J. E. PORTER.

SULKY PLOW.

No. 192,279. Patented June 19, 1877.

Fig. 1.

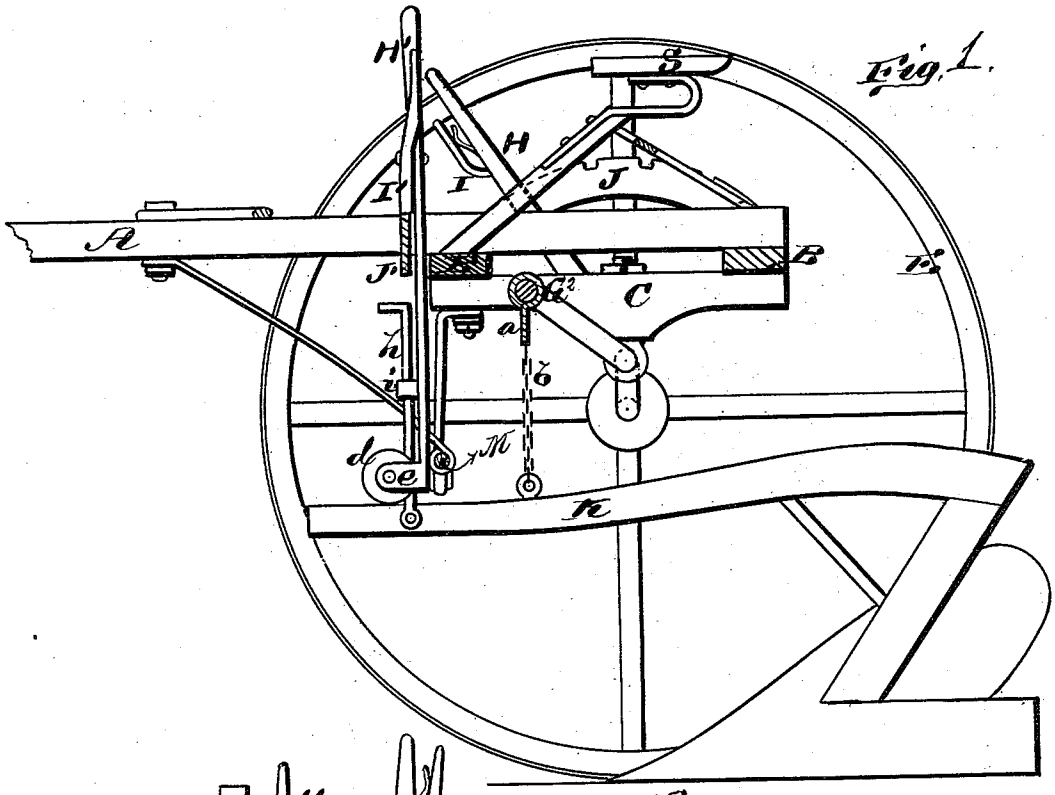



Fig. 2.

