June 24, 1969 T. BRADLEY 3,451,062

DISPOSABLE EXAMINATION GOWN

Filed March 16, 1966

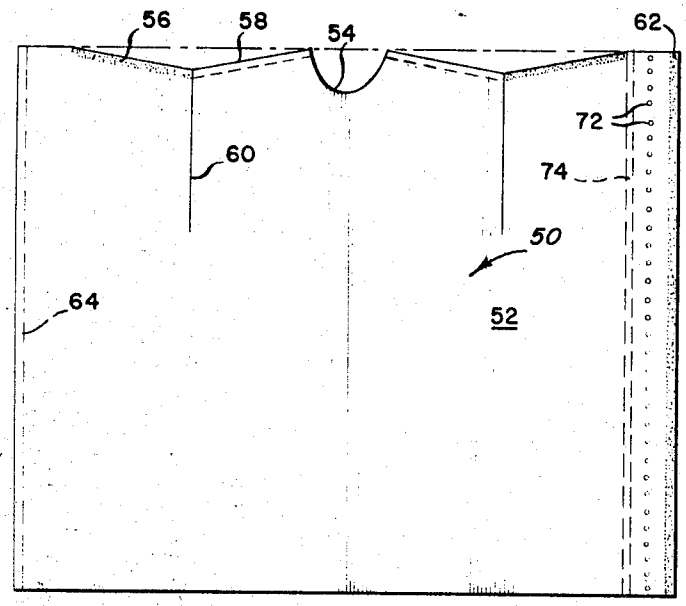


FIG. 1

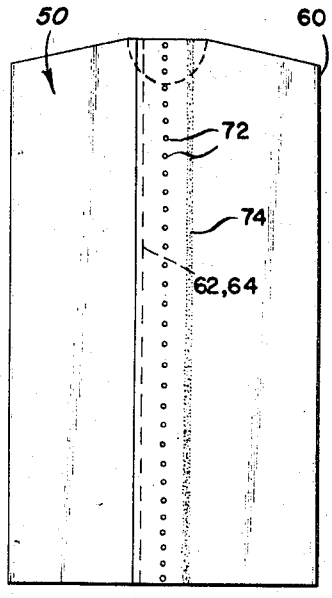


FIG. 2

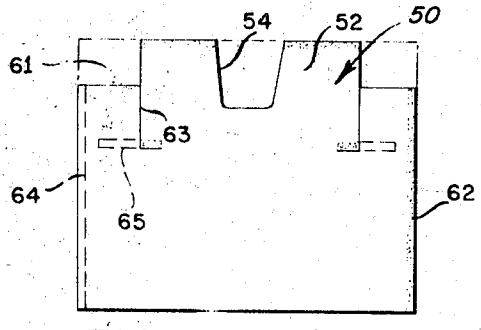


FIG. 3

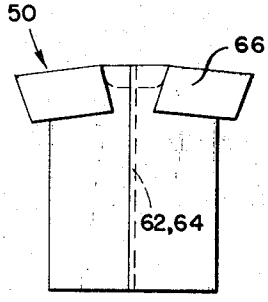


FIG. 4

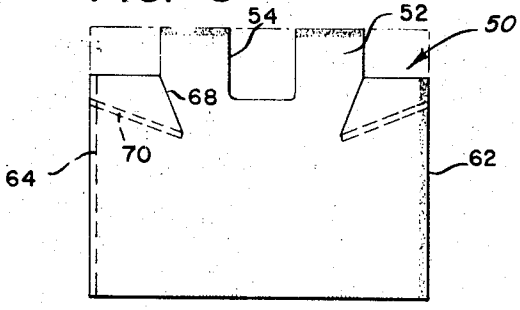


FIG. 5

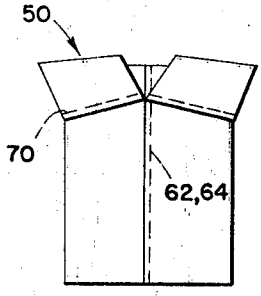


FIG. 6

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DISPOSABLE EXAMINATION GOWN

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U.S. Cl. 2—114 2 Claims

The present invention relates generally to disposable examination gowns, particularly for use in offices and hospitals.

Numerous previous inventors, such as Hutchison (Patent 1,080,451); Durand (Patent 2,680,850); Jelstrup (Patent 2,692,989); Palm (Patent 2,701,364); Schaffer (Patent 2,715,902) De Witt (Patent 2,768,383); O'Donnell (Patent 2,818,573); Melges (Patent 3,037,507); Lewis, Jr. (Patent 3,154,789); Derrick (Patent 3,155,984); MacDonald (Patent 3,160,891); and Hrubecky (Patent 3,196,874) have addressed themselves to the problem of designing disposable examining gowns. However, the present gown designs are believed to constitute important improvements in this field.

