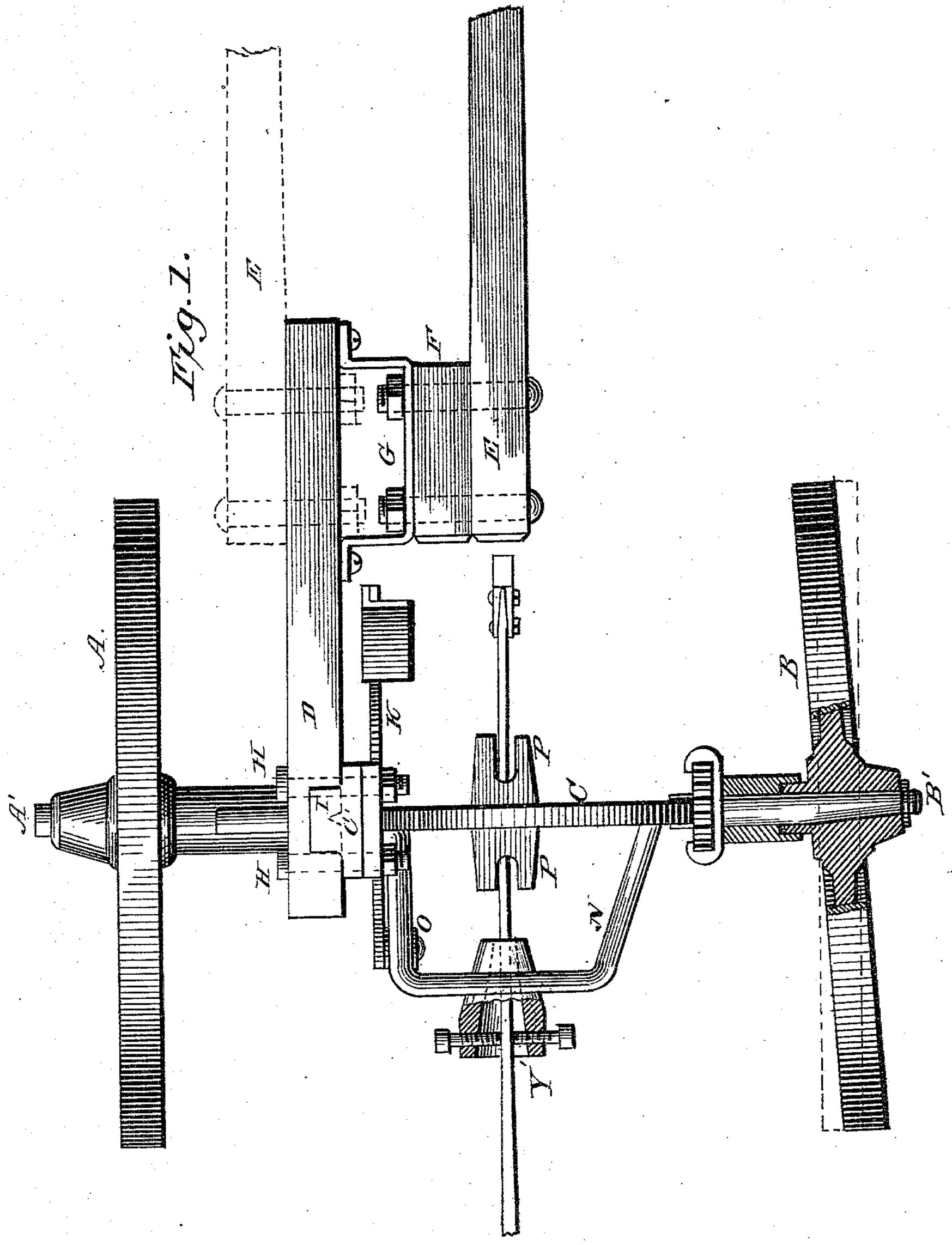
(No Model.) 4 Sheets—Sheet 1.

F. B. HUNT.

SULKY PLOW.

No. 295,175. Patented Mar. 18, 1884.

Fig. 1.



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(No Model.)

4 Sheets—Sheet 2.

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SULKY PLOW.

No. 295,175. Patented Mar. 18, 1884.

Fig. 2.

