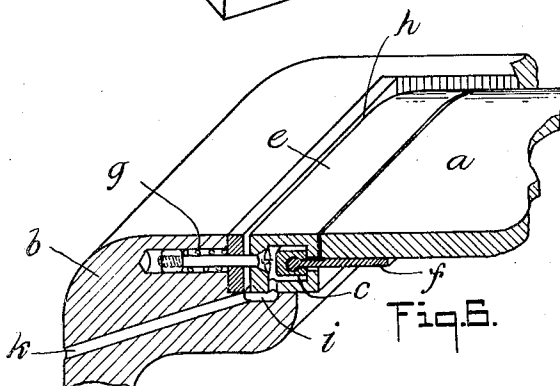
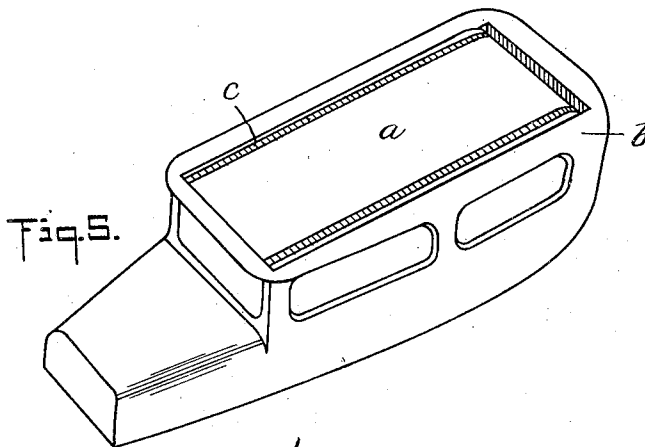
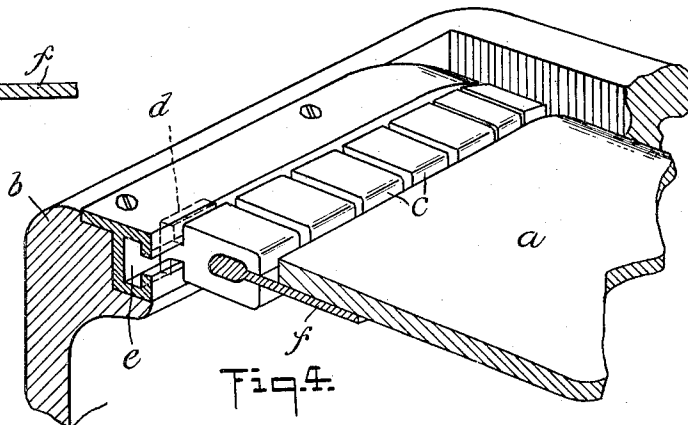
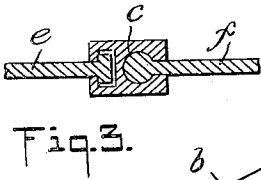
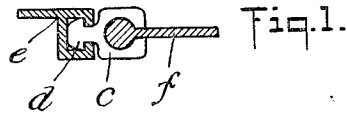
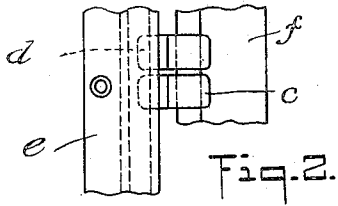


June 18, 1929.

W. T. SMITH
SHUTTER TRACKWAY

1,718,183

Filed Oct. 11, 1928



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UNITED STATES PATENT OFFICE.

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SHUTTER TRACKWAY.

Application filed October 11, 1928, Serial No. 311,745, and in Great Britain October 8, 1927.

This invention relates to flexible shutters, blinds, curtains, awnings, motor saloon car roofs and the like and to fasteners for the same and has for its object to devise an improved construction which will enable the same to be made of textile fabric, leather, rubber or other flexible material while being maintained straight or sufficiently taut to enable them properly to fulfill their functions and at the same time to be moved into a suitably formed recess or wound upon rollers, drums or other rotary members when not required in use.

The invention consists in a fastener for a flexible shutter, blind, curtain, roof or the like comprising a series of jaw or fastener members mounted upon one or each edge of the shutter or the like or upon a tape or the like secured thereto and adapted to be held and slidable within or upon a suitably shaped channel or guide fixed to some convenient part of the structure with which the shutter or the like is to be employed.

The invention also consists in the combination of a piece of fabric, leather, rubber or the like, and a plurality of members fastened along one or both of the longitudinal edges thereof and having projections adapted to slide within or upon a suitably shaped channel or guide.

The invention also consists in a flexible shutter, curtain, blind, roof, or the like fitted with a fastener of the above character.

