

No. 773,592.

PATENTED NOV. 1, 1904.

T. DE Q. RICHARDSON.

HOOK AND EYE.

APPLICATION FILED DEC. 29, 1903.

NO MODEL.

FIG. 1.

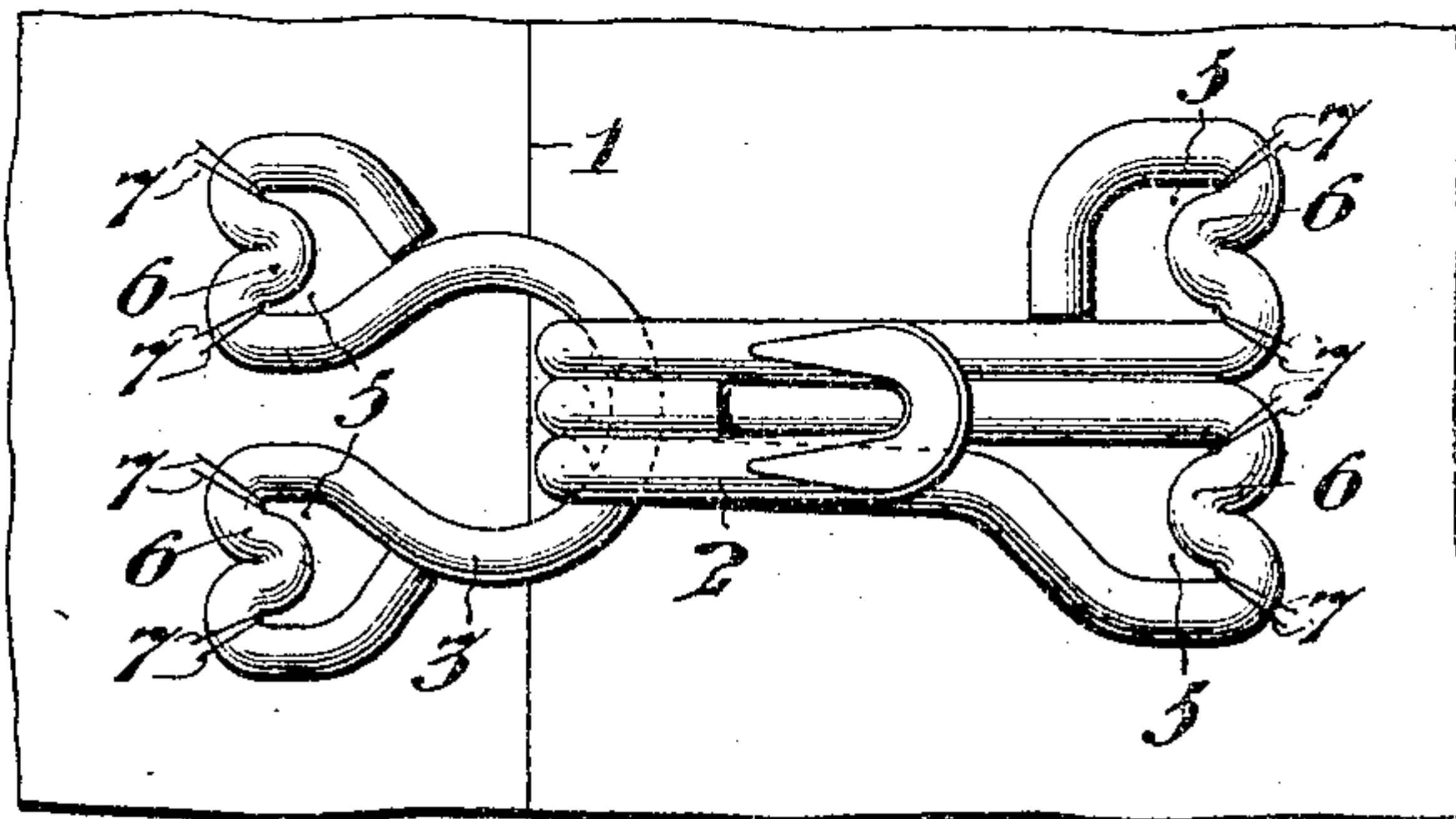
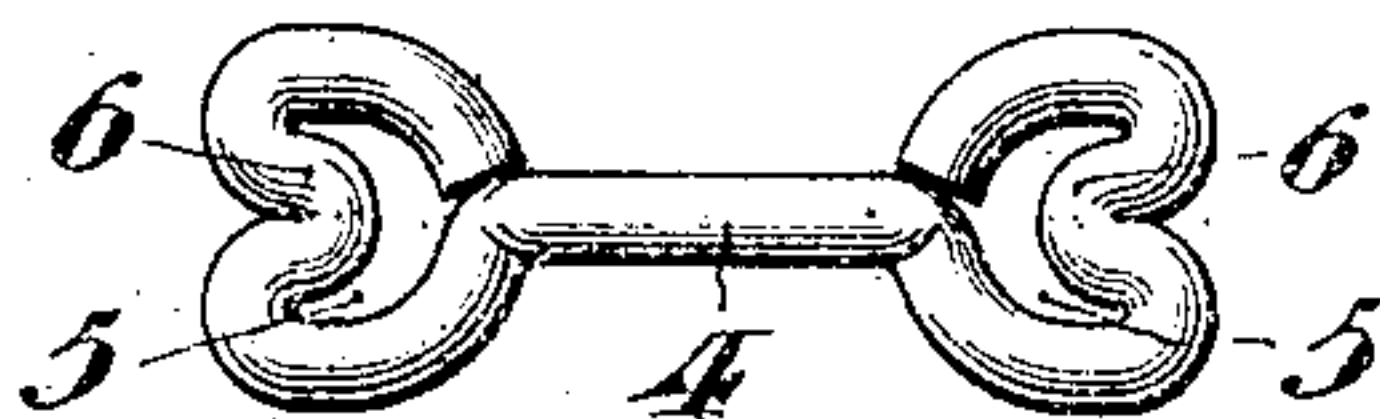


FIG. 2.



