T. SCHERF.

LINING FOR BARRELS AND OTHER LIKE CONTAINERS.

APPLICATION FILED NOV. 9, 1908.

936,817. Patented Oct. 12, 1909.

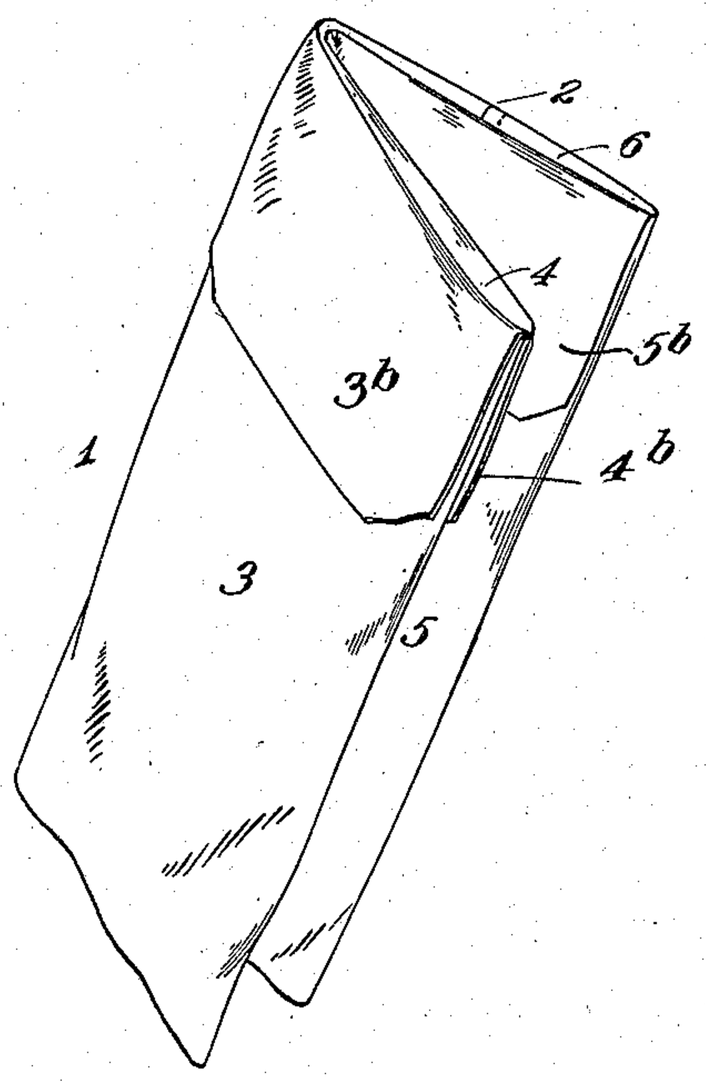

FIG. 1

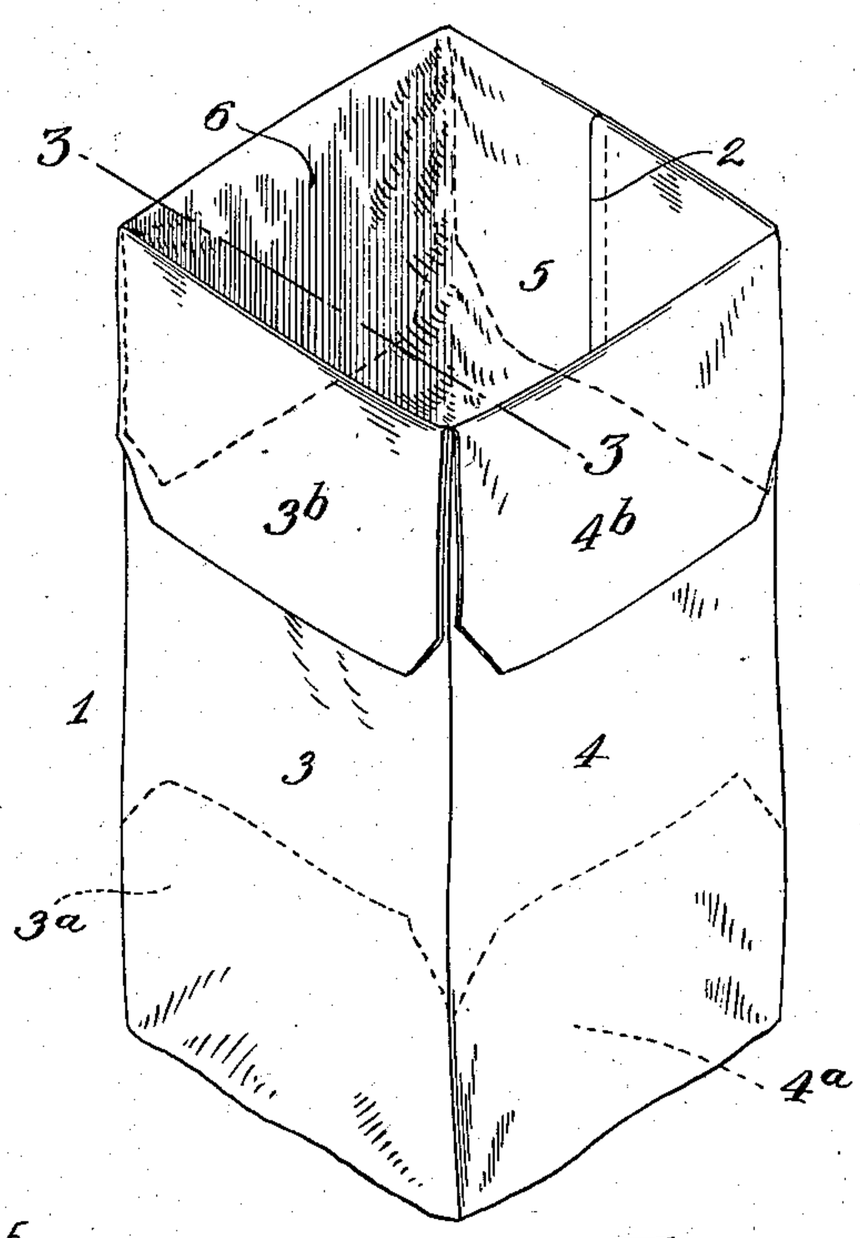

FIG. 2

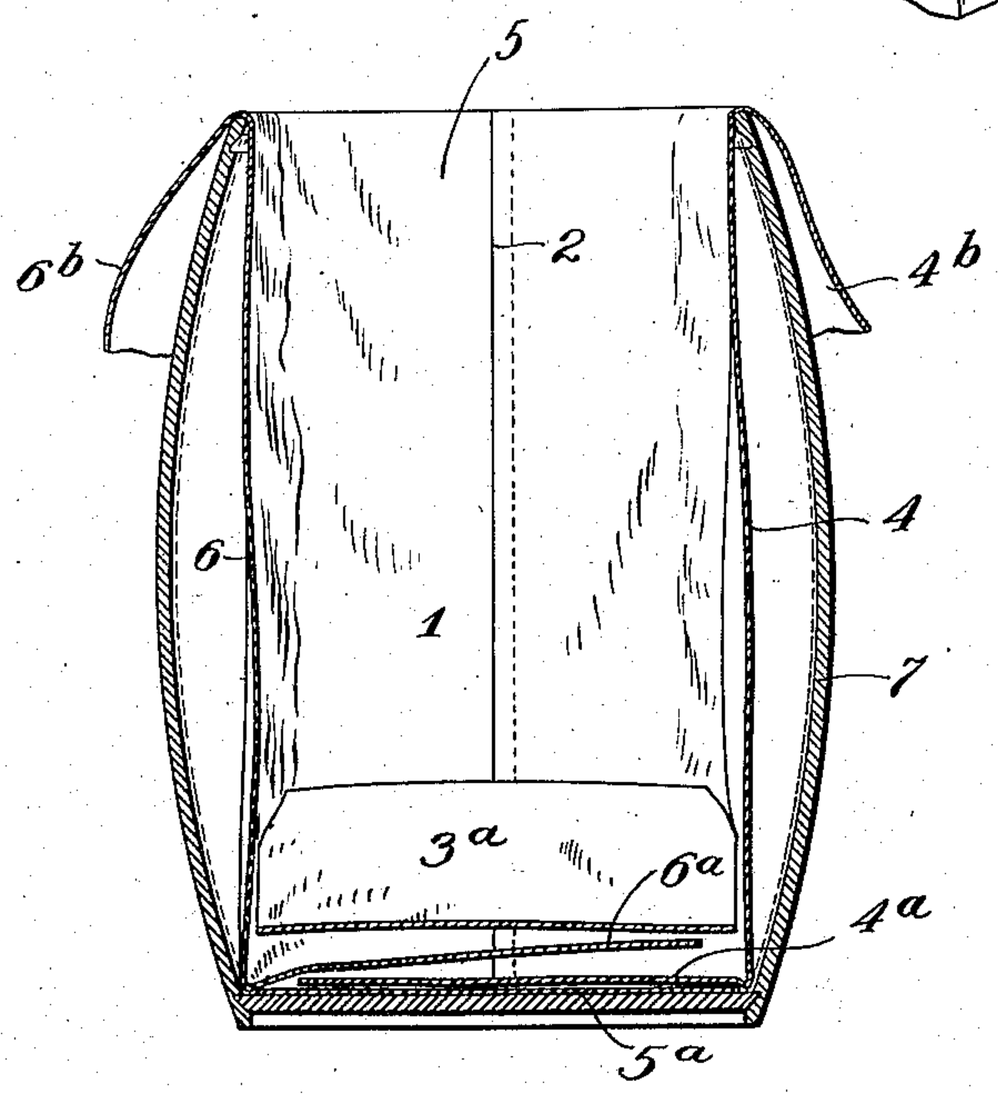

FIG. 3

WITNESSES:
Nathan F. Fretter.
W. L. McJarrell

INVENTOR,
Theodore Scherf
BY Bates, Fouts & Hull,
ATTYS.

UNITED STATES PATENT OFFICE.

THEODORE SCHERF, OF CLEVELAND, OHIO, ASSIGNOR TO THE CLEVELAND-AKRON BAG COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

LINING FOR BARRELS AND OTHER LIKE CONTAINERS.

936,817. Specification of Letters Patent. Patented Oct. 12, 1909.

Application filed November 9, 1908. Serial No. 461,628.

To all whom it may concern:

Be it known that I, THEODORE SCHERF, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Linings for Barrels and other Like Containers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to linings for receptacles, and more particularly to linings for barrels, kegs, casks, boxes and other like containers.

