June 29, 1926. 1,590,755

E. F. HULBERT

REENFORCED FIBER CONTAINER CLOSURE AND METHOD OF MAKING THE SAME

Filed Oct. 26, 1925

Fig. 1.

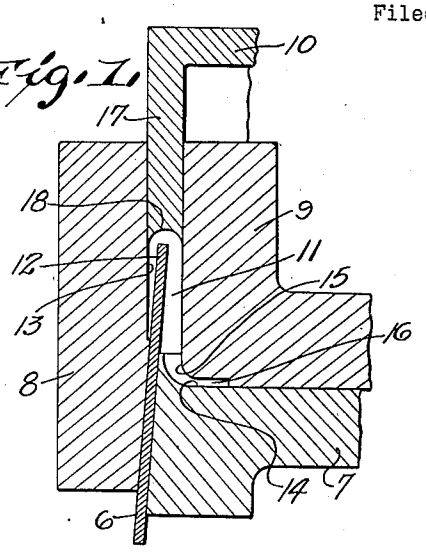


Fig. 2.

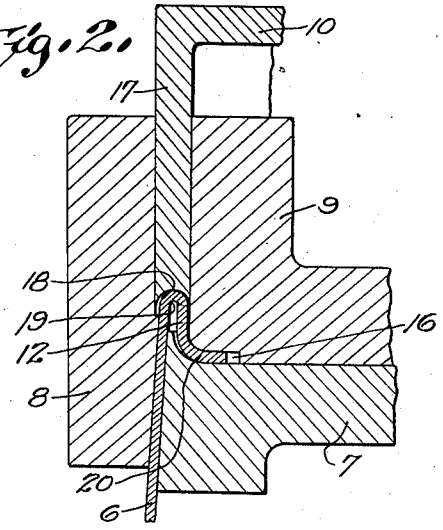


Fig. 3.

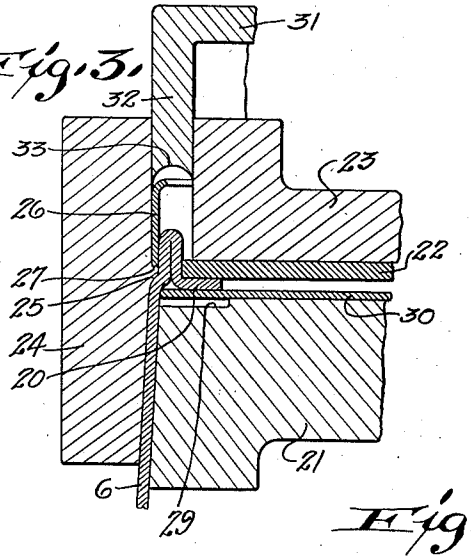


Fig. 4.

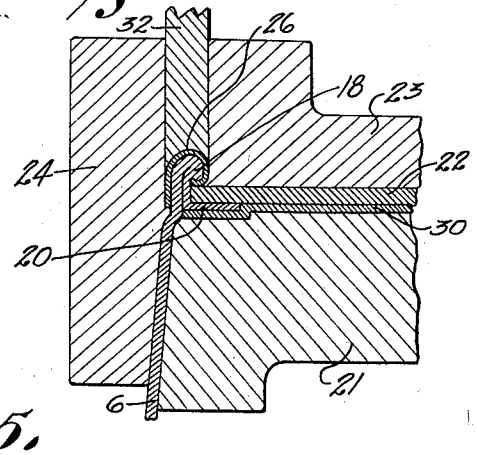
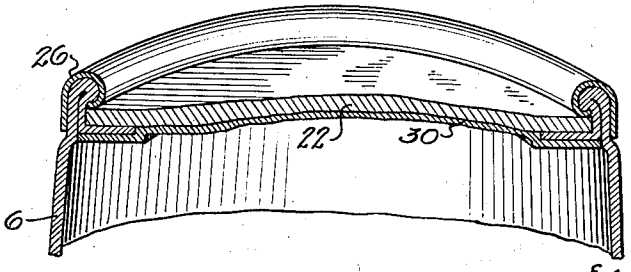


Fig. 5.



