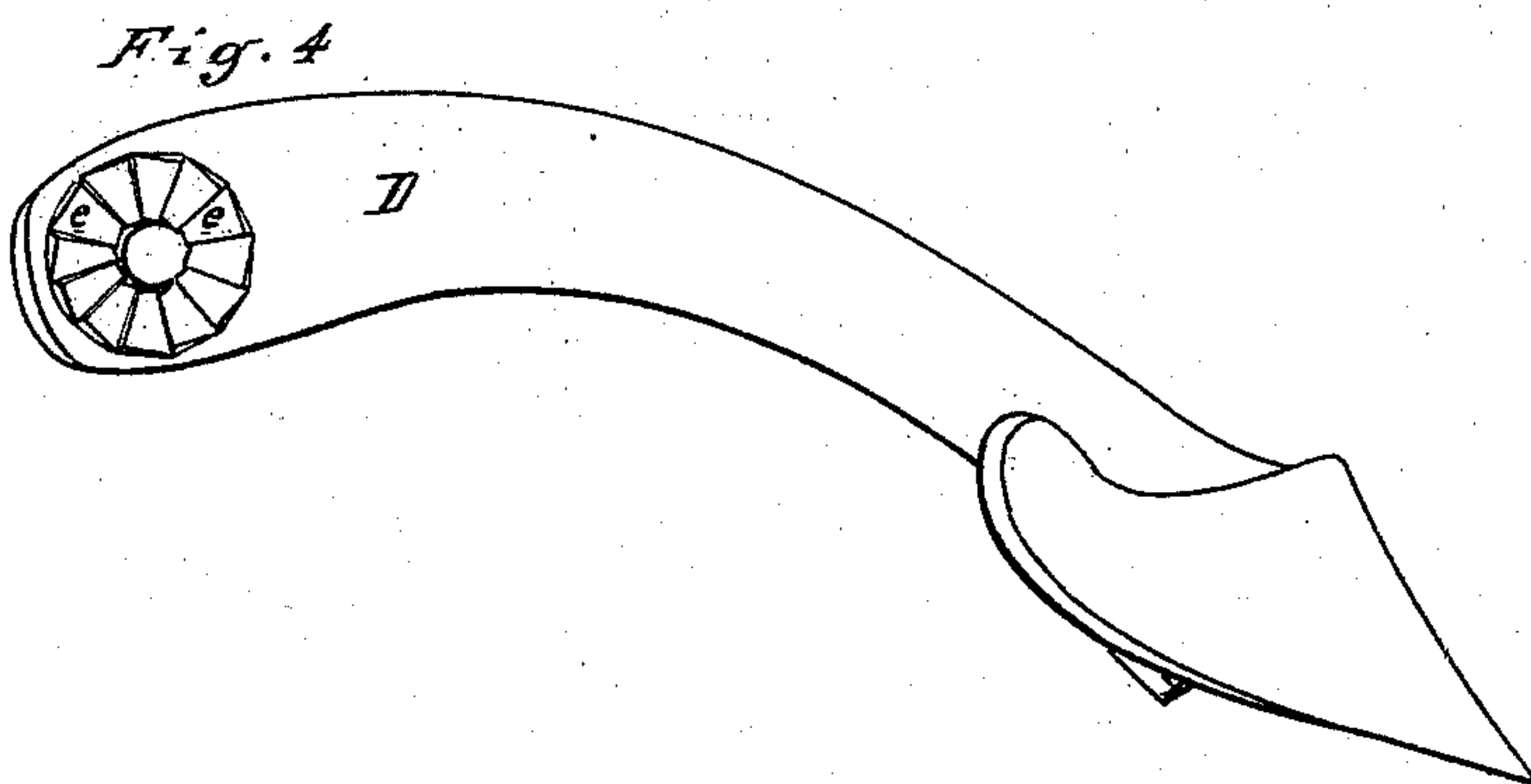
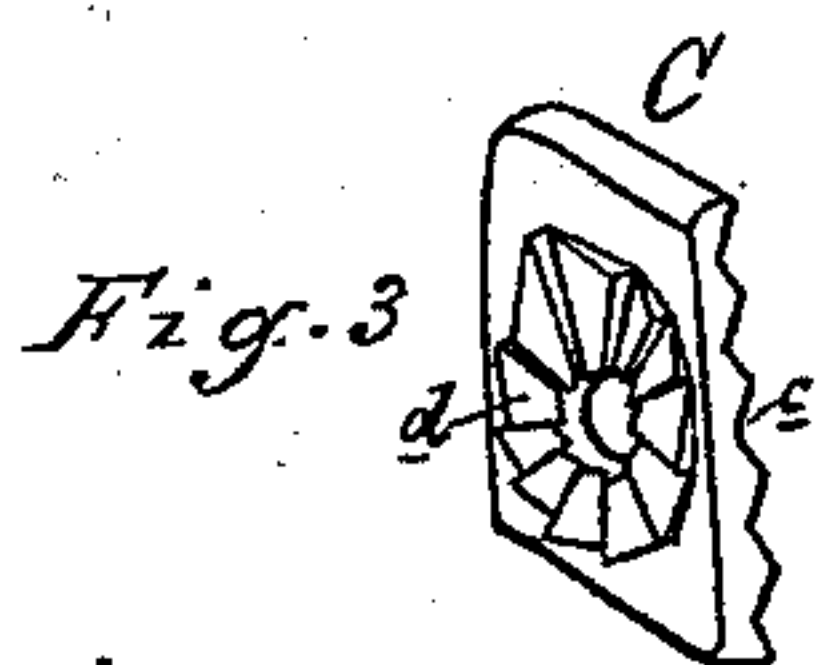
