

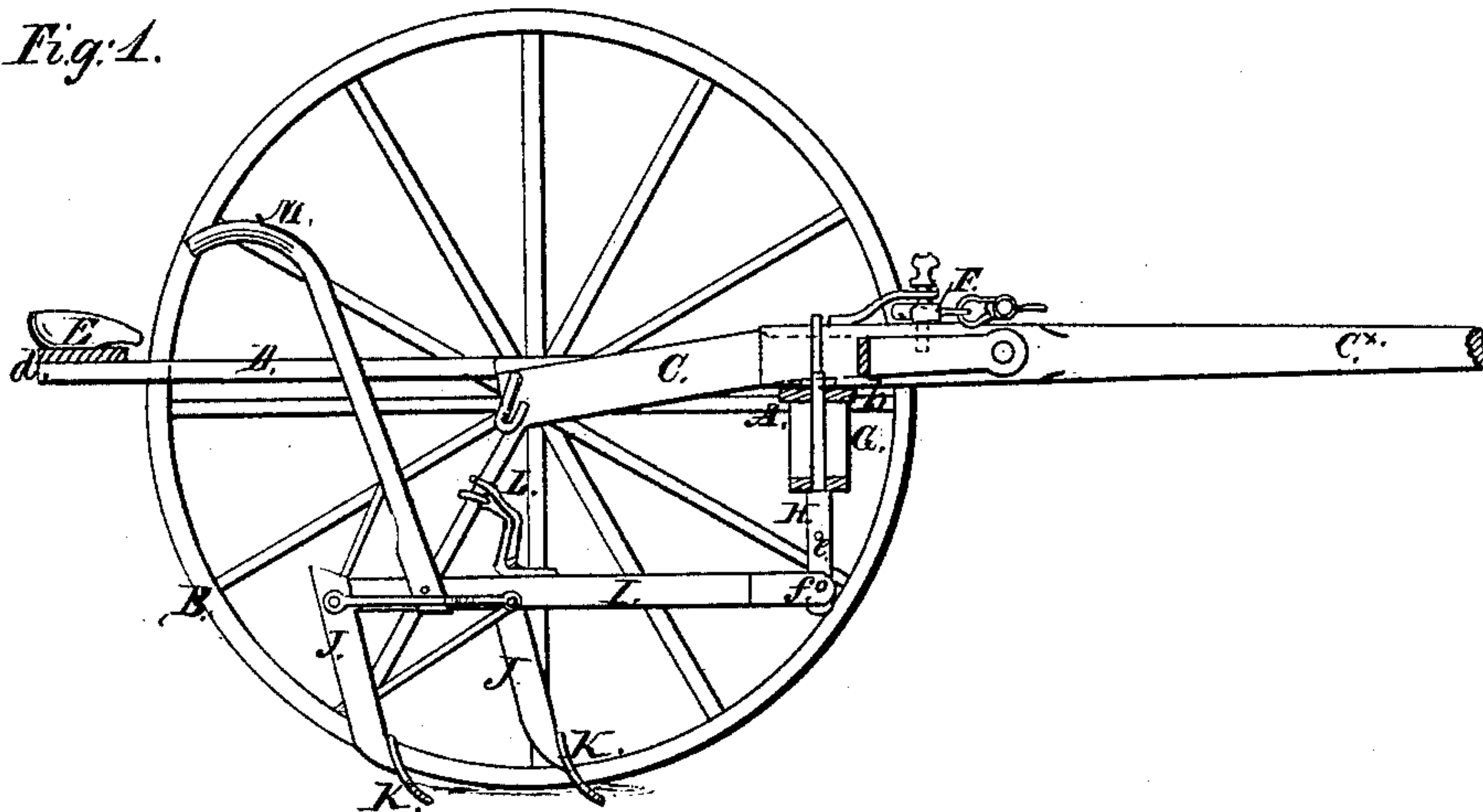
*H. Van Meter,*

