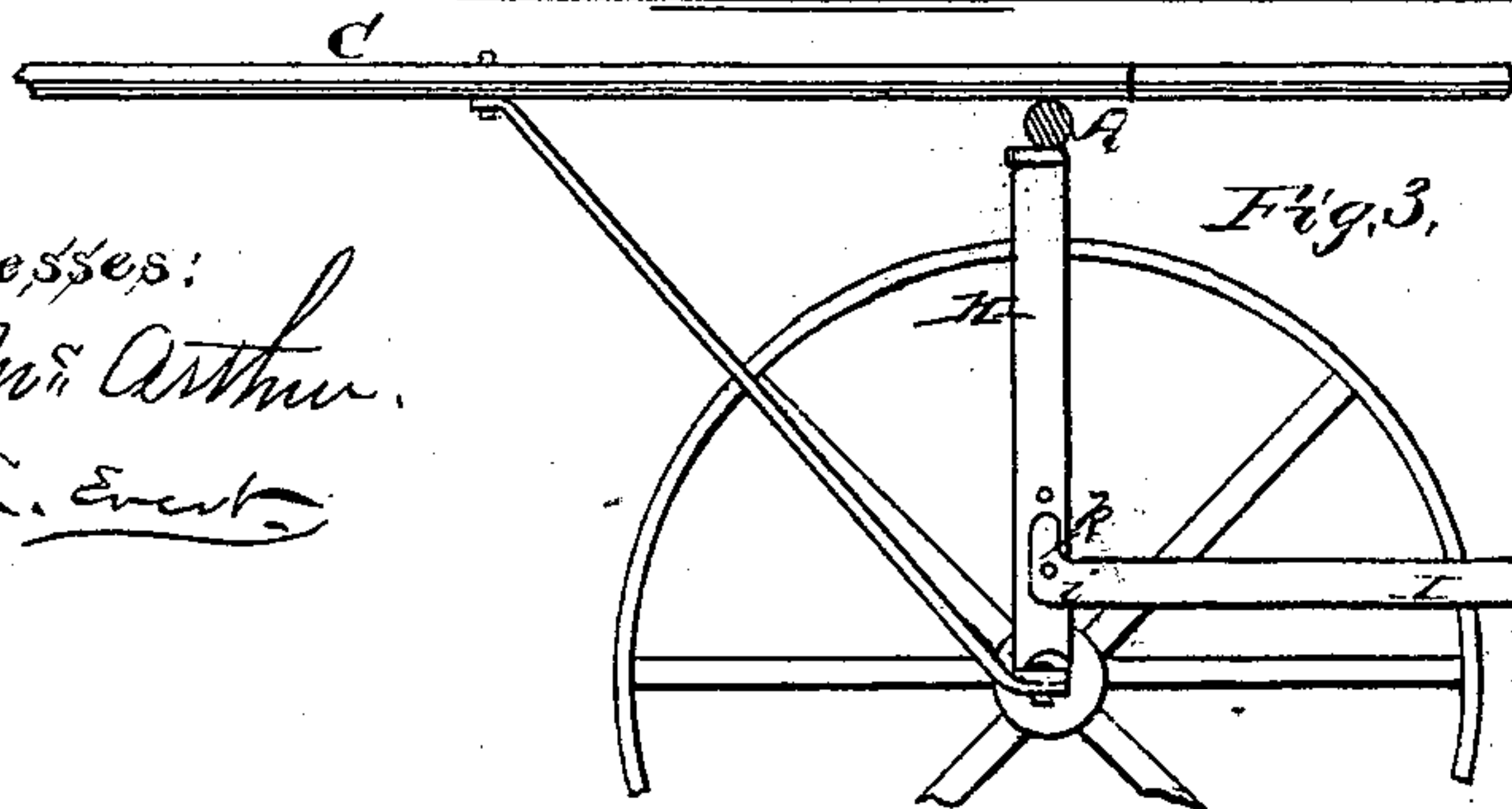
