

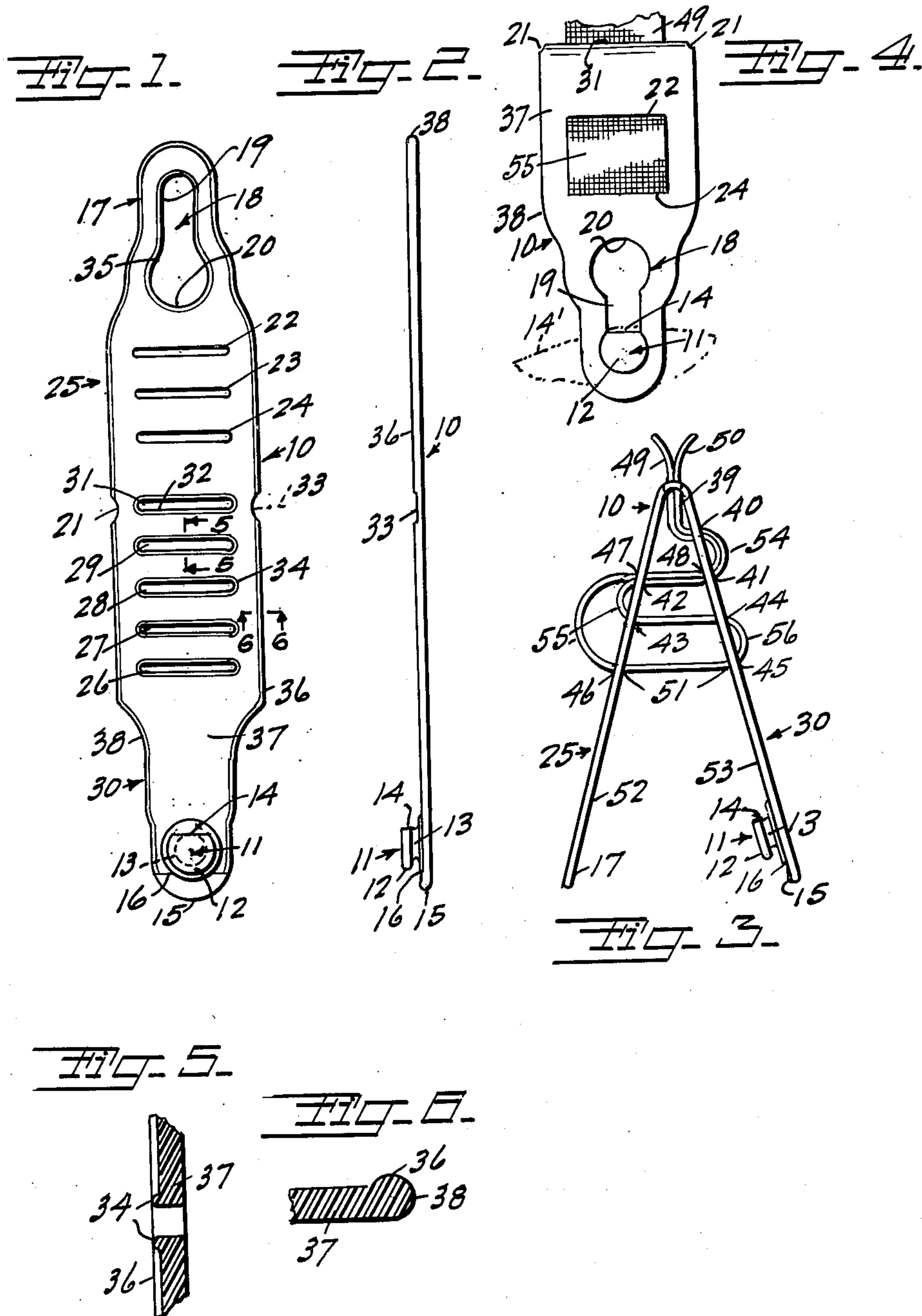
Jan. 6, 1953

W. I. HATCH ET AL

2,624,093

GARTER CLASP

Filed Sept. 10, 1951



INVENTOR.
Walter I. Hatch
 BY *Edna B. Hatch*
Philip A. Medall
 Attorney

UNITED STATES PATENT OFFICE

2,624,093

GARTER CLASP

Walter I. Hatch and Edna B. Hatch,
North Sacramento, Calif.

