

(No Model.)

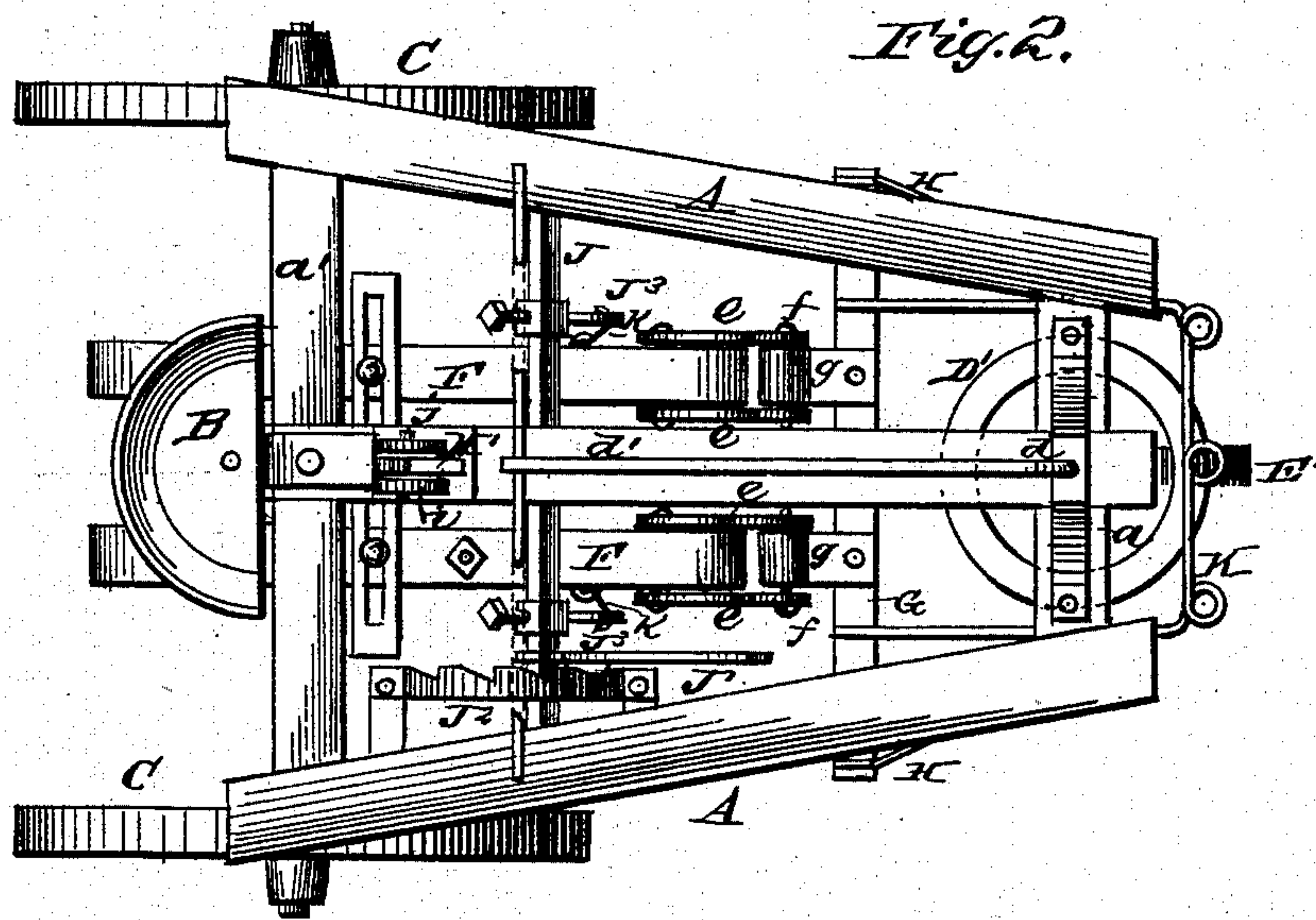