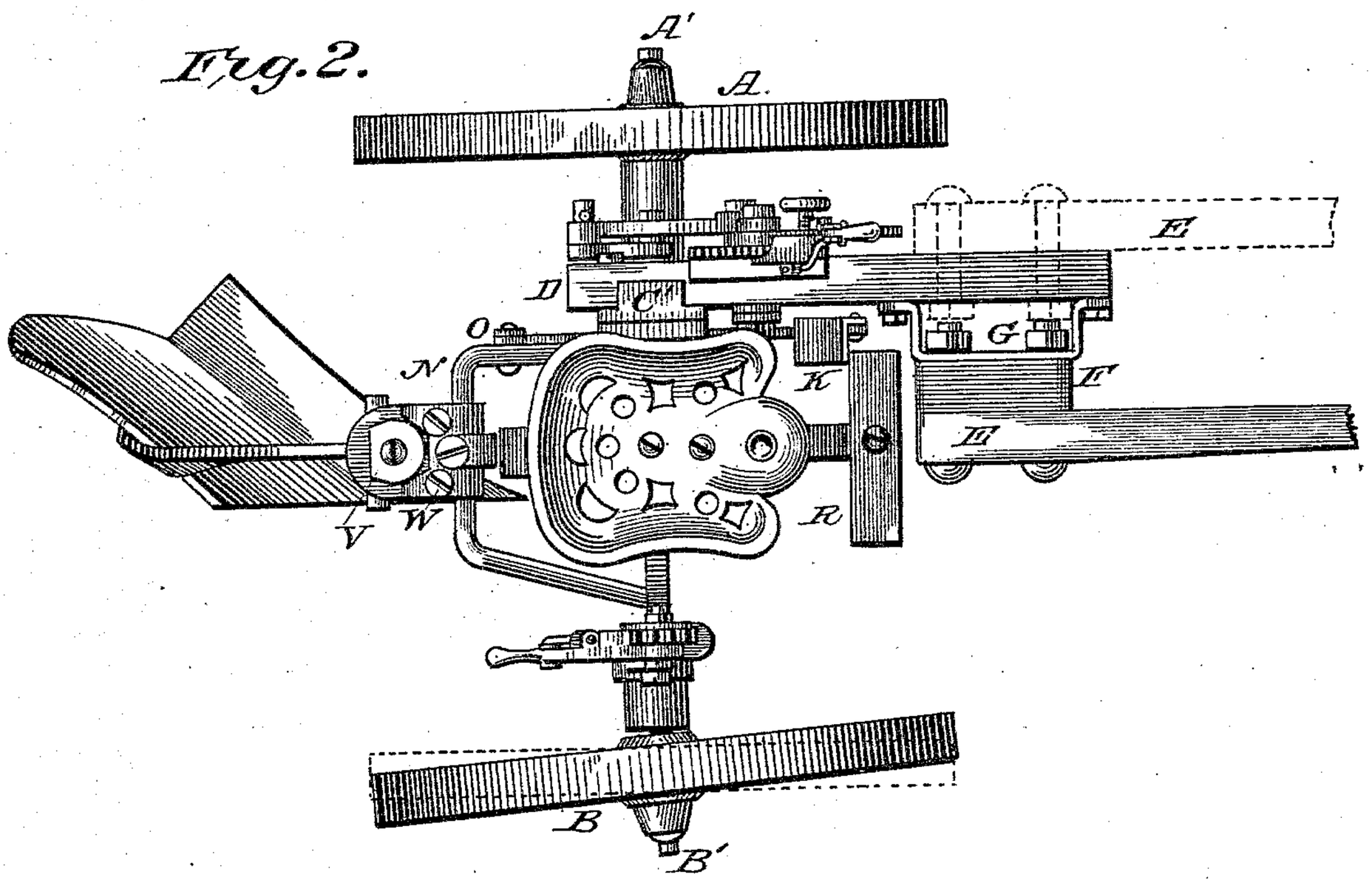
