

(No Model.)

L. LUPPEN.

SULKY PLOW

No. 261,365.

Patented July 18, 1882.

Fig. 1.

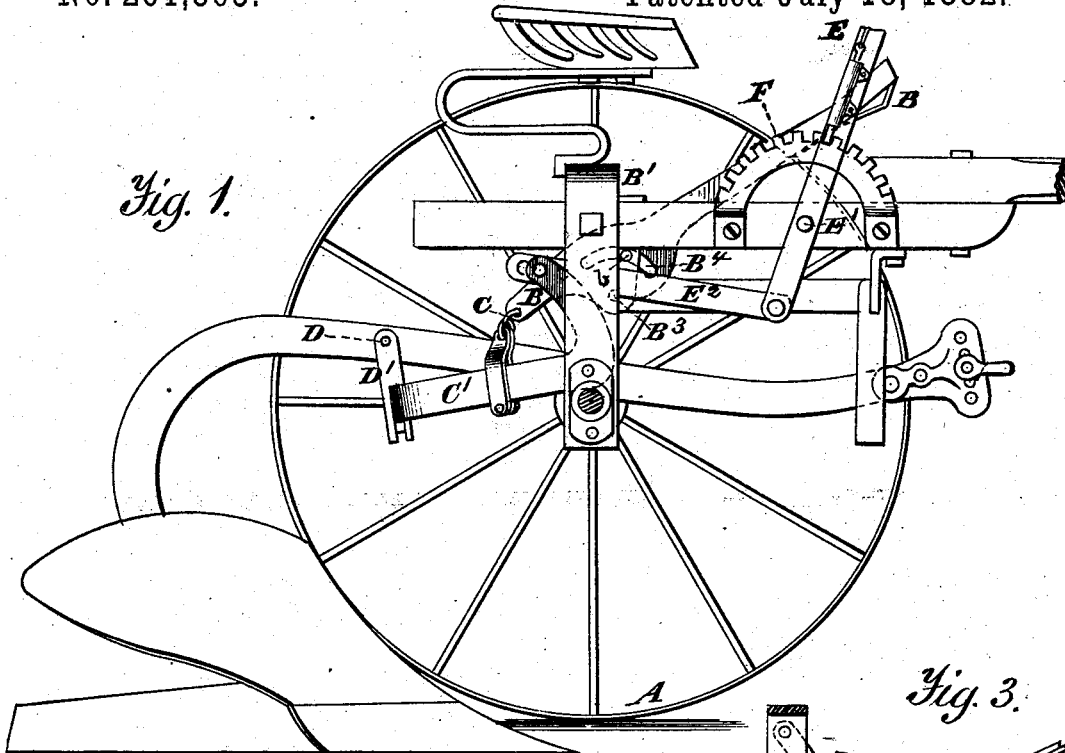


Fig. 2.

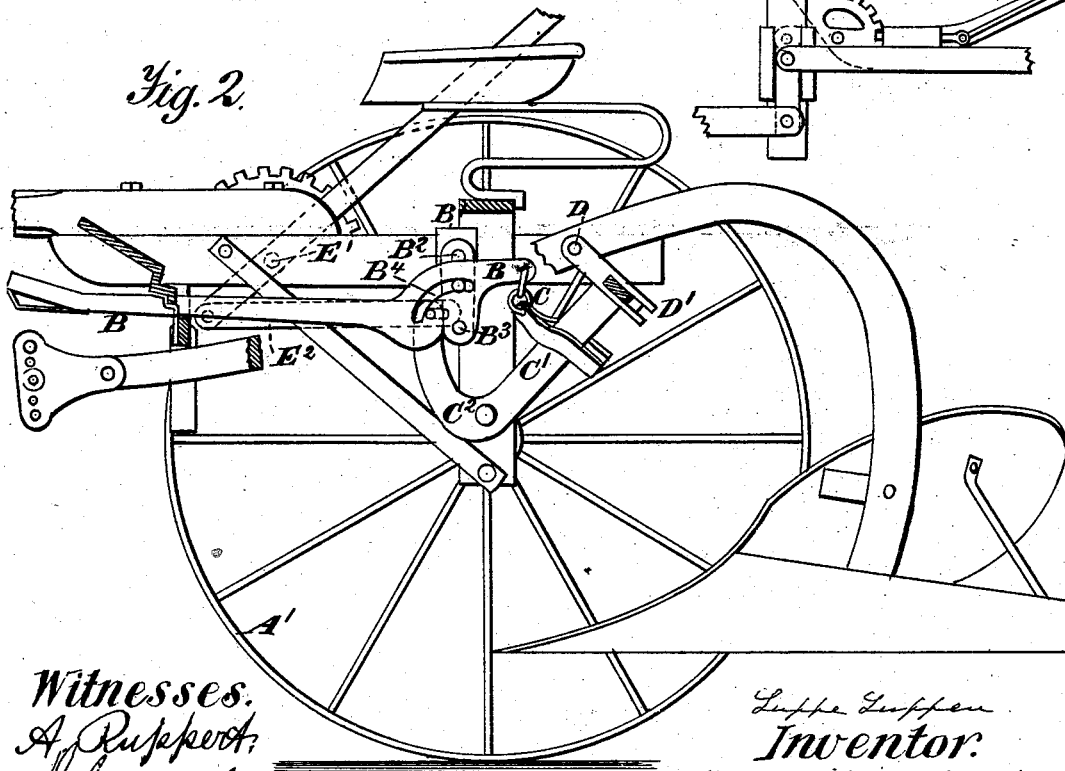
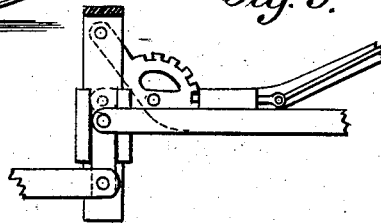


Fig. 3.



