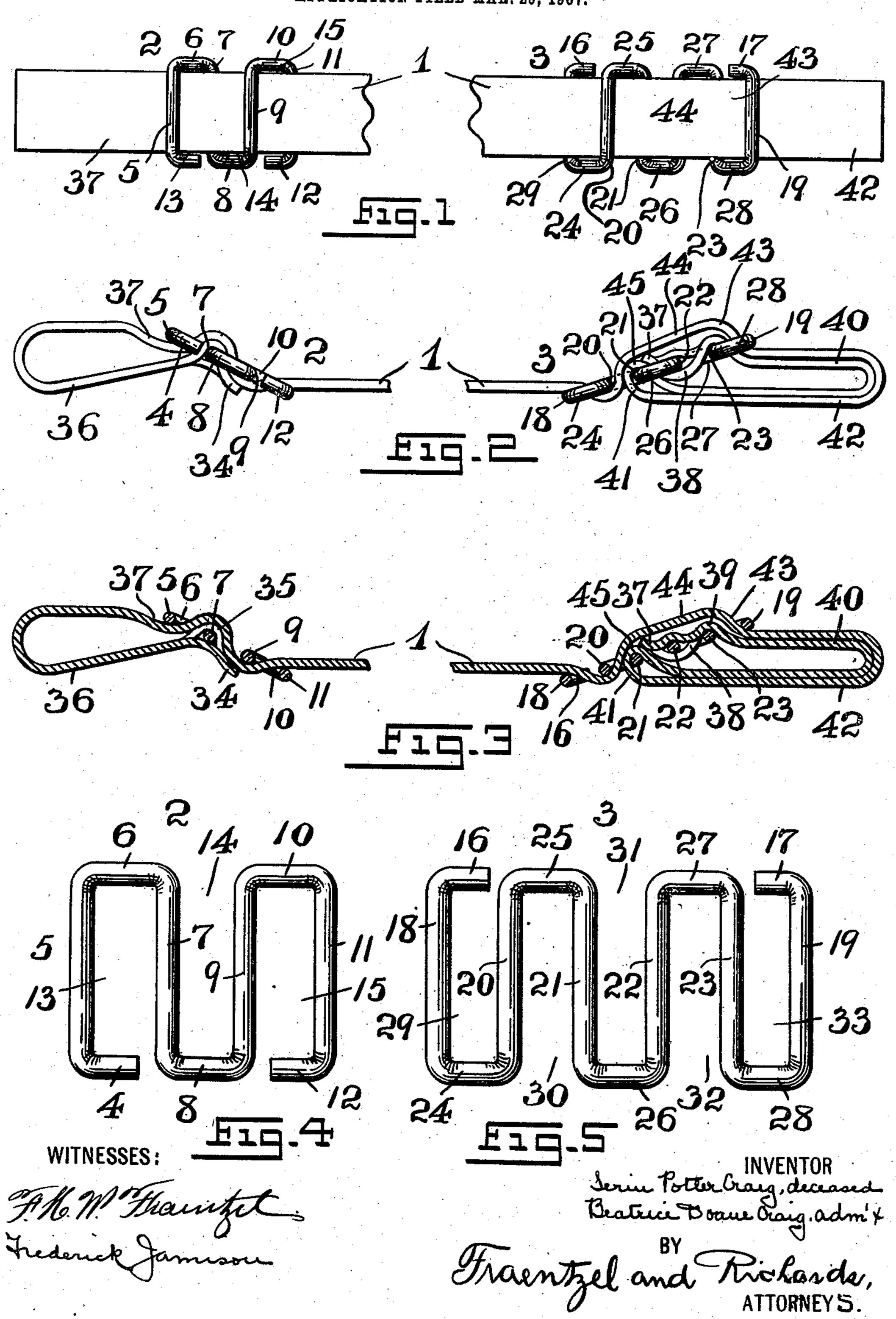
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HOLDING OR RETAINING DEVICE.

APPLICATION FILED MAR. 29, 1907.



UNITED STATES PATENT OFFICE.

BEATRICE DOANE CRAIG, OF BROOKLYN, NEW YORK, ADMINISTRATRIX OF SERIN POTTER CRAIG, DECEASED.

HOLDING OR RETAINING DEVICE.

No. 881,461.

Specification of Letters Patent.

Patented March 10, 1908.

