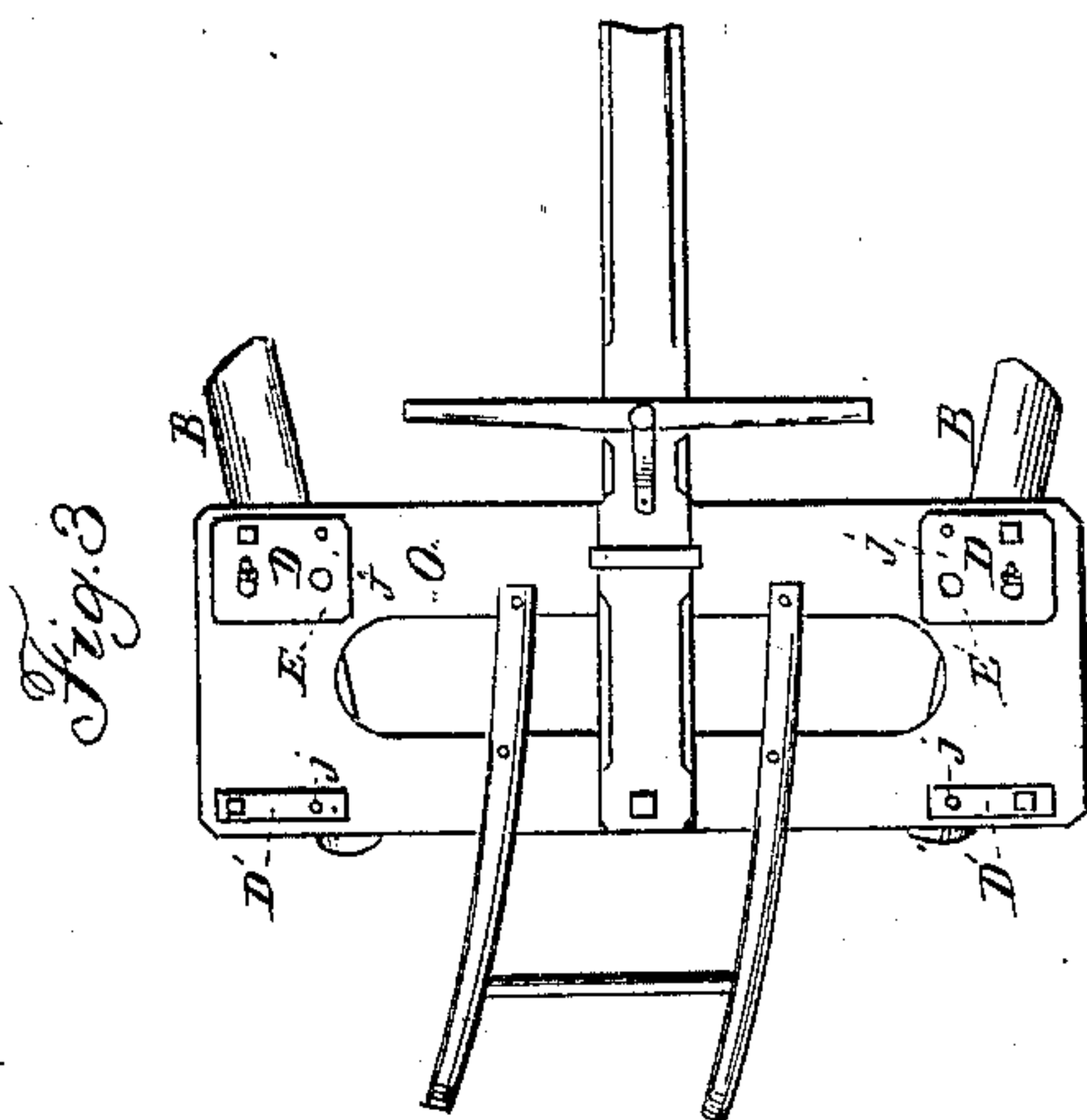
