

Aug. 27, 1957

G. B. HUNSICKER

2,803,836

FLUID PROOF SHEET FOR HOSPITAL BEDS

Filed April 25, 1956

FIG. 1.

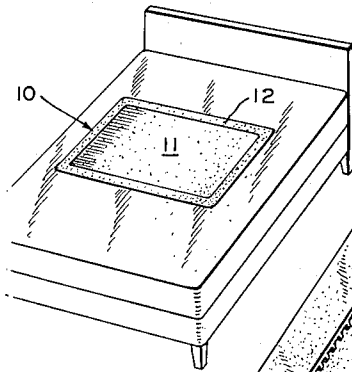


FIG. 2

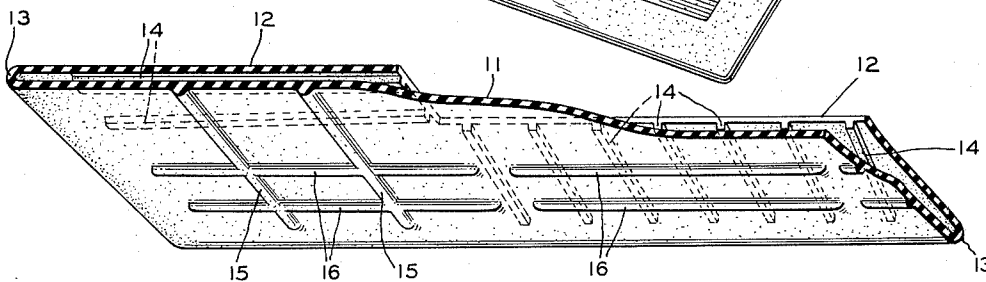
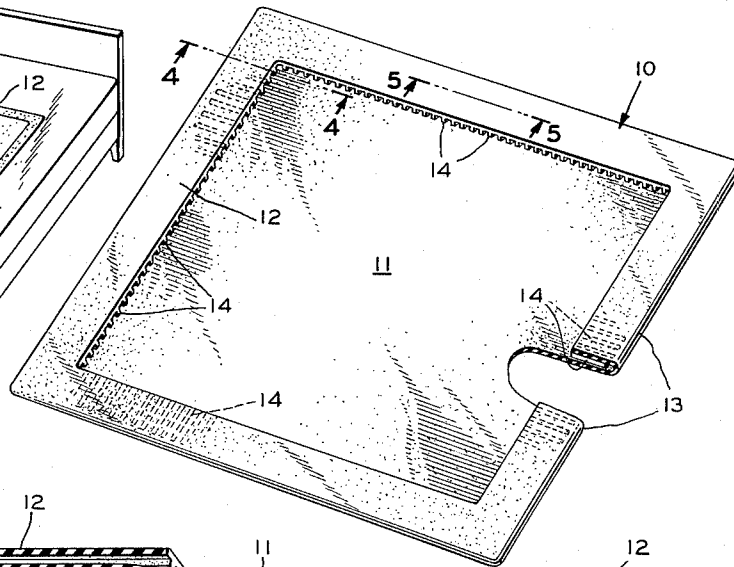


FIG. 4.

FIG. 3.

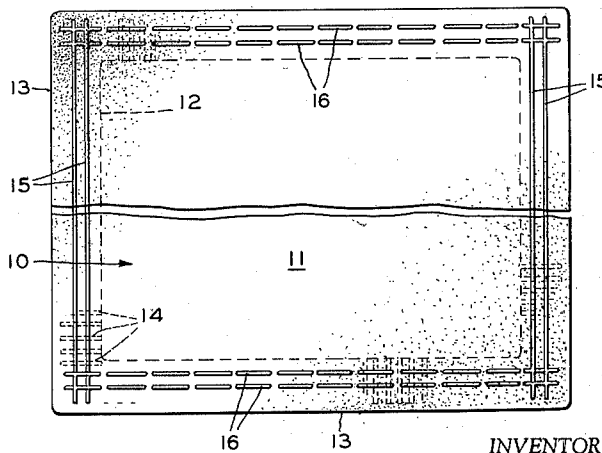
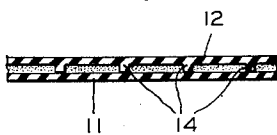


FIG. 5.



INVENTOR

GLADYS B. HUNSICKER

BY

B. P. Fishburne, Jr.

ATTORNEY

1

2,803,836

FLUID PROOF SHEET FOR HOSPITAL BEDS

Gladys B. Hunsicker, Muscatine, Iowa

Application April 25, 1956, Serial No. 580,576

1 Claim. (Cl. 5—334)

This invention relates to a protective device or sheet for use upon a bed.

A primary object of the invention is to provide a fluid proof sheet for use upon a hospital bed, or the like, beneath the ordinary cloth sheet, and between such sheet and the mattress, the device being constructed to retain or hold body fluids and preventing the same from passing to the mattress or down the sides of the bed.

A further object is to provide a protective sheet of the above-mentioned character which will remain flat upon the bed and which will not readily slip from its desired position.

Still another object of the invention is to provide upon a sheet of the above-mentioned character a novel and simplified gutter construction, adapted to retain fluids and prevent them from passing from the protective sheet.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view showing the application of the protective sheet upon a hospital bed or the like,

Figure 2 is a perspective view of the sheet on an enlarged scale, part broken away,

Figure 3 is a bottom plan view of the sheet, part broken away,

Figure 4 is a greatly enlarged fragmentary perspective view in section taken substantially on line 4—4 of Figure 2,

Figure 5 is an enlarged fragmentary vertical section taken substantially on line 5—5 of Figure 2.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 10 designates a protective device or sheet in accordance with the invention. The sheet 10 is rectangular, as shown, and may be approximately thirty-three inches wide by approximately thirty inches long or lengthwise of the bed, although these dimensions are not critical and may be varied as found desirable. In this regard, I also contemplate making the sheet in a smaller size which may be thirty-three inches wide by approximately twenty inches lengthwise of the bed. The entire sheet 10 which is preferably of unitary construction, as shown, is preferably formed from sheet rubber or some other similarly flexible and fluid proof rubberlike or plastics material, or the like.

