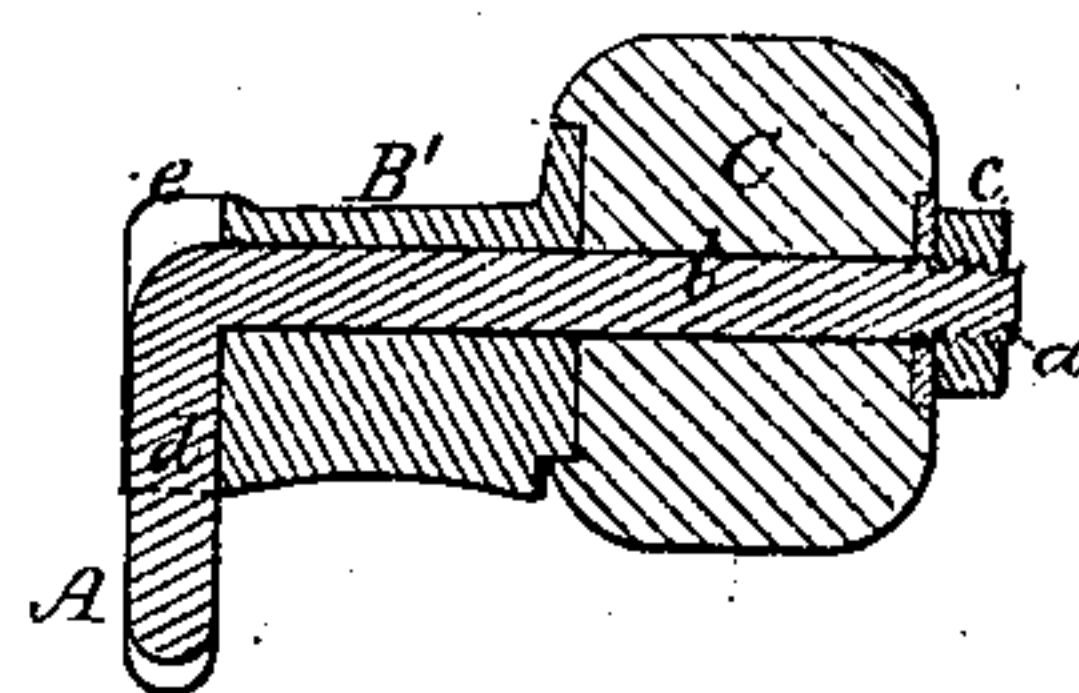
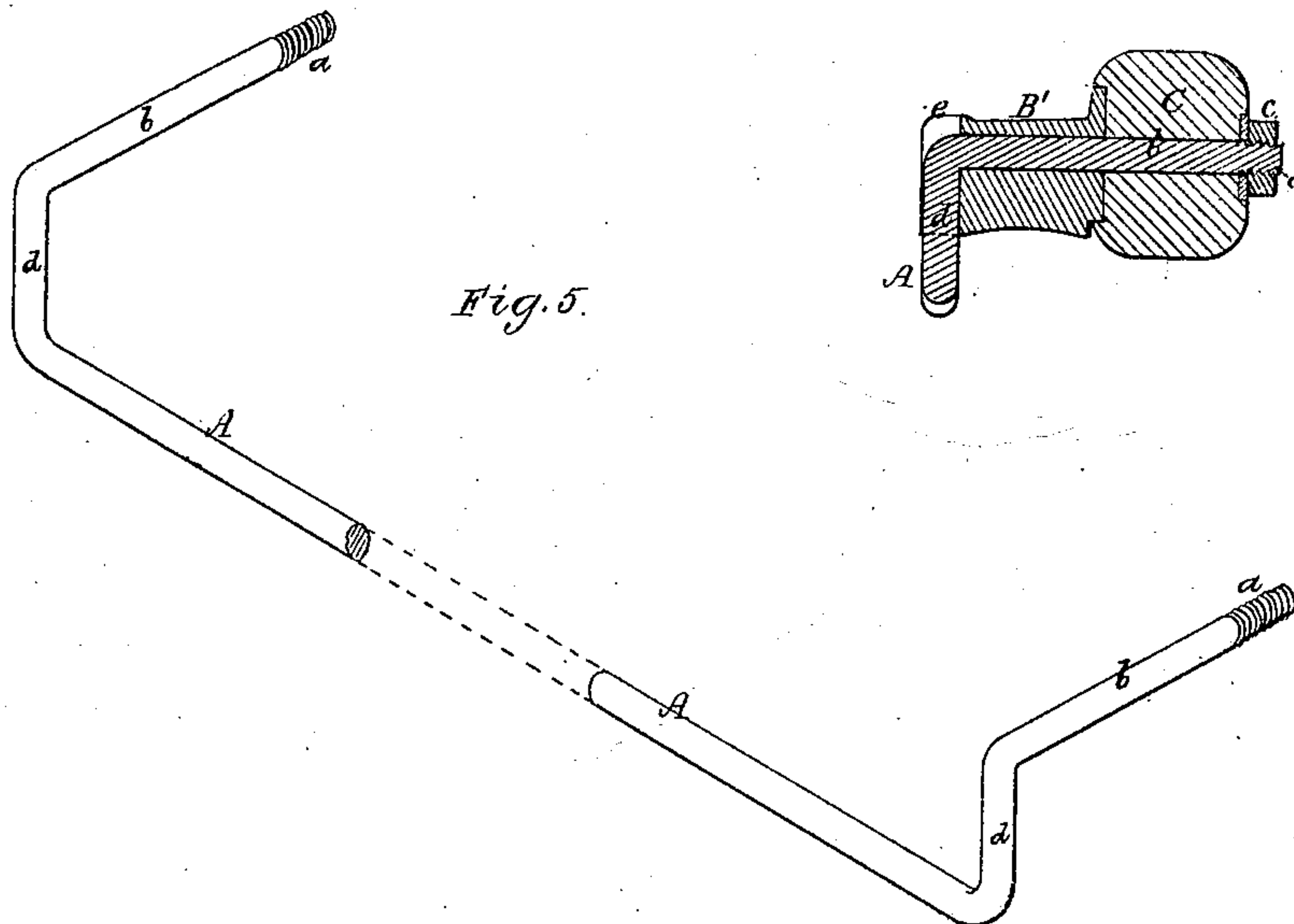
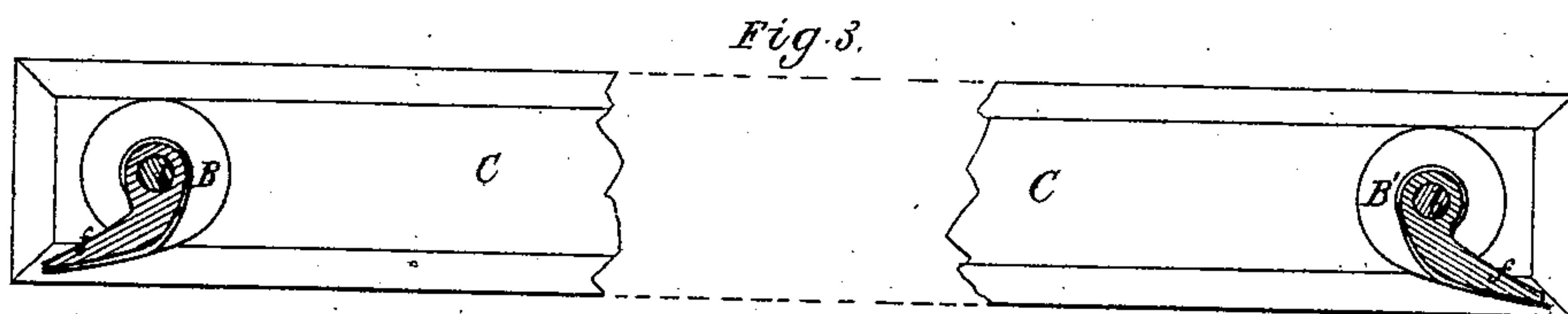
