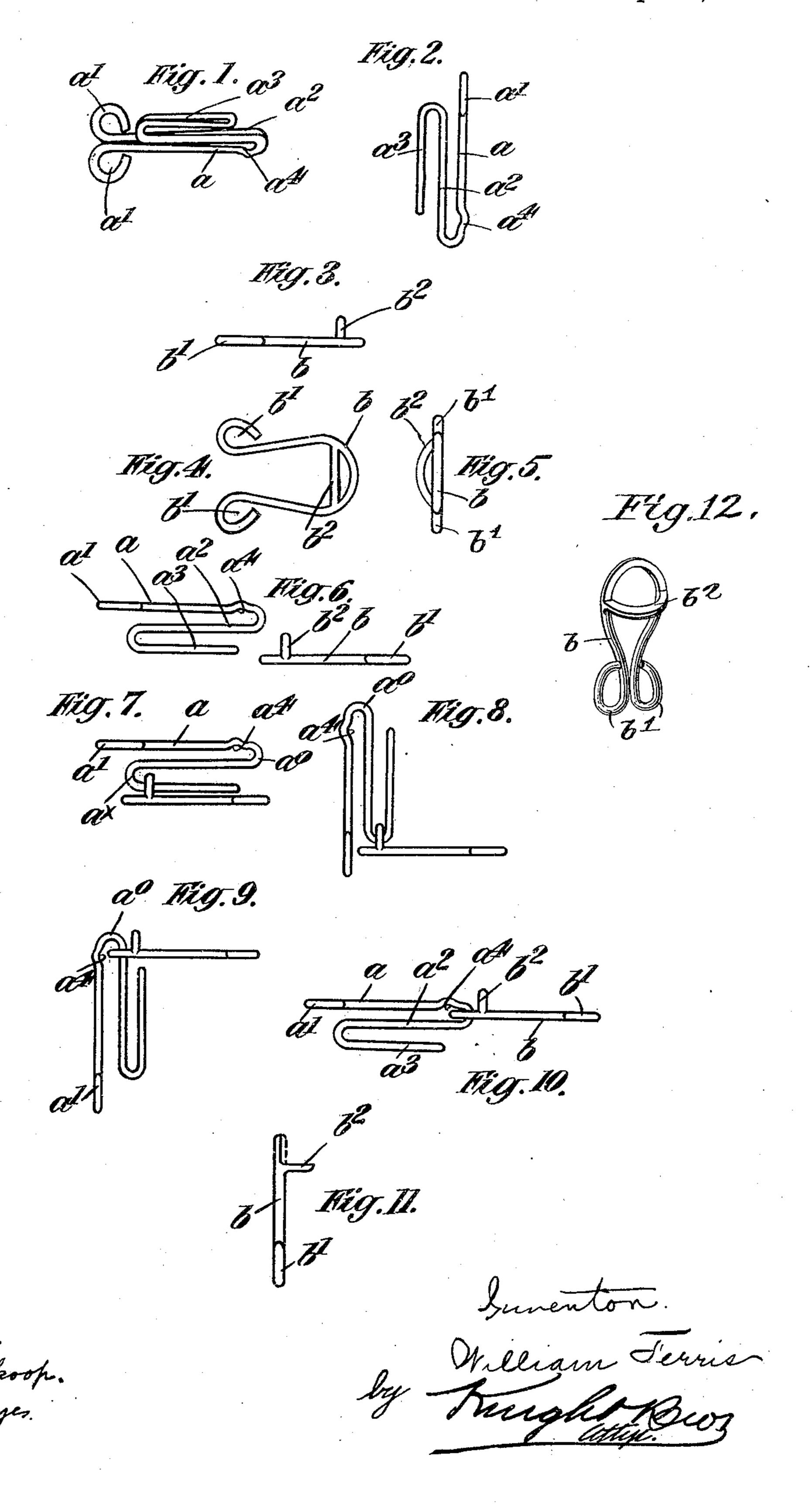
W. FERRIS. HOOK AND EYE.

APPLICATION FILED JAN. 15, 1906.

935,098.

Patented Sept. 28, 1909.



UNITED STATES PATENT OFFICE.

WILLIAM FERRIS, OF MIDDLESEX COUNTY ASYLUM, NEAR TOOTING, ENGLAND.

HOOK AND EYE.

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Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed January 15, 1906. Serial No. 296,206.

To all whom it may concern:

Be it known that I, William Ferris, M.D., B. S., (London,) a subject of the King of Great Britain, residing at Middlesex 5 County Asylum, near Tooting, in the county of Surrey, England, have invented certain new and useful Improvements in Hooks and Eyes, of which the following is a specification.

This invention relates to fastening devices applicable for use in securing wearing apparel and other articles; the object being to insure the fastening against accidental disengagement.