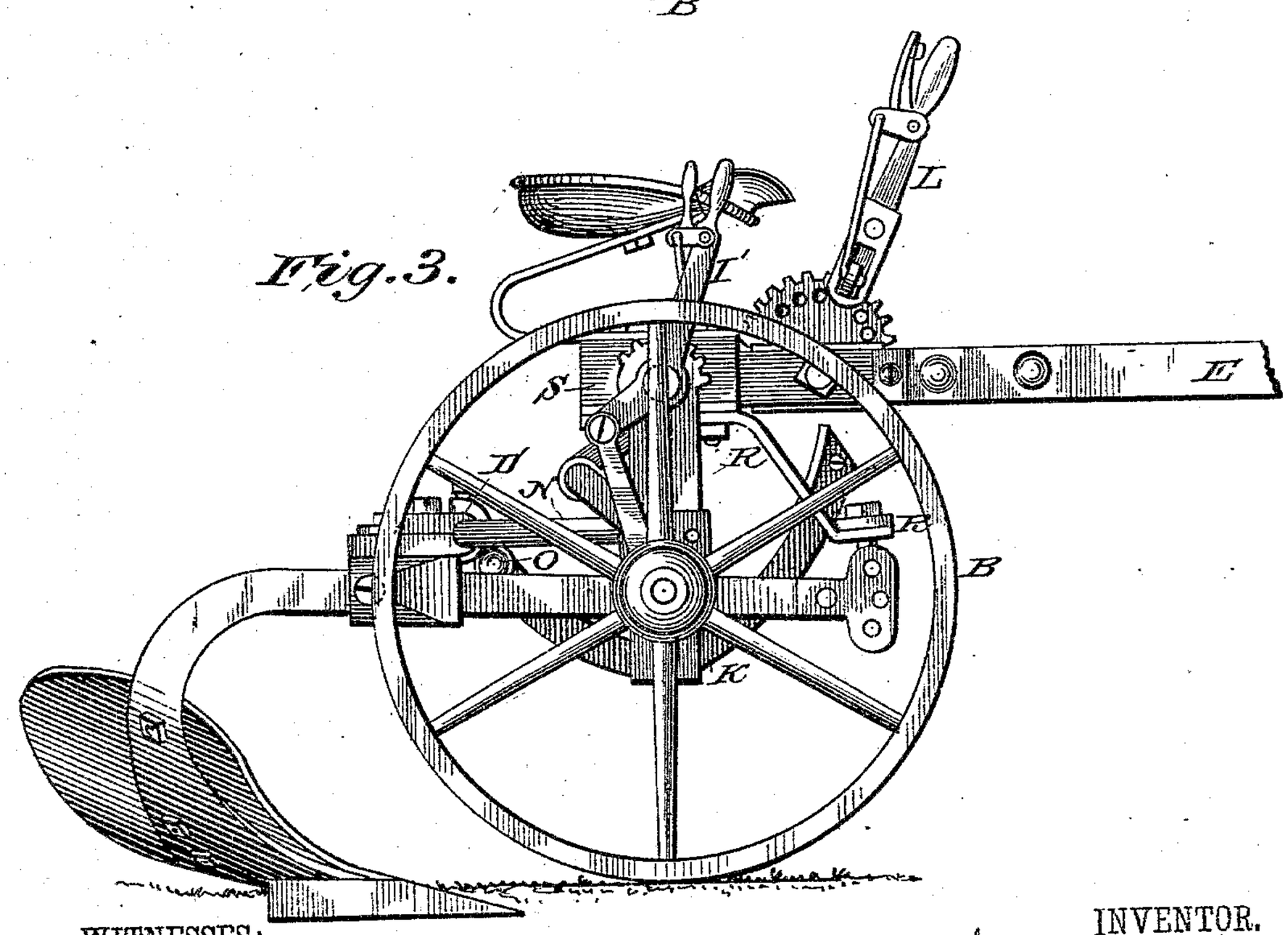


