No. 885,434. PATENTED APR. 21, 1908.

F. S. CARR.

ATTACHING MEANS FOR FASTENING MEMBERS.

APPLICATION FILED JUNE 13, 1907.

Fig. 1.

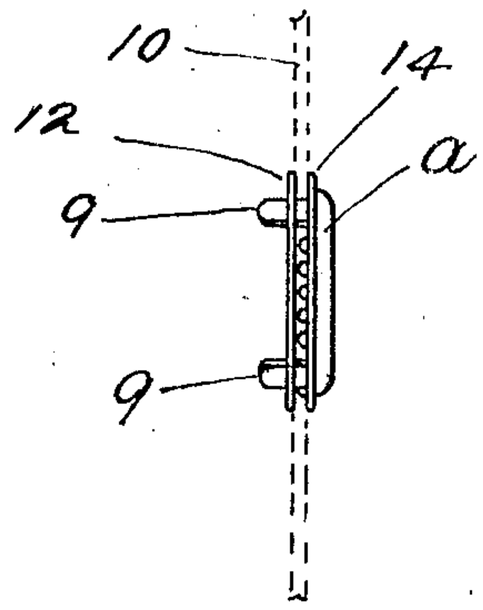


Fig. 2.

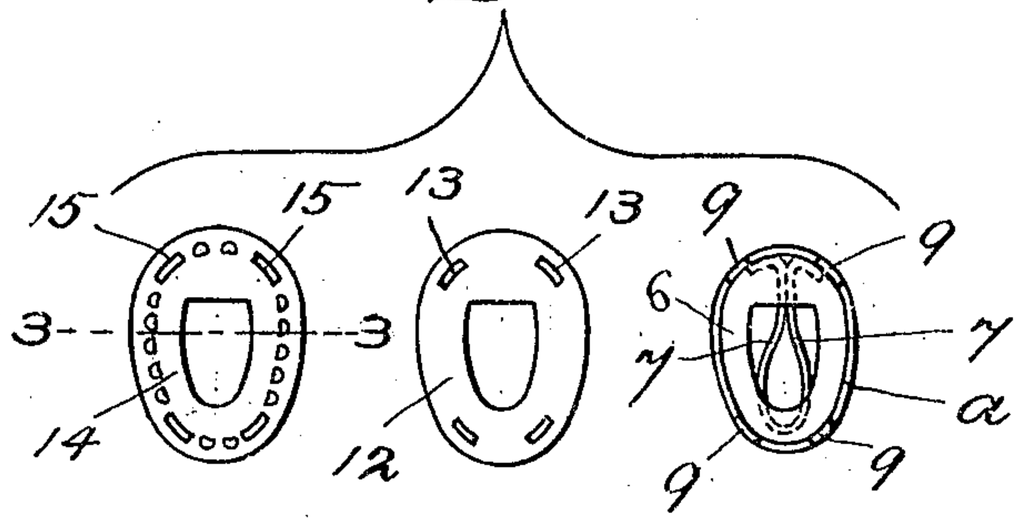


Fig. 3.

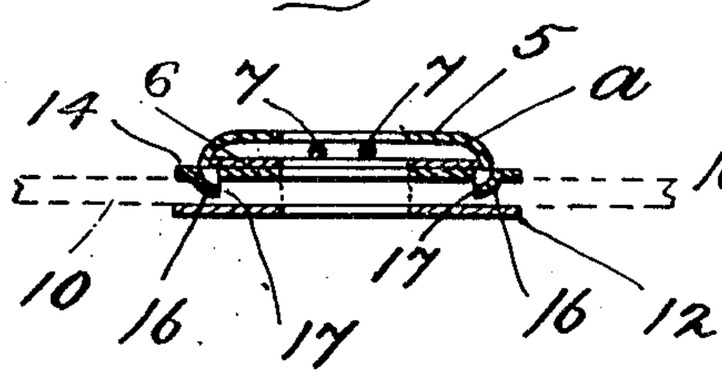


Fig. 4.

