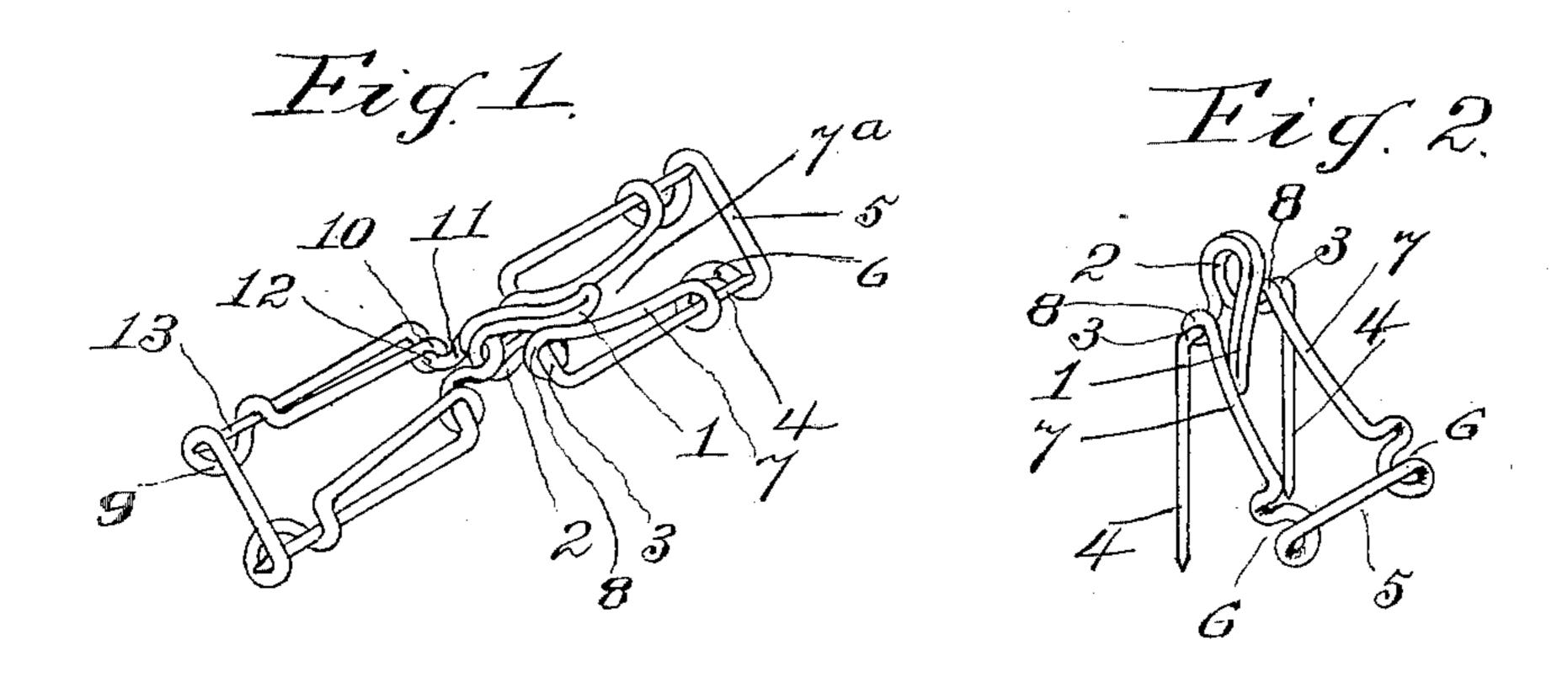
No. 675,437.

