

W. NOTMAN.

Cultivator.

No. 100,655.

Patented March 8, 1870.

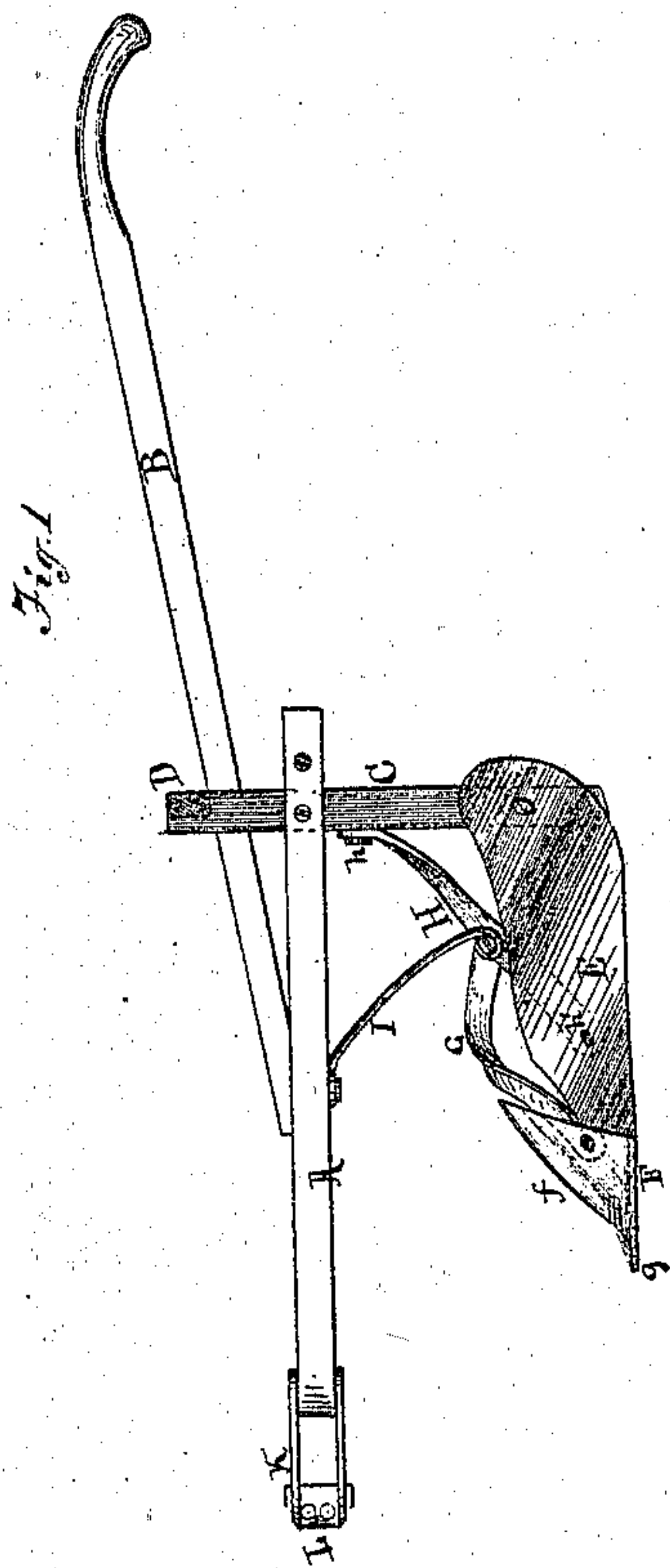