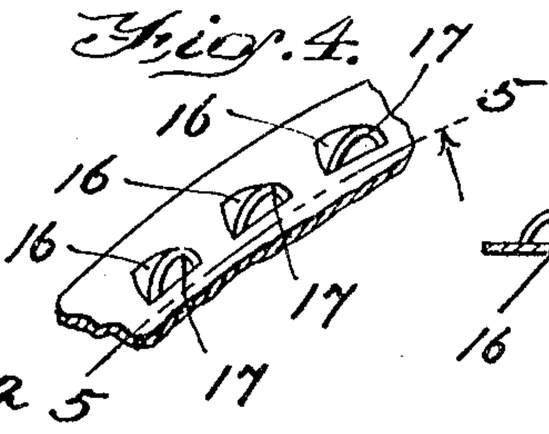


Fig. 5.

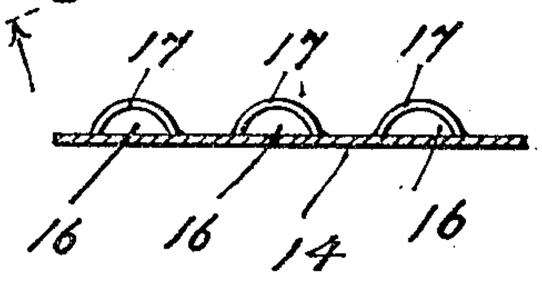
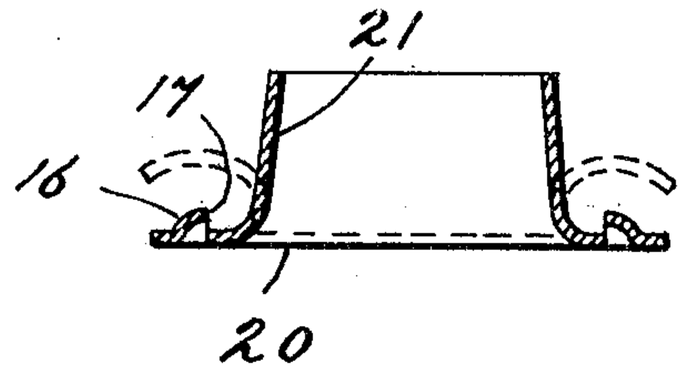


Fig. 6



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UNITED STATES PATENT OFFICE.

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ATTACHING MEANS FOR FASTENING MEMBERS.

No. 885,434. Specification of Letters Patent. Patented April 21, 1908.

Application filed June 13, 1907. Serial No. 378,754.

To all whom it may concern:

Be it known that I, FRED S. CARR, of Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Attaching Means for Fastening Members, of which the following is a specification.

This invention relates to fastening members which are adapted to be applied to flexible articles, such as carriage curtains, gloves, etc.

The invention is applicable to fastening members of various kinds, such as a socket member adapted to engage a complemental stud member, or an eyelet adapted to engage a cord or lacing.

The invention has for its object to provide improved means for clamping a fastening member to a piece of cloth or other flexible material, in such manner that the said flexible material will be firmly engaged at a number of points, and prevented from being pulled outwardly from its proper engagement with the fastening member.

The invention consists in a fastening member having a sheet metal clamping part adapted to bear on one side of the article to which the member is to be attached, and provided with offset portions which are integral with the said clamping part and project therefrom to engage the portion of the article to which the member is applied, the material of each offset portion being detached at one edge from the part on which it is formed, to form elongated non-penetrating jaws adapted to engage the article by biting or indenting without penetrating it, and arranged to face inwardly and prevent outward displacement of the portion of the article on which the clamping part bears, the member being provided with a complemental clamping part adapted to hold the article in engagement with the said jaws.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents an edge view of a socket fastening member having a clamping part embodying my invention. Fig. 2 represents the inner sides of the parts of the fastening member shown in Fig. 1, said parts being separated. Fig. 3 represents an enlarged section on line 3—3 of Fig. 2. Fig. 4 represents a perspective view of a portion of the clamp part having jaws formed in accordance with my invention. Fig. 5 represents a section on line 5—5 of Fig. 4, looking toward the left. Fig. 6 represents a sectional view on an enlarged scale of an eyelet, the setting flange of which is provided with jaws in accordance with my invention.

The same letters of reference indicate the same parts in all the figures.