Office disposable examining gowns ideally must be designed to permit observation and examination of both breasts at the same time, as pathology in the breast, which may cause minor distortion of the breast or difference in the size of the two breasts, may not be obvious when one breast is observed by itself, but may be immediately obvious when the two breasts are compared.

Similarly, it is important to be able to examine the base of the neck and the axillae in continuity with the examination of the breasts since the tail of the breast extends into the axilla, and since pathology in the breast spreads to the lymph nodes in the axilla and to the lymph nodes in the base of the neck. Examination of the axilla is best done with the patient's hands first on their hips so that the examiner's fingers may palpate the lymph nodes in the apex of the axilla and then with the patient's arms raised upwards over the head so that the lymph nodes along the lateral wall of the axilla may be palpated. This examination should be continuous with the examination of the breast since pathology in the breast spreads to the axilla. Gowns that allow the breasts to be examined by turning flaps laterally will obscure the axillae and prevent the breasts and axillae from being examined in continuity. Ausculation of the chest requires, of course, a comparison of the two sides of front of chest, and then both sides of back of chest. Thus, disposable examining gowns must provide for examination of both front and back.

The problems inherent in the design of hospital disposable gowns are somewhat different than present in gowns designed for office use. During operation on the abdomen, pelvis or extremities, the gown frequently becomes stained with blood and must be removed at the end of operation and new gown placed on still unconscious patient. However, intravenous fluids are frequently running into one of the patient's arms and if the gown has sleeves, it is difficult to remove same without interrupting the intravenous fluids and possibly contaminating the entire intravenous setup. In similar manner, bandages or casts on the patient's arms prevent placement or removal of arm from sleeve of gown.

In the hospital, the patient is frequently unconscious following an operation or an obstetrical delivery and it is inadvisable to sit the unconscious patient up in order to place the gown over the patient's head. Similarly, gowns that require the patient to step into them are unacceptable. Also, it is unsatisfactory to try to pull the examination gown over the lower extremities and up over the lower trunk while the patient is unconscious. Of course, gowns must adequately cover the patient's trunk, arms and shoulders to avoid exposure and embarrassment. In addition, the ties on the back of conventional hospital gowns are frequently uncomfortable when the patient lies on his back. Whereas simplicity in design and low cost of manufacture is necessary in disposable gowns, the requirement of withstanding stresses and strains of a patient sleeping are still present. Finally, it is generally recognized that gowns held together by snaps or ties are unacceptable as patient is exposed when bending over.

Accordingly, an object of the present invention is to provide both office and hospital disposable examining gowns characterized by simplicity in design and low cost of manufacture, while permitting all examination functions.

Another object of the present invention is to provide an office disposable gown permitting examination of breasts, axilla and base of neck in continuity without obstruction by gown.

Still another object of the present invention is to provide an office disposable gown permitting covering of front of chest while back of chest is examined.

Still a further object of the present invention is to provide a hospital disposable examination gown capable of being placed and removed from patient while presenting no obstructions to bandages, casts or intravenous fluid setups.

Another object of the present office and hospital disposable examination gown designs is to provide simplified technique for reattaching portions of gowns, as desired.

Still further objects of the present invention will become apparent from the specification and drawings, wherein:

FIG. 1 is plan view of first embodiment of hospital disposable gown illustrating configuration of single sheet;

FIG. 2 is back view of assembled first embodiment of hospital disposable gown;

FIG. 3 is plan view of second embodiment of hospital disposable gown illustrating configuration of single sheet;

FIG. 4 is back view of assembled second embodiment of hospital disposable gown;

FIG. 5 is plan view of third embodiment of hospital disposable gown illustrating configuration of single sheet; and

FIG. 6 is back view of assembled third embodiment of hospital disposable gown.

The hospital disposable gown, as seen in FIG. 1–6, is generally designated by reference numeral **50** and consists of a single sheet of paper **52** or other disposable material cut to predetermined pattern to provide neck opening, sleeves and the like, as desired. As seen in the embodiment of FIGS. 1 and 2, single sheet **52** is provided with neck opening **54**, surrounded by tapered cut-out portions **56** and **58** intersecting at cuts **60**. Also segments **56** and free edges **62** and **64** are provided with suitable fastening technique. Although folding and fastening technique is apparent, FIG. 2 illustrates back of assembled gown in which slots **60** now provide openings for arms. Alternatively, as seen in FIG. 3, single sheet **52** may be provided with cut out sections **61**, slits **63** and fastening technique applied along lines **65**. In this manner, the assembled gown is provided with sleeves **66** as seen in the back view of FIG. 4. Finally, as illustrated in FIG. 5, diagonal cuts **68** may be made in sheet **52** with fastening technique located along diagonal lines **70**. As seen in the rear view of FIG. 6, a flap is thus provided in this version of disposable gown **50**.

