

No. 709,902.

Patented Sept. 30, 1902.

J. R. HARD.
HOOK AND EYE.

(Application filed Apr. 19, 1901. Renewed Feb. 24, 1902.)

(No Model.)

Fig. 1.

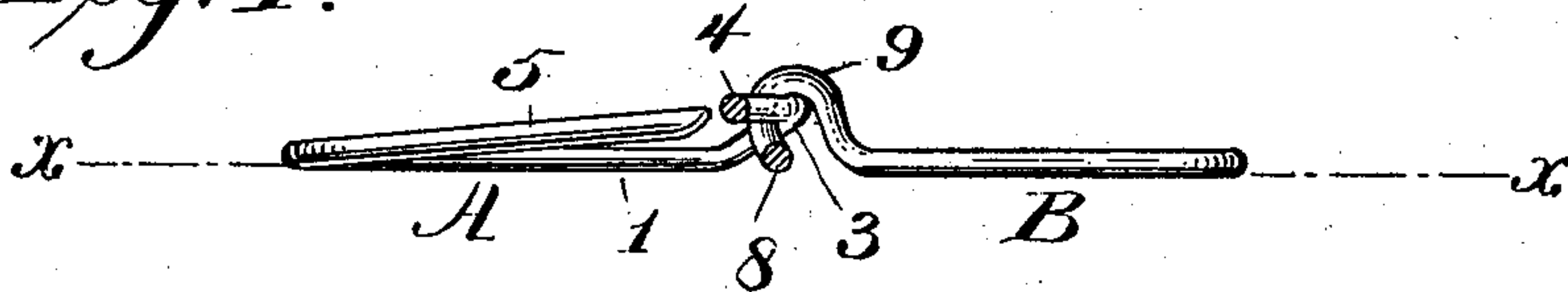


Fig. 2.

