

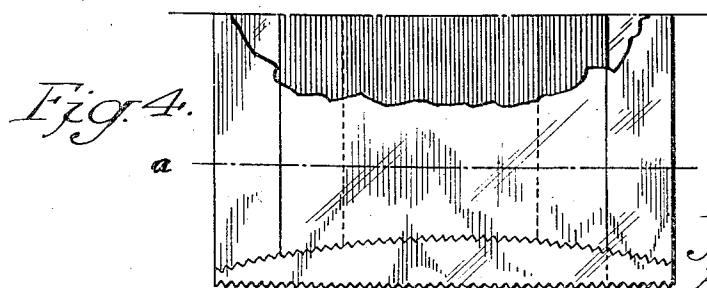
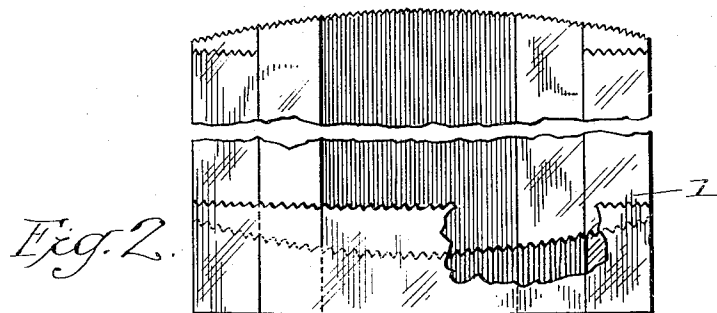
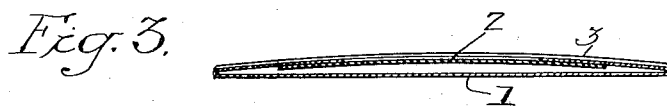
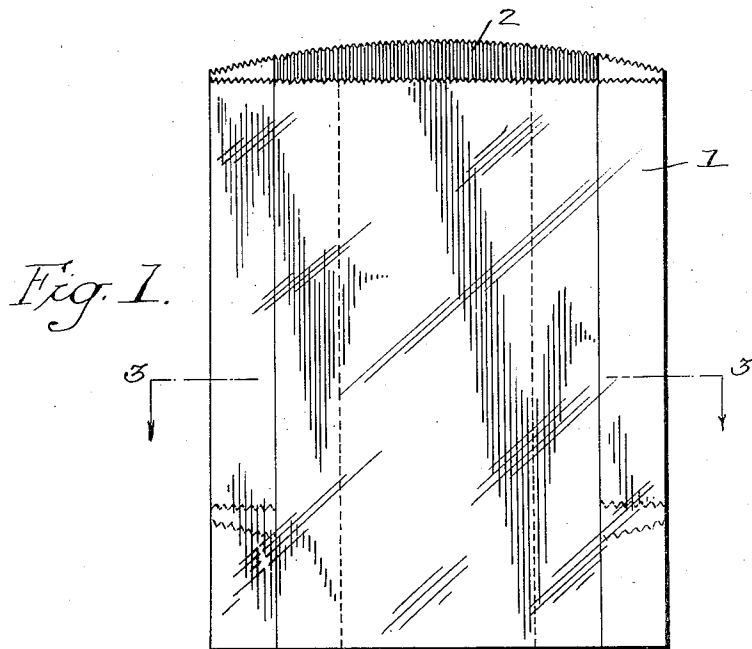
May 28, 1935.

J. M. DRIVER

2,003,182

CONTAINER

Filed July 26, 1930



Inventor;
John M. Driver
by his Attorneys
Hanson & Hanson

UNITED STATES PATENT OFFICE

2,003,182

CONTAINER

John M. Driver, Wynnewood, Pa.

Application July 26, 1930, Serial No. 470,966

5 Claims. (Cl. 229—53)

This invention relates to improvements in containers, and more particularly to that type of container comprising a tubular body formed by strips of paper or other suitable material adhering along their longitudinal edges. Containers of this character are commonly formed by machinery, the paper or other stock from which the product is made being passed into and through the machine in continuous longitudinal strips or webs and being glued together and divided longitudinally into sections affording containers of the desired length. Where the containers take the form of bags, the machines also are equipped to fold over and seal one end of the individual tubular blank to thereby form a bottom closure, the other end being left open for insertion of the contents.

