

No. 779,522.

PATENTED JAN. 10, 1905.

C. J. BROSNAN.
PAPER CLIP.

APPLICATION FILED APR. 18, 1904.

Fig. 1.

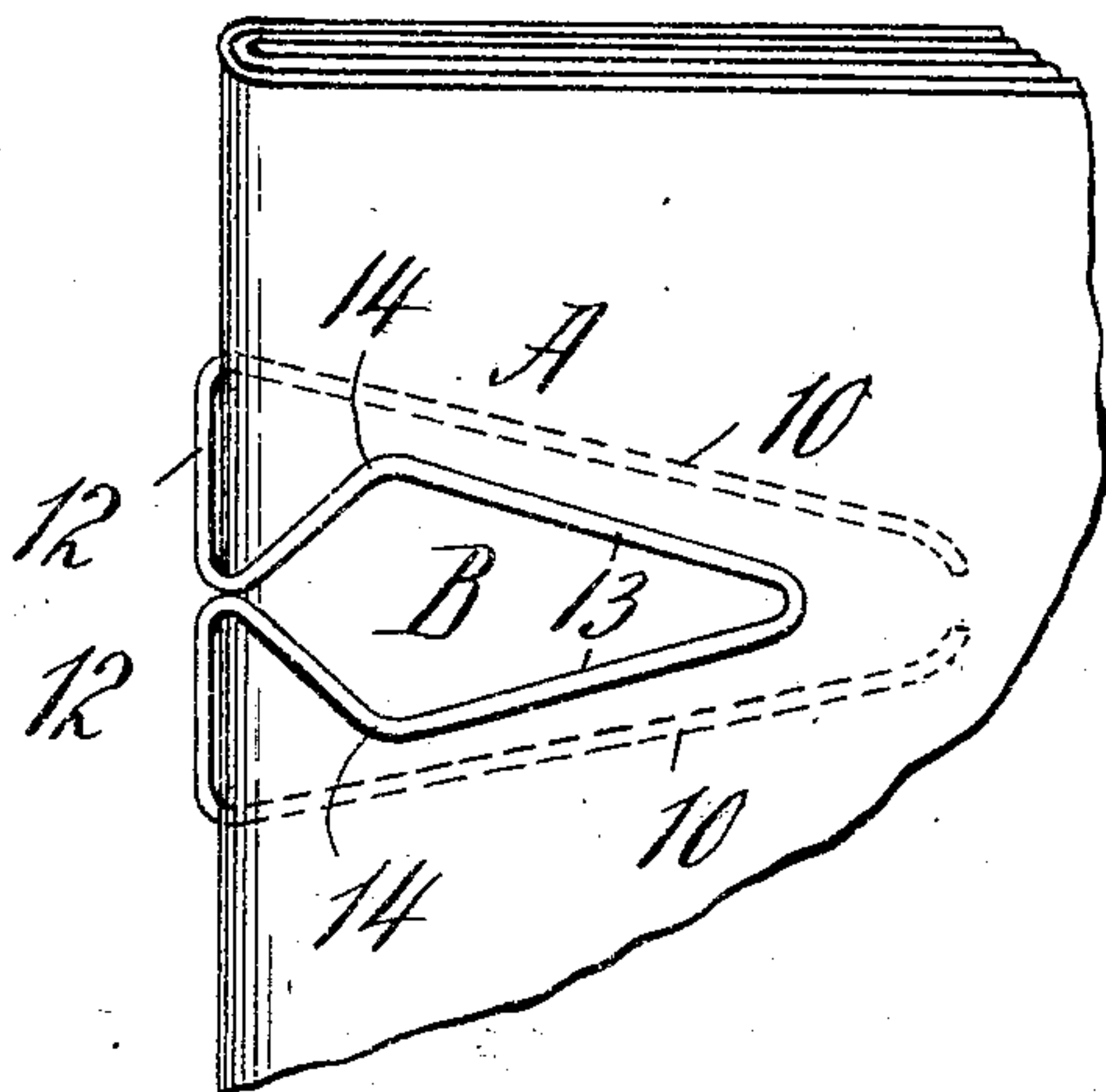


Fig. 4.

