My invention aims to provide improvements in snap fastener slide sockets.

In the drawing which illustrates a preferred embodiment of my invention:

Figure 1 is a plan view of a portion of a strap installation showing the use of my improved socket;

Fig. 2 is an enlarged section taken on the line 2—2 of Figure 1, the stud member of the installation being shown in elevation;

Fig. 3 is a top plan view of the socket member; and

Fig. 4 is a bottom plan view of the socket member.

Referring to the specific embodiment of my invention illustrated by the drawing, I have shown separable snap fastening means particularly, though not exclusively, for use on gloves, overshoes and other articles of wearing apparel having a strap element. My improved socket member is adapted to be attached to one end of the strap element and is slidable relative thereto to adjust it for fastening engagement with a cooperating stud, usually fixed. In the drawing the socket member 1 is attached to a strap 2 and the stud member 3 is attached to a carrying medium 4 which is illustrated as being in the form of a strap portion.

My improved socket 1 is pressed from a single piece of metal and has a plate portion from which is pressed a tubular boss 5 extending first upwardly from the plate portion (Fig. 2) and then curving outwardly and passing through the plate portion so that one portion of the boss is located at one side of the plate while the other portion is located at the opposite side. This is to give additional length to the boss without having it extend too far at either side of the plate portion. The boss is open at its free end and is turned inwardly upon itself at that end to provide a neck-engaging portion 6 for snap fastening engagement with the stud 3. The boss 5 is preferably divided by slits 7 throughout its length into an equal number of portions which are adapted to expand and contract when being engaged with or disengaged from the stud 3.

Strap-receiving slots 8 are provided at opposite sides of the boss 5 in the plate portion. The strap 2 passes through one of the slots and over the boss 5 and through the other slot 8, thereby securing the socket in slidable engagement with the strap. The prongs 9 provide the usual means for preventing accidental sliding movement of the socket relative to the strap.

It has been found that yieldable boss portions on slidable sockets are apt to become distorted and set during use, especially when lateral stress is exerted upon the boss portion when it is attached to the stud. To overcome this, I provide a simple and efficient means which prevents over-expansion and distortion of the boss in the direction that the stress is normally applied. Therefore, I have formed the slits 7 at 45 degree angles relative to a line passing longitudinally through the plate of the socket. In this manner I provide symmetrical yieldable portions of the boss adjacent to each of the strap-receiving slots 8. The means which prevents overexpansion is in the form of an ear 10 formed from the material cut out to provide the slot 8 between the prongs 9, as best illustrated in Figs. 2 and 4. This ear 10 is bent inwardly underneath the plate and has its end terminating in a slightly spaced relation to the free end of the boss so that when that portion of the boss adjacent to the free end is moved laterally during a tendency for overexpansion it will engage the ear. Thus when the stud and socket are under lateral stresses in normal use the ear 10 will prevent overexpansion of that portion of the boss adjacent thereto. In the particular device illustrated I have shown a second ear 11 formed from the material of the other slot 8 and bent inwardly in the same manner as the ear 10 so that care need not be exercised in the matter of attaching the socket to the strap. In other words, if two ears are provided either end of the socket may be toward the free end of the strap. At a matter of fact, only one ear is necessary if the socket is attached in the correct manner to the strap because stress is exerted in one direction only in the strap type of installation.

My invention is particularly desirable because it is strong, durable and the entire socket unit is formed in a simple manner from a single piece of sheet metal.

While I have illustrated and described a preferred embodiment of my invention, I do not wish to be limited thereby; because the scope of my invention is best defined by the following claims.

I claim:

1. A slide fastener socket having a plate portion, a boss extending from said plate portion for engagement with a cooperating fastener stud, said boss being divided by a number of slits to permit expansion and contraction thereof, said plate portion having strap-receiving slots provided at opposite sides of said boss and an abutment means carried by said plate portion and located...
between one strap-receiving slot and one portion of said boss for contact therewith to prevent overexpansion thereof when lateral stress is exerted upon said boss toward said abutment means.

2. A slide fastener socket having a plate portion, a boss extending from said plate portion for engagement with a cooperating fastener stud, said boss being divided by a number of slits to permit expansion and contraction thereof, said plate portion having strap-receiving slots located at opposite sides of said boss and an ear formed from the material cut out to form one of said slots, said ear being bent toward and terminating adjacent to one of the expansible portions of said boss thereby to prevent overexpansion thereof when lateral stress is exerted upon said boss toward said ear.

3. A slide fastener socket having a plate portion, an integral boss extending from said plate portion for engagement with a cooperating fastener stud, said boss being divided by a number of slits which permit expansion and contraction thereof, said plate portion having strap-receiving slots located at opposite sides of said boss and an integral abutment portion formed as an integral part of said fastener socket and being located between one strap-receiving slot and one portion of said boss for contact therewith to prevent overexpansion thereof when lateral stress is exerted upon said boss toward said abutment portion.

4. A slide fastener socket having a plate portion, an integral boss extending from said plate portion for engagement with a cooperating fastener stud, said boss being divided into a number of equal parts circumferentially by longitudinal slits thereby to permit expansion and contraction of the boss at all sides, said plate portion having strap-receiving slots located at opposite sides of said boss and an ear formed from the material cut out to form one of said slots, said ear being bent toward and terminating adjacent to one of the expansible portions of said boss thereby to prevent overexpansion thereof when lateral stress is exerted upon said boss toward said ear.

5. A slide fastener socket having a plate portion, an integral boss extending from said plate portion for engagement with a cooperating fastener stud, said boss being divided into a number of equal parts circumferentially by longitudinal slits thereby to permit expansion and contraction of the boss at all sides, said plate portion having strap-receiving slots located at opposite sides of said boss and an ear formed from the material cut out to form one of said slots, said ear being bent toward and terminating adjacent to one of the expansible portions of said boss thereby to prevent overexpansion thereof when lateral stress is exerted upon said boss toward said ear and a second ear formed from the material of the other slot and extending toward and terminating adjacent to another expansible portion of the boss whereby said socket may be attached to either end of a strap.

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