Fig. 3.



WITNESSES:

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(No Model.)

4 Sheets—Sheet 3.

F. B. HUNT.

SULKY PLOW.

No. 295,175. Patented Mar. 18, 1884.

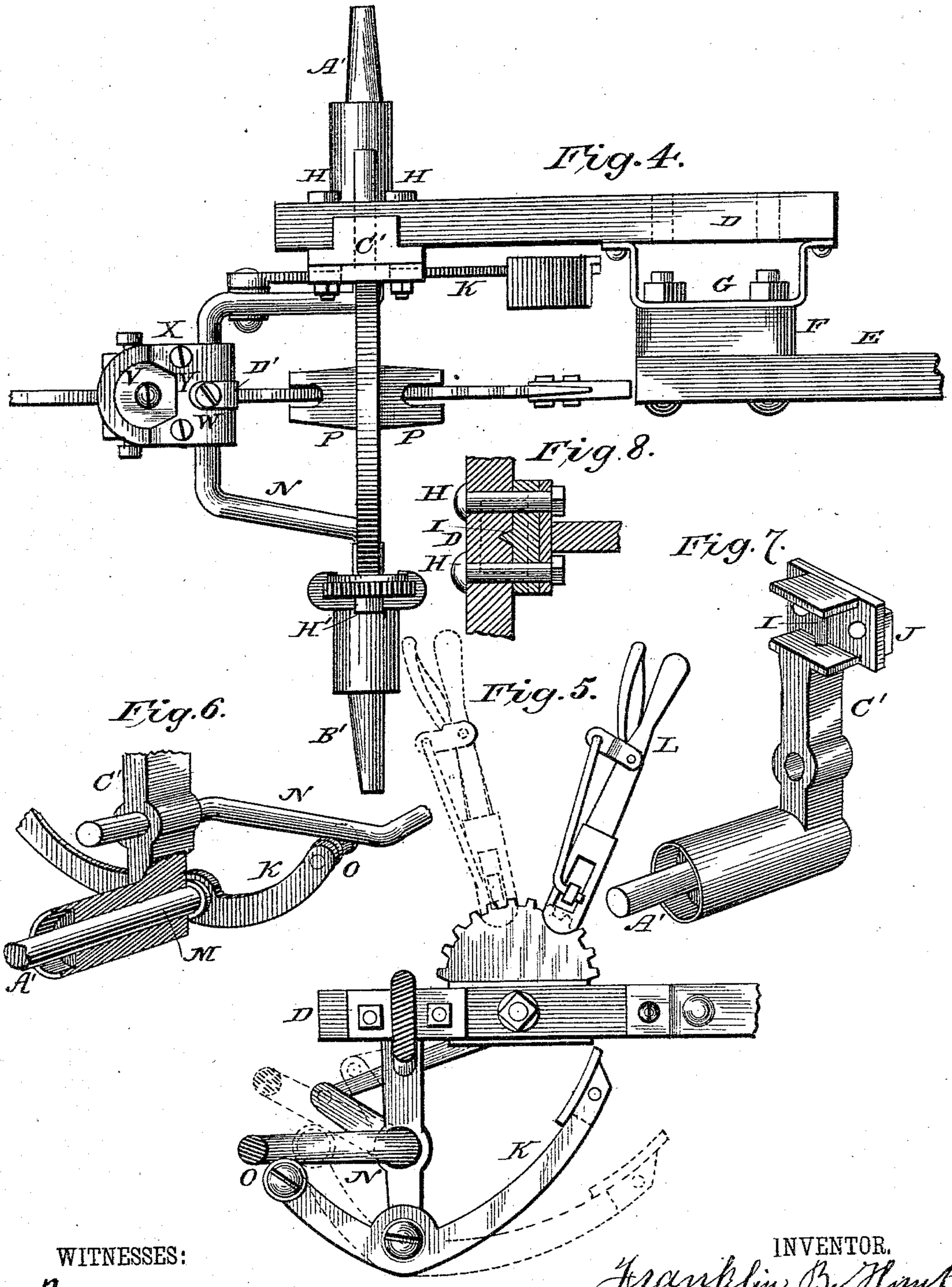

Fig. 4.

Fig. 8.

Fig. 7.

Fig. 5.

Fig. 6.

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4 Sheets—Sheet 4.

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SULKY PLOW.

No. 295,175. Patented Mar. 18, 1884.

Fig. 9.

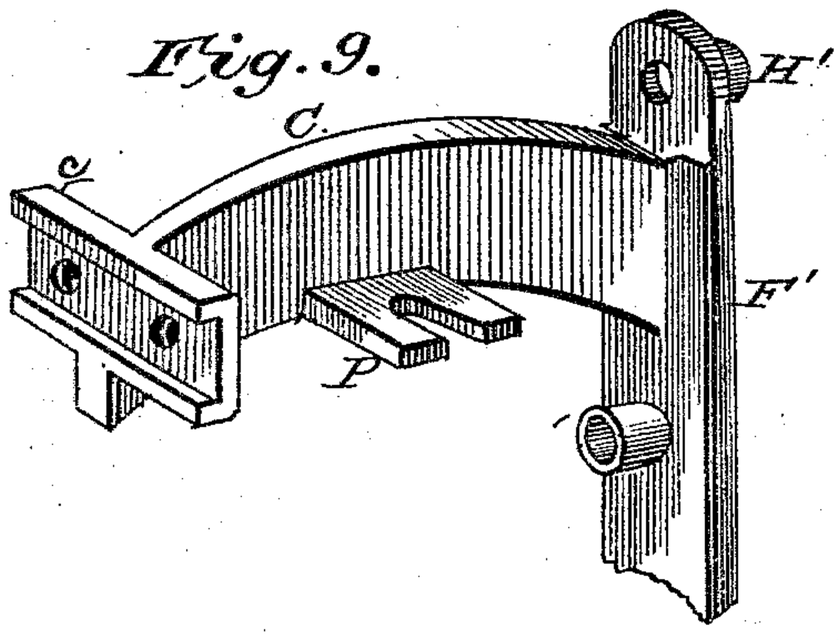


Fig. 10.