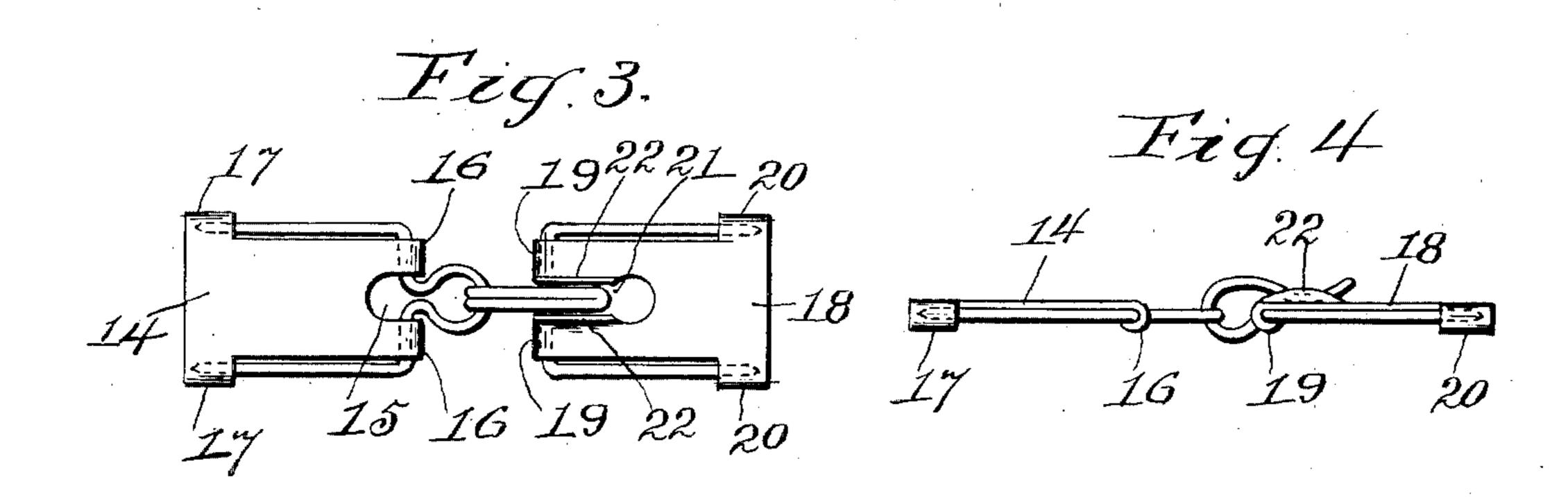
Patented June 4, 1901.

G. F. BROCKWAY. HOOK AND EYE.

(Application filed Dec. 20, 1900.

(No Modei.)





Witnesses:

J. W. Mac Elroy

George F. Brockway.

By CHLLICH

Attivi

United States Patent Office.

GEORGE F. BROCKWAY, OF HOWELL, MICHIGAN, ASSIGNOR OF ONE-HALF TO ALBERT D. THOMPSON, OF SAME PLACE.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 675,437, dated June 4, 1901.

Application filed December 20, 1900. Serial No. 40,542. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BROCKWAY, a citizen of the United States, residing at Howell, in the county of Livingston and State of Michigan, 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 particularly to a hook and eye adapted to be applied without sewing or riveting or without employing separate means of attach-

ment.

One object of the invention is to provide a pivoted hook having piercing-points to swing with the hook, a pivoted eye having piercing-points to swing with the eye, and novel means for forming the pivot-bearings and the anchors for the said points.

A further object of the invention is to provide a novel and peculiar hook-and-eye fastening composed of four wires, two of which form the hook portion and the other two the eye portion, the hook portion being especially formed to prevent accidental displacement

25 therefrom.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of my improved hook and eye. Fig. 2 is a perspective view of the hook in open 30 position. Fig. 3 is a front view of a modification. Fig. 4 is a side view of a modification.

The same numeral references denote the same parts throughout the several views of

the drawings.

