

No. 700,372.

T. DE Q. RICHARDSON.
GARMENT HOOK.

Patented May 20, 1902.

(Application filed Nov. 4, 1901.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

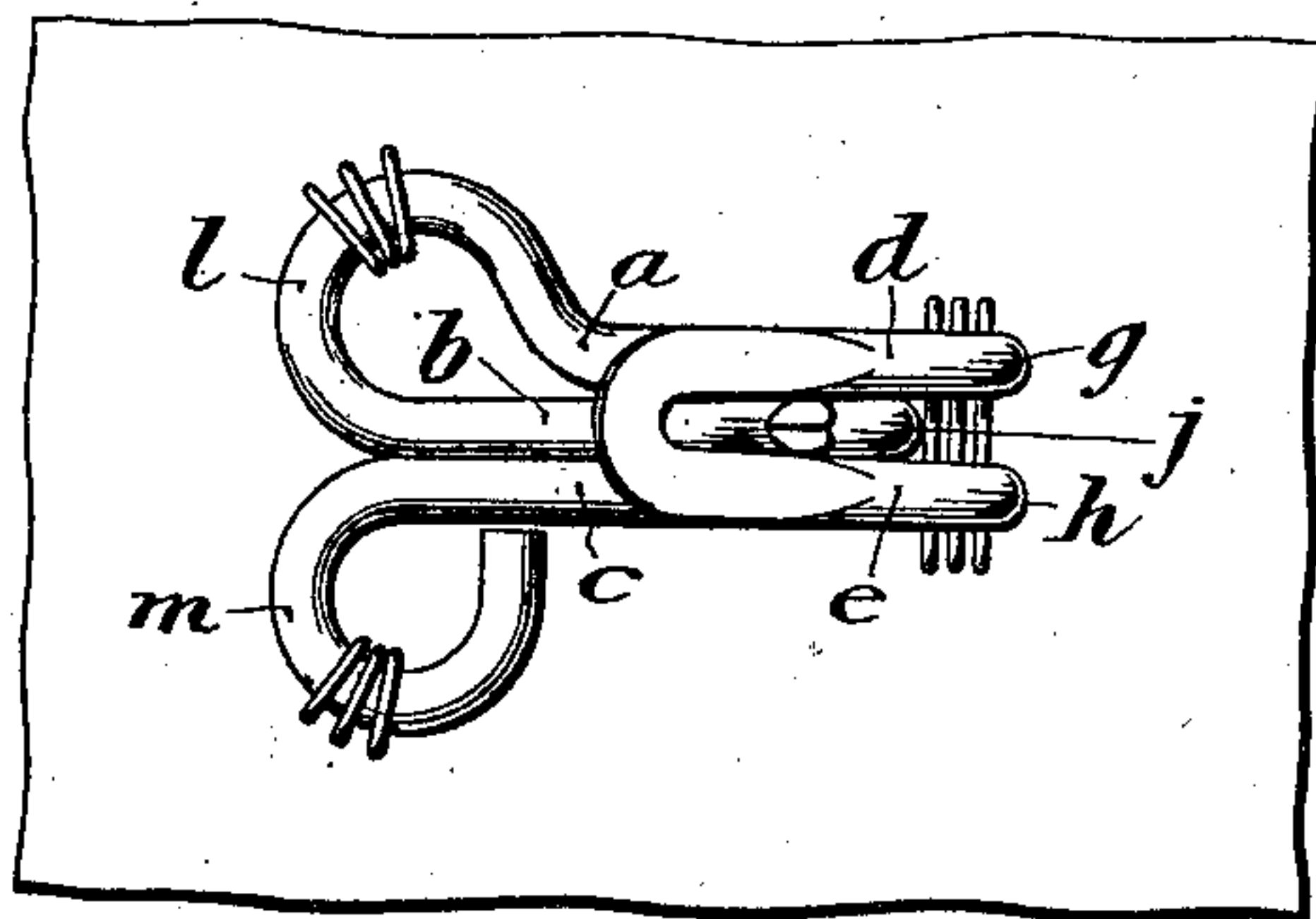
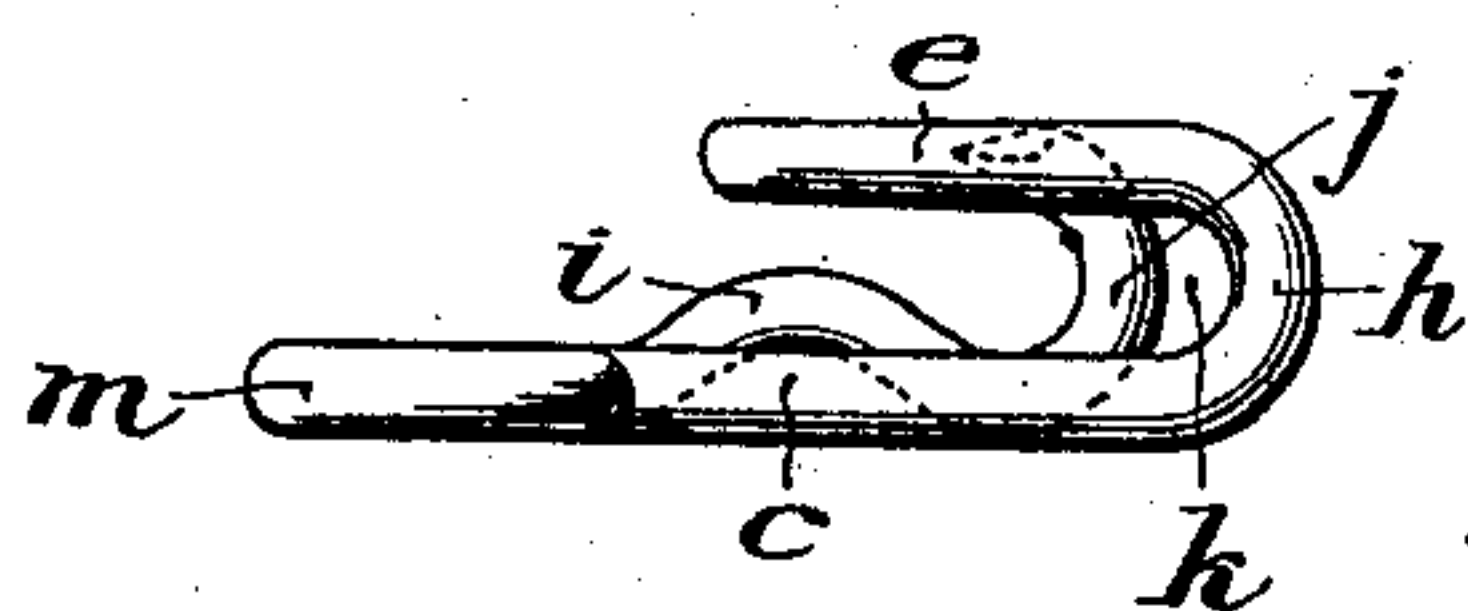


