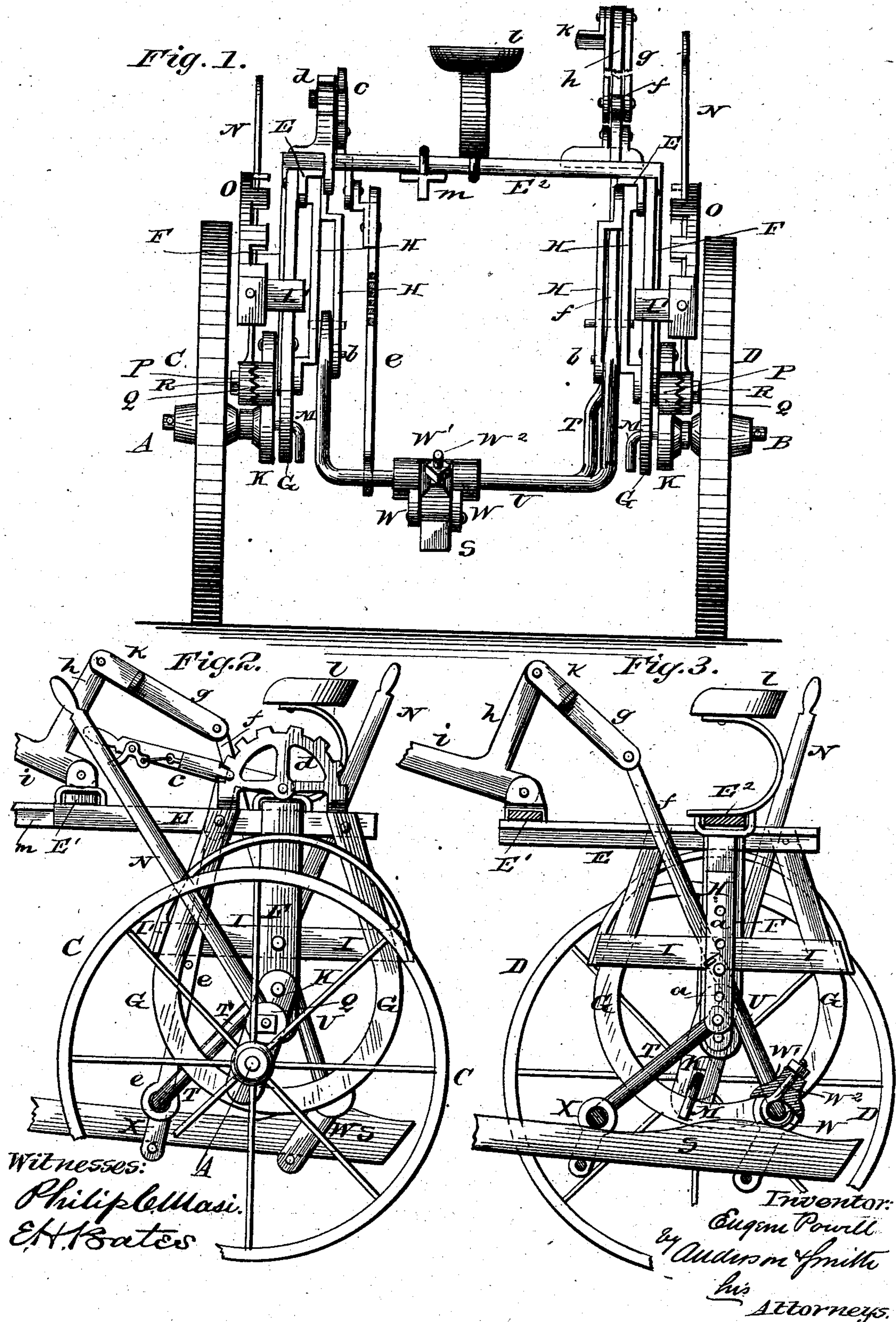


(No Model.)

E. POWELL.  
SULKY PLOW.

No. 290,107.

Patented Dec. 11, 1883.





# UNITED STATES PATENT OFFICE.

EUGENE POWELL, OF DELAWARE, OHIO.

## SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 290,107, dated December 11, 1883.

Application filed February 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE POWELL, a citizen of the United States, residing at Delaware, in the county of Delaware and State of Ohio, have invented certain new and useful Improvements in Sulky-Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a rear view of my sulky-plow. Fig. 2 is a side view, and Fig. 3 is a vertical sectional view.

