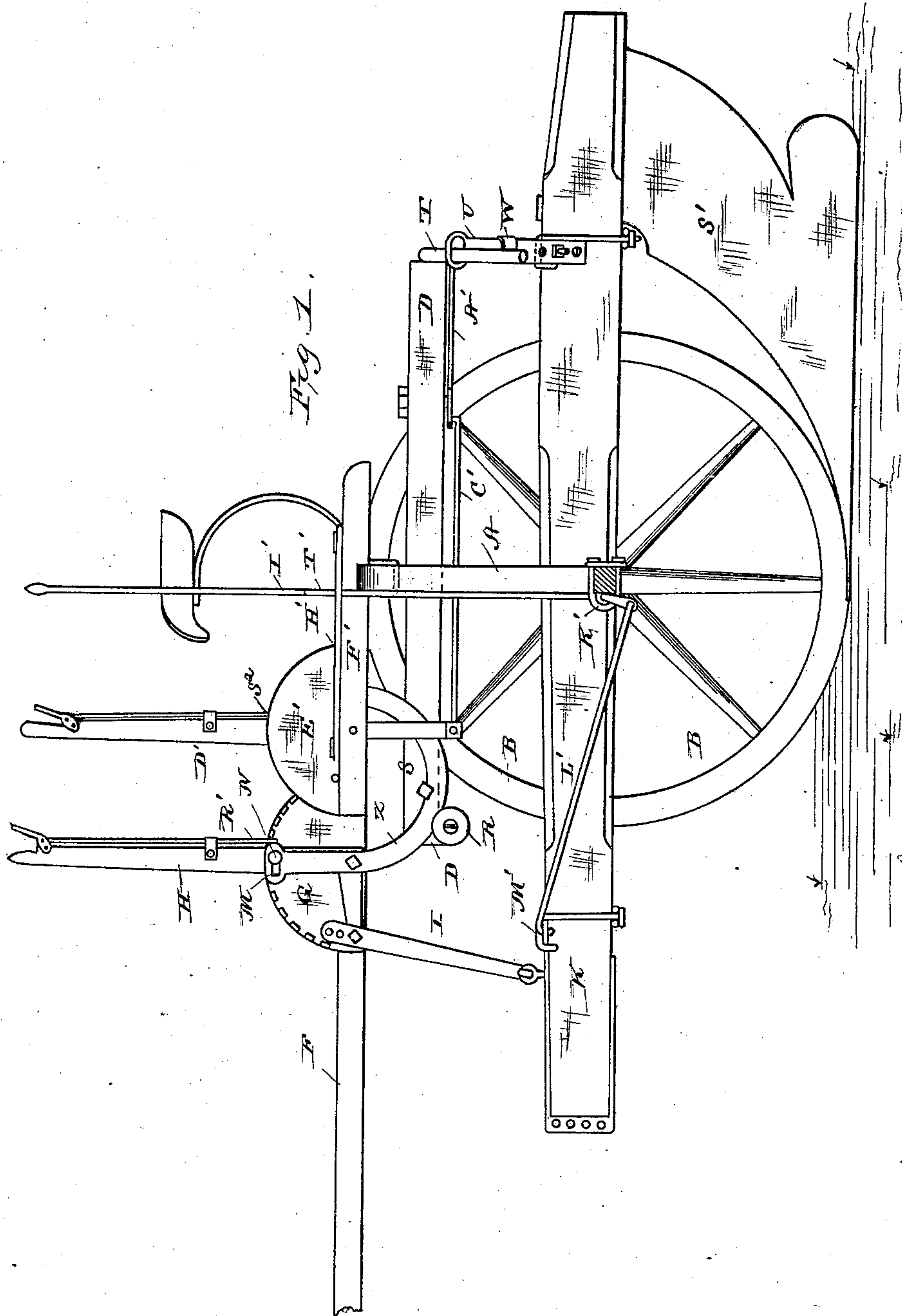
M. G. WOOD & W. C. PRATT.

3 Sheets—Sheet 1.

SULKY PLOW.

No. 256,422.

Patented Apr. 11, 1882.



