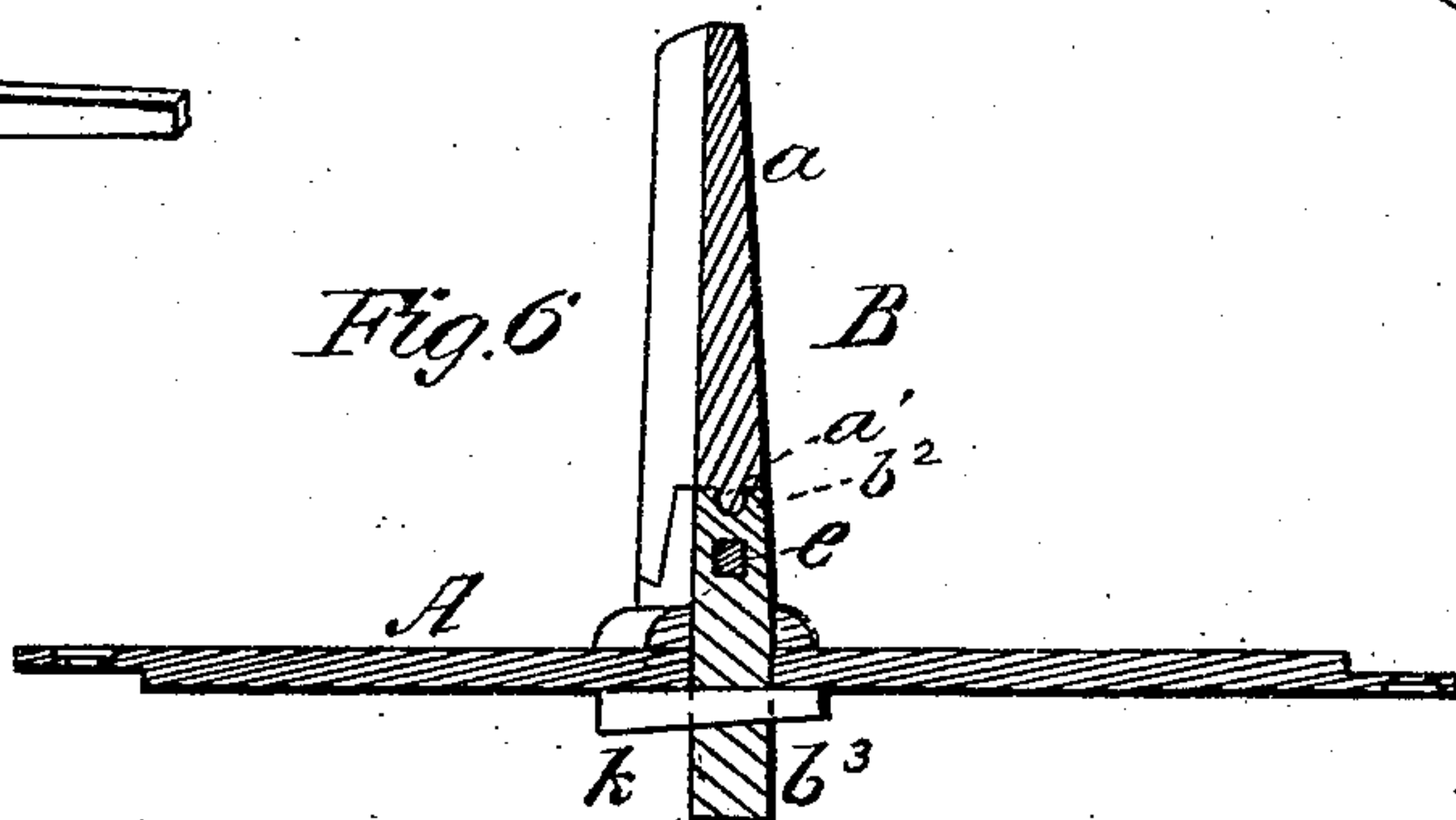
