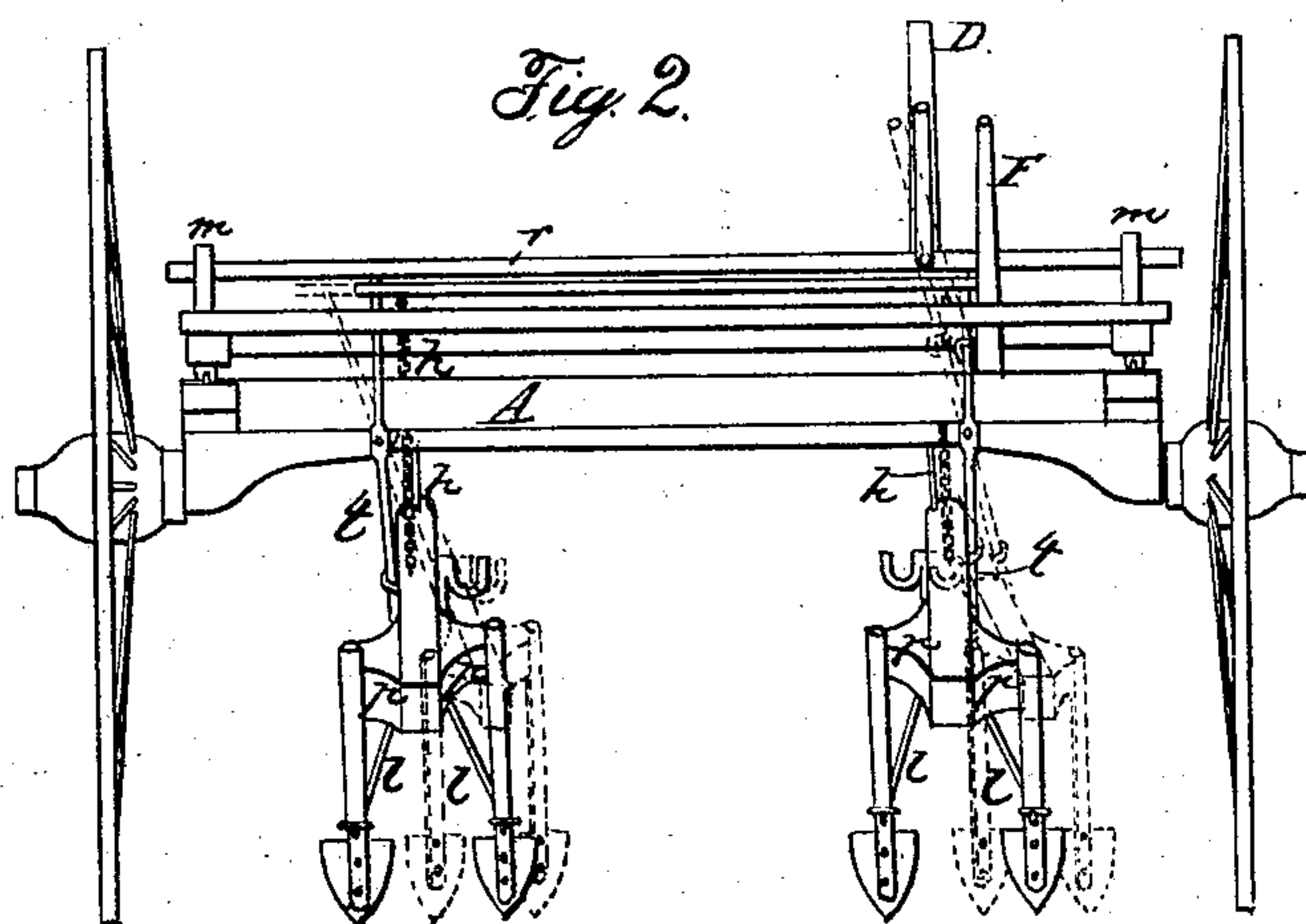
