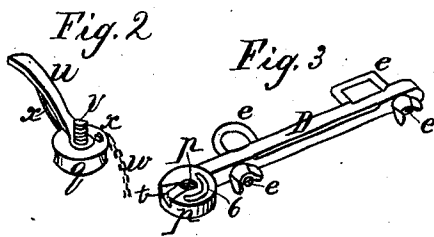
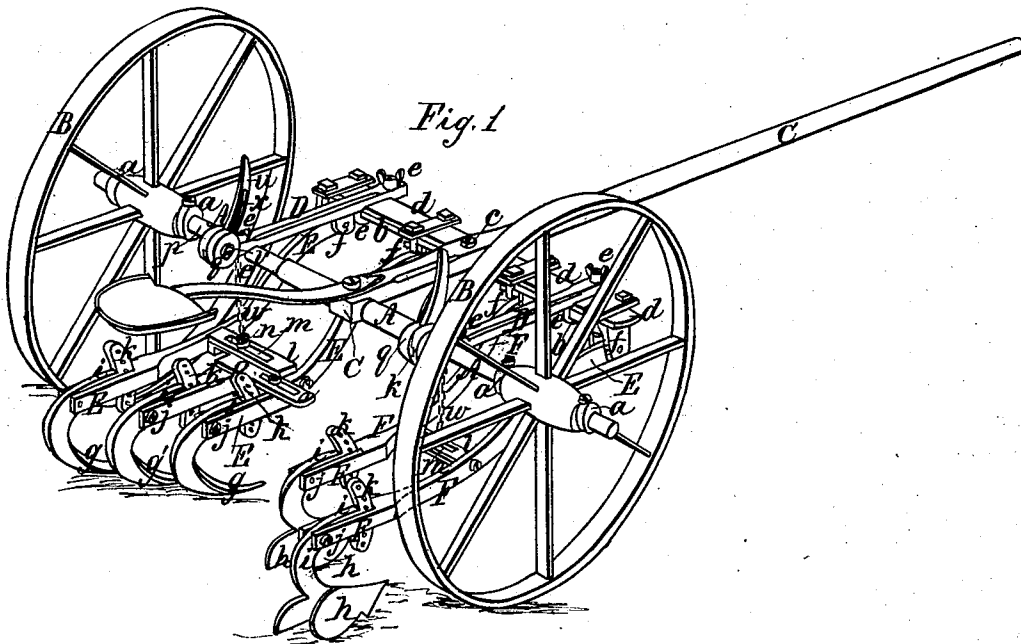


S. FISHER.
WHEELED CULTIVATOR AND PLOW.

No. 95,453.

Patented Oct. 5, 1869.



Witnesses
Ed Wilson
Edmund Masson

Inventor
Saml Fisher
By atty A B Slaughter.

United States Patent Office.

SAMUEL FISHER. OF HIGHTSTOWN, NEW JERSEY.

Letters Patent No. 95,453, dated October 5, 1869.

IMPROVEMENT IN WHEELED CULTIVATOR AND PLOW.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL FISHER, of Hightstown, in the county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Wheeled Cultivators or Plows; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a perspective view of the machine.

Figures 2 and 3 represent perspective views of detached pieces of the machine, not distinctly seen in fig. 1.

My invention relates to a series of cultivators or plows, connected to or with the axle of a pair of carrying-wheels, and so constructed as to be capable of the several adjustments necessary in such machines to adapt them to the varied uses or purposes of farming.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same, with reference to the drawings.

A is the axle, upon which the carrying-wheels B B are placed and turn, they being adjustable on said axle by means of the collars and set-screws *a a*, so as to be set nearer to or further from each other, as the distance between the rows to be plowed or cultivated may require.

The tongue C is fastened centrally to the axle A, and a bar or plate, *b*, is fastened to the tongue at *c*.

On top of the bar or plate *b*, and on each side of the tongue C, are placed bars or plates *d d*, which can be moved out and in on the permanent bar *b*, and may be guided in its movements by a tongue in one of the bars and a groove in the other.

The object of the sliding or adjustable bars *d d* is for the purpose of adjusting the distance between the plows or cultivators, from "out to out" intermediately, or both.

Braces D D extend from the bars *b d* back to the axle, and are adjustable on each by means of screw-clamps *e e*, so that they may be set toward or from each other.

The axle A, pole C, bars *b d*, and braces D D, may be said to constitute the main frame of the machine.

To adjustable hangers *f*, screw-clamped on the bars *b* and *d*, are pivoted the beams E E and F F, which extend rearward and downward, and have fastened to them, at or near their rear extremities, the cultivator-teeth *g*, or plows *h*, or parts of each, as the kind of work to be done may require.

The rear ends of the beams E and F are forked or slotted, so as to receive the shanks *i* of the cultivators or plows, which are pivoted therein, as shown at *j*, and the ends of the shanks *i*, beyond the pivots *j*, have an arc, *k*, on them, furnished with a series of holes, into one of which a pin may be placed to hold the teeth or plows at their adjusted position, and

these pins may be of wood, so that if the points of the plows or of the cultivators should come against any unyielding obstacle, the pin may break, and allow the tooth or the plow to swing back upon its pivot, and thus avoid more serious damage.

The beams E E and F F are, as above stated, adjustable laterally, at their forward ends, on the bars *b d*.

They are also braced toward their rear ends by overlapping bars *l l*, through slots *m*, in which a set-screw, *n*, is placed, so that they can be correspondingly adjusted at their rear ends.

The middle cultivator-tooth, *g'*, not having a beam of its own to carry it, is secured to the beam of one of the other teeth by a right-angled slotted bar, *o*, so that it may be adjusted centrally with regard to its mates or fellows when they are adjusted, and raise and lower with them.

On the rear ends of the braces D D, and in rear of the axle A, there are disks or hubs *p p*, which have in them a pivot-hole, *r*, a slotted arc, *s*, and a radial recess, *t*, and there is attached to, so as to work in connection with these hubs *p*, a pulley, *q*, a spring-lever, *u*, and a pivot, *v*, there being a recess in that face of the pulley which sets up against the face of the hub *p*, into which the lever *u* and its spring may enter.

The beams E F are suspended to the pulleys *q* by chains *w*, and the driver, sitting in his seat G, may seize the levers *u*, and, by moving them downward and backward, raise up the beams, and the teeth or plows attached thereto, and when, by the swinging of the lever and the turning of the pulley thereby, the lever comes opposite to the recess *t* in the hub *p*, the spring *x*, behind it, forces into said recess *t*, and it there locks the pulley, and holds up the plows or cultivators.

When the plows or cultivators are to be let down, the lever *u* is drawn laterally against its spring until both are in the recess in the pulley, and then the weight of the plows or cultivators will turn the pulleys, if not restrained by the levers, and they will descend to the ground.

A stud, *z*, in the pulley *q*, moves in the slotted arc *s* of the hub *p*, and defines the extent of motion of said pulley.

Having thus fully described my invention,

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

In combination with a main axle, a pair of carrying-wheels, and a main frame that can be widened or narrowed, and adjustable beams and plows thereon, the hub, pulley, lever, and chain, and their appliances, for raising or lowering, or holding the plows or cultivators on the main frame or axle, substantially as described.

SAML. FISHER.

Witnesses:

SAMUEL E. FISHER,
S. M. SCHANCK.