

BETHUEL RANGER.

Improvement in Bracelet Fastenings.

No. 120,535.

Patented Oct. 31, 1871.

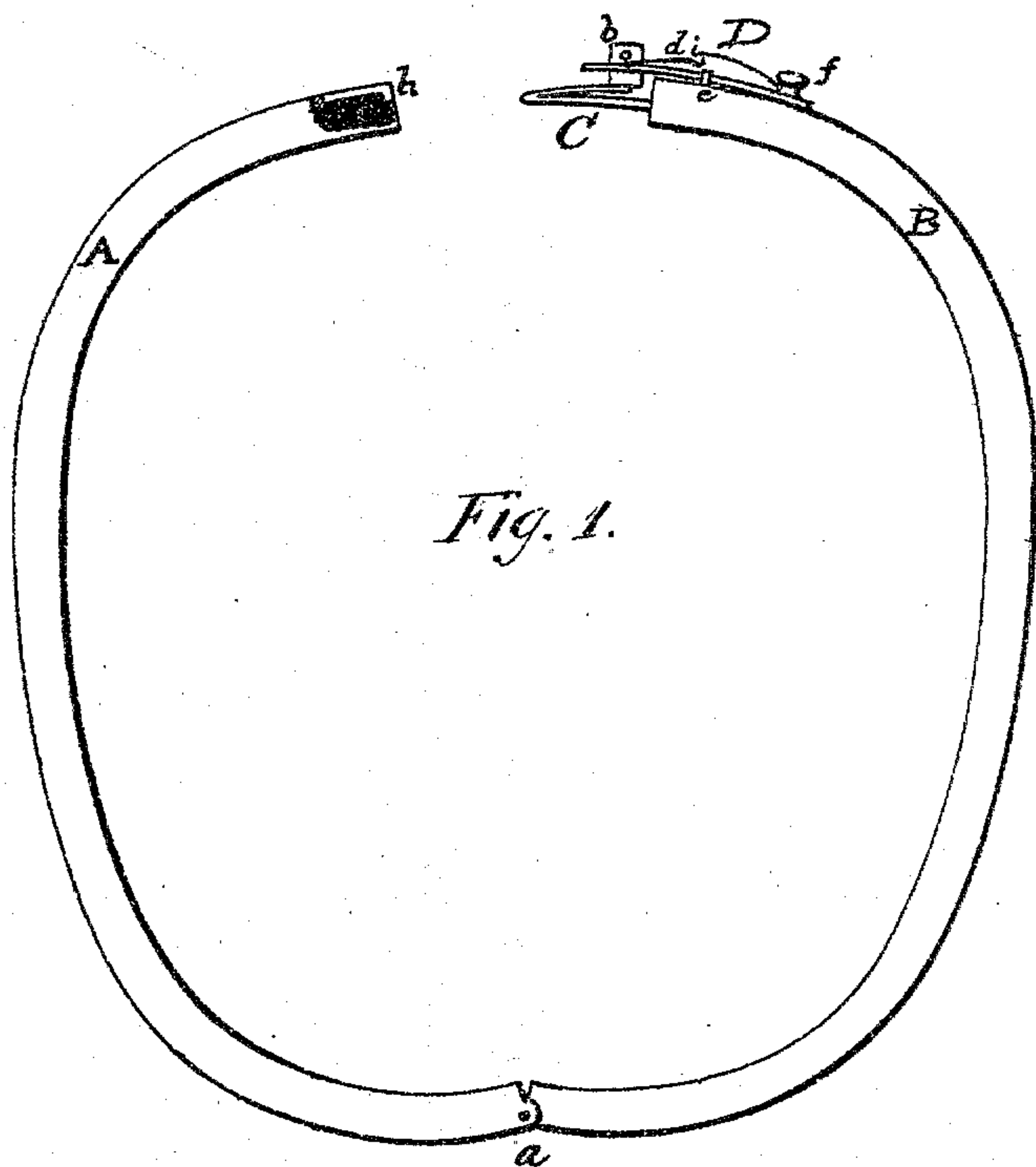


Fig. 1.

