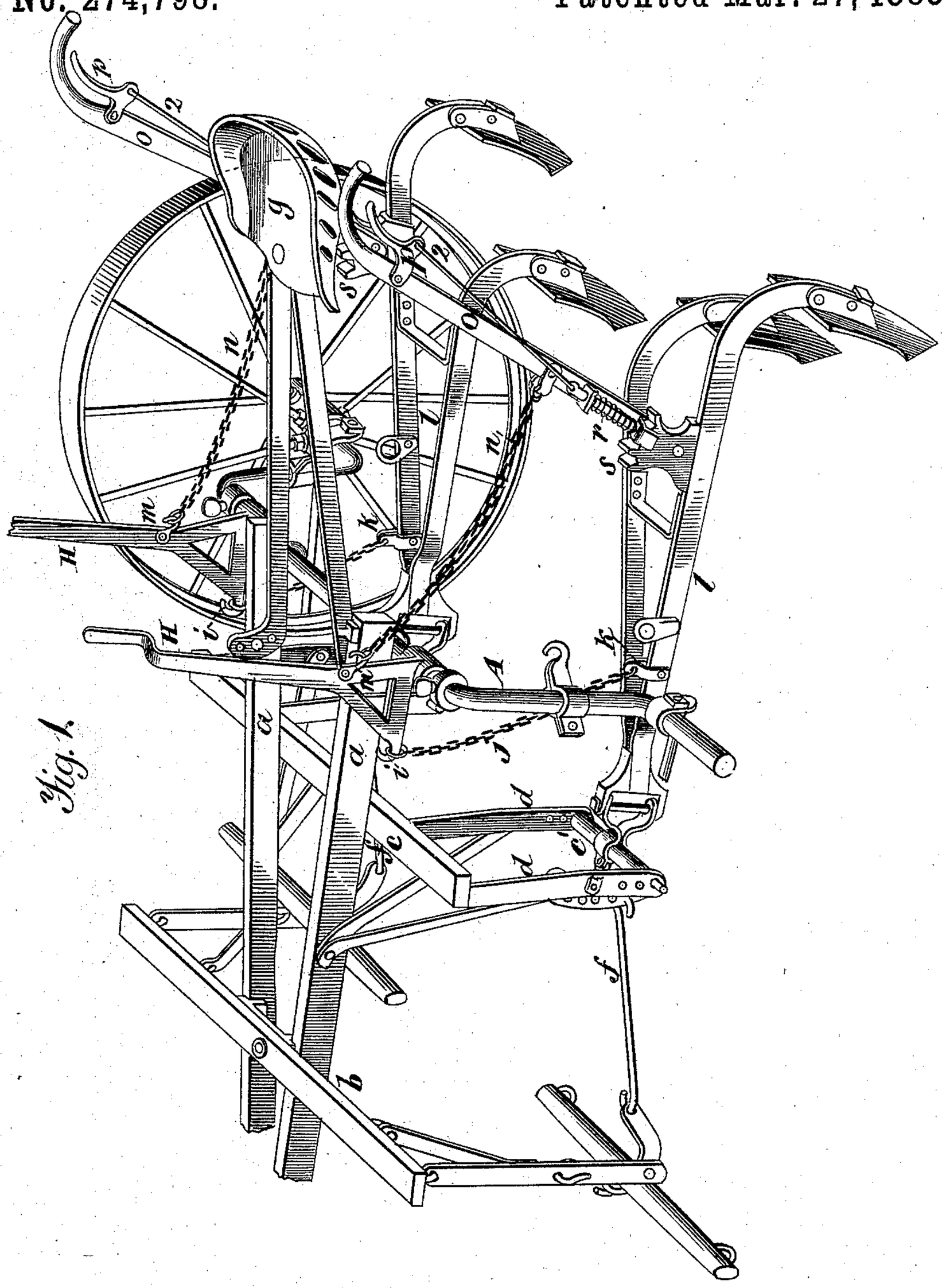
(No Model.) 2 Sheets—Sheet 1.

L. LUPPEN.

CULTIVATOR.

