

(No Model.)

E. NORTON.

WOOD VENEER JACKETED SHIPPING CAN.

No. 602,768.

Patented Apr. 19, 1898.

FIG. 1.

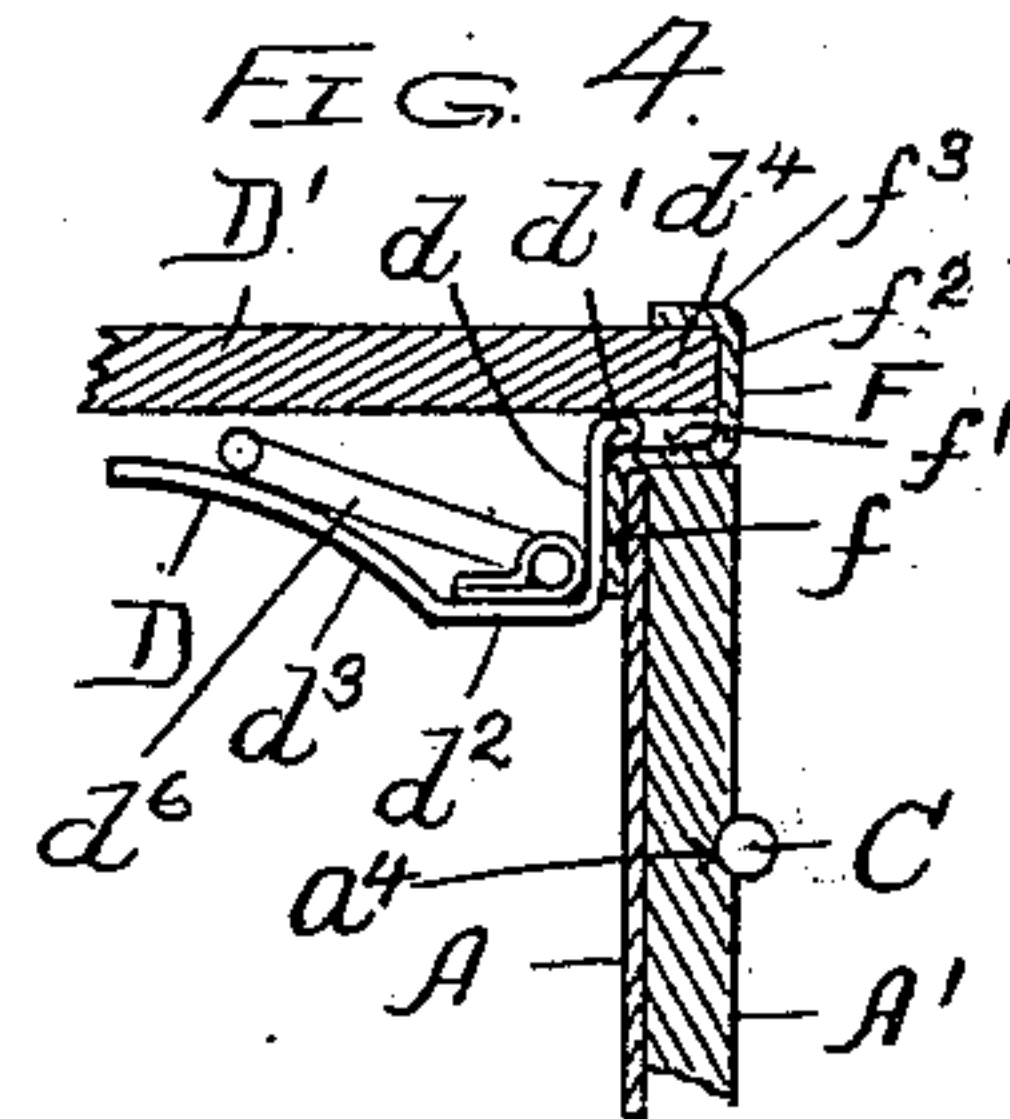
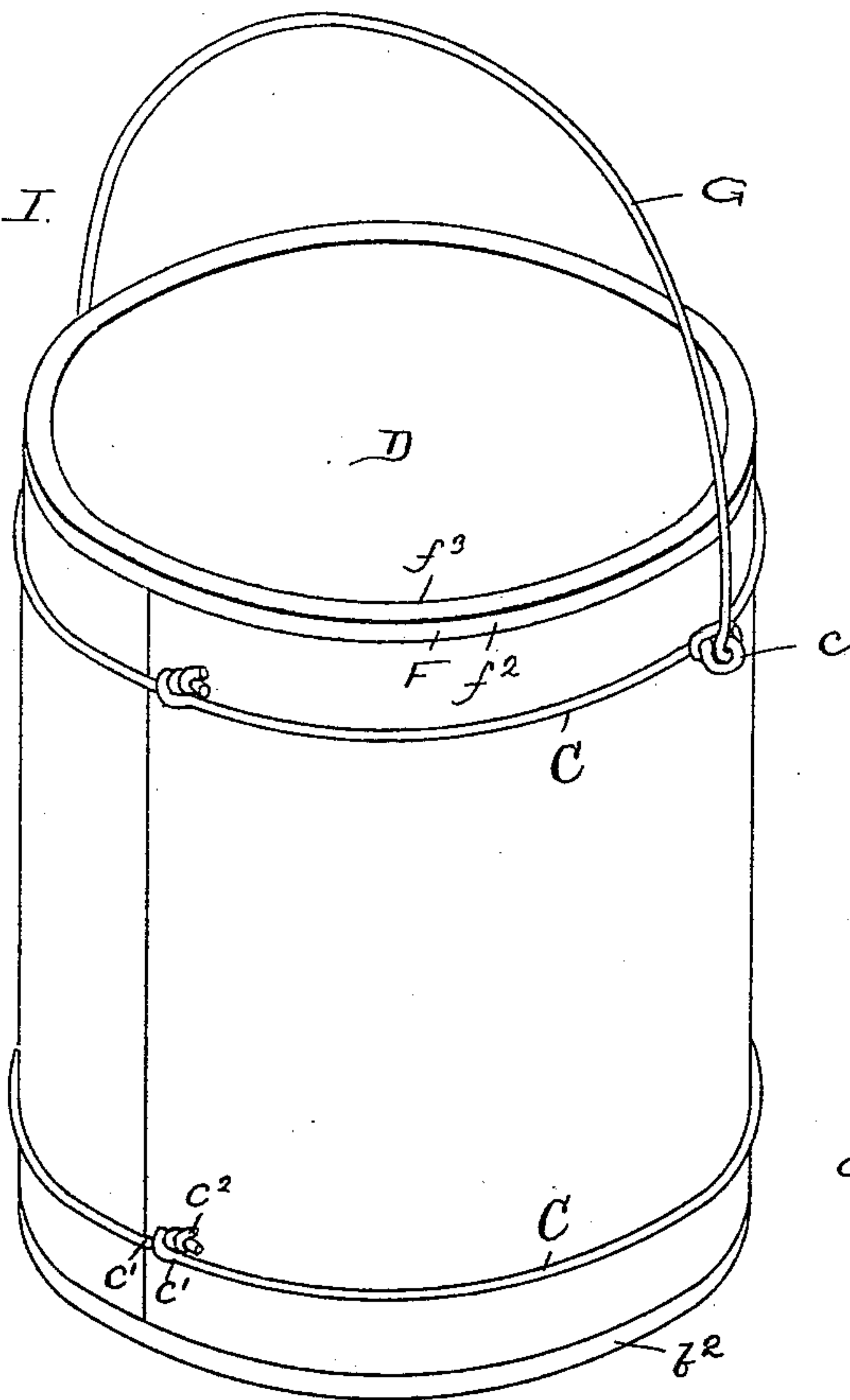


FIG. 2.