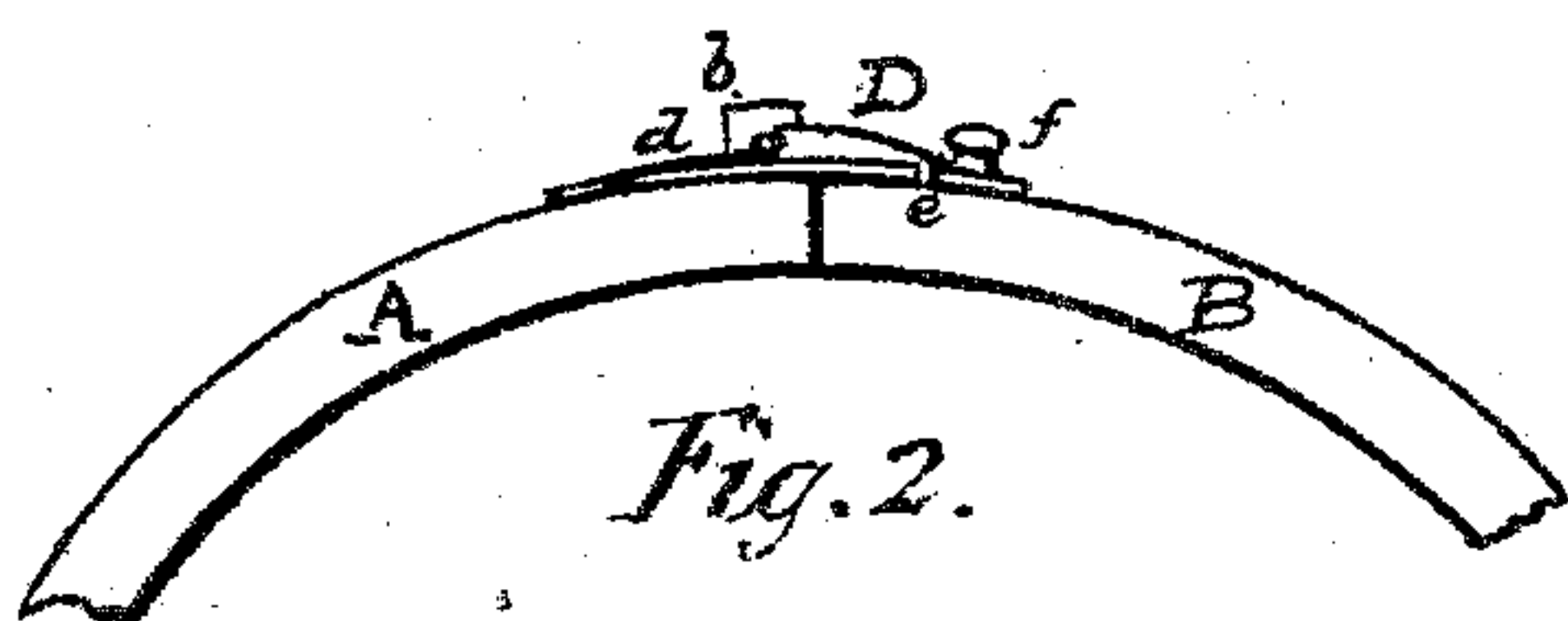


Fig. 2.