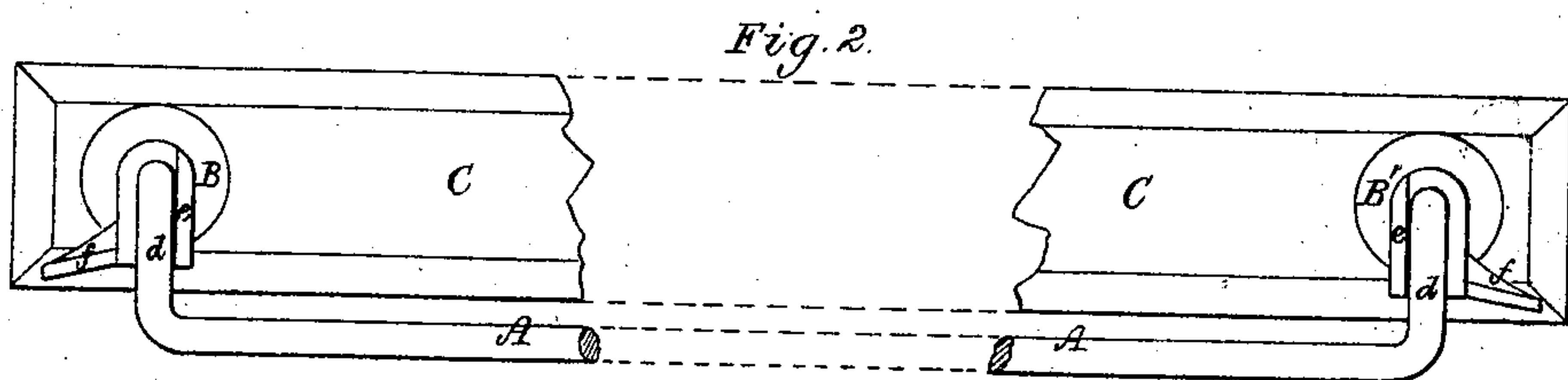
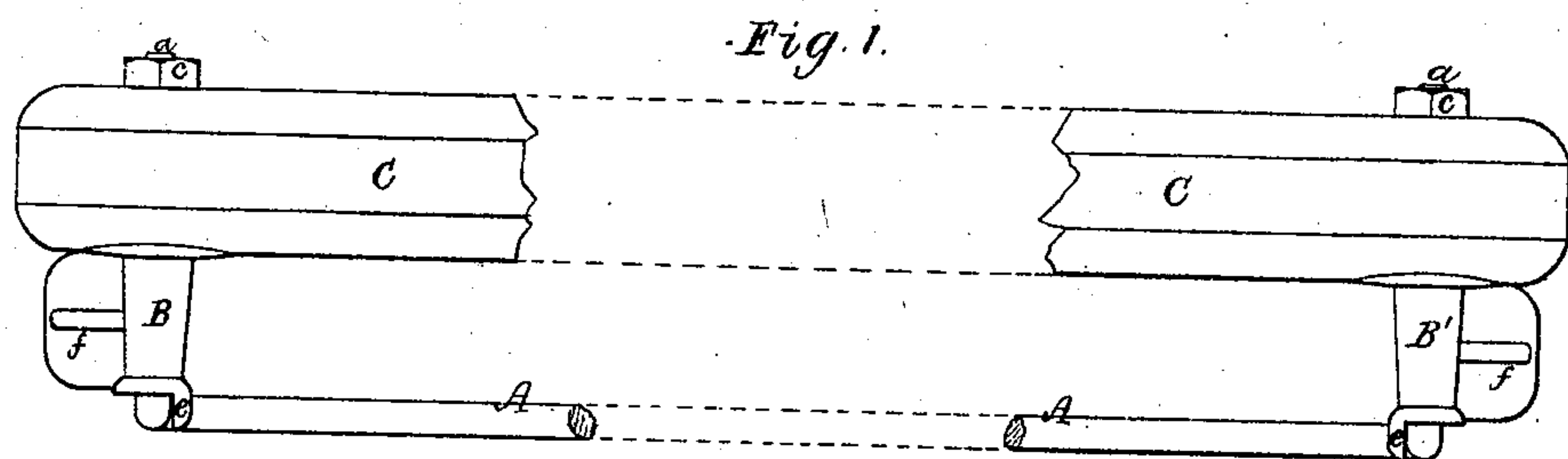


