J. P. WILLIAMS.

MEANS FOR ATTACHING HOOKS AND EYES.

APPLICATION FILED MAR. 22, 1909.

1,046,046. Patented Dec. 3, 1912.

Fig. 1.

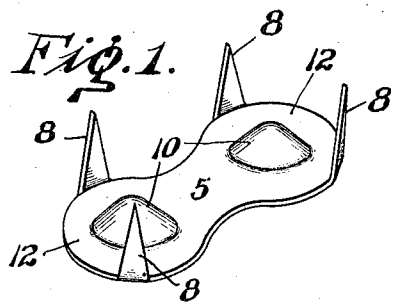


Fig. 4.

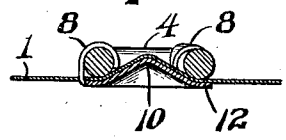


Fig. 2.

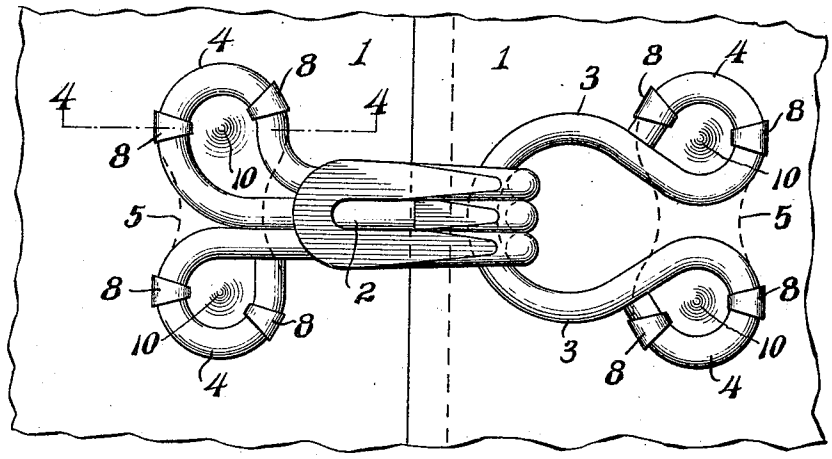
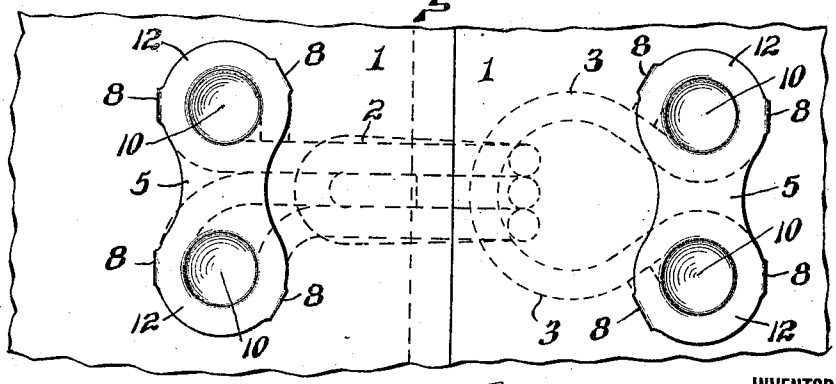


Fig. 3.



WITNESSES

Daniel Webster, Jr.

Carrie E. Kleinfelder.

INVENTOR

James P. Williams

BY Cyrus N. Anderson

ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES P. WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE DE LONG HOOK AND EYE COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

MEANS FOR ATTACHING HOOKS AND EYES.

1,046,046. Specification of Letters Patent. Patented Dec. 3, 1912.

Application filed March 22, 1909. Serial No. 485,014.

To all whom it may concern.

Be it known that I, JAMES P. WILLIAMS, a citizen of the United States, residing in Philadelphia, county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Means for Attaching Hooks and Eyes, of which the following is a specification.

My invention relates to improvements in the means for attaching hooks and eyes or either and similar devices to an article, such, for instance, as wearing apparel.

One of the most common and well known ways of securing hooks and eyes to articles of wearing apparel consists in sewing the same thereon,—the stitches being in engagement with bends formed in the material of the hook or eye which bends are frequently termed "thread bends" or "thread eyes." But it is desirable frequently to secure hooks and eyes to articles of wearing apparel or other similar objects by means other than thread; that is, by means other than sewing and my invention is designed to meet this need.

As far as I am aware, none of the various methods or means other than thread which have been employed for securing hooks and eyes and similar articles to objects such as wearing apparel have proved entirely satisfactory and their commercial use is limited.