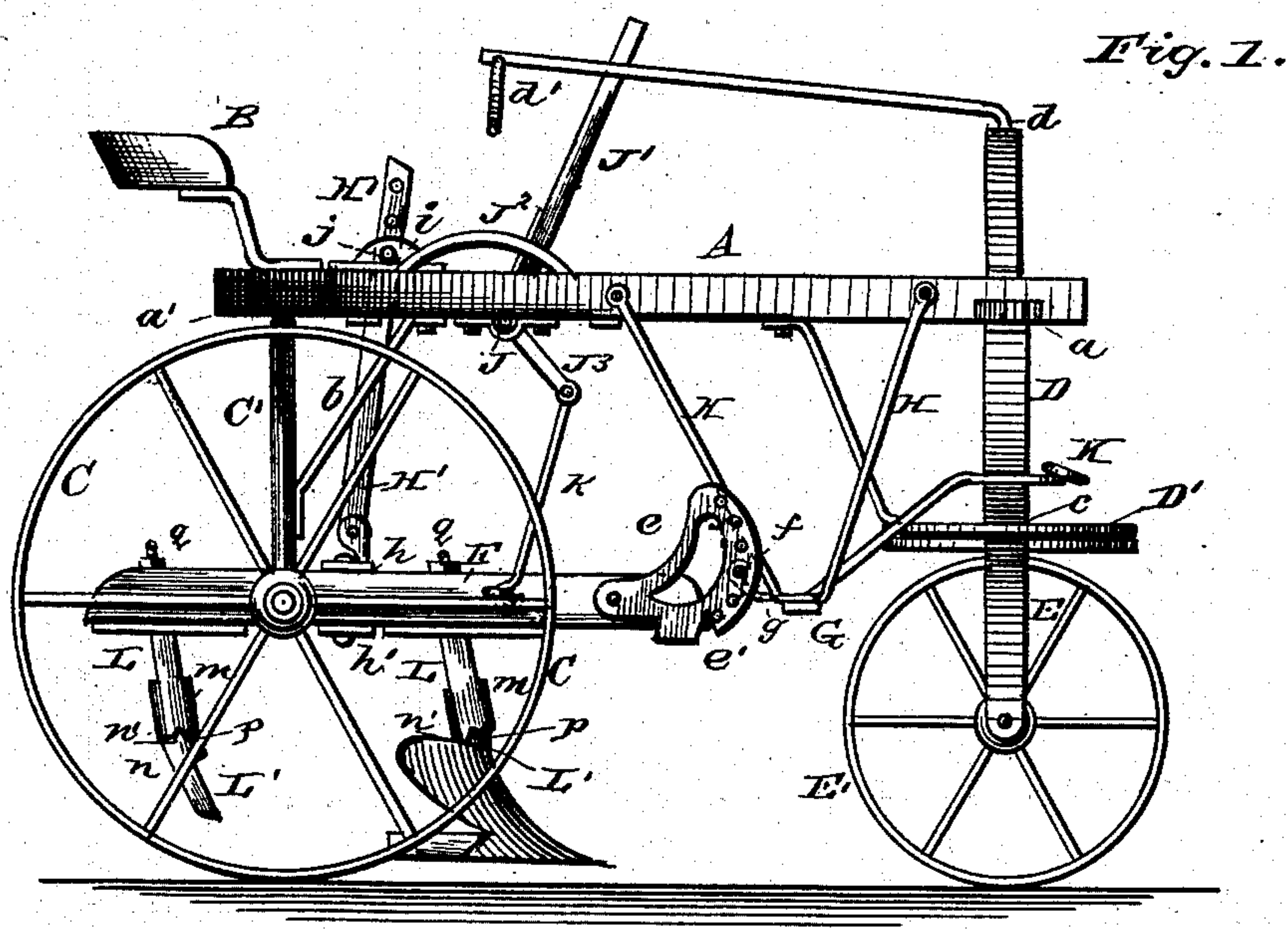
C. B. DOUGLAS.