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To all whom it may concern:

Be it known that I, BEATRICE DOANE CRAIG, a citizen of the United States, and a resident of Brooklyn, county of Kings, and 5 State of New York, am administratrix of the estate of Serin Potter Craig, late a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, deceased, and who did invent certain new 10 and useful Improvements in Holding or Retaining Devices; 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 ap-15 pertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in fastening or retaining devices which are to be used in the place of buckles and are to be employed for the purposes of connecting various portions of straps or bands to one another, or for the purposes of attaching a strap or band to some other fixture, all with a view of providing a novel and cheap construction of holding or retaining device for the straps or bands which are used in the construction of harness, or in hose-supporters, and which may be used also with trunk-straps, shawl-straps, and the like.

This invention has for its principal object to provide a novel and simply constructed 35 fastening or retaining device or element, for the purposes of suitably and adjustably connecting various parts of a strap together, or for the purpose of attaching or connecting the strap to another fixture, and to provide 40 a device which may be used in lieu of the usual buckle and tongue, and to provide a device which is held in place by frictional or binding engagement with the surface-portions of the strap or band, without any dan-45 ger of the device or element slipping from its holding or retaining engagement with relation to the part or parts of the strap with which the device is employed.

Other objects of this invention not at this time more especially mentioned will be clearly understood from the following detailed description of the present invention.

This invention consists, therefore, in the novel construction of fastening or retaining device hereinafter set forth; and, further-

more, the invention consists in the various arrangements and combinations of parts, as well as in the details of the construction of the same, all of which will be more fully described in the accompanying specification, 60 and then finally embodied in the clauses of the claims which are appended to and which form an essential part of this specification.

The invention is fully illustrated in the accompanying drawings, in which:—

Figure 1 is a plan view of two portions of a strap or band provided with two forms of fastening or retaining devices or elements embodying the principles of this invention; Fig. 2 is a side view of the parts shown in said 70 Fig. 1; and Fig. 3 is a central longitudinal vertical section of the same. Figs. 4 and 5 are plan views of the two forms of devices shown in said Figs. 1, 2 and 3, said views being made on an enlarged scale.

Similar characters of reference are employed in all of the above described views,

to indicate corresponding parts.

Referring now more particularly to Figs. 1 to 5 inclusive, the reference-character 1 indi- 80 cates a suitable strap, band, or the like, and 2 and 3 are two forms of connecting fastening or retaining devices or elements made according to the principles of the present invention.

The above mentioned fastener or retaining 85 device or element 2 is usually and preferably made from suitable wire, and said device comprises an end-member or shank 4 from which projects a laterally extending endpiece or member 5 to which is connected a lon- 90 gitudinally extending side-piece or member 6. Connected with this side-piece or member 6 is a laterally extending center-piece or member 7, to which is connected by means of a longitudinally extending side-piece 95 or member 8, another laterally extending center piece or member 9. Projecting from the end-portion of said center piece or member 9 is another longitudinally extending side-piece or member 10, with which is 100 connected a laterally extending end-piece or member 11 formed upon its free end with an inwardly and longitudinally extending shank 12. In this manner, a fastening or retaining device or element 2 has been produced which is 105 provided with the three loop-shaped portions or receiving members 13, 14 and 15, and in which the various parts of the strap or band 1 may be arranged and secured substantially in the manner illustrated in Figs. 1, 2 and 3 110 of the drawings, as will be hereinafter more

fully described.

Referring now more particularly to Fig. 5 of the drawings, it will be seen that the fas-5 tening or retaining device or element 3 is also made from dutiable wire, and is provided at each of its free end-portions with the respective shanks 16 and 17, the wire being bent or formed into a series of alternately 10 disposed and laterally extending end-pieces 18 and 19, and a series of laterally extending center pieces or members 20, 21, 22, and 23, the various laterally extending members being alternately connected at the opposite 15 sides of the device, by means of a series of longitudinally extending side pieces or members 24, 25, 26, 27 and 28. In this manner the fastening or retaining device 3 is produced, the same being formed with the re-20 spective receiving members or loop-shaped portions 29, 30, 31, 32 and 33, in which the opposite end-portions of the band or strap 1 may be arranged, substantially in the manner to be presently described.