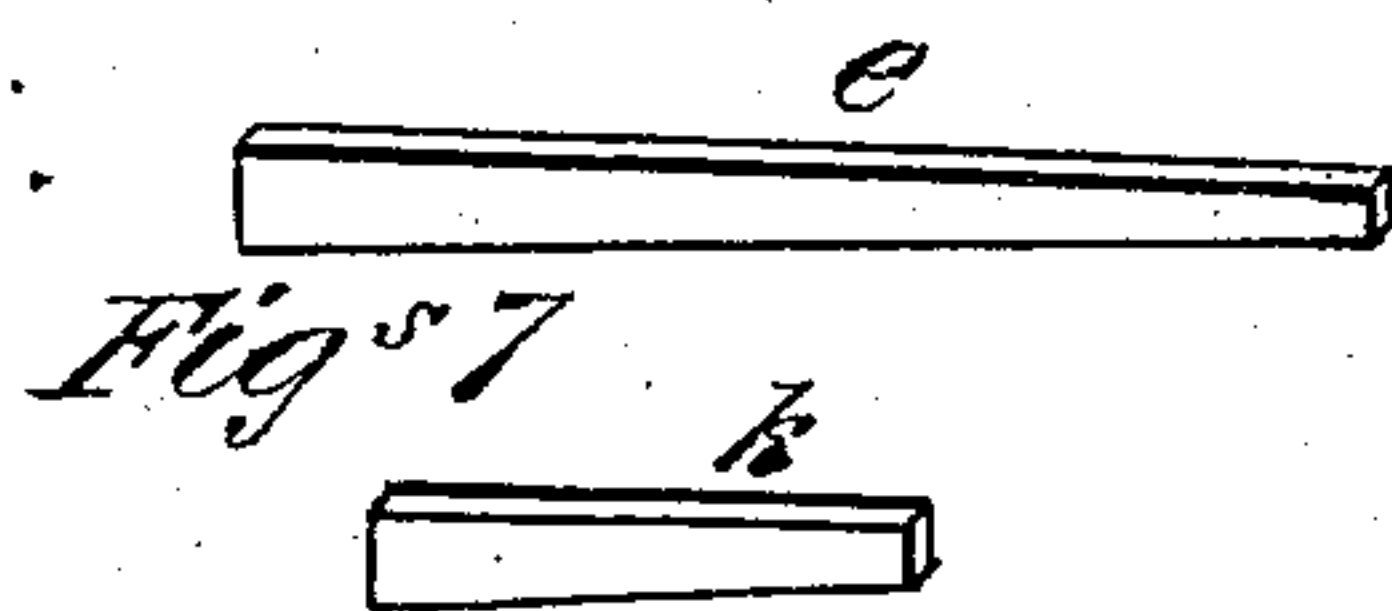