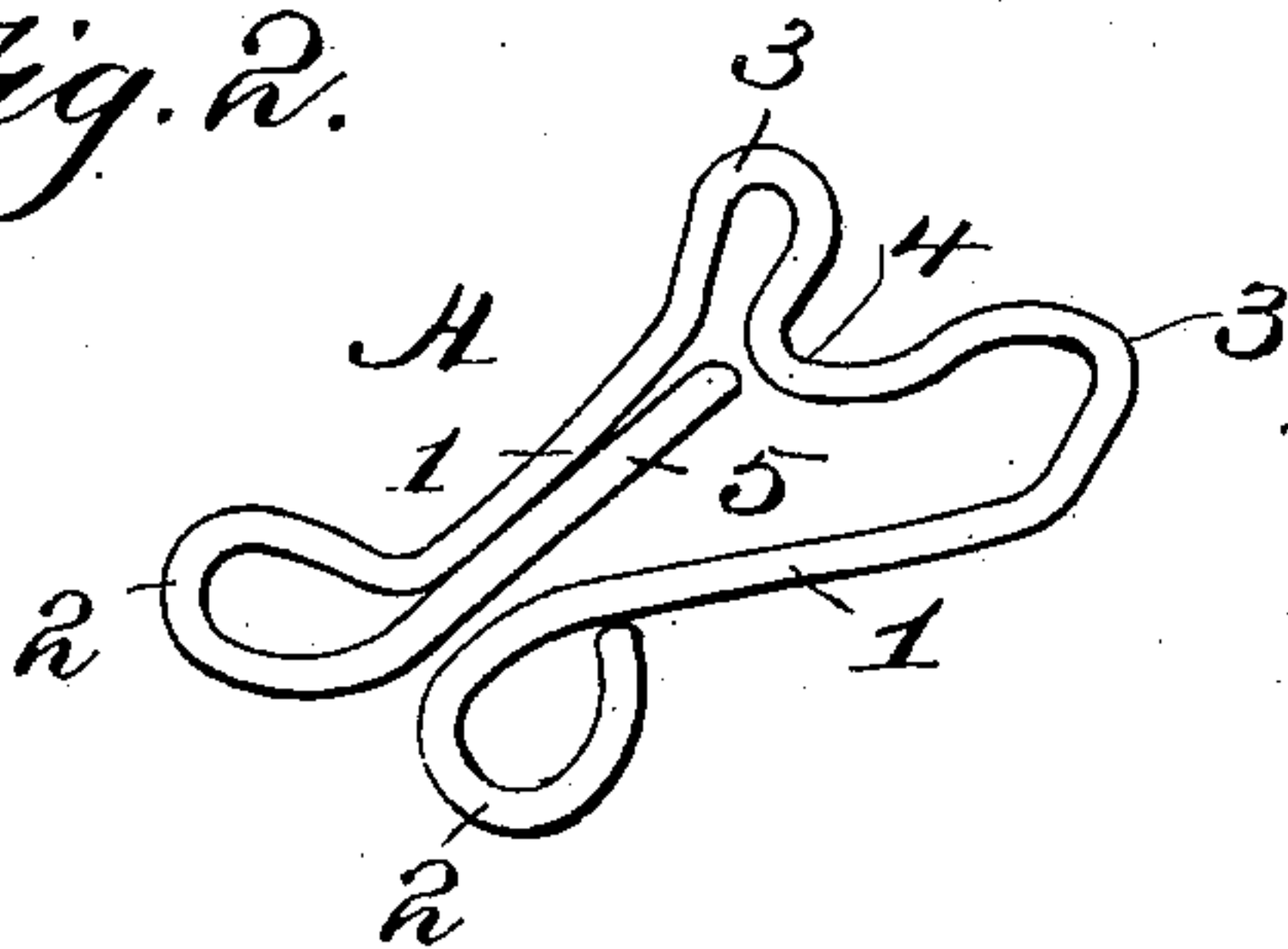


Fig. 3.