INVENTOR.
Edwin F. Hulbert
BY
Searles & French
ATTORNEYS

Patented June 29, 1926. 1,590,755

UNITED STATES PATENT OFFICE.

EDWIN F. HULBERT, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE MASTER PACKAGE CORPORATION, OF OWEN, WISCONSIN, A CORPORATION OF DELAWARE.

REENFORCED-FIBER CONTAINER CLOSURE AND METHOD OF MAKING THE SAME.

Application filed October 26, 1925. Serial No. 65,000.

The invention relates to fiber containers and to a method of making the same.

The object of this invention is to so treat the fiber siding of the container as to clamp the head between an inturned flange and bent over edge of the siding and to hold the parts thus combined firmly in place by a metal band applied to the siding and engaging the head.

The invention further consists in the several features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings, Fig. 1 is a detail sectional view showing the siding in the forming apparatus;

Fig. 2 is a view similar to Fig. 1, showing the siding in partially formed condition;

Fig. 3 is a detail sectional view through the container parts and forming apparatus during the head-assembly operation;

Fig. 4 is a view similar to Fig. 3, showing the parts in finished form;

Fig. 5 is a side elevation view, partly in section, of the finished container body.

In the drawings the numeral 6 designates the tubular siding of the cover or body of the container. This siding is formed of pressed pulp or a number of wrappings of fiber or paper sheets and is generally cylindrical or conical in form.

The siding 6 is first held between an internal expanding chuck 7 and an external contracting chuck 8 which cooperate with plungers 9 and 10 to form a space 11 into which the upper end 12 of the siding projects. The face 13 of the chuck 8 is offset from the end 12 to provide a clearance space. The face 14 of the chuck 7 is curved upwardly toward its outer edge to form an annular curved portion and the face 15 of the plunger 9 is spaced therefrom for a short distance before said plunger contacts with the chuck to form a lateral annular extension 16 of the space 11. The plunger 10 has an annular part 17 working between the chuck 8 and the plunger 9, and provided with a curved edge 18 which, upon being moved downwardly, engages the upper edge of the end 12 of the siding and turns it over and works it down into the extension 16 and thus forms a bend 19 in the siding and an inwardly extending flange 20. This action occurs because the fiber of the siding at the upper end, under the action of the plunger 10, becomes pliable enough to be turned over and forced into the position shown in Fig. 2.

With the siding thus initially formed it is placed over an anvil or chuck 21 and a head-piece 22 is started within the bent-over edge of the siding and moved downwardly to the position shown in Fig. 3 by a clamping plunger 23, and then an external contracting chuck 24 is actuated to squeeze the sides of the bent upper end of the siding between it and the head and to clamp the siding below the head to the chuck 21, the face portion 25 of said chuck 24 causing a lateral off-set in the siding adjacent the head.

A band 25 of thin sheet-steel or other suitable sheet-metal is then placed about the outer side of the bent-over edge of the siding and seats on the annular shoulder 27 of the chuck 24 and has its upper edge 28 slightly curved inwardly.

Thereafter the anvil 21 is raised to clamp the head 22 between it and the plunger 23 and has an annular recess 29 in its face to accommodate the flange 20. If desired, a facing piece 30 may be laid over the anvil 21 and secured by adhesive to the head 22 and over the flange 20.

Thereafter a forming plunger 31, having an annular part 32 provided with a curved edge 33 and working between the chuck 24 and the plunger 23, is moved downwardly to roll the free end of the band over the bent-over edge of the siding and bend this edge over against the head and clamp it in this position, as shown in Fig. 4, whereby the head is firmly secured within the siding between the flange 20 and the bent-over edge 12 of the siding.

What I claim as my invention is:

1. In a container, the combination of tubular fiber siding having an end portion with a return bend and an inwardly extending annular flange, a head seating against said flange and fitting within the turned-

over end portion of said siding, and a metal band clampingly engaging the extended ends of said siding and the head.

2. In a container, the combination of tubular fiber siding having a double wall end portion and a flange extending inwardly from the end of the inner wall of said end portion, a head seating against said flange and fitting within said double wall end portion, that part of said double end portion above the head extending inwardly over the head, and a metal band clampingly engaging said double wall end portion.

In testimony whereof, I affix my signature.

EDWIN F. HULBERT.