FIG. 2.



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FIG. 3.

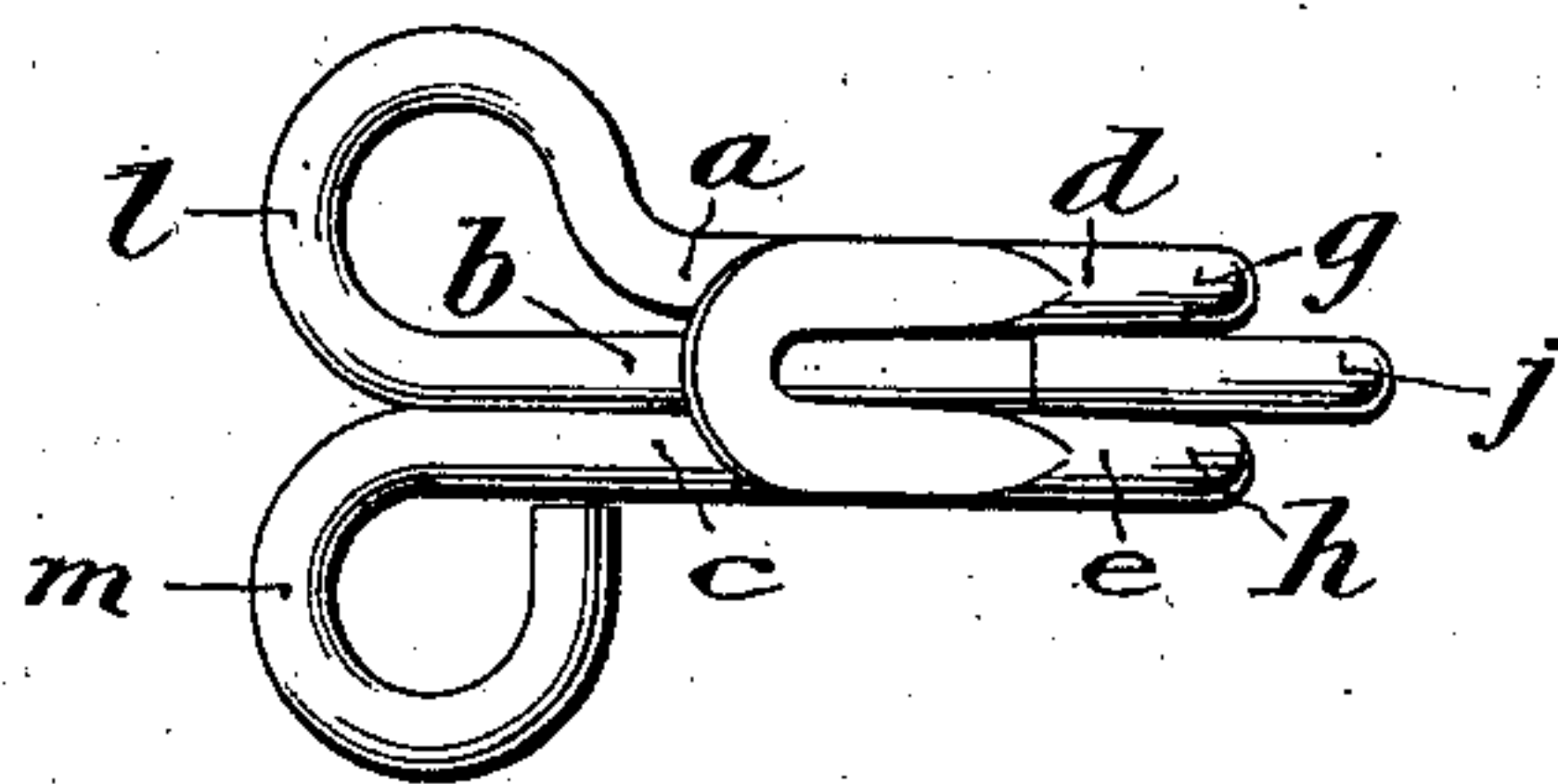


FIG. 4.

