D. ARGERBRIGHT.
Wheel-Cultivator.

No. 209,210. Patented Oct. 22, 1878.

Fig. 1.

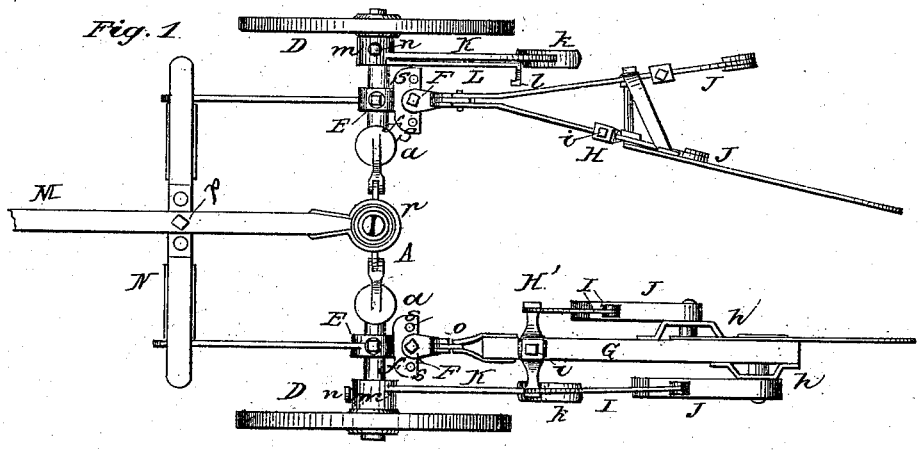


Fig. 4.

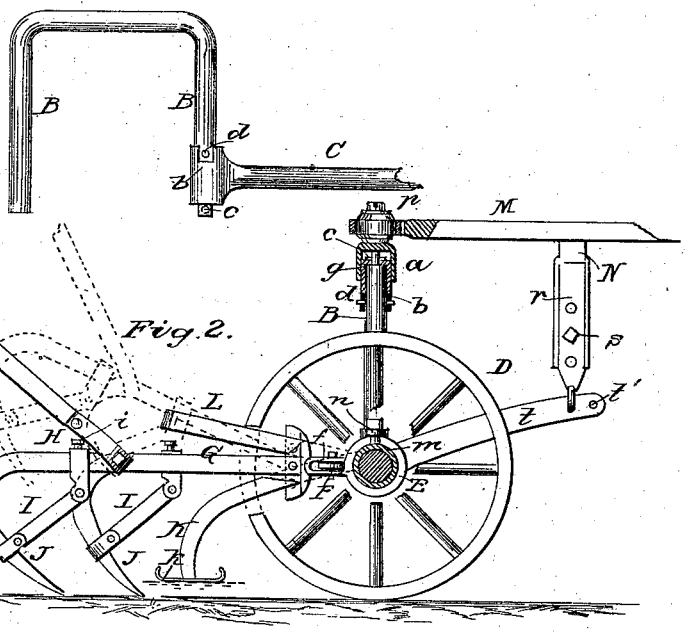
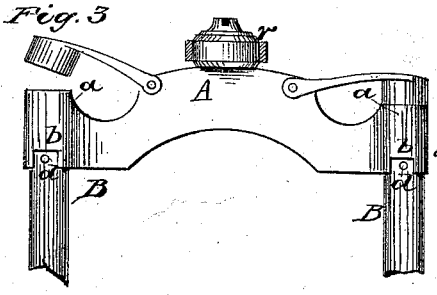


Fig. 2.

Fig. 3



Witnesses
Fred. G. Dieterich
Thos. Mister.

Inventor
Daniel Argerbright
By Myers & Co.
Attys.

UNITED STATES PATENT OFFICE.

DANIEL ARGERBRIGHT, OF TROY, OHIO.

IMPROVEMENT IN WHEEL-CULTIVATORS.

Specification forming part of Letters Patent No. **209,210**, dated October 22, 1878; application filed March 16, 1878.