In fastening apparel by the means ordinarily employed and particularly ladies' blouses, dresses and the like, considerable inconvenience is experienced owing to the tendency of the fastening device to become 20 disengaged; the garment presenting an unsightly appearance and, at the same time, causing discomfort to the wearer.

According to the present invention, the fastening device comprises a hook, the usual entering portion thereof being extended and returned upon, or arranged exteriorly to, the aforesaid entering portion; thus forming a kind of double hook, the returned portion constituting a guard as will be hereinafter described. In conjunction with the aforesaid double hook there is employed an eye having a transverse bar which is preferably given a slight curvature.

In order that the invention may be clearly understood and readily carried into effect, I will proceed to describe the same with reference to the accompanying drawings, which illustrate as an example one mode of carrying my invention into effect.

Figure 1 is a perspective view of the double hook; Fig. 2 being a side view thereof. Fig. 3 is a side view of the eye and Fig. 4 a plan, Fig. 5 being an end view corresponding with Fig. 4. Figs. 6, 7, 8 and 9 illustrate the various relative positions the hook and eye assume during the operation of fastening; Fig. 10 representing the hook and eye when fastened together or engaged. Fig. 11 is a side view of an alternative method of making the eye, and Fig. 12 is a perspective view of this form of eye.

The hook comprises the usual portion a provided with loops or eyes a' a' for effecting its attachment to the article of apparel.

The hook portion a² is formed with an extension a³ which is returned upon the por-

tion a^2 . The eye comprises the usual circular ended body b and loops or eyes b' b' for effecting its attachment to the article of apparel; a bar or guard b^2 being arranged 60 transversely to the aforesaid body portion b. The hook may be made in the ordinary manner and be composed of wire as indicated in the drawing, but other modes of manufacture may be adopted as found convenient. 65 At a point indicated for example at a^4 the part \bar{a} is formed with a groove so as to afford lodgment for the cotton, or other material whereby the hook is attached to the article of apparel and thereby afford a clear 70 passage, between the parts a and a^2 of the hook, for the travel of the eye in effecting the fastening. The part a^3 may be arranged as shown in the drawing or, what is found to answer well in practice the said part may 75 be about half the length of the part a^2 . The eye may be made from wire or be produced by stamping or other convenient means. In the latter case, provision must be made for pressing out the transverse bar b^2 . If de- 80 sired, the eye may be made from comparatively stout metal or wire and the bar or guard formed by splitting the circular ended body, as shown in Fig. 11.

Referring to the diagrams, Figs. 6 to 10, 85 in fastening the device, the part a^3 of the hook should be held outward, the eye b being in the relative position seen in Fig. 6. Upon passing the eye toward the hook the bar b^2 engages the inner side of the portion 90 a^3 of the hook and upon arriving at the bend a^{\times} Fig. 7, the hook and the eye are caused to assume positions at right angles to each other, whereupon the circular end of the eye is passed along the inner side of the part a^2 95 of the hook to the bend a^0 , Fig. 9. The hook and eye are then caused to assume the relative positions shown in Fig. 10 whereupon the fastening is complete.

It will be readily seen that the method of 100 fastening by the improved device is simple and owing to the bar or guard b^2 , the detachment of the hook and eye is practically impossible. The hook portion a^3 moreover assists the bar in its function of preventing 105 the accidental disengagement of the parts. The fastening and unfastening are also effected without pressure.

What I claim and desire to secure by Letters Patent of the United States is:—

1. In a fastening device the combination of the hook consisting of a back portion,

attaching eyes integral therewith, a hook portion returned upon the said back portion and an extension of said hook portion returned upon and lying adjacent to the 5 outer side of the said hook portion and having its end extending toward the outer bend of the back and hook portions, with an eye consisting of a semi-circular ended body having attaching eyes formed integrally therewith and a transverse guard extending laterally out of the plane of the eye and across from side to side of the said semicircular ended body and positioned adjacent to the outer extremity of the latter, same being adapted to coöperate with said hook so as to prevent the accidental unfastening of the said fastening device.

2. In a fastening device, the combination of the hook consisting of a back portion, attaching eyes integral therewith, a hook portion returned upon the said back portion and an extension of said hook portion returned upon and lying adjacent to the outer side of the said hook portion and having its end extending toward the outer bend of the 25 back and hook portion, a transverse groove in said back portion near the said outer bend; and a cooperating eye for said hook having a body portion provided with attaching eyes formed integrally therewith, and a 30 split portion providing a semi-circular member extending laterally out of the plane of the eye and across from side to side of the body portion, said semi-circular member being adapted to prevent the accidental un- 35 fastening of the said fastening device.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses this 3rd day of January 1906.

WILLIAM FERRIS.

Witnesses: A. H. PAYN, H. W. GREEN.