

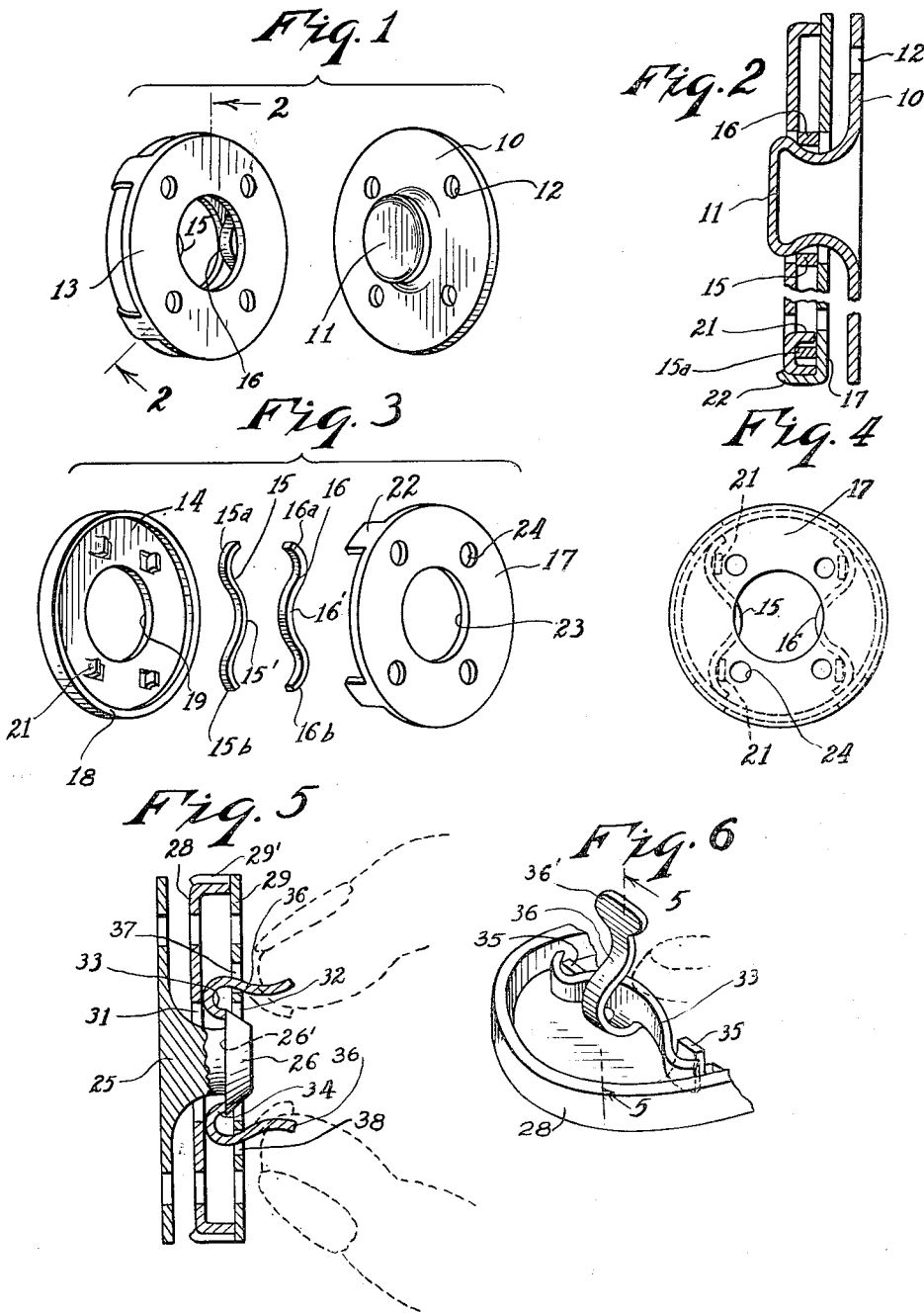
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SAFETY SNAP

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SAFETY SNAP

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1 Claim. (Cl. 24-211)

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This invention relates to safety snap.

It is an object of the present invention to provide a safety snap which is so constructed to fit under a piece of clothing or cloth and with a cooperating element which will contain the first snap element and the cloth, whereby to secure the two elements and the cloth portions together.

It is another object to provide a safety snap device for use on clothing and to eliminate the use of the standard safety pin which has a pointed end.

Other objects of the invention are to provide a safety snap arrangement adapted to contain clothing or cloth which is of simple construction, inexpensive to manufacture, has a minimum number of parts, and is compact, easy to operate and convenient to use.

For a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a collective and perspective view of the two elements forming the safety snap designed according to one form of the invention.

Fig. 2 is a sectional view taken on line 2-2 of Fig. 1 with the parts in assembled relationship.

Fig. 3 is a collective view of the several parts of the fastener separated from one another and shown in perspective, the spring elements being separated and released from the projections of the one part.

Fig. 4 is a top planned view of the one part containing the spring elements.

