

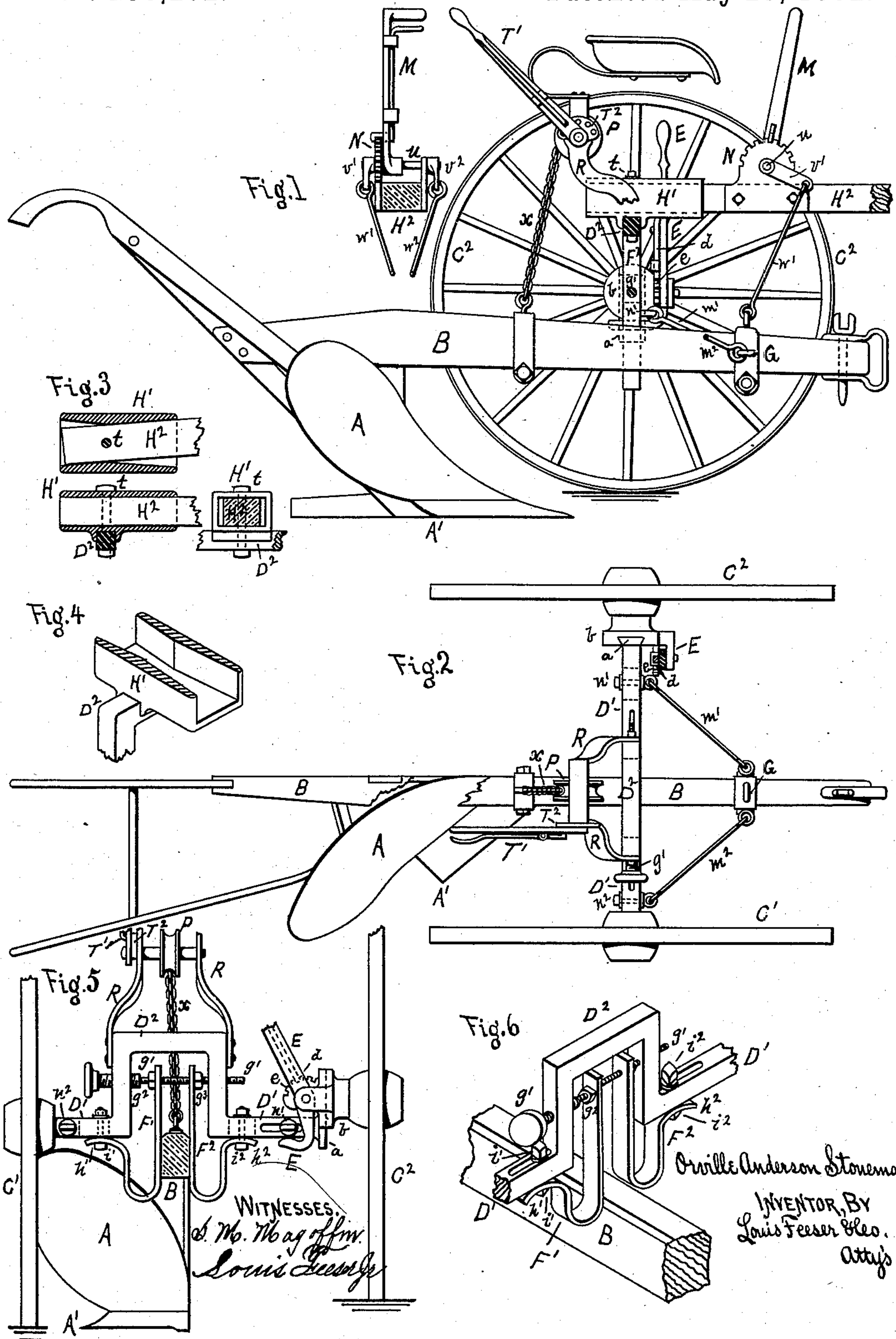
(No Model.)

O. A. STONEMAN.

SULKY PLOW.

No. 258,262.

Patented May 23, 1882.



UNITED STATES PATENT OFFICE.

ORVILLE A. STONEMAN, OF MINNEAPOLIS, MINNESOTA.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 258,262, dated May 23, 1882.

Application filed July 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, ORVILLE ANDERSON STONEMAN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Sulky-Plows, of which the following is a specification.

This invention relates to sulky-plows; and it consists in the construction and combination of parts hereinafter particularly described, and then sought to be specifically defined by the claims.

Figure 1 is a sectional side elevation. Fig. 2 is a plan view with the tongue removed; Figs. 3 and 4, detached detail views of the swivel-tongue connection; Fig. 5, a front elevation, and Fig. 6 a perspective view, of a portion of the axle and beam and its connections detached.