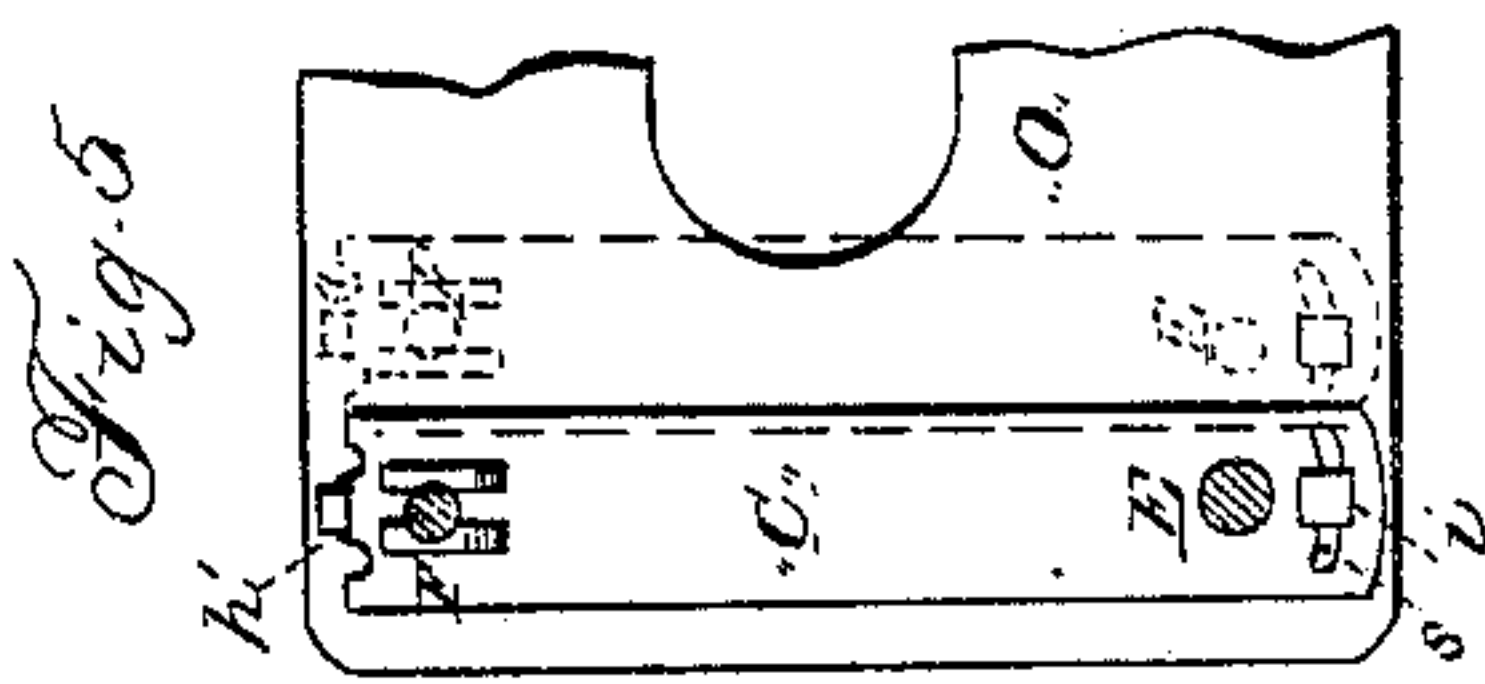
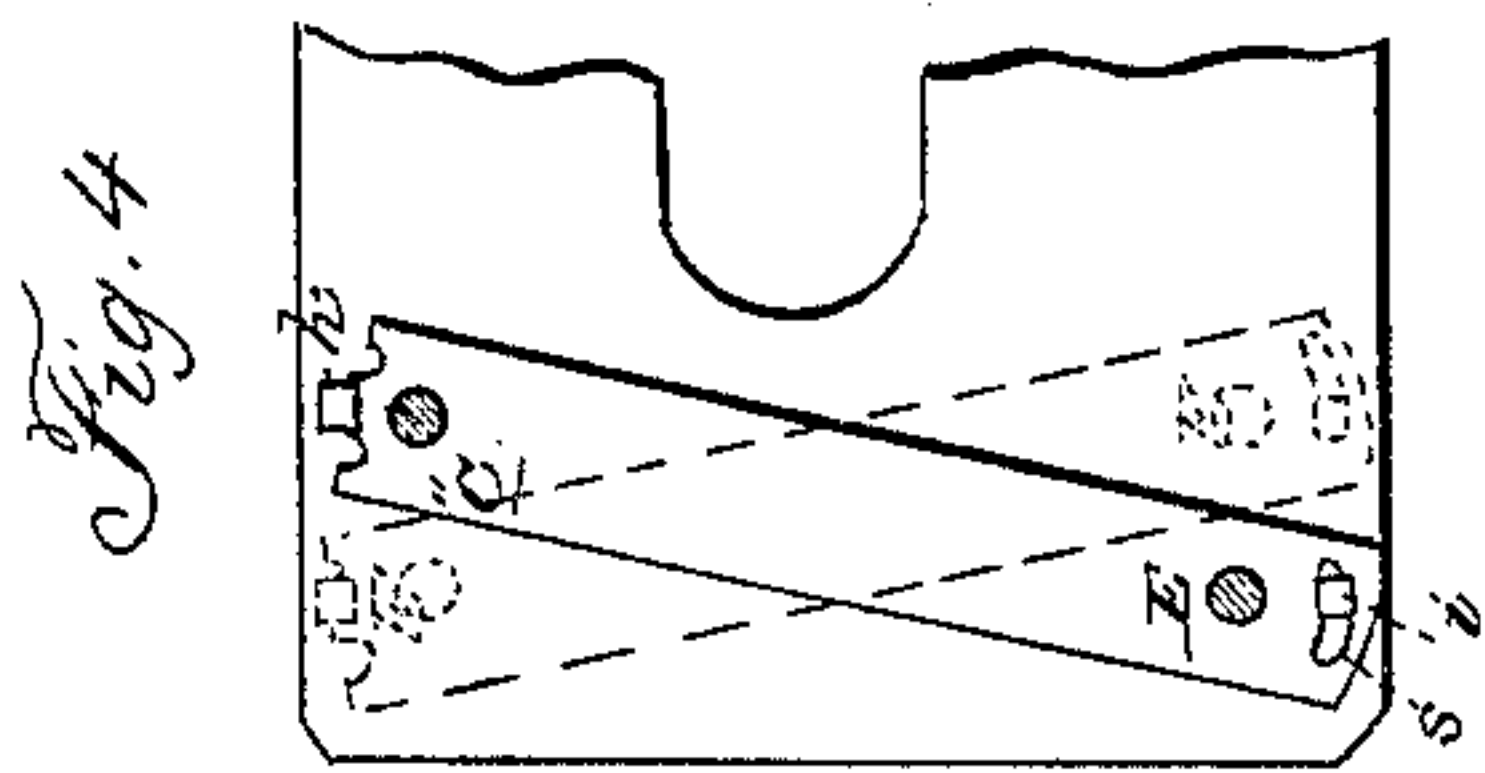
