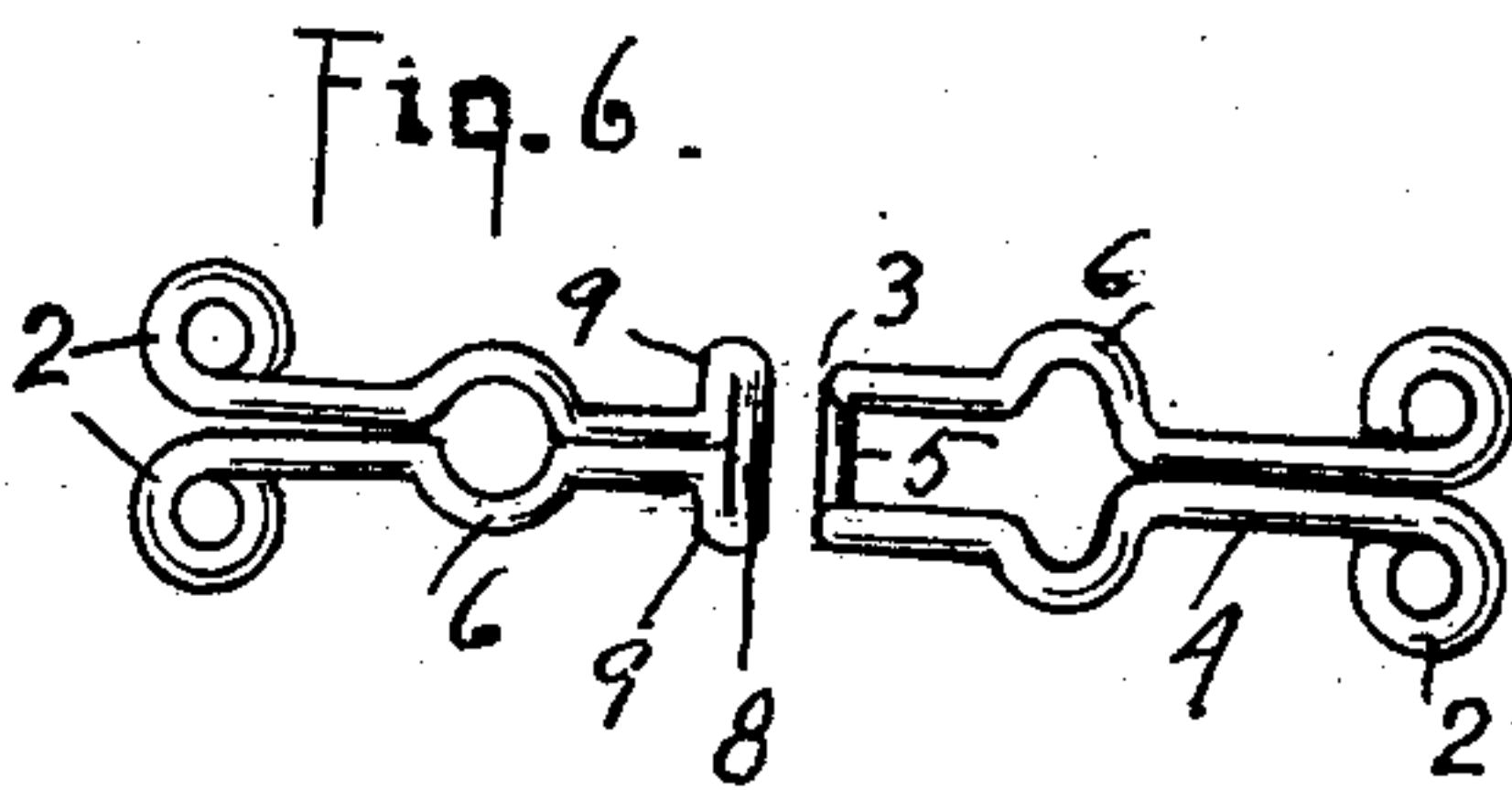
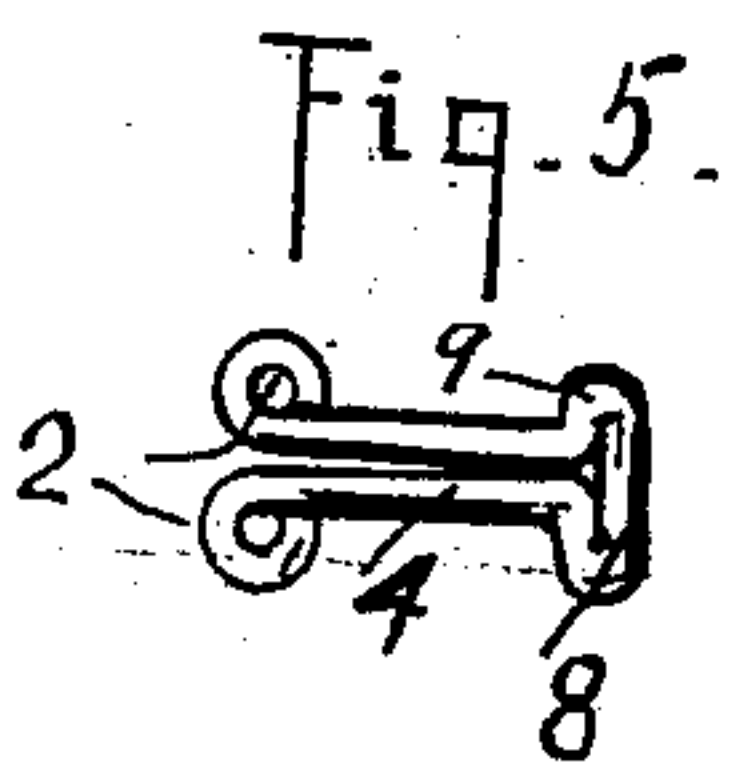