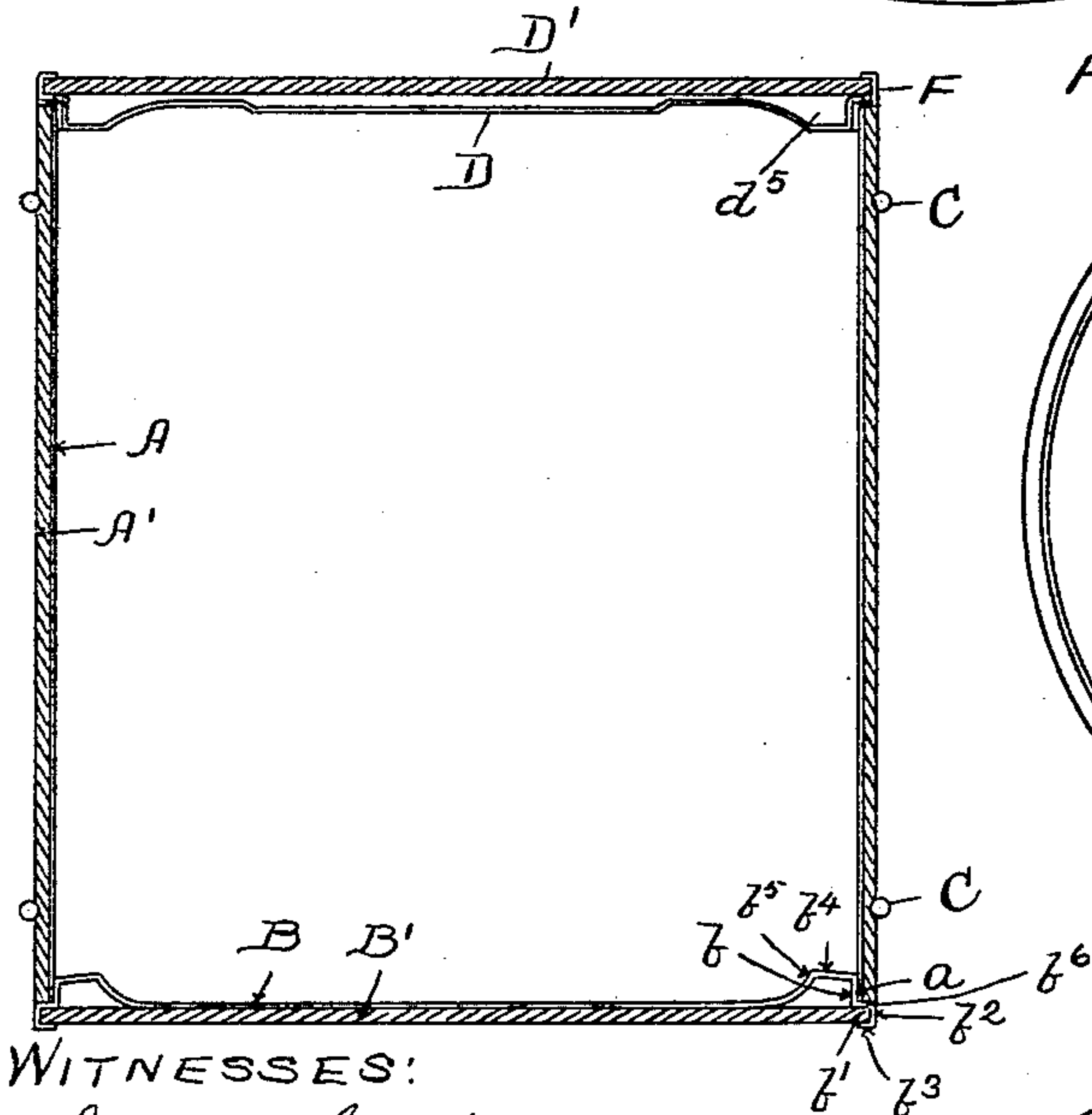