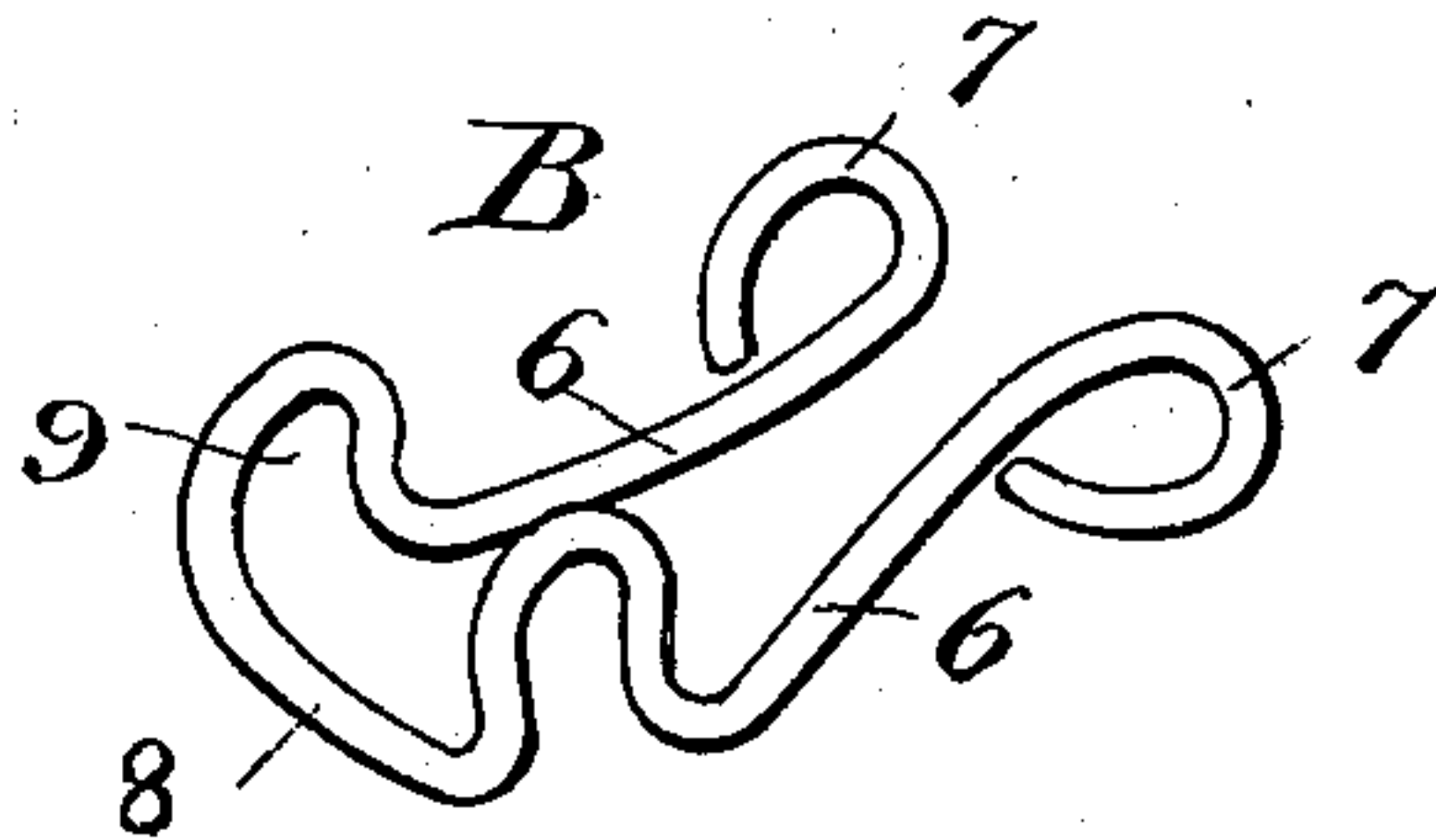


Fig. 4.

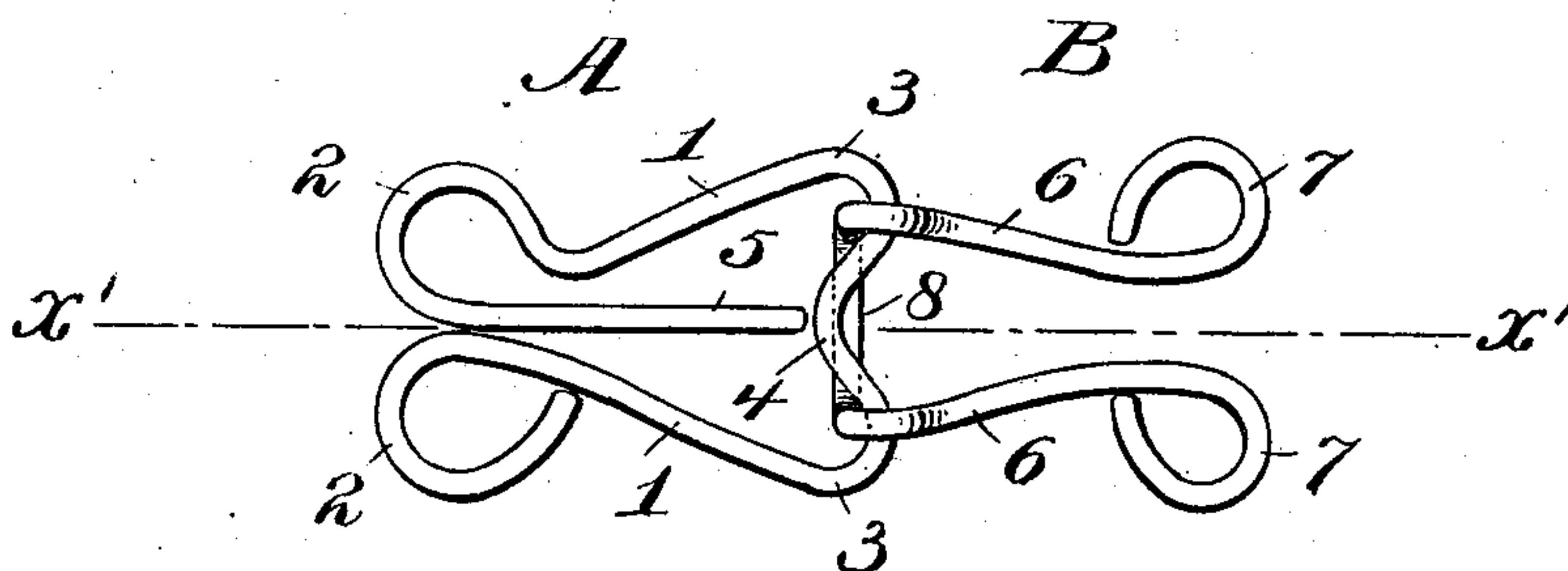


Fig. 5.