Referring first to Figs. 1, 2, 3, and 4, which illustrate a socket fastening member adapted for application to a carriage curtain, *a* represents the body portion of the socket member, which, as here shown, is composed of an outer plate 5 and an inner plate 6, said plates being rigidly connected in any suitable way to form a casing, in which are located two resilient wire jaws 7 7 adapted to grasp a hooked stud member which is insertible in orifices 8 formed in the front and back plates of the casing. The said socket member is or may be constructed substantially as shown in Letters Patent of the United States No. 803,468, dated October 31, 1905. The body portion *a* is provided with flexible inwardly-projecting prongs 9, which are adapted to penetrate the flexible curtain 10 or other article to which the fastening member is to be applied, said prongs being bent inwardly at their inner ends against a flat plate or washer 12 placed against the inner side of the curtain to secure the fastening member to the curtain. The plate 12 is provided with slots 13 to receive the prongs 9.

In carrying out the embodiment of my invention shown in Figs. 1, 2, 3, and 4, I provide a clamping part 14, which is an additional plate of the same form as the plate 12, and is provided with slots 15 to receive the prongs 9. On the plate 14 are formed a series of offset portions 16 by forming a series of slits or cuts in the material of the plate 14 at intervals and forcing the material at one side of the cuts outwardly from one side of the plate, each offset portion having a thin edge 17 which constitutes an elongated non-penetrating jaw 17, at one side of the body of the plate, and are preferably of the arched form shown in Figs. 4 and 5. Each of the jaws 17 stands in a plane substantially at right angles to the side of the plate 14 from which it projects, and the jaws all face inwardly toward the center of the plate, as shown in Figs. 2 and 3. The plate 14 is placed upon the prongs 9, and in contact with the inner side of the body *a* of the casing, the jaws 17 projecting from the inner side of the

plate, and engaging one side of the sheet 10, by biting or indenting without penetrating the same. The back plate or washer 12 is then placed upon the prongs 9 engaging the opposite side of the sheet 10. After this the prongs are bent inwardly to press the plate 12 against the sheet, and to force the sheet into firm engagement with the jaws 17. The described inwardly-facing arrangement of the jaws causes them to indent and firmly engage the sheet, and prevent it from being pulled outwardly in any direction from the center of the plate; at the same time the jaws are free from sharp points adapted to penetrate the sheet, so that the latter is clamped or gripped between the plates 14 and 12 without being punctured or penetrated. I wish to draw a distinction between the elongated curved jaws 17 arranged substantially at right angles with the side of the plate from which they project and facing inwardly toward the center of the plate and adapted to bite or grasp the fabric without penetrating it and conical bosses or projections and other penetrating prongs which have heretofore been used upon a clamping part to penetrate the sheet to which the clamping part is applied. Such penetrating bosses or prongs do not have elongated gripping edges similar to those presented by the non-penetrating jaws 17, and therefore do not exert the strong and non-injurious hold upon the fabric that is exerted by the said jaws. On the other hand, the said penetrating bosses or prongs rupture the fabric and render it comparatively easy for the fabric to tear away when strain exerted outwardly from the center of the clamping part is exerted on the fabric.

In Fig. 6 I show another embodiment of my invention, in which the offset portions 16 having the elongated jaws 17, are formed on the setting flange 20 of an eyelet. 21 represents the barrel or tube of the eyelet, which is adapted to be upset or spread over the flange 20 and jaws 17, as indicated by dotted lines in Fig. 6. The barrel when thus spread, constitutes a complemental clamping part which coöperates with the flange 20 and jaws 17 in gripping the material into which the eyelet is inserted. The jaws may be formed with a slight inward inclination toward the center of the member, or in other words, they may be slightly hooked to give a very firm hold on the materials. When the jaws are employed in conjunction with prongs 9 which penetrate the material, they prevent liability of the material tearing away from the prongs.

I claim:

A fastening member having a sheet-metal clamping part adapted to bear on one side of the article to which the member is to be attached, and provided with a series of cuts and with offset portions, each including one edge of one of the cuts, said edges being raised above the clamping part, and constituting inwardly facing elongated jaws adapted to engage and prevent outward displacement of the portion of the article on which the clamping part bears, the said member being provided with a complemental clamping part.

In testimony whereof I have affixed my signature, in presence of two witnesses.

FRED S. CARR.

Witnesses:
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