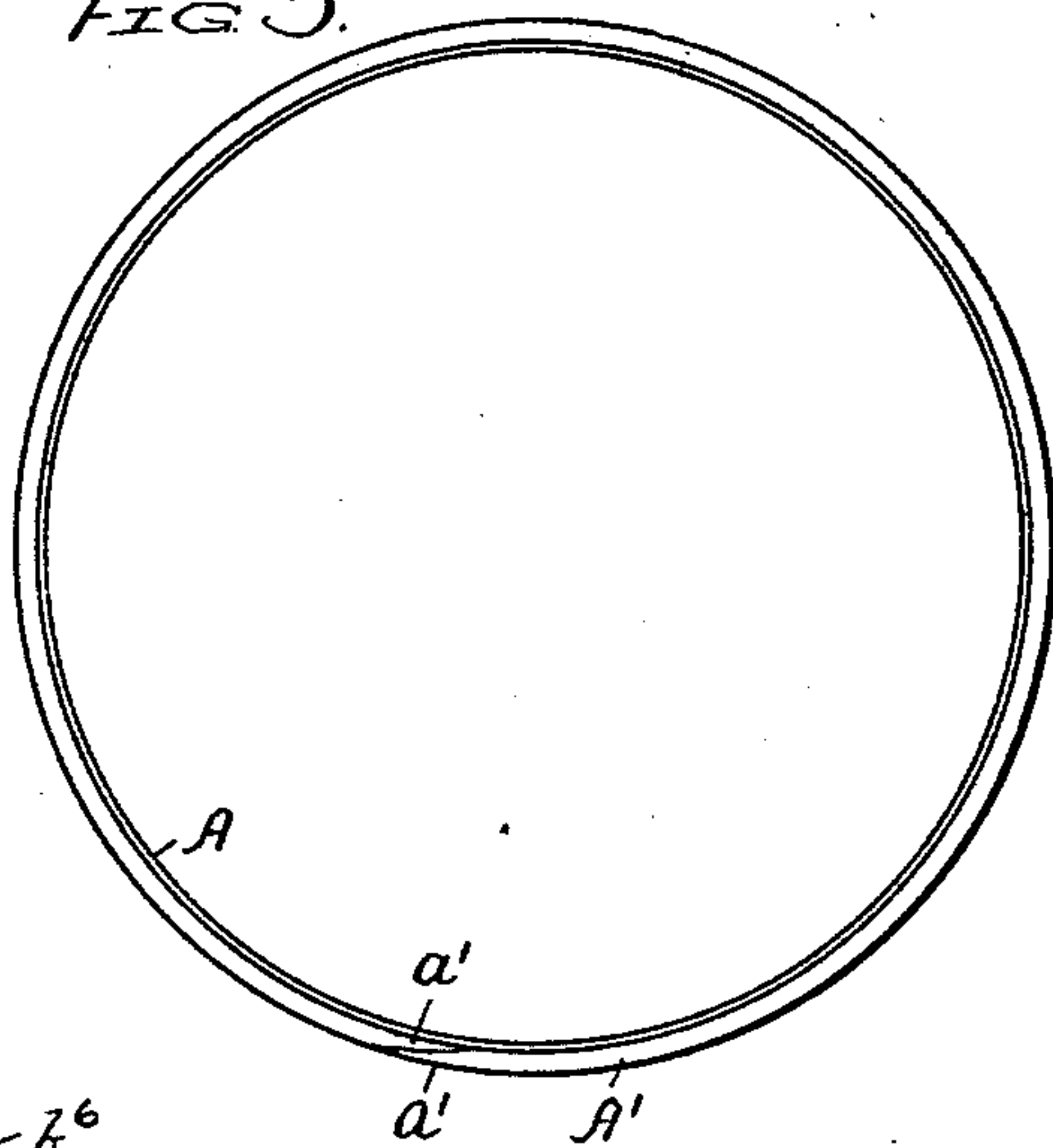


