

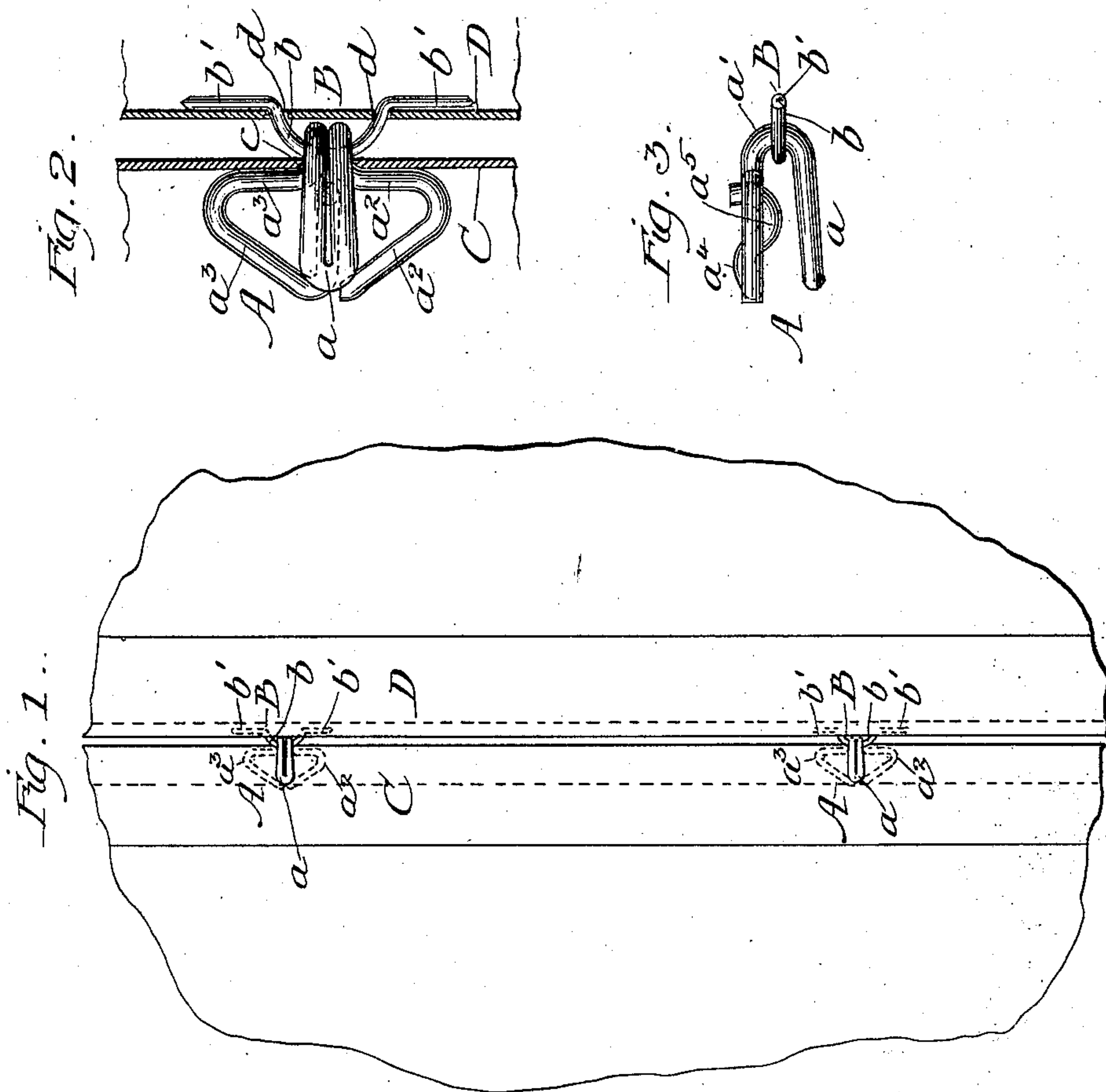
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Patented Nov. 19, 1901.

F. W. FRANCE.
HOOK AND EYE.

(Application filed Apr. 28, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 687,009, dated November 19, 1901.

Application filed April 28, 1900. Serial No. 14,721. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. FRANCE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Hooks and Eyes, of which the following is a specification.

The object of my invention is to construct a hook and eye both of which can be inserted in the material at the place where required and when inserted held in position without sewing or other fastening means than provided from the form of the hook and eye and the manner of insertion; and the invention consists in the features and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a plan view showing two pieces of fabric or material fastened together by my improved hook and eye; Fig. 2, an enlarged plan view of the hook and eye, showing the pieces of material to which they are respectively applied in section at the folded edge; and Fig. 3, an end elevation of the hook and eye detached from the material.

The hook A is formed to have a tongue or hook proper, a , united to a body by a curve or neck a' , which starts directly from the inner line of the base or body, so as to leave but little, if any, appreciable length of shank between the neck or curve and the base or body. The base or body consists of two projecting or lateral sides or wings a^2 and a^3 , each having a straight line or plane on the inner or contact side, with a diagonal rearwardly and inwardly extended portion. The projecting or lateral side or wing a^3 has a forward continuation or extension a^4 , which is provided with a curve or bend a^5 in the direction of the tongue or hook a , so as to form a contracted mouth or space between the curve or bend and the tongue or hook for the curve or bend to act as a guard against the easy detachment of the hook from the eye.