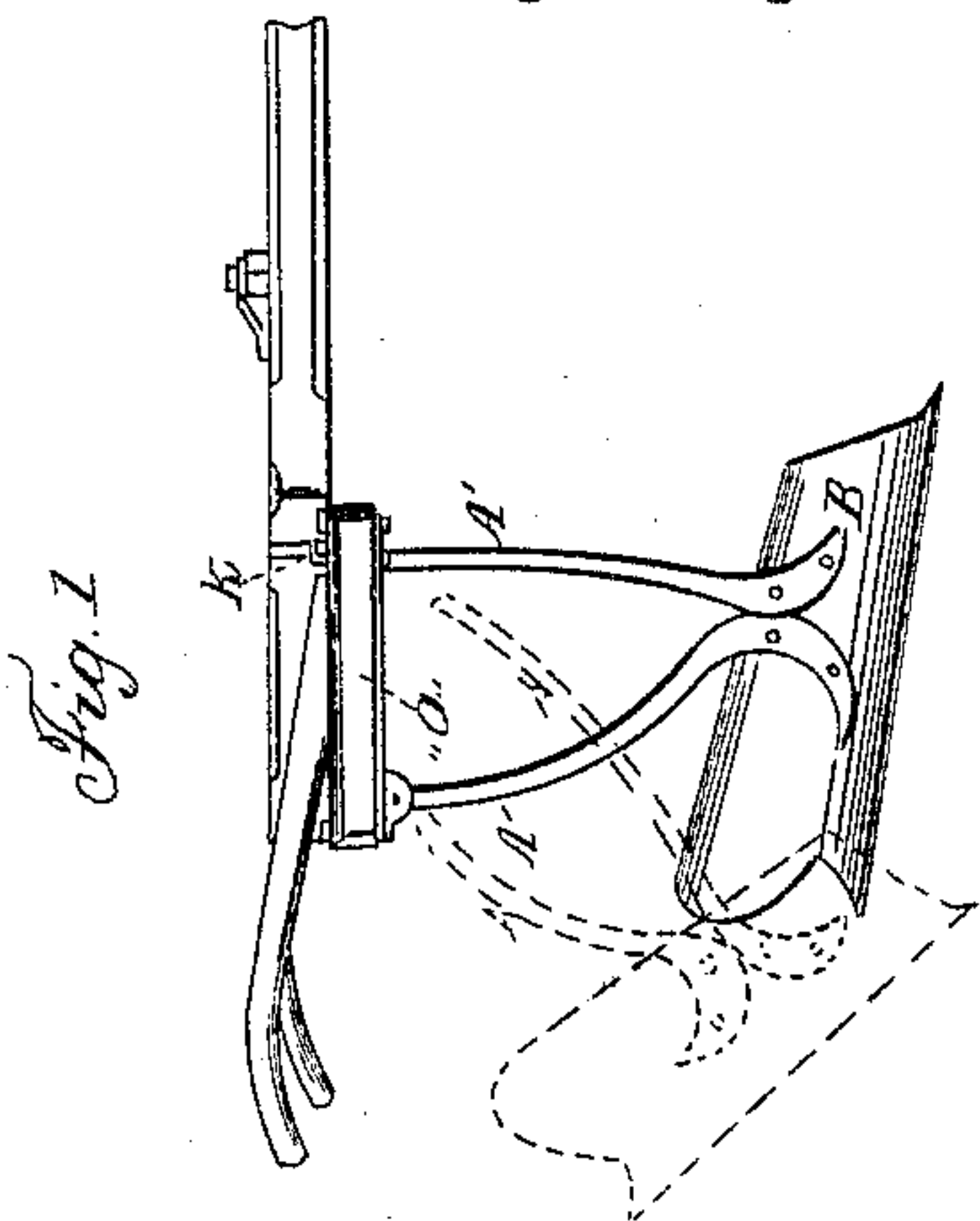