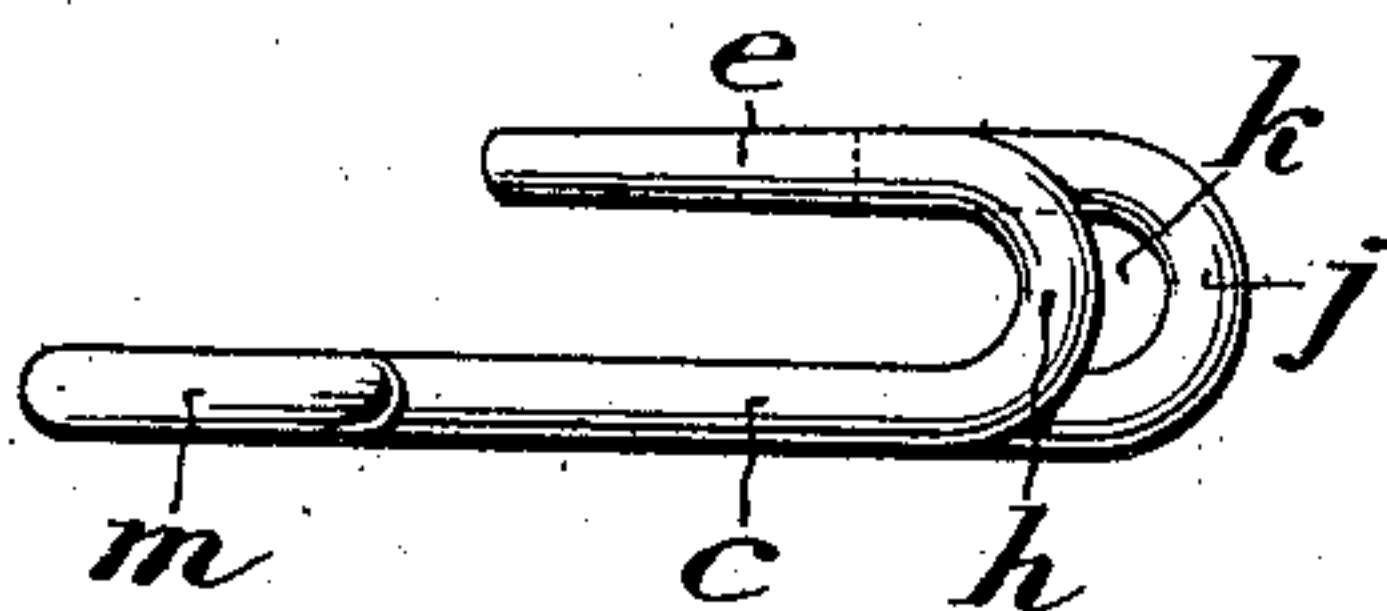


FIG. 5.