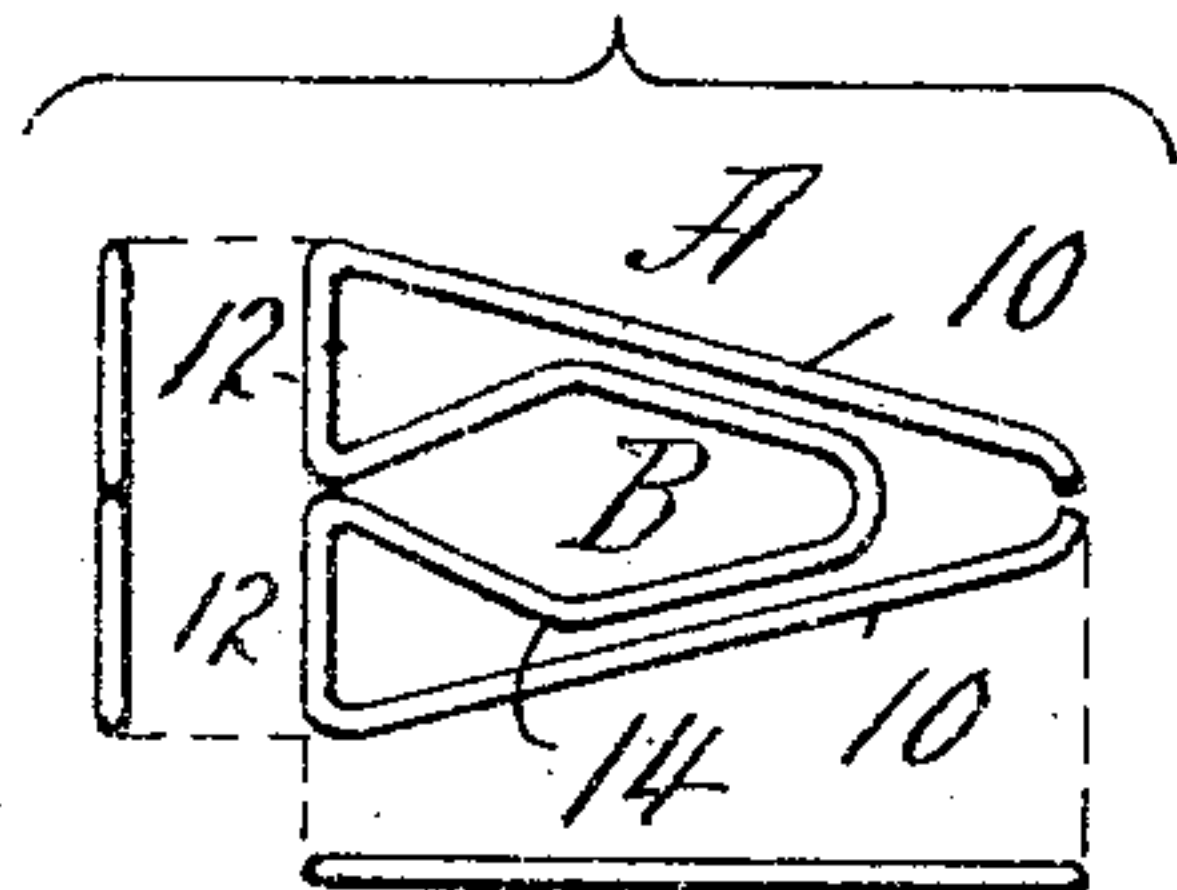


Fig. 2.

