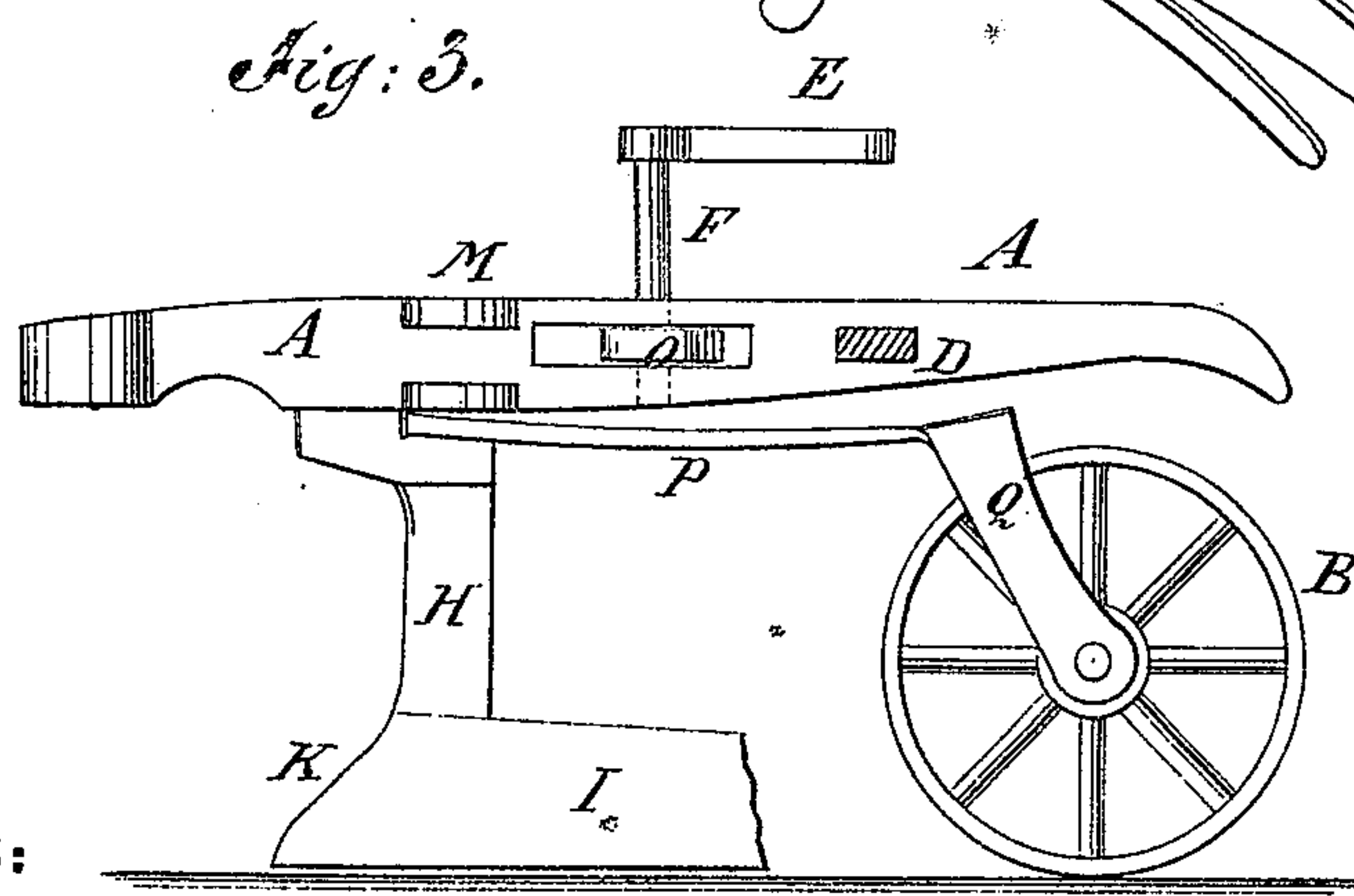
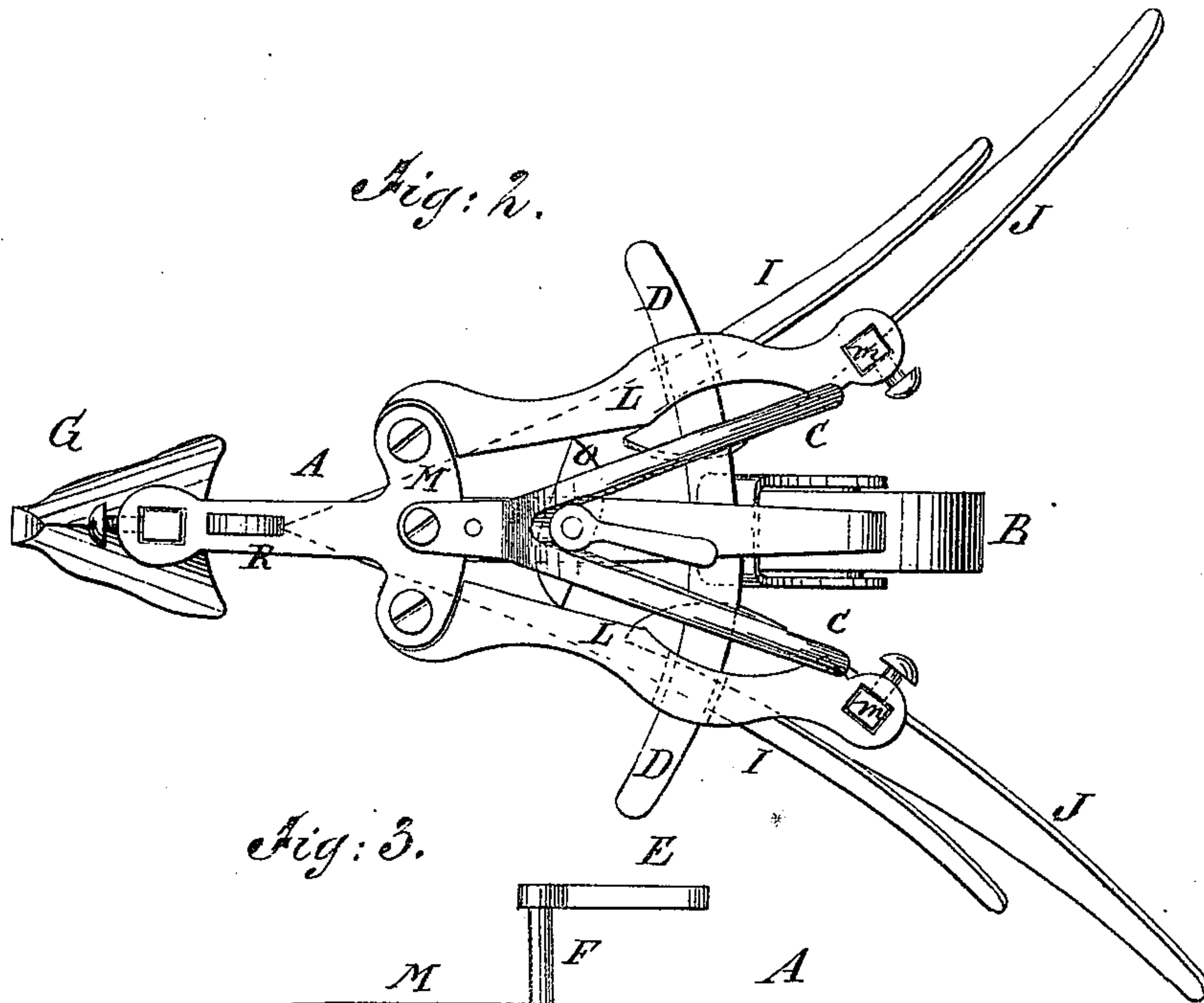
