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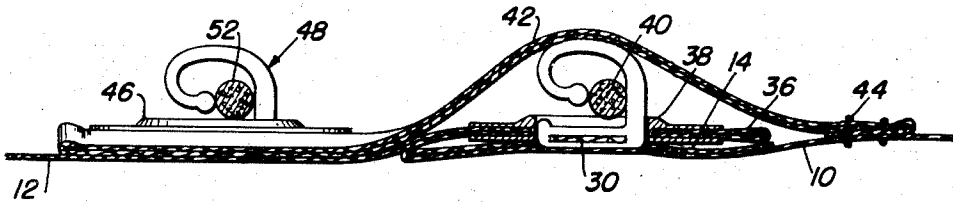
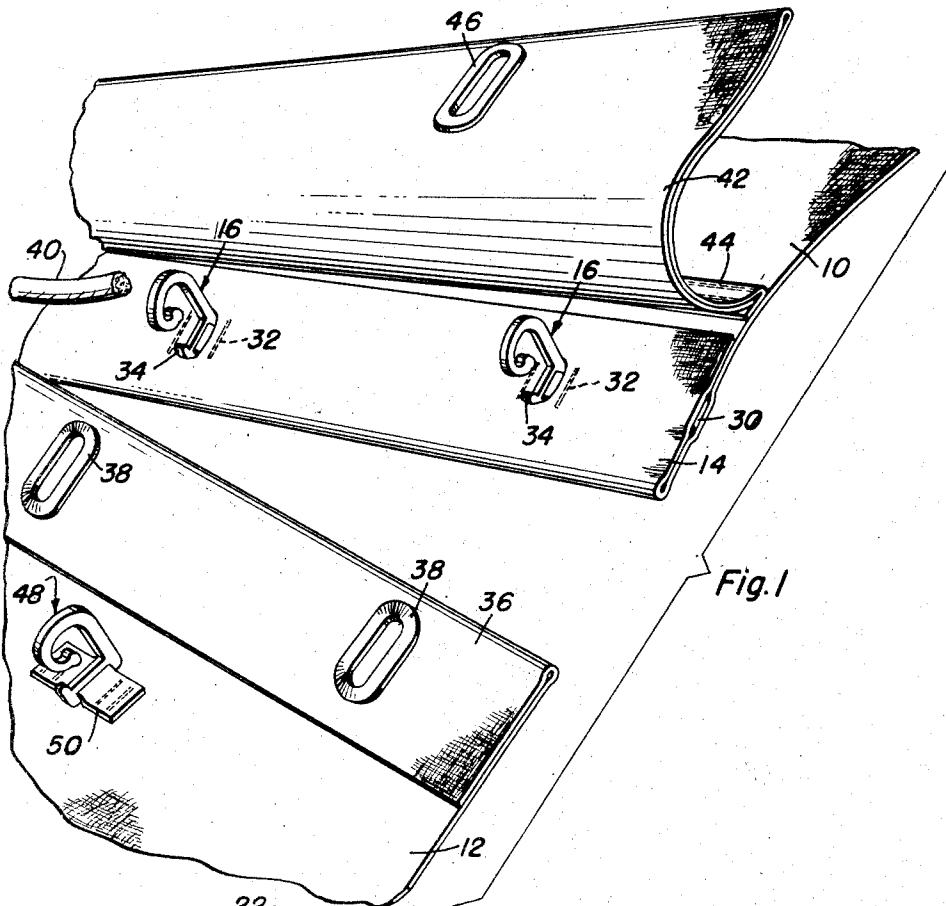
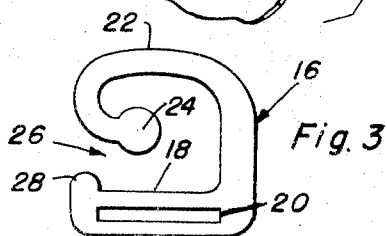
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WEATHERPROOF COVERING CLOSURE FASTENER

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Fig. 2



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WEATHERPROOF COVERING CLOSURE
FASTENER

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1 Claim. (Cl. 24—203)

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This invention relates to new and useful improvements and structural refinements in coverings such as are commonly employed for heavy machinery, guns, tanks and other types of equipment which is being either transported or stored, and in particular, the invention concerns itself with certain structural improvements in closures which are used for connecting together adjacent edges of the covering so as to sustain the same in position.

In accordance with conventional practice, adjacent edges of the covering were laced together in a manner which permitted gaps or openings to remain at the edges, so that, as a result, the covering was by no means weatherproof and wind, moisture, snow, ice, etc. were permitted to enter the covering and cause damage to the contents. Moreover, the penetration of wind through the lacings had a tendency to dislodge the covering from the object on which it was placed, whereby the covering was subjected to a considerable amount of shifting movement, resulting in friction with the enclosed object. This internal friction was of such a magnitude that the covering not only had to be made of substantial weight and durability, but even under the best of conditions, was usually subjected to considerable wear, tearing and other damage, requiring frequent and extensive repairs.