Fig. 5 is an enlarged vertical sectional view of a safety snap according to another form of the invention, wherein projections of the springs are provided to effect the release of the parts.

Fig. 6 is a fragmentary perspective view of the spring assembly part with a section thereof removed to show the spring with its projection in full perspective.

Referring now particularly to Figs. 1, 2, 3 and 4, 10 represents one of the snap elements which has a central projection or protrusion 11 over which the cloth is placed. This element may have a plurality of small holes 12 for the purpose of attaching it to a garment by means of the passage of thread through the holes and to the garment material.

A second element 13 is formed of an assembly of a backing part 14, opposing springs 15 and 16, and a cover part 17. The backing part has an upstanding peripheral flange 18 and a central opening 19. Also, struck upwardly from within

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the part are a plurality of struck up portions or tabs 21 arranged in pairs and each pair adapted to receive and retain either a spring 15 or a spring 16. The spring 15 has an intermediate portion 15' and two end portions 15a and 15b formed of a reverse curve from the intermediate portion 15'. The spring element 16 has an intermediate portion 16' and reverse curved end portions 16a and 16b. These spring elements are fitted into the part 14 outwardly of the struck in tabs in the manner as shown in Fig. 4. The intermediate portions will extend inwardly beyond the edge of the hole 19.

The part 17 of the assembly 13 has tabs 22 angularly spaced from one another and these tabs extend about the flange 18 of the part or member 14. These tabs will lock the parts 14 and 17 together. This member 17 has a hole 23 equal in size to the hole 19 of the member 14. Small holes 24 are provided in the part 17 by which the assembly can be fixed by means of thread to a garment or cloth material.

It will be seen that the springs are located in the base part 14 and are centered in position by the struck portions 21 and the flange 18. Part 17 is placed over the part 14 and held in assembled position by bending the tabs.

The head of the member 10 is pushed into the openings 19 and 23 of the respective parts 14 and 17 and will press outwardly the springs 15 and 16 and the intermediate portions 15' and 16' of the respective springs will retain the head 11 of the member 10. When the pressure on the spring is released the springs return to their original positions. As the head 11 is pulled from the assembly, a similar deflection of the springs 15 and 16 is made. The holes 19 and 23 are sufficiently large so that a cloth can be projected through the same by means of the head 11.

The arrangement is particularly adaptable for connecting together the ends of diapers and similar cloth material. The arrangement will get away from the safety pins which are ordinarily used on babies' diapers and provide a more safe means.

Referring now more particularly to Figs. 5 and 6, there is shown an arrangement wherein the springs can be levered in such a manner as to be easily released from the head and without having to force the parts of the fastener assembly from each other. According to this form of the invention there is provided a body member 25 having a head 26 with a sharp shoulder 26'. The assembly, including a part 28 and a part 29, held together by tabs 29' and which respectively have

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openings 31 and 32 to receive the head 26. These openings 31 and 32 are sufficiently large to receive a cloth with the heading 26.

Special spring elements 33 and 34 are used. These spring elements are held by projections 35 struck inwardly from the flanged member 28. Each spring element has an intermediate portion and reverse curve end portions which are attached to the tabs 35. On the intermediate portion of each spring element is a handle projection 36 which has an enlarged end 36' and which can be levered to pull in the intermediate portion of the spring and to release the head 26. The handle projection 36 extends through diametrically-spaced holes 37 and 38 in the part 29 and can pivot against the sides of the holes. By grasping the two projections 36 which extend outwardly from the springs 33 and 34, the intermediate portions of the springs will be levered from the shoulder 26'. This will release the head 26 and permit the members to be disengaged from one another. As soon as the handle projections 36 are released, the springs will assume their original shapes and prepare the same for the next insertion of the head 26. It will thus be apparent that the parts can be more quickly severed from one another by a simple squeezing together of the handle projections 36.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the appended claim.

We claim:

A snap fastener assembly comprising a body member having an enlarged central head projecting therefrom, said central head having a peripheral shoulder, an assembly adapted to receive said head and comprising two parts fastened together, one of said parts having inwardly-extending projections arranged in pairs spaced apart from one another, opposing spring elements, each of said spring elements having a

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bowed intermediate portion adapted to engage the peripheral shoulder of the central head of the body member and reversely bowed end portions, said pairs of projections of the one part receiving the reversely bent end portions of the respective spring elements, said body member further having a peripheral flange and the reversely bowed end portions of the spring elements being confined between the flange and the projections, the other part being fastened to the one part and confining said spring elements therebetween, said assembly parts having registered central openings for receiving the head of the body member, the intermediate portions of the respective spring elements extending inwardly of the periphery of the registered central opening, said one part having diametrically spaced holes disposed respectively at the opposite sides of the central opening of the other part and each of said spring elements having forwardly-extending projections extending respectively through said diametrically spaced holes and operable when levered radially inwardly on the sides of said holes to release the springs from the peripheral shoulder of the central head whereby upon squeezing together said handle projections the assembly may be quickly and easily separated from the body member.

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