The hook as a whole is formed, as shown, from a single piece of wire of the requisite diameter bent on itself, preferably flattened at the point of bend to spread the wire to produce the hook or tongue a . The two parts of the doubled wire are bent in unison to form the neck or curve a' . One part is continued laterally, rearwardly, and inwardly to form the side or wing a^2 of the base or body and

the other part is continued laterally, rearwardly, and inwardly to form the side or wing a^3 of the base or body and is then carried forward and bent to form the continuation or extension a^4 , with the curve or bend a^5 .

While it is preferred to construct the hook from a single piece of wire, it could be made from two pieces of wire each bent to form a half or side of the hook and brazed or otherwise united along the hook or tongue a . It is also evident that the hook could be made from sheet metal cut and formed into shape to have a hook or tongue proper and a neck, with lateral sides, for the base or body, and having one side extended forward or toward the neck and provided with a retaining bend or curve, as in the hook made from wire.

The eye B, to cooperate with the hook in the form of construction shown, is made from a piece of wire bent or curved centrally to form the eye proper, d , with a lateral extension on each side of the eye forming the ends b' , which ends are in a straight line or plane corresponding to the straight line or plane of the front side of each base-piece a^2 and a^3 . The hook or tongue a enters the eye d when the hook and eye are in place on the material, and when so entered, owing to the short neck or curve a' , the two pieces of material are brought together and held in close juxtaposition at the edges.

The hook as a whole is applied to a strip of material C by folding the material on itself to form an edge or fold, which edge or fold is provided with a hole c , through which the tongue or hook a can be passed from the inside of the folded material to project or lie on the outside, as shown in Figs. 1 and 2, and when in position the straight or plane face of the base or body of the eye is against the folded edge of the material, as shown in Fig. 3, the eye being held in place without requiring special sewing or other attaching means therefor to the material. The eye is applied to a strip of material D by folding the material on itself to have an edge or fold which is provided with perforations at a distance apart corresponding to the width of the eye d , and the eye is inserted from inside of the fold by passing the ends through the perforations, one end being inserted and passed through a perforation and then

through the other perforation, bringing the eye outside of the fold, in the position shown in Figs. 1 and 2, with the ends within the fold and in a straight plane or line and against the folded edge, so that the eye will be held in place without requiring any special sewing or other fastening than the engagement of the eye with the folded edge of the material. The fold of both pieces of material is sewed or stitched down in the usual manner, and when so stitched the hook and the eye will be secured at their respective pieces or sides of the material. The fastening of the material at the open edges is had in the usual way of fastening by hooks and eyes, and when fastened the two edges will be held in close relation by reason of the short neck and cannot be readily unfastened, owing to the guard formed by the curve or bend a^5 of the base of the hook.

I claim—

1. A hook for garments consisting as a whole of a hook or tongue, a short neck or curve uniting the hook or tongue to the base or body, starting direct from the base or body and forming the closed end of the hook or tongue, and a base or body of a triangular shape having lateral wings on each side of the hook or tongue, each wing having a straight end bar or portion standing at a right angle to the hook or tongue and a side bar or portion standing at an incline to the hook or tongue, starting from the end of the straight bar or portion and standing at an incline to the hook or tongue and terminating in the line of the side and at the open end of the hook or tongue proper, with the bar of one wing turned on itself and extended toward the closing end of the hook or tongue proper with a curve or bend adjacent to the neck within the opening of the hook or tongue to serve as a guard against detachment of the hook, substantially as described.

2. A hook for garments consisting of a single piece of wire bent on itself to form a hook or tongue, a short neck or curve uniting the hook or tongue to the base or body, starting directly at the end of the base or body and forming the closed end of the hook or tongue, a lateral extension of the wire on one side of the hook or tongue with a diagonal return thereof to form the side bar of the wing for

the base or body, a lateral extension of the wire on the other side of the hook or tongue with a diagonal return thereof to form the side bar of the other wing of the base or body, and a straight line return parallel with the hook or tongue forming an intermediate bar between the side bars of the base and provided with a curve or bend to furnish a guard for coacting with the hook or tongue, substantially as described.

3. A new article of manufacture embracing the following elements, two strips of fabric each having a folded edge provided with a series of perforations, a series of eyes, each eye having a bent or curved center and straight ends and secured to one of the two strips of fabric at the folded edge by passing the body through a perforation in the fold to have its bent or curved center project from the edge of the fold and its straight ends engaged with the fold on the inside, a series of hooks each hook formed from a single piece of wire to have a hook or tongue proper, a short neck or curve uniting the hook or tongue proper to the base or body and forming the closed end of the hook or tongue, a base or body having lateral wings, each wing having an end portion or bar standing at a right angle to the hook or tongue and a diagonal side portion or bar standing at an incline to the hook or tongue starting from the end of the straight portion or bar and terminating in the line of the side and at the open end of the hook or tongue proper with the bar of one wing turned on itself and extended toward the closed end of the hook or tongue and provided with a curve or bend adjacent to the neck within the opening of the hook or tongue to serve as a guard against detachment of the hook, and each hook as a whole secured to the other strip of fabric in line with the companion eye therefor at the folded edge by passing the hook or tongue proper and the neck through a perforation in the fold of the fabric strip to have the hook or tongue extend outside of the fold and the end bar or portion of the base or body engage with the fold on the inside, substantially as described.

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Witnesses:

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