It has been proposed to form this type of container of "cellophane" or similar transparent sheet material, thereby to render the contents visible. This has been found impracticable, however, for several reasons. "Cellophane" i. e., regenerated cellulose is inherently flimsy and unsubstantial, and containers made of this material assume the same characteristics. Such containers are extremely difficult to handle, and the operation of inserting the contents is both tedious and expensive. Also the container affords no support for the contents so that the package itself usually lacks firmness and form and is undesirable in that respect. Another undesirable feature of the all-"cellophane" container is the tendency of the sides to adhere together, it being difficult and sometimes quite impossible to open the bags to receive the contents. This difficulty is aggravated by the weakness of the material in certain directions and its tendency to tear under very slight strains.

It has also been proposed to form containers with a strip of "cellophane" forming a narrow window at the front through which a limited portion only of the contents is visible, but machine-made containers of this character, requiring in manufacture the use of three separate strips inclusive of the strip of "cellophane", are made by a method differing in essential respects from that constituting my invention, and the container itself is not comparable either to the all-"cellophane" container or to one made in accordance with my invention. Such containers, aside from affording only a limited view of the contents, are necessarily of poor appearance due to the impracticability of creating a smooth seam between the "cellophane" and the bond or other paper forming the body of the bag. Unequal expansion and contraction of these materials in the gluing operation causes a puckered appearance along the seam which renders the front of the bag unattractive, and for this reason alone the utility of the container is very limited.

It is an object of my invention, then, to provide a bag which shall be in all desirable respects a substantial equivalent of a container made entirely of "cellophane", and which shall be the superior of the all-"cellophane" article by reason of a complete absence of the essential defects, outlined above, which render the latter container commercially impracticable. By my invention, I have produced a container of the stated type which is essentially a "cellophane" container improved in fundamental respects to a point affording an article of high utility and desirability.

More specifically, an object of the invention is to provide a "cellophane" container which shall have sufficient "body" to render it readily handled and to afford a package of adequate firmness and definite form.

Another object is to provide a "cellophane" container that shall not be subject to sticking closed and which may be readily opened to receive the contents.

In the attached drawing:

Figure 1 is a front view of a bag made in accordance with my invention;

Fig. 2 is a rear face view of the bag;

Fig. 3 is a section on the line 3—3, Fig. 1 and

Fig. 4 is a fragmentary front view of the lower end of the tubular blank before being folded on the line *a—*a** to form the bottom of the bag as shown in Fig. 2.

"Cellophane" is a highly desirable material for use in the manufacture of containers for certain purposes but, as set forth above, this material by reason of certain inherent physical characteristics is generally unsuitable. I have discovered that by introducing at the back of a "cellophane" container of the stated type a longitudinal strip or panel of a relatively heavy, tough and durable sheet material, such as bond or glazine paper, it is possible to provide a container in which all of the undesirable features arising from the physical characteristics of the "cellophane" are eliminated the container having all of the desirable characteristics of one made in its entirety of "cellophane" but lacking the undesirable features previously mentioned. Thus, with reference to the drawing, a container made in accordance with my invention may comprise a tubular body, a major portion 1, of the circumference of which is composed of "cellophane" or similar transparent sheet material, while the lesser portion, 2, is composed of a relatively heavy, tough and durable sheet material, such as bond paper, which by reason of its inherent physical characteristics shall be capable of providing in the tubular body as a whole the body, strength and resistance to mutilation lacking in the "cellophane". The parts 1 and 2 extend longitudinally of the tube and are joined at their longitudinal overlapping edges by means preferably of a suitable adhesive,

and the tubular body, 1—2, is so folded that the transparent portion 1 forms the entire front of the bag as well as side edge portions of the back, of which latter the part 2 constitutes a central reinforcing panel. In forming the bottom of the bag, the end of the tube, see Fig. 4, is folded back upon the transparent front face on the line *a—**a* and is secured against the rear face by adhesive, the fold including portions both of the front and rear faces.

A container constructed as above lacks the flimsiness of the all-"cellophane" container and has sufficient "body" to render handling easy, and to afford a package of desirable firmness. Such a container is relatively strong and durable and is not liable to tearing to anywhere near the same degree as the all-"cellophane" container. In these respects the reinforcing panel 2 compensates for the physical deficiencies of the "cellophane". Furthermore, there is no tendency for the "cellophane" to adhere to the bond or glazine paper so that there is no difficulty, as in the all-"cellophane" article, in opening the container to admit the contents. It is to be noted, also, that for all practical purposes and in all desirable features the container is the substantial equivalent of the all-"cellophane" article.

