

[54] **ROLL OF PLASTIC FILM APRONS**

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[*] Notice: The portion of the term of this
patent subsequent to 1991, has been
disclaimed.

[22] Filed: **Mar. 16, 1973**

[21] Appl. No.: **342,170**

Related U.S. Application Data

[63] Continuation of Ser. No. 144,154, May 17, 1971,
Pat. No. 3,735,865.

[52] U.S. Cl. **242/55.53**, 2/49 R, 206/278,
206/390, 206/820

[51] Int. Cl. **B65d 85/66**, B65d 85/67

[58] Field of Search 206/390, 278, 820; 2/48,
2/49 R

[56] **References Cited**

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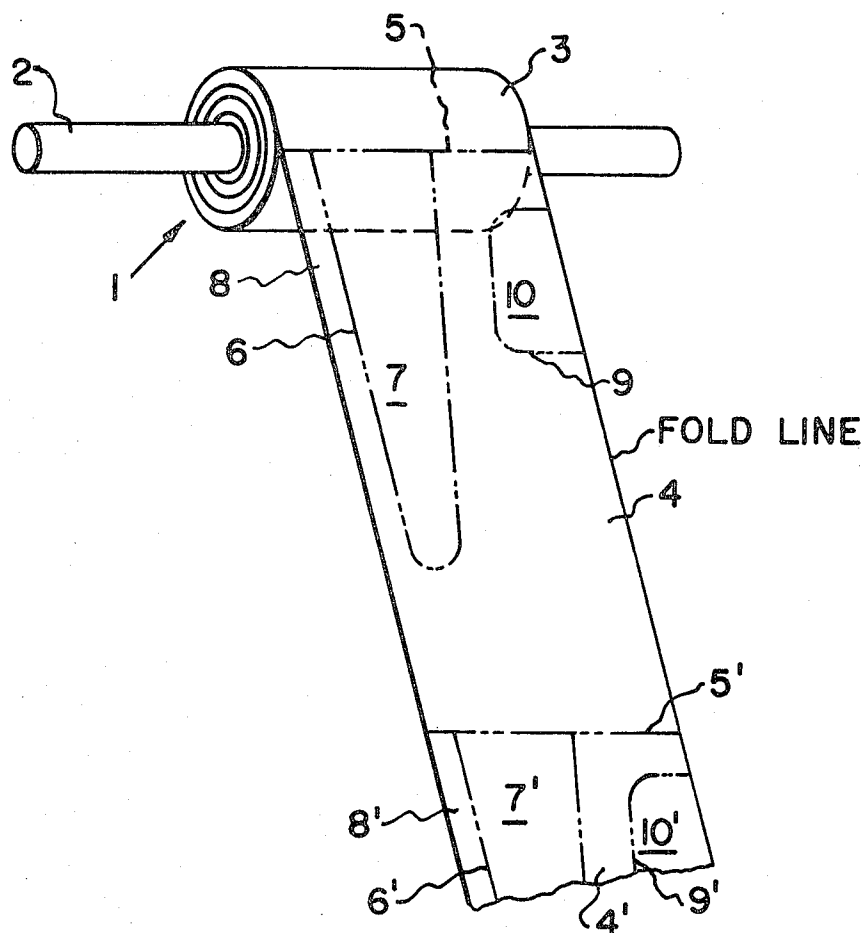
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Primary Examiner—William T. Dixon, Jr.
Attorney, Agent, or Firm—Neal J. Mosely

[57] **ABSTRACT**

Disposable plastic film aprons are prepared from strip material folded longitudinally and the folded film strip packaged in roll form and perforated to provide a plurality of readily separable aprons. The plastic film strip has a plurality of perforations extending transversely thereof to separate one apron from the next on said strip and perforations defining straps positioned on opposite sides of each apron extending longitudinally thereof to provide tie straps operable to be tied around of the neck of the user and perforations extending from said longitudinal fold to define a neck opening.

