Dec. 30, 1924.

1,521,157

G. A. KING ET AL

CARPET FASTENER

Filed April 10, 1924

Fig. 1.

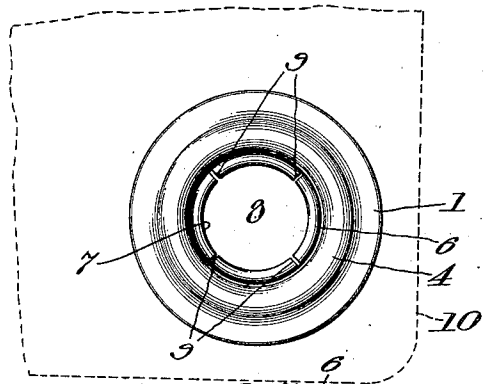
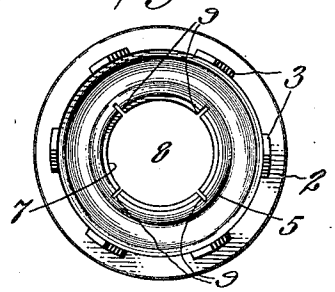


Fig. 4.

Fig. 2.



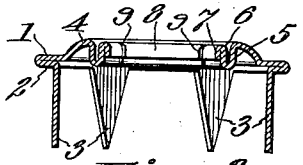


Fig. 3.

Fig. 5.

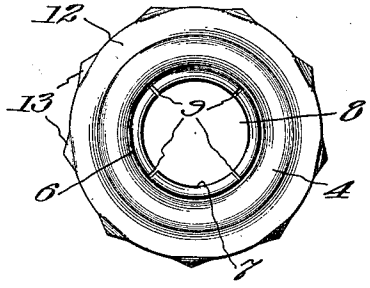
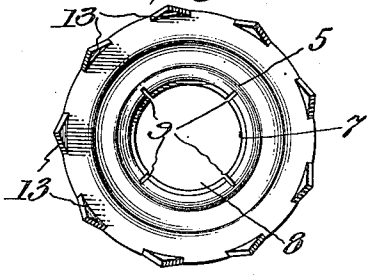


Fig. 6.



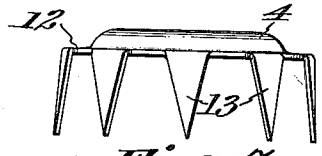


Fig. 7.

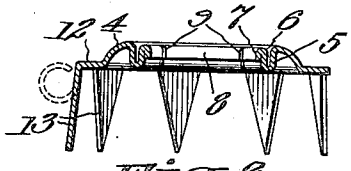


Fig. 8.

Inventors:
George A. King
Ernest D. Simons
by
Wm. F. Finckel
Attorney.

Patented Dec. 30, 1924. 1,521,157

UNITED STATES PATENT OFFICE.

GEORGE A. KING, OF WATERBURY, AND ERNEST D. SIMONS, OF CHESHIRE, CONNECTICUT, ASSIGNORS TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

CARPET FASTENER.

Application filed April 10, 1924. Serial No. 705,656.

To all whom it may concern:

Be it known that we, GEORGE A. KING and ERNEST D. SIMONS, citizens of the United States, residing, respectively, at Waterbury and Cheshire, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Carpet Fasteners, of which the following is a full, clear, and exact description.

The object of this invention is to provide an improved socket member of a snap fastener for use especially on carpets or rugs, for securing the carpets or rugs in a smooth and effective way on floors, although the fastener is capable of use for other purposes or on other articles.

The invention consists of a socket member, having a relatively extended lateral base flange provided with attaching prongs and a central stud-engaging opening, preferably made resilient, the whole being made in one piece, as we will proceed now to explain and finally claim.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan view showing in dotted lines a piece of material, such as a floor covering or rug, to which the device is attached. Fig. 2 is an inverted view and Fig. 3 is a cross-section of the fastener detached. Fig. 4 is a cross-section of the parts shown in Fig. 1. Fig. 5 is a plan view illustrating another form of the invention, and Fig. 6 is an inverted view, Fig. 7 is an elevation and Fig. 8 is a cross-section of said modification.

