(No Model.)

# J. F. SCHOEPPL.

## HOOK AND EYE.

No. 558,616. Patented Apr. 21, 1896.

Fig. 1

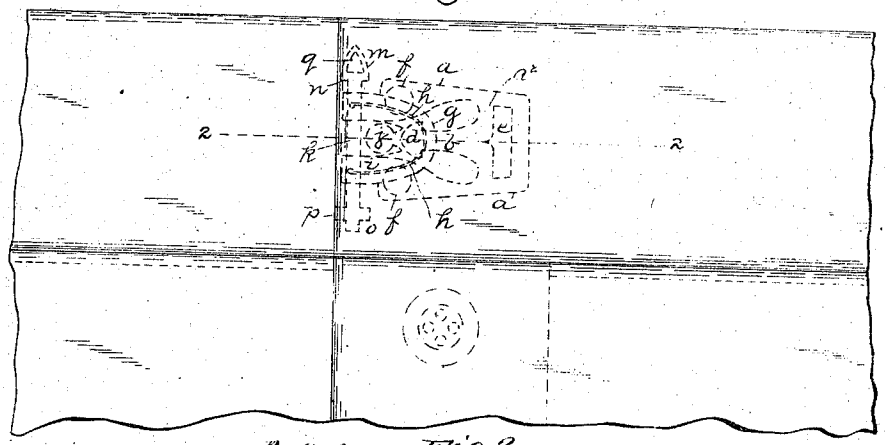


Fig. 2.

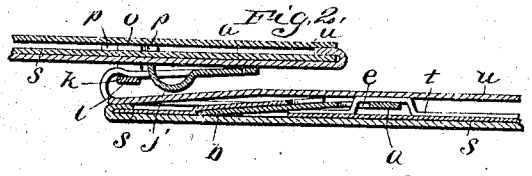


Fig. 3

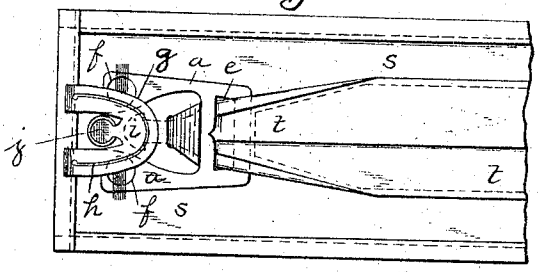


Fig. 6.

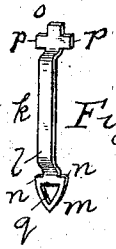


Fig. 5.

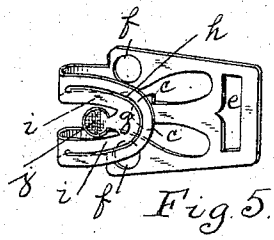


Fig. 4

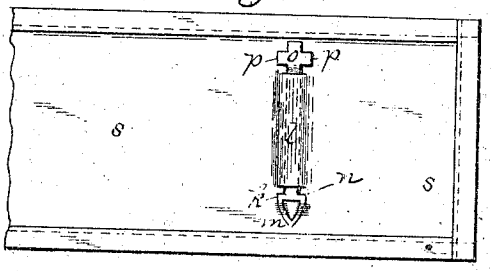


Fig. 7.

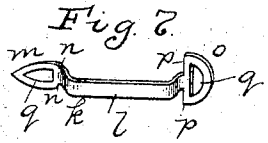
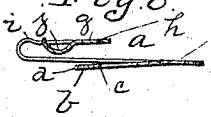


Fig. 8.



Witnesses:
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Joseph F. Schoeppl.
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# UNITED STATES PATENT OFFICE.

JOSEPH F. SCHOEPPL, OF PITTSBURG, PENNSYLVANIA.

## HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 558,616, dated April 21, 1896.

Application filed February 27, 1893. Serial No. 463,896. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH F. SCHOEPPL, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hooks and Eyes; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a hook and eye or like connecting device.

In the accompanying drawings, Figure 1 shows two parts of a garment joined by my improved hook and eye, said hook and eye being shown in dotted lines. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 shows the manner of securing the hook in place, the inner facing of material being removed. Fig. 4 is a like view of the eye. Fig. 5 is a view of the hook removed. Fig. 6 is a like view of the eye removed. Fig. 7 is view of a modified form of eye, and Fig. 8 is a sectional view of the hook.

Like letters indicate like parts in each of the figures of the drawings.

