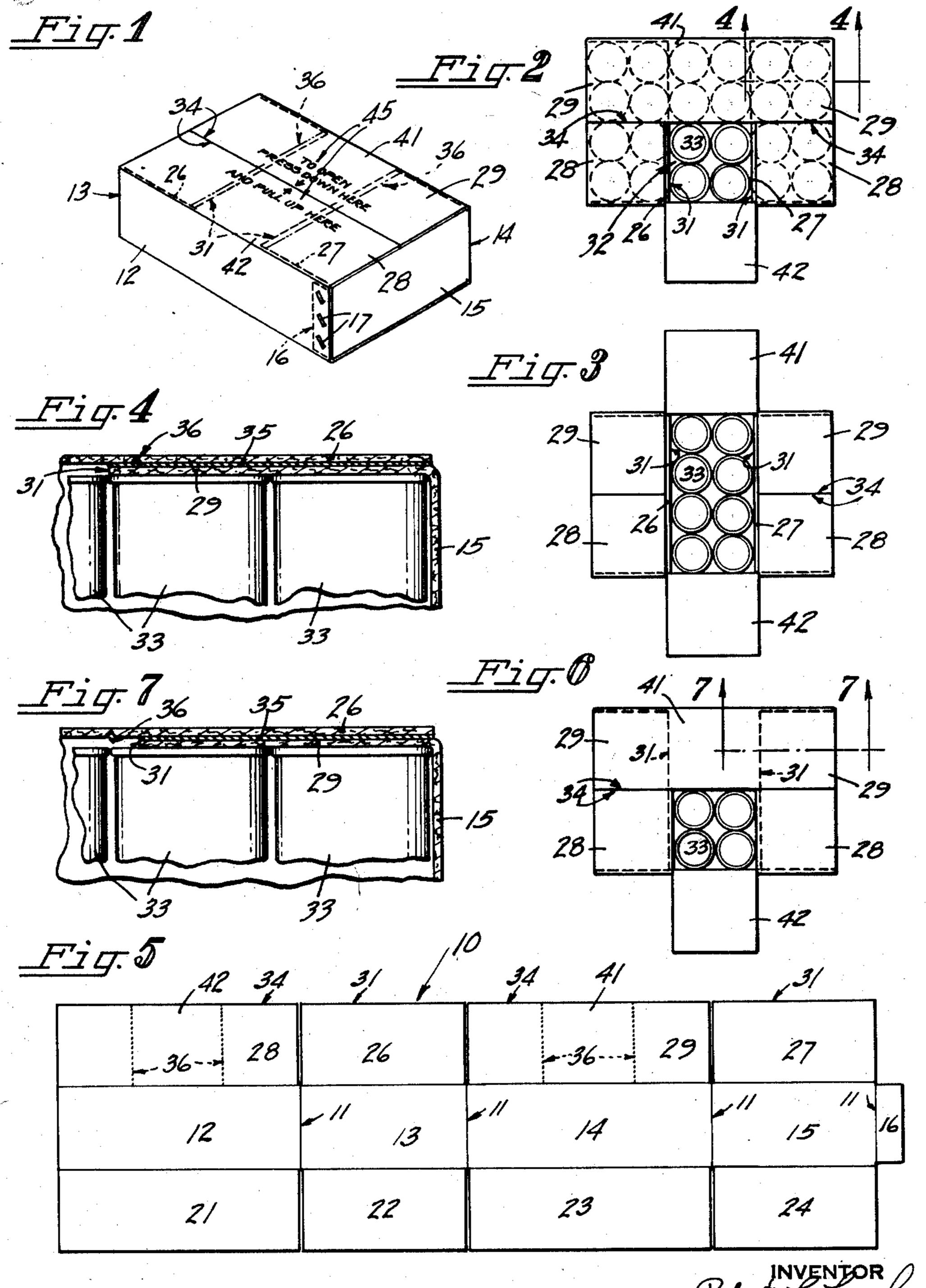
CONTAINER

Filed Oct. 1, 1936



Robert L. Larch
BY Draw W. Thomburgh
Charles H. Cine
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,148,480

CONTAINER

Robert L. Larsh, Joliet, Ill., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application October 1, 1936, Serial No. 103,576

2 Claims. (Cl. 229—51)

The present invention relates to fibre containers or cartons in which canned goods or the like are shipped and stored and which the closed by overlapping sealed closure flaps, the invention having particular reference to lines of perforations which set off removable wall sections formed in certain of the flaps for facilitating quick and easy opening of the carton.

