June 29, 1926. 1,590,756

E. F. HULBERT

DISHED HEAD CONTAINER

Filed Oct. 26, 1925 2 Sheets-Sheet 1

Fig. 1.

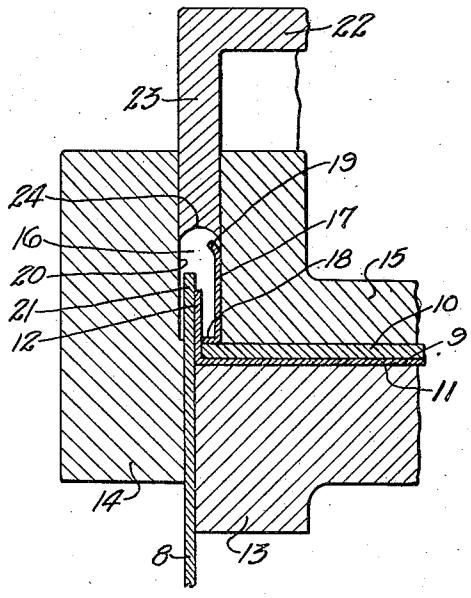


Fig. 2.

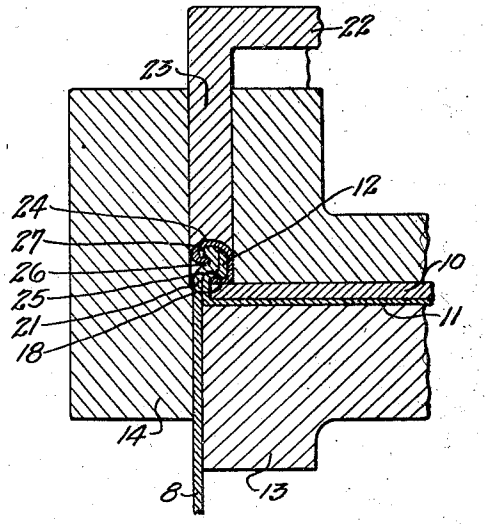
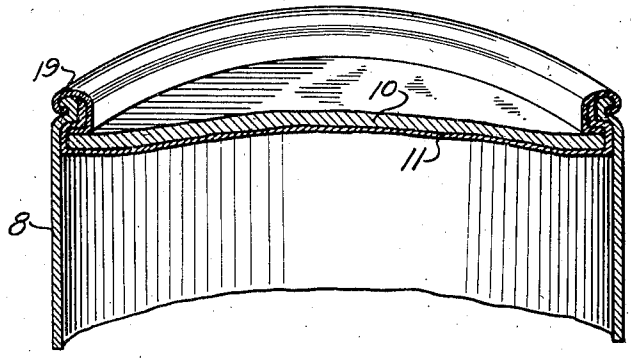


Fig. 3.



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Fig. 4.

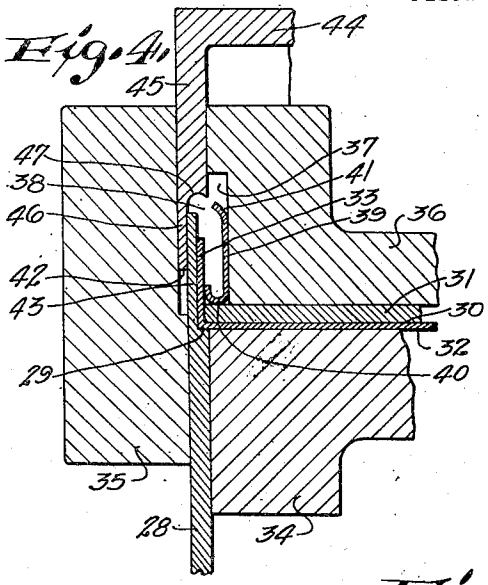


Fig. 5.

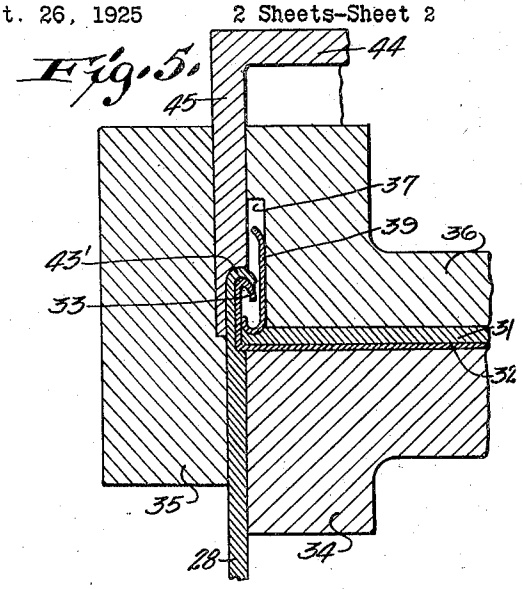


Fig. 6.