*Cultivator.*

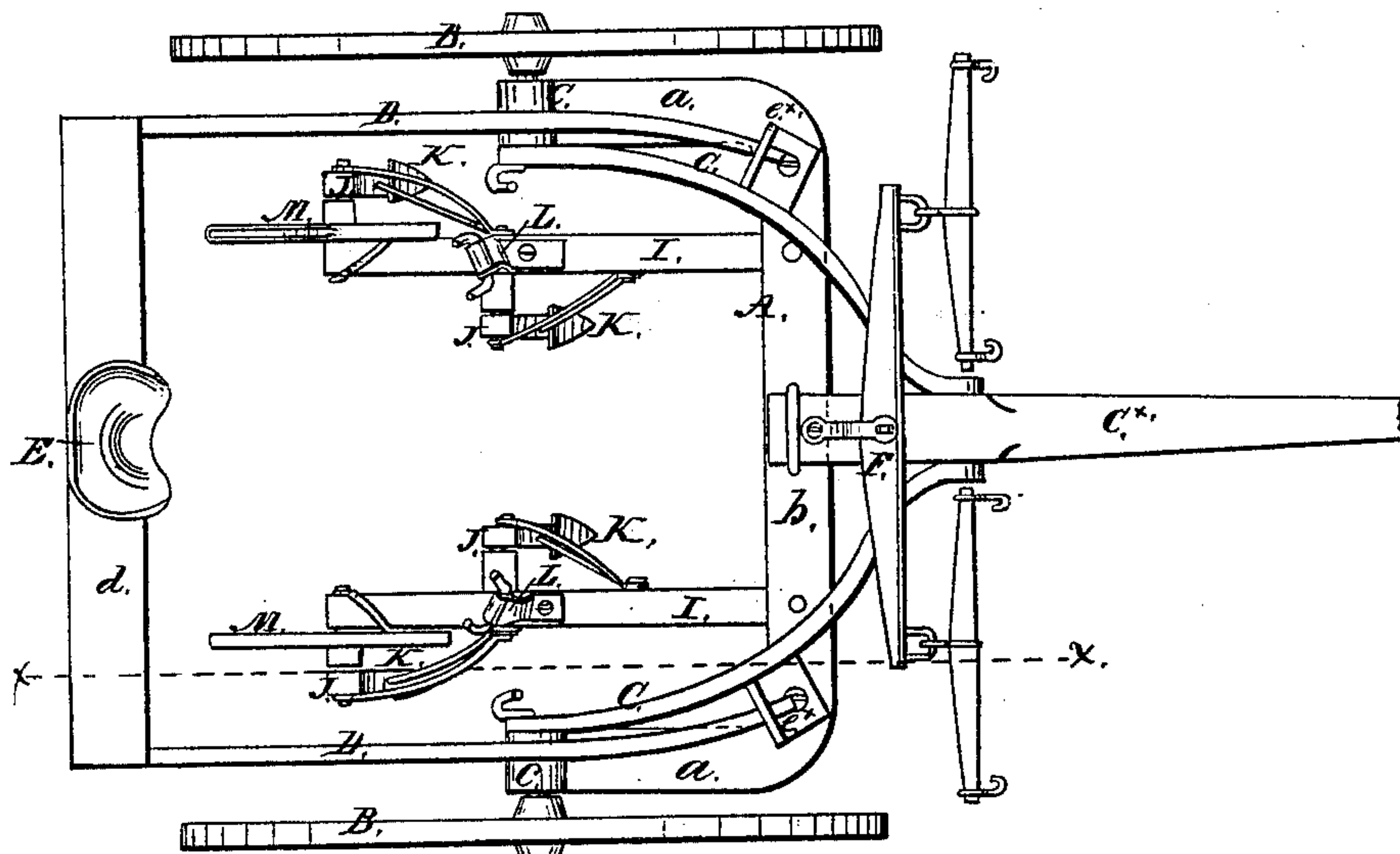
No. 90,208.