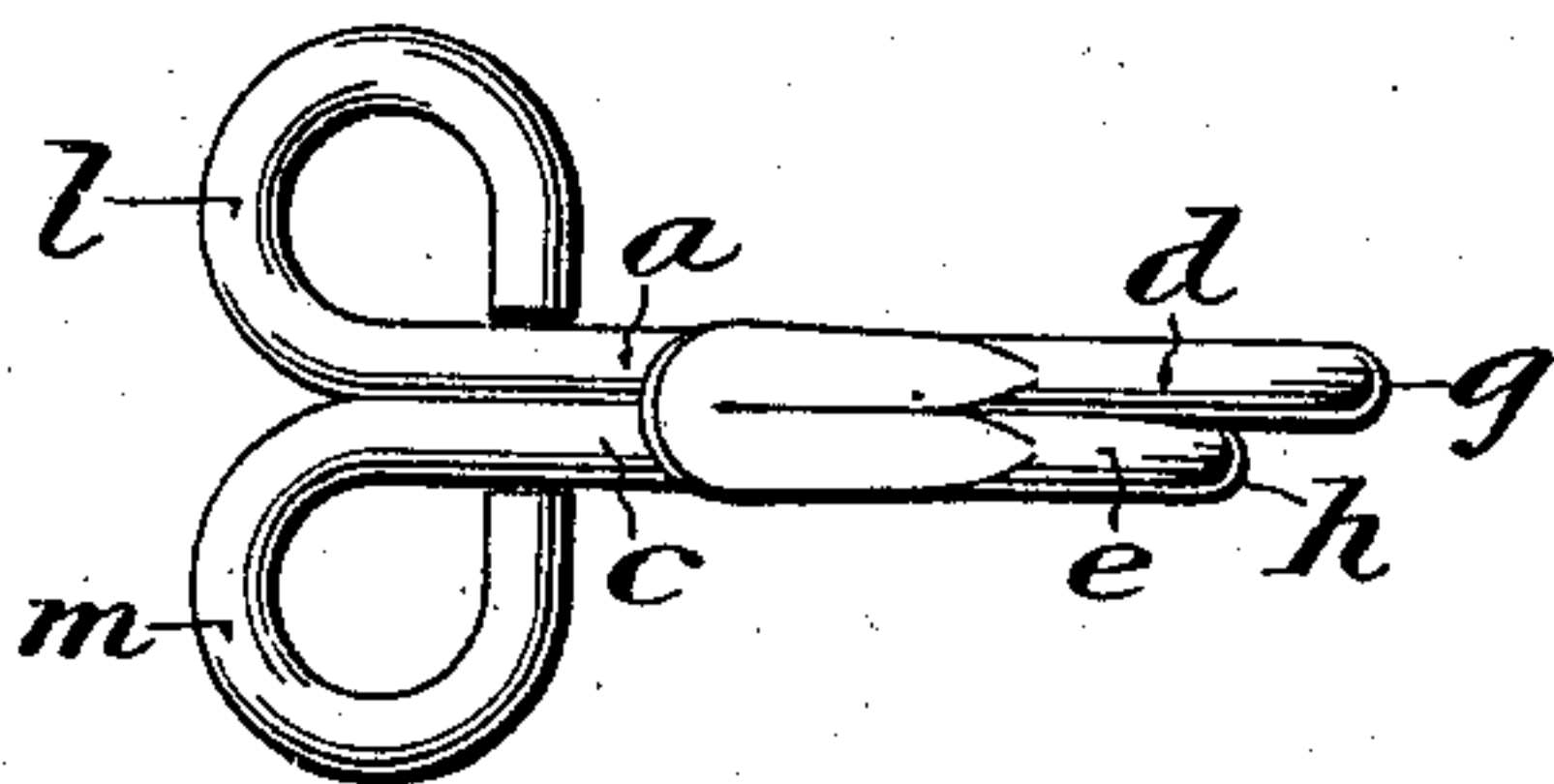
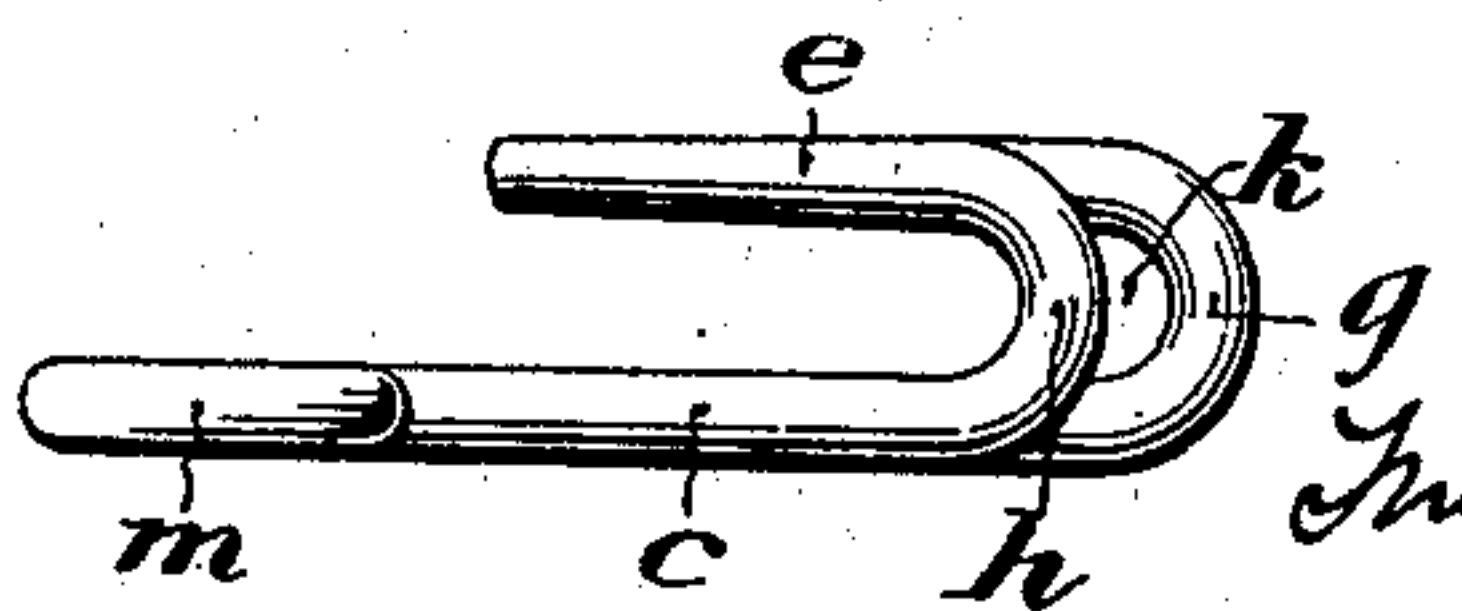


FIG. 6.