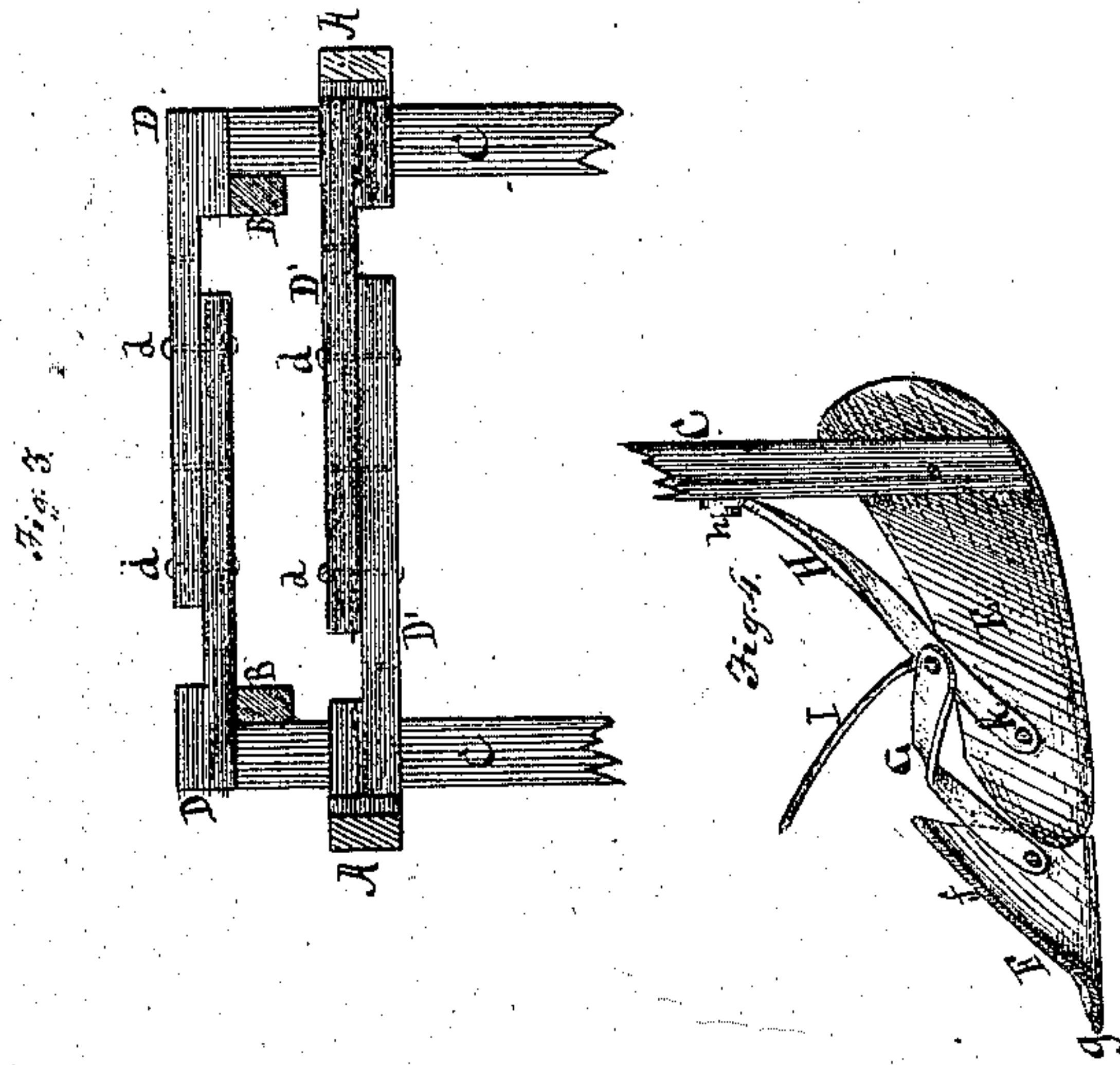
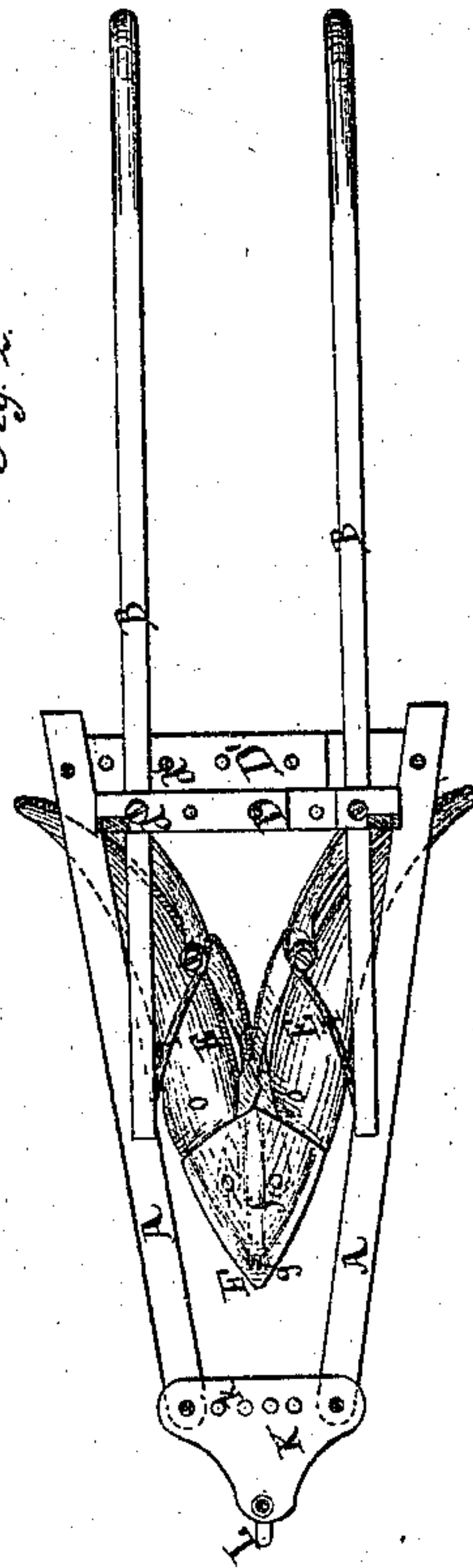