Among the objects of the invention are the production of a lining which may be readily applied to the receptacle with which it is to be employed and which, when so applied, will be efficient in preventing the escape of the contents of the receptacle.

Further objects of the invention are to provide a lining of paper or analogous flexible material which shall be economical of production, convenient of application to and removal from a barrel or other receptacle with which it may be associated and which will dispense with the necessity of applying a separate bottom and top to the lining.

Generally speaking, the invention may be defined as consisting of the combinations of elements embodied in the claims hereto annexed and illustrated, in one embodiment, in the drawings forming a part hereof, wherein—

Figure 1 represents a perspective view of a lining showing the same in folded condition prior to insertion into its receptacle; Fig. 2 represents a similar view of the lining, showing the same unfolded, and Fig. 3 represents a sectional view of a barrel having my lining applied thereto, the section through the lining being taken on about the line 3—3 of Fig. 2.

In constructing my improved lining I take a sheet of paper, preferably paper that has been softened to render the same pliable, and form the same into a tube by securing the edges of the same together in any suitable manner, as by pasting or gluing the same.

The tube is divided peripherally into a number of parts and the top and bottom of the tube are slitted to form flaps therefrom. In the embodiment of the invention shown herein, the periphery of the tube is divided into four equal parts, and four flaps are formed at the top and at the bottom of the tube, the slits by which the corresponding top and bottom flaps are formed being in the same straight line extending substantially parallel with the axis of the tube. The flaps at what will be the bottom of the tube are folded upwardly inside of the tube, while the flaps which are at what will be the top of the tube are folded outwardly. For convenience of packing and of application to the articles with which it is to be employed, the lining is then folded longitudinally into four equal parts, the folds being formed in such manner as to connect the corresponding slits between the flaps at the top and at the bottom of the tube, as shown more particularly in Figs. 1 and 2.