J. B. BANCROFT.
Shuttle-Guides for Looms.

No. 145,925.

Patented Dec. 30, 1873.



Witnesses
J. N. Piper.
L. A. Ballou.

Joseph B. Bancroft.
by his attorney.
N. H. Eddy

UNITED STATES PATENT OFFICE

JOSEPH B. BANCROFT, OF HOPEDALE, MASS., ASSIGNOR TO HIMSELF,
GEORGE DRAPER, AND WILLIAM F. DRAPER, OF SAME PLACE.

IMPROVEMENT IN SHUTTLE-GUIDES FOR LOOMS.

Specification forming part of Letters Patent No. 145,925, dated December 30, 1873; application filed
December 3, 1873.

To all whom it may concern:

Be it known that I, JOSEPH B. BANCROFT, of Hopedale, of the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Shuttle Guides or Guards for Looms; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a top view, Fig. 2 a front elevation, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of one of my improved shuttle guides or guards, and the portion or cap-bar of the loom-lay to which it is applied.

My invention relates to the construction of the guard and its supports, and is mainly for the purpose of preventing the shuttle from accidentally being thrown upward while in the act of passing beyond the guard.

In such drawings, the guard-rod A is represented as bent twice at a right angle near each end of it, the same being as shown in Fig. 5, which is a perspective view of the rod. Furthermore, there is a male screw, *a*, cut on the rod at each extremity, or each of the shank parts *b b* of it. These shanks *b b* go through tubular columns B B' and the cap-bar C of the lay, the said columns B B' being projected from the front of the said bar. They are held in place by the rod and nuts *c c*, screwed upon its terminal screws *a a*. The portions *d d* of

the rod constitute shoulders to rest against the heads or outer ends of the columns. Each of said heads is provided with a lip or flange, *e*, projected from it, in manner as shown; and, furthermore, there is to each column a deflector or tongue, *f*, arranged to extend from it, as represented.

These deflectors serve to prevent the shuttle from being thrown upward while in the act of passing beyond the guard, the lip or flange of each column being with the guard to prevent the column from being turned around on the guard-shank when the deflector is struck by a shuttle.

I claim—

1. The combination of the deflectors *f f* and shuttle-guard A.

2. Each of the tubular columns B B', provided with the lip *e* and deflector *f*, for application to the guard A, made substantially as shown and described.

3. The guard or guide A, constructed or bent as set forth, in combination with the columns B B', provided with the lips *e e* and deflectors *f f*, all being applied and fastened together and to the cap-bar C by means and in manner substantially as specified.

JOSEPH B. BANCROFT.

Witnesses:

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