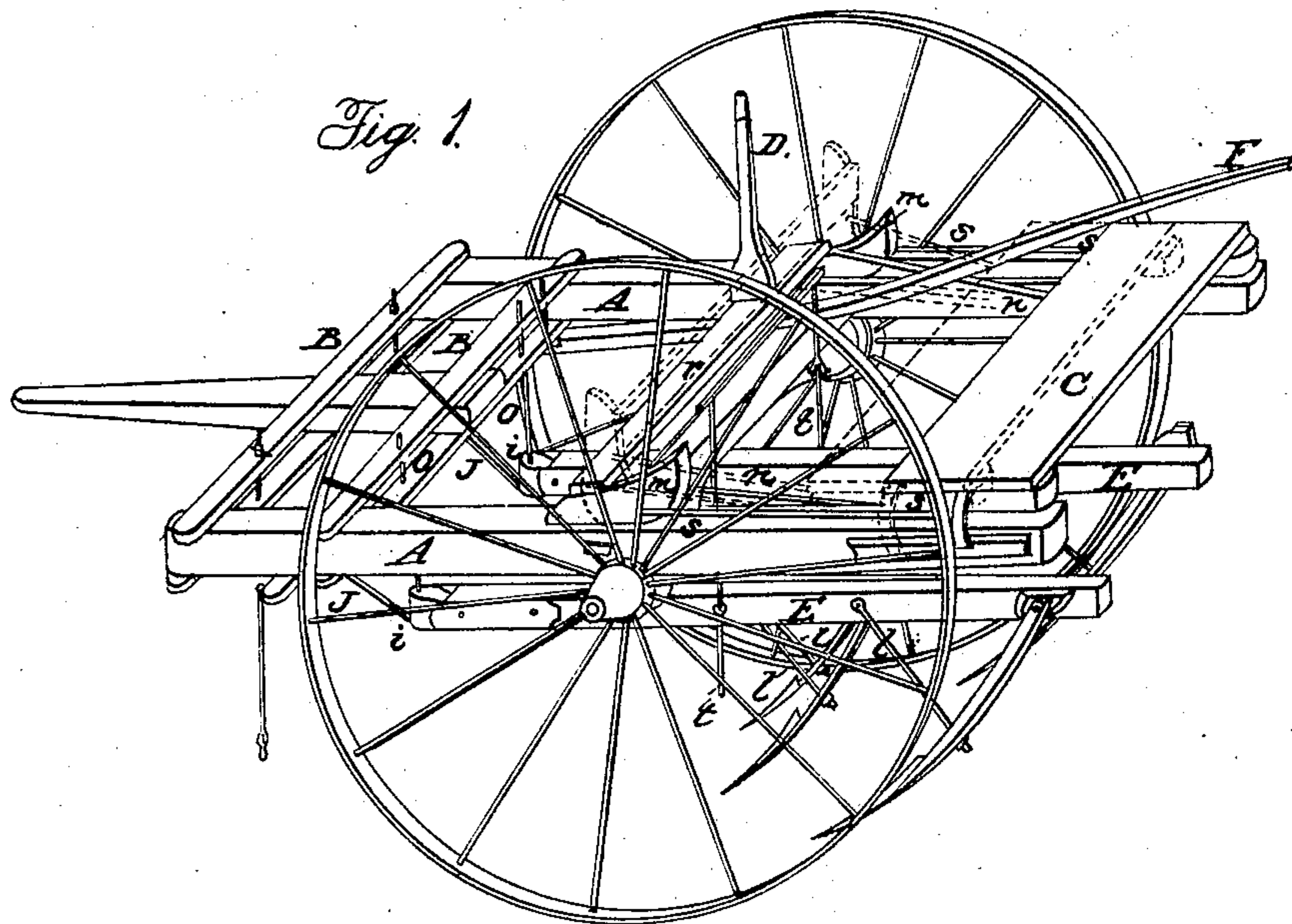