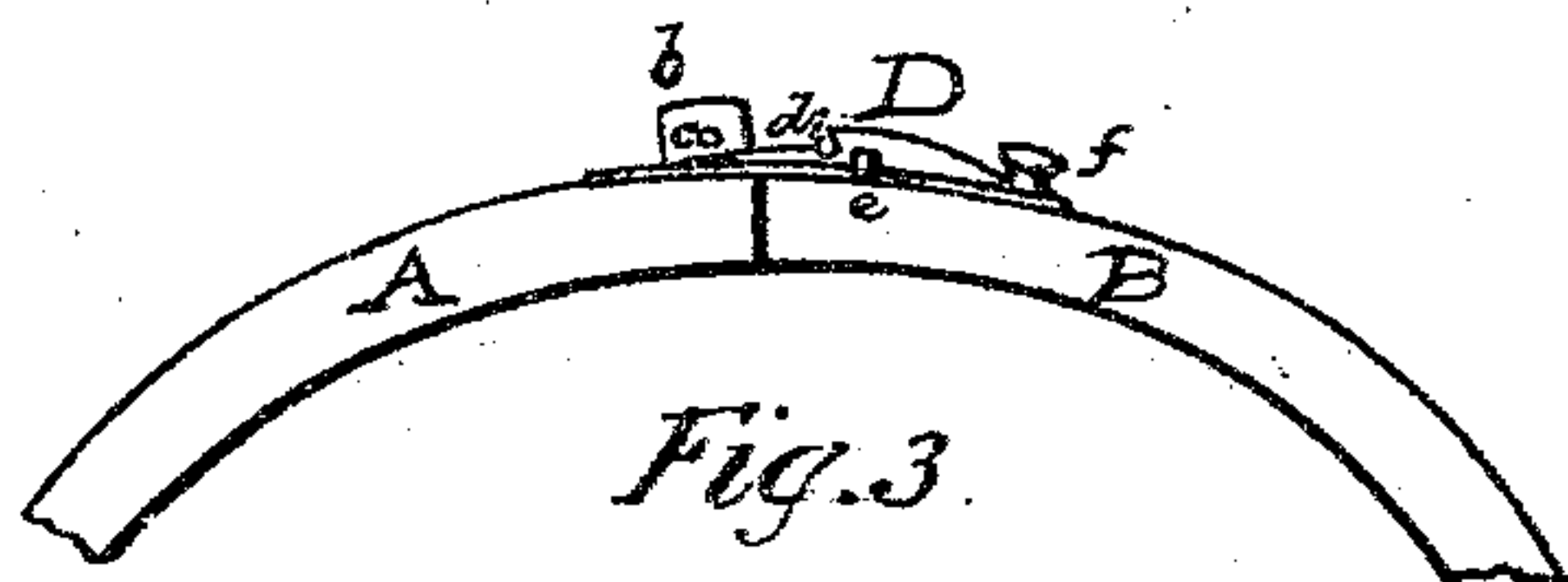


Fig. 3.

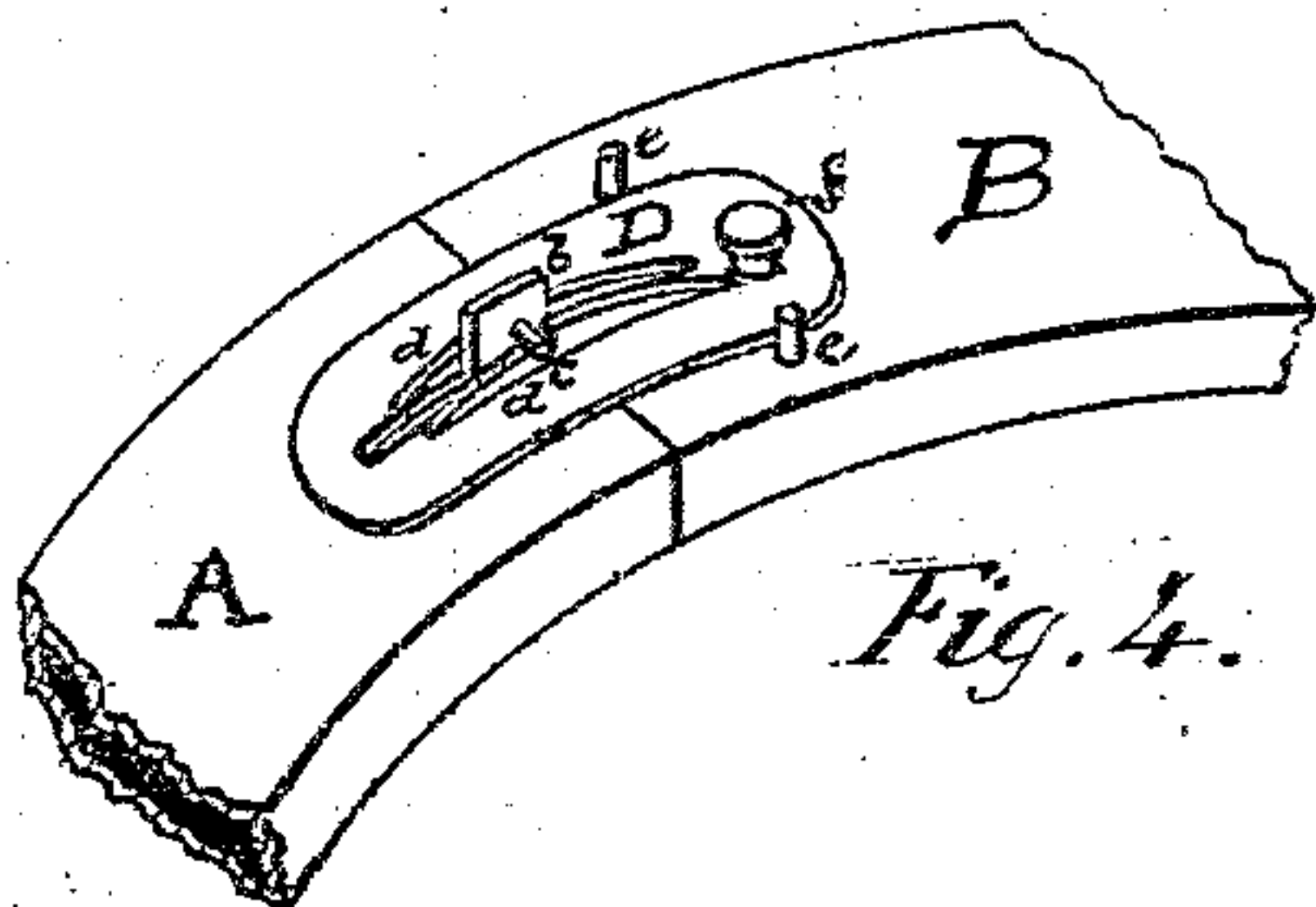


Fig. 4.

Witnesses:
James B. Smiley
David B. Thompson

Inventor:
Bethuel Ranger.

UNITED STATES PATENT OFFICE.

