This invention relates to the packaging of articles and more particularly to a continuous tube-like strip of packaging material which is constructed and adapted to be divided into individual bags at the point of packaging.

An object of the invention is to provide a tubular strip of the above type which is so arranged that the individual bags may be opened and filled prior to being severed from the strip.

Another object is to provide such a continuous tube-like strip wherein the individual bags are formed by transverse seals which constitute the bottoms of the successive bags and transverse slits which extend through selected portions of the tubes adjacent the transverse seals to define the top portions of the respective bags.

Another object is to provide a construction of the above type wherein the opening of the bags for filling is facilitated.

Other objects and advantages will be apparent as the nature of the invention is more fully disclosed.

In accordance with the present invention a packaging tube of flexible film-forming material in flattened condition is provided with longitudinal pleats and transverse slits which pass through one or more of the pleats, the distance between the slits determining the length of each individual bag. Due to the fact that the tube is provided with pleats through which the slits pass it is possible to fill the bags with the material or merchandise to be packaged therein while the packaging units are still interconnected, as the mouth of the packaging unit can be substantially fully opened up by introducing grasping members or by directing a stream of air to the mouth. As the pleats are cut off by the slits the mouth of the bag is opened and the merchandise to be packaged can be easily introduced.

According to an embodiment of the invention at least one side of the flattened tubing is provided with one or more pleats situated within the longitudinal edges of the tubing. In this case the slits extend over practically the whole width of the pleats so that the packaging units are connected with each other only at the longitudinal edges of the tubing.

The individual containers may be initially provided with a bottom by a transverse seal adjacent but spaced from each slit so that a pocket is formed. This sealing may be obtained by heat-sealing if the tubing material used is a thermoplastic material, such as polyethylene.

The tubing may be provided with two pleats or folds and one half of the pleats may be narrower than the other. In this case the narrower half of the pleats is preferably wholly cut through.

The slits may be positioned only in one of the sides of the tubing but they may also be positioned in both sides, i.e., they pass through both sides.

The tubing may be provided with pleats or folds in both sides.

The accompanying diagrammatic drawing are shown some embodiments of continuous bag tubings of polyethylene according to the invention.

FIG. 1 is a plan view of a tubing which has been divided and sealed to form interconnecting bags.
the same manner as the tubing according to FIGS. 3 to 5. The slits pass wholly through the tubing and each individual bag is connected to the adjacent bags only by means of the longitudinal strips 11. In opened up condition the cross section of the bag may have the appearance as shown in FIG. 7, provided that the tubing during the blowing up operation does not rest on a flat support but is suspended, for instance vertically.

It is not necessary to provide the transverse seals in the tubing initially but said seals may be provided after the filling of the bag. The closing of the bags may be carried out in other ways, such as by means of an adhesive.

In order to facilitate the separation of the bag from the tubing, perforations may be provided in the prolongation of the slits.

The tubing according to the present invention may be manufactured of such plastic film materials as polyethylene or polyvinyl chloride but cellophane, paper and similar packaging material may also be used.

Having now described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A flexible tubing of thermoplastic material for packaging purposes, said tubing being folded in flattened condition and having front and back panels and having at least one longitudinal inturned bellows fold, said tubing having a series of transverse slits, spaced longitudinally to form a series of article receiving packaging units therebetween, said slits extending entirely through said front panel and through said bellows fold, but terminating at their ends to leave at least portions of said back panel connecting successive units, said tubing having a transverse heat seal closely adjacent one side of each slit thereby closing the adjacent end of each of said units, each unit thereby having a slit at one end and a transverse seal at the other end, said units being adapted to be opened to receive an article for packing, said connecting portions being adapted to be subsequently severed to form individual packages.

2. A tubing as set forth in claim 1 in which said slits extend through only one of said panels and the other of said panels is provided with perforations to facilitate separation of the units.

3. A tubing as set forth in claim 1 wherein said bellows fold is formed in one of said panels and is spaced inwardly from the side edges of said panels to form a pleat having a front wall narrower than said panel and said slits extend entirely through said pleat and said front and back walls but terminate at points within the confines of said walls to leave connecting strips at the side edges of said walls.

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