2 Sheets—Sheet 1.

SULKY PLOW.

No. 273,971.

Patented Mar. 13, 1883.



Witnesses:

Phil L. Dutton  
W. R. Keyworth.

Inventor.

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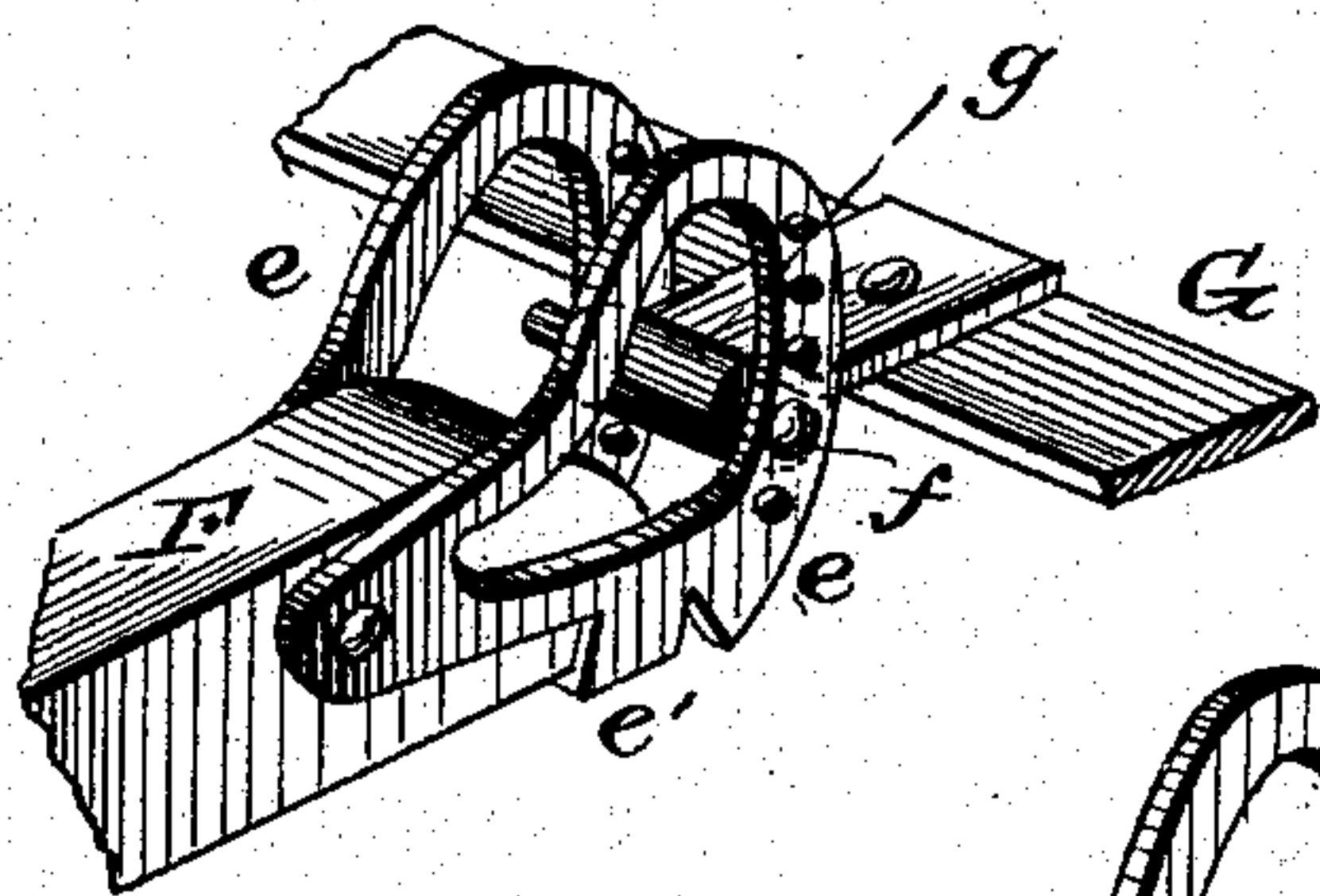


