April 15, 1952 H. E. SMITH 2,593,210

COLOSTOMY GUARD

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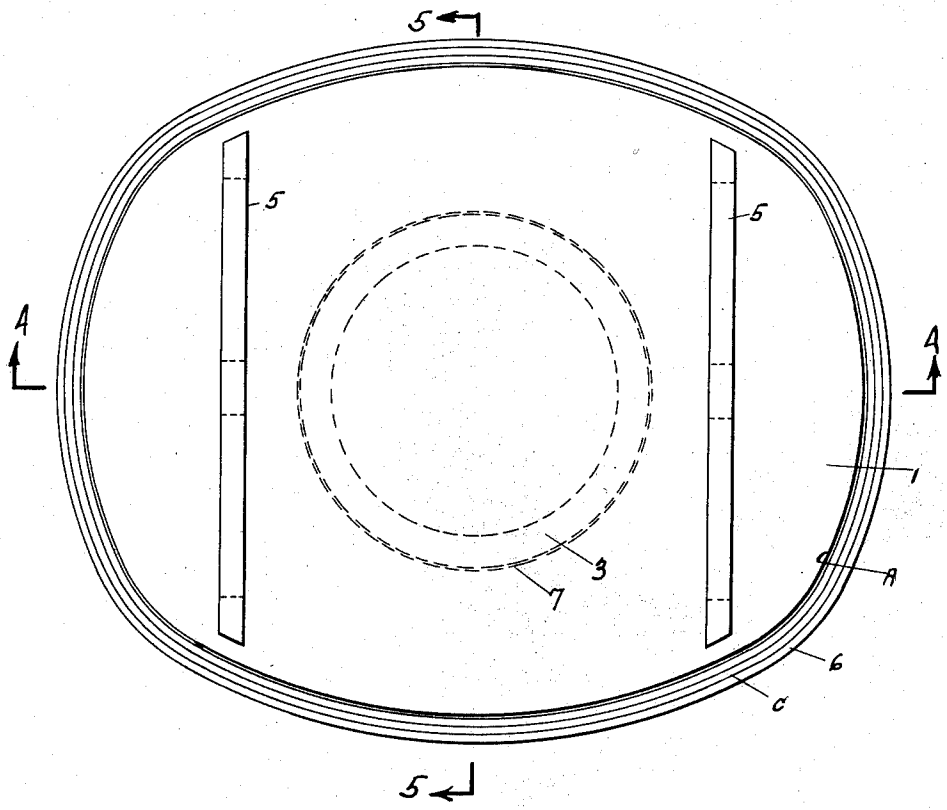


Fig. 1

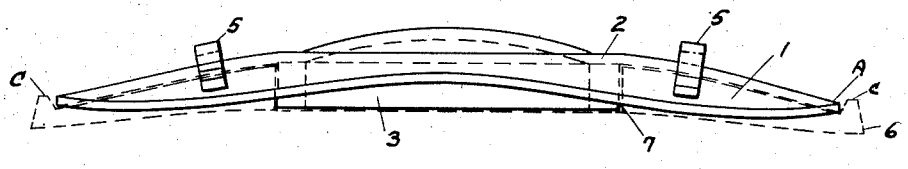


Fig. 2

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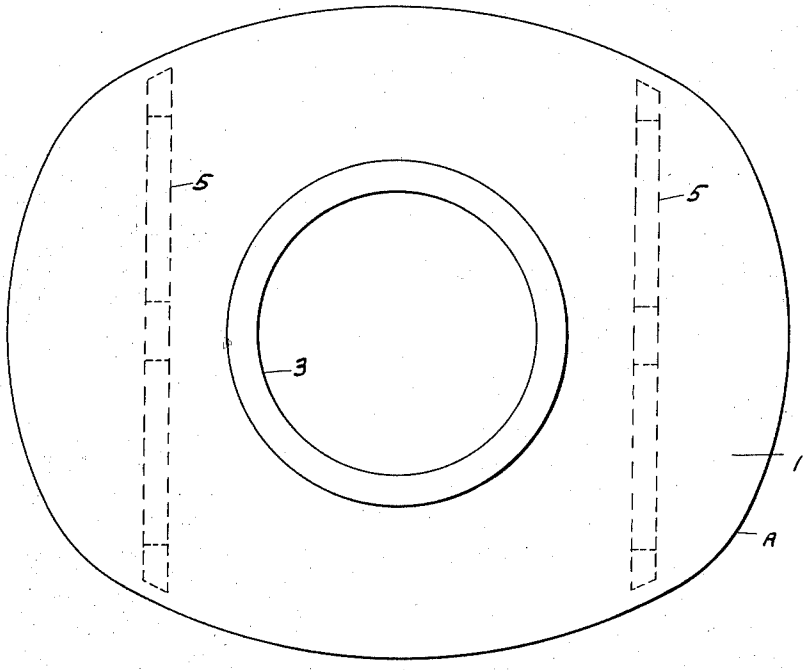


