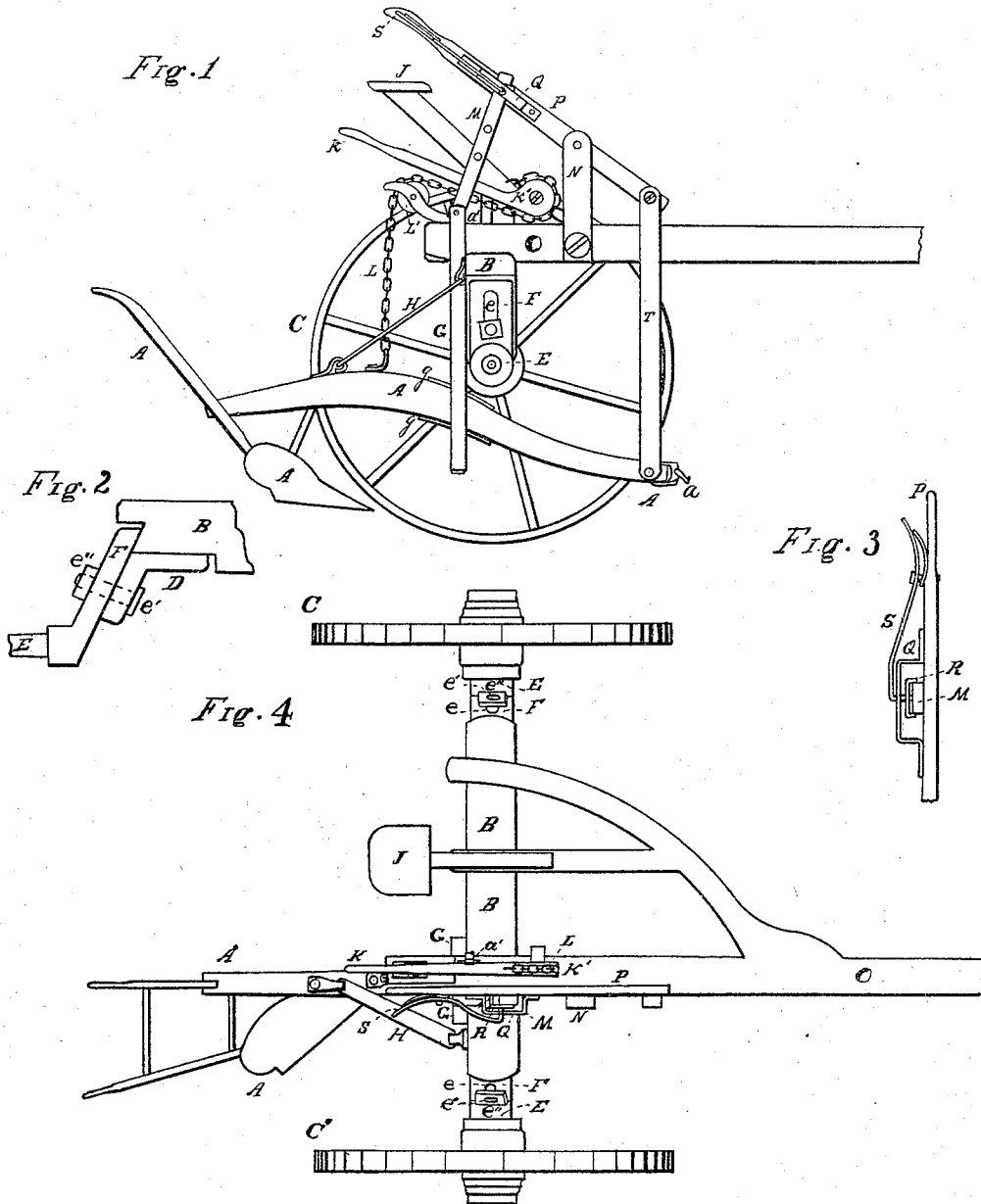


E. E. BAIRD.
Sulky-Plows.

No. 147,741.

Patented Feb. 24. 1874.



WITNESSES.

J. L. Lawlor
W. F. Harbach

INVENTOR.

Elason E. Baird
By Girdley & Warner
his attys

UNITED STATES PATENT OFFICE.

