(No Model.) 2 Sheets—Sheet 1.

L. M. BROCK.

SULKY PLOW.

No. 312,324. Patented Feb. 17, 1885.

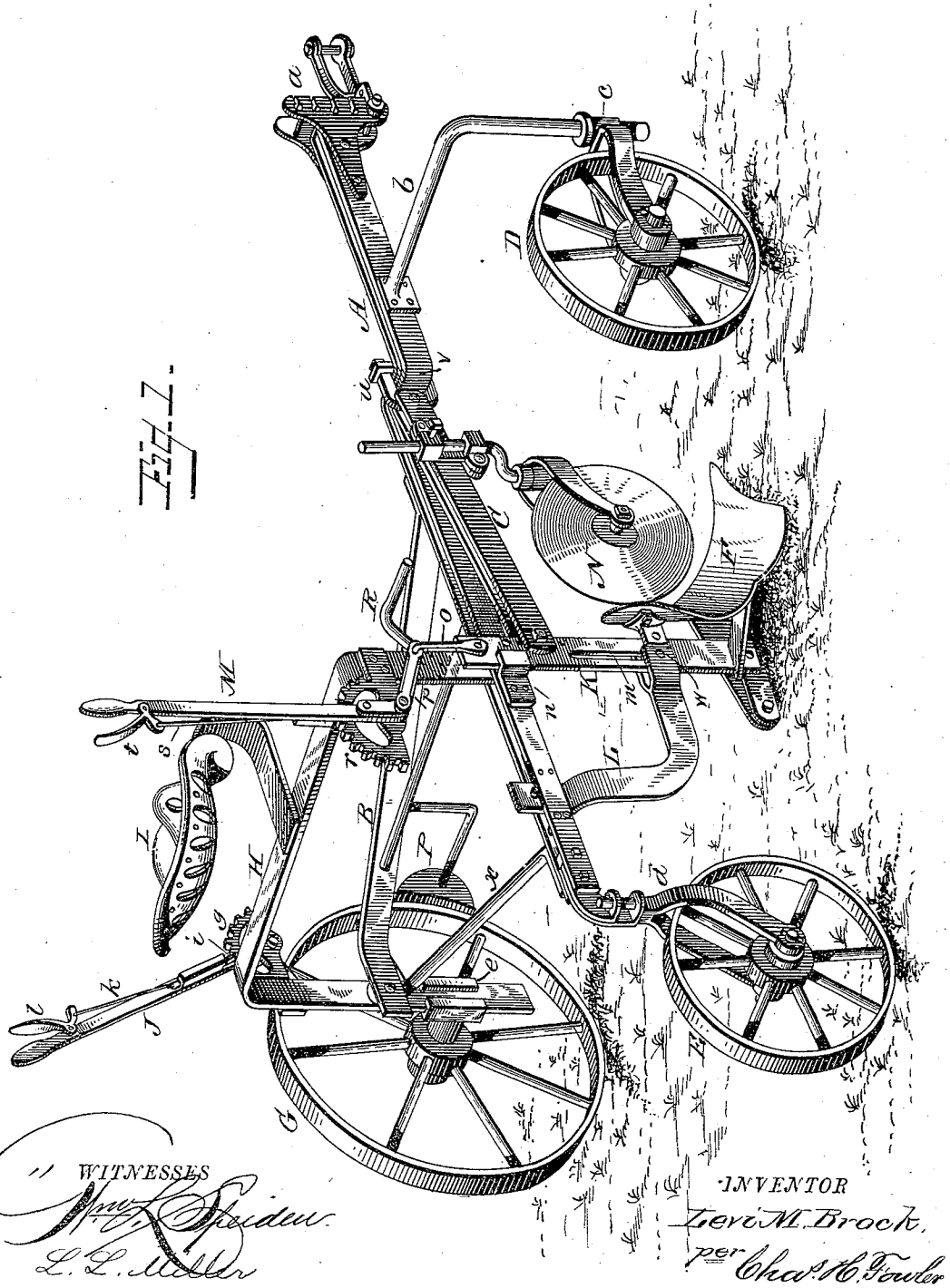

Fig. 1.

WITNESSES

Wm. L. Speiden.