Witnesses.
Edwin L. Jewell.
J. J. McCarthy

Inventor.
Myron G. Wood and W. C. Pratt
By C. M. Alexander.
Attorney

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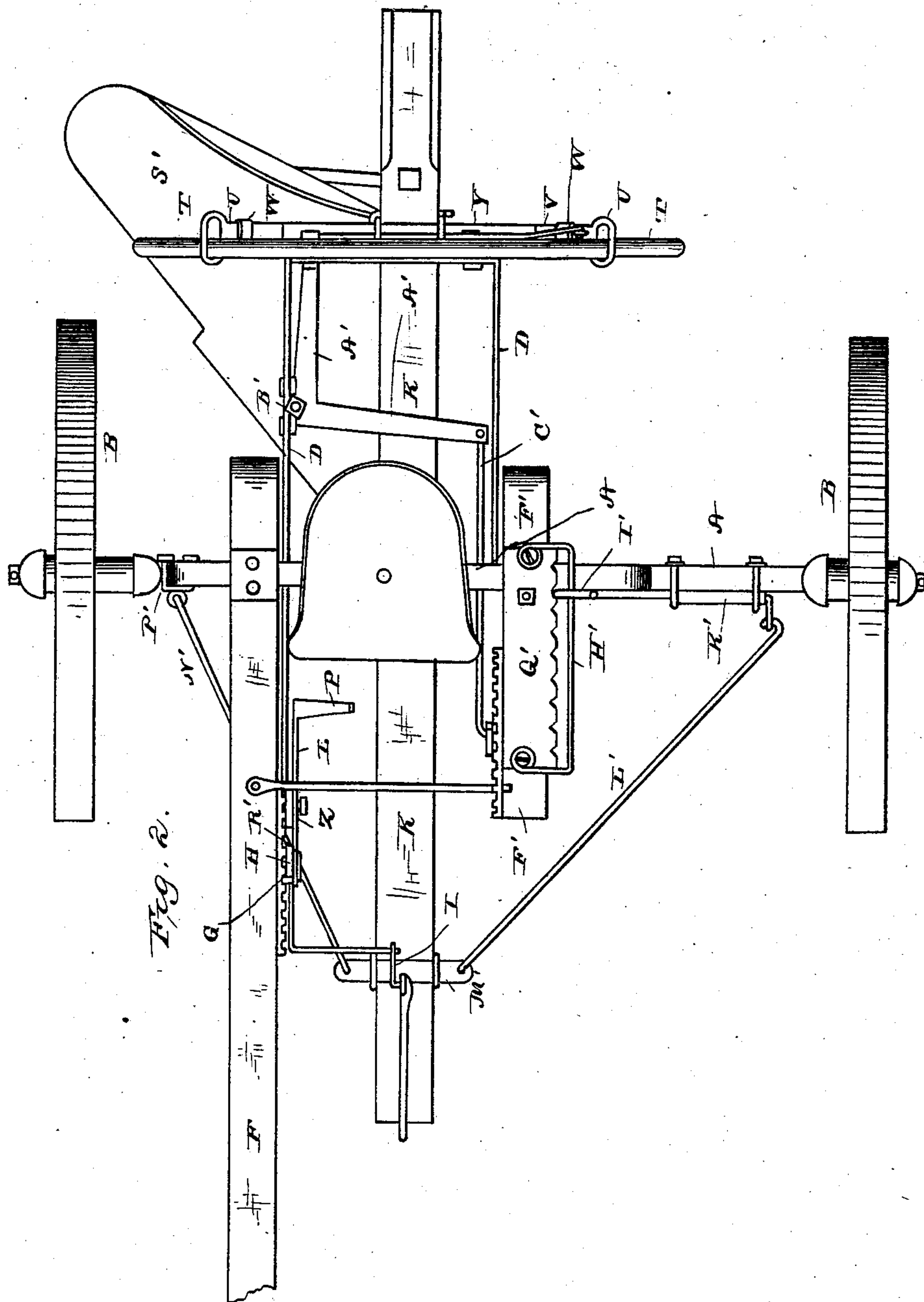
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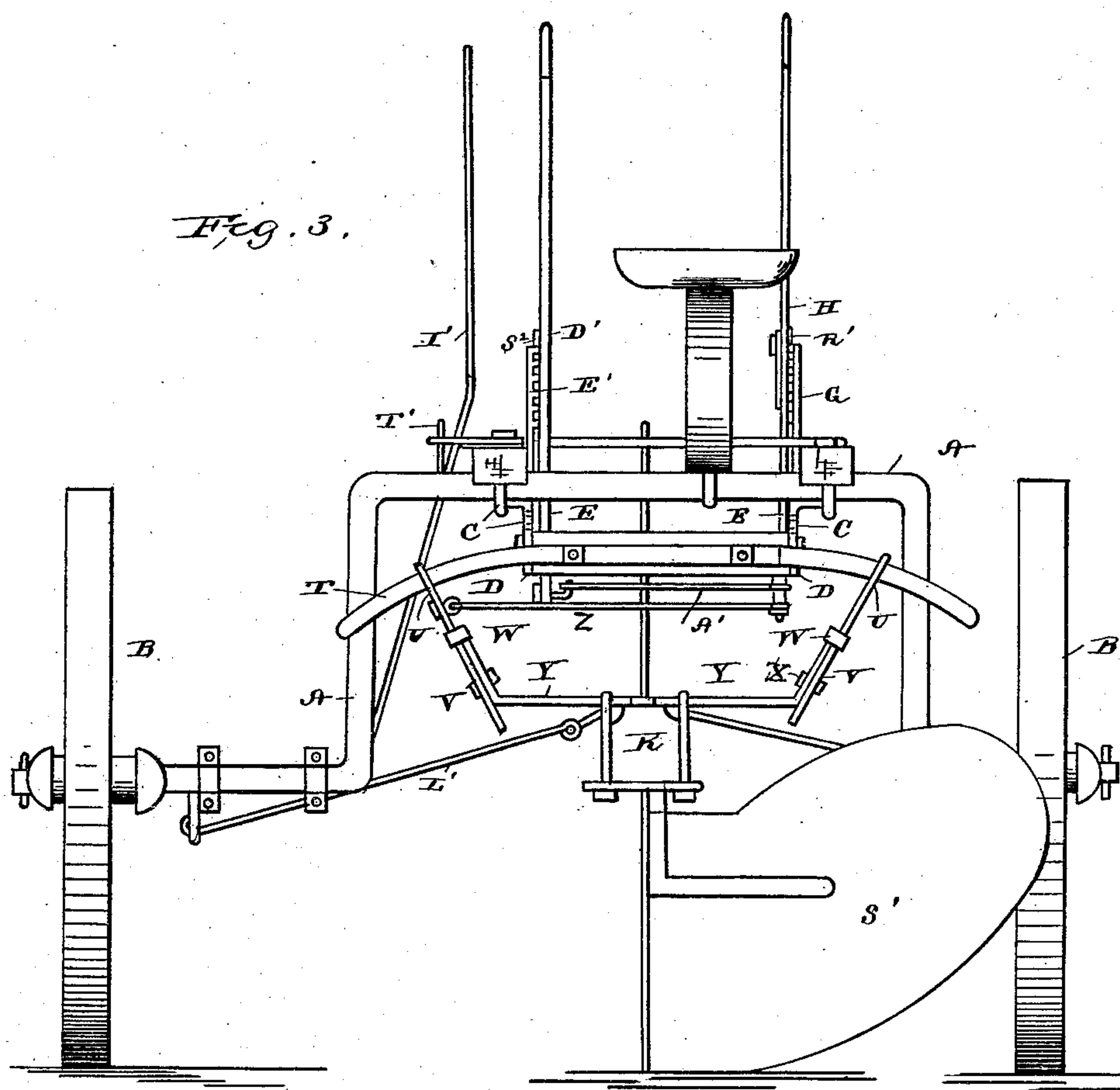
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UNITED STATES PATENT OFFICE.