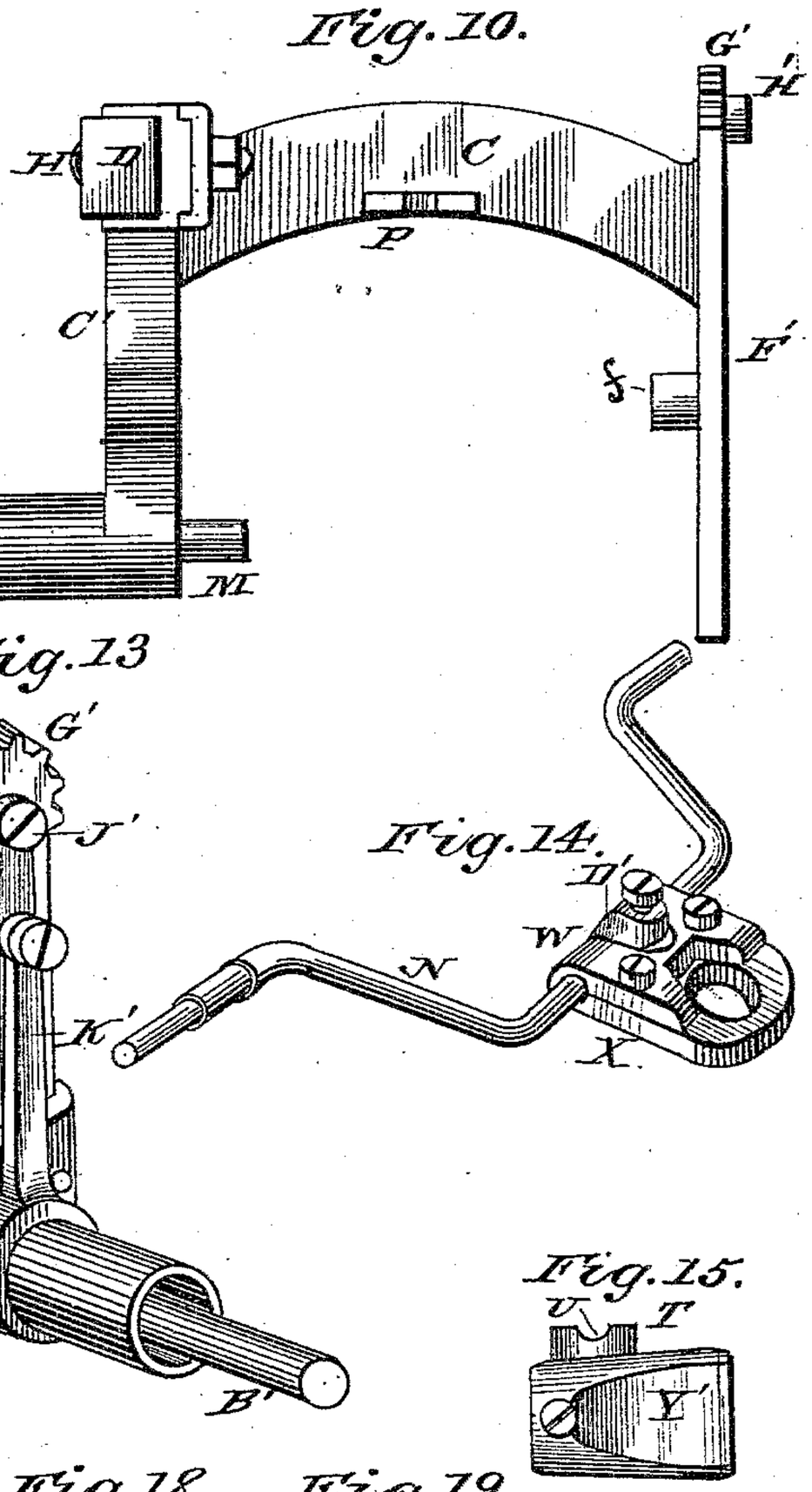


Fig. 11.

