

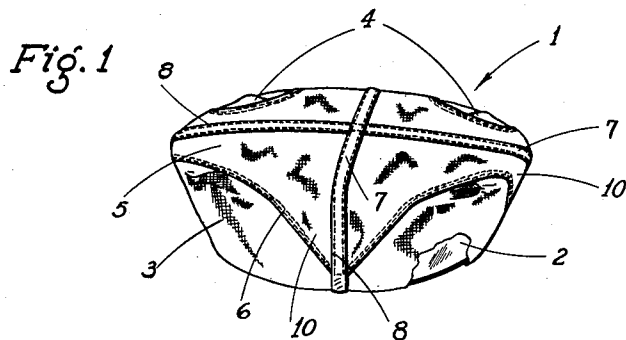
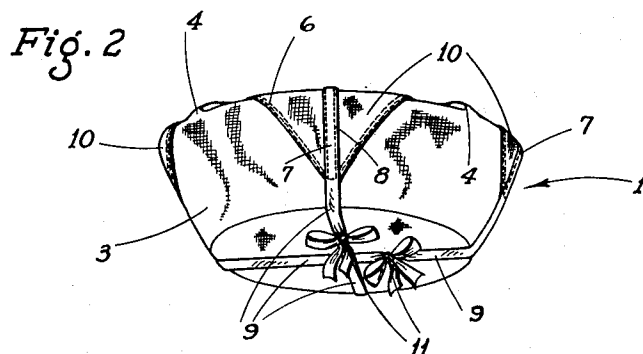
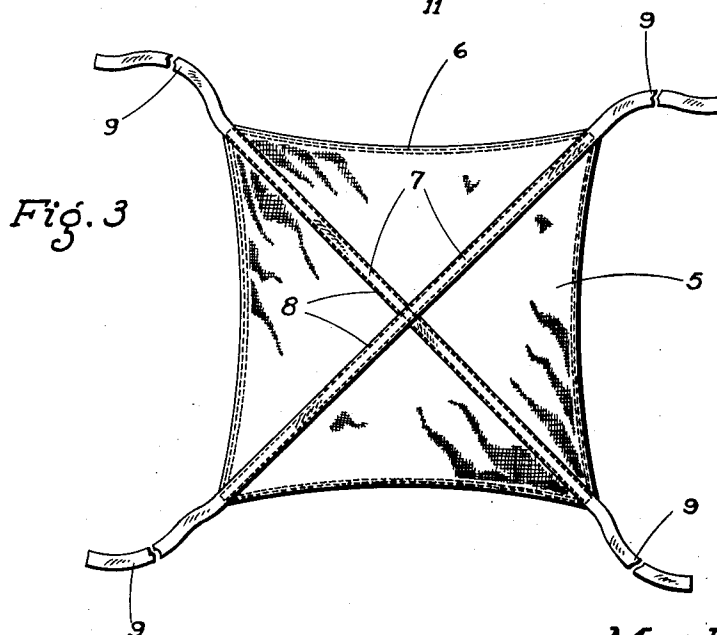
Feb. 14, 1956