The object of my invention is to provide a metallic fastener which may be satisfactorily employed for the purpose of securing hooks and eyes and other similar articles to objects, such, for instance, as wearing apparel. To this end, and in carrying out my invention, I employ a metallic strip, although other material may be employed if found to be suitable, which strip is provided with prongs which preferably, though not necessarily, are integral with the strip and are bent so as to extend transversely of the plane of the same. These strips are placed against the garment or other article opposite the securing bends of the device such, for instance, as hooks or eyes, which it is desired to secure to such garment or other article, and the securing prongs extend through the material of such garment or article and are located or situated on the outside of the securing bends and are bent inwardly over the wires forming the bends so that the points of the prongs are located in the space within the bends. Preferably, though not necessarily, the material of the strip opposite each securing bend is countersunk so as to form raised or projecting portions upon one side of the strip which project into the adjacent securing bends of the hooks or the eyes as the case may be or such other similar devices as may be provided with securing means similar to the thread bends of hooks and eyes.

A convenient embodiment of my invention is illustrated in the accompanying drawings, but it will be understood that changes in the details of construction may be made without departing from my invention as the same is pointed out and claimed in the appended claim.

In the drawings:—Figure 1 is a perspective view of the securing strip and showing the attaching prongs; Fig. 2 is a top plan view showing a hook and eye secured to the adjacent edges of a garment by the attaching means shown in Fig. 1; Fig. 3 is a bottom plan view of the same; and Fig. 4 is a section on the line 4—4 of Fig. 2.

Referring to the drawings:—1 designates the portions of a garment or other article to which the hook 2 and the eye 3 are secured. The hook and the eye are provided with securing bends 4 as shown. The hook and the eye are secured to the portions of the garment or other article 1 by means of a metallic attaching device consisting of a base plate or strip 5. The opposite end portions of the base plate or strip are illustrated as being somewhat enlarged, the central portion of the plate or strip being narrower than the opposite end portions. However, it is not essential to my invention that the central portion of the plate or strip shall be narrower than the end portions. It is desirable that the opposite end portions shall be of substantially the same shape or outline as that of the oppositely located securing bend of the hook or eye or other similar article to be attached to an object, such, for instance, as wearing apparel. The opposite end portions of the plate or strip 5 are provided with prongs 8. I have found it satisfactory to employ two prongs at the opposite end portions of the strip or plate but it is to be understood that the number of prongs may be increased or may be decreased as found to be practicable and desirable.

These prongs are sharpened, as shown, but, as illustrated, the lateral thickness of the metal in the prongs is not reduced, though I am not limited as to this. The metal of the plate or strip 5 at its opposite end portions is countersunk or upset so as to form raised or projecting portions 10 which project upwardly into the securing bends of a hook or an eye or similar device secured to an article by means of such attaching device.

In securing a hook or an eye or other similar device to an article, the prongs 8 are inserted through the article and the securing bends of the hook or eye are placed between the said prongs and the latter are then bent inwardly over the wire of the said thread bends as shown in the drawings. The wire of the respective bends rests upon the flange-like portions 12 of the base plate or strip 5 which surround the projections 10, wherefore the said projections act as abutments or stops to assist in preventing lateral displacement or movement of the hook or eye with relation to the securing device. The said projections 10 also act as anvils to assist in the turning of the ends of the prongs 8 into the angle formed between the wire of the securing bends and the said projections. And by countersinking the opposite end portions of the base plate or strip 5 seats are formed therein which serve as a means for properly supporting and positioning the attaching device in a machine or tool which may be employed for securing the attaching device to an article and to the device, as for instance, a hook or eye which is to be secured to said article. The formation of the projections 10 in the base plate or strips 5 also strengthens the same.

By the employment of my invention, I am enabled to secure upon both sides of an article to which a hook or an eye or similar device is connected, a surface without exposure of points to catch the hands or clothing and yet the fastening securely holds the hook or eye or other device so that it is not likely to be accidentally or otherwise removed.

Having thus described my invention, I claim:—

The combination of a garment fastener having securing eyes with means for securing the said fastener to a garment, the said means consisting of a plate-like member having upset portions at its opposite ends which are adapted to enter and be centrally located with respect to the securing eyes of the said fastener and the said plate-like member being provided with two or more attaching prongs secured to each end of the said plate-like member, the said prongs being connected with the edge of said member and separated a distance from each other, and the said prongs adapted to extend through the material of the said garment and upon the outsides of the said securing eyes and to be bent over the latter and extended into the said eyes and into the angle formed between the material of the said eyes and the said upset portions.

In testimony that I claim the foregoing as my invention, I have hereunto signed my name this 18th day of March, A. D. 1909.

JAMES P. WILLIAMS.

In the presence of—
S. Salome Brooke,
Carrie E. Kleinfelder.