D. C. EVANS.
GARTER ATTACHMENT.
APPLICATION FILED DEC. 12, 1917.

1,354,095.

Patented Sept. 28, 1920.

Fig. 1.

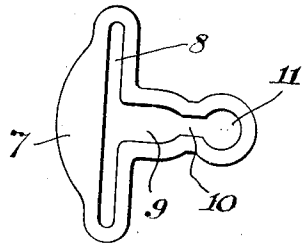


Fig. 2.

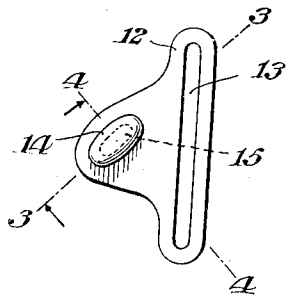


Fig. 3.

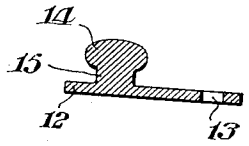


Fig. 4.

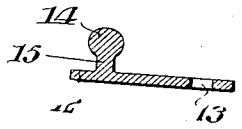


Fig. 5.

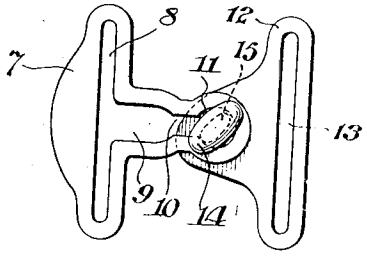
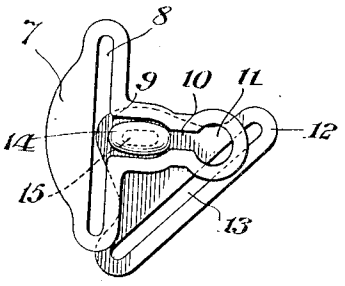


Fig. 6.



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UNITED STATES PATENT OFFICE.

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GARTER ATTACHMENT.

1,354,095. Specification of Letters Patent. Patented Sept. 28, 1920.

Application filed December 12, 1917. Serial No. 206,738.

To all whom it may concern:

Be it known that I, DAVID C. EVANS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton, State of Ohio, have invented a new and useful Garter Attachment, of which the following is a specification.

My invention relates to garter attachments. The object is to provide improved means for disengageably attaching the free end of the leg-band to an intermediate part of the garter. The special purpose is to provide means for preventing accidental disengagement of the parts without unduly adding to the difficulty of arbitrary engagement and disengagement.

Referring to the drawings, which illustrate merely by way of example a suitable embodiment of my invention:—

Figure 1 is a plan view of one of the attachment elements made in accordance with my invention.

Fig. 2 is a similar view of the other coöperating attachment element.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a section on line 4—4 of Fig. 2.

Fig. 5 is a plan view showing the parts in final coöperating position.

Fig. 6 is a similar view showing the parts in such relative position that they may be separated one from the other, or from which they may be brought into operative position as shown in Fig. 5.

Similar numerals refer to similar parts throughout the several views.

Referring especially to Fig. 1, the loop member 7 is provided with the usual slot 8 for receiving the web of the garter. This loop member is provided with the opening 9, the contracted channel 10 communicating therewith and the substantially circular opening 11 communicating with the channel 10. Opening 11 it will be noted is smaller than opening 9.

The other coöperating attachment element 12, as shown in Fig. 2, is provided with the usual slot 13 for the securing threads or stitches. This element 12 is also provided with the stud having preferably an oval or spheroidal head 14. This stud is mounted on a flattened stem 15; the lesser dimension of the stem being slightly less than the width of the channel 10 of element 7. The greater dimension of the stem is approximately that of the diameter of the opening 11 of element 7. The head 14 is substantially greater in dimension than said diameter of the opening 11 of element 7.

In operation—the elements are assembled by inserting the head 14 of element 12 through opening 9 of element 7 and with the elements in relative position approximately at an angle of 45 degrees, the narrow portion of stem 15 will pass through channel 10 into opening 11, whereupon the two elements will assume the position shown in Fig. 5 in response to the pull of the garter.

In disengaging, the elements must be brought into relative position at approximately an angle of 45 degrees, and the stem 15 with its narrow dimensions registering with the channel 10, may be pushed through the channel into opening 9, when the head 14 is withdrawn therefrom. It will be noted that three distinct operations are required for disengaging the parts, first; turning them relatively so that the stem will pass through the channel 10, second; pushing the stem through the channel 10 into opening 9; third, then withdrawing the head 14 from the opening 9 and vice versa.

While these three operations are readily and almost automatically performed when it is desired to cause the arbitrary separation of the elements, yet these three consecutive movements are not likely to occur accidentally. Thus we have an extremely simple and easily operated device, with the minimum liability of accidental disengagement.

It will be noted that the oval or spheroidal head 14 has its longitudinal extension corresponding with the longitudinal extension or greater dimension of the stem 15. One of the advantages of this construction is that when the element 12 has been turned into the proper angular relationship with respect to element 7, to permit the insertion of the head 14 through the opening 9, the narrower dimension of the stem will be presented to the channel 10, so that the parts may be brought into final position. Or again, when the elements are in operative position as shown in Fig. 5, and it is desired to disengage the same, 12 must be turned into an angular relationship with element 7 to permit the flattened stem to pass

through channel 10, from opening 11 to opening 9. In this angular relationship the head will be in proper position to be withdrawn from opening 9. In other words, the corresponding shapes of the head and flattened stem, afford a visual indication for assisting in the arbitrary engagement and disengagement of the parts.

The spheroidal formation of the head also obviously facilitates in the manipulation of the parts.

What I claim is:—

1. A garter attachment for disengageably connecting the leg band, comprising a stud-carrying element provided with an oval head having a flattened stem mounted thereon, and a coöperating element having an elongated opening for receiving the head and a circular opening spaced therefrom, but connected therewith by a contracted channel for permitting the passage of the flattened stem to the circular opening, the circular opening having a diameter corresponding substantially to the greater dimension of the flattened stem, the respective longitudinal axes of the elongated opening and of the head and its stem being at an angle with each other when the parts are in operative locking position in order that, to disengage the members, the elements must first be arbitrarily moved to bring said axes into alinement, so that the flattened stem may be moved through the channel from the circular opening into the elongated opening.

2. A garter attachment for disengageably connecting the leg band, comprising a stud-carrying element provided with a spheroidal head having a flattened stem mounted thereon, and a coöperating element having an elongated aperture for receiving the head and a circular aperture spaced therefrom, but connected therewith by a contracted channel for permitting the passage of the flattened stem to the circular aperture, the circular opening having a diameter corresponding substantially to the greater dimension of the flattened stem, the respective longitudinal axes of the elongated aperture and of the head being at an angle with each other when the parts are in operative locking position.

3. A garter attachment for disengageably connecting the leg band, comprising a stud-carrying element provided with a spheroidal head having a flattened stem mounted thereon, and a coöperating element having an elongated opening for receiving the head and a circular opening spaced therefrom, but connected therewith by a contracted channel for permitting the passage of the flattened stem to the circular opening, the circular opening having a diameter corresponding substantially to the greater dimension of the flattened stem, the respective longitudinal axes of the elongated opening and of the head being inclined to each other at an angle of approximately forty-five degrees when the parts are in operative locking position.

DAVID C. EVANS.