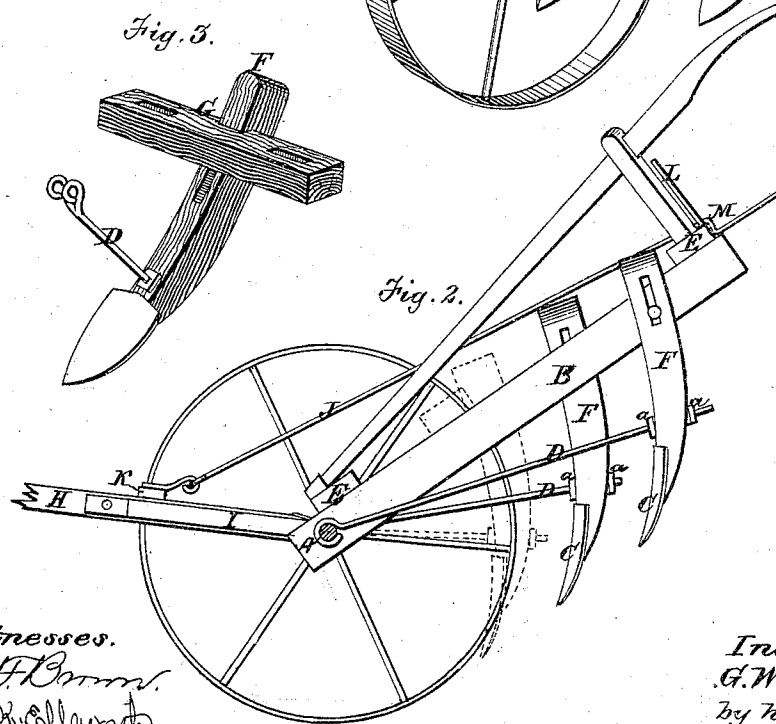
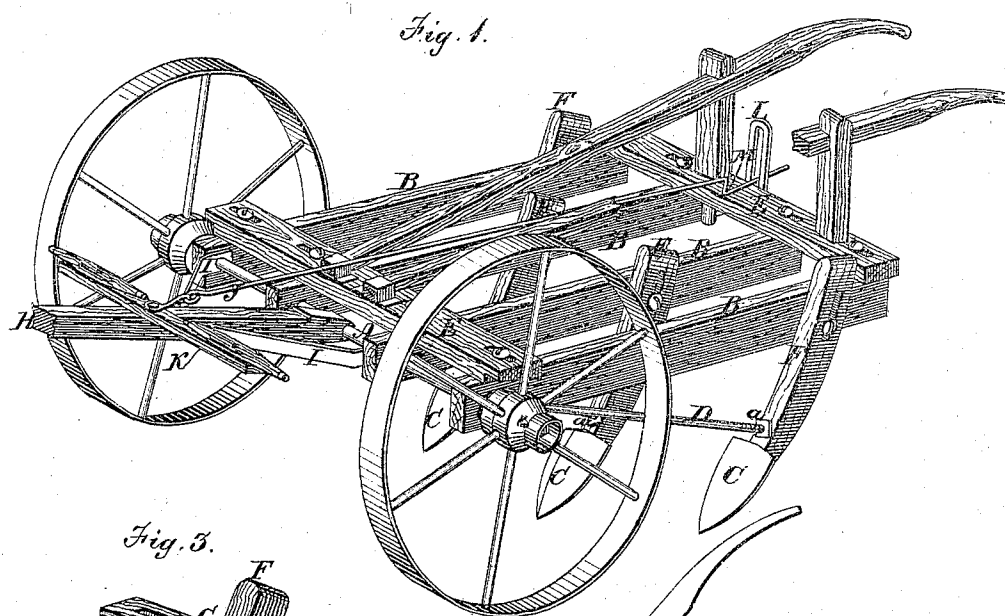


G. WAGGONER:

Cultivators.

No. 134,949.

Patented Jan. 14, 1873.



Witnesses.
C. F. Brown.
Dr. J. Ellsworth.

Inventor.
G. Waggoner.
by his Attys.
Hill & Ellsworth

UNITED STATES PATENT OFFICE.

GEORGE WAGGONER, OF NEW KINGSTON, PENNSYLVANIA.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 134,949, dated January 14, 1873.

To whom it may concern:

Be it known that I, GEORGE WAGGONER, of New Kingston, in the county of Cumberland and State of Pennsylvania, have invented a new and Improved Corn-Plow; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view of the whole machine; Fig. 2, a longitudinal vertical section; and Fig. 3, a perspective view of a modification of the device shown in Fig. 1 for attaching the plow-standard to the frame.

Similar letters of reference in the accompanying drawing denote the same parts.

This invention has for its object to improve the construction of wheel-cultivators in respect of the means for connecting the tongue, axle, and frame in such manner as to hold either the tongue or frame in suspension. The invention, therefore, consists in the combination, in the manner hereinafter described, of the tongue, axle, frame, and a certain bar, articulated to the tongue, passing over the axle, and having some device—such as a shoulder—for dropping over the rear side of the frame when either the tongue or the frame is tilted up, so as to hold it in that position.

A is the smooth cylindrical axle above specified, the same being made thus in order to enable the beams B of the plow-frame, which are pivoted to it at their front ends, and also the braces D, to be moved sidewise along the axle when it is desired to change the distances between the plows C. Slotted cross-bars E, attached to the front and rear ends of the beams B by means of set-screws, admit of such change of distance. The plow-standards F are slotted near their upper ends and fastened to the beams by means of set-screws so as to allow the distance between the plows and beams to be also changed. Braces D, jointed at their front ends to the axle, and

having screw-threads at their rear ends, which pass through the standards F, serve to strengthen the same, the screw-threads allowing the standards to be swung on their pivots by means of nuts *a* on the threads in front and in rear of the standards.

As shown in Fig. 3, the standards F may be fastened rigidly to short slotted bars G, attachable to the under sides of the beams by means of set-screws, and, consequently, movable lengthwise—that is, sidewise of the beams—in order to change the distances between the plows without shifting the beams.

H is the tongue, pivoted at its rear end to the axle A, and I are arms fastened at their front ends to the sides of the beams, and pivoted at their rear ends to the axle, so that the tongue and its arms draw directly from the axle and are movable thereon in a vertical plane. J is a bar or chain, jointed or attached at its front end to the double-tree K, which is itself pivoted directly to the tongue. L is a slotted plate extending upward from the rear cross-bar E. Through this plate the bar J passes. Said bar is formed with a shoulder, M.

If it is desired to lift the tongue when the horses are not harnessed to it, the dropping of the shoulder M behind the rear cross-bar E holds the tongue suspended. Similarly, if, when the horses are joined to the plow, it is desired to raise the frame, as shown in Fig. 2, in order for the plows to clear the ground in turning or in transit, the dropping of the shoulder M behind the cross-bar holds the frame suspended.

What I claim as new is—

The combination of the tongue H, axle A, frame B E, bar J, shoulder M, and slotted plate L, all arranged as and for the purpose specified.

GEORGE WAGGONER.

Witnesses:

D. H. WANBAUGH,
W. W. WANBAUGH.