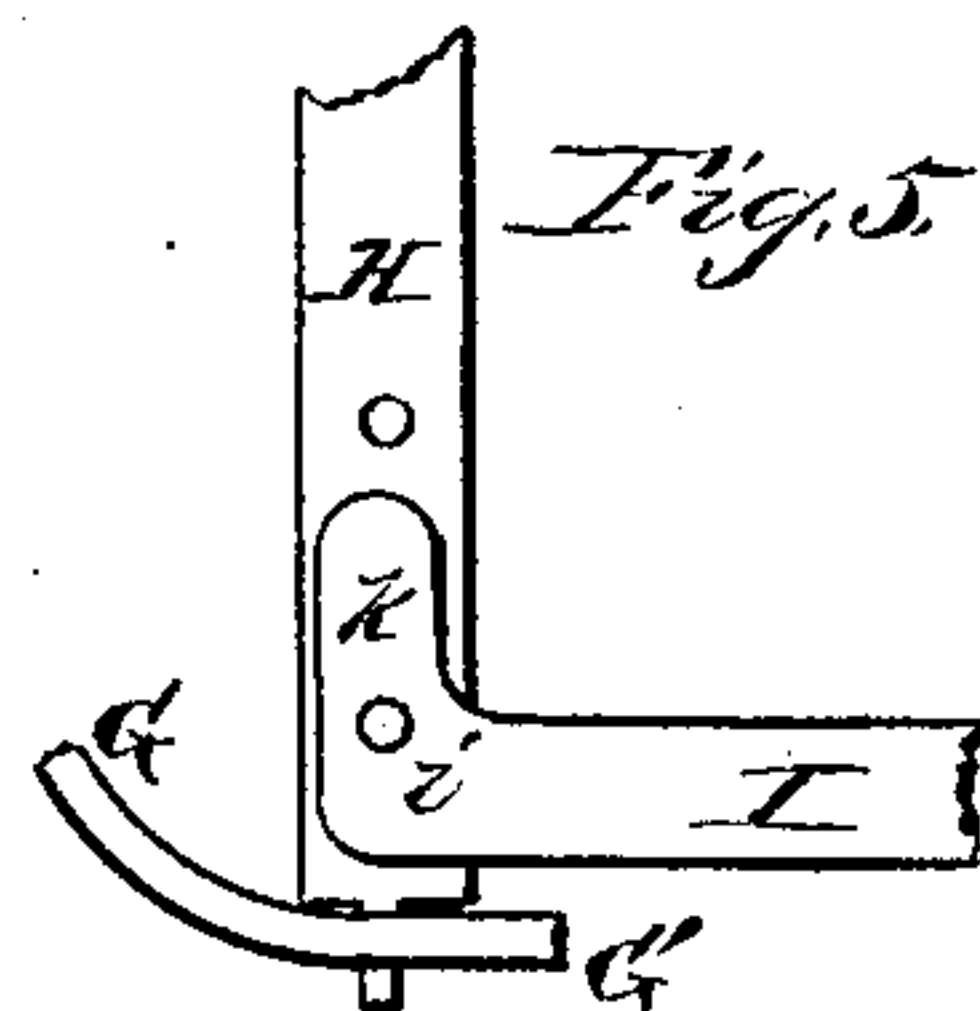
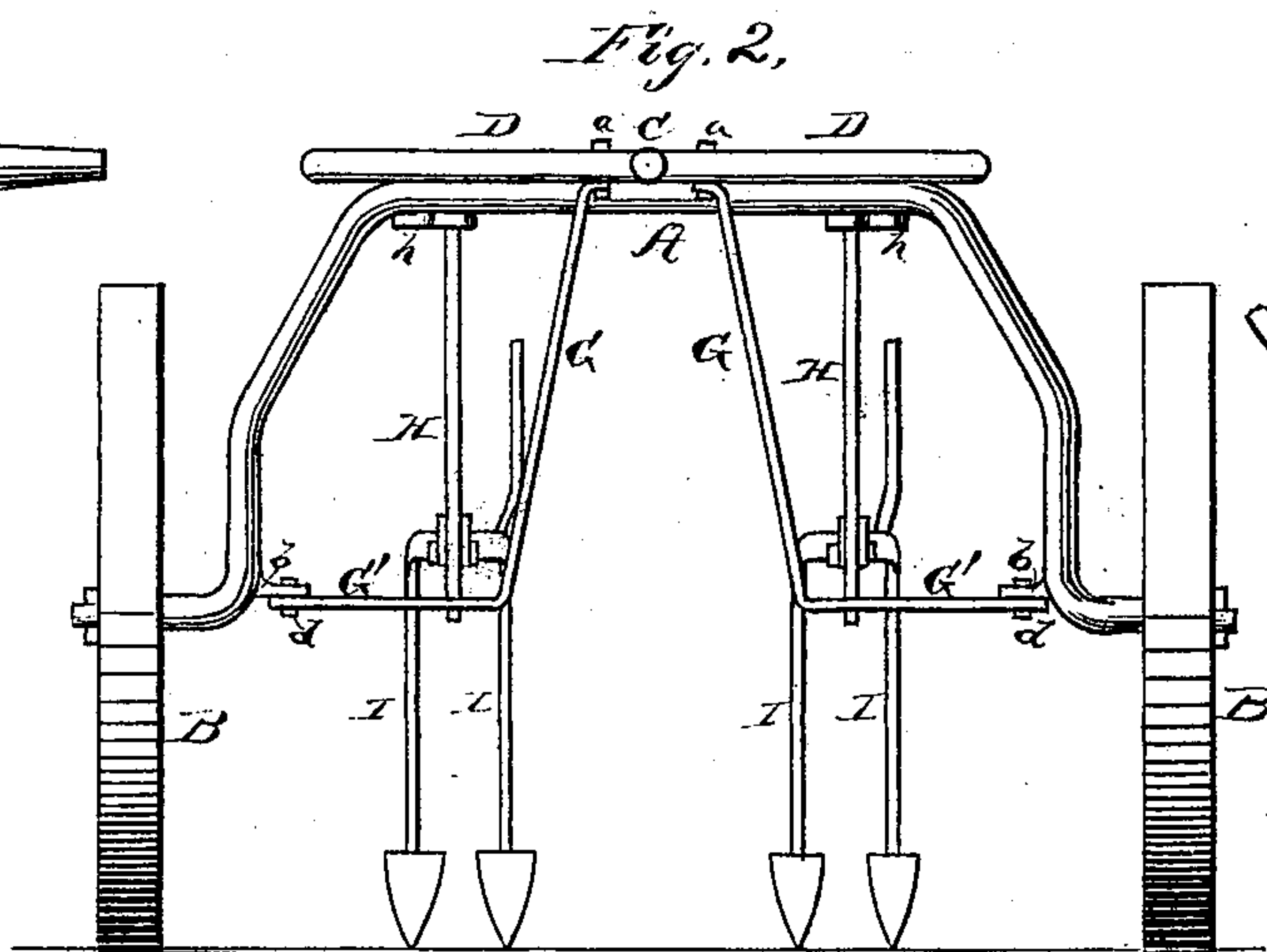