L. L. Miller

INVENTOR

Levi M. Brock,

per Chas. H. Fowler

Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

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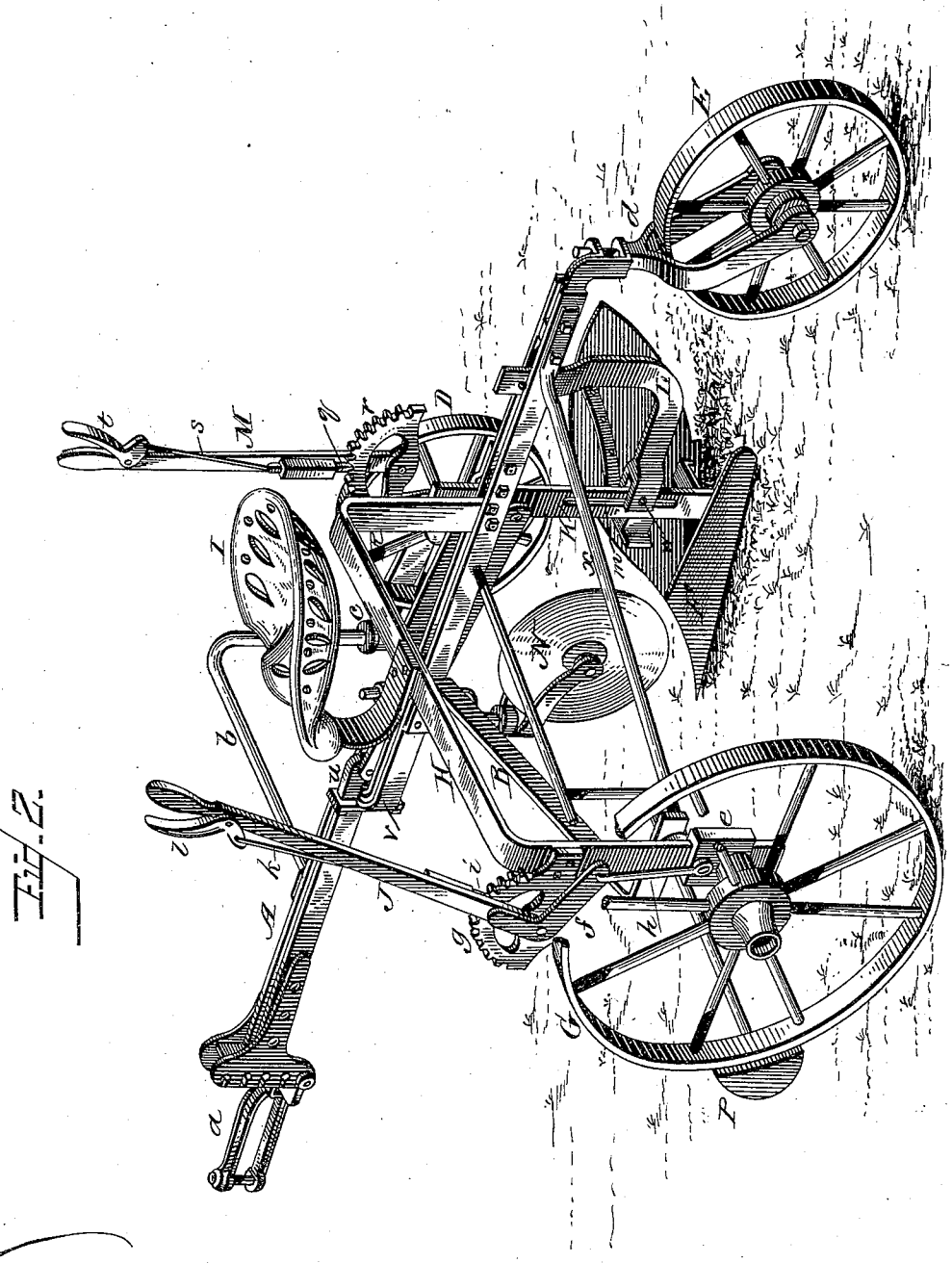

Fig. 2.

WITNESSES

Wm. L. Spieden.

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UNITED STATES PATENT OFFICE.

LEVI M. BROCK, OF MACKINAW, ILLINOIS.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 312,324, dated February 17, 1885.

Application filed October 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, LEVI M. BROCK, a citizen of the United States, residing at Mackinaw, in the county of Tazewell and State of Illinois, 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 of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention, and Fig. 2 a similar view of the reverse side thereof.

The object of the present invention is to provide a light-draft tongueless sulky-plow that will be both practical and easily operated and controlled, also a plow that will effectively do its work and avoid all possibility of the horses slipping out of the traces when turning corners. These objects I attain by the construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, the frame of the plow is represented by the beam A, angular brace B, and the brace C, these parts taken together forming the essential portions of the frame.

