



# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **195,389**, dated September 18, 1877; application filed July 28, 1877.

### *To all whom it may concern:*

Be it known that I, JOSEPH M. PAYNE, of Dallas, in the county of Dallas and State of Texas, have invented a new and valuable Improvement in Sulky-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 vertical sectional view of my sulky-plow. Fig. 2 is a side view, Fig. 3 is a rear view, and Fig. 4 is a plan view, thereof.

The nature of my invention consists in the construction and arrangement of a sulky-plow, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the sulky-frame, provided on its under side with boxes *a a*, in which the axle *b* is placed. B B are the driving-wheels, placed on the ends of the axle *b*. C represents the plow-beam, with plow *C'*, of any suitable construction.

The plow-beam is attached to the sulky-frame by means of bars D D', the extreme inner ends of which are perforated with holes *x x*, for the purpose of moving to or from the wheels, according to the nature of the ground.

The end of the front bar, D, is attached to a stirrup, E, which is adjustable in a slot, *e*, in the front cross-bar of the sulky-frame A, for the purpose of giving or taking land. When adjusted, this stirrup is fastened firmly to the frame, so as to attach this bar D at the inner end firmly to its place, and the lever thereby is caused to move the outer end only of said bar, which is attached to the plow, whereby the point of the plow may be raised and lowered at will without regard to the heel, so that the point of the plow can be taken out of the ground first, or put in point first.

The bar D', on the rear end of the plow, is attached to a stirrup, G, which straddles the plow-beam and passes under the same, with a spring, H, on top of the beam, holding said stirrup up, as shown. The other end of the bar D' passes through a vertically-slotted arm, I, attached to and depending from the sulky-frame, against which arm the pin *d* works, said pin being passed through one of the holes *x* in the inner end of the bar, and governing the distance of the plow from the wheel.

The inner end of the bar D' is, by links *i*, connected with a curved lever, J<sup>1</sup>, provided with a spring-pawl, *h*<sup>1</sup>, to take into a ratchet-segment, K<sup>1</sup>, as shown, so that by the use of said lever J<sup>1</sup> the level of the plow may be adjusted, as required; or, in other words, the plow set perfectly level, or tilted to the right or left, as desired.

The front bar, D, is operated by a lever, J, with spring-pawl *h* and ratchet-segment K, for raising or lowering the point of the plow, as desired.

The rear end of the plow is raised and lowered, as required, by means of a lever, J<sup>2</sup>, through the rear end of which the bar D' passes, said lever being operated by the foot of the driver, and provided with a spring-pawl, *h*<sup>2</sup>, taking into a ratchet-segment, K<sup>2</sup>, the two levers J and J<sup>2</sup> working entirely independent of each other.

Hence, with the bars, levers, and ratchets, the operator can adjust the plow at both ends of the beam, and hold it firmly in position with the yielding pressure of the spring H.

L is the tongue, which is shown in position for three horses; but for two or four horses, the tongue is placed on the outer ends of the frame, over the plow-beam, so that we get direct draft from the plow.

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

1. In a sulky-plow, the combination, with the plow and frame, of the pivoted connecting-bars D D', having holes *x* in their inner

ends for adjusting the plow at different distances from the wheels, substantially as herein set forth.

2. In a sulky-plow, the combination of the pivoted connecting-bars D D', with adjusting-holes at their inner ends, and a plow, with its beam at their outer ends, and the independent levers J J<sup>2</sup>, with pawls and ratchet segments K K<sup>2</sup>, 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.

JOSEPH MOTT PAYNE.

Witnesses:

R. B. MCGEASHAN,  
H. W. REYMOND.