*Patented May 18. 1869.*

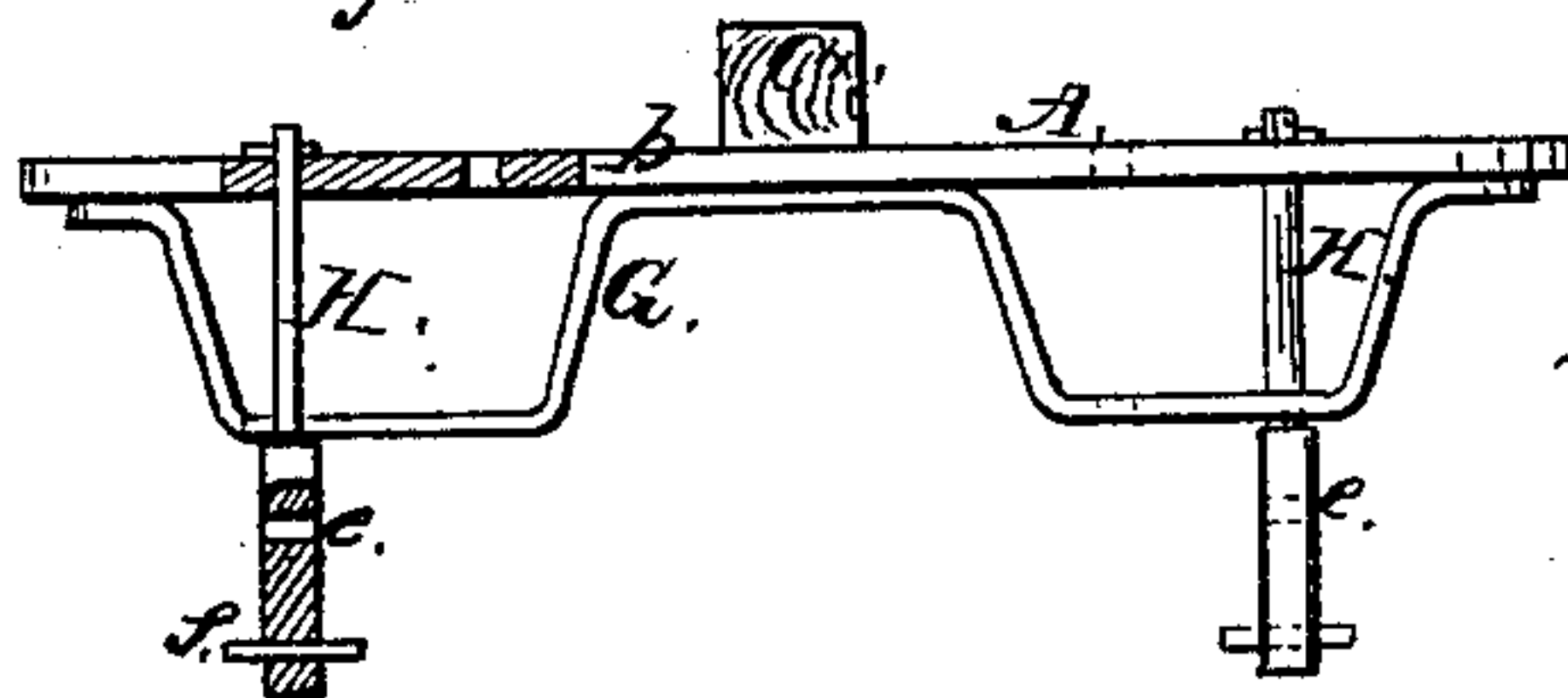
*Fig: 1.*



*Fig:2.*



*Fig. 3.*



*Witnesses.*

F. L. Sprig

Wm A Morgan.

*Inventor*

Hiram von Meter,  
per Mum & Co

per Mum & Co

Atty.



# United States Patent Office.

HIRAM VAN METER, OF MACOMB, ILLINOIS.

Letters Patent No. 90,208, dated May 18, 1869.