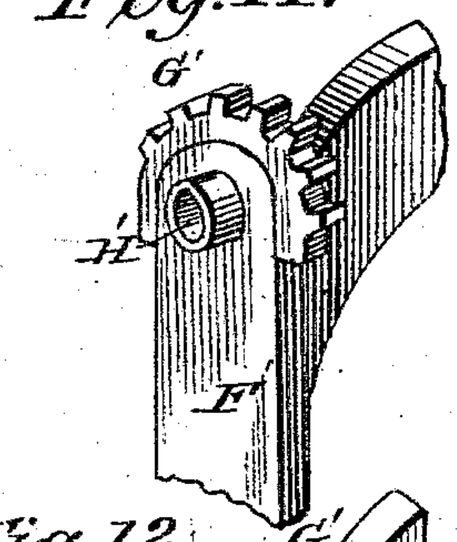


Fig. 12.

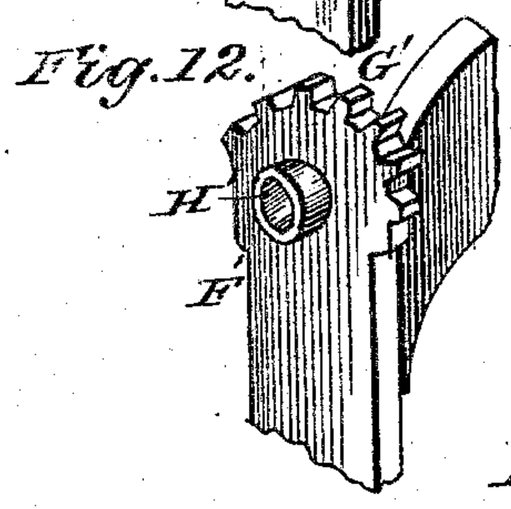


Fig. 13.

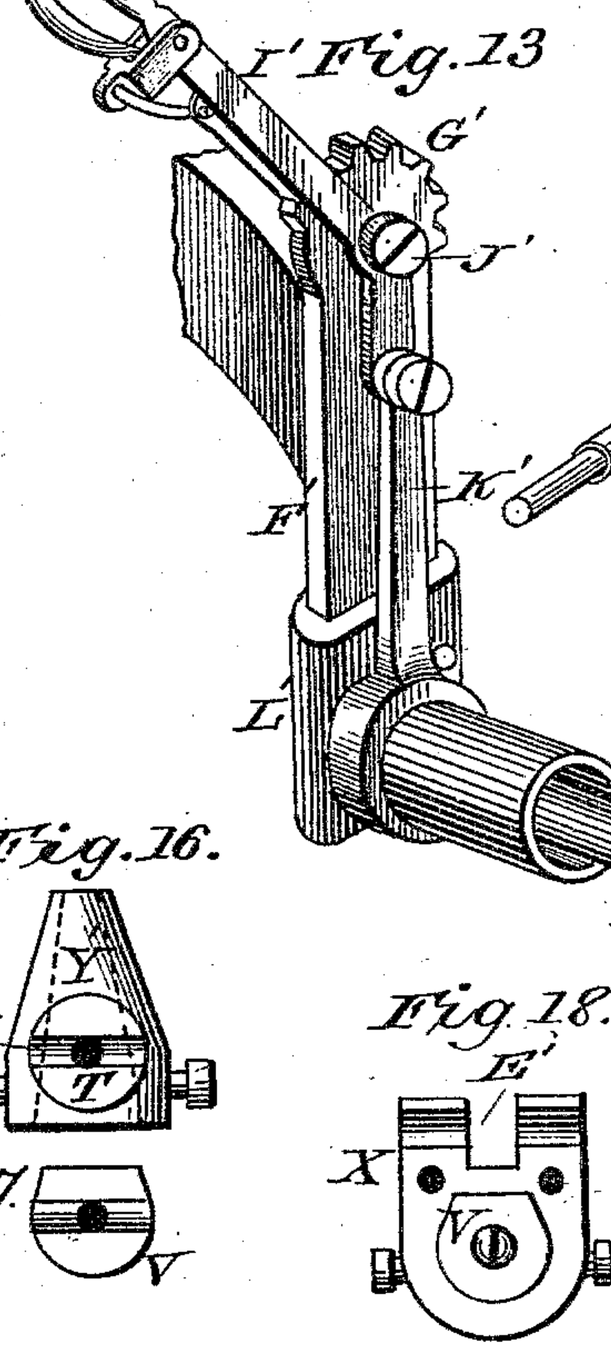


Fig. 14.