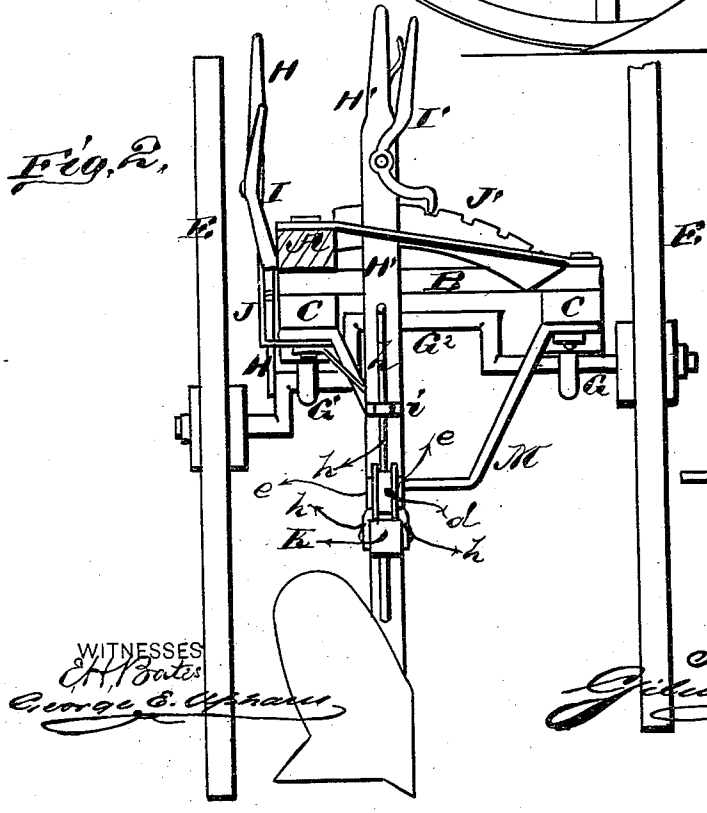
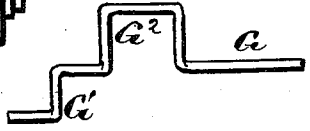



Fig. 3.




WITNESSES

E. H. Bates

George E. Graham

INVENTOR.

John E. Porter.

Gilmore, Smith & Co.

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JOHN EDGAR PORTER, OF CHEROKEE STATION, KANSAS.

## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **192,279**, dated June 19, 1877; application filed May 12, 1877.

*To all whom it may concern:*

Be it known that I, JOHN E. PORTER, of Cherokee Station, in the county of Crawford and State of Kansas, 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 longitudinal vertical sectional view of my sulky-plow. Fig. 2 is a part sectional front view of the same, and Fig. 3 is a detail view.

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 tongue, to the rear portion of which, on the under side, are attached two parallel bars, B B, extending toward the left at right angles with the tongue. The ends of these bars are at their under sides connected by beams C C, running parallel with the tongue.

In suitable boxes on the under sides of these beams is placed the axle, upon the ends of which the driving-wheels E E are mounted. This axle is straight at one end, G. At the other end it forms a crank, $G^1$, and in the center a crank, $G^2$.

To the crank $G^1$ is attached a lever, H, provided with an ordinary spring-lever dog, I, taking into a segmental rack, J, as shown.

The crank $G^2$ has a short arm, *a*, rigidly attached to it, and this arm is, by a chain, *b*, connected with the plow-beam K.

At the front of the sulky-frame A B C is a downwardly-projecting guard, M, to which a lever, H′, is pivoted, said lever being provided with a spring-lever dog, I′, that takes into a segmental rack, J′.

At the lower end of the lever H′ are forwardly-projecting ears *e e*, between which is mounted a roller, *d*. Between this roller and the lever passes loosely a rod, *h*, upward through an eye or guide, *i*, on said lever. The lower end of the rod *h* is formed with a fork, which straddles the front end of the plow-beam, and is pivoted to the same.

S is the driver's seat, supported on the sulky-frame.

It will be seen that in this invention the plow runs or works perfectly loose in every way. In running over rough ground the plow works up and down on the roller *d* in front. By means of the lever H′ the plow may be tilted so as to throw it on the bar in finishing up and laying off the land.

The lever H, by means of which the plow is thrown in and out of the ground, also adjusts the wheels to level the sulky when in the furrow and out of it.

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

1. In a sulky-plow, the axle forming the straight arm G, crank-arm $G^1$, and center crank $G^2$, in combination with the wheels E, arm *a* with chain *b* connecting with the plow-beam, and the lever H, whereby the plow is raised or lowered and the wheels adjusted with one operation of the same lever, as set forth.

2. The combination of the pivoted lever H′ with guide *i*, the sliding rod *h*, forked at its lower end, and the plow-beam K, substantially as and for the purpose described.

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

JOHN EDGAR PORTER.

Witnesses:
SILAS HUDSON,
JOHN LITTLE.