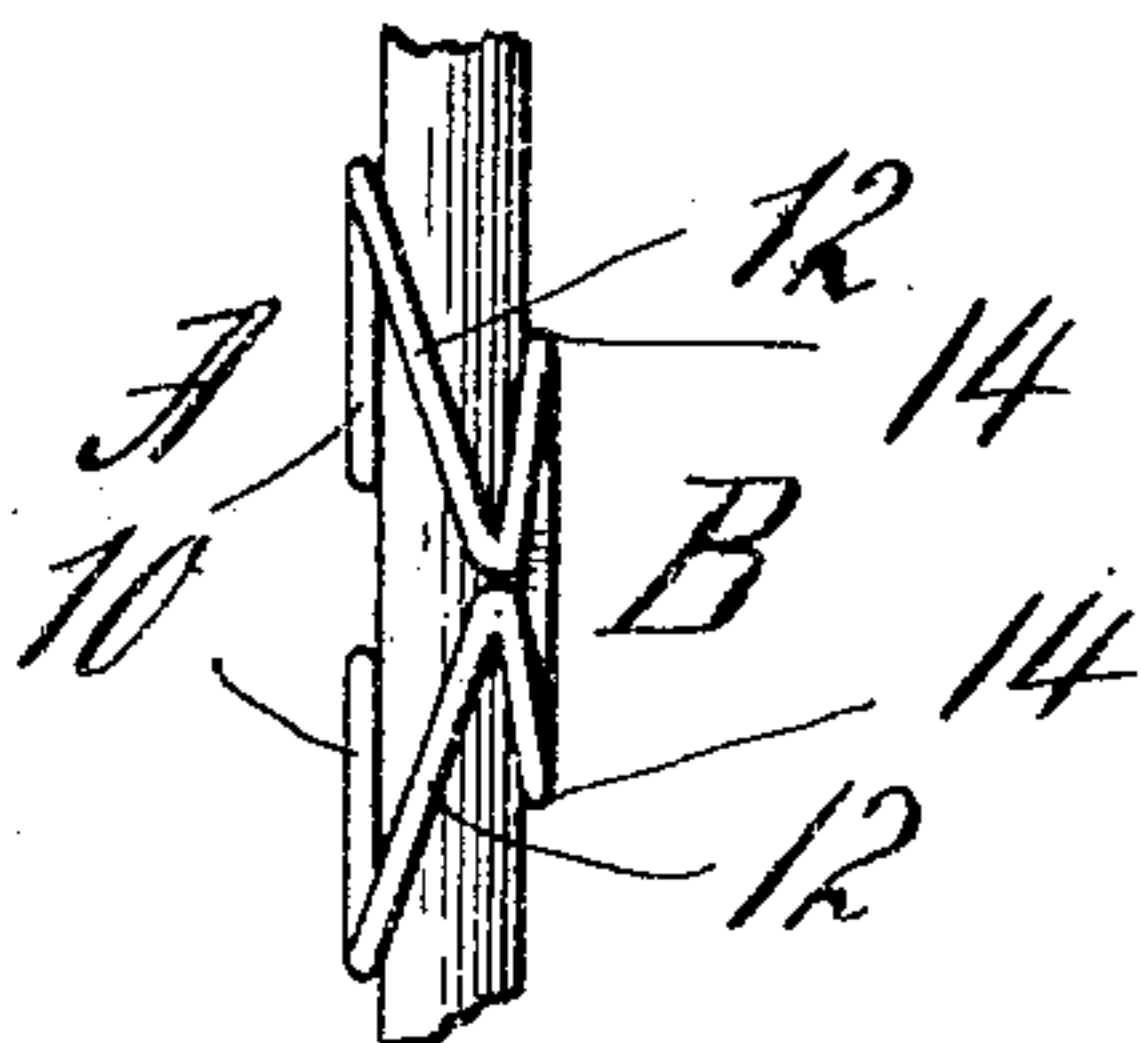