Describing the parts by reference characters, 1 represents the tubular lining hereinbefore referred to, and 2 the seam at which the edges of the lining blank are united, as by means of paste. As shown herein, the tube is divided into four longitudinally extending sections, said sections being designated by the numerals 3, 4, 5 and 6, and each section being provided at its bottom with a corresponding flap 3^a, 4^a, 5^a and 6^a respectively, and at its upper end with an outwardly and downwardly turned flap 3^b, 4^b, 5^b and 6^b, respectively, said flaps being formed by means of longitudinal slits at the bottom and top of the tube. For convenience of folding, these flaps will have their free ends beveled at the corners, as shown in the drawings.

Where the lining is intended for a barrel, as shown at 7, the perimeter of the tube will be substantially equal to the inner perimeter of the central or bilge portion of the barrel. The lining being of softened pliable paper, the top and bottom thereof will accommodate themselves to the contracted space occupied thereby, while the middle portion will, when material is placed therein, conform in contour to the inner contour of the barrel and will fit against the inner surface of the barrel, as indicated by dotted lines in Fig. 3.

In applying my lining to a barrel or other receptacle it is inserted into the barrel with the upper flaps engaging the top of the barrel, as shown in Fig. 3, thus retaining the lining in place. By shaking the lining, the bottom flaps will in most instances disen-

gage themselves from their respective sides and will drop down in the manner shown in Fig. 3, thus forming a closure for the bottom of the lining. This closure, on account of the manner in which the flaps are formed, will effectively prevent the leakage of material therethrough, as each flap extends substantially across the bottom of the tubular lining and breaks joints with the adjacent flap or flaps. When the barrel has been filled, the operator folds over the flaps 3^b, 4^b, 5^b and 6^b, and places the cover on the receptacle.

From the foregoing description taken in conjunction with the drawings, it will be apparent that I have produced a lining for barrels which is extremely simple and economical of production, but which will be efficient in operation and may be applied to the container with which it is to be employed with a minimum of manipulation.

As shown in Fig. 1, the linings may be folded for packing or shipment along the longitudinal lines connecting the slits between the corresponding flaps at the top and bottom and in this condition will occupy a minimum of space and will be in readiness for insertion into the barrels or other receptacles with which they may be employed.

While I have shown the lining as provided with four flaps at the top and at the bottom thereof, I do not propose to limit it to any particular number of such flaps, as it will be apparent that more or less may be used, it being essential that enough flaps be employed to form, when folded transversely of the tube, a tight closure for the same.

Having thus described my invention, what I claim is:

1. A lining for barrels and other like containers, comprising a tube of pliable paper normally open at both ends and divided into a plurality of longitudinally extending sections, each section having at its opposite ends a flap, the flap at the bottom of a section being bent inwardly against the inner surface of such section and the flap at the top being bent outwardly against such section.

2. A lining for barrels and other like containers comprising a tube of pliable paper having a plurality of slits extending from each end toward the longitudinal center thereof, the corresponding slits at opposite ends being in substantial alinement, the flaps formed between said slits at one end of the tube being folded inwardly into substantial engagement with the body of the tube and the flaps formed between said slits at the opposite end of the tube being folded outwardly into substantial engagement with the body of the tube.

3. A lining for barrels and other like containers comprising a tube of pliable paper having flaps at the bottom and top thereof, the flaps at the bottom being adapted to fold one over the other to form a bottom closure, and the flaps at the top being folded outwardly and adapted to be folded inwardly.

4. A lining for barrels and other like containers comprising a tubular body of pliable paper, said body having flaps at opposite ends thereof adapted to extend transversely of the body to form end closures therefor, said body being divided into longitudinal sections, each section having a flap at opposite ends thereof and said body being folded along the lines between said sections.

5. A lining for barrels and other like containers comprising a tube of pliable material having a plurality of slits extending from each end toward the longitudinal center thereof, the corresponding slits at opposite ends being in substantial alinement, the flaps formed between said slits being arranged and adapted to be folded across the tube to form closures therefor, the flaps at one end of the tube being folded inwardly against the body thereof and the flaps at the opposite end of the tube being folded outwardly against the body thereof and the body of the tube being folded along the lines uniting the corresponding slits at opposite ends thereof.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

THEODORE SCHERF.

Witnesses:
J. B. HULL,
BRENNAN B. WEST.