To the forward end of the beam A is connected the usual clevis, *a*, to which the double-trees or triple-trees are attached, and immediately in the rear of the clevis, and to the beam, is secured one end of an arm, *b*. This arm extends out horizontally and at right angles to the length of the beam a short distance, and then extends in a downward direction, and at the end of the arm is attached a wheel, D, by means of a swivel-connection, *c*. The wheel D is intended to run in the furrow ahead of the plow, and by its swivel-connection acts as a caster-wheel to follow the line of draft. A second caster-wheel, E, is attached to the rear end of the beam A by a swivel-connection, *d*, and runs in the line of the furrow directly after the plow F. A third and larger wheel, G, has its axle supported in a vertically-adjustable bracket, *e*, adapted to slide on the upright portion of a support, H, to which the driver's seat I is secured. The wheel G is used simply to level the plow by means of the hand-lever J, its lower end terminating in a bell-crank, *f*, pivoted at the apex of the angle to a toothed segment, *g*, and connected to the bracket *e* by a link, *h*, a spring-catch or pawl, *i*, engaging with the teeth of the segment to hold the lever in place. The catch or pawl *i* is of the usual form, having connected thereto the rod *k*, the rod being attached at its upper end to a lever, *l*, pivoted to the upper end of the lever J, so that both of said levers may be grasped by the hand when in the act of raising or lowering the wheel G to level the plow. The three wheels D E G, as will be seen, are arranged in a triangular position. Thus the most possible carrying capacity on the wheels is obtained, taking the friction from the bottom of the plow, and thereby securing an exceedingly light draft. In turning corners the large wheel G acts as a pivot, while the smaller wheels D E at each end of the beam A do the turning, moving forward or backward, as required, permitting the plow to turn easily a square corner to the right or left, and at the same time cut the dirt all out.

The plow F is suitably connected to a standard, K, slotted, as shown at *m*, and connected to the beam A by the angular brace L. The brace L, together with the guide *n*, holds the standard in an upright position, the upper extremity of the standard having connected thereto by link *o* the bell-crank end *p* of a hand-lever, M.

By the above-described means the plow F may be raised or lowered, as circumstances may require, and held in the adjusted position by a catch or pawl, *q*, engaging with the toothed segment *r*, the former being secured to a rod, *s*, which is in turn connected to a small lever, *t*, pivoted to the lever M.

To the standard K is bolted one end of the braces C, one upon each side thereof, the opposite ends of said braces being attached to the beam A by a suitable coupling, *u*, at a point where the beam is bent at an angle, as shown at *v*. The standard K is provided with a series of holes to receive the bolt which connects the rear ends of the braces C to said standard, thus allowing the plow to be raised or lowered to give to it any desired pitch by connecting the braces to the standard at any point along the line of perforations or holes. By the employment of the braces and connecting them to the standard and plow-beam, as shown, and forming an angle bend in the beam, a line

draft from the clevis is obtained. The rolling colter N is clamped to the braces C, which serve as the beam of the plow, and is raised or lowered with said braces. The slot or groove *m* in the plow-standard K enables the plow to be guided in or out the ground and held in true position by means of the brace L, which is forked or bifurcated at its lower end and passes on each side of the standard. Between the forked or bifurcated end of the brace L is held a small roller, *w*, which passes through the slot, and thus lessens the friction when moving the brace.

When found necessary, the plow can be run over rough or uneven ground independent of the frame by providing the link *o*, which connects with the plow-standard K, with an elongated slot, thus permitting the frame to work up and down and pass over obstructions that the wheels may encounter without affecting the level running of the plow.

To the wheel G, I provide a brake, P, having a foot-lever, R, for operating it, thus controlling the speed of the plow when transporting it from one field to another or passing down hill, it being also used in turning corners by holding the large wheel, the smaller or caster wheels being compelled to do their duty in turning the plow more accurately. A brace-rod, *x*, connects the support H with the beam A to render the support more rigid.

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

In a sulky-plow, the beam thereof, bent as shown, and having connected to this angular bend by a coupling the braces which carry the colter, in combination with the slotted plow-standard connected to said braces, and the bifurcated end of an angular brace, which is attached to the rear end of the plow-beam, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEVI M. BROCK.

Witnesses:
R. V. HOWE,
GEO. T. RISINGER.