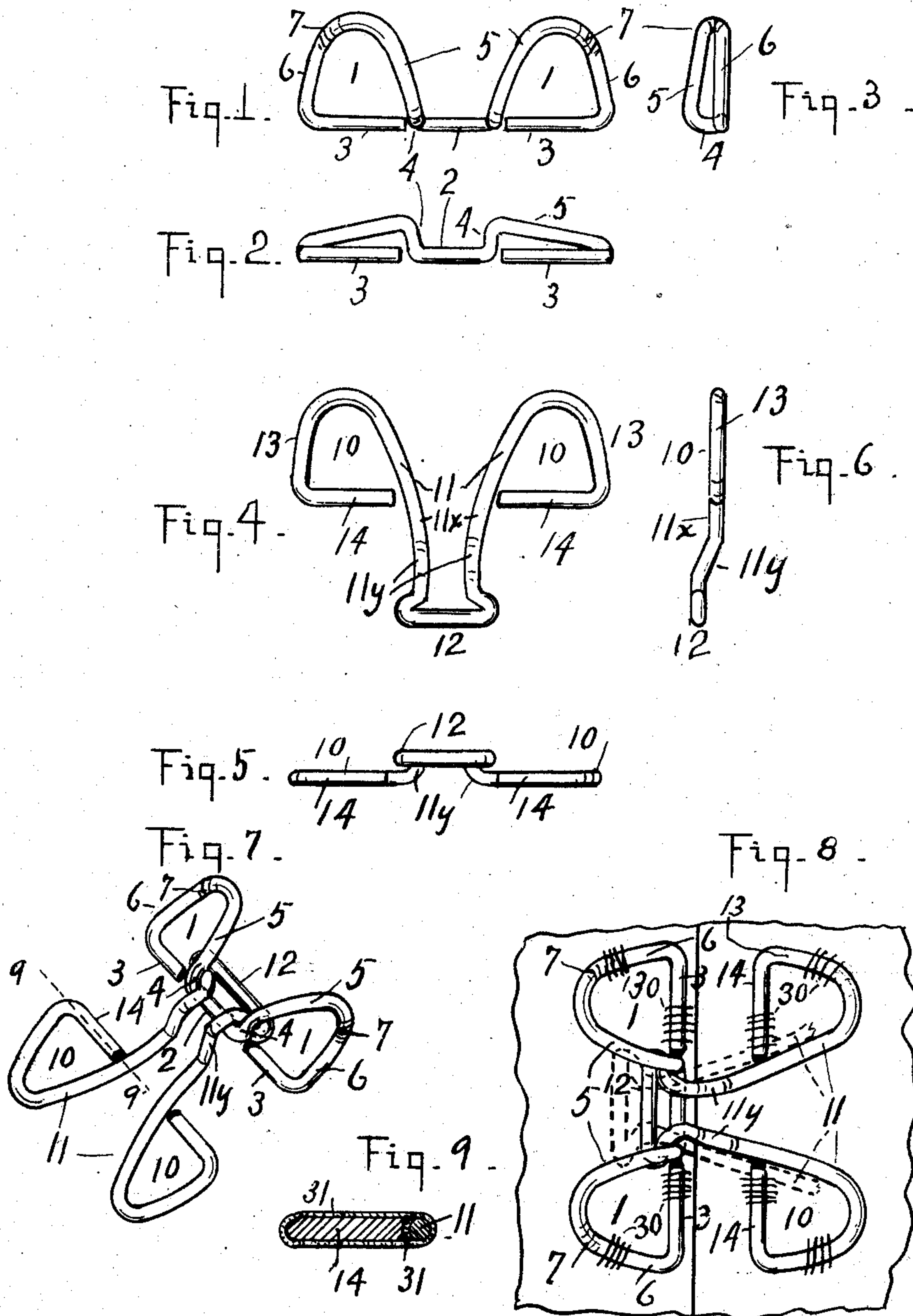


W. M. CORTHELL.
HOOK AND EYE.
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Patented Dec. 1, 1908.



Witnesses

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HOOK AND EYE.

No. 905,409.

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To all whom it may concern:

Be it known that I, WILLIAM M. CORTHELL, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hooks and Eyes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to hooks and eyes ordinarily made of wire, such as commonly used in securing together parts of garments. Its objects are to secure several advantages in a simple and economical construction, among which are security against unhooking, avoidance of wear of the goods, a wide spread fastening to the goods to secure a strong hold, and facility of operation in hooking and unhooking.

The invention consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawing which illustrates the invention and forms a part of the specification,—Figures 1, 2 and 3 are respectively plan, front elevation, and side view of an eye; Figs. 4, 5 and 6 are respectively plan, front elevation, and side view of a hook; Fig. 7 is a perspective view of the hook and eye engaged; Fig. 8 is a plan view of the hook and eye secured to a fabric; Fig. 9 is a section on line 9—9 of Fig. 7.

In the drawings of this application, numeral 1 denotes thread loops of the eye having a hook-engaging part or bar 2 situated in the same plane and in line with the straight parts 3 of the loops.