No. 274,798. Patented Mar. 27, 1883.



Witnesses.
A. Ruppert.
A. C. Klinke

L. Luppen
Inventor.
Holloway & Blanchard
Attys

(No Model.)

2 Sheets—Sheet 2.

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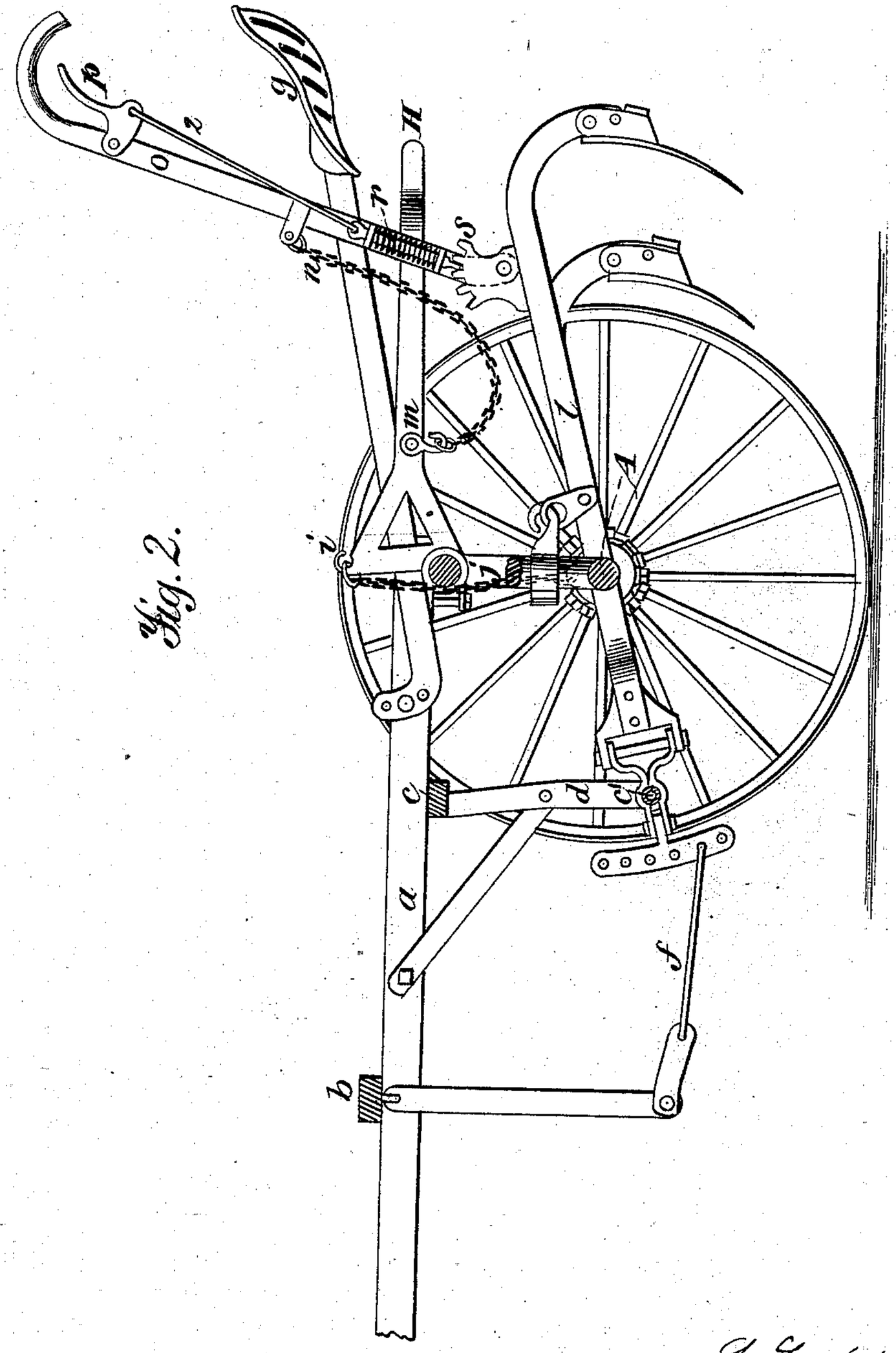
Fig. 2.