## IMPROVEMENT IN CULTIVATORS.

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

To all whom it may concern:

Be it known that I, HIRAM VAN METER, of Macomb, in the county of McDonough, and State of Illinois, have invented a new and improved Cultivator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved cultivator, for plowing or cultivating plants which are grown in hills or drills; and

It consists in a novel construction of the same, as hereinafter fully shown and described, whereby, it is believed, several advantages are obtained over the ordinary cultivators in use.

In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, fig. 2.

Figure 2, a plan or top view of the same.

Figure 3, a detached view of a part pertaining to the same.

Similar letters of reference indicate corresponding parts.

The frame of the machine is composed of a front cross-bar, *A*, of iron, bent or otherwise made of such a shape as to have two side-pieces *a a*, extending back at right angles with the forward part *b*, as shown in fig. 2, the bearings, or boxes *c*, for the axles of the wheels *B B*, being attached to the rear ends of *a a*, the wheels having separate or independent axles.

*C C* are hounds, also constructed of iron, and firmly attached to the cross-bar *A*, the draught pole *C<sup>x</sup>* being secured between the hounds, with its rear end attached to the centre of the forward part *b* of the cross-bar *A*.

*D D* are two bars, constructed of a suitable elastic wood, and having their front ends fitted in sockets, *c<sup>x</sup> c<sup>x</sup>*, at the ends of the part *b* of *A*, and resting on the boxes *c c*.

The rear ends of these bars *D D* are connected by a cross-bar, *d*, which may be a piece of plank, and has the driver's seat *E* secured centrally upon it.

The draught-pole *C<sup>x</sup>* has a double-tree, *F*, attached to it, in the usual manner.

To the under side of the part *b*, of the front cross-bar *A*, there is firmly secured a bar, *G*, which is bent, or curved, as shown in fig. 3, to form lower bearings for two upright spindles, *H H*, the upper bearings being in the part *b* of the cross-bar.

These spindles are allowed to turn freely in their bearings, and their lower parts, below the bar *G*, are perforated with a series of holes, *e*, to admit of the

front ends of plow-beams *I I* being secured to them, by pins *f*, at higher or lower points, as may be desired.

Each plow-beam has two standards, *J*, attached, and these standards have teeth, or shares, *K*, at their lower ends, of the usual or any proper shape.

On the top of each plow-beam there is secured a stirrup, *L*, to receive the feet of the driver, and each beam is provided with a handle, *M*, extending upward sufficiently high to be within convenient reach of the driver.

From the above description, it will be seen that the plow-beams may be moved laterally, to conform to the sinuosities of the rows of plants, either by the feet, or by the hands of the driver, and either or both plow-beams may be temporarily raised, when required, to admit of the teeth, or shares passing over obstructions.

It will further be seen, that owing to the construction and arrangement of parts as shown and described, quite a large, unobstructed space is allowed within the machine, in front of the driver, which admits of the plants being clearly seen, so that none will be in danger of being plowed out.

The team, also, can be hitched quite close to the machine, which is an advantage, as it admits of the machine plowing quite near to the ends of the rows of plants.

In case the driver prefers walking to riding, the bars *D D* may be withdrawn with facility, and full command is then had over the beams.

The teeth, or shares, may be made to plow at a greater or less depth, by securing the front ends of the plow-beams at a greater or less height on the spindles *H H*.

In consequence of the principal part of the frame of the machine being of iron, it is rendered very strong and durable.

I claim as new, and desire to secure by Letters Patent—

1. The combination of the plow-beams *I I*, with a cultivator-frame, constructed as shown and described, with the plow-beams attached to the frame, as set forth.

2. The sockets *c<sup>x</sup>*, arranged as described, upon the cross-bar *A*, whereby the elastic bars *D*, of the seat, are adapted to be held upon the frame with their centres resting upon the boxes *c*, of the axles, as herein set forth and shown.

HIRAM VAN METER.

Witnesses:

I. W. WESTFALL,  
JOHN D. HAIL.