Fig. 3

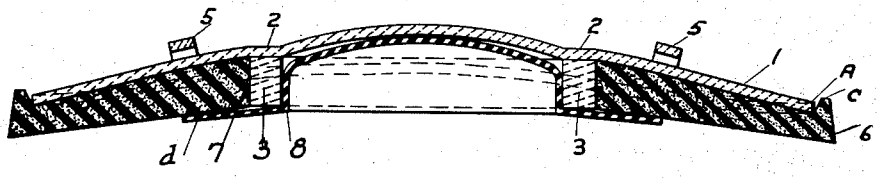


Fig. 4

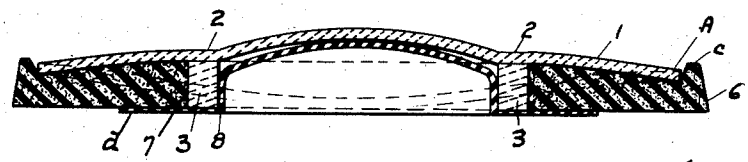


Fig. 5

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COLOSTOMY GUARD

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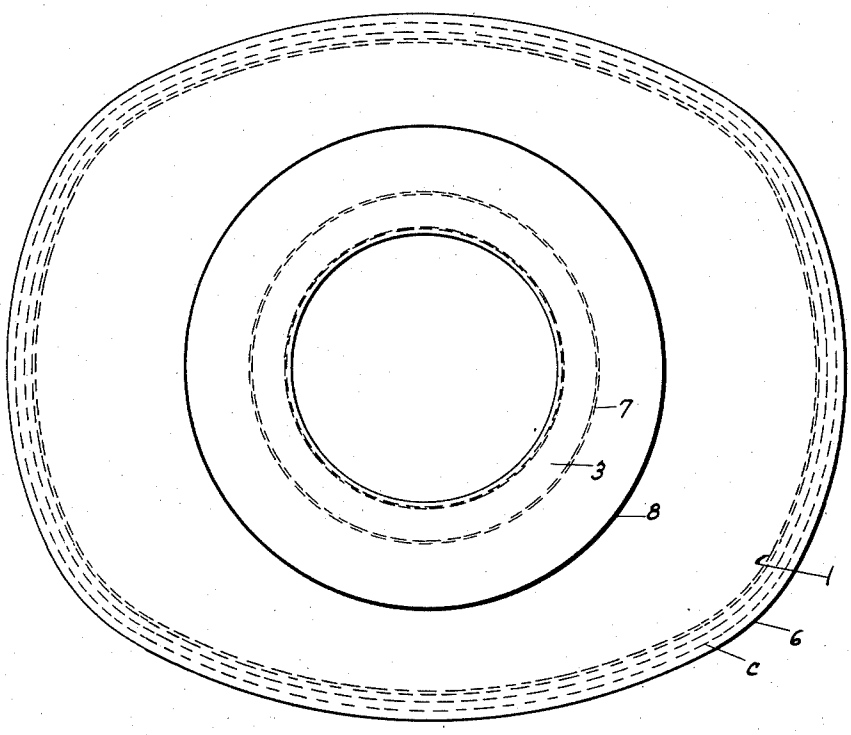