MYRON G. WOOD, OF CHURCH'S CORNERS, AND WALTER C. PRATT, OF HUDSON, MICHIGAN.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 256,422, dated April 11, 1882.

Application filed March 9, 1882. (Model.)

To all whom it may concern:

Be it known that we, MYRON G. WOOD, of Church's Corners, in the county of Hillsdale, and in the State of Michigan, and WALTER C. PRATT, of Hudson, Lenawee county, Michigan, have invented certain new and useful Improvements in Sulky-Plows; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in sulky-plows; and it has for its objects to provide improved mechanism whereby the plow may be inserted in or withdrawn from the ground, the width of the furrow varied within certain limits at will, and the plow "winged" by the driver with ease and convenience without leaving his seat, as more fully hereinafter specified. These objects we attain by the apparatus and mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of the improved sulky-plow; Fig. 2, a top view of the same, and Fig. 3 a rear view of the plow.

The letter A indicates a bent metallic axle, upon which are mounted the wheels B, one end of the axle being higher than the other to permit one wheel to run upon the surface of the field, while the other travels in the furrow which it is forming. The upper horizontal portion of the bent axle is provided with hangers C, between which is pivoted a frame, D, by means of a transverse bolt provided with nuts at the end. The hangers are each provided with two or more apertures or bearings, E, by means of which the bolt may be adjusted vertically to vary the height of the frame, as may be required.