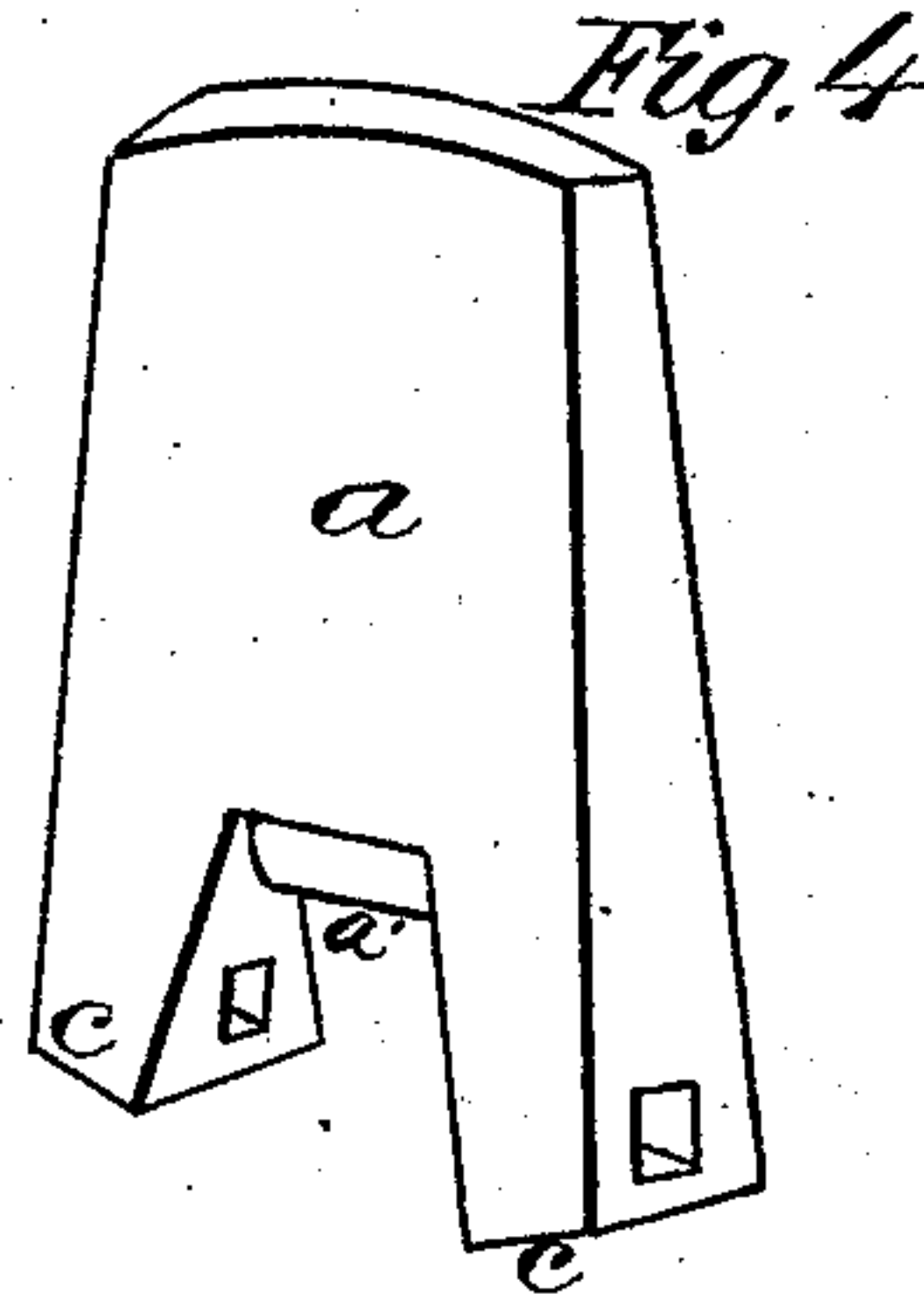
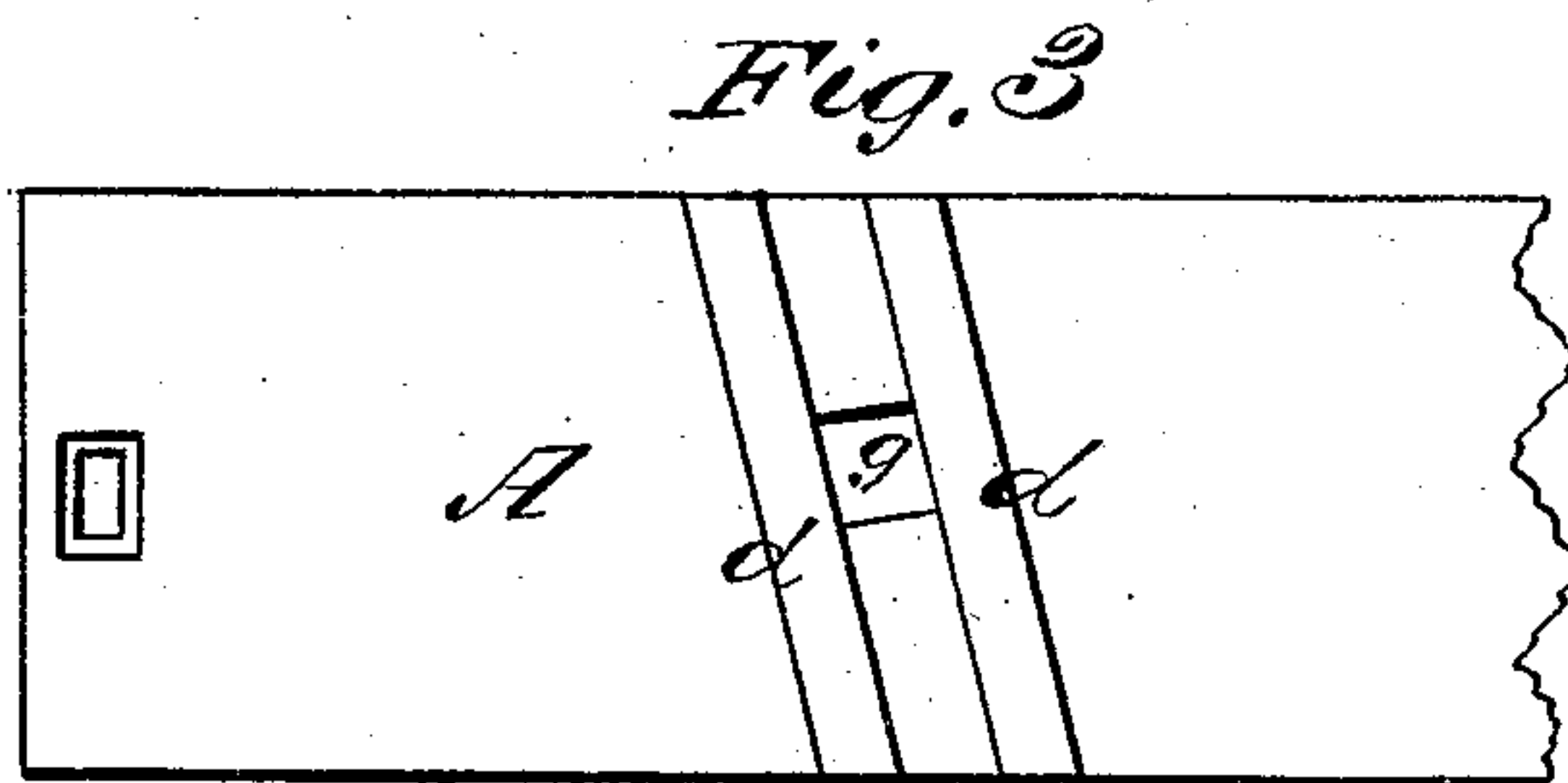