Witnesses.
A. Ruppert.
A. C. Klein

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Attys

UNITED STATES PATENT OFFICE.

LUPPE LUPPEN, OF PEKIN, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 274,798, dated March 27, 1883.

Application filed October 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, LUPPE LUPPEN, a citizen of the United States, residing at Pekin, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Combined Riding and Walking Cultivators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in combined riding and walking cultivators, in which the plows, cultivators, drills, and harrows connected to the frame are operated by levers under the immediate control of the operator; and the objects of our improvements are, first, to provide suitable means for adjusting the plows, cultivators, &c., in a vertical plane; second, to so adjustably attach the handles to said cultivators, plows, &c., that the operator can remain in his seat and operate the same, or can dismount and operate the same while on the ground, when walking. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective or plan view of my improved combined riding and walking cultivator, and Fig. 2 is a transverse sectional view of the same.

Similar letters refer to similar parts throughout the several views.

A represents an iron axle, bent upward at equal distance from the center to form an arch and outward at equal distance from each end to form the spindles or bearings for the wheels.

Bed-pieces *a a* are rigidly attached at one end by clips to the top of the arched axle, with their outer ends converging toward each other and held in place by a metal cap or bridge, thus forming hounds, between which the pole is secured. Across the top, near the outer end of the bed-pieces *a a*, is pivoted to the cap or bridge a cross-bar, *b*, having hinged at each outer end a depending bar, to which is adjustably hooked a draft-whiffletree.

About midway between the outer end of the bed-pieces *a a* and the axle is secured a cross-bar, *c*, having attached at its outer ends two depending bars, *d d*, the lower ends of which are perforated to receive a cross-shaft, *c'*. To the center of said cross-shaft is rigidly attached a clevis for connection with the plow-beams, and a perforated vertical draw-bar, to which the whiffletree-bars are connected by means of hooked rods *f f*. A seat, *g*, is pivoted above the frame to the bed-pieces, *a a*.

To the top of the arched axle is adjustably secured, by means of clamping-sleeves, two upright operating-levers, H H, formed with a triangular projection at their base. The outer end of the triangular base of each lever is formed with a hook, *i i*, to which is attached a chain, *j*, that extends downward, and is attached by its opposite end to a sliding clamp, *k*, that embraces the plow-beam or gang *l*.

Near the apex of the triangle, on levers H H, are formed hooks *m m*, to which one end of the chains *n n* is attached, the opposite end of said chains being connected to operating-levers *o o*. These operating-levers are formed with tongue-levers *p p*, pivoted underneath the hand-piece at the outer end of said levers. Short rods 2 2 connect the tongue-levers *p p* with spring-bolts *r r*, that are formed to engage with the rack-bars *s s*, so that the handles or levers *o o* can be adjusted to any desired angle convenient for the operator while riding on the seat of the cultivator, or, when dismounted and walking at the rear of the plows or gangs, the handles or levers can be let down to a position convenient for the hands of the operator.

With my improvements, as hereinbefore described, diamond corn-plows, cultivators, drills, and harrows can be readily attached to and detached from the cultivator, axle, and frame, readily adjusted and easily operated, either by the operator occupying the seat on the cultivator or while walking on the ground.

The operation of the machine is obvious and needs no explanation.

Having fully described my invention, what I desire to secure by Letters Patent is—

1. In a combined walking and riding cultivator, the combination, with the plow-beams and handles, formed as described, of the le-

vers sleeved upon the arch of the axle and connected by hooks and chains to both the plow beams and handles, substantially as shown.

2. In combination with the arched axle A, the levers H H, connecting-chains *j n*, pivoted lever-handles *o o*, and plow-beams *l*, substantially as shown and specified.

In testimony whereof I affix my signature in presence of two witnesses.

LUPPE LUPPEN.

Witnesses:
H. F. FROCHE,
W. HEMMINGHOUSE.