C. B. DOUGLAS.

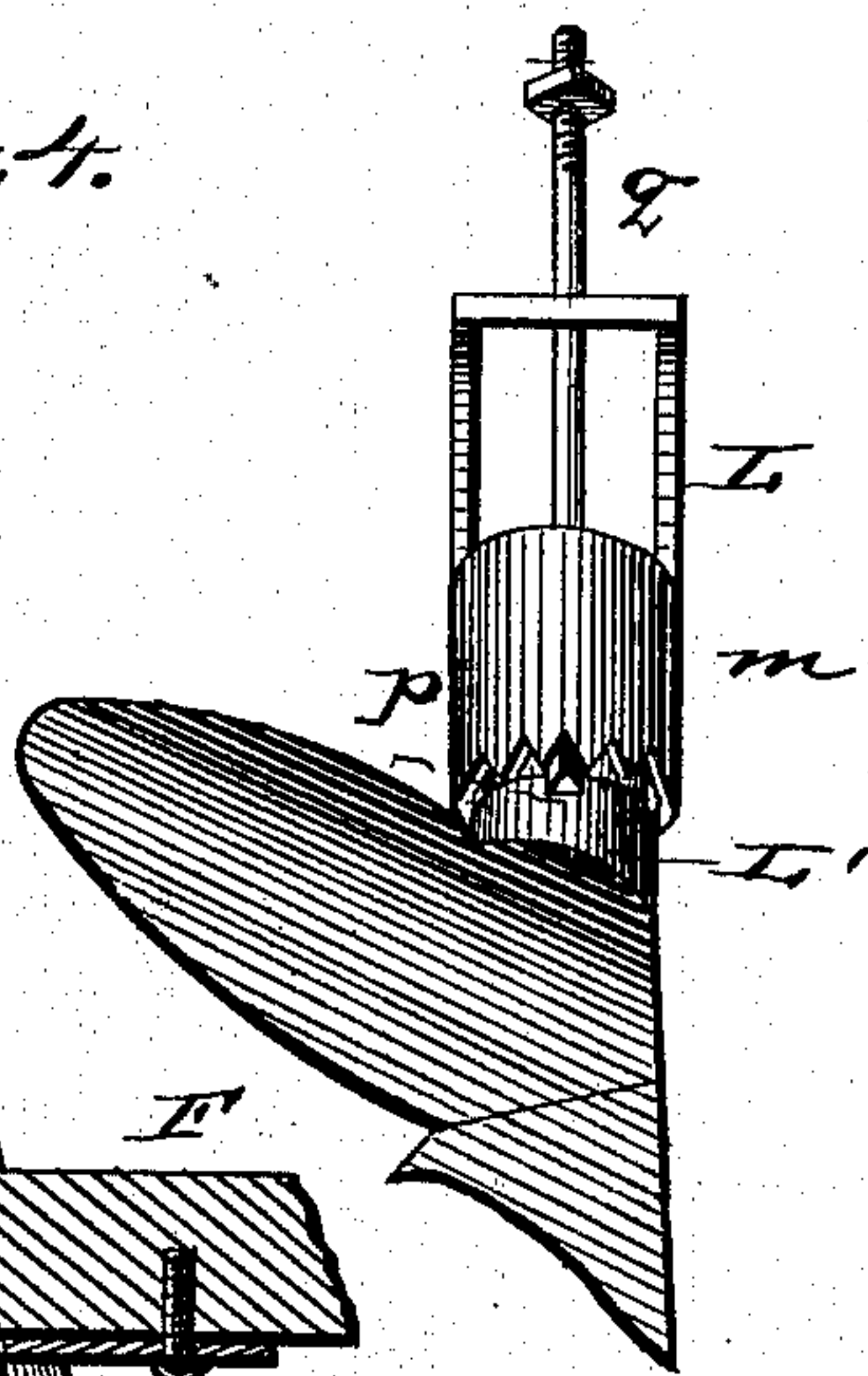
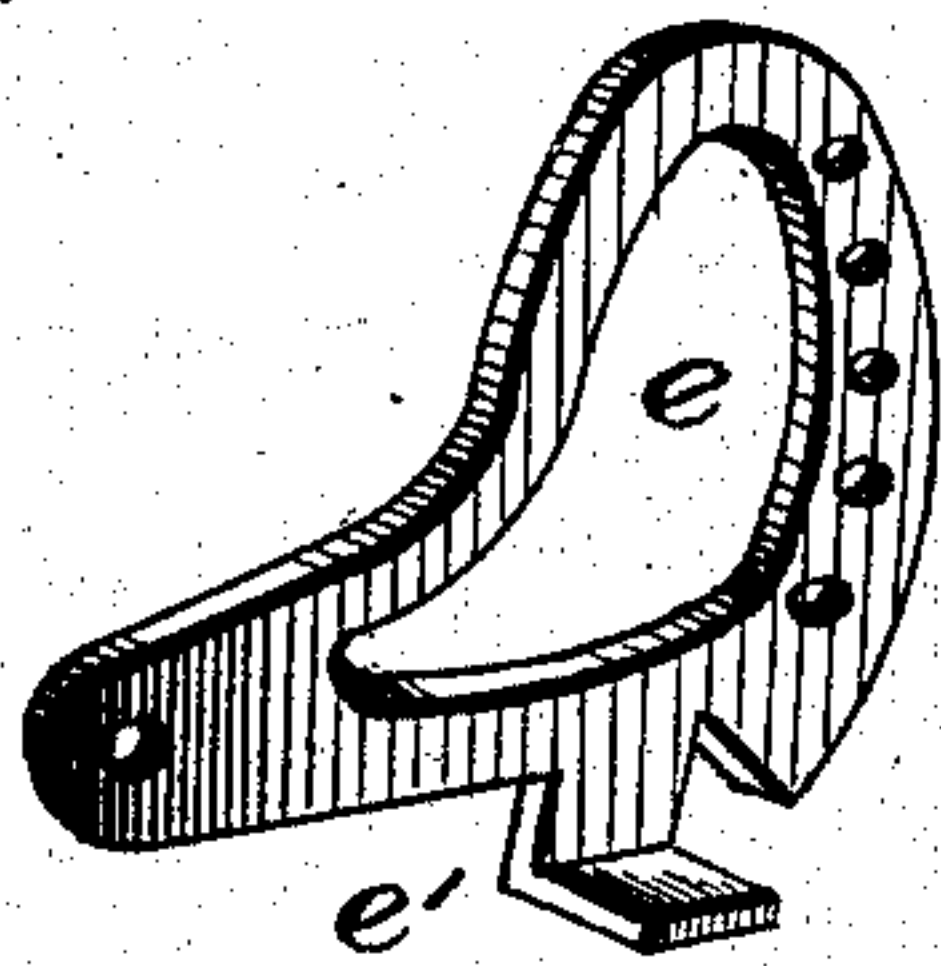
SULKY PLOW.