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THOMAS DE QUARTEL RICHARDSON, OF PHILADELPHIA, PENNSYLVANIA.

GARMENT-HOOK.

SPECIFICATION forming part of Letters Patent No. 700,372, dated May 20, 1902.

Application filed November 4, 1901. Serial No. 81,080. (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, in the
5 county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Garment-Hooks, of which the following is a specification.

In attaching to a garment a hook of an ordinary form, it is quite customary, in addition to engaging the thread with the usual thread eyes, at the rear end of the structure, to pass it through the fabric abreast of the outer end portion of the shank and across the
15 shank at such point, the thread crossing said shank constituting what I herein term a shank securing stitch.

This is done to secure the free edge of the garment to the front portion of the hook, so
20 that when the hook is engaged with an eye on the other edge of the garment, said first named edge will, by its engagement with said shank, be held down flat over said other edge, and its tendency to fly outward and leave a
25 gap visible between said opposing edges be overcome.

The expedient of employing the shank securing stitch has, however, heretofore failed in many instances to accomplish the desired
30 object, for the reason that said stitch has, in the use of the garment, slipped rearwardly along the shank, that is, toward the thread eyes, producing a corresponding corrugation in and consequent narrowing of the adjacent
35 free edge portion of the garment.

My invention aims to provide an easily manufactured hook adapted to be secured to the garment not only by stitches engaging any suitable or usual thread eyes, but also by the
40 shank securing stitch or thread referred to,—which shall be, while very simple and inexpensive, so organized as to secure or confine said shank securing stitch or thread against movement away from its normal and desired
45 point of application to the hook.

My invention is adapted for embodiment in various forms of garment hooks. Said invention may, however, be very conveniently and advantageously embodied in a hook of
50 the kind having a tongue wire curved to form an automatically yielding locking projection extending into the space between the shank

and bill to prevent accidental disengagement of the eye.

In the accompanying drawings, 55

Figure 1 is a view, in face elevation, of a hook embodying the preferred form of my improvement, said hook being shown as attached to a piece of fabric.

Figure 2 is a view, in side elevation, of the hook of Figure 1, shown as detached from the fabric. 60

Figure 3 is a view in front elevation, and Figure 4 is a view in side elevation, of another form of hook embodying my improvements. 65

Figure 5 is a view in front elevation, and Figure 6 a view in side elevation, of still another form of hook embodying my invention.

Similar letters of reference indicate corresponding parts. 70

I first refer to the particular embodiment of my invention depicted in Figures 1 and 2, and which is, of course, but one of many possible embodiments.

As the hook shown in said Figures 1 and 2
75 of the accompanying drawings is organized, it happens to be composed of a single length of wire appropriately bent. *a, c*, are wire lengths or members of the shank, and *d, e*, are wire lengths or members of the bill. *g* is
80 a bend connective of the members *a, d*; and *h* is a bend connective of the members *c, e*.

At the free end of the bill the members *d, e*, merge into each other as shown.

The member *b*, which may be conveniently
85 termed a tongue wire, lies between the members *a, c*, and embodies at a point approximately opposite the free end of the bill, a curved portion *i*, best shown in Figure 2, which extends into the eye passage space between
90 the shank and bill, and constitutes what may be termed a locking projection.

It also embodies or includes a portion which forms the bend *j*, which bend extends across
95 the space between the shank and bill, that is to say, from the shank, in the form illustrated, to a point between the members *d, e*, of the bill, and in the form under discussion is adapted to engage directly with the eye or other
100 complementary member of the fastening, and receive any strain due to the tendency of the edges of the garment to draw apart under movements of the wearer or otherwise. I, therefore, herein term the members or bends

of the several hooks depicted which directly engage with the eyes or complementary members of the fastenings, the strain receiving bends.