M. F. HUNTER
TIE FOR SURGICAL PACKS

2,734,543

Filed Nov. 16, 1953

2 Sheets-Sheet 1



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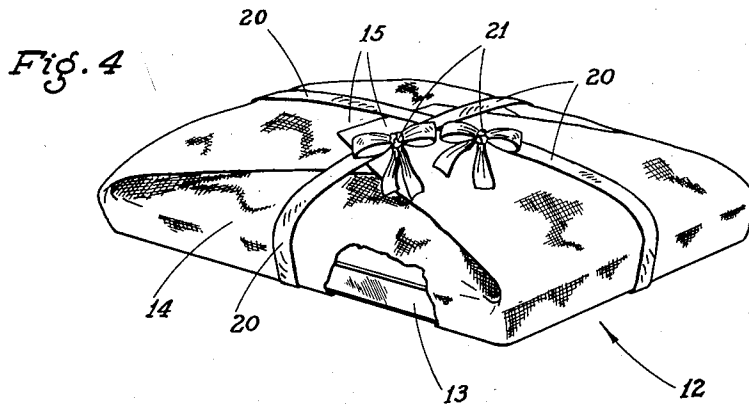
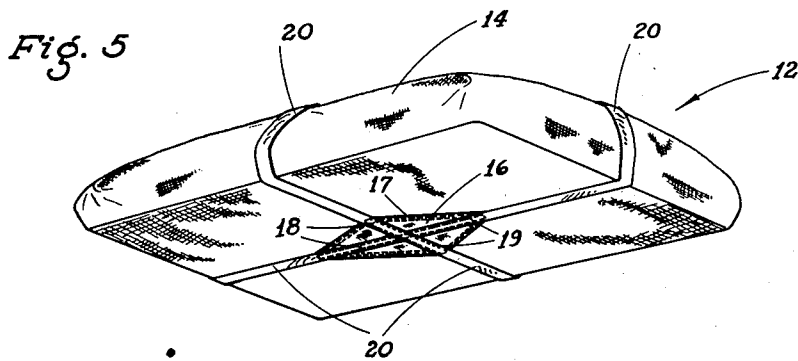
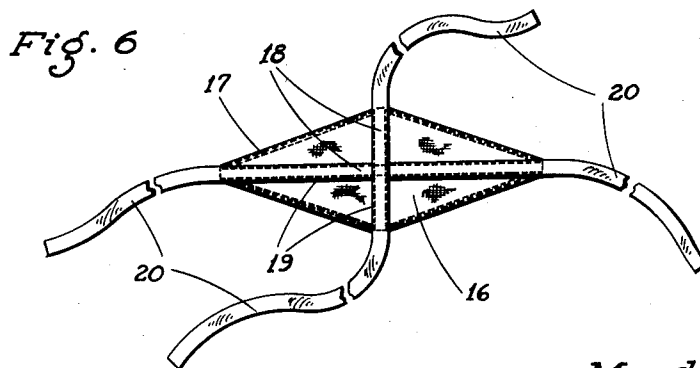
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TIE FOR SURGICAL PACKS

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3 Claims. (Cl. 150—52)

This invention is directed to, and it is a major object to provide, a novel tie for surgical packs.

Surgical packs, as used in hospitals, comprise—conventionally—a container such as a basin or tray holding surgical instruments or the like, and a cloth wrapper folded about the container to envelop the same; it being the present practice to secure the lapped parts of the wrapper together with pins. This is not only time-consuming when the wrapper is applied to or removed from the container, but also the pins soon wear holes in the wrappers, necessitating either mending or disposal thereof.

It is thus another important object of this invention to provide a tie for use to secure the cloth wrappers of surgical packs wholly without the use of pins or other elements which perforate the cloth, and a tie which can be applied to or removed from a surgical pack readily and quickly; the tie being of fabric which is strong, long wearing, and not harmed by the heat of the autoclave in which the surgical packs are sterilized after being assembled, but before use.

Another object of the invention is to provide a tie for surgical packs which comprises a section of heavy-duty cloth, and a plurality of flexible fabric tapes secured to and projecting from said section; the latter being adapted to engage flat on one surface of the pack, with the tapes extending about the pack and being releasably tied together at the opposite surface of said pack.

It is also an object of the invention to provide a tie for surgical packs which is designed for ease and economy of manufacture; a tie which is strong and long wearing; and a tie which, when in use, does not impair storing or stacking of the surgical packs.

It is also an object to provide a practical and reliable tie for surgical packs, and one which will be exceedingly effective for the purpose.

These objects are accomplished by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings:

Fig. 1 is a top perspective view of a ring basin type surgical pack secured by the tie.

Fig. 2 is a bottom perspective view of the same.

Fig. 3 is a plan view, detached, of the tie shown in use in Figs. 1 and 2.

Fig. 4 is a top perspective view of a tray type surgical pack secured by a modification of the tie.

Fig. 5 is a bottom perspective view of the same.

Fig. 6 is a plan view of the tie shown in use in Figs. 4 and 5.

Referring now more particularly to the drawings and particularly to the characters of reference marked thereon—and at present to Figs. 1–3—the tie in this embodiment is adapted for use on a ring basin surgical pack, indicated generally at 1.

In this type of surgical pack a ring basin 2, which contains surgical instruments or the like, is enveloped by

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a heavy-duty cloth wrapper 3; the basin 2 being first disposed on the wrapper 3, and the latter then drawn upwardly about the basin and folded over the top thereof in closing relation. The folded-over portions of the wrapper 3 are shown in part at 4.

After the basin 2 is enveloped in the wrapper 3, the latter is secured against displacement from said basin by employment of a tie, which is constructed as follows; the tie being shown detached and in plan view in Fig. 3.

The numeral 5 indicates a substantially square section of heavy-duty cloth stitched on its edges, as at 6. Two single lengths 7 of flexible cloth tape are secured by lines of stitching 8 in right angle intersecting relation on the section 5 of cloth, with said lengths 7 of tape extending from corner to corner of said section 5 of cloth, and thence projecting therebeyond a substantial distance as free or tie-tapes 9.