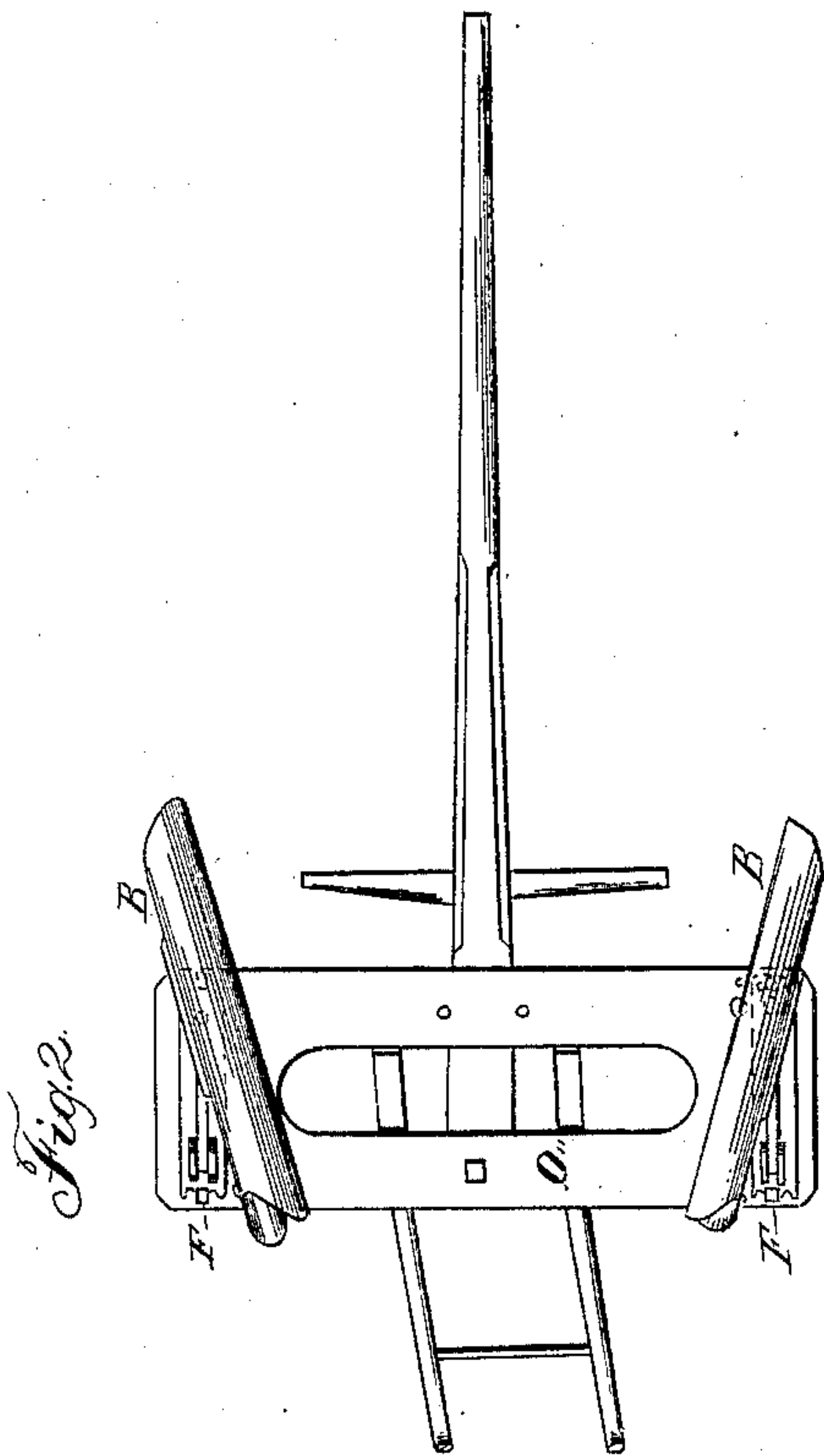