The invention still further consists in other details and arrangements hereinafter described or indicated.

The accompanying drawings illustrate two modes of carrying out the invention.

Figures 1 and 2 are respectively an elevation and plan of one convenient form of fastener member in accordance with the invention.

Figure 3 shows another convenient form of fastener member in accordance with the invention.

Figure 4 is a fragmentary view showing a motor saloon car roof in part section with a form of fastener and a method of fixing the same in accordance with the invention.

Figure 5 shows on a smaller scale the complete roof of a motor saloon car fitted with fasteners in accordance with the invention.

Figure 6 is a similar view to Figure 4 show-

ing a modification in accordance with the invention.

In carrying my invention into effect in one convenient manner as, for example, in its application to the roof of a motor saloon car and as illustrated in Figures 1 to 4, I form my improved roof from a strip *a* of textile fabric, leather, or other like flexible material of a size and shape depending upon the size and shape of the car body *b* and upon each of the longitudinal edges of the flexible strip I secure a number of jaw or fastener members *c* each of which has a projection *d* thereon of a size and shape to enable the same to be slidable within or upon a metal or other guide or channel *e* (which may be of approximately key-hole, T, or other suitable shape in cross-section) fixed by screws or otherwise to the sides of the car body or any other convenient part of the structure. Each longitudinal edge of the roof material and its corresponding guide or channel thus form parts of a fastener member having mating or interlocking members and the flexible roof may be adapted to enter a suitable recess or to be wound upon a roller, drum or the like (not shown) at one end of the car body, when the roof is not required in use, the drum being spring-controlled or otherwise suitably operated for the purpose of permitting the winding up and unwinding of the roof, it being understood that during such operations the projections *d* upon the members *c* at the edges of the roof material will be slidable within or upon the channels or guides *e* and the proportions may be such that the roofing need never be out of engagement with the channels or guides when wound around the roller, drum, or other rotary member provided for the purpose.

The jaw or fastener members *c* may be fixed directly upon the edges of the roof material or they may be fitted upon a flexible tape or the like *f* which is secured in any suitable manner along the longitudinal edge of the roof, or, if desired, the tape and fastener members or projections thereon may be formed as a continuous tape of flexible material of suitable section.

The channels, guides or fastener members on the framework of the car body or at the sides of the roof or the like may be allowed to

give under spring compression or tension thus allowing for any shrinkage of the material composing the roof, blind or shutter, and when such spring or resilient means are employed I prefer to arrange for the waterproofing of the joint that will necessarily be formed between the fastener member and the body to which it is yieldingly held. Thus, for example, in Figure 6 I have shown an arrangement in which the guide member *e* is under the control of suitable springs *g*, and beneath the joint *h* I provide a drainage channel *i* adapted to catch any water that may leak through the joint or that may pass into the interior of the guide member *e* through drainage openings, as shown in Fig. 6, the trough or channel *i* having one or more outlet passages or openings *k* through which the water collecting therein may escape. Such waterproofing arrangements may be adopted also to take care of any water that may get past the tape at the edge of the blind or the like in those modifications of the invention in which no spring means are provided for compensating for shrinkage.

Each of the jaw or fastener members *c* may be formed with an enlarged head or projection of rectangular, circular or other suitable shape in cross-section and is split at one edge or otherwise suitably formed to enable it to be clamped upon the edge of the tape, or stringer or upon a beaded or enlarged edge of the same, and the invention is to be considered as extending to a tape, stringer, strip or the like of fabric or other flexible material provided with such fasteners independent of any particular purpose for which such tape or the like is to be used or any curtain, blind, roof or other article to which it is to be se-

cured and either by itself or in combination with a suitable channel or guide adapted to co-operate with such jaw or fastener members.

The invention may be applied with equal effect and like advantage in the case of awnings, blinds, shutters and the like, and I may vary the form and construction of mating or interlocking fastener members and the arrangements for taking up the blind or the like when not required in use depending upon the purpose for which the invention is to be applied or any practical requirements that may have to be fulfilled.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a closure device of the character described, a body having an opening therein, a guide member resiliently secured to the body, a flexible closure member, and a plurality of jaws attached to said closure member and slidably mounted in said guide member, said guide member being resiliently secured to allow for the expansion and contraction of the flexible closure member.

2. In a closure device of the character described, a body having an opening therein, a guide member, spring mounted bolts for securing said guide member to said body, a flexible closure member, a plurality of jaws attached to said closure member and slidably mounted in said guide member, said guide member being so secured to allow for the expansion and contraction of the flexible closure member.

In testimony whereof I affix my signature.
WILLIAM TAYLOR SMITH.