1 Claim, 6 Drawing Figures



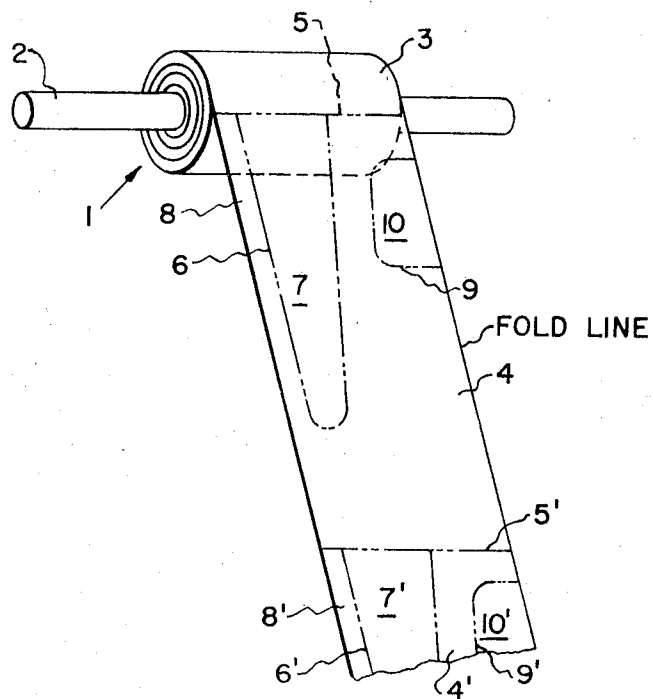


FIG. 1

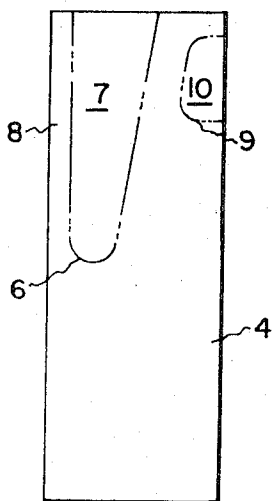


FIG. 2

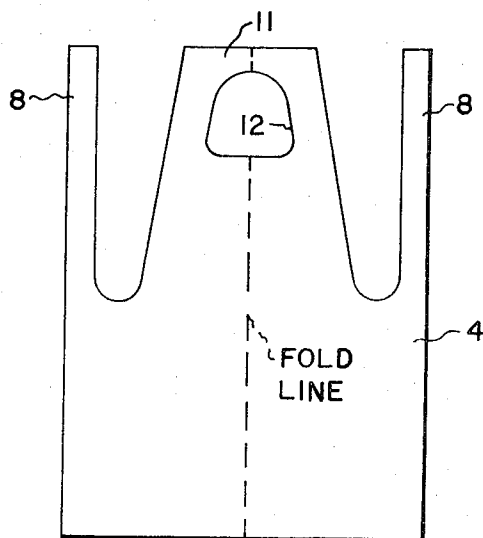


FIG. 3

ROLL OF PLASTIC FILM APRONS

CROSS REFERENCE TO RELATED APPLICATION

This is a continuation of copending application Ser. No. 144,154, filed May 17, 1971 U.S. Pat. No. 3,735,865.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to new and useful improvements in disposable plastic film aprons. More particularly, the invention relates to plastic film aprons manufactured in strip form, folded longitudinally, and perforated to be separated from one another and packaged in rolls.

2. Description of the Prior Art

Disposable bibs for aprons are shown in a variety of prior art references, viz. U.S. Pat. No. 2,262,010; 2,424,680; 2,756,430; 2,763,867; 3,001,646; 3,131,399 and 3,221,341. The prior art concerned with disposable bibs and aprons for the most part discloses bibs and aprons of paper which is of inadequate strength for the purpose. Also, the prior art tends to emphasize bib or apron construction which has additional tabs or tie straps or the like secured thereon by sewing or by heat sealing or adhesive sealing. In the few constructions that are provided with integral tie straps, the tie straps are usually cut into the material in a form which tears readily in use.

STATEMENT OF OBJECTS AND FEATURES OF THE INVENTION

It is, therefore, one object of this invention to provide a new and improved disposable plastic film apron in roll form, folded longitudinally, and perforated for separation of individual aprons one from the next.