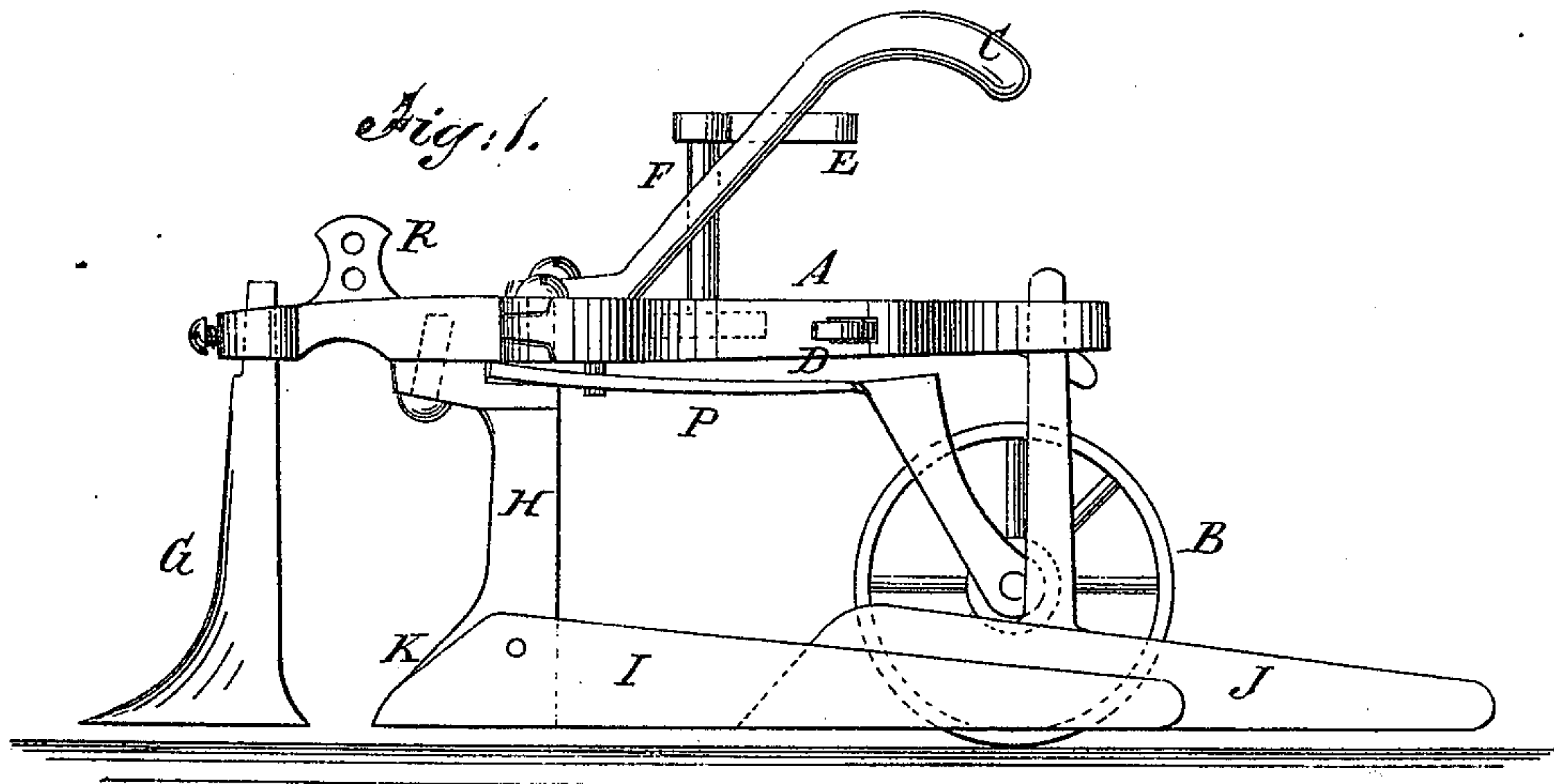