5 In the form shown that portion of the tongue wire *b* which extends between the bill members *d*, *e*, constitutes but a brief continuation of the metal of the strain receiving bend *j*; it may, of course, extend for any desired length
10 along the bill.

It is obvious that the metal lengths or portions into which the respective ends of the strain receiving bend *j* merge, may be disposed in any desired arrangement with respect to the other portions of the hook, and that the particular disposition of the tongue wire illustrated in Figures 1, 2, 3, and 4, in which said wire terminates between the side members of the bill, is by no means an essential condition in connection with embodiments
20 of my invention.

The bends *g*, *h*, are, in the organization under discussion, abreast of each other, and so located, longitudinally of the hook,—being
25 farther from the inner end of the hook than is the strain receiving bend,—that an open space exists between said bends *g*, *h*, on the one hand, and said bend *j* on the other, said space in the form shown, in which it is approximately crescent shaped, being, when the
30 hook is viewed in side elevation, completely closed or framed by the respective bends.

The opening referred to, which I designate the shank stitch opening or eye *k*, is of sufficient breadth to allow of the ready passage of
35 a needle and thread through it, and preferably also of such breadth that a portion of its bounding line is formed by the flat or straight faces of the outer ends of the members *a*, *c*, upon which faces the securing stitches may
40 find a stable bearing.

l, *m*, are any usual thread eyes, conveniently formed by continuations of the wires which constitute the members *a*, *b*, *c*.

45 In the organization of hook depicted, the locking projection *i* is, in use, automatically depressed by an eye manually inserted or removed from beneath the bill, and, on the passage of the eye away from it, springs out
50 again to normal position, in a manner well understood by those familiar with the art.

The space between the shank and the bill constitutes what may be termed an eye passage, inasmuch as it is traversed by the eye;
55 its sides are defined by the opposing faces of the shank and bill,—and its distant end is defined by the strain receiving bend.

As the hook of Figures 1 and 2 is organized, an inserted eye, which term I use as signifying any selected complementary member of the fastening, seats itself against the bend *j* of the member *b*, and said bend, therefore, receives, in the first instance, the entire burden or strain due to the pull of the eye.

65 Said strain receiving bend, therefore, operates to engage the eye and to bar or prevent its further passage along the eye passage, said

bend extending across, and therefore bounding or defining the distant end of said eye passage.

70 The strain receiving bend which in Figures 1 and 2 is the bend designated *j*, extends approximately perpendicularly to the plane of the shank, at the inner side of the space *k* intended for the reception of the shank securing
75 stitch, and serves, in the form under discussion, not only to engage directly with an eye, but also to prevent the shank securing stitch or stitches from slipping toward the inner end of the hook. The free end of the
80 member *b* is so remote from a shank securing stitch extending through the opening *k*, that said shank securing stitch will not pass to the outer side of said member.

While the bend *j* is shown as having a slight
85 curvature between the bill and shank of the hook, it is obvious that it does not necessarily embody such curvature.

I have herein referred to the structure illustrated in Figures 1 and 2 as embodying the
90 preferred form of my invention. It is to be understood, however, that while it is the preferred form where a tongue wire having a locking projection is to be employed, my invention contemplates the use of other forms and
95 arrangements of hooks which do not embody locking projections, and also those which are not provided with tongue wires.

The structure shown in Figures 3 and 4 is similar to that illustrated in Figures 1 and 2,
100 with the exceptions that the member *b* is devoid of the locking projection, and that the bend *j* exists beyond the bends *g*, *h*, that is to say, is farther from the thread eyes *l*, *m*, than are said bends *g*, *h*.
105

In the operation of said structure, the eye forming the complementary member of the garment fastener, will seat itself against the bends *g*, *h*, instead of against the bend *j* as in the structure of Figures 1 and 2, and said
110 bends *g*, *h*, are, therefore, in the embodiment of Figures 3 and 4, strain receiving bends.

The hook shown in Figures 5 and 6 is one which is formed without any third or tongue wire member, and without any locking projection, but approximates what may be termed
115 the old fashioned form of garment hook.

To incorporate my improvement in said hook I have formed the bends *g*, *h*, at its front end at different distances from the thread
120 eyes at its inner end, the bend *g*, as will be seen in the drawings, existing so far beyond the bend *h* that the shank securing thread space *k* is formed between said bends.