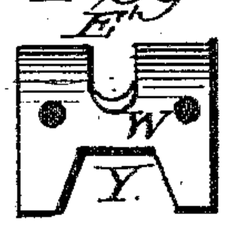
Fig. 15.

Fig. 16.

Fig. 17.

Fig. 18.

Fig. 19.



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INVENTOR.

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UNITED STATES PATENT OFFICE.

FRANKLIN B. HUNT, OF RICHMOND, INDIANA, ASSIGNOR TO THE RICHMOND SULKY PLOW COMPANY, OF SAME PLACE.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 295,175, dated March 18, 1884.

Application filed January 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN B. HUNT, of Richmond, in the county of Wayne and State of Indiana, have invented certain Improvements in Sulky-Plows, of which the following is a specification.

My invention relates to a series of improved devices in a sulky-plow, which will be hereinafter fully described, and set forth in the specification and claims.

Figure 1 is a top plan, showing the land-wheel set obliquely to the furrow, and the beam-holder partly in longitudinal horizontal section. Fig. 2 is also a top plan. Fig. 3 is a side elevation. Fig. 4 is a top plan, exhibiting the manner of pivoting the plow-beam to the crank or bail, and the land-wheel axle set forward to hold the wheel obliquely to the furrow, and also exhibiting the foot-lever arranged beneath the crank or bail. Fig. 5 is a detached view in side elevation, showing the manner of attaching the foot-lever and operating it in conjunction with the hand-lever. Fig. 6 is a detached sectional view, showing the application of the foot-lever. Fig. 7 is a perspective view, showing a part of the arch with the furrow-wheel axle attached. Fig. 8 is a detached horizontal longitudinal section, showing the manner of securing the tongue-timber and holding the two parts of the arch together. Fig. 9 is a perspective of a part of the arch. Fig. 10 is an elevation, showing Figs. 7 and 9 attached to form the arch complete. Fig. 11 is a detached perspective view, showing the manner of attaching the quadrant for the adjustment of the furrow-wheel. Fig. 12 is also a detached perspective, showing the manner of casting the quadrant as an integral part of the arch. Fig. 13 is a perspective detached view, showing the axle and slide which carries the land-wheel, together with the lifting devices and quadrant. Fig. 14 is a perspective of the crank and the pivoting devices which connect it with the plow-beam. Fig. 15 is a side elevation of the beam-holder, and Fig. 16 is a top plan of the same. Fig. 17 is a bottom plan of a cap which rests on the top of the beam-holder, to hold the pivoting device in place. Fig. 18 is a top plan of the lower half of the pivoting device as seen in Fig. 14. Fig. 19 is a top plan of the upper half of the pivoting device.

A is the furrow-wheel, B the land-wheel, A′ the furrow-wheel axle, and B′ the land-wheel axle. C and C′ form the arch. D is the tongue-timber attached to C′ of the arch. E is the tongue. F is a block attached to the tongue-timber D by means of a bracket, G. The tongue is shifted from the block F to the tongue-timber D, as shown in dotted lines, when three draft-animals are used. The tongue-timber D is held in place in C′ of the arch by means of the bolts H H. These bolts H also hold the parts C and C′ of the arch together. There is a cleat, I, Figs. 1 and 8, cast as an integral part of C′, and a corresponding gain cut in the tongue-timber D, to hold said timber firmly from slipping endwise when any strain is placed upon it. The parts C and C′ of the arch are matched together where the bolts H pass through, as seen at Fig. 10. The recess in C is plainly shown in Fig. 9, and a corresponding projection on C′ is shown at J, Fig. 7. Thus it will be seen that the bolts H perform the double purpose of holding the two parts of the arch together and holding the tongue-timber D firmly in place, as plainly shown in Fig. 10.

The foot-lever K works in conjunction with the hand-lever L, and is pivoted centrally to the inwardly-projecting end M of the furrow-wheel axle A′. The rear end of this foot-lever rests beneath the crank N, and is provided with a roller, O. The operation is plainly shown at Fig. 5. The foot being placed on the front end of lever K, it is pressed downward as the lever L is pulled backward by the hand. The land-wheel B is arranged obliquely to the furrow, as seen in Figs. 1 and 2, the front side of the spindle B′ being straight to throw the front side of the wheel inward toward the furrow. The inclination of this wheel to run toward the furrow takes much friction off the landside of the plow. The beam-holder, Figs. 15 and 16, has a wedge-shaped hole and set-screws for the oblique adjustment of the plow-beam, as may be required. There is a direct connection or combination of operation between the inwardly-inclined land-wheel and the oblique adjustment of the plow-beam

in the beam-holder to suit circumstances. This arrangement is plainly shown in Fig. 1. The integral parts P of the arch C are for the purpose of attaching the foot-rest R and the seat-spring mounted on the block S.

