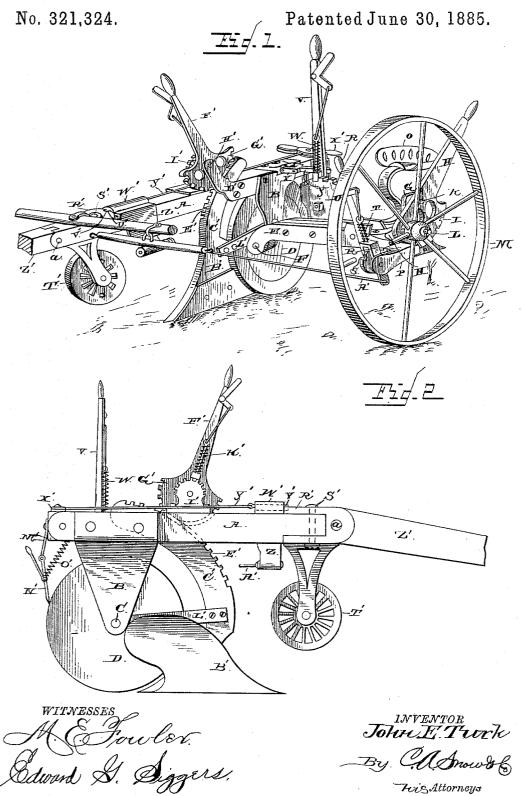
J. E. TURK.

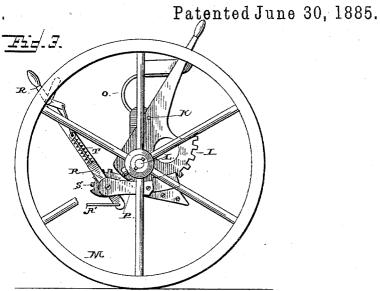
SULKY PLOW.

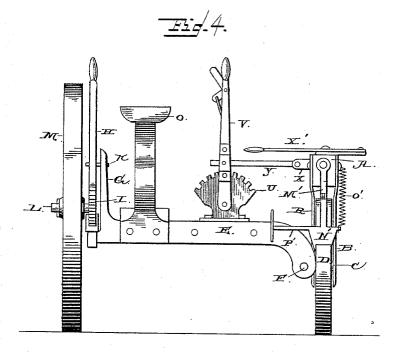


J. E. TURK.

SULKY PLOW.

No. 321,324.





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Texts Attorneys

STATES PATENT

JOHN E. TURK, OF KELLY'S CORNERS, MICHIGAN.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 321,324, dated June 30, 1885.

Application filed April 21, 1885. (No model.)

To all whom it may concern:

Be it known that I, John E. Turk, a citizen of the United States, residing at Kelly's Corners, in the county of Lenawee 5 and State of Michigan, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in 10 sulky-plows; and it consists in the peculiar combination and construction of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is 15 a perspective view of a plow embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a similar view showing the opposite side of the machine. Fig. 4 is a rear elevation of the same.

A represents the plow-beam, near the rear end of which, on opposite sides, are bolted brackets B, in the lower end of which brackets is journaled a landside-wheel, D, upon a shaft, C.

To the inner one of the brackets B is hinged an axle, E, as at F. The outer end of this axle has projecting from its upper side a standard or bracket, G, to which is fulcrumed a lever, H, that has a segmental rack, I, formed 30 with it. The lever is fulcrumed to the bracket at the point K. A spindle, L, projects from the outer side of the lever, and on this spindle is mounted the main supporting-wheel M.

N represents a spring-pawl, which is bolted 35 to the upper side of the axle near the outer end thereof, and engages with one of the teeth of the rack I, and thereby keeps the lever H at any desired position.

A driver's seat, O, has its standard bolted 40 to the axle near the outer end thereof, and extending forwardly from the outer end of the axle is a bracket, P, in which is fulcrumed the lower end of a hand-lever, R.

A segmental rack, S, is formed integrally 45 with a portion of the bracket P, and the handlever R is provided with a spring-actuated bolt, T, which engages with the rack S, and maintains the lever R at any desired position.

A segmental rack, U, is provided near the 50 center of the axle and extends parallel therewith, and to this rack is fulcrumed a handlever, V, having a spring-actuated bolt, W,

which engages with the rack and secures the lever thereto at any desired point.

 ${
m X}$ represents a bracket that is bolted to the 55inner side of the plow-beam near the rear end thereof, and to this bracket is connected a rod, Y, that is connected also to the lever V. A. bracket, Z, is also bolted to the inner side of the plow-beam near the front end thereof, and 50 is connected to the lower end of the lever R by means of a rod, A'.