In use of the above described tie, the section 5 of cloth is first disposed symmetrically atop the ring basin type surgical pack 1, and the corner portions of said section 5 of cloth are then turned down the sides of the pack, defining what may be termed triangular tails 10. With the section 5 of cloth so disposed on the pack 1, the free or tie-tapes 9 are drawn under the pack, and opposed ones of said tapes are bow-tied together, as at 11.

As so applied to the pack 1 the wrapper is effectively maintained on the basin 2, without the need of the usually employed pins or other comparable elements which perforate the cloth; the tie being capable of being applied to or removed from the pack 1 readily and quickly.

Also, after the tie is applied to the pack 1 it provides an additional closure, which assures against entry of foreign substances into the basin 2 from about the folded-over portions 4 of the wrapper 3.

Another advantage of a tie, composed wholly of fabric, is that it is not susceptible to injury, as by rusting—as are pins—when the pack and tie assembly are sterilized in an autoclave.

While the section 5 of cloth is substantially rectangular, the edges are slightly inwardly arcuate, as shown; the purpose of this feature being to assure that the section 5 of cloth remains smooth; i. e., does not wrinkle or cup as it is drawn down from the top of the round or ring basin pack.

In Figs. 4–6 inclusive there is illustrated an embodiment of the tie especially adapted for use in a tray type surgical pack, indicated generally at 12. In this type of pack a tray 13, which contains the surgical instruments or the like, is enveloped within a heavy-duty cloth wrapper 14; the tray 13 being first disposed centrally on the wrapper 14 and the latter then drawn upwardly about the tray 13 and folded thereover, as at 15.

Here the tie, as shown detached and in plan in Fig. 6, comprises a diamond-shaped section 16 of heavy-duty cloth, and which section is stitched at the edges, as at 17.

A pair of lengths 18 of flexible cloth tape are secured to the section 16 of cloth by lines of stitching 19. The lengths 18 of cloth tape intersect in right-angle relationship, and extend from corner to corner of section 16 of cloth; said lengths 18 of tape projecting beyond said corners as free or tie-tapes 20.

In this embodiment, to secure the wrapper 14 against displacement from the tray 13, the section 16 of cloth is first disposed symmetrically on the under side of said pack; the tapes 20 then being drawn upwardly about the ends and sides of the pack, with corresponding tapes bow-tied together, as at 21, over the top of the pack in the manner shown in Figs. 4 and 5. Here, just as in the embodiments of Figs. 1–3 inclusive, the tie can be readily applied to or removed from the pack 12, and when in use such tie effectively maintains the wrapper 14 against unfolding or displacement.

One of the prime advantages of using the section 5

to secure the lengths 7 of tape together, as in Figs. 1-3 inclusive, and the section 16 to secure the lengths 18 of tapes together, as in Figs. 4-6 inclusive, is that said sections maintain the free or tie tapes 9 and 20, respectively, in proper relationship at all times, so that the ties can be applied to the packs without having to manually orient the tapes before being drawn about the packs and tied.

From the foregoing description it will be readily seen that there has been produced such an article of manufacture as will substantially fulfill the objects of the invention, as set forth herein.

While this specification sets forth in detail the present and preferred construction of the article of manufacture, still in practice such deviations therefrom may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described the invention the following is claimed as new and useful, and upon which Letters Patent are desired:

1. A tie for a surgical pack comprising a section of cloth of quadrilateral shape, and tapes secured on and extending across one face of the cloth in overlying relation and projecting outwardly from the corners thereof is substantially bisecting relation thereto for a predetermined distance to provide free end portions for tying engagement with each other over the pack when the cloth

section is engaged therewith, and stitching securing the tapes on the cloth for substantially the full length of the overlying extent of the tapes.

2. A tie as in claim 1 in which the cloth section is substantially square and the side edges of the cloth are concavely curved with a relatively great radius of curvature to enable the cloth section to be maintained without edge wrinkles when said section is placed on a ring basin with the periphery of the cloth section between the corner portions thereof, extending about the basin adjacent the rim thereof.

3. A tie as in claim 1, in which the cloth section is of elongated diamond form.

References Cited in the file of this patent

UNITED STATES PATENTS

161,506	Grinsted et al.	Mar. 30, 1875
335,274	Daniels	Feb. 2, 1886
484,951	Everett	Oct. 25, 1892
624,839	Merrill et al.	May 9, 1899
1,029,370	Jacobs	June 11, 1912
1,385,695	MacCormack	July 26, 1921
2,106,640	Kovalik	Jan. 25, 1938

FOREIGN PATENTS

206,830	Germany	Feb. 20, 1909
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