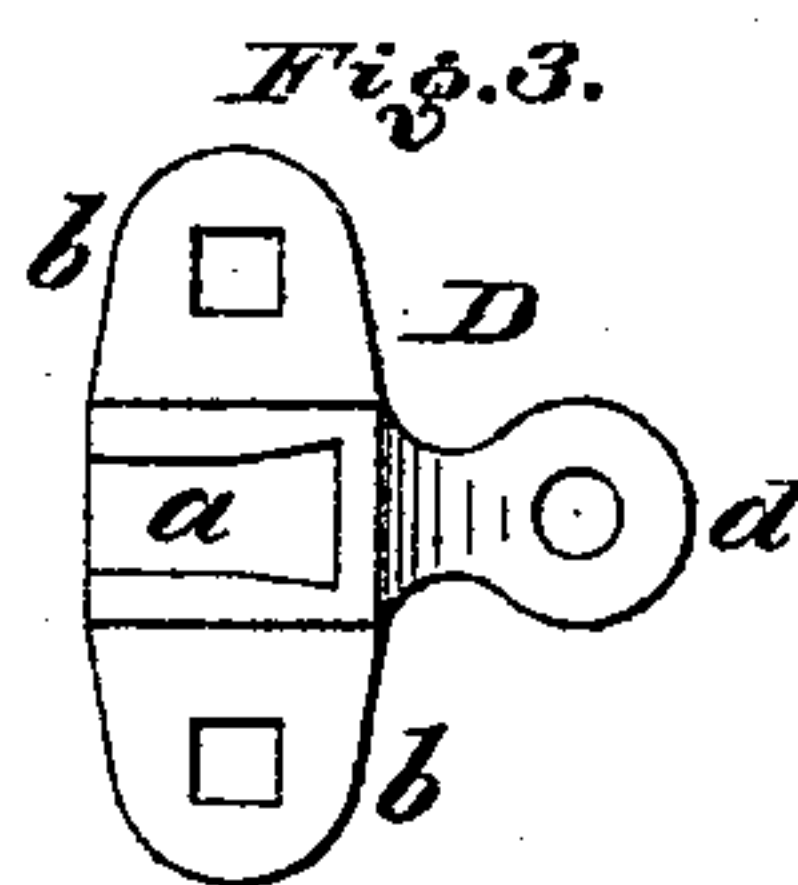
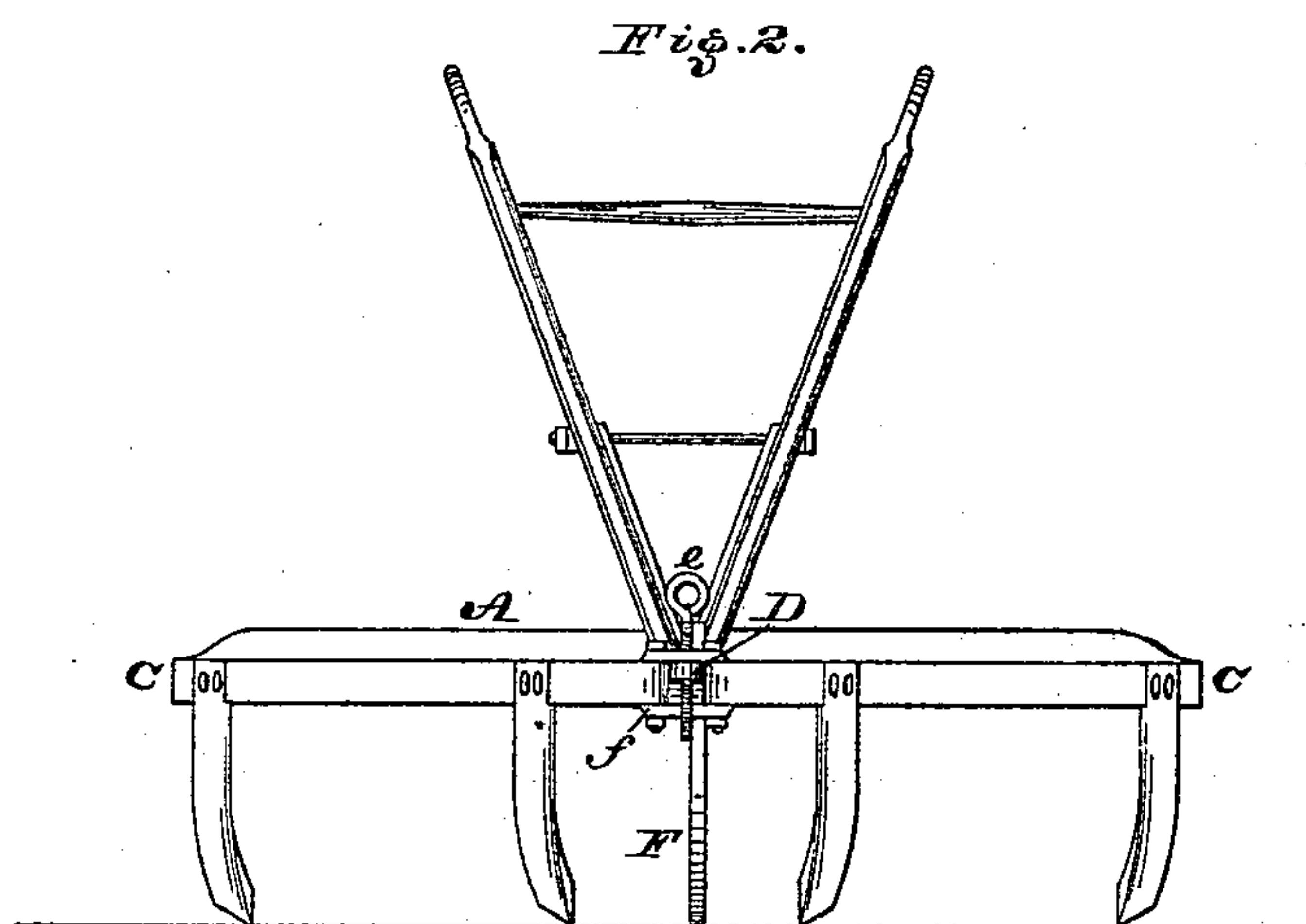