Another object of this invention is the provision of an improved disposable longitudinally folded apron having tie straps formed integrally therewith and packaged in a continuous roll.

A feature of this invention is the provision of a new and improved disposable apron of plastic film stock in strip form longitudinally folded and perforated for separation of one apron from the next and perforated at the longitudinal fold to define a neck opening.

Another feature of this invention is the provision of a new and improved disposable apron of plastic film stock in longitudinally folded strip form, perforated for separation of the aprons into separate units and provided with perforations for separating integral tie straps from the body of the apron and perforations extending from said longitudinal fold to define a neck opening.

Other objects and features of this invention will become apparent from time to time and throughout the specification and claims as hereinafter related.

SUMMARY OF THE INVENTION

This invention comprises a new and improved disposable apron formed from an elongated strip of plastic film stock, folded longitudinally, and packaged in roll form. The plastic film strip is perforated to provide a plurality of readily separable aprons and includes perforations extending transversely of the strip to permit separation of one apron from the next and perforations defining tie straps positioned on opposite sides of each apron and extending longitudinally thereof to provide

tie straps operable to be tied around the neck of the user, and perforations extending from the longitudinal fold defining a neck opening.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an isometric view of a plurality of aprons of plastic strip material folded longitudinally and stored in roll form.

FIG. 2 is a plan view of one of the folded aprons removed from the roll shown in FIG. 1.

FIG. 3 is a plan view showing one of the plastic film aprons removed from the roll and unfolded.

FIG. 4 is a view in front elevation of a dispensing carton containing a roll of folded aprons as shown in FIG. 1.

FIG. 5 is a view of a carton shown in FIG. 4 with the front wall or panel removed.

FIG. 6 is an isometric view of the carton and roll of FIG. 4 with the cover partially open.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings by numerals of reference and more particularly to FIG. 1, there is shown a preferred embodiment of the invention in which a plurality of disposable aprons are prepared from plastic film material in strip form and stored on a roll. In FIG. 1, there is illustrated a roll of aprons generally designated 1 which is formed of a strip material which has been longitudinally folded prior to perforating and winding on the roll. The fold line of the wound material is indicated at the right side of the isometric view shown in FIG. 1. The roll 1 is provided with supporting rod or roller 2 on which the longitudinally folded plastic film 3 is wound.

The longitudinally folded plastic film 3 is provided with transversely extending perforations 5 and 5' which define tear lines for separation of individual aprons one from another. At the upper end of the apron, adjacent to the line of perforations 5, there are provided longitudinally extending perforations 6 which outline a cutout portion 7 which can be torn out from the apron to leave tie straps 8 spaced from the center portion of the apron.

At the center portion of the apron, adjacent to the line of perforations 5, there are a plurality of perforations 9 which form an arcuate cutout 10 at the fold line. When the arcuate cutout 10 is removed from the apron it provides a neck opening to fit over the head and neck of the user when the apron is removed from the roll.

In the initial formation of the aprons, the plastic film is unwound from a storage roll and is folded and perforated with the required perforations and then wound on the supporting rod or roller 2. If desired, the cutout portion 7 which defines the tie straps 8 may be completely cutout at the time of perforation of the apron. The cutout portion 10, however, must not be removed inasmuch as it is required to permit the aprons to be pulled from the roller without distortion.

Each successive apron on the roll is provided with the same arrangement of perforations for removal of one apron from the next and for removal of the cutout portions which provide the tie straps and neck opening. In FIG. 1, the arrangement of perforations for the next succeeding apron is numbered the same as for the first apron with the addition of a prime to each of the reference numerals.

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In FIGS. 2 and 3, one of the aprons is shown removed from the roll. In FIG. 2, the apron 4 has been torn from the roll and is still in a longitudinally folded condition. The cutout portions 7 and 10 are in the same relation as shown in FIG. 1 and may be removed by the user to provide an apron ready for use. Of course, if the apron has been prepared with the cutout portion 7 removed at the time of manufacture the need for removal by the user is eliminated. In FIG. 3, the apron is shown unfolded and flattened position with the cutout portions 7 and 10 removed. The removal of cutout portions 7 leaves tie straps 8 in a free position to be tied around the waist of the user. The removal of cutout portion 10 leaves a head and neck opening 12 in the center portion 11 of the upper end of the apron 4.