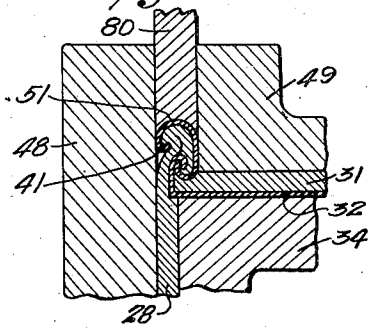
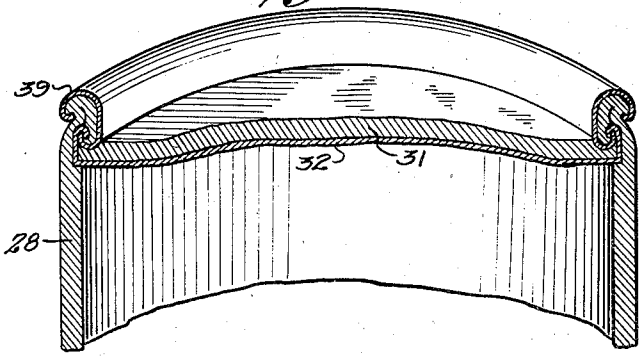


Fig. 7.



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UNITED STATES PATENT OFFICE.

EDWIN F. HULBERT, OF MILWAUKEE, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE MASTER PACKAGE CORPORATION OF DELAWARE.

DISHED-HEAD CONTAINER.

Application filed October 26, 1925. Serial No. 65,001.

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

The object of the invention is to provide a container closure of dished-head type in which the flanged portion of the head and an extended end of the siding are clamped together by a metal band which has a part abutting against the disk portion of the head whereby the head is firmly attached to the siding by the method hereinafter described.

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 through the container parts and head-attaching apparatus;

Fig. 2 is a view similar to Fig. 1, showing the finished container;

Fig. 3 is an elevation view, partly in section, of the finished closure;

Fig. 4 is a detail sectional view through container parts of a modified form of container and head-attaching apparatus;

Fig. 5 is a view similar to Fig. 4, showing the parts in an intermediate position;

Fig. 6 is a view similar to Fig. 4, showing the parts in their final position;

Fig. 7 is an elevation view, partly in section, of the modified form of container shown in Fig. 6.

Referring to Figs. 1 to 3, inclusive, the numeral 8 designates fibre tubing forming the siding of the body or cover of the container. This tubing may be of pressed pulp or a number of wrappings of paper or fibre sheets.

The head 9 is of fibre having a laminated disk portion 10 secured to a dished portion 11 of one or more fibre sheet laminations having an annular flange 12.

The siding 8 is firmly held between an internal expanding chuck 13 and an external contracting chuck 14, and the head, which is inserted into and fits within the siding, is clamped between the chuck 13 and a clamping plunger 15, as shown in Fig. 1, the plunger 15 being of less diameter than the head and forming with the chuck 14 a space 16.

A band 17, of thin sheet-steel or other suitable sheet-metal, having an outwardly extending base flange 18 and a slightly curved upper end 19, is placed within the flange portion of the head with said flange 18 abutting the disk portion 10 before the plunger 15 is moved to the position shown in Fig. 1.

The inner face 20 of the chuck 14 above the head is recessed to provide clearance between said chuck and the extended end 21 of the siding.

A forming plunger 22 has an annular part 23 working between the chuck 14 and the plunger 15 and is provided with a curved edge 24.

With the parts in position, as shown in Fig. 1, the plunger 22 is moved downwardly to the position shown in Fig. 2, whereby that portion 25 of the flange 12 adjacent the head and that portion 26 of the siding adjacent the head are bent down over the head and the remainder of the flange 12 and the extended end of the siding are firmly clamped together between the inturned edge 27 of the band and the part extending from the flange 18.

In the modified form of construction shown in Figs. 4 to 7, inclusive, the numeral 28 designates fibre tubing forming the siding of the body or cover of the container and is preferably in the form of a step-wound tube in which the inner tube provides a head seat or shoulder 29.

The head 30 is of fibre similar to the head 9 and has a disk portion 31 secured to a dished portion 32 having an annular flange 33.