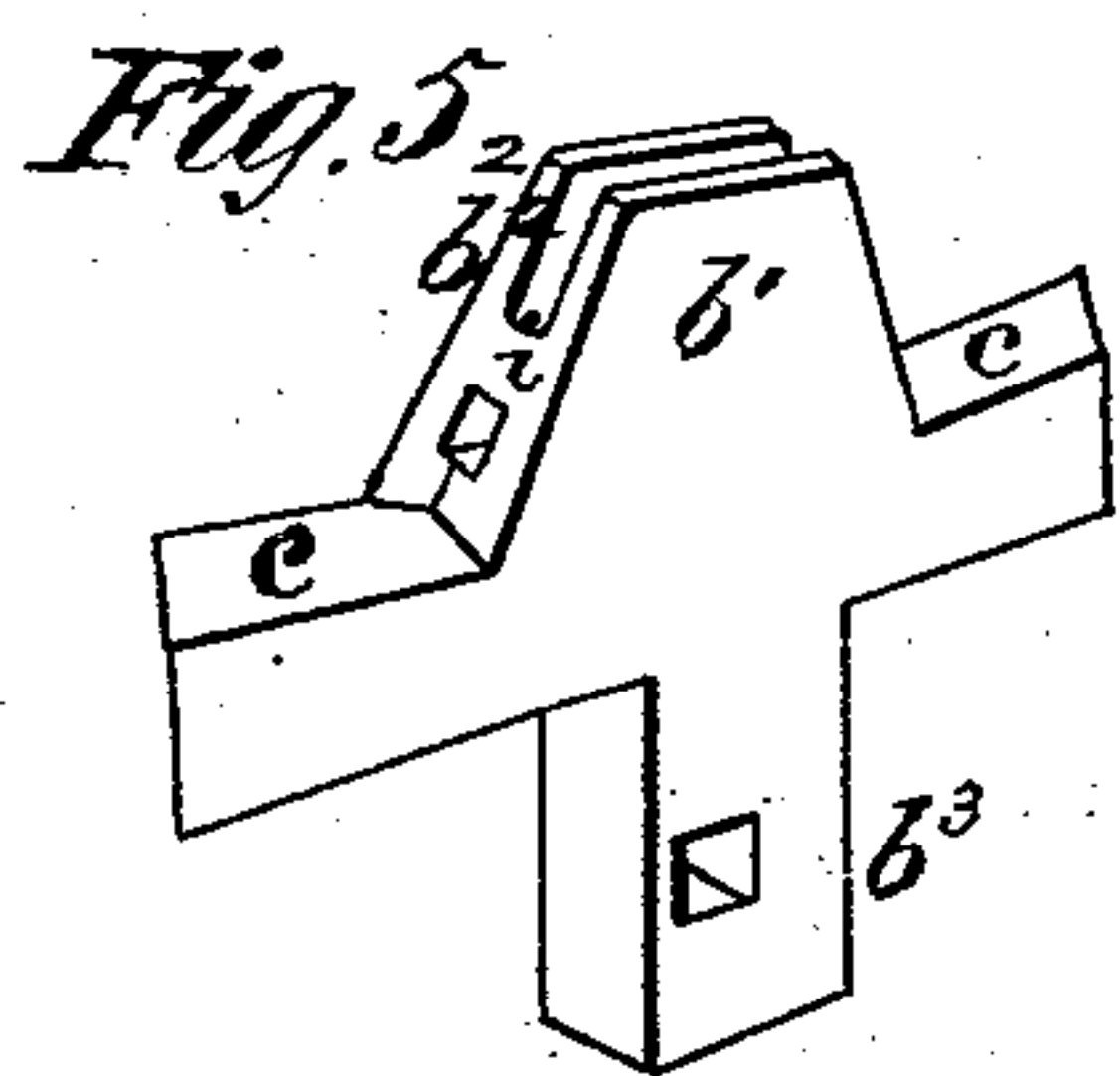