In the embodiment last referred to the bend
125 *h* is obviously the strain receiving bend, and it is, like the other strain receiving bends illustrated, impassable to an eye entering the eye passage.

Manifestly a great variety of forms of hook
130 other than those herein referred to may be arranged to embody the improvement herein described without departure from my invention.

Having thus described my invention, I claim—

1. A garment hook embodying a shank and a bill, and a plurality of bends existing at different points longitudinally of the structure and extending from said shank to said bill, the innermost bend serving to engage an eye and being in the normal operation of the hook impassable to said eye, and an inner and an outer bend adapted to confine in position a shank securing thread passed between them.

2. A garment hook having a shank and a bill existing in approximately parallel planes, and having an eye passage between them, a strain receiving bend extending across the distant end of said eye passage, and impassable to an eye entering said passage, and a member extending approximately perpendicularly to the planes of the shank and bill, and arranged at a point longitudinally of the hook a sufficient distance to the front of said bend to afford space between itself and said bend for a shank securing stitch, substantially as set forth.

3. A garment hook having a shank and a bill, existing in approximately parallel planes, and having an eye passage between them, a strain receiving bend extending across the distant end of said eye passage and impassable to an eye entered in said passage, and a member extending approximately perpendicularly to the planes of the shank and bill, and arranged at a point a sufficient distance, longitudinally of the hook, to the front of said bend to afford space between itself and said bend for a shank securing stitch, the respective ends of said last named member merging into the hook structure.

4. A wire garment hook having a shank and a bill, arranged to form an eye passage between them, a bend connective or continuous of said shank and bill, and a tongue wire member extending along the shank and having a bend or portion extending from the shank to the bill and so disposed as to be out of line, viewed from the side of the hook, with the bend first referred to, the innermost of said bends extending across the distant end of said eye passage and being impassable to an eye entered in said passage, and the space between said bends constituting a shank securing stitch opening or seat, substantially as set forth.

5. A wire garment hook comprising a shank formed of two wire lengths, a bill formed of two wire lengths, said shank and bill existing in approximately parallel planes, bends connective of the wire lengths of the shank and those of the bill, an additional member existing in part in proximity to the members

of the shank and in part in proximity to the members of the bill, and embodying a strain receiving bend extending across an eye passage between the shank and bill which bend exists at a point closer to the rear end of the structure than are the bends first referred to, and is impassable in the normal operation of the parts to an eye entering said passage, substantially as set forth.

6. A wire garment hook comprising a shank formed of two wire lengths, a bill formed of two wire lengths, said shank and bill existing in approximately parallel planes, bends connective of the wire lengths of the shank and those of the bill, an additional member existing in part between the members of the shank and in part between the members of the bill and comprising a strain receiving bend existing at a point closer to the rear end of the structure than are the bends first referred to, the length of wire forming said additional member embodying also a locking projection, substantially as set forth.

7. A garment hook comprising two shank members, two bill members, two bends connective of said shank and bill members respectively, a member extending along the shank to a point near the outer portion of the latter and thence across the eye passage formed between the shank and bill, to a point between the two bill members referred to, the bend of the member last referred to being closer to the rear end of the hook than are the bends first referred to, and constituting a strain receiving bend to engage the complementary member of the fastening, and also serving to prevent the sliding rearwardly of a shank securing stitch engaged with the outer end portions of the shank members.

8. A garment hook having a shank and a bill arranged in approximately parallel planes, between which shank and bill exists an eye passage, a strain receiving member extending from the shank to the bill at the distant end of said passage, which member is in the normal operation of the hook impassable to an eye entering said passage, and a shank securing stitch opening or seat arranged at the front end of the hook beyond the eye passage, the member or members forming or defining which opening or seat are arranged in a plane approximately perpendicular with respect to the planes of the shank and bill.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this 1st day of November, A. D. 1901.

THOMAS DE QUARTEL RICHARDSON.

In presence of—

BRADBURY BEDELL,

CHRISTIAN S. MACCAIN.