This invention has relation to plow-sulkies for right and left hand plows; and is designed as an improvement on the invention granted to me in Letters Patent No. 263,577, dated August 29, 1882; and it consists in the construction and novel arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the claims appended.

Referring by letter to the accompanying drawings, A and B designate the crank-axes for the wheels C and D. These axes are both rigidly secured to pivoted bars K K at the lower ends of the vertical frame-bars F, and have hook-guards M M at their inner ends, which turn down over and inside of the curved frame-bars G, thus greatly lessening the strain on the pivoted bars K K. The curved bars G G and vertical bars F F are connected at their upper ends by the side beams, E E, which are in turn connected by top cross-bars, E' E'. Intermediate cross-braces, I I, connect the curved bars G and the vertical frame-bars F at each end of the frame, as shown, and are provided with laterally and outwardly extended ends I' I', to which the notched arch-racks O O are secured, thus giving additional strength to the frame, without materially increasing the weight, and also bringing the racks nearer to the axles.

The pivoted bars K K are provided, about midway of their length, on their outer faces with notched or serrated seats P P, through which the pivots by which they are secured to the frame-bars F F pass outwardly, and against these seats P the lower ends of the levers N N for swinging the wheels are placed,

and held in position on the pivots by serrated caps Q Q, having recesses for the reception of the thickened lower ends of said levers, and securing-nuts R for holding the caps in place. This construction affords a strong fastening for the levers N N, and permits an easy adjustment of the same, for a purpose hereinafter explained.

The plow-beam S is connected to the sulky by two cranked rods or bails, T U—to the first near its front end, and to the other near its rear end. The connection is made near the rear end of the beam by means of clamps W, which are constructed to slide on the bail U, except when locked in place by a block, W', passed upon the stem of an eyebolt, W<sup>2</sup>, encircling the bail U between the eyes of the clamps W, and provided with a locking-nut to hold the eyebolt and block in place. The front connection, X, is simply a guide in which the plow-beam works when the bails T U are adjusted.

The sulky-frame is provided with vertical arms H H, parallel with and preferably secured to the vertical frame-bars F F. These arms H H are perforated laterally, as at *a*, for the reception of the bolts *b*, by which the bails T U are pivoted between them, and by this construction the bails may be pivoted higher or lower on the frame to suit plows of different heights, or to regulate the depth of plowing, or for other purposes, as may be deemed necessary.

*c* designates a latching-lever, and *d* its notched rack. This lever *c* is connected by a rod, *e*, to the front bail, T, and by it this bail may be raised and lowered, as expediency may require. One arm, *f*, of the rear bail, U, extends forward nearly to the front of the frame of the sulky, and is connected by a link-connection, *g*, to an angular arm, *h*, of the lever *i*, pivoted in bearings upon the top of the front top bar of the frame, as shown. At its lower end, on its inner face, the angular arm *h* or the link *g* is provided with a step or stirrup, *k*. *l* designates the driver's seat, secured to the rear top cross-bar of the frame by a slide-fastening, in order that it may be shifted on said bar when the plow is changed from a right to a left hand plow, or vice versa. The tongue or pole *m* is also connected to the top cross-bars by a slide-fastening for the same purpose,



and the adjustable clamps permit the plow-beam to be changed from right to left.

In a left-hand plow the furrow-wheel, which is the left-hand wheel, must be worked forward of the right-hand wheel, and in a right-hand plow the reverse of this is true.

To change the sulky from a right to a left hand plow, the caps Q Q should be loosened, and the left-hand lever turned to the rear notch of its rack, the right-hand lever to the front notch of its rack, and the caps again tightened, the wheels being in the same plane. To change from a left to a right hand, would, of course, require a reverse position of the levers N N.

The rear bail, U, is operated by the lever *i*, and by means of the step *k* the driver can throw his entire weight upon the lever, which will greatly assist him in raising the plows, and enable him to perform the operation with ease.

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

1. In a plow-sulky, the frame-bars F F and curved bars G G, in combination with the pivoted bars K K, having the ratchet-seats, the levers N N, and the caps Q Q, and fastening-nuts, substantially as specified.

2. In a plow-sulky, the combination, with the frame-bars F F and curved bars G G, of the intermediate cross-bars, I I, having angular ends I' I', extending outwardly, and the arched racks O O, substantially as specified.

3. In a plow-sulky, the combination, with the vertical perforated arms H H, secured to the main frame, of the pivoted bails T and U, and their operating-levers *i c*, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE POWELL.

Witnesses:

FRANK A. KAUFFMAN,  
JOHN S. GILL.