Referring to the construction shown in Figs. 1 to 4, the flange 1 has its rim 2 turned in or rolled over, that is to say, reverted, and from the periphery of said inturned rim extend a number of prongs 3 normal thereto by which the device is attachable to an object, such as a carpet or rug. Inwardly from the flange is a domed or raised portion 4 which is perforated centrally. The material of the dome is reverted at 5 and then inverted, as at 6, and its terminal or free end is rolled down as at 7 to form a rim for the previously mentioned central perforation or opening now first designated 8, to receive and engage the complemental member of the fastener, namely, the head or stud member, which may be of any usual or approved kind. The raised folded parts 5, 6 and 7 on the dome supply a reinforced stud engaging element, and being located on the dome are at the proper elevation to receive and securely engage the stud member. The folded parts 6 and 7 are located below the outer plane of the raised portion 4, and thus said raised portion serves to take the weight of persons treading on the socket member, and hence the parts 6 and 7 are protected from injury by such treading.

If the stud member is of the rigid or non-resilient type, then the stud engaging element of the socket member must be resilient, and it is so shown in the drawings, the resiliency being obtained by slitting the parts 5, 6 and 7 as at 9, so that the segments thus formed yield laterally for the passage, under applied force, of the head of the stud into and out of engagement with the socket. If the stud member is of the resilient type, then the stud engaging element of the socket may be non-resilient, and so made by omitting the slits.

As already stated, one use of the device is as means for detachably securing carpets and rugs to floors, and the invention was particularly designed for securing rugs on the floors of motor vehicles, the socket being attached to the rug and the complemental stud member, usually in the form of a screw stud, being fastened in the floor of the body. As shown in Figs. 1 and 4, the device is attached to the back 10 of the carpet, the prongs being forced through the back and by a suitable tool or other means curled over underneath the flange. When the flange has its rim inturned, the points of the prongs will, in the setting operation, be clinched against the inturned portion, as clearly seen in Fig. 4, so that there will be no unsightly appearance of metal to disfigure the face or pile 11 of the carpet; and inasmuch as the device is in one single piece, the socket may be applied very readily and in a very simple way. This form of the invention lends itself perfectly for use in setting or attaching machines having automatic feeding hoppers.

The form of the invention shown in Figs. 5 to 8 inclusive is the same in construction as that previously described, excepting that

instead of inturning the rim of the flange, it may be left plain as indicated at 12 and the prongs 13 in this case will extend downwardly from the edge of the rim of the flange. This is a useful construction, but lacks the element of symmetrical finish and concealment of the points of the prongs inherent in the first described construction.

In both of these forms of the invention the central perforation or opening is surrounded by a thrice-folded edge or rim which is the active agent for engaging the complemental stud member.

As to both of these constructions, it is to be noted that each is a one piece fastener and hence there is a material increase in the facility of production and a corresponding decrease in the cost. Furthermore, through the contact of the carpet with the flat surface presented by the inturned edge, as shown in Figs. 1 to 4, the possibility of injuring the carpet from its underside, due to cutting or wear, is practically eliminated.

Both devices present a very durable and uniform snap action.

Variations in details of construction are permissible within the principle of the invention herein disclosed and in the claims following.

What we claim is:—

1. A socket member of a snap fastener, having a relatively extended lateral base flange provided with edge prongs and a central stud engaging opening surrounded by a series of infolded walls, the terminal wall being free and serving as the immediate stud engaging element, the whole being made in one piece.

2. A socket member of a snap fastener, having a relatively extended lateral base flange provided with attaching prongs and a central stud engaging opening surrounded by a series of infolded walls, the terminal wall being free and serving as the immediate stud engaging element, the whole being made in one piece, the said infolded walls being slitted and thereby rendering the device resilient.

3. A socket member of a snap fastener, having a relatively extended flat lateral base flange provided with a reverted rim and prongs extending from the inner edge of the rim and adapted to clinch against the reverted rim in setting, and a centrally arranged stud engaging reinforced opening, the whole made in one piece.

4. A socket member of a snap fastener, having a relatively extended flat lateral base flange provided with a reverted rim and prongs extending from the inner edge of the rim and adapted to clinch against the reverted portion of the flange in setting, and a centrally arranged stud engaging reinforced opening, said stud engaging element depending from a dome-shaped portion, the whole made in one piece.

5. A socket member of a snap fastener, having a relatively extended flat lateral flange provided with a reverted rim and prongs extending from the inner edge of the rim and adapted to clinch against the inturned portion in setting, and a dome-shaped portion having a central opening the edge of which is folded and the folded portion slitted.

6. A socket member of a snap fastener, having a relatively extended flat lateral flange provided with a reverted rim and prongs extending from the inner edge of the rim and adapted to clinch against the inturned portion in setting, and a dome-shaped portion having a central opening surrounded by a thrice-folded stud engaging edge made resilient by slitting.

In testimony whereof we have hereunto set our hands this 7th day of April A. D. 1924.

GEORGE A. KING.
ERNEST D. SIMONS.

Witnesses:
WALTER L. WOOD,
HARRIET GOODYEAR.