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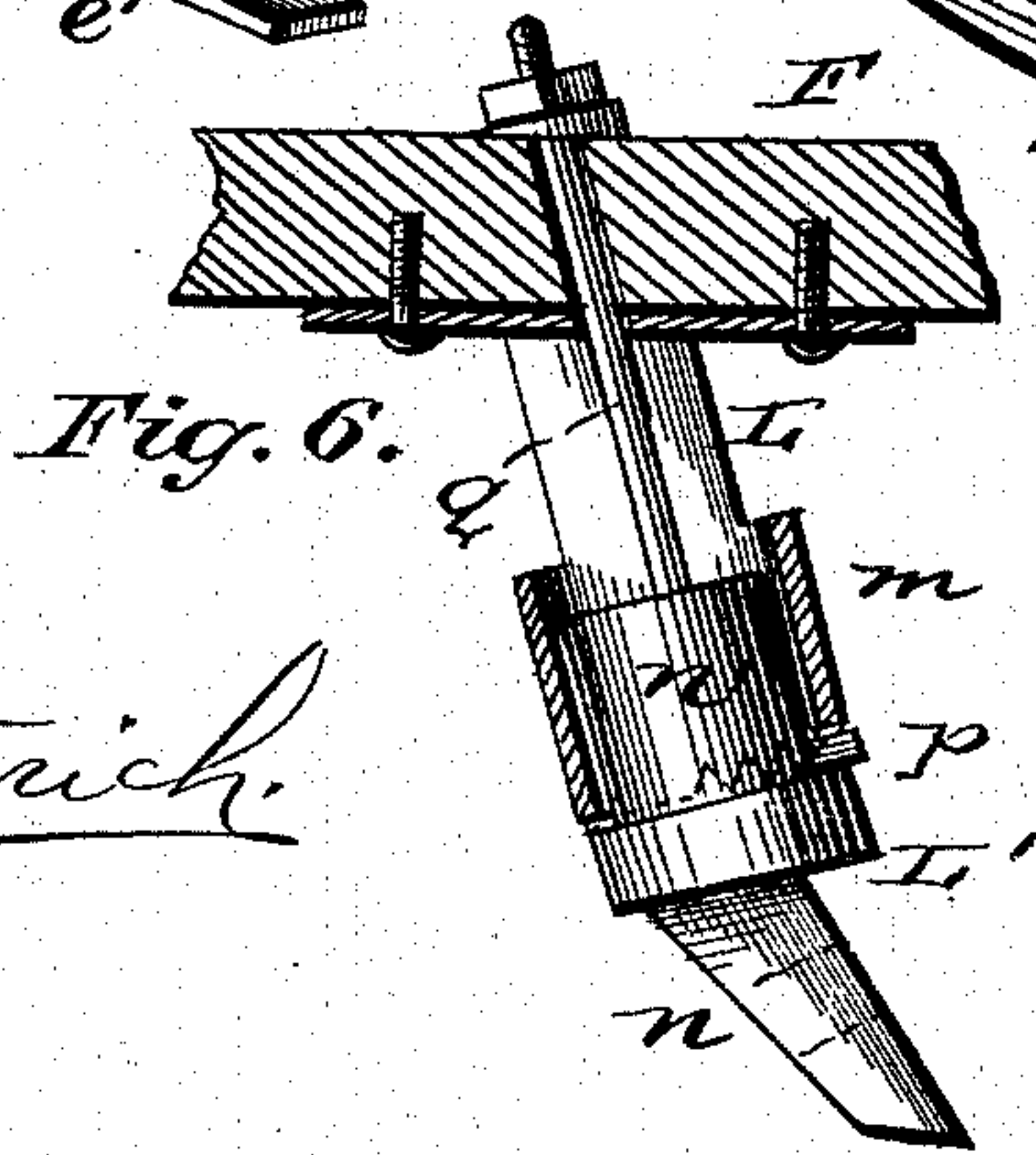
This technical drawing illustrates a mechanical device, possibly a pump or engine component, featuring a large flywheel on the left and a horizontal beam (A) supported by a vertical post (D). The flywheel is connected to a crank (E) and a connecting rod (F). The beam (A) is pivoted at its ends (a, a') and has a lever (B) attached to its left end. A long rod (a') extends from the right end of the beam. The device is mounted on a base (C) and includes various other components labeled with letters and numbers, such as the crank (E), connecting rod (F), and various joints and pivots (e, e', f, g, h, h', i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