The hook portion is formed of a single wire folded upon itself, so that the wire lies parallel to form a tongue 1, the folded wire being bent to form a hook 2, which terminates under the tongue, whence the portions of the 40 wire diverge or are bent at right angles from each other to form pivot-shoulders 3. The wire is then bent at right angles to the shoulders 3 in the direction in which the tongue points and terminates in piercing-points 4. 45 The pivot-bearing and anchor-wire for the hook portion has a central cross-bar 5, at each | end of which is formed a depending inturned U-shaped loop or anchor 6 for the piercingpoints 4. From the top of the loops 6 the 50 wire is extended toward the shoulders 3 to

which terminate in bearings 8 for the shoulders 3. There is a space 7^a left between the arms 7 throughout their length, in which the tongue in its pivot movement works. The 55 bearings stand up close to the sides of the tongue, and the latter is bent inwardly between the bearings, with its point outwardly from them, so as to make a spring-passage between the tongue and the bearings for the 60 eye, which will prevent the accidental displacement or disconnection of the hook and eye. The anchors 9 and bearings 10 of the eye portion are made exactly like those of the hook portion. The eye 11 is formed central 65 of the wire and has shoulders 12 for the bearings 10, whence the wire is extended in the same horizontal plane with the eye and terminates in compressible piercing-points 13. It will be seen that the arms 7 have a slight 70 spring, owing to the shape of the anchors 6, so that when the eye is placed over the tonguepoint its passage into the hook is assisted and facilitated by the spring of the tongue, thus permitting the tongue to lie down close 75 to the arms and partially between the bearings 3, thereby preventing the escape of the eye and making it a most compact device.

In lieu of the anchor-wires above described I may employ plates. (See Figs. 3 and 4.) 80 The eye-plate 14 has a central cut-out 15 and is turned back upon itself at the sides of the cut to form the eye-wire bearings 16. The other end of the plate has ears which are turned inward toward each other to form an- 85 chors 17 for the eye-piercing points. The hook-plate 18 has the same bearings 19 and anchors 20 as the plate 14, and the bearing end has a slot 21, in which the tongue works in pivot action. The bearings have a portion 90 or flange 22 struck up therefrom at the sides of and at right angles to the top or front face of the plate. The tongue lies partially between the said flanges, so that the eye has to be pressed between the top edges of the 95 flanges and the tongue as it is passed to and from the hook.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

form depressed or concaved diagonal arms 7, having a pivoted eye terminating in swinging

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piercing-points, and a member having a pivoted tongue terminating in swinging piercing-points, and working between its pivot-bearings, said bearings or a portion thereof and the tongue making a flexible passage for the

eye.

2. In a hook and eye the combination, with the pivot-bearings and anchors, of the eye having shoulders at right angles thereto and in the same horizontal plane therewith, and piercing-points extending from the shoulders in said plane; and the hook having a tongue, and shoulders at right angles to the tongue and terminating in piercing-points extending in the same direction as the tongue below the latter and held by the anchors, said shoulders working in the said bearings to permit a simultaneous movement of the tongue and piercing-points on the same pivot.

3. In a hook and eye, the combination, with the wires having U-shaped anchors and pivot-bearings, of the wire having an eye, piercing-points, and shoulders between the eye and point forming pivots for two of the said bearings so that the eye-points will engage two of

the said anchors; and the wire having a hook, shoulders for the other two bearings at right angles to, and under the hook, a tongue projecting from the hook over the shoulders and between the latter bearings, and piercing: 30 points extending from the shoulders so as to

engage the other two anchors.

4. In a hook and eye the combination, with the wires having a cross-bar, U-shaped depending anchors, and arms extending from 35 the anchors and terminating in pivot-bearings so as to leave a space or opening between the arms, of the wire having an eye and terminating in piercing-points, and shoulders which lie between the eye and its points, and 40 a hook having a tongue lying close to the hook-arms and working in said hook-space and between the hook-bearings.

In witness whereof I hereunto set my hand

in the presence of two witnesses.

GEORGE F. BROCKWAY.

Witnesses:

A. D. THOMPSON,

A. G. THOMPSON.