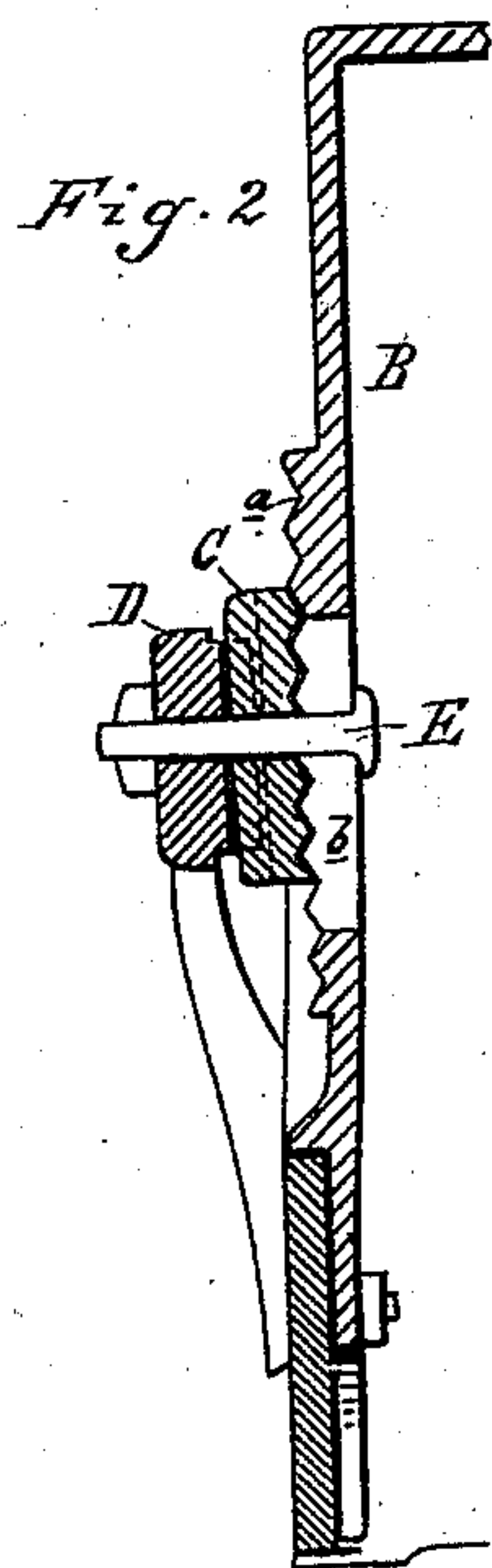
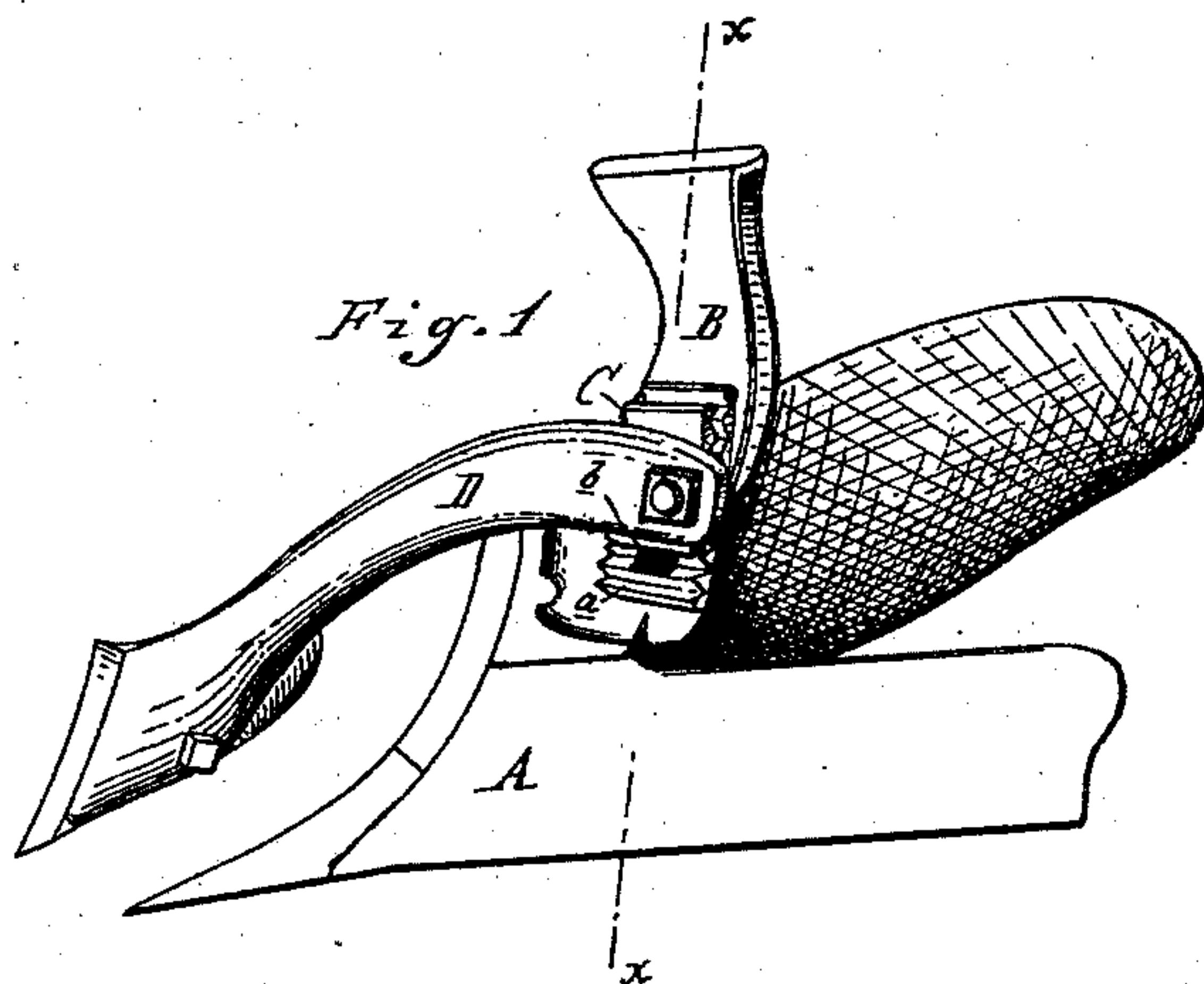