A. DART.  
Cultivator.

No. 163,921.

Patented June 1, 1875.



WITNESSES:

*Chas. Niota*  
*A. J. Perry*

INVENTOR:

BY

*A. Dart*  
*Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ALBERT DART, OF ROCKVILLE, CONNECTICUT.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **163,921**, dated June 1, 1875; application filed April 17, 1875.

*To all whom it may concern:*

Be it known that I, ALBERT DART, of Rockville, Tolland county, Connecticut, have invented a new and useful Improvement in Cultivators, of which the following is a specification:

The invention will first be described in connection with the drawing, and then pointed out in the claim.

Figure 1 is a side elevation of my improved cultivator. Fig. 2 is a top or plan view, and Fig. 3 is a longitudinal vertical section.

Similar letters of reference indicate corresponding parts.

A is the beam, to which the front share G and the handles C C are attached. B is a rear wheel for gaging the cut of the long mold-boards I and I. The two front mold-boards I I are supported from the beam by the standard H, the front and lower end of which forms a cutter, K, in which the mold-boards I terminate. L L are adjustable bars, hinged to the cross-piece m, which carry, by means of the stands M M, the two rear mold-boards J J. These bars L are spread apart by cam O, operated by means of the lever E on the shaft F, which latter passes through the beam A, and has the cam attached to its lower end. These bars may be operated by means of either single or double cams, as may be desired. The lever E extends back be-

tween the handles C C, so as to be at all times under the control of the attendant, who walks behind the guide and operates the machine. D is a horizontal guide-bar, which passes through the beam and through the bars L L, and supports the bars and mold-boards J J as they are spread or expanded by the cams or forced inward by the pressure of the earth thereon. The wheel B is supported by the spring P, which is attached to the under side of the beam. Q is a yoke, to which the rear end of the spring P is attached, which yoke forms the arbor-bearings of the wheel. By pressure on the handles the mold-boards I and J are made to cut deep or shallow, as may be desired. The arrangement of the mold-boards may be varied. The mold-boards J may be placed outside of I, if desired. The draft-chain is attached to the stand R on the front end of the beam.

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

The combination, with spring-adjusting wheel, of stationary wings I I and adjustable wings J J, as and for the purpose specified.

ALBERT DART.

Witnesses:

DWIGHT MARCY,  
SAMUEL J. COREY.