The instant invention eliminates all the above outlined disadvantages by providing a closure which is absolutely weatherproof as against wind, rain, snow, sleet, ice, etc. and which, as such, not only prevents the entry of weather into the cover, but also prevents the cover from shifting on the covered object, thus eliminating internal friction and permitting the cover to be made from relatively lighter material, without impairing its durability.

Some other advantages of the invention reside in its simplicity of construction and in its ability to be quickly and easily closed or opened.

With the above more important objects and features in view, and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a group perspective view, showing adjacent portions of coverings together with the closure in its opened position;

Figure 2 is a sectional detail of the subject shown in Figure 1, but in its closed position, and

Figure 3 is an elevational view of one of the fastener members used in the invention.

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Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the reference characters 10 and 12 designate, respectively, first and second sheets of flexible covering material, such as canvas, or the like, the invention residing in the provision of a weatherproof closure for securing adjacent edges of these sheets together.

The first sheet 10 has an edge portion 14 doubled outwardly upon itself, the term "outwardly" as used herein meaning at or to the outside of the cover when it is installed in position on a tank, gun, machinery, etc.

A plurality of fastener members designated generally by the reference character 16 are affixed at longitudinally spaced points to the first sheet 10, each of the fastener members 16 including a base 18 formed with a slot 20, and an upwardly or outwardly projecting, hook-shaped keeper 22 terminating at its free end in an enlarged extremity 24. The extremity 24 of the keeper 22 is spaced from the base 18 so as to afford a narrow passage 26 communicating with the interior of the hook-shaped keeper, while an upstanding detent 28 is provided on the base 18 adjacent the extremity 24, so as to restrict, to some extent, the passage 26, as is clearly shown in Figure 3.

The bases 18 of the several keepers 16 are disposed between the first sheet 10 and the doubled edge portion 14 of the first sheet, while suitable webbing 30, stitched to the sheet 10 at 32, extends through the slots 20 and thereby sustains the several fastener members 16 in position.

The doubled edge portion 14 of the sheet 10 is provided with suitable openings 34 through which the hook-shaped keepers 22 of the members 16 project outwardly, as is clearly shown in Figure 1.

The second sheet 12 is also provided with an edge portion 36 which is doubled outwardly upon the second sheet, and the sheet 12 as well as the doubled edge portion 36 thereof are provided with a plurality of elongated, eyes 38 which are adapted to receive the keepers 22 when the doubled edge portion of the sheet 12 is overlapped on the doubled edge portion of the sheet 10, as illustrated in Figure 2. Thereupon, a flexible fastening element such as a rope or cable 40 may be inserted laterally through the passages 26 into the hook-shaped keepers 22 of the fastener members 16, whereby to sustain the closure in its secured position. It is to be noted that by virtue of the passages 26, the fastener element 40 may

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be inserted or removed laterally in a highly expeditious manner, thus avoiding the necessity of threading or drawing the fastener element through the fastener members in a longitudinal direction, such as would be necessary if the passages 26 did not exist.

When the fastener element 40 is in the keepers 22, the detents 28 of the keepers prevent the fastener element from being accidentally or unintentionally withdrawn, which function is also assisted by the enlarged extremities 24 of the keepers, as shown.

The closure unit thus described is effectively protected against weather by means of a flap 42 which is stitched or otherwise secured, as at 44, along one edge thereof to the first sheet 10, while the relatively opposite edge portion of the flap 42 is provided with a set of reinforcing eyes 46. These eyes are adapted to receive additional fastener members 48 which are identical in construction to the members 16 and which are secured by relatively short lengths of webbing 50 to the second sheet 12, adjacent the doubled portion 36.

A flexible fastening element 52 is employed in conjunction with the fastener members 48, and it is to be noted that while the fastener members 16 are spaced closely together, perhaps 10 or 12 inches apart, the fastener members 48 are spaced further apart, perhaps five or six feet, since their function is only to sustain the flap 42 in position over the closure, so as to protect the closure from accumulation of moisture or ice, such as would impair opening of the same.

Apart from being protected by the flap 42, the closure means are also protected by the out-turned edge portions 14, 36 of the respective sheets 10, 12 which function as effective pockets for catching any moisture or wind such as may find its way under the protective flap.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction, combina-

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tion and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

In covering of the type described, the combination of a first flexible sheet having an edge portion doubled outwardly upon itself to provide superposed inner and outer layers, the outer layer being provided with an elongated opening having its longitudinal axis at right angles to the doubled edge of the first sheet, a rigid fastener member comprising an elongated base, an inverted J-shaped hook extending upwardly from one end of said base and overlying the same in spaced relation, an enlarged head provided at the free extremity of said hook, and an up-standing detent provided at the other end of the base and spaced from said head to afford a passage connecting with the inside of the hook, the base of said hook being provided with a transverse slot and disposed between the inner and outer layers of the first sheet, a tape secured between said inner and outer layers and extending through said slot to sustain the fastener member in position, said hook and said detent projecting outwardly through said opening above the outer surface of the outer layer, a second sheet superposed on the doubled edge portion of the first sheet and provided with an elongated eye having said hook and said detent projecting outwardly therethrough, and an elongated flexible fastening element extending through said hook exteriorly of the second sheet, said element being greater in thickness than the width of said passage but being flexibly compressible for lateral insertion and withdrawal therethrough.

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