To all whom it may concern:

Be it known that I, DANIEL ARGERBRIGHT, of Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Wheel-Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, like letters indicating like parts in the various figures of said drawing.

Figure 1 is a plan view of a cultivator provided with my improvements. Fig. 2 is a sectional view of the same. Fig. 3 is a rear view of the central arch minus the axles. Fig. 4 shows a modification in the construction of the arch.

My improved cultivator is constructed to be used either with or without a pole or tongue. In either case the hitching or draft pieces, as well as the plow-beams, are secured in position at a level with the axles to which they are coupled, so that the draft is directly from the axles. If a draft-pole or tongue is used, the same is connected with the top piece of an arch rising from the axles, and is also sustained by an elevated bar in front connecting with the said draft-pieces, to which bar the tongue is pivoted.

A designates the top piece of the arch, having a pipe-box, *a*, at each end to receive the upper ends of the side posts, B. Each of the boxes *a* has an aperture in the top, through which extends the upper end of post B, being reduced to form a shoulder, *g*, against which the top of the box rests, and secured in position by a pin, *c*. The lower edge of box *a* has a recess, *b*, in which projects a pin or stud, *d*, from post B, this allowing the post to turn somewhat, according to the backward or forward motion of the plow.

In Fig. 4 is shown a modification in construction of the pipe-box connection, the box *a* being formed on the axle C, to connect with side post, B, at the lower end thereof.

As shown in the drawing, the axles C of wheels D extend at right angles from the lower ends of the posts B, to which the said axles are fixed or connected.

E indicates the hitching or draft pieces, each being coupled to the axle, as shown, and provided with a fan-shaped end, *f*, with apertures *s* for a lateral or horizontal adjustment with it of the coupling F. The latter is provided also with holes arranged vertically for a vertical adjustment of its connection with the plow-beam G, which has its connecting end sloped off or beveled somewhat to allow such adjustment upward or downward. The beams G are provided with the sliding boxes H and H′, the latter being adapted to a plow-beam constructed of wood, a beam of wood and one of metal being shown in the drawing. (See Fig. 1.)

The boxes H and H′ are adjusted on the beams G by means of the set-screws *i*. A brace, I, connects each box with a shank, J, the latter having a coupled joint or connection with the beam at *h*, so that by setting a box forward or backward on the beam the shank may be adjusted at any desired angle.

When the plow-beams are of wood, the box H′ may be connected with two shanks or standards by means of braces, as shown. The lower end of brace I is usually provided with a break-pin, to prevent the plow from being injured by sudden contact with any obstacle.

K is a drag, provided with a foot, *k*, which serves to support and balance the structure when the plow-beams are raised for carriage purpose. This piece K is fixed to a box, *m*, on the axle, said box being formed to receive the inner end of the hub of each wheel D, to prevent sand or dirt from getting into the hub. The box *m* may be secured by means of a set-screw, *n*, to the axle, and the drag K may be raised or lowered, as desired. An arm, L, is fixed to the part K, and provided with a rest, *l*, on which the plow-beam is hung when not in use.

The draft attachment is at the ends *o* of the hitching-pieces E; but, when desired, for the purpose of guiding the plow-carriage, a tongue, M, is coupled to the top piece, A, and pivoted at *p* to an elevating-bar, N, which supports adjustable arms *r*, fixed to the bar and loosely

connected with the forward ends of the draft-pieces E, so as to allow the plows the same motion back and forward as when the draft-connection is at the pieces E and the tongue M dispensed with. The arms *r* may be made of one piece or adjustable in length, as shown.

The advantage in having the construction so that the draft is directly from the axle is, that the draft-horses are relieved from the weight of the pole M, and this object is also, in a great measure, attained by using my tongue attachment.

Having described my invention, I claim—

The box *m*, secured on the axle to cover the inner end of the wheel-hub, and provided with drag K and arm L, substantially as set forth.

In testimony that I claim the foregoing I affix my signature in presence of two witnesses.

DANIEL ARGERBRIGHT.

Witnesses:
M. B. LAMBERT,
WALTER J. SHOMAS.