The letter F indicates the tongue or pole of the plow, which is rigidly attached to the upper horizontal portion of the axle at one side. To this tongue, in front of the driver's seat, is bolted a ratcheted segment, G, and pivoted an angle-lever, H, which is provided at its upper end with a suitable handle, so located as to be under convenient control of the driver. The lower end of said lever is loosely connected

with a link, I, hooked at its lower end to the forward end of the plow-beam K. To the fulcrum-pin of the angle-lever H is also pivoted a curved lever, L, which is provided with a horizontal slotted head, M, adapted to play upon a bolt, N, passing through the slot and secured to the lever H. The lower end of the said curved lever is provided with a stirrup, P, by means of which it can be operated by the foot of the driver, and the curved portion extends and is adapted to play between a friction-roller, R, and a pin, S, secured to a short hanger on the frame D, for the purpose more fully hereinafter described. The rear portion of the frame D has secured to it a segment, T, upon the ends of which are secured and adapted to play the loops U on the upper ends of the links V, which are adjustably secured by means of the guides W and bolts X to the oblique arms of a transverse bar, Y, securely fastened to the rear of the plow-beam, by means of which the plow-beam is suspended from the rear of the frame D.

To one of the links V is loosely attached one end of a link, Z. The other end is pivoted to one end of an angle-lever, A', fulcrumed at B' to the frame D. The other end of said angle-lever has loosely connected to it the rear end of a rod, C', the forward end of which is pivoted to the lower end of a lever, D', fulcrumed to a ratcheted segment, E', securely attached to a short beam, F', rigidly secured to the upper horizontal portion of the bent axle. The said beam is also provided with a ratchet-plate, G', and guard H', between which is adapted to play the upper end of an angle-lever, I', which is fulcrumed in a bearing, K', secured to the lower horizontal portion of the bent axle at one end. The lower end of said lever has loosely attached to it one end of a rod, L', which is connected to a plate, M', secured to the forward end of the plow-beam. The opposite end of said plate is secured to a brace-rod, N', which connects with the axle at P'. The levers H and D' are provided with detents R' S', adapted to engage and be held by the respective ratchets before mentioned. The lever I' is adapted to engage the teeth of the ratchet-plate, being pressed against the edge of the same by means

of a spring, T', bearing against the guard before mentioned.

The various rigid parts of our improved plow may be secured together by means of suitable clips and bolts, or in any other convenient manner.

The operation of our invention is as follows: To elevate or depress the plow, the lever H is brought back or pressed forward by the driver. 10 The initial movement of the lever operates the forward end of the plow-beam, so as to incline the point of the plow properly to be withdrawn from or pressed into the ground, the bolt slipping in the slotted head of the curved lever, 15 permitting it to remain inactive. The final movement of the lever H carries the bent lever in the proper direction to operate the frame D positively and elevate the plow or set it into the ground, as may be required. When it is 20 desired to wing the plow the lever D' is turned forward or backward, causing the plow to incline in the desired direction. In order to regulate the width of the furrow, the lever I' is operated, moving the forward end of the plow-beam laterally, so as to present the plowshare 25 S' at a greater or less angle to the line of travel, and cause it to cut to a greater or less width.

In the above we have described the segment at the rear of the frame as having loosely supported upon it the looped links connected with 30 the rear of the plow-beam; but it is evident that the segment may be arranged to slide, and the links may be rigidly attached to it and the same object effected.

35 The play of the curved lever upon the upright lever permits a slight movement to the plow beam and share when the share meets with an obstruction, so as to prevent the shock

which would come upon the share when suddenly and violently brought against such obstruction, thus preventing the injury attendant upon such shock. 40

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is— 45

1. In combination with the bent axle and the tongue or pole of a sulky-plow having a ratcheted segment, the angle-lever fulcrumed to the segment and loosely connected to the forward part of the plow-beam, the curved lever fulcrumed to said segment and provided with a 50 slotted head adapted to play upon a bolt upon the angle-lever, and the pivoted frame D, provided with a friction-roller and pin between which the curved lever plays, substantially as 55 and for the purpose specified.

2. In combination with the frame D, pivoted to the bent axle, and the segment T at the rear thereof, the plow-beam provided with the yoke U V Y, the bell-crank, connecting-rods, 60 and the lever D' for operating the plow to wing the same, substantially as and for the purposes set forth.

3. In combination with the bent axle and plow-beam, the angle-lever I', fulcrumed to the 65 axle, the connecting-rods L' N', and the beam-clamp M', whereby the width of the furrow may be regulated, substantially as specified.

In testimony whereof we affix our signatures, in presence of two witnesses, this 4th day of 70 March, 1882.

MYRON G. WOOD.
WALTER C. PRATT.

Witnesses:

JAMES B. DICKERSON,
H. H. HILLER.