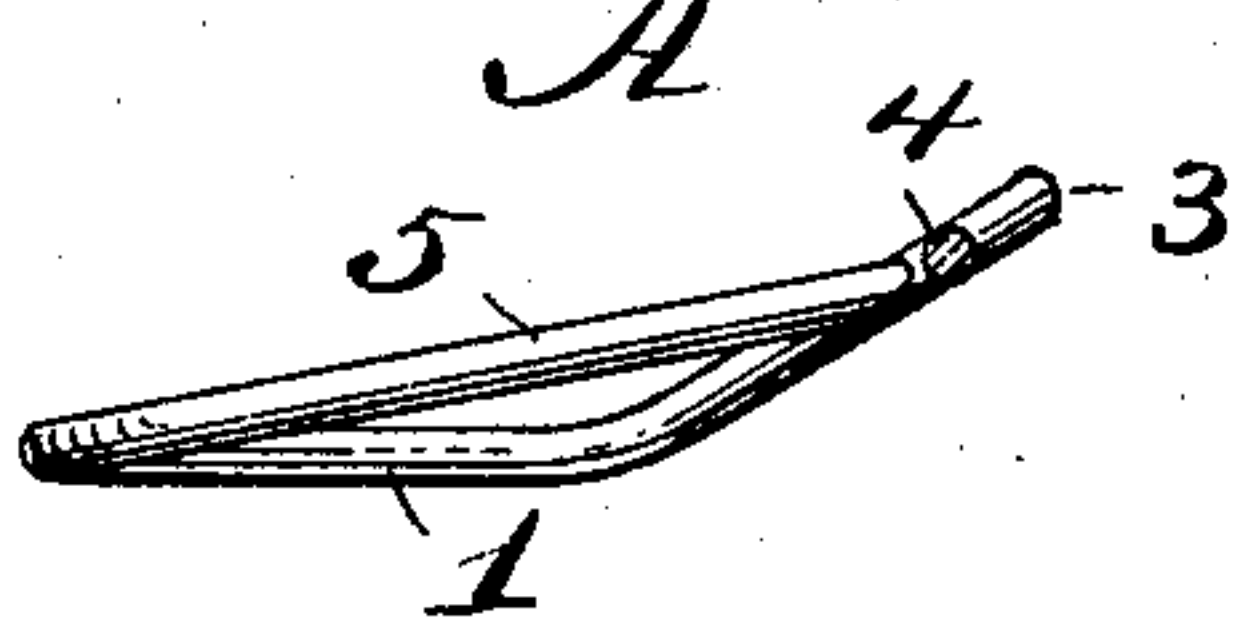
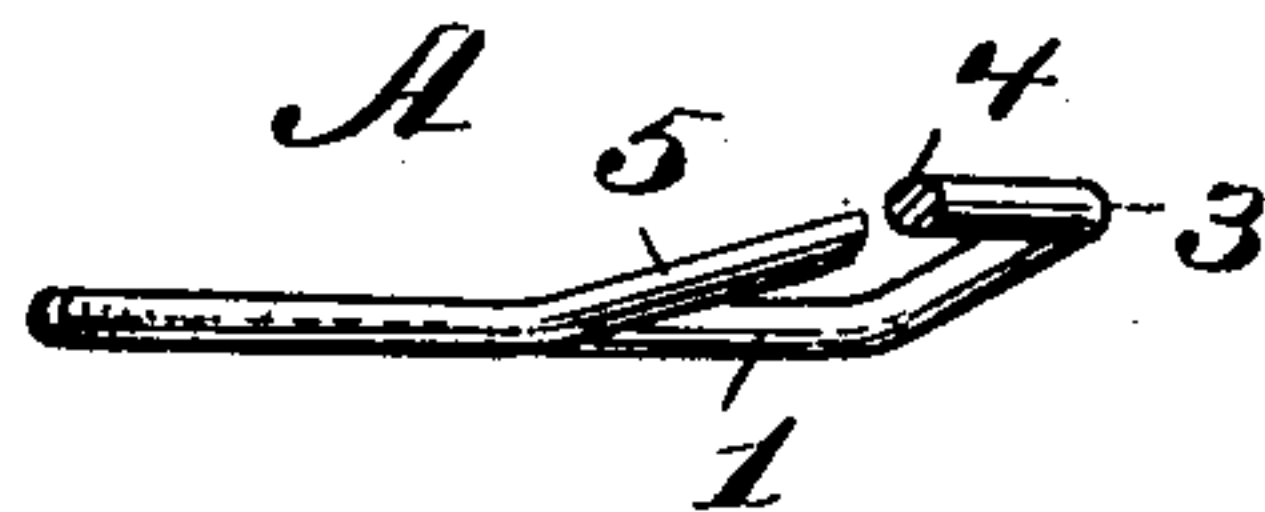


Fig. 6.



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HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 709,902, dated September 30, 1902.