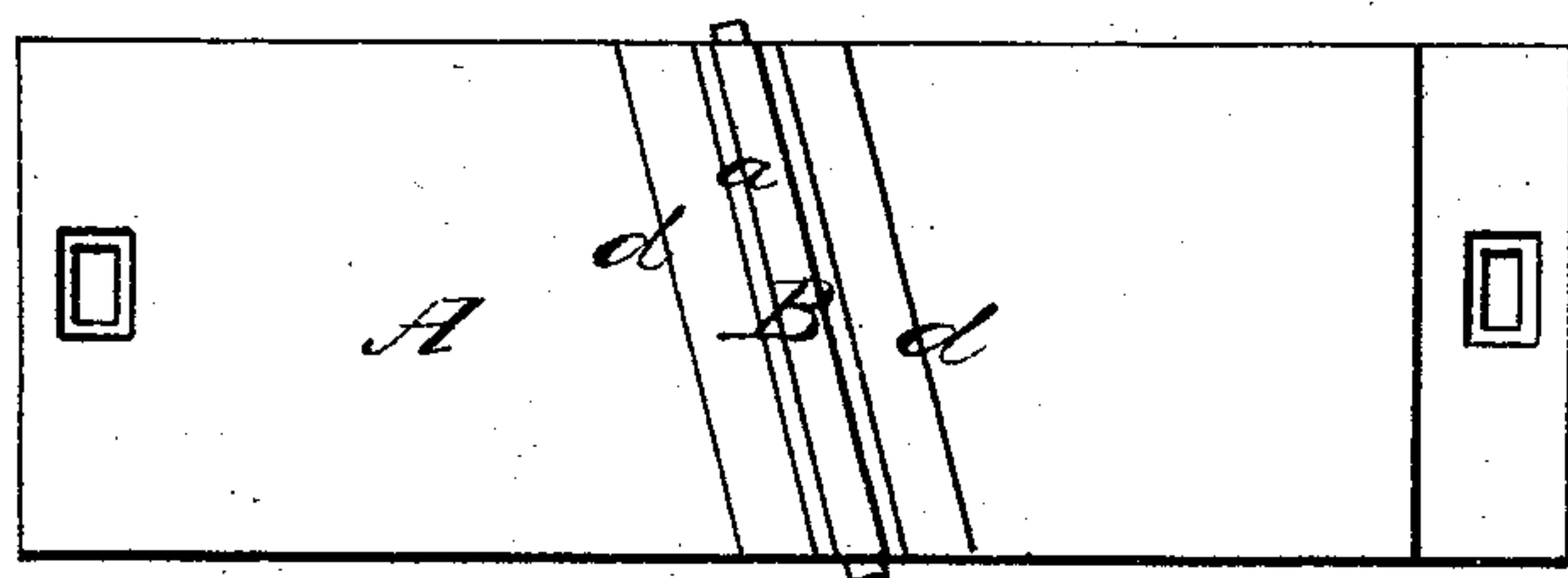
