J. SPAIN.

Sulky-Cultivator.

No. 168,537. Patented Oct. 5, 1875.

Fig. 1.

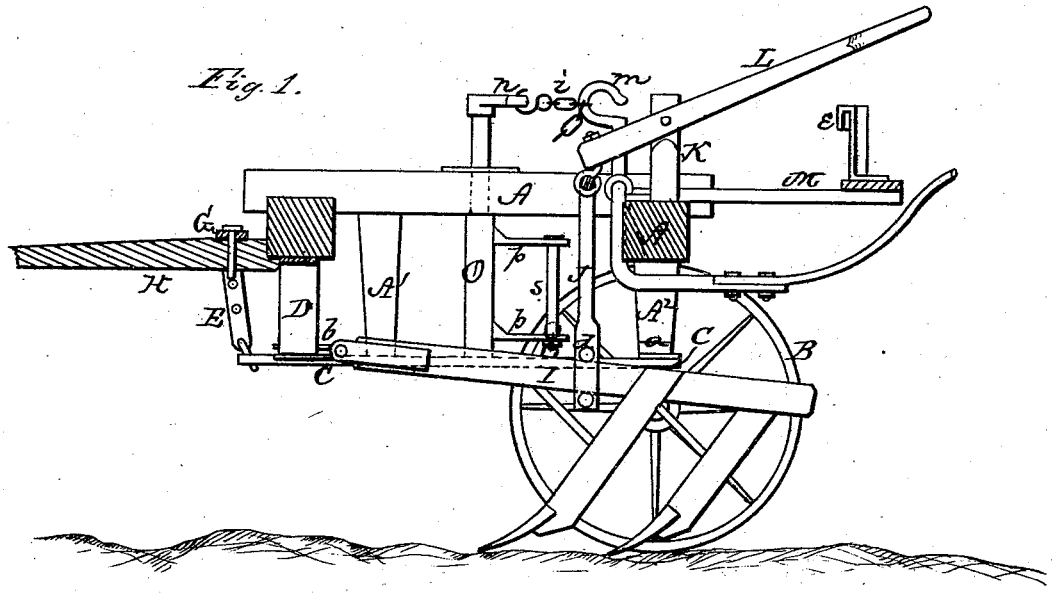
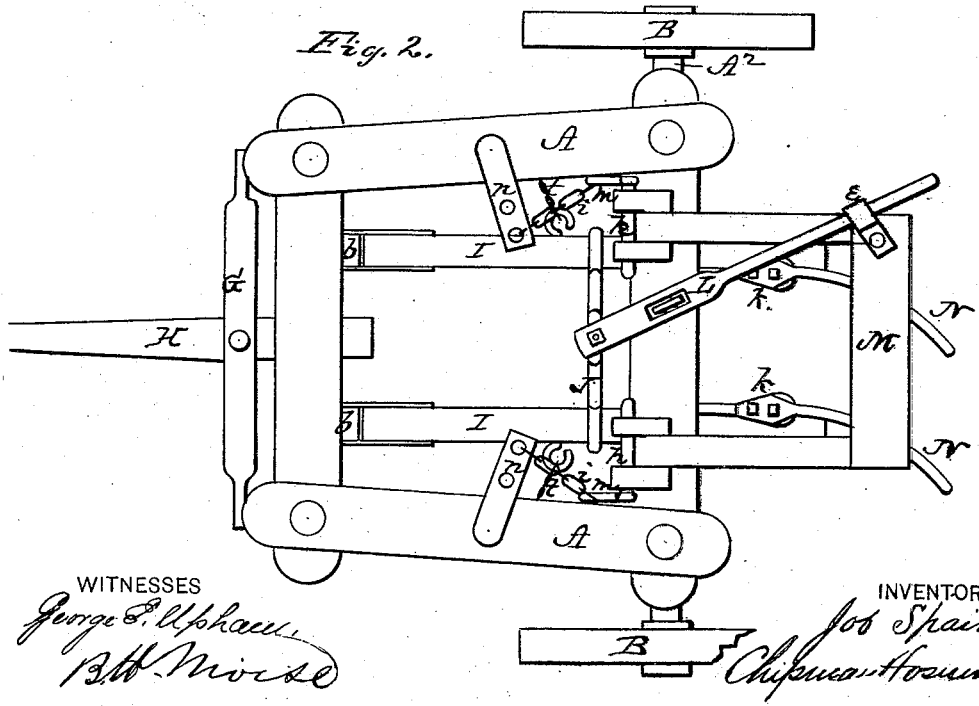


Fig. 2.



WITNESSES

George E. Upham

W. H. Morse

INVENTOR

Jos Spain.

Chipman & Hosmer & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOB SPAIN, OF NORTH LEWISBURG, OHIO.

IMPROVEMENT IN SULKY-CULTIVATORS.

Specification forming part of Letters Patent No. **168,537**, dated October 5, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, JOB SPAIN, of North Lewisburg, in the county of Champaign and State of Ohio, have invented a new and valuable Improvement in Sulky Corn-Plows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation 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 representation of a longitudinal vertical section of my cultivator, and Fig. 2 is a plan view of the same.

My invention relates to sulky-plows for plowing or cultivating corn, &c.; and it consists in the construction and novel arrangement of the devices for coupling, suspending, and connecting the plow-beams, and in the devices for operating or moving the beams, as will be hereinafter more fully set forth.

In the annexed drawing, A represents the frame of my machine, the rear bar of which is, at each end, provided with a spindle attachment, extending downward and outward, and a wheel, B, placed thereon. From a suitable point of each side bar of the frame A extends a post, A^1, downward, to the lower end of which is fastened a draft-bar, C. The rear end of this draft-bar is, by a short arm, *a*, rigidly connected to the spindle-arm A^2, and near the front end it is fastened to a metallic stirrup, D, secured on the under side of the front cross-bar of the frame. The front end of each draft-bar C is, by an upright clevis, E, loosely connected to the end of a metallic cross-bar, G, pivoted on top of the tongue H, which is secured to the frame A. To the horizontal part of each stirrup D is adjustably attached a coupling, *b*, to which the plow-beam I is hinged, allowing said beam to be moved up and down as well as laterally. The two plow-beams are connected by means of a bow, J, attached to the beams by staples *d* passed around the beams and riveted to the ends of the bow. The upper part of the bow J is connected with one end of a lever, L, pivoted on a post, K, rising from the rear part of the frame A, and making the lever contiguous to the driver's seat M, which extends rearward from the frame A. The plow-beams are raised by forcing down the outer end of the lever L, and they are then held by placing said end of the lever under a hook, *e*, as shown. On the upper front edge of the rear cross-bar in the frame A are placed two short rocking shafts, *h h*, the inner end of each of which is bent downward and rearward under said cross-bar, and forms a treadle, *k*, and from the same projects a handle, N, so that the operator can rock the shaft *h*, whether riding or walking. The outer end of each shaft is bent upward, forming a hook, *m*, which is, by a chain, *i*, connected with an arm, *n*, projecting from a vertical shaft, O, having its bearings in the frame and draft-bar. From this shaft project two other parallel arms, *p p*, in which is an adjustable pin, *s*, connected by a chain, *t*, with the plow-beam on that side.

By these means the operator can, whether riding or walking, move the plow-beams laterally from side to side, as required in the cultivation of corn.

What I claim, and desire to secure by Letters Patent, is—

The combination, with the connected plow-beams I, of the rock-shafts *h*, with treadles *k* and handles N, vertical shafts O, with arms *n p*, and adjustable pins *s*, 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.

JOB SPAIN.

Witnesses:
AARON ORAM,
THOMAS SPAIN.