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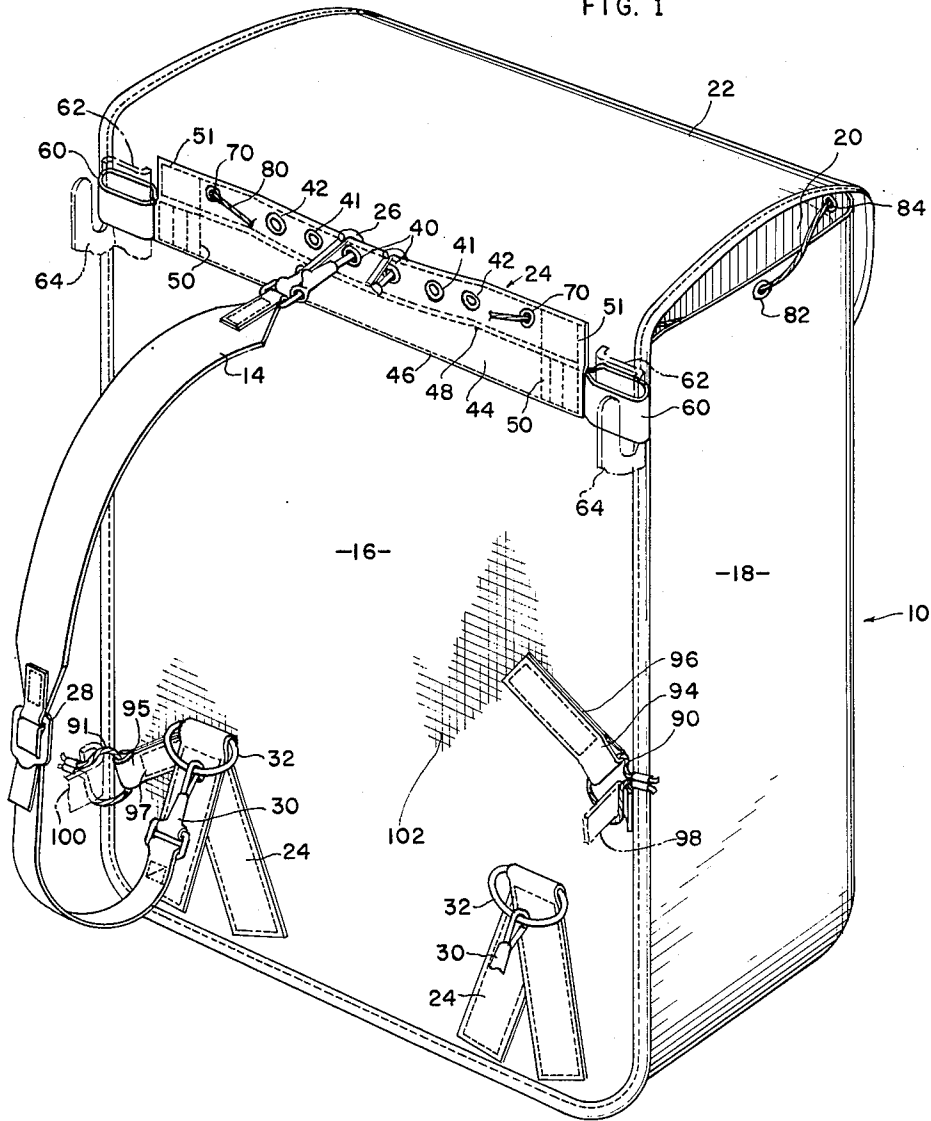
3,254,816