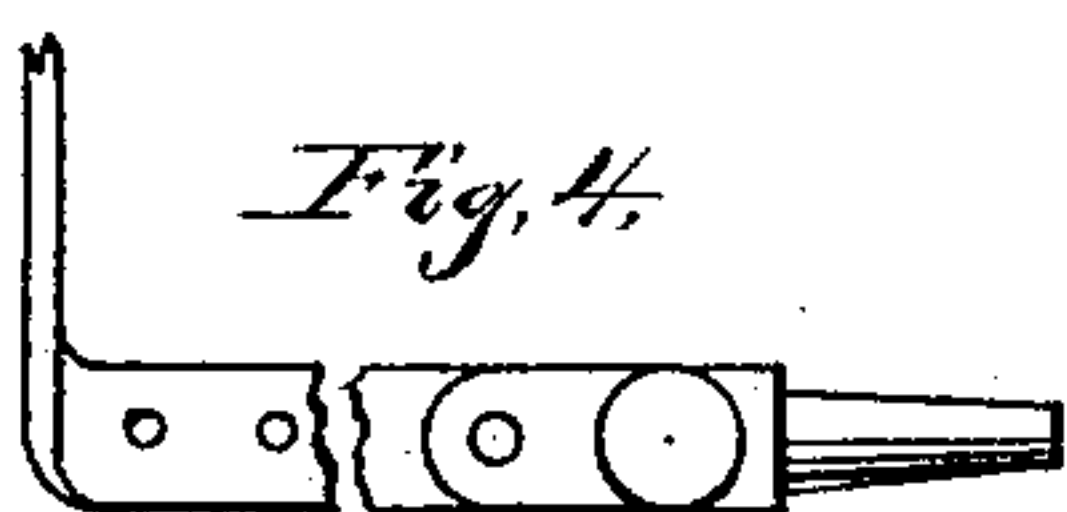