A is the plow; B, the beam; C' C², the sulky-wheels, and D' the axle, the latter being connected to the land-side sulky-wheel C² by a dovetail plate, *a*, sliding perpendicularly in a dovetail groove in the hub *b* of the wheel and adapted to be raised and lowered and held at any point by a lever, E, dog *d*, and notched segment *e*, as shown, to adapt the sulky to the depth of cut of the plow. The axle D' is provided with a crank-shaped bend, D², in which two curved plates, F' F², are held by a screw-rod, *g*', tapped through both upright parts of the bend D², and passing through slots in the plates F' F². Nuts *g*² *g*³ are placed upon the screw-rod, by which the distance between the plates F' F² may be adjusted to fit the beam B, which passes between them, as shown. The opposite ends of the plates F' F² are turned outward and upward and provided with curved ends *h*' *h*², by which they are secured with bolts *i*' *i*² to slots through the axle D', as shown, by which means they may be adjusted along the axle. By curving the ends *h*' *h*² any adjustment of the upper ends of the plates F' F² or twisting movement of the beam B will cause the plates to slip or slide across the nuts on the bolts *i*' *i*² and not cramp at these points, as they would if the ends were straight. When any bodily side adjustment of the plates is required, it may be accomplished by means of the slots through the axle, besides the screw adjustment. By this means the beam is held between the plates F' F², but

is perfectly free to move up and down and swing between the plates F' F², and at the same time be held by a side pressure with sufficient firmness for any kind of plowing. By the free perpendicular movement of the beam the wheels may rise and fall to any extent in running over rough ground without affecting the plow. This arrangement of the plates F' F² also permits the plow to be set at an angle to cause the back point, A', of the share to cut out through the sod in forming the first furrow in new land or prairie breaking, or for any other purpose.

G is a clamp encircling the beam forward of the axle D', and connected by rods *m*' *m*² to the axle, near either end, by bolts *n*' *n*², the landside connection *n*' being by a slot through the axle, (see Figs. 2 and 3,) so that it may be adjusted to hold the axle at right angles to the beam. These rods *m*' *m*² thus serve to draw the sulky attachment along with the plow, and in no other manner affect or control its movement.

H' is an oblong box or sleeve, attached rigidly to the upper side of the crank part D² of the axle D' by a bolt, *t*, the sides of sleeve on the inside being angular, as shown, to permit a slight degree of lateral play to the tongue, so that the natural vibratory motion of the horses will not be communicated to the axle.

Across the tongue H², forward of the sleeve H', a short shaft, *u*, is journaled, and provided with arms *v*' *v*² upon either end outside the tongue, which are connected by rods *w*' *w*² to the clamp G, the said arms *v*' *v*² being adapted to be raised and lowered and adjusted at any point by a hand-lever, M, and notched segment N, by which, through the rods *w*' *w*², the forward end of the beam may be raised and lowered to set the "nose" of the plow into the ground when first starting, or to raise it from the ground for any purpose. By suspending the beam between the plates, as described, and pivoting the tongue to the sleeve or cap H', as set forth, both tongue and beam are allowed a vibratory motion without communicating it to the axle.

P is a chain-wheel mounted in a frame, R, above the axle D' D², and connected by a chain, *x*, to the beam B in the rear of the axle, and adapted to be revolved and set at any point

by a lever, T' , and segment T^2 , to raise the plow from the ground and hold it at any desired point of elevation. This chain is simply and only to raise the plow when moving from
5 place to place, or when turning corners, and will be slack when the plow is working.

What I claim as new is—

1. The combination, with beam B and axle D' , having bend D^2 , of the curved plates F' F^2 ,
10 secured at their lower ends to axle D' and at their upper ends within the bend D^2 by a transverse adjusting-screw, g' , substantially as set forth.

2. The combination, with beam B and axle
15 D' , of the curved plates F' F^2 , having curved lower ends, h' h^2 , and admitting of lateral adjustment at their upper ends by means of a screw, substantially as specified.

3. The combination of axle D' D^2 , beam B,
20 plates F' F^2 , having curved lower ends, lateral adjusting-bolts i' i^2 , screw g' , and nuts g^2 g^3 , substantially as specified.

4. The beam B, suspended in the crank por-

tion D^2 of the axle D' between the plates F' F^2 , in combination with the sulky-tongue H^2 , 25 pivoted in the sleeve H' , having double inclined walls, and secured to the crank portion D^2 of the axle, by means whereof both beam and tongue may have a vibratory motion without communicating it to the axle, substan- 30 tially as set forth.

5. The combination of axle D' , beam B, and rods m' m^2 , connecting the axle and beam, one of the rods being secured to the axle by a bolt passing through an elongated slot in the axle, 35 by means whereof the axle and beam may be adjusted at right angle to each other, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 40 witnesses.

ORVILLE ANDERSON STONEMAN.

Witnesses:

C. N. WOODWARD,
LOUIS FEESER, Sr.