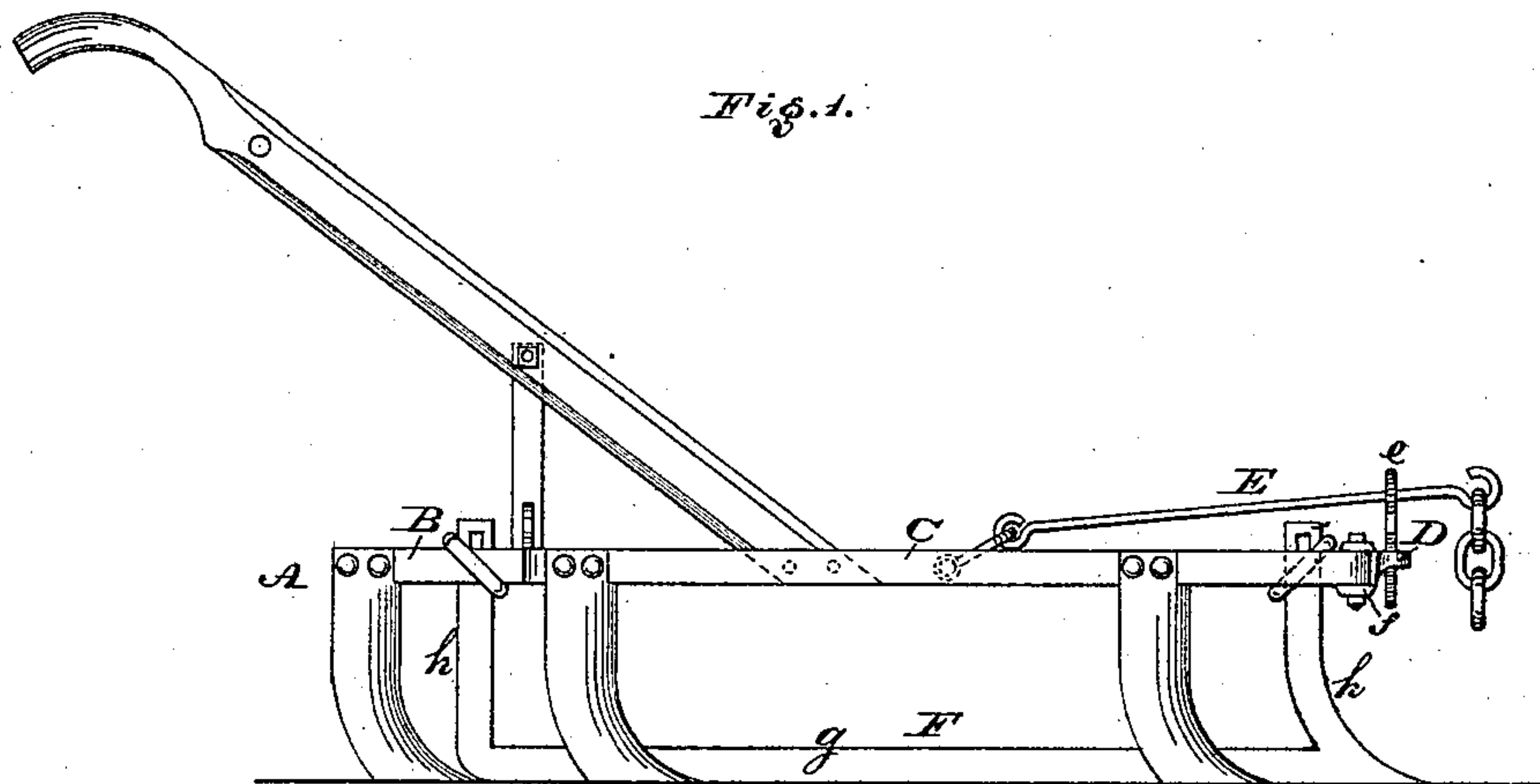