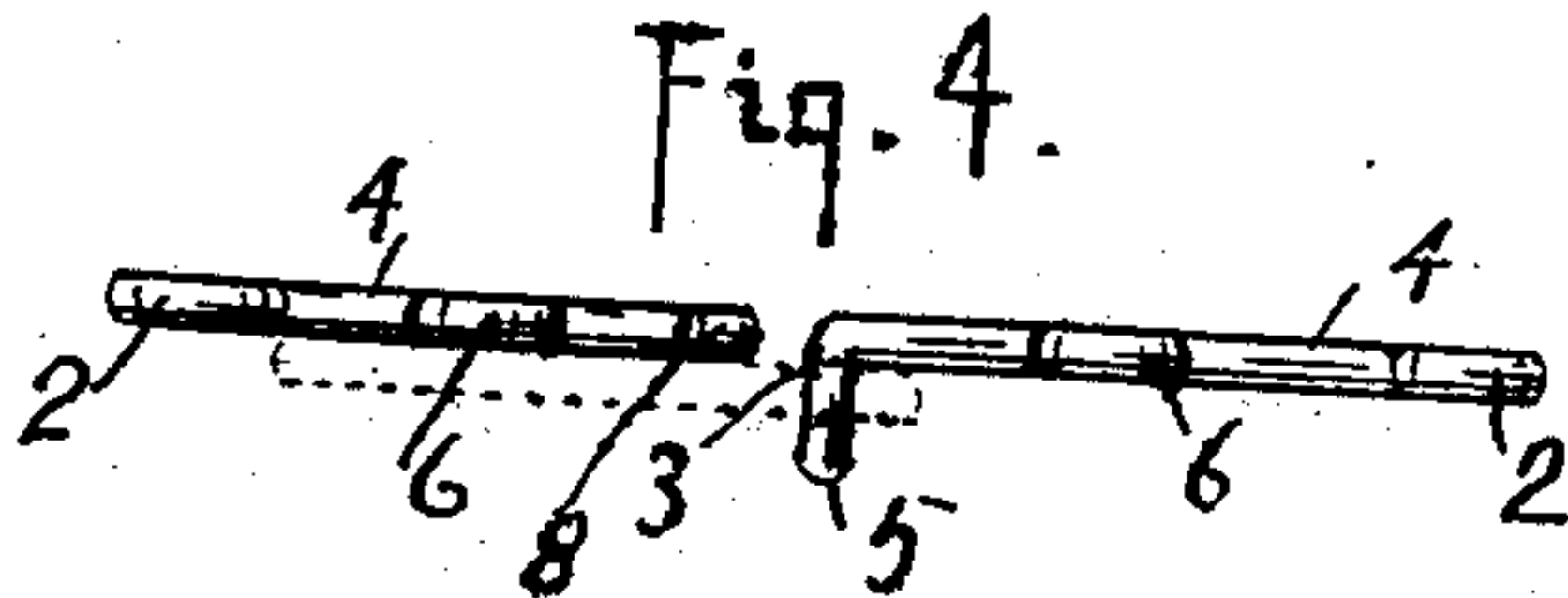