J. G. GROSS.
Plow.

No. 225,053.

Patented Mar. 2. 1880.



Attest:
A. Barthel
E. P. Sprague

Inventor:
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By E. P. Sprague
Atty.

UNITED STATES PATENT OFFICE.

JOHN G. GROSS, OF SALINE, MICHIGAN.

PLOW.

SPECIFICATION forming part of Letters Patent No. 225,053, dated March 2, 1880.

Application filed August 20, 1879.

To all whom it may concern :

Be it known that I, JOHN G. GROSS, of Saline, in the county of Washtenaw and State of Michigan, have invented an Improvement in
5 Plows, of which the following is a specification.

The nature of this invention relates to certain new and useful improvements in the construction and application of plow-jointers, and
10 in providing a means that shall admit of a vertical and radial adjustment to the same, in order that the depth of furrow and pitch of the jointer can be regulated as desired.

The invention consists in the peculiar construction and arrangement of parts to accomplish the desired results, all as more fully
15 hereinafter set forth.

In the drawings, Figure 1 is a perspective view. Fig. 2 is a vertical cross-section on line
20 *xx*. Fig. 3 is a detached perspective of the adjustable serrated plate. Fig. 4 is an elevation of the inner end of the jointer-arm, showing serrations upon its side.

In the accompanying drawings, which form
25 a part of this specification, A represents a plow, and B the standard of a plow, of the ordinary construction.

Upon the land side of the standard there are cast the horizontal serrations *a*, and
30 through these serrations and the standard is a slot, *b*.

C is a malleable-iron plate, upon one side of which are formed the horizontal serrations *c*, which engage, when in place, with the serrations *a* upon the standard. Upon the outer or
35 opposite face of this plate C are cast the radial serrations *d*, and upon the inner face of the rear end of the jointer-arm D are cast or otherwise formed radial serrations *e*, which engage with the similar serrations *d* upon the
40 plate C, the whole being secured together by means of a bolt, E.

By this means of construction and attachment I am enabled to vertically adjust the jointer-arm so as to regulate the depth of
45 furrow to be cut by the jointer, and also to radially adjust it to regulate the pitch of the same.

What I claim as my invention is—

The combination, with the plow-standard B, 50 having a slotted and serrated face, of the plate C, having one side serrated and the other provided with a ratchet disk or rosette, the jointer-arm D, having a corresponding disk, and the bolt E, passing through the slot of the stand-
55 ard, and through such plate and the jointer-arm, securing the parts adjustably together, substantially as described and shown.

JOHN G. GROSS.

Witnesses:

H. S. SPRAGUE,
A. BARTHEL.