Fig. 6

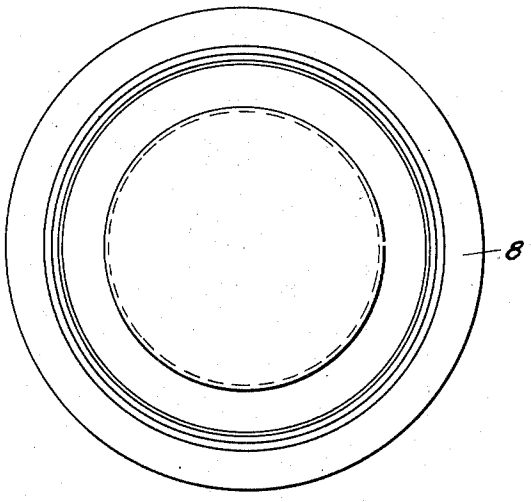


Fig. 7

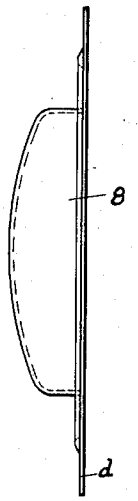


Fig. 8

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COLOSTOMY GUARD

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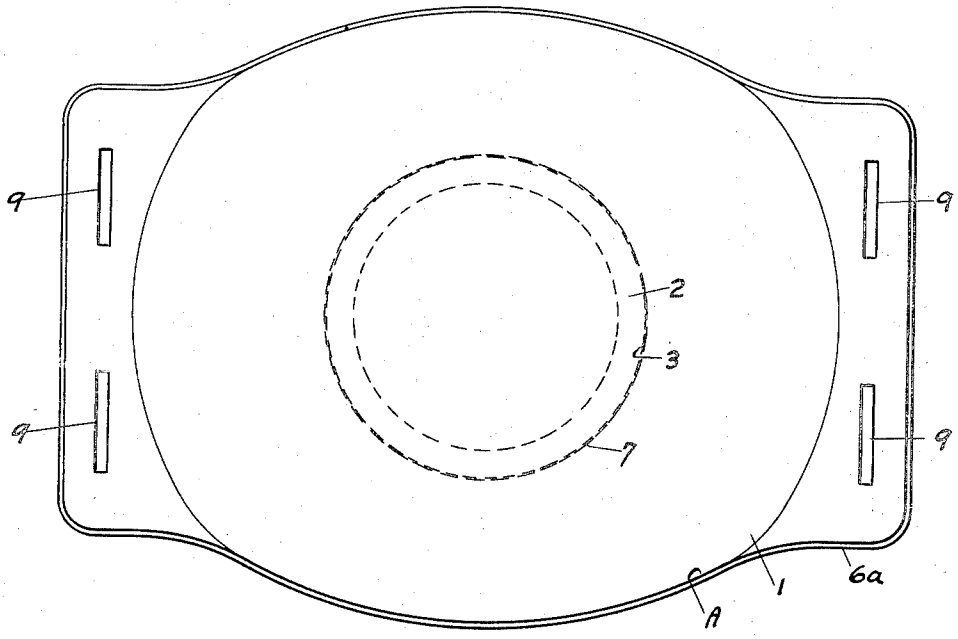


Fig. 9

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UNITED STATES PATENT OFFICE

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COLOSTOMY GUARD

Howard E. Smith, Monroe, Mich.

Application May 28, 1949, Serial No. 95,967

2 Claims. (Cl. 128—283)

1

My invention relates to a special medical appliance, applicable in the care of patients after a permanent colostomy.

The object of my invention is to produce a special colostomy guard and seal unit that will fit comfortably over the body surface opening, after the completion of the operation, for protecting same and temporarily sealing the opening, and is especially adaptable for controlled discharge.

A further object is to provide a transparent guard unit that is transparent, and of a thin design adaptable for wear beneath ordinary clothing without disclosure.

A still further object is to provide a guard of a design that will prevent seepage therefrom, and that may be easily removed, cleaned, and sterilized at will.

These several objects are attained in the preferred form by the construction and arrangement of parts more fully hereinafter set forth.

Similar parts on all drawings are marked by similar numerals or letters.

Fig. 1 is a top view of the guard, assembled with the surface pad, showing the general design and means for retaining same on the body.

Fig. 2 is a side elevation of the assembled unit, showing the guard formation, and the relative position of the flexible rubber pad units mounted thereon.

Fig. 3 is a bottom view of the guard casing with the pad removed, showing the general frame design and the colostomy guard ring mounted thereon.