ELASON E. BAIRD, OF PEOTONE, ILLINOIS, ASSIGNOR OF ONE-HALF HIS
RIGHT TO RUSSELL C. BAIRD, OF SAME PLACE.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. 147,741, dated February 24, 1874; application filed
November 25, 1873.

To all whom it may concern:

Be it known that I, ELASON E. BAIRD, of Peotone, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Sulky-Plows, of which improvements the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part hereof, and in which—

Figure 1 is a side elevation of a sulky-plow embodying my invention, and in which one wheel is represented as removed, in order that the remaining parts may be more clearly shown; Fig. 2, a front view of one end of the axle or journal bar and certain of its attachments; Fig. 3, a top or plan view of one of the adjusting-levers and certain parts operating in connection with it, and Fig. 4 a top or plan view of all the parts constituting my improved implement.

Like letters of reference indicate like parts.

In the drawing, A represents the plow. B is the main cross-beam or journal-bar of the sulky. C C are the wheels. D D are angle-irons attached to the bar B, and arranged thereon in the manner shown. E E are the journals of the wheels. F F are shoulders, rigidly attached to and projecting upward from the rear end of the journals E E. The shoulders F F are vertically slotted, as shown at *e*, and *e' e'* are bolts passing through the irons D D and the slots *e e*. *e'' e''* are nuts run upon the bolts *e' e'*, for the purpose of attaching the journals firmly to the irons D D. G G are vertical bars, firmly attached to the bar B, and constituting a stirrup, in which the plow-beam is arranged. The space between the bars G G is somewhat greater than the width of the plow-beam; and *g g* are anti-friction plates, attached to the upper and under sides of the plow-beam, and extending to, or nearly to, the bars G G, so as to prevent the contact of the plow-beam with the said bars. The space between the plates *g g* is such that a sufficiently broad bearing is presented to the bars G G to prevent the plow from rocking or tilting laterally. H is a push-bar, hinged to the plow-

beam and to the bar B. *a* is the clevis. J is the driver's seat. K is a lever, arranged near the seat J, and terminating in a roller, K', pivoted to the bar B. L is a chain or cable, attached to the roller K' and to the plow-beam. L' is a pulley, supporting the chain L. M is a perforated bar, the lower end of which is hinged or pivoted to the bar B. N is a post, rigidly attached to the guide-pole or tongue O, which is rigidly attached to the bar B. P is a lever, pivoted to the post N, and arranged near the seat J. Q is a loop attached to the lever P, and arranged to receive the bar M, which is considerably narrower than the loop, as shown. R is a sliding clasp arranged on the bar M. S is a catch attached to the lever P, and resting on a spring arranged at its rear end. The forward end of the catch S passes through the loop Q and the clasp R into the perforations in the bar M. T is a connecting-bar, pivoted to the forward end of the plow-beam and of the lever P. The team is attached to the forward end of the plow-beam, and the pole O passes between the team, and is attached to the neck-yoke.

It will be perceived from the foregoing description that the plow is suspended freely in its stirrup, and is vertically adjustable therein, in such a manner that it may be made to run either deep or shallow, and that it may be wholly lifted from the ground. Either or both of the wheels may also be adjusted vertically.

The sulky is driven forward by means of the push-bar H when the plow is drawn forward, and the latter, as well as the whole implement, is guided by means of the pole O. The rear end of the plow is raised and lowered by means of the lever K, which is retained in a horizontal position by means of a catch, *a'*, attached to the bar B. The forward end of the plow-beam is adjusted by means of the lever P, and the plow is lifted wholly from the ground and its beam retained in the line of draft by depressing both levers. The lever P is retained in any desired position by means of the catch S. The bar M, by being hinged at its lower end, and by passing through the wide loop Q, admits of the action of the lever P. The clasp R, from which the catch S is not entirely with-

drawn, permits the bar M from being so displaced that it will not be engaged by the said catch, and the loop Q holds the clasp R down upon the bar M when the forward end of the catch is raised. The wheels are adjusted by loosening the nut (or nuts) *e''* for that purpose. A pressure may be exerted upon the plow in the usual manner.

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

The push-bar H, pivoted to the rear of the plow-beam A and to the axle B, by means of which bar the sulky-frame is driven, and a backward movement given to the plow when the latter is raised, in combination with the stirrup G, levers K and P T, and chain L, substantially as specified.

ELASON E. BAIRD.

Witnesses:

N. C. GRIDLEY,
F. F. WARNER.