WITNESSES:

*Arthur E. Paige*  
*Josh Lancaster*

*Thomas DeQuartel Richardson*  
INVENTOR:

By his attorney  
*McMurry*

# UNITED STATES PATENT OFFICE.

THOMAS DE QUARTEL RICHARDSON, OF PHILADELPHIA, PENNSYLVANIA,  
ASSIGNOR TO THE DE LONG HOOK AND EYE COMPANY, OF PHILA-  
DELPHIA, PENNSYLVANIA, A CORPORATION OF WEST VIRGINIA.

## HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 773,592, dated November 1, 1904.

Application filed December 29, 1903. Serial No. 186,956. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS DE QUARTEL RICHARDSON, a citizen of the United States, residing in the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, 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, and its object is to provide means for preventing lateral movement of the members of a hook and eye fastening, after the said fastening has been secured upon an article of wearing apparel or any other article to which it may be secured.

Broadly considered, the invention consists in providing the thread eyes of hooks and eyes with means, the engagement of which with the threads, or other means by which the hooks and eyes are secured to an article, prevents their lateral movement.

Specifically considered, and as illustrated in the accompanying drawings forming a part of this specification, the improvement consists in bending inwardly a portion of the material constituting the thread eyes to form a projection extending into the said eye.

In the drawings,

Figure 1 is a plan view of a hook and what is known as a loop eye, respectively secured to the adjacent edges of an article of wearing apparel, the said hook and eye being in engagement, and the thread eyes thereof being constructed in accordance with my invention.

Figure 2 is a plan view of what is known as an invisible eye, the thread eyes thereof being constructed according to my invention.

Referring to the drawings,

1 designates the adjacent edges of an article of wearing apparel, or other object, which are connected together in the usual manner by means of the hook 2 and the loop eye 3. Except for the change in the construction of the thread eyes, the hook and eye are constructed in the usual, well-known form.

The eye shown in Figure 2, and designated 4, is commonly known as an invisible eye, and

the portion thereof which connects the thread eyes is not looped but is substantially straight.

In both Figures 1 and 2, the thread eyes 5 have the same construction. In each of the said figures, 6 designates a projection extending into the thread eye, the said projection consisting of an integral portion of the material forming thread eyes which is bent inwardly, the side members of the said projection forming acute angles with the opposite side portions of the said thread eye and an acute angle with each other.

As illustrated in the drawings, the members of the hook and eye fastening are secured to an article by means of the thread 7 or other suitable means which extends through the material of the said article, portions of the said thread or other means being located on opposite sides of the respective projections 6, as is clearly indicated in Figure 1.

It is to be understood, however, that in the form of construction illustrated in the drawings in which an angle is formed between the converging side portions of the respective projections, the said hooks and eyes may be additionally secured by thread or other means looped around the apexes of the said projections, a portion of the said thread which passes around the respective thread eye loops being located in the angle between the converging side portions of the said projections; and also that the said hooks and eyes may be secured solely by the securing means located in the position last indicated, the securing threads 7 being dispensed with.

It is obvious that when the members of a hook and eye fastening are secured to an article in the manner illustrated in Figure 1, they cannot move laterally, that is to say, in a plane parallel with the plane of the material of the article to which the said members may be secured.

It is found that when the members of a hook and eye fastening are secured upon articles in this manner, the threads by means of which the said members are secured are not worn so rapidly as in the case of the ordinary round



thread eye, where there is relative movement between the said thread eyes and the thread.

The friction between the thread eyes and the threads, in the case of round or substantially round thread eyes, by means of which the members of the hook and eye fastening are secured to the article, causes rapid wearing away of the threads, so that the hooks and eyes frequently become detached from the material of the article to which they are secured, and must be re sewed or secured to said article.

Having thus described my invention, I claim—

1. A member of a hook and eye fastening having thread eyes by means of which it is secured to an article of wearing or similar apparel, each of the said thread eyes being provided with means for preventing movement of the said member in directions parallel to the plane of the material of the article of apparel to which it is secured, the said means consisting of a portion of the material of the respective eyes which is bent inwardly so as to form a projection intermediate the opposite side portions of the thread eyes, the opposite side members of the inwardly bent portion form-

ing acute angles with the opposite sides of the thread eyes and an acute angle with each other.

2. The combination of an article of wearing apparel or other object having edges which are adapted to be brought adjacent to each other and secured together, with hooks and eyes, the said hooks and eyes having thread eyes by means of which they are secured respectively to the said adjacent edges, the said thread eyes consisting of loops, portions of which are bent inwardly to provide projections, the side members of the said inwardly bent portions forming angles with the opposite side portions of the respective thread eyes and with each other, and means for securing the said hooks and eyes to the said article of apparel or other object, the said means being located in one or more of the said angles.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this 28th day of December, A. D. 1903.

THOMAS DE QUARTEL RICHARDSON.

In presence of—

THOS. K. LANCASTER,  
LAURA KLEINFELDER.