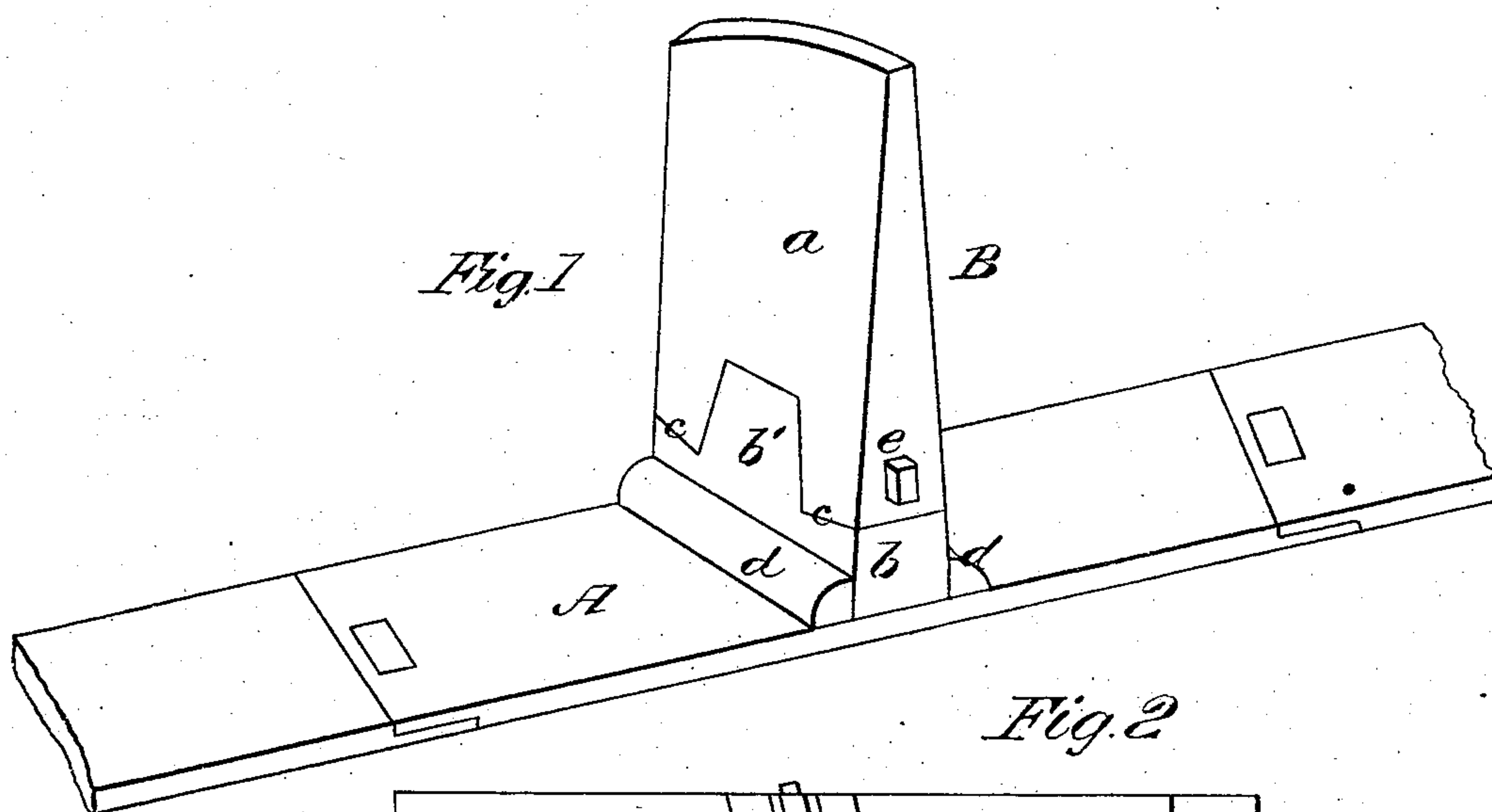