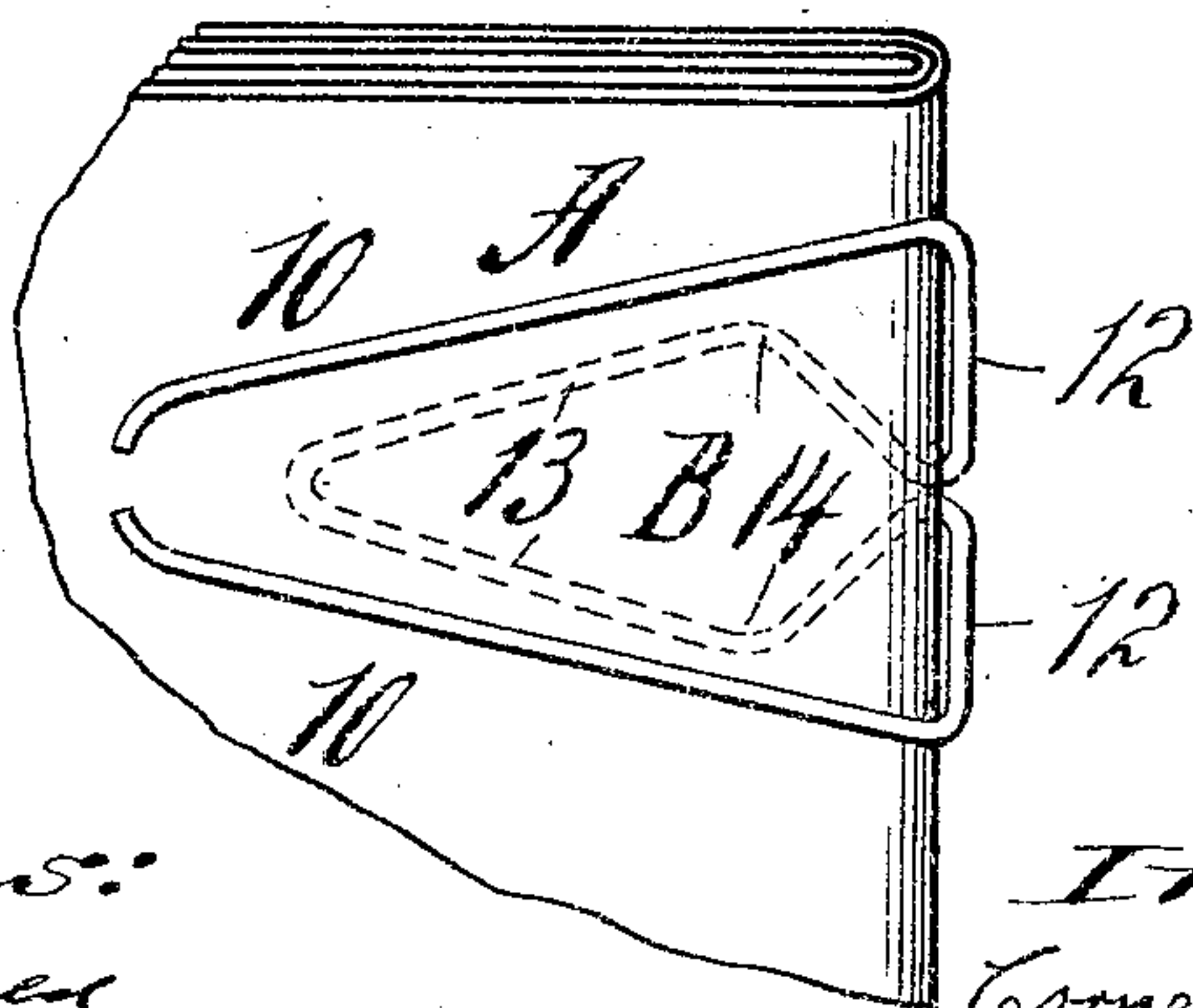