My improved hook and eye may be formed of any suitable metal having the requisite strength and resiliency. The hook *a* may be of any suitable shape, and it is composed of the side portions *a'* and the tail portion $a^2$, the hook proper, *g*, being a continuation of the side portions *a'*, bent to the proper distance. It is apparent that by connecting the forward ends of said side portions *a'* by a straight bar an eye will be obtained, so that the same construction applies both to the hook and the eye. Projecting forwardly from the tail portion $a^2$ between the side portions *a'* is the tongue *b*. The said tongue *b* has the shoulders *c* formed thereon and, preferably, the rounded or tapering head *d*, so that when the said tongue is inserted in the material the shoulders *c* will prevent its withdrawal without first drawing the cloth over and away from said shoulders. The tongue *b* is slightly inclined at the forward end to permit of its being more readily inserted into the material, while the body of the hook and eye rests flat upon the top thereof. Back of the tongue *b* in the tail portion $a^2$ is the opening *e*, adapted to receive the strap, by which said hook may be secured in place. The said hook and eye may be stitched to the material through the opening *e* instead of using the strap, if so desired. The hook *a* has the openings *f* formed in the forward end thereof, through which the thread may pass to further add to the security of the attachment of the said hook to the material. The hook proper, *g*, of the hook *a* has the slit *h* cut therein, which forms an independent tongue *i* on said hook proper and forms with said tongue the lug *j*. This lug *j* extends below the lower face of the hook proper, *g*, and is preferably rounded on its lower face.

As the metal from which the hook *a* is formed possesses a certain amount of resiliency, the tongue *i*, formed in the hook proper, *g*, will possess the same quality, so that when the hook is brought into engagement with the eye, as will more fully appear, the eye will overcome the resistance offered to it by the lug *j*, and having passed beyond said lug to the point of connection between said hook and eye said lug will spring back to its normal position and so prevent the eye from disengaging itself of its own accord from the hook. This tongue *i* may be omitted, however, and the lug *j* formed directly on the hook proper, *g*.

The eye *k* may be formed of like metal and consists of the shank *l* with the pointed end *m* and shoulders *n* similar to an arrow-head, the opposite end of said shank having the head *o* and shoulders *p*. The ends of said eye *k* may be provided with openings *q*. The eye *k* may be formed with a forwardly-projecting tongue similar to the tongue *b* and for the same purpose.

In Fig. 7 I have shown a modified form of eye.

In applying my improved hook and eye to a garment, an opening is first made in the under lining *s* of the garment at the proper position. This opening is made large enough to receive the tongue *b* of the hook *a*; but before inserting the tongue *b* within the opening formed for it in the under lining *s*, in cases where the hook is secured by a strap, a strap *t* is passed around the tongue *b* and the ends thereof passed through the opening *e*. When the tongue *b* is in the opening formed in the under lining, the strap *t* is then sewed securely to the under lining *s*. The hook *a* may be further held in place by stitching through the openings *f* at the forward part

of said hook. In this manner the hook *a* is tightly bound to the under lining *s*, the tongue *b* acting to hold the hook securely in place and prevent it being drawn from its position by the pulling strain to which it is subjected, while at the same time the strap *t* holds it down in place. The strap *t* may be omitted, if desired, and the hook be held in place by stitches passing through the openings. By having the strap *t* arranged in the manner shown a wide strap may be employed, while at the same time the pulling strain on the hook is evenly divided, and, consequently, there is not more strain on one side than the other which acts to displace the hook and prevent its proper engagement with the eye. When the hook has been thus secured in place, the inner facing *u* is then placed over the strap and the body of the hook, leaving only the hook proper, *g*, exposed. By the above-described manner of securing the hook *a* in place the inner facing *u* can be sewed in place without making the garment bulky at that point, as the strap and body of the hook *a* are flat and do not bulge out, thereby presenting a very neat finish to the garment.

The eye *k* is secured in place by making two openings in the under lining *s* and passing the pointed end *m* of said eye through said openings, as shown in Fig. 4, when the shoulders *p* of the head *o* will prevent the eye from further forward progress, while the shoulders *n* on the pointed end *m* will act to prevent its withdrawal; but to insure further against its withdrawal the pivoted end *m* may be stitched to the under lining *s* through the opening *q*. By having the eye pass through the under lining in the manner above described a more secure connection is made with said under lining than where the eye is sewed to the outer surface of the material, as in the ordinary way.

In connecting the hook *a* with the eye *k*, the said eye is slipped past the lug *j*, when said lug, springing back to its normal position, prevents the eye *k* from slipping of its own accord from the hook.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a hook and eye or like connecting device, a body portion having a forwardly-projecting tongue in the rear of the point of connection constructed to enter the material to which said body portion is to be attached, said body portion having an opening in the rear of said tongue, substantially as and for the purposes set forth.

2. In a hook and eye, an eye composed of the shank *l*, the pointed end *m* having the shoulders *n*, and the enlargement *o* having the shoulders *p*, substantially as and for the purposes set forth.

In testimony whereof I, the said JOSEPH F. SCHOEPPL, have hereunto set my hand.

JOSEPH F. SCHOEPPL.

Witnesses:
ROBT. D. TOTTEN,
J. N. COOKE.