*Witnesses:*

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# UNITED STATES PATENT OFFICE.

CHARLES B. DOUGLAS, OF TROY, ALABAMA.

## SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 273,971, dated March 13, 1883.

Application filed October 24, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. DOUGLAS, of Troy, in the county of Pike and State of Alabama, have invented certain new and useful Improvements in Sulky-Plows; and I 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, which form part of this specification, in which—

Figure 1 is a side elevation of my improved riding plow and cultivator. Fig. 2 is a top view of the same. Fig. 3 is a vertical section. Fig. 4 is a perspective view, showing in detail the connections of one of the plow-beams with the draw-bar. Figs. 5 and 6 are details showing the construction of the plow-standard and the manner of connecting the same to a plow-beam.

This invention relates to certain novel improvements in riding plows and cultivators, which will be fully understood from the following description, when taken in connection with the annexed drawings.

The letter A designates an angular frame, composed of converging side bars, a central longitudinal bar, a front transverse bar, *a*, and a rear transverse bar, *a'*, on which latter is mounted the driver's seat B.

CC designate two large transporting-wheels, which are applied on the short arms of an arched axle, C', secured rigidly to the bottom of the frame-bar *a'*, which axle is sustained by braces *b*.

D designates a rigid stirrup, which is secured to the front part of the frame A, and which terminates at its lower part in a horizontal ring, D', transversely across which is a bar, *c*. This ring D' rests upon a swivel-standard, E, to which is applied a small steering-wheel, E'. The swivel-standard has secured to it a vertical rod, *d*, which passes up through the front end of the frame A, and is directed backward, terminating in a long handle, *d'*. (Shown in Fig. 2.) By these means the attendant on his seat B can guide the machine to the right or left.