Application filed April 19, 1901. Renewed February 24, 1902. Serial No. 95,147. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. HARD, a citizen of the United States, residing in the borough of Manhattan, and city, county, and State of New York, have invented certain new and useful Improvements in Hooks and Eyes, of which the following is a specification.

This invention relates to hooks and eyes such as are employed for fastening garments and for like uses, and particularly to a hook and eye having a spring locking member or prong, such as that illustrated in my United States Patent No. 673,773, dated May 7, 1901. In the hook and eye described in that patent the eye is provided with the spring member or prong, and it has a somewhat V-shaped or U-shaped bight in its bail, and the hook has an open or laterally-expanded bill adapted to interlock with both the spring member and said bail. The distinction between the hook and eye of said patent and that which forms the object of the present application will be hereinafter pointed out.

In the accompanying drawings, which illustrate an embodiment of the present invention, Figure 1 is a section of the coupled hook and eye in the plane indicated by line x' in Fig. 4. Fig. 2 is a perspective view of the eye, and Fig. 3 a perspective view of the hook. Fig. 4 is a plan view of the coupled hook and eye. Figs. 5 and 6 illustrate slightly-modified forms of the eye, the views being sections.

A designates the eye, and B the hook. The several features of each of these parts are designated by numerals.

Of the eye, 1 represents the side bars, terminating at one end in the loops 2 and at the other end merging into the connecting-bail 3, which has in it the inward bend or bight 4. 5 is the spring-prong or locking member, which extends forward nearly to the said bend or bight 4. In my before-mentioned patent the several parts of the eye named above were all in the same plane, and viewed sidewise or edgewise the eye presented only the thickness of the wire of which the eye was made. In the present construction the bail 3 is bent upward, so that the bight 4 is elevated above the general surface (x in Fig. 1) to an extent equal to the thickness of the wire or a little more, and the spring locking member 5 inclines upward to an extent suffi-

cient to put its free end about on a level with said bight, as clearly shown in Fig. 1.

Of the hook, 6 represents the side bars, 7 the loops, and 8 the tip of the broad laterally-expanded closed bill. The form of the hook clearly shown in Figs. 1 and 3 is preferred. This hook is flat except at the hooked end, where there is an arch 9 formed in the bill. Thus the main portion of the hook rests flat on the general surface and the arched bill rises abruptly above this level. In my former patent the eye took over the upturned bill of the hook; but in the present construction the bill of the hook takes over the eye. The object in thus elevating the free end of the spring locking member is to enable the said member to be depressed below the bight 4 sufficiently to allow the bill of the hook to engage when the eye is secured to and overlies a hard surface. This is not so important where the eye is stitched to soft yielding material; but it adapts the eye to use on material of any kind, whether yielding or not.

Obviously the hook illustrated in my former patent might be used with the above-described eye, the latter taking over it by preference.

The exact form of the bends in the eye for elevating the spring locking member and the bail is not very essential. In Fig. 5 the side bars are curved or bent upward at about the middle of their length, and in Fig. 6 the spring locking member is bent upward at about the middle of its length, the outer portion of it lying in substantially the same plane with the side bars.

It will be noted that the loop-like downwardly-directed tip of the arched bill of the hook takes over the elevated bight in the bail of the eye and interlocks with the spring locking member of the eye.

Having thus described my invention, I claim—

1. In a hook and eye, the combination with an eye having a flat base and at its engaging end a bail with an inwardly-bent bight, and having a spring locking prong or member which extends forward substantially to said bight, the bight and the free end of said locking member being elevated above said base, in combination with a hook having a base, and a downwardly-curved loop-like bill which

takes over the bight of the eye and interlocks with said locking member.

2. A hook having a closed, loop-like bill, arched at 9 and with its tip 8 directed downward, in combination with an eye having a bail with an elevated bight 4, and a spring locking member 5 having its free end elevated above the base or main portion of the eye and adjacent to said bail, the bill of the hook taking over the said bight of the eye and interlocking with the locking member of the eye, substantially as and for the purpose set forth.

3. The combination with an eye A, having a base portion which rests on the fabric, a bail with an inwardly-bent bight 4 elevated

above the level of the base and with a locking-tongue, the free end of which is also elevated above the base, of a hook B, having a base portion which rests on the fabric, an elevated, arched, loop-like bill adapted to take over and interlock with the bail and said locking-tongue of the eye, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name, this 16th day of April, 1901, in the presence of two subscribing witnesses.

JOHN R. HARD.

Witnesses:

HENRY CONNETT,
PETER A. ROSS.