Fig. 3.



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UNITED STATES PATENT OFFICE.

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PAPER-CLIP.

SPECIFICATION forming part of Letters Patent No. 779,522, dated January 10, 1905.

Application filed April 18, 1904. Serial No. 203,568.

To all whom it may concern:

Be it known that I, CORNELIUS J. BROSNAN, a citizen of the United States of America, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Paper-Clips, of which the following is a full, clear, and exact description.

This invention relates to improvements in paper-clips of a kind formed of spring-wire and constructed with portions which distended oppositely from each other develop a reaction to embrace and bind marginally sheets of paper or the like.

The object of the invention is to provide a wire-formed paper-clip of novel shape whereby an improved device of the aforementioned general character is produced in point of practicability and cheapness of construction, ease of manipulation in bringing the clip to its marginal engagement with superimposed sheets of paper, efficiency in the retention and binding action, and with certainty of its being maintained when in its binding engagement without liability of swinging or shifting from its given set position, and the clips are advantageous, furthermore, in that when packaged they will not become interlocked one with another to cause bother and delay in taking one or more out from the box to be used, and another feature of desirability incidental to the employment of the clip is found in the flat and even condition of the bound or clip-engaged marginal portions of the several sheets of paper, together with the avoidance of liability of either engaging side portion of the clip to catch or be caught by or interlocked with other papers in conjunction with which the clipped bunch of papers may be brought.

The invention consists of a clip composed of a single length of spring-wire comprising an outer frame having opposite members thereof in V arrangement and a diamond-shaped inner frame, the wire portions of both frames being normally located in the same plane, the inner frame being joined to the outer frame at the wider end thereof and the portions forming the point of the inner frame extending closely alongside and substantially

parallel with the convergent side members of the outer frame.

The improved clip is shown in the accompanying drawings, in which—

Figure 1 represents the clip as marginally engaging a plurality of sheets of paper. Fig. 2 is an edge view of the same. Fig. 3 is a view similar to Fig. 1, but as seen at the opposite side. Fig. 4 is a view showing the clip in its normal condition—that is, showing the relations of the parts before the clip is brought to its binding engagement.

The clip comprises an outer frame A, having opposite members 10 10 thereof in V arrangement and a diamond-shaped inner frame B, the inner frame being joined to the outer frame at the wider end thereof and the portions forming the point of the inner frame extending closely alongside within and substantially parallel with the convergent side members 10 of the outer frame. The clip is formed of a single length of suitably heavy spring-wire, brass, or steel, and an intermediate part of the wire is bent into the form of a diamond or spear head, as shown, and portions 12 12 of the wire outwardly beyond the diamond-frame forming intermediate portions are outwardly oppositely extended, but in a common line, preferably, and the extremities 10 10 are continued convergently to constitute the outer portion of the clip within which the aforementioned diamond-shaped frame B is inclosed. The extremities 10 10 range closely outside of and parallel with the convergent portions 13 13, and all of the parts of the clip normally and before the clip is brought into use occupy positions in the same plane.

The clip is brought to engagement marginally with the sheets or leaves to be held together temporarily by transversely deflecting the inner frame from its normal plane, which may be done easily with the thumb-nail preparatory to sliding the clip to its embrace about the marginal portions of the sheets, and as the clip is brought to its engagement the points of the convergent members 10 10 become separated more or less, as shown, according to the thickness of the bunch of papers. The parts 10 10 and 13 13 bind at

opposite sides of the bunch of papers along lines between such parallel and closely-arranged parts 10 and 13, securely holding the sheets together and in an especially flat condition, the single pair of knuckles 14 at the opposite sides of the diamond-shaped inner frame having an inward pressure against the sheets, which is effective to prevent the clip from working outwardly and loosening or diminishing its binding action, and the clip having the straight formation at its back, as constituted by the portions 12 12, in line with each other, as shown, is retained squarely in place and without liability of swinging or tilting from a position with its length perpendicular to the edge of the papers. By in-turning the free ends of the outer members about as shown the outer frame of the clip is normally closed—an advantageous condition thereof when a supply of the clips are in the box as preventing measurably the somewhat-annoying interengagement of one of the clips with another.

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

1. A paper-clip consisting of a single length

of spring-wire comprising an outer frame, having opposite members thereof in V arrangement, and a diamond-shaped inner frame, the wire portions of both frames being normally located in the same plane, the inner frame being joined to the outer frame at the wider end thereof, and the portions forming the point of the inner frame extending closely alongside and substantially parallel with the convergent side members of the outer frame.

2. A paper-clip consisting of a single length of spring-wire, an intermediate portion thereof being bent into diamond shape and having its extremities oppositely outwardly extended, and then turned at an acute angle with each other and continued in V arrangement outside of, and parallel with, the wire sections constituting the inner part of the diamond, the inner and outer portions of the device being normally in the same plane.

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

CORNELIUS J. BROSNAN.

Witnesses:

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