The sheet 10 comprises a central rectangular body portion 11, of single thickness, and the body portion 11 is arranged lowermost or next to the mattress of the bed during use. Arranged above the body portion 11 adjacent the margins of the same is a continuous relatively narrow gutter forming marginal strip or portion 12, which preferably extends continuously around the four sides of the sheet, as indicated. The gutter forming strip 12 is preferably integrally joined with the body portion 11 in a continuous manner, so as to form a con-

2

tinuous marginal bead or edge 13 which is U-shaped in cross section, as shown in the drawings. The gutter forming strip 12 thus overlies the body portion 11 in superposed relation thereto about the entire margin of the sheet.

In order to maintain the gutter forming strip 12 spaced slightly above the body portion 11, there are provided upon the lower face of the strip 12 a multiplicity of spaced relatively short depending ribs or projections 14, preferably formed integral with the strip 12, as shown. These ribs 14 are spaced apart equidistantly around the four sides of the sheet and the ribs extend transversely of the strip 12 for substantially its full width, as shown. The ribs 14 are preferably at right angles to the longitudinal edges of the marginal strip 12, and may be spaced apart on the strip any preferred distance, such as one-half inch, or the like. If preferred, the ribs 14 could be formed upon the upper face of the body portion 11, below the strip 12, instead of upon the lower face of the strip 12.

Pairs of continuous parallel longitudinal ribs 15 are formed upon the bottom of the sheet body portion, near and inwardly of its opposite longitudinal edges, and extending lengthwise of the bed, in use. These continuous ribs 15 may be of substantially the same character or shape as the ribs 14, if desired, and the ribs 15 preferably extend for substantially the entire length of the sheet, lengthwise of the bed. In use, the ribs 15 are arranged downwardly and contact the mattress or mattress pad, and help to prevent the sheet from slipping transversely of the bed. The ribs 15 also add some degree of stiffness to the sheet near its marginal longitudinal edges, and thus help to prevent the same from folding or buckling while in use, and the ribs 15 tend to maintain the rubber sheet flat upon the bed, as is desirable.

Near and inwardly of the upper and lower transverse edges of the sheet, the same is provided upon its lower face with pairs of spaced parallel rows of projections 16 or interrupted ribs, preferably formed integral with the sheet body portion 11, as shown. The rows of projections 16 preferably extend for substantially the entire width of the sheet, as indicated, and the spacing of the rows of projections laterally may be the same as the spacing of the ribs 15 of each pair. The interrupted ribs 16 serve to prevent the rubber sheet from sliding lengthwise upon the bed and allow the sheet to be folded or rolled up transversely, due to the spaced or interrupted arrangement of the projections 16. As best shown in Figure 4, the endmost projections 16 of the rows of projections intersect and cross end portions of the continuous ribs 15, to form a waffle-like or grid pattern upon the bottom of the sheet adjacent its four corners. This further aids in preventing the rubber sheet from slipping upon the bed.

Additionally, the entire lower surface of the sheet body portion 11 is preferably roughened by any suitable means during manufacturing, so that slipping of the sheet upon the bed is further inhibited.

In use, the protective device or sheet is arranged upon the bed as in Figure 1, with the gutter-forming strip 12 uppermost and the ribs 15 and rib sections 16 lowermost. The device may be covered with the usual cloth sheet. The ribs 14 will hold the marginal strip 12 elevated slightly from the body portion 11, so as to form a horizontal gutter or fluid trap around all four sides of the rectangular sheet, such gutter being closed at its outer side by the bead 13 and open at its inner side as defined by the inner edges of the strip 12.

Any fluids emanating from the patient's body will pass through the cloth sheet and onto the body portion 11 of the rubber sheet. Such fluids cannot flow from the edges

3

of the rubber sheet due to the gutter which is provided around the margins of the same, as above described.

The device should be of great utility in hospitals, due to its sanitary nature, and its use will eliminate to a great degree the frequent changing of all bedding, due to being soiled by body fluids. With the present device, it will merely be necessary to change one cloth sheet and to wash the protective rubber sheet, and the remaining bedding or the sides of the bed should never become soiled.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

A fluid proof protective sheet for hospital beds, said sheet formed entirely of rubber-like material and comprising, a relatively thin flexible sheet body portion of substantially uniform thickness having a substantially smooth top face, a relatively narrow strip overlying the sheet body portion adjacent the margin of the latter and extending continuously around the margin of the sheet body portion and integrally secured thereto to form with

4

the sheet body portion a marginal gutter for retaining body fluids upon the top of the sheet body portion, a multiplicity of ribs formed upon the bottom face of the strip in spaced relation and extending substantially at right angles to the margins of the strip and sheet body portion and for substantially the full width of the strip, said ribs holding the strip uniformly elevated from the sheet body portion around the entire margin of the latter, and ribs formed integrally upon the bottom face of the sheet body portion near and parallel to its margin and directly below said strip and preventing slippage of the sheet upon the bed and also stiffening the sheet along its margin so that the sheet will not tend to wrinkle while in use.

References Cited in the file of this patent

UNITED STATES PATENTS

1,930,398	Souchard	Oct. 10, 1933
2,167,178	Kohlstadt	July 25, 1939
2,522,887	Nelson	Sept. 19, 1950

FOREIGN PATENTS

103,978	Switzerland	Apr. 1, 1924
1,030,914	France	Mar. 18, 1953