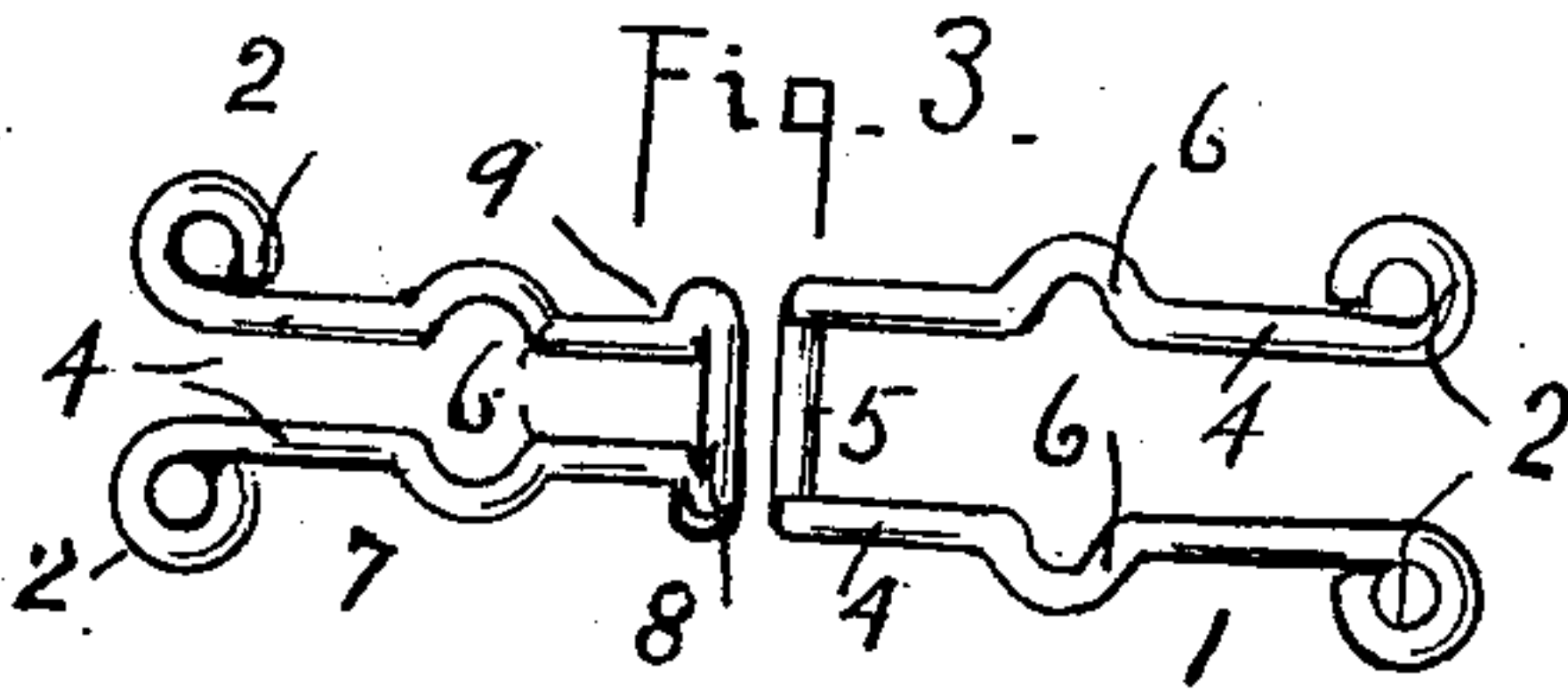
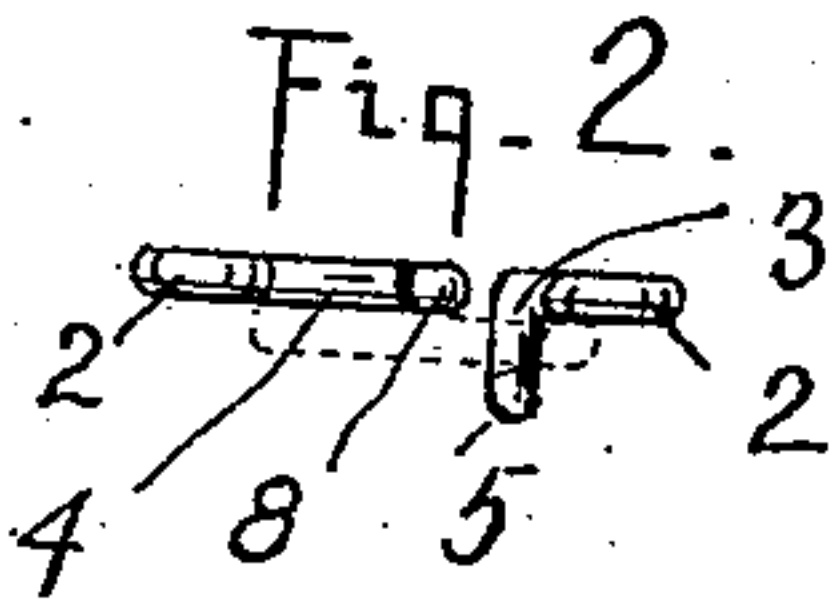