In my construction of sulky-plow the plow may be turned in the ground without lifting, as it is swiveled to the bail, as hereinafter described; or it may be locked firmly and lifted as desired. The plow has a short landside, as seen in Fig. 2. The beam-holder Y', Figs. 15, 16, has a lug or pivot, T, integral therewith, and this pivot is provided with a recess, U. The cap, Fig. 17, is provided with a corresponding projection to fit the recess U. The cap in the figure is inverted, but seen in place in Figs. 2 and 4. In Fig. 2 the round side of the cap V is in front and allows the plow to swing loosely in a lateral direction in order to turn in the ground without lifting the plow; but in case it is desired to lock the plow and lift it, the cap is simply reversed and the square side placed foremost, as seen in Fig. 4. The cap V is also seen in place at Fig. 18, Figs. 18 and 19 being seen in place on the bail, Fig. 14. The square end of cap V fits snugly in the recess Y of cap W, and locks the plow firmly in a lateral direction when desired, and all the change required to allow the plow to turn on the pivot T is to reverse the cap V. The manner of the oblique adjustment of the plow-beam in the beam-holder by means of a wedge-shaped hole and set-screws is fully described and claimed in my Patent No. 256,695, of April 18, 1882; also, the lever L and quadrant and accompanying devices for lifting the plow are fully described and claimed in my Patent No. 254,481, of March 7, 1882. Therefore I deem a minute description of these parts unnecessary.

The clamp D', Fig. 14, is held firmly to the bail by means of a set-screw, and works in the recess E' of the pivoting device X W, for the purpose of the parallel lateral adjustment of the plow on the bail. The vertical part F' of the arch C is provided with a quadrant, G', and hollow integral bearing H' for the lever I'. This quadrant G' may be cast separate, as shown in Fig. 11, and held in place by the same bolt that holds the lever I' in place, as seen at J', Fig. 13. The quadrant may be cast as an integral part of the vertical part F' of the arch, as shown in Figs. 12 and 13. The lever I' is connected to the land-wheel axle B' by means of the connecting-loop K'. The lever I' is provided with the ordinary latch and pawl, to work in conjunction with the notches of the quadrant, as shown in Fig. 13, to raise or lower the wheel B by means of the slide L' on the vertical part F' of the arch.

I am aware that centrally-pivoted foot-levers have been used in conjunction with hand-levers; but such have not been pivoted directly to an extension of the furrow-wheel axle, as shown; therefore I do not claim a centrally-pivoted foot-lever, broadly.

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

1. The land-wheel B, placed obliquely to the furrow, in combination with the beam-holder Y', provided with a wedge-shaped hole and set-screws for the oblique adjustment of the plow in relation to the wheel B, substantially as set forth.

2. The beam-holder Y', provided with a wedge-shaped hole and set-screws, and a pivot, T, for swiveling the plow-beam to the crank or bail, substantially as set forth.

3. The pivoting devices X W, provided with the recess Y, in combination with the reversible cap V, whereby the plow may be loosely pivoted or made stationary laterally, as may be desired, substantially as set forth.

4. The beam-holder Y', provided with the integral pivot T, having the recess U, in combination with the cap V, provided with a projection to fit into the recess U, substantially as set forth.

5. The combination of the axle-section C, having the vertical portion F' and the recessed plate *c*, with the axle-section C', having the projection J, spindle A', and pivot M, substantially as described.

6. The combination of the axle-section C, having plates P, and recessed plate *c*, with the axle-section C', having the projection J, and the rib I, the bar D, and the bolts H H, substantially as set forth.

7. The vertical arch-section F', having hollow stud *f* on one side and the hollow stud H' on its other side, the sector G', having a circular half-recess, the spindle-slide L', loop K', and lever I', substantially as set forth.

8. In combination with axle A', having the extension M, hand-lever L, and bail N, the foot-lever K, centrally pivoted to the axle, and its rear end resting beneath the bail N, substantially as set forth.

FRANKLIN B. HUNT.

Witnesses:
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FRED. G. DIETERICH.