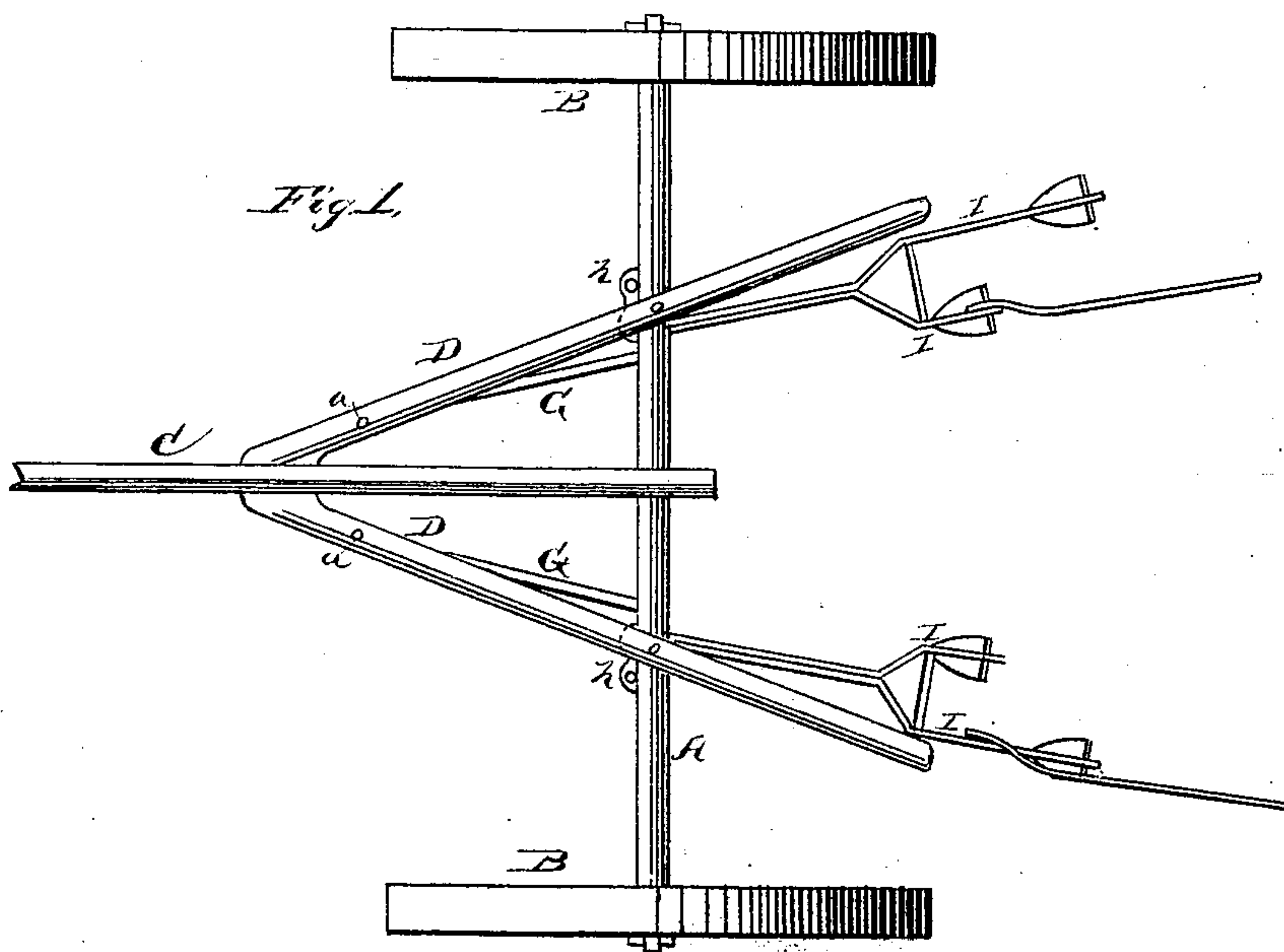