PACKSACK WITH STIFFENER FOR SHOULDER STRAPS

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2 Sheets-Sheet 1

FIG. 1



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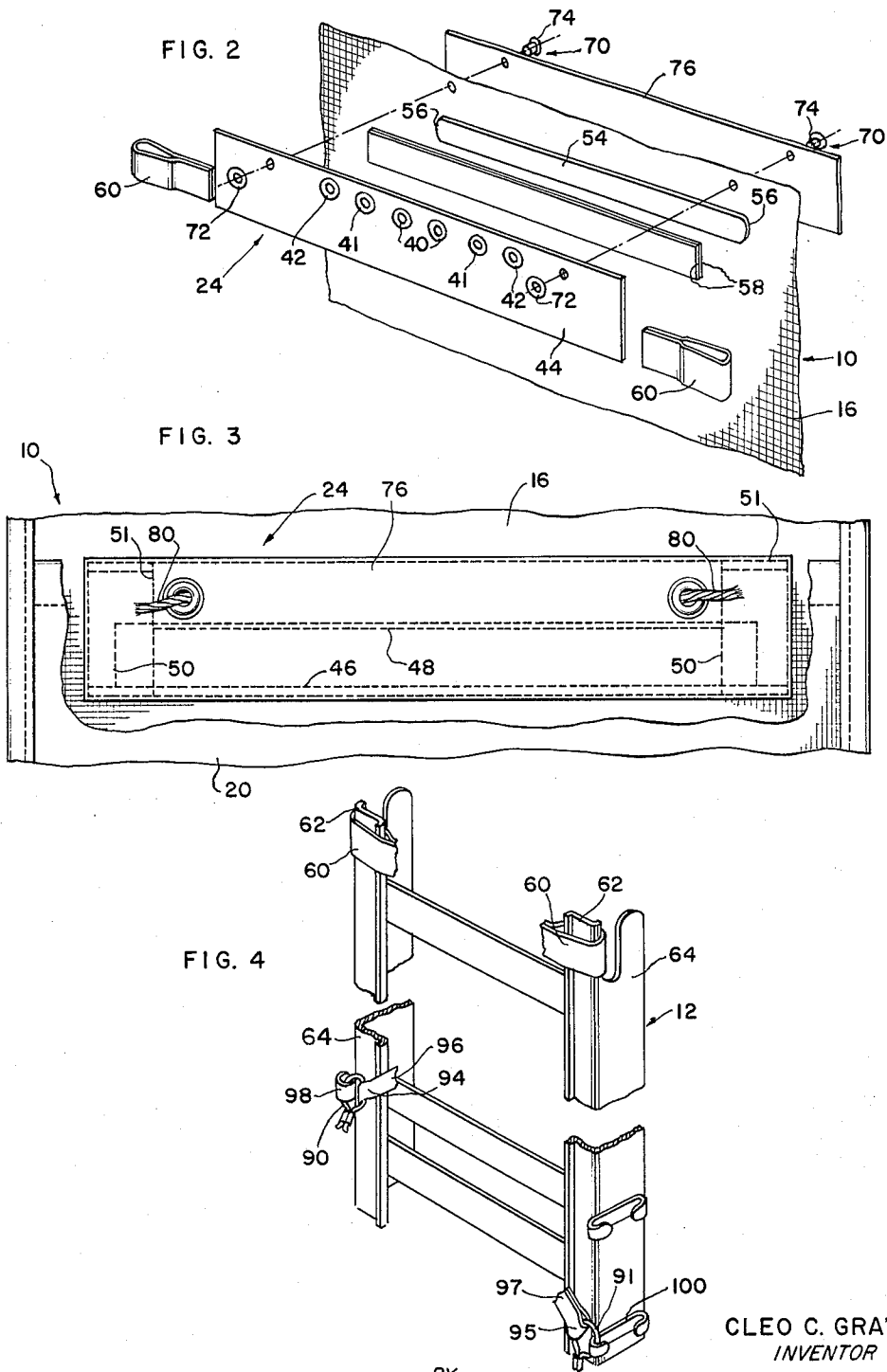
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PACKSACK WITH STIFFENER FOR SHOULDER STRAPS

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6 Claims. (Cl. 224-8)

This invention relates to a packsack, and more particularly to a packsack having a stiff, upper connector portion to which shoulder straps may be attached.

An object of the invention is to provide a new and improved packsack.

Another object of the invention is to provide a packsack having a stiff upper connector portion to which shoulder straps may be connected.

Still another object of the invention is to provide a packsack having a stay secured to the back panel thereof in a position extending thereacross.

A further object of the invention is to provide a packsack having a flexible back panel portion together with fastener members extending diagonally across the weave of the back panel member for attachment to hooks of a packboard.

Yet another object of the invention is to provide a fastener strip having a plurality of pairs of eyes spaced therealong to selected ones of which a pair of shoulder straps may be connected.