F F designate two beams, which are pivoted to clevises *e e*, of segmental form, that are constructed with undersupporting-lips, *e'*. The

front portions of these clevises are of segment form, and are provided with a number of perforations to receive bolts *f*, that pivot the clevises to eye-pieces *g*, which are rigidly secured to a transverse bar, G. This bar G is secured to rigid pendants H, which are secured to the side bars of the frame A. It will thus be seen that the front ends of the beams F F are pivoted to clevises, and that these clevises are pivoted to the bar G; also, that the clevises are adjustable for the purpose of raising or depressing the front ends of the beams for regulating the pitch of the plows. The two beams are connected together near their rear ends by means of transverse longitudinally-slotted bars *h h'* and set-bolts, which pass through the beams. By loosening the nuts on said bolts the beams can be adjusted at any desired distance apart. The eye-pieces *g* may be secured to the bar G, so that they can be adjusted on this bar for the purpose of setting the front ends of the beams at different distances apart.

H' designates a bar which is pivoted to the top slotted bar, *h*, and which extends up through a slot made through the center beam of frame A, and through slotted plates secured to the upper and lower sides of this center beam. The top plate has ears *i i* formed on it, which are perforated transversely to receive through them a bolt or pin, *j*, which is removable, and which is passed through one of a number of holes made through the suspension-bar H'. The pin or bolt *j* may pass through the bar H' above the said ears *i i*. In the former instance the plows hereinafter described will be securely locked down in the proper position, and in the latter instance, after setting the plows to run at a given depth, they are allowed (with the rear ends of their beams) to rise.

J designates a square rock-shaft, to which a pawl-lever, J', is applied, adapted to engage with ratchet-teeth on the edge of a segment, J<sup>2</sup>, secured to the right-hand beam of the frame A. Projecting from the rock-shaft J are two arms, J<sup>3</sup> J<sup>3</sup>, which are laterally adjustable by means of set-screws, and which are connected by links *k* to the plow-beams. By these means the attendant can raise or depress the rear



ends of the plow-beams and with them the plows.

K designates a transverse draw-bar, which is located in front of the stirrup D, and provided with three eyes, to either one of which the draft-tongue can be attached. This draw bar or head K is shown rigidly secured to the sides of the stirrup D and its arms extended back and rigidly secured to the transverse bar G. Instead of adopting this arrangement, I contemplate attaching the arms of the draw-head to bar G by hooking their rear ends over the same and using set-screw fastenings, which will admit of the ready adjustment of the ends of the said arms at different points on said bar.

I will now describe the construction of the plow-standards, reference being had to one of them.

The standard is composed essentially of two parts, L L'. The part L is rigidly secured to the bottom of a beam, and is composed of two parallel arms formed on the upper end of a tube or socket, *m*, having pitched or ratchet teeth on its lower end. The part L' consists of a slotted shoe, *n*, a cylindrical tenon, *n'*, which is fitted into the tube *m*, and a shoulder, *p*, having ratchet-teeth adapted to interlock with the teeth on the tube *m*. From the upper end of the tenon *n'* rises a rod, *q*, which may be cast centrally into it, and which is passed through the beam and secured by means of a nut on top of the beam. By loosening

this nut, so as to disengage the ratchet-teeth of the tenon from those on the tube, the plow-point can be adjusted to draw more or less land.

A plow may be permanently or detachably secured to the shoe *n*, or a hoe of any desired shape may be substituted for a turn-plow.

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

1. In a wheel-plow, the combination of the plow-beams, the laterally-adjustable clevises, the bar G, rigidly connected to the frame A, the pivotal connections of the said beams to the clevises, the slotted connecting-bars, the suspension-bar H', the sustaining-pin therefor, and means for raising and depressing the plow-beams, all constructed and adapted to operate substantially in the manner and for the purposes described.

2. A plow-standard consisting of a tube or socket, *m*, having ratchet-teeth on its lower end, the shoe *n*, the tenon *n'*, having ratchet-teeth formed on it, and the screw-threaded rod *q*, constructed substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES B. DOUGLAS.

Witnesses:

J. A. DENNIS,

J. R. GOLDTHWAITE.