D. GROSS.

Scrapers for Washing Ores.

No. 155,439.

Patented Sept. 29, 1874.



Witnesses.
E. H. Bates
Robert Everett.

Inventor.
David Gross
Chipman & Co.

UNITED STATES PATENT OFFICE.

DAVID GROSS, OF UPPER MACUNGIE, PENNSYLVANIA.

IMPROVEMENT IN SCRAPERS FOR WASHING ORES.

Specification forming part of Letters Patent No. **155,439**, dated September 29, 1874; application filed June 20, 1874.

To all whom it may concern:

Be it known that I, DAVID GROSS, of Upper Macungie, in the county of Lehigh and State of Pennsylvania, have invented a new and valuable Improvement in Scrapers for Iron-Ore Washing; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a perspective view of my improved scraper-blade. Fig. 2 is a top view of a blade and its base-plate. Fig. 3 is a top view of the base-plate without the blade. Figs. 4 and 5 show the blade-sections detached. Fig. 6 is a sectional view of the blade and its base-plate. Figs. 7 are views of the wedge-keys.

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

This invention has relation to scraper-blades which are used on cylinders for the purpose of washing iron ores; and it consists in a sectional blade, which is composed of two separable sections united by a key, and secured removably to a base-plate, whereby the blade can be readily renewed at pleasure, as will be hereinafter explained.

In the annexed drawings, A A designate the flat base-plates, to which my improved scrapers B are removably secured, which plates are halved together at their ends, and fastened by means of bolts. Diagonally across each plate A are two ridges, *d d*, between which a scraper-blade, B, is applied, and secured by

means of a tenon, *b³*, and a wedge-key, *k*. (Shown in Fig. 6.) The blade B is composed of two sections, *a* and *b*, which are secured together by means of a wedge-key, *e*, so that, when either section wears out, it can be readily replaced by a new section. The section *b* is constructed with a tongue, *b¹*, which is slightly tapered, and which has a notch or groove, *b²*, in its upper end, to receive a rib, *a'*, formed across the upper end of a recess made in the blade *a* to receive the tongue *b¹*. The abutting ends *c c* of the sections *a b* are inclined toward the tongue *b¹*, and one of the inclined edges of this tongue *b¹* is made concave transversely, as shown at *i*, Fig. 5, to receive the convex edge of the recess in section *a*. I thus lock the two sections rigidly together, and can renew them at pleasure.

The above-described invention is designed as an improvement on the patents granted to R. Solliday, Nos. 138,948 and 145,455.

I claim as my invention—

1. The blade B, composed of two sections, *a* and *b*, secured together by means of the wedge-key *e*, for the purpose set forth.

2. The section *b*, having the tongue *b¹* and groove *b²*, in combination with the blade *a*, having the rib *a'*, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DAVID GROSS.

Witnesses:

MICHAEL PRICHARD,
MILTON S. RICHARDS.