D. R. RAYMOND.  
Cultivator.

No. 200,089.

Patented Feb. 5, 1878.



Witnesses:  
H. C. Arthur.  
C. L. Everett.

Inventor:  
D. R. Raymond.

J. H. Alexander & Elliott,  
Attorneys.

# UNITED STATES PATENT OFFICE.

DANIEL R. RAYMOND, OF OSCEOLA, IOWA.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **200,089**, dated February 5, 1878; application filed December 6, 1877.

*To all whom it may concern:*

Be it known that I, D. R. RAYMOND, of Osceola, in the county of Clarke and State of Iowa, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in certain improvements on wheel-cultivators, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of my cultivator. Fig. 2 is a front view; Fig. 3, a longitudinal section; and Figs. 4 and 5 are detail views.

A represents an arched axle, of any suitable dimensions, the ends of said axle forming spindles, upon which the wheels B B are placed. C is the tongue, secured to the center of the axle A at the top, and D D are hounds, connected to the tongue on opposite sides, and extending over and beyond the top of the axle, the hounds being attached to the axle, as shown. To the front portion of each hound D, on the under side, is fastened the front end of a brace, G, by means of a bolt and nut, *a*, and this brace extends downward and rearward to a point below the axle. This brace also inclines outward in the same direction as the hound D, and at the lower end extends horizontally outward, in the form of a bar, G', to an ear, *b*, at the inner end of the spindle by a bolt, *d*. H represents a vertical

bar, which is journaled at its lower end in the bar G', and at its upper end in a casting, *h*, attached to the under side of the axle A. To each bar H are pivoted two cultivator-beams, I I, which are connected together, and their extreme front end turned upward, forming, as it were, an L-shaped clip, *k*, which fits on or straddles the bar H, and is pivoted thereto by a bolt, *i*, as shown, so as to allow of turning the plows up and down and to either side. The bar H is perforated, so that the beams I can be adjusted up or down, as required, by simply removing the bolt *i* and putting it in again. The bar H is adjustable laterally to and from the wheel, for the purpose of adjusting the plows to and from each other.

By taking out the bolt *d* the bar H may be taken out, and its journals inserted in other holes in the bar G' and casting *h*.

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

In a cultivator, the combination of the arched axle A, with perforated castings *h* and lugs *b*, the inclined braces G, forming horizontal perforated bars G', the laterally-adjustable pivoted bars H, and the vertically-adjustable cultivator-beams I, forming L-shaped clips *k* at their forward ends, all constructed substantially as and for the purposes herein set forth.

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

D. R. RAYMOND.

Witnesses:

R. F. MCGREW,  
S. THURSTON.