The plastic film used in the manufacture of these bibs or aprons may be of any suitable type and is selected largely on economic considerations. Generally, polyethylene film is most economical and suitable for the purpose. However, other suitable plastic films, such as polyvinyl chloride, vinylidene chloride copolymers, rubber hydrochloride, polyesters, may be used. The thickness of the film used in manufacturing the aprons is dependent strictly upon the toughness of the film and the type of wear or use to which the apron may be put. The films used in the manufacture of the aprons therefore may vary from a fraction of a mil in thickness up to several mils perhaps as heavy as 5 or 10 mils in thickness. Usually the film having a thickness of 1 to 2 mils is adequate for the purpose.

In FIGS. 4, 5, and 6 the roll of plastic aprons is shown installed in a dispensing carton. The particular arrangement shown is a preferred arrangement for handling large rolls of 50 or 100 aprons or more. However, it will be obvious to those skilled in the art that smaller or larger cartons can be used for dispensing lesser or greater numbers of aprons on a roll.

In FIG. 4, there is shown a front elevation of a carton 20 in which the roll 1 of plastic aprons 4 is supported. Carton 20 has a front panel 21, side panels 23 and 24, and a bottom panel 25, as well as a rear panel which is not shown. A top panel 26 is in the form of a lid which may be folded elongated or closed to install or remove a roll of aprons. In the front panel 21 there is provided an elongated slot 22 through which the aprons 4 may be pulled from the roll.

In FIG. 5, the front panel 21 is removed or cut away to show the interior construction of the carton and its

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relation to the roll of aprons. The bottom panel 25 has end walls 23 and 24 extending upward therefrom in the form of flaps which have extensions 27 and 28 respectively which fold downward over flaps 29 and 30 which extend inward from the front panel 21 which is cut away in FIG. 5. The rebent flap portions 27 and 28 together with end walls 23 and 24 and flaps 29 and 30 provide a multiple end wall construction consisting of three thicknesses of the cardboard from which the carton is made. At the center of each end wall, there is a circular cut through one or two of the thicknesses of cardboard to provide a recessed opening receiving the end of roller 2 on which the roll of aprons is wound. In FIG. 6, the carton and roll of aprons are shown in an isometric view with the cover or top wall 26 opened showing the end flap 31 which fits inside the front panel 21.

While this invention has been described fully and completely, as required by the Patent Statutes, with reference to a single preferred embodiment, it should be understood that within the scope of the appended claims the invention may be practiced otherwise than specifically described and shown herein.

I claim:

1. A roll of plastic film aprons comprising an elongated strip of plastic film folded in half longitudinally and wound in said longitudinally folded form as a roll on a core or roller, said folded film having a plurality of perforations extending transversely thereto at predetermined longitudinally spaced intervals to facilitate tearing discrete portions of plastic film from the roll, said folded plastic film having a plurality of perforations adjacent to each set of transversely extending perforations extending from the edge fold to define a subsequently removable portion of plastic film which when removed leaves an opening at said edge, said folded plastic film having an arcuate cut-out portion beginning at each set of transversely extending perforations and extending parallel to the edge opposite said fold, curving transversely, and then extending back to said transversely extending perforations, to define tie straps at one side, said plastic film being severable from said roll and the portion defined by said perforations being removable to define an apron having tie straps extending upward from a base portion and having a central neck opening, when the film is unfolded.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,851,760 Dated December 3, 1974

Inventor(s) Buford Bryan Smith

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

On the cover sheet item [76] "Ruford Bryan Smith" should read -- Buford Bryan Smith --; Reference to the terminal disclaimer "1991" should read -- 1990 --.

Signed and sealed this 6th day of May 1975.

(SEAL)

Attest:

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