BETHUEL RANGER, OF BRATTLEBOROUGH, VERMONT.

IMPROVEMENT IN BRACELET-FASTENINGS.

Specification forming part of Letters Patent No. 120,535, dated October 31, 1871.

To all whom it may concern:

Be it known that I, BETHUEL RANGER, of Brattleborough, in the county of Windham and State of Vermont, have invented an Improvement in Bracelet-Fastenings, of which the following is a specification:

The object of my invention is to provide such a fastening for bracelets as will prevent their accidental unfastening and consequent liability to be lost.

In the accompanying drawing which forms a part of this specification, Figure 1 is a side elevation representing the bracelet open, and with a portion broken away to show the catch *h*, the cam-slide upon the other part being drawn back. Fig. 2 is a side view of the upper part of the bracelet when clasped and locked. Fig. 3 is a similar side view representing the bracelet clasped, but with locking cam-slide drawn back. Fig. 4 is a perspective view of the upper part of the bracelet when clasped and locked, as in Fig. 2. In the last three figures the lower part of the bracelet is represented broken away, not being necessary to represent my invention.

Like letters represent like parts in the different figures of the drawing.

A and B are the two parts of a bracelet of ordinary form and material, hinged together at *a* in the usual manner. C is the ordinary spring-clasp attached to the part B of the bracelet, and which engages behind the shoulder *h* of the part A in the usual way when the two parts are pressed together. The spring-clasp C has the push-piece *b* attached to its upper portion, as usual, as shown in Fig. 1, and upon each side of the upper part of this push-piece a projecting pin or stud, *c*, is fastened in any well-known way. The object of these pins *c* will be hereinafter explained. D is a cam-slide resting upon the part B of the bracelet, and held between the guides *e*, two or more in number, as required, so as to allow it to be moved back and forth. This cam-slide projects over the end of the part B, as shown in Fig. 1, and the push-piece *b* of the spring-clasp C passes through a longitudinal slot in the cam-slide, and projects above it, as shown, the pins *c* of the push-piece preventing its displacement. Upon the forward part of this slide D are two raised projections, *d*, one upon each side of the slot, which form inclined planes or cams, and upon the back part of the slide a stud,

f, is attached for the purpose of moving the slide forward and backward. Near the center of the slide, and at the back part of the cams *d*, a transverse notch, *i*, is cut in each cam, of such size as to permit the pins *c* on the push-piece to fit therein when the slide is moved forward. The slot in the slide D is of sufficient length to permit the cam-slide to move forward until the notch *i* in the cams is immediately beneath the pins *c* of the push-piece.

The operation of the device is as follows, viz.: The bracelet being open, and having the cam-slide drawn back so that the points of the cams *d* are beneath the pins *c*, as shown in Fig. 1, the two parts of the bracelet A and B are pressed together. The spring-clasp C enters the opening in the part A, and when the two parts are brought close together the clasp catches behind the shoulder *h*, and the bracelet is by this operation fastened in the usual way. The cam-slide D is now pushed forward by pressing against the stud *f* (the cams *d* sliding beneath the pins *c* of the push-piece and springing it up a little) until the notches *i* are beneath the pins *c*, when, depressed by the reacting pressure of the spring-clasp, the pins drop into the notches in the cams, and hold the slide firmly in that position. The bracelet is now fastened by the spring-clasp or catch. The clasp is locked, so that it cannot be opened by any pressure upon the push-piece, the cams *d* being interposed between the pins *c* of the push-piece and the bracelet, and the cams *d* are held against accidental withdrawal by the engagement of the pins *c* in the notches *i*. To open the bracelet, after having been thus locked, the cam-slide is drawn back (the spring-clasp yielding sufficiently to allow the pins *c* to be lifted out of the notches) until the points of the cams are beneath the pins *c*, as shown in Fig. 3, when the push-piece may be pressed down and the clasp withdrawn in the usual manner, the bracelet being then as shown in Fig. 1.

The scope of my invention is the employment of a locking device to prevent the possibility of the main catch or clasp being accidentally unfastened, and as this may be accomplished in various ways I do not limit myself to this particular device.

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

1. The combination of a locking device with

the clasp or catch of a bracelet, substantially as set forth.

2. The combination of the cam or cams *d* with the clasp or catch C, substantially as set forth.

3. The combination of the notches *i* of the cams with the pins *c* of the push-piece, to prevent the accidental withdrawal of the cams, substantially as set forth.

4. The arrangement of the slotted cam-slide or

its equivalent with relation to the push-piece and the guides, substantially as set forth.

5. The engagement of the pins *c* with the notches *i* (and their disengagement) by yielding pressure, substantially as set forth.

BETHUEL RANGER.

Witnesses:

DANIEL B. THOMPSON,

JAMES B. SMILEY.

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