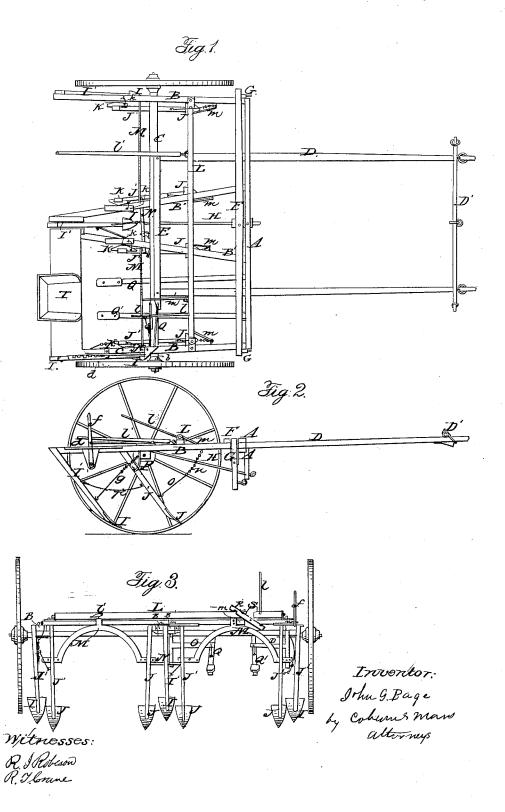
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Patented Aug. 22, 1865.



UNITED STATES PATENT OFFICE.

JOHN G. PAGE, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 49,547, dated August 22, 1865.

To all whom it may concern:

Be it known that I, John G. Page, of Rockford, in the county of Winnebago, in the State of Illinois, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

The nature of my said invention consists in providing a wheeled cultivator with two draftpoles and in so arranging and constructing said machine that two rows may be cultivated at a time, and also in novel arrangements and devices whereby the two sets of plows may be operated simultaneously by the driver, either

by a lever operated by the hand or by a footlever or treadle, as he may prefer.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which-

Figure 1 represents a plan or top view of my invention; Fig. 2, a side elevation of the same,

and Fig. 3 a rear elevation thereof.

Similar letters of reference in the different figures denote the same parts of my invention.

A represents the front cross-bar of the frame of the cultivator, constructed of two pieces, one lying above and one below the longitudinal bars B B, which are fixed upon the axle C, as shown, thus forming a slot in said front crossbar, in which the draft-poles D D rest, and have a lateral movement when desired.

E represents a cross-bar connecting the said draft-poles at their rear ends, there being also another cross-bar connecting the same lying within the aforesaid slot in A, there being a bolt passing through said cross-bars at their middle joint, as shown. From said central point of said cross-bar connecting the draftpoles there projects back a short support, to which the evener or double-tree F is attached, G representing vertical single-trees, the upper ends resting against the extremities of said evener F, while the draft is applied at the lower ends, as shown, one horse being attached to each of said vertical whiffletrees G outside of the draft-poles, and one horse being attached to the draft-rod H.

the draft-poles, as shown, to enable three or two horses to operate the machine, if desired. To the rear end of the draft-poles is attached a rod, a, which is connected to the bent lever b, to which also is connected the rod c, the opposite end of which is attached to the vertical lever f, so that by moving said lever back or forward upon the rack d the draft-poles may be thrown out of line, which, when fixed by the horses, will cramp the machine to operate successfully in cultivating upon a hillside, where otherwise the machine would slide or swing down out of place and destroy the plants.

B' B' represent two plow-beams, arranged as shown, and fastened rigidly to the front cross-bar, A, and axle C. To the rear ends of the beams B B and between the converging ends of the beams B' B' are attached or piveled the three standard. It is which the converging that the standard of the sta oted the three standards I', to which are attached the shares I. At a suitable distance in front of said standards I' are attached to said beams the four standards J', upon which are fastened the front plows or shares, J. The upper ends of said standards J' are provided with a rocker attachment, whereby they are attached to said beams at the center by a movable joint, so that by means of a hook and series of staples or loops, as shown, either face of said rocker K may be brought down upon said beams, and thus each share J may be adjusted at any desired angle, and the two forward center shares may be adjusted at different distances apart, having a free motion at their points of connection with the beams B' B'.

L represents a roller extending across the front part of the machine, supported in suitable bearings at each end and provided with the arms m, projecting forward, as shown, to the ends of which are attached the chains n, which are connected to the front standards, J', while the chains p connect said front standards to the rear ones, I', so that by simply bearing down the lever l the driver readily raises all the plows

up from the ground at will.

The two sets of front plows, which stride the rows of plants, are connected together respectively by the semicircles or bows marked M, as clearly shown in Fig. 3. The standards J' are attached to the ends of said semicircles, as shown, there being provisions at such connecting-points for adjusting said shares nearer together or farther apart, as may be desired. The D' represents a long neck-yoke attached to | adjacent ends of the said arcs M are connected

by means of the bar N, which also permits the connection to be shortened or lengthened, as desired; or the same connection may be made at the top of said semicircles or directly with the standards J' J'.

m' is a rod attached at one end to one of said arched connections M, and hinged at the other end to a cross-bar on the frame lying under the roller L, l' being similarly arranged with respect to the other arc M, and projecting back, forming a lever, operating as hereinafter set forth.

O P represent two bent or T-formed levers, the upper ends being pivoted to the axle, as shown. The lower end of O is attached to the connecting bar N, while the horizontal arm is connected with the foot-lever Q, and the lower end of P is suitably connected to the standard J', as shown, the horizontal arm being connected with the foot-gear Q'. By this arrangement the driver upon the seat, by pressing his foot upon the lever Q, moves all the forward plows laterally in one direction, and by pressing his foot upon Q'he moves them in the opposite direction, thus adapting the machine to the sinuosities of the rows. Should the driver desire to walk, he may equally well control said plows by moving the lever U.

When the rows are straight the front plows may be rendered stationary by bringing the latch or eatch R down upon the rod m', if de-

sired.

When it is desired to raise the plows from the ground to move the machine from field to field the lever l may be brought down under

the catch S, which holds it as long as may be desired.

For the purpose of adjusting the machine to rows of different distances apart an adjustable connection may be made between the tops of the two arcs M over each row.

Having described my invention, I will now specify what I claim and desire to secure by

Letters Patent:

1. In combination with a cultivating-machine for cultivating two rows, the employment of the two draft-poles D D, arranged and operating substantially as and for the purposes herein specified and shown.

2. In combination with a cultivator arranged so as to cultivate two rows at once, the arrangement of the two semicircles M M, the connecting-bar N or its equivalent, and the front sharestandards, J', operating substantially as and

for the purposes specified.
3. The arrangement of the latch R with the rod m' and arc M, as and for the purposes shown

and set forth.

4. The arrangement of the lever l with the latch R and rod m', operating to release the forward plows when they are raised from the ground, substantially as shown.

5. The arrangement of the long neck-yoke D' with the two poles D, as and for the purposes

specified.

JOHN G. PAGE.

Witnesses:
SILAS G. TYLER,
JOHN L. PAGE.