The siding is firmly held between the chucks 34 and 35, similar to chucks 13 and 14, and the head, which is inserted into and fits within the siding, is clamped between the chuck 34 and a clamping plunger 36, as shown in Fig. 4, the plunger having a recessed portion 37 and forming with the chuck 35 a space 38.

A band 39 of thin sheet-steel or other suitable sheet-metal is initially formed with a concavo-convex base portion or flange 40 and a slightly curved upper end 41, and is fitted within the flanged portion of the head with the flange 40 abutting the disk portion 31 of the head.

The inner face 42 of the chuck 35 above the head is recessed to provide clearance between said chuck and the extended end 43 of the siding.

A forming plunger 44 has an annular part 45 with forming portions including an annular part 46 and a curved edge 47, and this

plunger works between the chuck 35 and the plunger 36, and when moved downwardly from the position shown in Fig. 4 to that shown in Fig. 5, bends the upper ends 43′ and 33 of the extended end 43 of the siding and the flange 33 over, as shown in Fig. 5. Thereafter the chuck 35 and the plunger 36 are withdrawn and a straight cylinder-walled chuck 48 and a plunger 49 are brought into clamping position and a forming plunger 80, similar to the plunger 22, with a curved edge 51, is moved down to bend the upper end 41 of the band over the bent ends 43′ and 33′ of the siding and band and then roll these ends 43′ and 33′ down against the head adjacent the curved flange 40 of the band and force the free end of the band into crimping engagement with the siding adjacent the head.

Thus, it will be noted that in the construction above described a portion of the siding and the head are bent over the head and firmly clamped between portions of the band, which also extends over them and has a part abutting against the disk portion of the head.

I desire it to be understood that this invention is intended to include such variations from the specific disclosure as fall within the scope of the appended claims.

What I claim as my invention is:—

1. In a container, the combination with the siding, of a dished head fitting within the siding and a flange portion extending beyond the outer side of the disk portion of said head, said flange portion and a part of said siding being bent laterally inwardly over said head, and a metal band clamping said flange and the bent-over part of said siding in position and having a flanged base portion interposed between said bent-over parts and the disk portion of said head.

2. In a container, the combination with the siding, of a dished head fitting within the siding and having a flange portion extending beyond the outer side of the disk portion of said head, said siding having a part bent over on itself and with the flanged portion of said head extending inwardly over said head, and a metal band clamping said flanged portion and the bent-over part of said siding together.

3. In a container, the combination with the siding having a head seat, of a dished head abutting said seat and having an outwardly extending flange portion, said flanged portion and that part of the siding extending beyond said seat being bent laterally inwardly over the head, and a metal band having a part abutting against the head and extending over said laterally bent parts and into crimping engagement with said siding.

4. In a container, the combination with the siding, of a dished head fitting within the siding and having a flange portion extending beyond the outer side of the disk portion of said head, said siding having a part bent over upon itself and with the flanged portion of said head extending inwardly over said head, and a metal band clamping said flange and the bent-over part of said siding in position and having a flanged base portion interposed between said bent-over parts and the disk portion of said head.

5. In a container, the combination with the fibre siding, of a dished fibre head, a metal band having a flat base portion adjacent the head and a convolute portion extending from said base portion over and into engagement with the outer side of the siding, said band having the flanged portion of said head and the upper edge of the siding clamped between its outer edge and the angle formed between said base and convolute portions.

6. In a container, the combination with the fibre siding of a dished fibre head, a metal band having a flat base portion adjacent the head and a convolute portion extending from said base portion over and into engagement with the outer side of the siding, said band having the flanged portion of said head and the upper edge of the siding clamped between its outer edge and the angle formed between said base and convolute portions, that portion of the siding between the edge of the band and said angle being offset inwardly from the main plane of the siding and over the main body part of the head.

7. In a container, the combination with the siding, of a dished head having a disk portion and a dished portion fitting within the siding, said dished portion having a flange extending with a part of said siding over the disk portion of said head, and a metal band clamping said siding and head in the above specified relation and having a base portion abutting against the disk portion of the head and an outer edge portion crimped to the siding adjacent the head.

8. In a container, the combination with the siding, of a dished head having a disk portion and a dished portion fitting within the siding, said dished portion having a flange extending beyond the outer side of the disk portion of said head and bent laterally with said siding inwardly over the disk portion of said head, and a metal band clamping together said flange and the bent-over part of said siding.

In testimony whereof I affix my signature.

EDWIN F. HULBERT.