The invention provides a packsack having a back panel of flexible material to the upper portion of which is secured a stiffened connector strip extending thereacross to spread the upper portion of the back panel and to which shoulder straps may be connected. Preferably the connector strip includes a band of woven material having, along the upper portion thereof, a plurality of pairs of grommets secured thereto in positions spaced therealong, the band having the lower portion thereof stitched to the back panel along substantially the entire length thereof and enclosing a stiff, sheet metal stay which has a pad positioned thereover. Preferably a pair of looped, flexible strips are provided at the ends of the band for attaching the packsack to a packboard, and a pair of looped connectors are provided near the lower edge of the back panel and stitched thereto at vertically spaced positions positioned along an imaginary line extending somewhat diagonally relative to the weave of the back panel so that they may be stretched apart to place looped cords connected thereto over hooks of a packboard.

A complete understanding of the invention may be obtained from the following detailed description of a packsack forming a specific embodiment thereof, when read in conjunction with the appended drawings, in which:

FIG. 1 is a perspective view of a packsack forming one embodiment of the invention;

FIG. 2 is an enlarged fragmentary, exploded view of a portion of the packsack of FIG. 1;

FIG. 3 is an enlarged, fragmentary front elevation view of the packsack of FIG. 1; and

FIG. 4 is a fragmentary, perspective view of the packsack of FIG. 1 secured to a packboard.

Referring now in detail to the drawings, there is shown therein a packsack 10 which may be selectively attached to a packboard 12 (FIG. 4) or carried by shoulder straps 14 (FIG. 1) without the packboard 12. The packsack 10 includes a back panel 16 preferably of canvas or other woven material, side panels 18 also of canvas, a front panel 20 and a top 22 forming an extension of the back panel 16, and, of course, a bottom (not shown). A stiffened connector 24 is provided at the upper end portion of the back panel 16 and is secured thereto in a position stiffening and maintaining the upper portion of the

back panel 16 spread when the packsack is suspended from the shoulder straps 14, which are of known construction including snaps 26, adjusting buckles 28 and lower snaps 30, which are adapted to hook into rings 32 secured by looped straps 34 stitched securely to the lower portion of the back panel 16.

The upper snaps 26 may be selectively hooked to pairs of grommets or eyes 40, 41 or 42 which are spaced along the upper portion of a fabric connector strip 44 preferably of heavy woven material of nylon or the like. About the lower half of the strip 44 and the end portions thereof are secured by stitchings 46, 48, 50 and 51 to the upper portion of the panel 16 and form an elongated pocket between the stitchings 46, 48 and 50 in which is positioned a stay 54 (FIG. 2) of sheet metal such as, for example, aluminum having rounded ends 56 and extending substantially the entire length of the pocket formed between the strip 44 and the back panel 16. A pair of canvas strips 58 are positioned between the stay 56 and the strip 44 to form a pad over the edges of the stay 54 with the strip 44. This construction provides a cushion or pad over the stay so that there is no discomfort to the user by engagement of the back of the user by the strip 44. The stitchings 46, 48 and 50 at the ends of the strip 44 also secure doubled or looped bands 60 to the panel 16 and the strip 44. The looped bands 60 are adapted to slide over upper end portions 62 of vertical members 64 of the frame of the backboard 12. The strip 44 and bands 60 preferably are composed of heavy woven nylon or similar material.

The grommets 40, 41 and 42 are secured at the free or unstitched upper, central portion of the strip 44 and, near the stitched end portions of the strip 44, rivet type grommets 70 are provided, the grommets 70 (FIG. 2) comprising a washer portion 72 and a rivet portion 74, which project through the strip 44, the back panel 16 and a reinforcing strip 76 of leather, artificial leather or the like, stitched securely to the front face of the panel 16. A drawstring 80 extending through the grommets 70 and also through grommets 82 and 84 (FIG. 1) is provided for drawing the upper end of the packsack 10 to a closed position.

The stay 54 extends substantially completely across the upper edge portion of the panel 16 and maintains the back portion of the panel 16 spread when the packsack 10 is supported by the shoulder straps 14. The connector 24 suspends the rest of the panel 16 and prevents bunching together or folding of the panel 16 while permitting the panel 16 to conform somewhat to the back of the user. The multiple thickness of the heavy fabric material at the stitched end portions of the connector 24 also provides some stiffness and prevents the outer side edge portions of the panel 16 from drooping relative to the central portion of the panel 16.