A. M. GRISWOLD.

Wheel-Cultivator.

No. 67,295.

Patented July 30, 1867.



Witnesses:

Arthur Prentiss
C. F. Wilson

Inventor:

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By Colby & Mason
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United States Patent Office.

A. M. GRISWOLD, OF MOMENCE, ILLINOIS.

Letters Patent No. 67,295, dated July 30, 1867.

IMPROVEMENT IN CULTIVATORS.

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

TO WHOM IT MAY CONCERN:

Be it known that I, A. M. GRISWOLD, of Momence, Kankakee county, in the State of Illinois, have made new and useful Improvements in Cultivators; and I hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications, in which—

Figure 1 is a perspective view.

Figure 2, rear view.

Letter A, side pieces of the frame; letters B B, cross-pieces connecting the sides A A; letter C, movable seat; letter D, lever by which the ploughs are raised and the seat moved; letters E E, beams, on each side of which the ploughs or shovels are attached; letter F, lever by which the ploughs are guided or moved from right to left; letters h h, chains or rods attached to the beams E E and the bar r; letters i i, knuckle or double joint; letters l l, braces to sustain the ploughs; letters m m, cams resting on the sides A A; letters n n, braces to hold the cam m in place; letters o o, upright rods, to which the beams E E are attached; letters j j, braces sustaining the rods o o; letter r, bar to which the cams m m and the chains h h and lever D are attached.

The object of my invention is to provide a machine adapted to various kinds of work, but more particularly to the cultivation of corn or crops cultivated in rows.

The ploughs or shovels are attached one on each side of the beams E E, the blocks p p being used to increase the distance between the ploughs. The beams E E are made fast to the cross-bars B B by a knuckle or double joint, i i, and the upright rods o o and braces j j, which pass up through the bars and are held by a bolt or pin in the openings through the rods near each end, and above said bar, as may be seen in fig. 1. The depth you desire to cultivate is readily adjusted by raising or lowering the rods o o and the braces j j, and also by moving the pin or bolt to one or another of the holes, near the end of the braces l l that sustain the ploughs. The knuckle or double joint i i enables us to raise or lower the ploughs or move them from side to side, as desired. The seat C moves upon four grooved rollers running on an iron track attached to the upper side of the pieces A A to guide it in its movements forward and back. The lever D is attached to the bar r, which extends across the machine above the axle. At each end of this bar are attached the cams m m. These cams are held at the desired point by the braces n n, one end being fastened to the inside and near the top of the cam, and the other end to the inside of the pieces A A. The rods s s also extend from the cams m to the seat C, being connected with the cams near the lower side, as seen in fig. 1. When the lever D is operated, the beams E E are, by means of the chains h h, raised or lowered, and at the same time the seat C, by means of the rods s s, is moved forward or back. When the lever is turned back, as in the red lines, fig. 1, the points of bearing of the cams m m are thrown forward. The bar r and the parts remain self-sustaining as to position. The position of the seat when the ploughs are raised is indicated by the red lines in fig. 1. By this movement of the seat forward the equilibrium of the machine is maintained. The lever F is connected with two oscillating levers t t, by which the operator can move the ploughs to the right or left to accommodate any irregularity in the rows, (see red lines, fig. 2.) The wheels of this machine are calculated to be quite high, which, together with the peculiar construction of the axle, enables us to operate among corn or other articles even when three feet or more high, which is often an object desired.

This cultivator may be used for preparing ground for grain or other crops. In cultivating corn, or anything else planted in rows, it is intended that the row shall pass between the two centre shovels. The other, coming after and at a little distance, serves to stir the whole surface of the ground.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The adjustable rods o o and the adjustable brace-rods j j, for the purposes specified.
2. The joints i i, when combined with the rods o o and j j and plough-bearing beams E E, substantially as and for the purposes set forth.
3. The cams m m, when combined with the braces n n, the rods s s, and bar r, and operating in the manner and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

A. M. GRISWOLD.

Witnesses:

F. WORCESTER,

WILLIAM F. STRUNK.