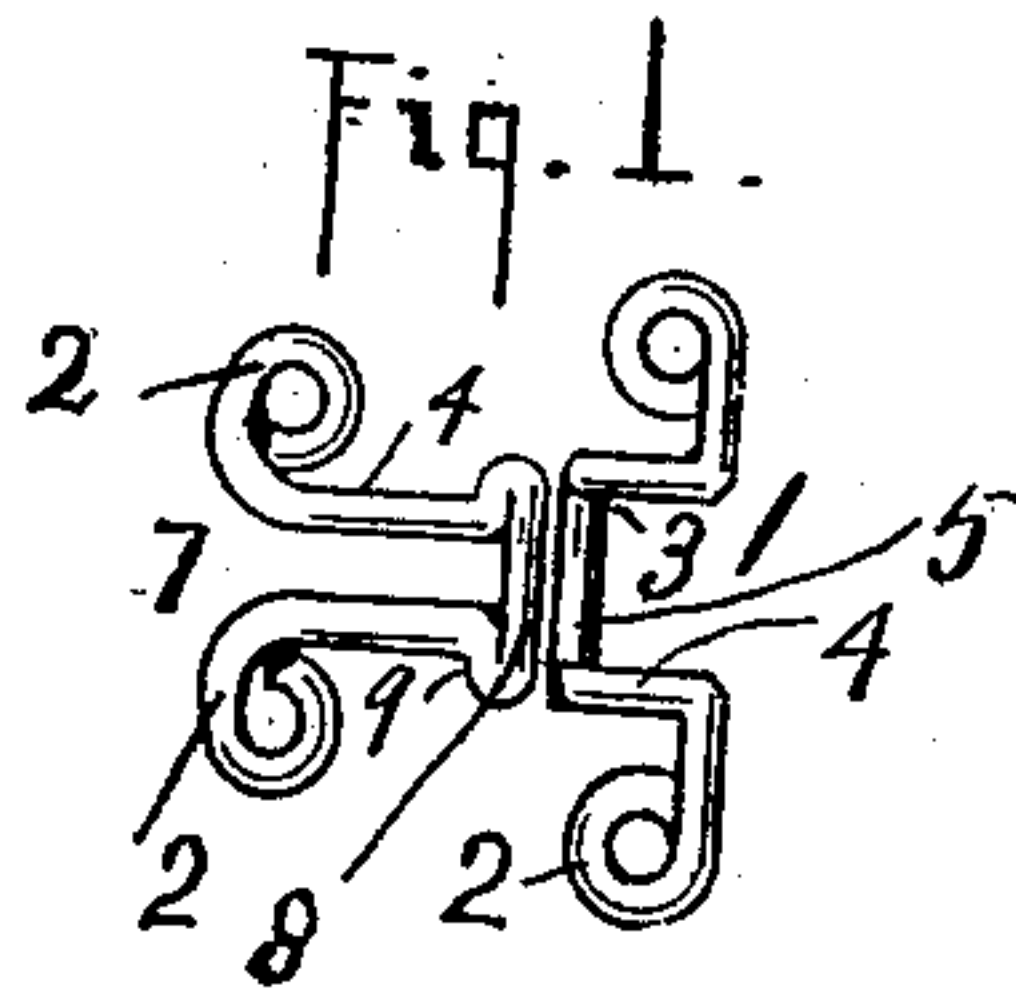