When the packsack 10 is to be carried by the packboard 12 the bands 60 are slid over the upper end members 62 of the vertical members 64 of the frame of the packboard. To secure the lower portion of the packsack to the packboard, there are provided short, looped cords 90 and 91 having their ends secured together by clips 92 and extending respectively through loops 94 and 95 of folded or looped back, straps 96 and 97 stitched to side edge portions of the panel 16 at different heights from the bottom of the panel 16. The looped cord 90 is adapted to be slipped over a lower hook 98 (FIGS. 1 and 4) fixed to one member 64 and the looped cord 91 is adapted to be slipped over a hook 100 secured to the other member 64. The hook 98 is positioned substantially above the hook 100 and the two straps 96 and 97 are spaced correspondingly vertically displaced positions along an imaginary line somewhat diagonal to weave 102 of the back panel

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16 so that the portion of the panel 16 between the stitched straps 96 and 97 can be stretched temporarily to facilitate hooking the cords 90 and 91 over the hooks 98 and 100, respectively. That is, the panel 16 is composed essentially of woven, substantially vertical and horizontal strands so that it has little vertical or horizontal elasticity, but can be stretched when tensioned diagonally of the weave. Both of the loops 90 and 91 are positioned near the bottom of the panel 16 so that the lower end of the packsack 10 is held securely to the lower portion of the packboard 12. The packboard 12 may be of a construction disclosed and claimed in my copending application Ser. No. 302,344, filed August 15, 1963.

The packsack 10 has the stiffened connector 24 which prevents folding, buckling and sagging of back panel 16 when the packsack is carried by the shoulder straps 14 connected to the connector 24. Also, the connector 24 provides a plurality of pairs of eyes 40, 41 and 42 for selectively receiving the snaps 26 of the shoulder straps so that the positions of the shoulder straps may be varied to adapt them to the size of the user and/or to shift the positions of the straps to vary the positions of the straps on the shoulders of the user periodically for long hauls. The spacing of the straps 96 and 97 somewhat diagonally relative to the weave of the back panel 16 facilitates fastening the packsack to the packboard and detaching the packsack therefrom.

It is to be understood that the above-described arrangements are simply illustrative of the application of the principles of the invention. Numerous other arrangements may be readily devised by those skilled in the art which will embody the principles of the invention and fall within the spirit and scope thereof.

What is claimed is:

1. In a packsack, a back panel of flexible material, a connector strip extending horizontally in a vertical plane and having a plurality of pairs of grommets spaced along the upper portion thereof, stitching securing the lower portion of the connector strip to the back panel in a position extending across the upper portion of the back panel and forming an elongated pocket positioned below the grommets and between the lower portion of the strip and the juxtaposed portion of the panel, a stay enclosed in the pocket, and a pair of shoulder straps having at the upper ends thereof connectors adapted to be attached selectively to the pairs of grommets and connected at the lower ends thereof to the packsack.

2. The packsack of claim 1 including a reinforcing strip secured by the stitching to the face of the pack panel opposite to the face of the back panel on which the connector strip is positioned.

3. The packsack of claim 1 including a pair of looped

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bands having end portions positioned under the end portions of the connector strip and secured by the stitching to the back panel and the connector strip.

4. The packsack of claim 1 including a pair of rivet members bracketing the grommets and securing the end portions of the upper portion of the connector strip to the back panel.

5. In a packsack, a generally rectangular back panel of fabric material having woven strands extending in predetermined directions at a right angle relative to each other, means at the upper end of the panel for securing the upper end of the panel to the upper end of a packboard,

and a pair of securing elements stitched to the lower portion of the back panel at opposite sides thereof at different distances from the bottom edge of the back panel and along a line extending somewhat diagonally relative to the weave of the strands for securing the lower portion of the back panel to opposite sides of the lower portion of a packboard.

6. In a combined packboard and packsack, a packsack back panel of fabric material having interwoven vertical and horizontal strands,

a packboard having a pair of upper connector portions at the upper corners thereof and a pair of hooks positioned near the lower end thereof spaced vertically from each other a predetermined distance and positioned at opposite sides of the packboard,

a pair of connectors secured to the back panel at the upper corners thereof and adapted to be fastened to the upper connector portions of the packboard,

a pair of looped fabric strips stitched to the back panel at opposite sides thereof and spaced apart vertically said predetermined distance,

and a pair of loops extending through the loops of the fabric strips and adapted to be placed over the hooks.

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