(No Model.)

C. M. RISLEY.
CULTIVATOR.

No. 248,954.

Patented Nov. 1, 1881.



Witnesses:

L. P. Grant,
W. F. Lichen

Inventor:

Caleb M. Risley,
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UNITED STATES PATENT OFFICE.

CALEB M. RISLEY, OF WOODBURY, NEW JERSEY, ASSIGNOR OF ONE-HALF
TO CLAYTON B. ROGERS, OF PHILADELPHIA, PENNSYLVANIA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 248,954, dated November 1, 1881.

Application filed May 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, CALEB M. RISLEY, a citizen of the United States, residing at Woodbury, in the county of Gloucester, State of New Jersey, have invented a new and useful Improvement in Cultivators, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the cultivator embodying my invention. Fig. 2 is a front view thereof. Fig. 3 is a bottom view of a detached portion enlarged.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a guide applied centrally to a cultivator in the longitudinal direction thereof, whereby the cultivator will be run uniform and steady and the depth of penetration of the hoes may be limited.

It also consists of the head at the forward end of the cultivator, having a dovetailed connection with the center bar of the frame of the cultivator, and provided with an eye for the attachment of the bolt for the draft-rod.

Referring to the drawings, A represents the frame of the cultivator, consisting of the central bar, B, and side bars, C C.

D represents a casting or head for the front of the frame, consisting of the dovetailed box or part *a*, to which the front end of the central bar, B, is fitted, said end being also of dovetailed form, the side eyes, *b b*, to which the side bars, C C, are pivoted, and the front eye, *d*, through which the bolt *e* of the draft-rod E is passed. The bottom of the head has a closing-plate, *f*, which, when bolted in position, firmly connects the center and side bars, B C, and the head, and separation of the parts is prevented. This feature of my invention is serviceable, as it prevents or obviates drilling or piercing the center bar in the broad direction of said bar, such drilling or piercing being a difficult operation and weakening the bar.

F represents a guide, formed of suitable metal, of the longitudinally-extending bottom bar or runner, *g*, and upright end pieces, *h*, the front one whereof is pointed or sharpened.

The end pieces, *h*, depend from and are secured to the central bar, B, of the frame or other suitable portion of the frame in such manner that the bottom bar occupies the center of the cultivator about the lower line of the hoes above, below, or on the level with the same, as desired.

It will be seen that when the cultivator moves forward the point of the guide enters the ground, and the bottom bar or runner, following the same, provides, as it were, a central support in the ground for the cultivator, so that the cultivator runs uniform and steady, obviating the usual roughness and irregularity of motion in implements of the kind.

The end pieces, *h*, are adjustably connected to the frame, so that they may be raised and lowered, thus providing means for adjusting the height of the bottom bar or runner, *g*, relatively to the nature of the work to be accomplished and the desired depth of penetration of the hoes.

The guide as constructed is of skeleton form, whereby it is light and durable, and may be made of a single piece of wrought-iron or of properly-shaped sections fitted and secured to each other as desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A cultivator-frame having center bar, B, and side bars, C, in combination with a skeleton-guide, F, consisting of a horizontal bottom bar, *g*, and two standards, *h h*, one at each end, said standards being secured to said center bar at their tops.

2. The center bar, B, having a dovetailed forward end, in combination with the head D, having dovetailed recess *a* and side eyes, *b*, the plate *f* bolted to said head, and the side bars, C, pivoted between said head and plate, substantially as set forth.

CALEB M. RISLEY.

Witnesses:

JOHN A. WIEDERSHEIM,
W. F. KIRCHER.