Fig. 2.



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# UNITED STATES PATENT OFFICE.

WALTER NOTMAN, OF DEERFIELD, OHIO.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 100,655, dated March 8, 1870.

*To all whom it may concern:*

Be it known that I, WALTER NOTMAN, of Deerfield, in the county of Portage and State of Ohio, have invented new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation of the cultivator. Fig. 2 is a top view thereof. Figs. 3 and 4 are detail views, to be explained hereinafter.

My invention consists in constructing a cultivator in such a manner that the whole machine may be adjusted by a peculiar construction of the frame, as also in the construction of the mold-boards and share, to be more fully described in the following:

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

In the drawings, A may represent the beams of the cultivator, being bolted near one end to standard C, and having a double cross-bar, D', mortised and tenoned to the end, as best shown in Figs. 3 and 4.

On the opposite ends of the beams is secured, by means of removable bolts, the clevis K, said clevis being composed of two metallic sides of triangular shape, but having two sides curved, so as to gradually come to a point, in which and through the sides, or, rather, the top and bottom pieces of the clevis, a gage, L, is secured, said gage L having any required number of holes for the insertion of the whiffletree-hook, and so as to make any required depth of furrow. In the opposite or straight-line end of the triangular clevis any suitable number of perforations, *k*, are made for the purpose of receiving the bolts passing through the ends of the beams A.

B B represent the handles of the cultivator, being pivoted to a brace, D, near the middle, and bolted at one end to the beams A.

D represents a brace, made of two parts, as shown in Fig. 3, and spliced at its ends with the ends of the standards C. This brace is so constructed that the upper piece will slide over the lower, and both have perforations

through them, for a purpose to be hereinafter described. The cross-bar D' is of the same construction as brace D, except that it is mortised and tenoned to beams A A, and may be made larger.

E E represent the mold-boards of my cultivator, and are made, preferably, of iron, and also of the shape shown in the drawings, that form being the best for the uses of the machine. The mold-boards are pivoted near one end to the standards.

At the other end a brace, H, is pivoted, and on this braces G and I are secured by rivets or by other means, the other end of brace G being fastened to the share F by means of rivets, bolts, or screws, and brace I to the beam A. The same construction is had on both sides of the cultivator.

F is the share or colter, made in a peculiar shape, viz: As a whole it is of diamond shape, with two sides bent inward, so as to form a segment of a circle, said ends covering the ends of the mold-boards E E. The top of the segment has a ridge or corrugation about three-fourths of its whole length, but the end nearest the ground is flattened out, so as to more effectually turn up the soil. The share F is made of steel, by preference, as this is found to be the most durable for this purpose. The depth of furrow is, as before stated, regulated by the gage L, set in the clevis K, the width is increased or diminished by the adjustable frame-work before described, and to be more particularly set forth in the description of the operation, which is as follows: When working in a field, and it is desired to throw the soil at a distance of two or three feet from the mold-boards, the bolts *d d* in the brace and cross-bars are removed, and the bars pulled farther apart, and then the bolts replaced. The bolts in the end of the clevis K should also be removed, and the beams A A drawn nearer together, as this tends to throw the mold-boards and share farther out through the medium of the braces G H I. When a narrow furrow is desired, the above process is reversed—that is, the handles, brace, and cross-bars are drawn close together, and the beams widened at the clevis.

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

1. The arrangement and construction of the beams A A, clevis K, brace D, double cross-bar D', and handles B B, substantially as described.

2. The peculiar construction and combination of the mold-boards E E, share F, and braces G H I, substantially as and for the purpose set forth.

The above signed by me this 1st day of November, 1869.

WALTER NOTMAN.

Witnesses:

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