It will be understood that containers made in accordance with my invention may vary from that shown in Figs. 1 to 3 of the drawing. Therein is illustrated but one well known form of bag, whereas the invention is equally applicable to bags of the square, satchel or automatic bottom type, and to bags having the tuck-in sides. The width of the reinforcing panel 2 also may vary in accordance with the requirements, and the "cellophane" may, without departure from the invention, extend completely across the back of the container, the strip 2 secured to the resulting "cellophane" tube functioning in the manner previously described to afford a desirable form of container. While I prefer to secure the reinforcing panel within the edges of the "cellophane" strip, the panel 2 may be secured externally without departure from the invention. It will be understood further that the material of the reinforcing strip may vary widely without departure from the invention, and there is to be no limitation in this respect. I may for example use a reinforcing strip of "cellophane", thus affording a completely transparent container; this, however, is considered relatively undesirable by reason of certain previously mentioned qualities in this material, and I prefer to employ a reinforcing strip of a material other than "cellophane".

I claim:

1. As a new article of manufacture, a bag comprising a transparent strip of flexible cellulose material and a second flexible strip of relatively stiff material, said strips being seamed together with the longitudinal edge portions of the transparent strip adhesively secured to the other strip to form a tubular bag body, the transparent strip forming the forward face of the bag, and said other strip together with portions of the transparent strip forming the rear face of the bag, and said seams being spaced inwardly from the longitudinal side edges of said forward face, the said front face being extended at one end of the tubular body, and that end of the tubular body, including a portion of the rear face, being folded and adhesively secured to the body of the bag at a location remote from the bottom edge of the front wall to form the bottom of the bag, the

side seams and bottom seam location leaving the front face of the bag entirely unobstructed and free of seams.

2. As a new article of manufacture, a bag formed of two flexible strips united at their longitudinal edge portions to form a tubular blank, one of said strips being of transparent cellulose material and the other of relatively stiff material, and the transparent strip being folded longitudinally along its opposite sides to define the forward face of the bag, the rearward part of the bag being formed by the remaining portions of the transparent strip and the other strip, the seams at the united edges of said strips being spaced rearwardly from the side edges of said forward face, the said forward face of the blank being extended at one end, and that end of the blank including a portion of the rear face being folded and adhesively secured at a location remote from the bottom edge of the front wall to form the bottom of the bag, the side seams and bottom seam location leaving the front face of the bag entirely unobstructed and free of seams.

3. As a new article of manufacture a bag formed of two flexible strips united at their longitudinal edge portions to form a tubular blank, one of said strips being of transparent cellulose material and the other strip being of other flexible sheet material, and the transparent strip being folded longitudinally along its opposite sides to define the forward face of the bag, and the rearward part of the bag being formed by the remaining portions of the transparent strip and the other strip with the side edges of the other strip spaced inwardly from the side edges of the forward face and seamed to the longitudinal edges of the transparent strip, the said forward face of the blank being extended at one end and that end of the blank including a portion of the rear face being folded and being adhesively secured at a location remote from the bottom edge of the front wall to form the bottom of the bag, the side seams and bottom seam location leaving the front face of the bag entirely unobstructed and free of seams.

4. A bag comprising a transparent strip of flexible cellulose material forming the front wall of the bag, and a second strip of other flexible sheet material forming a portion at least of the rear wall of the bag, the longitudinal margins of the transparent strip being folded rearwardly, and secured to the longitudinal margins of the second strip, the end of the tubular body thus formed including a portion of the rear face being folded and secured at a location remote from the bottom edge of the front wall to form the bottom of the bag, the side seams and bottom seam location leaving the front face of the bag entirely unobstructed and free of seams.

5. A bag comprising a transparent strip of flexible cellulose material forming the front wall of the bag, and a second strip of other flexible sheet material forming a portion at least of the rear wall of the bag, the longitudinal margins of the transparent strip being folded rearwardly and secured to the longitudinal margins of the second strip, and portions of the front and rear walls at one end of the tubular body thus formed being folded and secured in a position removed from the front face of the bag to form the bag bottom, the side seams and bottom seam location leaving the front face of the bag entirely unobstructed and free from seams.

JOHN M. DRIVER.