Application September 10, 1951, Serial No. 245,798

1 Claim. (Cl. 24—246)

1

This invention relates to improvements in garter clasps and provides a new and highly efficient clasp which is adjustable on garter elastic as desired, and which effectively maintains its adjustment irrespective of stresses applied, and, in the preferred form of the invention, the garter clasp is formed entirely of non-metallic material, and as a single element which includes integrally the clasp means and the adjusting and securing means for the elastic, the material preferably used being sufficiently flexible for convenient operation of the clasp means yet sufficiently rigid to prevent longitudinal bowing or collapsing of the element.

The objects and advantages of the invention are as follows:

First, to provide a garter clasp which is formed as a single element including stocking clasp means and garter elastic attaching means.

Second, to provide a garter clasp as outlined which is formed entirely of non-metallic material which is sufficiently flexible to permit convenient operation of the clasp means yet sufficiently rigid to prevent distortion of the body of the element under stress.

Third, to provide a garter clasp as outlined in which the attaching means includes means for adjusting the elastic longitudinally at will and which will efficiently maintain the adjusted position irrespective of stresses applied between the garter clasp and the elastic.

Fourth, to provide a garter clasp in which the cooperative clasp means are formed at the respective end portions of a relatively thin strip of material to be doubled centrally of the length for cooperation between the cooperative clasp means with the doubled portions to be secured together by a strip of garter elastic and which coincidentally secures the elastic to the garter clasp.

Fifth, to provide a garter clasp as outlined in which all edges are reinforced to increase the strength and rigidity and provide increased roundness of the edges for comfort and to obviate possibility of abrasion or irritation.

Sixth, to provide a garter clasp which is molded as a single element with an integral clasp button formed adjacent one end and a buttonhole formed in the other end portion and with adjusting and securing means for the garter elastic formed intermediately.

Seventh, to provide a garter clasp with a clasp button having a head and a neck and with the upper portion of the head flattened to coincidence with the periphery of the neck to obviate bulging with consequent possible rupturing of the portion of a stocking applied thereover.

2

Eighth, to provide a garter clasp which is formed complete in a single operation and therefore of the utmost economy in manufacture.

In describing the invention reference will be had to the accompanying drawings, in which:

Fig. 1 is a front elevation of the invention.

Fig. 2 is a side elevation of Fig. 1.

Fig. 3 illustrates the method of applying and adjusting the elastic.

Fig. 4 is a front view of the garter clasp as assembled with the garter elastic and with the clasp attached to the top of a stocking.

Fig. 5 is an enlarged fragmentary section taken on line 5—5 of Fig. 1.

Fig. 6 is an enlarged fragmentary section taken on line 6—6 of Fig. 1.

The invention can be formed of any suitable material, but is preferably formed of non-metallic medium flexible material such as vinyl plastics which are particularly suitable since they combine suitable rigidity to prevent folding or collapse of the element under stress while being sufficiently flexible for convenient operation of the clasp means.

The clasp can be formed of any suitable sheet material with the button welded or cemented in place but is preferably formed as a single integral unit by molding whereby, when the element is removed from the mold, it is ready for use simply by doubling and then threading the garter elastic therein through the securing and adjusting means, and obviously is marketed in its normal form as shown in Figs. 1 and 2. The most satisfactory material for this clasp is polyethylene formulation of plastics.

The garter clasp 10 has a clasp button 11 formed adjacent one end, this button having a head 12 and a neck 13, the upper portion of the head being flattened coincident with the periphery of the neck as indicated at 14 to avoid bulging thereover of the clasped portion of the stocking 14' and thus preventing rupture of the fibers of the stocking.