the two fastening or retaining devices shown in Figs. 1 to 5 inclusive, I will now set forth the manner of attaching the same to the various portions of the strap or band. The endnortion 34 of the strap or band is made with a slit or opening 35 by means of which the endportion can be slipped over the shank 4 and the members 5 and 6, so as to be arranged upon the member 7, substantially as shown in Fig. 3. A loop 36 is then formed at the end of the strap or band and the portion 37 of the strap or band is passed beneath the piece or member 5, and in an upward direction into and through the receiving portion 13, then over the piece or member 7 and the

40 13, then over the piece or member 7 and the portion of the strap secured on said member, down through the receiving portion 14 and around the laterally extending piece or member 9, being finally passed in an upward ditection into and through the receiving portion 15, so that the parts will be arranged in the relative positions shown in Figs. 2 and 3 of the drawings, to provide a looped end for the strap or band 1 with which the device or element 2 is positively, and at the same time adjustably connected, so that the looped end may be made larger or smaller, as will be

clearly evident.

To attach the fastener or retaining device 3
to the opposite end-portion 37 of the strap or band 1, said end-portion is made with a slit or opening 38, as shown in Fig. 3 of the drawings, which is passed over the shank 17 and the pieces or members 19, 28, 23 and 27, 60 being finally arranged in its held position upon the member or piece 22, substantially as indicated. The portion 39 of the strap or band is then passed over the piece or member 23 in a downward direction into and through 65 the receiving portion 33, the strap or band

being formed with a looped portion 40 which is then passed in an upward direction into and through the receiving portion 31, and over and around the piece or member 21, the strap or band-portion being passed in a down-70 ward direction through a receiving portion 30, as at 41, and then laid in the form of a loop 42 about the previously mentioned looped portion 40. At 43 the band or strap portion is turned in an upward direction and 75 passed through the receiving opening 33, a part 44 being formed which turns in a downward direction at 45 into and through the receiving portion 30, and is then arranged upon the lower surface of the piece or member 20, 80 from which it passes in an upward direction through the receiving portion 29 and over the end-piece or member 18, as clearly illustrated in said Figs. 2 and 3 of the drawings. In this manner the fastening or retaining de- 85 vice is securely held in its adjustable relation with the doubled looped end-portion of the strap or band as will be clearly evident, and a pair of devices or elements 2 and 3 have been provided which are of great utility and bene- 90 fit in harness construction, especially for the purposes of providing shaft tugs with the usual looped end-portions, or for producing other looped portions of the various straps or bands used in the construction of harness, or 95 garment or hose supporters.

From the foregoing description of the present invention, it will be clearly seen that a simple construction of holding or retaining device or element usually and preferably 100 made from wire has been produced, which may be used in connection with the straps or bands of the various kinds, no matter for what use they are intended, the holding or coupling or connecting devices or elements 105 being easily secured in position, without having to be sewed on or riveted fast, and the devices, being held by their frictional contact with the faces of the strap or band, and being especially adapted for use in the various 110 arrangements of the straps or bands employed in the construction of harness.

I claim:

1. A fastening or retaining device for straps and the like, consisting of a frame-like 115 structure comprised of laterally extending members, alternately connected with longitudinally extending side-members, all arranged to provide a series of loop-shaped receiving portions in which parts of a strap are 120 adapted to be inserted and arranged in frictional engagement with the laterally extending members, and a longitudinally extending shank at one end of said frame-like structure for the insertion in an opening formed in the 125 end-portion of the strap, whereby said endportion of the strap may be slid upon one of said laterally extending members, substantially as and for the purposes set forth.

2. A fastening or retaining device for straps 130

and the like, consisting of a frame-like structure comprised of laterally extending members, alternately connected with longitudinally extending side-members, all arranged to 5 provide a series of loop-shaped receiving portions in which parts of a strap are adapted to be inserted and arranged infrictional engagement with the laterally extending members, and a longitudinally extending shank at each end 10 of said frame-like structure for the insertion of one of said shanks in an opening formed in the end-portion of the strap, whereby said end-portion of the strap may be slid upon one of said laterally extending members, sub-15 stantially as and for the purposes set forth. 3. A fastening or retaining device for

straps and the like, consisting of a frame-like

structure made of wire, said structure comprising a pair of end-members, a series of intermediately arranged and laterally ex- 20 tending members, a series of longitudinally extending side-members, and an inwardly extending shank at the free end of each sidemember, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand

this 27th day of March, 1907.

BEATRICE DOANE CRAIG, Administratrix.

Witnesses:
FREDK. C. FRAENTZEL,
ANNA H. ALTER.