Fibre cartons suitable for shipping and storing heavy canned goods such as the usual cans
of fruits, vegetables, beverages and the like are
usually subject to rough handling in transit and
are therefore preferably constructed from heavy
and tough paper board. The closure flaps are
usually sealed down with adhesive or wire staples.

It has been found that such cartons are difficult to open and that the resistance offered by the toughness of the paper and the clinging effect of the adhesive or staples often cause an irregular tearing of the flaps when an attempt is made to separate them. This irregular tearing of the board often extends into the side walls of the container destroying it and sometimes producing haphazard spilling of its contents. At other times attempts to separate and remove the flaps results in the tearing away of several small pieces of the fibre board before actual opening of the carton is achieved.

An object therefore of the instant invention is 30 the provision of a heavy duty fibre shipping container or carton having overlying inner and outer sealed closing flaps wherein the adjacent edges of the inner flaps are spaced apart to provide an opening for the removal of the container con-35 tents when the container is opened, and the adjacent edges of the overlying outer flaps abut against each other for temporarily closing the container opening to confine the contents during shipment and storage, these outer flaps having 40 aligning spaced and parallel transverse lines of perforations disposed adjacent the adjacent edges of the inner flaps and setting off removable portions of the outer flaps which may be readily torn open by the fingers and folded back to 45 permanently expose the container opening and thus gain access to the interior of the container.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a sealed fibre container embodying the instant invention;

Fig. 2 is a top plan view of the container showing the removable portion of one of the outer flaps opened;

Fig. 3 is a view similar to Fig. 2 showing the removable portions of both outer flaps opened;

Fig. 4 is an enlarged section of one corner of the sealed portion of the container as taken substantially along the line 4—4 in Fig. 2;

Fig. 5 is a developed plan view of the container blank in the flat as before assembly;

Fig. 6 is a top plan view of a modified form of container showing the removable portion of one of the outer flaps opened; and

Fig. 7 is an enlarged section of one corner of the sealed portion of the modified container as taken substantially along the line 7—7 in Fig. 6.

As a preferred embodiment of the invention the container illustrated in the drawing is preferably made from a one-piece blank 10 (Fig. 5) of plain or corrugated fibre board. The blank is formed into a rectangular container body by being folded along creased parallel lines 11 which set off flat side wall portions 12, 13, 14 and 15. A tab 16 formed on the outer edge of the wall portion 15 is secured by suitable adhesive or staples 17 (Fig. 1) to the wall portion 12 adjacent its outer edge to hold the ends of the folded blank together.

Bottom closure flaps 21, 22, 23, 24 are formed integrally with the side wall portions 12, 13, 14 30 and 15, respectively, along their lower edges to provide a bottom for the container. These flaps are folded inwardly in the usual overlapping manner and are secured together by suitable adhesive or staples.

In a similar manner the top of the container is provided with inner closure flaps 26, 27 (Fig. 5) formed on the side wall portions 13, 15, respectively, and outer closure flaps 28, 29 which are formed integrally with the side wall portions 12, 40 14, respectively. These flaps are adapted to be folded inwardly and sealed after the container has been filled. The inner closure flaps are so proportioned that when they are folded into closed position their adjacent terminal edges, marked 31, will be spaced apart as shown in Fig. 1. This space provides an opening 32 (Fig. 2) in the container through which the contents, herein shown as cans 33, may be removed when the container is opened.

The outer flaps 28, 29 are laid down over the top of the inner flaps 26, 27 and are so proportioned that their adjacent terminal edges 34 abut against each other to temporarily close the container opening 32 and to confine the container

contents during shipment and storage. These outer flaps are secured to the inner flaps preferably by a suitable adhesive 35 (Fig. 4) which is uniformly applied to the entire sealing surface

of the inner flaps.