By means of the hand-levers V and R, the landside-wheel may be tilted or inclined toward or from the wheel M, as will be readily 65 understood, so as to cause the plow B', which is secured to the beam immediately in advance of the landside-wheel, to work in the ground at any desired angle.

The standard C of the plow is curved rear- 70 wardly and upwardly, and passes through and is supported in a bracket, D', secured to the beam, and the front outer face of said inclined portion of the plow-standard is provided with a series of rack-teeth, E'.

A hand-lever, F', which has a segmental rack, G', formed at its lower end, is fulcrumed to the bracket D', as at H', and engages with the rack-teeth of the plow-standard. By means of the lever F' the plow may be raised or lowered, 80 as will be readily understood.

A segmental rack, I', is bolted to the upper side of the plow-beam, on the outer side of the lever F', and with this rack engages a spring-actuated bolt, K', with which the lever is pro- 85 vided, by which means the lever may be maintained at any position at which it is placed, with the plow either in or raised from the ground.

The plow-standard is fulcrumed to the shaft C by means of rearwardly-extending arms L', 90 that are bolted to the standard on opposite sides thereof, as shown.

Depending from the rear end of the plow-beam is a link, M', to which is hinged a scraper, N', that is caused to bear upon the rear upper 95 side of the landside-wheel by means of a spring, O', which is secured to said scraper and to the plow-beam.

An arm, P', extends inwardly from the inner side of the scraper to within easy reach of the 100 driver, and when it is desired that the scraper should not bear upon the periphery of the wheel, it can be thrown up out of contact therewith by means of this arm.

R' represents a caster, which is swiveled to the front end of the plow-beam by means of a vertical bolt, S'.

A wheel, T', is journaled in the caster, and 5 runs in advance of the plow. In a line with this wheel, in the rear side of the upper end of the caster, is made a notch, U', which aligns with the longitudinal axis of the beam.

A bolt, V', works in a box, W', that is se-10 cured to the front end of the plow-beam on the upper side thereof, and is caused to engage with or disengage from the notch in the caster by means of a hand-lever, X', that is fulcrumed to the rear end of the plow-beam, and is con-15 nected to the bolt by means of the rod Y'. When the bolt engages with the notch, the caster is prevented from turning on the front end of the wheel and the plow is guided in a direct line. When the bolt is disengaged from 20 the notch, the caster is free to turn, as will be readily understood.

A draft-pole, Z', is hinged to the caster, as at a, and is provided with a double-tree and single-tree for the attachment of a team in the

25 ordinary manner. A sulky-plow thus constructed is easily operated, is of light draft, and performs its work thoroughly and well.

Having thus described my invention, I

1. The combination of the axle, the supporting wheel, the plow-beam hinged to the axle, the landside-wheel journaled in the brackets which form the hinge, the plow fulcrumed to 35 the shaft of the landside-wheel, having its standard curved and provided with rack-teeth, and the hand-lever F', having segmental gear G', meshing with the rack-teeth of the plowstandard, and the lever V, for inclining the 40 beam, the plow, and the landside-wheel, substantially as described.

2. The combination of the plow-beam, the plow, the landside-wheel, the scraper N', hinged to the plow-beam, and the spring O', secured 45 to the scraper and to the beam, substantially

as described.

3. The combination of the axle, having the vertical bracket G at one end, the lever H, having the rack-teeth I and the spindle L, and fulcrumed to the bracket G, the supporting- 50 wheel on the spindle, the pawl engaging with the rack-teeth, the plow-beam hinged to the axle, the landside wheel journaled in the brackets that form the hinge, the plow fulcrumed to the shaft of the landside-wheel, a lever for rais- 55 ing or lowering the plow, and the lever V, for inclining the beam, the plow, and the landsidewheel, substantially as described.

4. The combination, in a sulky-plow, of the axle having the supporting-wheel at one end, 60 the bracket B, hinged to the opposite end of the axle and having the spindle C, the plowbeam secured to the bracket, the landsidewheel on the spindle C, the plow fulcrumed also on said spindle, a lever for raising or low- 65 ering the plow, and a lever for tilting the bracket, the beam, the landside-wheel, and the

plow, substantially as described.
5. The combination, in a sulky-plow, of the axle having the supporting-wheel at one end, 70 the bracket B, hinged to the opposite end of the axle and having the spindle C, the plowbeam secured to the bracket B, the landsidewheel on the spindle C, the plow fulcrumed also on said spindle, a lever for raising or low- 75 ering the plow, a lever, V, for tilting the bracket, the beam, the landside-wheel, and the plow, the caster R', swiveled to the front end of the plow-beam, the wheel journaled in the caster, the pole hinged to the caster, and a spring- 80 actuated bolt working on the front end of the beam for engaging a notch, U', in the caster, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 85

presence of two witnesses.

JOHN E. TURK.

Witnesses: LEONARD SANFORD, Loss Parsons.