Fig. 4 is a longitudinal sectional view taken on the line 4—4 of the Fig. 1, showing the relative position of the assembled units.

Fig. 5 is a cross-sectional view taken on the line 5—5 of the Fig. 1, showing the central cross-sectional design.

Fig. 6 is a bottom view of the Fig. 1, showing the general arrangement of the attached surface pad and shield unit mounted thereon.

Fig. 7 is a plan view of the thin rubber shield cup.

Fig. 8 is a side view of the rubber shield cup.

Fig. 9 is a modified top view showing alternate belt attaching means.

I will now describe more fully the detailed construction of my colostomy guard, referring to the drawings and the marks thereon.

In general surgery, a permanent colostomy is performed at a predetermined position on the abdomen, and with the severed intestine open end projected through the abdominal incision, retaining same permanently in that position. My special colostomy guard is designed to cover, inclose and temporarily seal the intestine opening to prevent any discharge or leakage therefrom, and is easily removed for care thereof.

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The guard casing A is formed of a curved surface base 1, made of suitable sheet material, preferably transparent plastic material having non-toxic properties, and is formed substantially to the normal abdominal curvature, and designed with a central circular ring shoulder 2 thereon. A cylindrical colostomy ring 3, of like material, is mounted on the inner surface of the curved base section 1, positioned concentric with the ring surface 2, and securely attached and sealed therewith, preferably by a liquid solvent acetone applied between the adjoining surfaces, and then subjected to a heat treatment as is commonly used therewith for the ordinary fusion. Across the outer surface of the guard base 1, are mounted double belt bars 5, positioned at opposite base ends, and designed to provide suitable strap belt openings therebeneath, or suitable belt slots 9 in opposite base ends, as in Fig. 9. Any suitable belt means may be applied therein, providing adjusting and retaining means for securing said guard to the abdomen, over the required surgical incision. On the inner surface of the base section 1 is mounted a soft sponge rubber surface pad 6, preferably formed with an outer rim c designed to encircle and fit the base section edges or a flat pad 6a, if desired, as in Fig. 9, and is formed with a central circular recess 7 positioned concentric with the ring 3, and is mounted thereover. The surface pad 6 is preferably formed with an inner beveled, curved surface to fit the base section curvature, and with a straight, flat outer surface flush with the colostomy ring end, forming a soft, smooth body contact surface, and liquid tight therewith for preventing any abdominal leakage. Within the outer end of the ring 3 is mounted a thin, pliable rubber seal cap 8, closely fitting the ring inner surface, positioned with its outer flange d extended over the surface pad central opening 7, covering and sealing the joint therewith.

Any suitable type of belt means may be used adaptable to proper body adjustment, and when the assembled guard is mounted over the colostomy opening, it forms a closing seal therefor, temporarily, and is provided with a secure body surface seal to prevent leakage of any discharge as may take place. The guard may be readily removed for inspection or sterilization, and is easily cleaned by removal of the seal cap 8 therefrom.

My guard casing may also be made of any other

suitable materials, either as assembled, or cast, or moulded, if desired. The application and operation is the same in either case.

Having fully described my colostomy guard, what I claim as my invention and desire to secure by Letters Patent is:

I claim:

1. A guard unit adapted for colostomy patients, comprising a thin sheet of transparent material formed substantially to normal abdominal curvature, a centrally positioned cylindrical colostomy guard ring fixedly mounted on the inner surface thereof, integral therewith, a resilient surface pad of the guard ring thickness and formed with a like central recess for receiving said guard ring therein, mounted over the guard inner surface, and suitable belt strap means formed on the guard outer surface for retaining said guard in an abdominal position.

2. A guard unit adapted for colostomy patients, comprising a thin curved sheet of transparent plastic material formed substantially to normal body abdominal curvature, a short, centrally positioned guard ring projected from the inner surface thereof, integral therewith, a sponge rubber surface pad with central opening mounted over the inner surface thereof, said pad being of a thickness equal to the short guard ring and positioned with its central opening thereover, a closed flanged rubber seal cap mounted within the guard ring opening and projected over the pad ring joint for sealing same, and suitable belt strap means formed on the guard outer surface ends for adjustably mounting same in a predetermined abdominal position.

HOWARD E. SMITH.

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