Provision is made for opening the container by tearing a portion of either or both of the outer flaps 28, 29 along aligned predetermined weakened lines and folding the torn portion back out 10 of the way to expose the container opening 32. For this purpose aligned transverse spaced and parallel lines of perforations 36 (Figs. 1, 4 and 5) are formed in the outer flaps and are disposed so that they will overlie the inner flaps 26, 27 adjacent to and parallel with the flap edges 31.

These lines of perforations 36 set off removable portions 41, 42 in the respective outer flaps 28, 29. The marginal edges of these removable portions adjacent the lines of perforations 36 are secured 20 to the inner flaps by the adhesive 35 in order to maintain the full holding strength of the flaps and to prevent accidental opening of the con-

tainer during handling.

To open the container one of the removable 25 portions, as for example the portion 41 of the outer flap 29 is pressed down adjacent its terminal edge 34 and the fingers inserted under the removable portion 42 of the opposite flap 28. A slight pull on this portion 42 breaks the adhesive so bond between its secured marginal edges and the inner flaps 26, 27 and at the same time tears the outer flap 28 along its lines of perforations 36 in a regular and directed zone of separation. The torn portion may then be folded back as shown 25 in Fig. 2.

This exposes a part of the container opening 32 (Fig. 2) along one side between the spaced adjacent edges 31 of the inner flaps 26, 27 from which the cans 33 may be readily removed. If a 40 larger opening is desired the opposite removable portion 41 also may be readily torn back in the same manner as shown in Fig. 3. As a convenience in opening the container suitable legends 45 (Fig. 1) may be printed on the outer flaps 28, 29 45 to instruct the user how to proceed.

Figs. 6 and 7 illustrate a modified form of the invention. In this modified form the lines of perforations 36 are located adjacent the terminal edges 31 of the inner flaps 26, 27 and are 50 spaced inwardly thereof overlying the space 32 between the edges. In opening this form the same steps of tearing away and bending back the container wall are used although there will be no adhesive joint to break at the marginal edges.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent

that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being 5 merely a preferred embodiment thereof.

I claim:

1. A container comprising a rectangular body having side walls, and inner and outer overlying closure flaps formed integrally with said side 10 walls and adhesively sealed together to close said body, said inner flaps having their adjacent terminal edges spaced apart to provide an opening in the container and the outer flaps having their adjacent terminal edges substantially abutting 15 against each other so as to temporarily close the container opening, one of said outer flaps having spaced and parallel transverse weakening lines overlying said inner flaps adjacent the terminal edges thereof for substantially the entire width of 20 said flap, whereby to set off a removable portion in said outer flap having its marginal edges adjacent the weakening lines secured to and supported by the outer portions of said inner flaps, said removable portion being adapted to be torn 25 along said weakening lines with a minimum of resistance by adhesive to open the container by inserting the fingers between the adjacent terminal edges of the outer flaps and exerting a pulling force on said removable portion to expose 30 the container contents.

2. A container for shipping and storing canned goods, comprising a rectangular body having side walls, and inner and outer overlying closure flaps formed integrally with said side walls and ad- 35 hesively sealed together to close said body, said inner flaps having their adjacent terminal edges spaced apart to provide an opening in the container and the outer flaps having their adjacent terminal edges substantially abutting against 40 each other so as to temporarily close the container opening, each of said outer flaps having spaced and parallel transverse lines of perforations overlying said inner flaps adjacent the terminal edges thereof for substantially the entire 45 width of said flap, whereby to set off removable portions in said outer flaps having their marginal edges adjacent the lines of perforations secured to and supported by the outer portions of said inner flaps, said removable portions being adapt- 50 ed to be torn along said lines of perforations with a minimum of resistance by adhesive to open the container by inserting the fingers between the adjacent terminal edges of the outer flaps and exerting a pulling force on said removable por- 55 tions to expose a predetermined number of cans.

ROBERT L. LARSH.