910,645.

W. M. CORTHELL.
HOOK AND EYE.
APPLICATION FILED JULY 22, 1907.

Patented Jan. 26, 1909.



Witnesses

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HOOK AND EYE.

No. 910,645.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed July 22, 1907. Serial No. 334,933.

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 is 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 afford secure hold, and facility of operation in hooking and unhooking.

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

In the accompanying drawing which forms a part of the specification,—Figure 1 is a plan view of a hook and eye detached; Fig. 2 is an edge view thereof, and the hook being shown in dotted lines engaged with the eye; Fig. 3 is a plan view of a modified hook and eye; Fig. 4 is an edge view thereof; Fig. 5 is a plan of a modified hook; and Fig. 6 is a plan of a modified hook and eye.

Numeral 1 denotes an eye having thread-receiving loops 2 offset at 3 from the sides 4. 5 indicates the hook-engaging end of the eye which is bent at approximately right angles to the sides, as shown in Figs. 2 and 4, and may be called the "drop" of the eye. In use it extends below the main part of the eye a distance about equal to the diameter of the wire of which the article is made and in use holds the goods at that point away from the sides 4 of the eye thus facilitating the attachment of the hook, to be described, without wearing the goods, which latter is in many cases a serious defect in prior devices in which the eye is held in contact with the goods, which must be pushed away by a wearing contact of the point of a hook.

In some cases thread-holding bends 6 in the sides 4 of the eye, or of the hook, can be interposed between the end of the eye, or of the hook, and loops 2, as shown in Figs. 3 and 6. The simpler form is however generally preferable.

7 denotes a hook having thread-receiving loops 2 and sides 4, and an eye-engaging end or head 8. Preferably the sides of the hook will be separated, as shown in Figs. 1 and 3, to insure greater distance between the loops and a consequent secure attachment to the goods. This however is not essential in all cases.

The eye-engaging end or head of the hook is formed by bending the wire as represented and so as to extend beyond the hook sides 4 a distance about equal to the diameter of the wire substantially as represented at 9. To engage this hook with the eye when both are secured to a garment or the like, the goods and hook will be manipulated to enter one end 9 of the head 8 between the sides 4 of the eye, and below said sides, and then pushing under the opposite end. This requires a slight bending of the goods which must occur before the hook is released, an operation that will not occur accidentally, the engagement of the hook and eye being thus made secure.

A further security against accidental unhooking is provided in that the "drop" end of the eye abuts against the loops 2 of the hook when the latter is moved inwardly in the general plane of the engaged hook and eye so that it is necessary to put the hook and eye in different planes approximately at right angles to each other before the head of the hook can be pushed back of the eye, or back into the bends 6 of the eye in case the form having such bends be used. The construction however permits a more direct engagement by inserting head 8 under the sides at their rear, which operation is facilitated by the offsets by which the loops are removed from the path of the head. This separation of the loops also insures firmer hold on the fabric. Obviously in the form shown in Figs. 3 and 6 the head can be simply passed down below the level of the sides at the bends 6 of the eye and so made to engage.

A serious objection to many forms of hooks and eyes is that parts of them are flattened or distorted by the machines the garments are passed through in the laundry. Neither the hook nor the eye herein set forth is subject to that defect, the several parts of the hook being situated in one plane, and the several parts of the eye so situated except for the "drop" 3 which being at right

angles to the main plane and of small extent will not be injured by a wringing or other machine.

Another advantage of the improvement before mentioned is that the drop slightly depresses the fabric to which the eye is attached, and that this and the manner of connecting the hook and eye obviates the wearing effect of the hook point.

10 The spread of the sides of the eye and hook insuring a desirable distance between the loops and their points of attachment obviates excessive strain on the threads of the fabric. The offsets of the loops increase the
15 distance while providing that the loops are removed from any desired path of the hook head 8 so that in cases where desired said heads can be passed under the eye from the rear. Obviously this implies a compara-
20 tively loose engagement, and is referred to as one of the capacities of the improvement, though ordinarily the hook head will be inserted and engaged otherwise, as before indicated.

25 Having described the invention what I claim is,—

1. The combination with a hook, of an eye having loops, sides, and a right angled bend at the hook-receiving end of the eye, said sides being spaced apart to receive a hook, 30 and said hook having a head extended in use beyond the sides and bearing against the bend.

2. An eye having loops, offsets, and sides all in a common plane, and a right angled 35 downwardly bent end whereby it is adapted to be engaged by a hook head, said sides of the eye being spaced apart, as set forth.

3. An eye having loops, offsets and sides all in a common plane, and a downwardly 40 bent end, combined with a hook made of a single piece of wire and having sides, loops and head, said head extending outside the sides and all parts of the hook situated in one
45 plane.

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

WILLIAM M. CORTHELL.

Witnesses:

CHAS. M. CATLIN,
W. N. WOODSON.