4 indicates upward bends or risers whereby part 2 joins the raised sides 5 of said loops. These sides 5 are connected by sides 6 with the sides 3. Parts 2, 3 and 6 are in the same plane, and parts 5 are elevated above them by bends at 4 and 7, the material object of these bends being to provide entrance for the head of the hook, after the manner of ordinary hooks and eyes, when the head is carried back of the eye sides.

Each thread loop will in use be sewed to a fabric at points 30 indicated in Fig. 8. The sides 3 are made straight to avoid the slipping of the securing threads and the consequent crawling of the connected fabric, such as occurs in case of round eyes, and also to provide for sufficient loop-sewing

threads. Slipping of the threads at 7 is avoided by the bend or rise at that point, the loop sides 5 being here upwardly bent, as shown and before described.

The loop-sides 3 are parallel with the hook loop sides 14, and being situated in line with the hook-engaging bar 2 can, together with said bar, be in use situated near the edges of a garment to be fastened together, which situation of these several parts efficiently obviates gaping of the garment. Further the comparatively long straight sides 3 provide ample space for sufficient threads to efficiently secure them in place, and as elsewhere in effect stated, being substantially at right angles to the line of the pull of the garment edges, slipping of the threads is prevented, as also is true in case of the loop-sides 14 of the hook.

10 denotes thread loops of the hook connected by the extended sides 11 with a head 12. The loop sides 11, 13 and 14 are in the same plane, but the extension 11^x of the sides 11 are bent upwardly as indicated at 11^y so that the head when practically engaged with an eye is situated in a plane above part 2 of the eye, and below its sides 5 as shown.

The loop sides 14 of the hook are arranged in lines parallel with the head and transversely to the hook as a whole to prevent (when the hook is pulled to one side or obliquely) the shifting of thread holding such sides to the fabric.

In practical use all parts of the hook lie on the fabric except the head and side extensions 11^x beyond bends 11^y.

The hook and eye are each made of a single piece of wire, and have ends situated in the same plane with adjacent parts as shown. These in practice will be joined to said parts and covered and concealed by suitable coating of enamel or the like, as indicated at 31 in Fig. 9.

To engage the hook head with the cross part or bar 2 of the eye, ends of the head can be successively entered, by suitable manipulation, under the sides 5 adjacent the risers 4. Or the head can first be entered under the sides 5 toward their rear and then drawn forward, said sides for this purpose being spread apart and raised above the level of part or bar 2, as indicated, the hook side-extensions 11^x, and the eye loop-sides 5 being bent upwardly above the level of the

eye cross-bar 2, provide for a compact arrangement of the bar and head when engaged.

All the outer parts of hook and eye will in use lie in contact with the fabric of the garment to which they are applied, and only the inner parts be raised slightly above, as and for the object set forth.

The hook sides 11 are flared backwardly so as to bear against the risers 4 of the eye before the hook head becomes disengaged by accidental or other movement toward each other as indicated by broken lines in Fig. 8, thereby adding to the safety of the connection. Obviously the loop sides 14 would arrest the forward movement of the hook in case the flare of sides 11 was insufficient for the purpose.

Having described the invention what I claim is,—

1. An eye having a dropped hook-engaging bar 2, and thread loops with side parts 3 in line with said bar.

2. An eye having a dropped hook-engaging bar 2, and thread loops with side parts 3 in line with said bar, said eye being made of wire having ends terminating adjacent the ends of the bar.

3. An eye having a dropped hook-engaging bar 2, and thread loops with said parts 3 in line with said bar, said eye being made of wire having ends terminating adjacent the ends of the bar, and having raised sides 5.

4. An eye having a dropped hook-engaging bar 2, and thread loops with side parts 3 in line with said bar, in combination with a hook having a head and loop-side-extensions bent upwardly to raise the head above the level of the loops and of the bar.

5. An eye having a dropped hook-engaging bar 2, and thread loops with side parts 3, said eye being made of wire, in combination with a hook having a head and loop-side

extensions bent upwardly to raise the head above the level of the loops and of the bar, said loops having straight sides parallel with the main or outer part of the head.

6. The combination of the hook and eye, said eye having a depressed hook-engaging bar, and thread loops with sides in line with said bar, and said hook having thread loops with sides parallel to said sides of the eye loops.

7. The combination of a hook having thread loops with straight sides 14, and an eye having loops with straight sides 3, and a hook-engaging bar, said latter loop-sides being in line with the bar, and the several loops in use being rectangularly situated.

8. The combination of a hook having flared sides and a head connected by a contracted neck, with an eye having sides situated apart a distance approximately equal to but less than the length of the said head, and connected by the dropped bar 2, said hook head bearing against the under surfaces of the eye sides and also against the hook-engaging drop of said eye, said hook and eye having thread loops rectangularly disposed.

9. In combination, a hook having sides, head, and contracted neck, and an eye having sides and a side-connecting bar, and thread holding portions, said sides being situated above the plane of said bar and thread holding portions to provide for engaging the hook head and eye from the rear and under said raised sides.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WILLIAM M. CORTHELL.

Witnesses:

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