The very end of this portion of the element is increased in thickness as indicated at 15, tapering upwardly to normal thickness adjacent the lower edge of the button as indicated at 16 to more efficiently cooperate with the other end portion 17 which has a buttonhole 18 with an elongated clasp slot 19 extending from a button passage 20, the two end portions of the element being narrowed as shown. Indents 21 are provided in the respective longitudinal edges midway between the two ends to provide a bend point for doubling the element for use.

A series of elongated transverse slots is provided in each section as related to the bend

3

point, there being three slots 22, 23 and 24 formed in the buttonhole section 25, and four slots 26, 27, 28 and 29 formed in the other or button section 30, and one slot 31 is formed with one edge 32 coincident with the bend line 33.

The slots 22, 23, 26 and 27 are relatively narrow since only one thickness of elastic is threaded through them, these slots being approximately $\frac{3}{64}$ inch across.

The remaining slots are to have two thicknesses of elastic threaded through them and therefore must have a wider gap, not less than $\frac{1}{16}$ inch, and at least the slots in the button end have peripheral reinforcement as indicated at 34.

The buttonhole is also peripherally reinforced as indicated at 35, and peripheral reinforcement is provided about the entire element except at the bend line. The thickness of the body 37 of the element is made preferably about .040 inch in thickness and the reinforcement in the form of a peripheral bead adds about $\frac{1}{64}$ inch, making the total thickness through the reinforced portions about $\frac{1}{8}$ inch. This increased thickness also provides for a rounded edge of greater radius as indicated at 38 to guard against abrasion and irritation.

In assembling the garter clasp with a ribbon of garter elastic, the element is first doubled by bending at the bend line 33. The garter elastic is threaded down through the central slot 31 at the bend as indicated at 39, out through slot 29 as indicated at 40, back through slot 28 as indicated at 41, then across through slot 24 as indicated at 42, back through slot 23 as indicated at 43 and across and through slot 27 as indicated at 44, back through slot 26 as indicated at 45 and across and through slot 22 as indicated at 46 and back through slot 24 as indicated at 47 and across and through slot 28 as indicated at 48 and back through slot 29 and up through slot 31 as indicated at 49.

After the main strand 50 has been adjusted to the desired length, the strand 49 is drawn through tight, drawing the two sections 25 and 30 together at 51 leaving the tabs 52 and 53 free for clasping to a stocking or the like.

When adjustment of the elastic is desired, a relatively thin instrument such as a nail file is inserted under the respective turns 54, 55, 56 to loosen them to permit the elastic to be advanced or retracted as may be necessary. When the elastic is drawn tight it is firmly held and cannot give or slip under stresses set up between the clasp and the elastic.

Thus a single element formed as a unit pro-

4

vides a complete adjustable clasp for stockings and the like and one which is formed entirely of non-metal in its preferred form.

We claim:

5 A garter clasp comprising an elongated element formed throughout solely of, plastic material having flexibility and resiliency and relatively non-elastic and having cooperative clasping means including a buttonhole consisting of 10 a button passage and a clasping slot extending therefrom and formed in one end portion, and a button having a head and a neck and formed integrally with the other end portion of said element, a ribbon of garter elastic, said element 15 having a width greater than said ribbon and including integral securing means provided in the central portion for the ribbon of elastic, said element being foldable centrally of its length for cooperation between the clasping means, said securing means comprising a central transverse 20 slot formed centrally of the length of the element and including four spaced transverse slots formed in one half of the element containing the button, and three spaced transverse slots 25 formed in the other half containing the buttonhole and registrable with three of said four slots, with the most distant slots from the center of the element being located approximately halfway between the center and ends of the element, 30 and a strip of garter elastic threaded through said central slot and transversely through the registrable slots to secure the elastic in adjusted position as desired and secure the respective 35 halves together intermediate the length with the end portions free for operation of the clasping means.

WALTER I. HATCH.
EDNA B. HATCH.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
207,694	Tunny	Sept. 3, 1878
824,332	Barnum	June 26, 1906
1,031,306	Williams	July 2, 1912
2,055,311	Rocke	Sept. 22, 1936

FOREIGN PATENTS

Number	Country	Date
355,731	Germany	July 1, 1922
803,476	France	Oct. 1, 1936