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LUPPE LUPPEN, OF PEKIN, ILLINOIS.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 261,365, dated July 18, 1892.

Application filed February 27, 1892. (No model.)

To all whom it may concern:

Be it known that I, LUPPE LUPPEN, a citizen of the United States, residing at Pekin, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Sulky-Plows, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to sulky-plows; and the objects of my improvements are, first, to provide a foot-lever for raising and lowering the plow; and, second, to provide such devices and combinations thereof as will enable the operator to cause the plow to be carried forward as it is raised up, by which means it is raised with the expenditure of a less amount of force than is ordinarily required. I attain these objects by means of the devices and combinations illustrated in the accompanying drawings, in which—

Figure 1 is an elevation having one of the carrying-wheels removed, showing the other wheel, the driver's seat, a portion of the tongue and frame-work, the plow and its beam in position for use, foot-lever, and the parts for connecting it to the plow-beam. Fig. 2 is an elevation showing the parts above enumerated as they appear when the plow is raised up, a portion of the beam being broken away for the purpose of showing the curved slot in the foot-lever and the position of its parts, it showing, also, the foot lever or rest upon which the operator places his feet; and Fig. 3 is a detail view, showing the mechanism for adjusting the vertically-adjustable carrying-wheels.

Similar letters refer to similar parts throughout the several views.

Sulky-plows have heretofore been constructed in such a manner that the plows and their beams could be raised and lowered at the will of the operator; but the change of position has been effected by means of a lever operated by hand or by the foot of the operator; but in none of the devices with which I am acquainted has any provision been made for giving to the plow and its beam any considerable forward movement in the act of raising it out of the ground for the purpose of more nearly balancing it upon its point of suspension and making it capable of being handled with the

expenditure of comparatively a small amount of force, as in my case.

In constructing this class of plow with my improvements connected therewith I provide two carrying-wheels, A A', of any approved form, one of which is of greater diameter than the other, as is usual in the type of plow now in use. I also provide the necessary axles and frame-work for supporting the wheels and the other parts in position, said frame being provided with a slip-joint inside its smallest wheel for the purpose of providing for the raising and lowering said wheel, and with a lever and sector for holding the wheel in its adjusted position. I also provide a tongue-seat and foot-board of any approved form.

The above-recited parts may be of any approved forms; but as they form no part of my present invention they need not be more particularly described here.

The parts which constitute my improvements will now be described, they consisting of a lever, B, which is pivoted to a bracket, B', bolted or otherwise attached to the frame-work of the machine at B², the pivotal point of the lever being at B³. This lever is provided with a curved slot, B⁴, for controlling its range of motion, which works on a stud, b, secured in the bracket B', as shown in Figs. 1 and 2, the long arm of said lever extending forward and upward, and having at its extreme forward end an enlargement adapted to receive the foot of the operator, while its rear and shorter arm is extended rearward and downward, and is provided with a flexible connection, C, which connects it with a yoke, C', pivoted to the vertical portions of the frame-work at C². It will be seen that the yoke C' extends some distance to the rear of its pivotal points, and that the beam of the plow is pivoted thereto at the point D, lugs D' D' being provided for that purpose. The short arm of the foot-lever being connected to the yoke C' at a point in the rear of the point where it is pivoted to the frame of the machine, it follows that as the forward end of the foot-lever is pressed downward the rear portion of the yoke C' will be carried upward and forward, and that, owing to the fact that the beam of the plow is so pivoted to said yoke that it cannot move backward or forward

thereon, it will partake of the forward movement of the yoke, and will be carried forward as it is raised, the long arm of the yoke C' giving to it a largely-increased amount of forward movement, the result of which will be to carry the weight of the plow nearer to a line with the axis of the carrying-wheels, or, in other words, will transfer a portion of the weight thereof from its rear end to its forward end, and thus result in a saving of considerable of the force now required in raising plows of this description, such a saving being of importance, as it frequently happens that it is desirable to employ boys as operators, which with a plow the parts of which are arranged as hereinbefore described is quite feasible.

As a matter of convenience in transporting the implement from place to place, I may provide a lever, E, and pivot it to the frame at E', its lower or short arm being attached to a rod, E², the opposite end of which is connected to the short arm of yoke C', while its long arm passes upward in such a direction as to cause it to be in a proper position to be manipulated by the driver as he sits in his seat. The lever and its connections, when used, are designed to enable the driver to raise the plow to a

suitable height and to secure it in said position, in order that when the implement is to be moved long distances—as from field to field—the driver may be relieved of the labor of keeping it raised by his foot, the plan shown including a sector, F, attached to the frame of the machine, by the side of which the lever passes, it being provided with a spring and dog for securing said lever in position by entering notches formed in the upper surface of the sector.

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

In a sulky-plow, the combination, with the plow-beam and the yoke having an upwardly-curved arm, of the hand-lever E and sector F, the foot-lever B, having curved slot B¹, the guide-pin b, and the flexible connection C, substantially as shown and described.

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

LUPPE LUPPEN.

Witnesses:

W. HEMMINGHOUSE,
H. F. FROEBE.