G. D. HART.

Cultivator.

No. 63,384.

Patented Apr. 2, 1867.



Witnesses.
C. M. Swamy
Frank Smith.

Inventor.
George D. Hart
by R. H. Marsh, Attorney

United States Patent Office.

GEORGE D. HART, OF LYCOMING COUNTY, PENNSYLVANIA.

Letters Patent No. 63,384, dated April 2, 1867.

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, GEORGE D. HART, of Lycoming county, Pennsylvania, have invented new and useful Improvements in Cultivators; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications, in which—

Figure 1 is a side elevation.

Figure 2, plan, looking upon the under side.

Figure 3, plan, top side.

Figures 4 and 5, views showing the different positions of the changeable and adjustable parts.

Letters A A', standards sustaining the cutting blades; letters B B, blades that work the soil, combining with ploughshare and mould-board; letters C C, two metal plates on the under-side of the framework F; letters D D', plates on the top part of the frame O, as shown in fig. 3; letters E E, holes for the reception of the ends of the standards A'; letters F F, hinged joints for the upper end of the standards A; letters g g, slots in the plates C C to provide for the lateral movement thereof; letters h h, notches in the other end of the plates C to provide also for lateral movement; also letter i, bolts, one at each of the four corners of the frame to sustain the plates C; letter j, a series of holes for the bolts i; letter k, wooden pins passed through openings in the standards A'.

The object of my invention is to provide a cultivator that shall possess ready means of adjustment, both as to breadth of ground it will cut in its passage, and also as to the angle of the soil-moving blades B. Another feature is hanging the standards A with hinge, and using the wooden pins k, as shown in fig. 3. Should either of the blades B meet with serious obstruction, the wooden pin k would yield, and the position indicated by the dotted lines in fig. 1 would result. An examination of the drawings will show that my arrangement admits of and provides for a great variety of adjustments by which the front ends of the blades B may be brought nearer together, or carried farther apart. The same is true also of the rear ends, thus giving any desired angle to the blades B, as also any desired distance between them to suit rows of plants near together or more removed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the standards A, attached to the plate C by hinge, and standards A' with its tenon at the upper end, (as shown in fig. 1,) with the blades or cutters B, the plates C, when provided with the slots g, and the notches h, and the frame or support O, all constructed and arranged substantially as described and set forth.

GEO. D. HART.

Witnesses:

HENRY W. PETRIKIN,
W. W. HART.