Of course, free edges **56**, **58**, **62**, **64**, **65** and **70** of sheets **52** of the FIGS. 1–6 embodiments of hosptial gown **50** may be secured by several techniques, some of which will now be described. For instance, adhesive similar to that

used on self-sealing envelopes may be employed. As such adhesive, however, will not readily separate to allow gowns to be removed, perforations **72** may be employed proximal to adhesive on edge **62**, as illustrated in the FIGS. 1–2 embodiment. In order to replace gown after perforations **72** have been torn, a line of adhesive **74** proximal to line of perforations **72** is employed. In this manner, the free edges of gown **50** may be adhered together after being torn apart. That is, as seen on the right hand side of sheet **52** in FIG. 1 from the free edge proximally there is a line of adhesive **62**, a line of perforations **72** and a second line of adhesive **74** on reverse side. Of course, similar construction may be employed in the FIGS. 3–6 embodiments.

Alternatively, adhesive, characterized by low peel adherence and high shear adherence, may be coated on one surface of the free edges. The low peel adherence will enable free edges **65** of the FIGS. 3–5 gown embodiment, for example, to be easily peeled apart permitting sleeves **66** to be readily opened to remove gown. Also, this adhesive will adhere when it is pressed together again, thereby enabling the gown to be replaced on patient after it is removed for examination.

Immediately after the operation or obstetrical delivery, hospital gown **50** is placed on the front of patient with arms in sleeves of gown. Gown **50** is not fastened at the patient's back until consciousness is regained permitting patient to be rolled on side or placed in sitting position. All this is accomplished with hospital gown **50**, without providing conventional large flaps that get in way until fastened around patient's back. Obviously, conventional snap assemblies, with resulting discomfort, are avoided in the present gown design. In general, it may be said that such conventional snap arrangements are not acceptable, as usually such arrangements are only found at top of gown permitting lower two-thirds of patient's back to be exposed when walking as well as separating and bunching up during sleeping hours.

Obivously, the cuts made in sheet of paper of hospital gown **50** may be varied to provide a choice of models with various shapes of sleeves or flaps to cover shoulders. Similarly, the cuts in upper lateral section or inside of sheet may be varied to provide differed shapes or length of flaps to wrap around patient and cover patient's back. Optionally, the sleeves of gown may be omitted, and shoulders and upper arms simply protected by widening shoulder straps creating flap which will extend over shoulders and cover upper arm.

The sleeve may be positioned at the top of the arm to close under the arm—or the sleeve may be positioned under the arm to close at the top of the arm—or the sleeve may be positioned at one side of the arm to close at the other side of the arm.

Manifestly, changes in shape of offices disposable gown **10**, as well as alternative technique for attaching shoulder straps and panels of disposable material, may be employed without departing from the spirit and scope of invention. Similarly, revision of length and direction of cuts in hospital gown, as well as alteration of position or size of neck opening and sleeves, may be resorted to without departing from spirit and scope of invention. Finally, fastening and reattachment technique of hospital disposable gown may be varied without departing from scope of invention.

I claim:

1. A disposable examination gown, comprising

(a) a single shet of disposable material having a top portion containing a cut-out neck area and two slits running downwardly from the top edge of said sheet defining arm openings as the outermost side portions of said sheet are folded inwardly,

(b) first means for separating and reattaching the ends of said outermost side portions including two sealing rows spaced from each other with perforations located therebetween, and

(c) second means for separating and reattaching adjacent selected portions of said top edge after said outermost side portions of said sheet are folded inwardly.

2. A disposable examination gown as in claim **1**, wherein said two sealing rows are located on opposite sides of said sheet.

References Cited

UNITED STATES PATENTS

782,819	2/1905	Bikle	2—75
1,489,046	4/1924	Thompson	2—114
2,701,364	2/1955	Palm	2—114
3,276,036	10/1966	Cater	2—114
2,692,989	11/1954	Jelstrup	2—114
2,973,523	3/1961	Brainard et al.	2—114 X
3,156,927	11/1964	Grimm et al.	2—114 X
3,218,649	11/1965	Ricter	2—114
3,230,546	1/1966	Sabee	2—114

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