

UNITED STATES PATENT OFFICE.

GEORGE W. SCHENCK, OF GENEVA LAKE, WISCONSIN, ASSIGNOR TO
CHAUNCEY E. BRANDON, OF SAME PLACE.

IMPROVEMENT IN WHEEL-CULTIVATORS.

Specification forming part of Letters Patent No. **166,417**, dated August 3, 1875; application filed
May 15, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. SCHENCK, of Geneva Lake, in the county of Walworth and State of Wisconsin, have invented an Improvement in Sulky-Cultivators, of which the following is a specification:

My invention relates to certain improvements in sulky-cultivators, having for its object to enable the rider to raise or lower either or both plow-frames with one hand.

Figure 1 is a perspective view. Fig. 2 is a plan of the plow-frames and of the shield suspended between them. Fig. 3 is a partial elevation of the rear end.

In the drawing, A A represent the traction-wheels, each mounted on a curved or arched axle-arm, B, both arms being bolted to the under side of an axle-beam, B, on top of which the rear ends of a split or forked tongue, C, are bolted. D is a seat for the driver on a perch projecting horizontally to the rear of the axle-beam. E E are the main beams of the plow-frame, each hung by a pair of eye-bolts at the front end to the under side of the draft-tongue. E' is a shorter beam at the inner side of each beam E, and is hinged thereto at the front end by a pin through a plate, a, projecting inwardly from the latter. An arched bar, F, is laid across all the beams, its flat or straight ends passing under clamp-plates b on the outer beams, and under similar ones, b', on the beams E'. A plow-standard (and shovel) is placed on each side of each beam E, and one on the inner side of each beam E'. The outer shovels are adjustable as to the distance between them by moving their beams to the required distance apart, and then securing them in position by screwing down the bolts through the clamp-plates b. The inner beams may in like manner be adjusted and secured, if desired; but in practice they will not be clamped to the gage-bar F, being free to move laterally. Their positions will be under the control of the driver, who sits with a foot resting upon the rear end of each beam E', so that he can move it toward or away from the straddled row by a movement of the foot, as circumstances may require.

G is an arched metal shield, hung by a flexible metal strap, G', at the front end, to the under side of the tongue, while its rear end is suspended between the shovels and directly over the straddled row by two wires or cords from the bar F. Its office is to protect the young corn from injury from dirt thrown too close to or upon it by the inner shovels.

The plow-beams are raised and lowered in the following manner: A shaft, H, is journaled through bearings c across the rear ends of the forked tongue, with an arm at the left-hand end, to which is attached one end of a cord, I, or chain, passing over a sheave in a standard, J, thence down to the left-hand shovel-beam E. At the right-hand end there is a lever, K, having a gripe spring-pawl, d, which engages with a notched quadrant, e, projecting to the rear from the right side of a standard, J'. By means of this arrangement of devices the left beam may be raised and lowered and suspended at any point of elevation. K' is a similar lever, having a pawl, d', which engages with a quadrant, e', at the left side of the standard J', and from which a chain passes over a sheave in said standard, and down to the right beam E. The lower end of said lever K' is sleeved upon the shaft H, and by means thereof the said beam E may be raised and lowered at will.

The levers are so near together that they may be simultaneously drawn back to lift both sets of shovels in case a large obstruction is met with.

What I claim as my invention is—

In a cultivator, substantially as described, the combination of the levers, K' for lifting each set of shovels, both placed at one side of the frame, one being rigidly secured to a rock-shaft, and the other turning independently of said rock-shaft, so as to be used separately or to be simultaneously drawn back by one hand, substantially as described and shown.

G. W. SCHENCK.

Witnesses:

BENJAMIN FISH,
JAMES CLEARY.