FIG. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF MAYWOOD, ILLINOIS, ASSIGNOR TO HIMSELF, AND  
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## WOOD-VENEER-JACKETED SHIPPING-CAN.

SPECIFICATION forming part of Letters Patent No. 602,768, dated April 19, 1898.

Application filed May 22, 1897. Serial No. 637,676. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN NORTON, a citizen of the United States, residing in Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Wood-Veneer-Jacketed Shipping-Cans, of which the following is a specification.

My invention relates to improvements in wood-veneer-jacketed shipping-cans.

The object of my invention is to provide a wood-veneer-jacketed shipping-can of a simple, strong, and durable construction in which the wood-veneer body and heads are so combined with the tin or sheet-metal body and heads as to each complement and strengthen the other in the most efficient manner, while at the same time the construction is such that the wood-veneer body and heads may be applied after the sheet-metal body and heads are made and joined or soldered together, thus enabling the tightness of the soldered seams of the sheet metal to be tested in the usual manner in water before the wood-veneer parts are applied and without injury thereto, and which may be not only closed substantially air-tight, so as to properly protect coffee, spices, and other like articles from deterioration, but also be capable of being easily and conveniently opened and still leave means for temporarily closing the can substantially air-tight while the goods are being used therefrom.

To this end my invention consists in the novel construction of parts and devices herein shown and described and hereinafter specified in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a can embodying my invention. Fig. 2 is a central vertical section. Fig. 3 is a horizontal section, and Fig. 4 is an enlarged detail partial vertical section.

In the drawings like letters of reference indicate like parts throughout all the figures.

In said drawings, A represents the sheet-metal body, and A' the wood-veneer body, of the combined sheet-metal and wood-veneer shipping package or vessel. B is the sheet-metal bottom or head, and B' the wood-veneer

bottom or head, of the same. The sheet-metal head or bottom B is provided with an upright cylindrical flange or shoulder *b*, adapted to fit within the sheet-metal body A at the lower end thereof and form a soldering-surface there-  
with for the soldered seam *a*, which unites the sheet-metal body A to the sheet-metal bottom B. The wood-veneer bottom B' is secured to the sheet-metal bottom B after the soldered seam *a* has been formed and tested, if desired, by folding the outer rim or edge of the sheet-metal bottom B over and around the rim *b'* of the wood-veneer bottom, as is clearly illustrated in Fig. 2. The right-angle flanges *b*<sup>2</sup> *b*<sup>3</sup> thus formed on the sheet-metal bottom B not only rigidly secure the sheet-metal and wood-veneer bottoms together, but also add materially to the stiffness and strength of the combined structure. The strength and stiffness of the sheet-metal bottom are also increased by the annular angular walls *b*<sup>4</sup> *b*<sup>5</sup>, uniting the upright flange *b* to the main disk portion of the sheet-metal head or bottom B. As the sheet-metal bottom B is reinforced or stiffened by the wood-veneer bottom B', which is firmly and rigidly secured thereto, the internal shoulder *b*, which fits inside the sheet-metal body A, serves to effectually stiffen and support the body and afford a firm support or resistance for the tension of the wire hoops or bands C, which surround the wood-veneer body A' and by which the sheet-metal and wood-veneer bodies are firmly compressed and united together, so that each mutually supports and strengthens the other.

D is the sheet-metal cover or upper head, and D' the wood-veneer cover or upper head, of the vessel. The sheet-metal cover D is provided with an interior right-angle flange or shoulder *d*, and with a marginal rolled rim or edge *d'*, and with angular annular walls *d*<sup>2</sup> *d*<sup>3</sup>, uniting the interior shoulder or flange *d* with the main portion of the cover D.

To the upper end of the sheet-metal body A, I preferably secure a seamless ring F, having a depending flange *f*, which is soldered to the upper end of the sheet-metal body A, a horizontal or outwardly-extending flange *f'*, which extends across the end of the wood-veneer body A', and an upright flange *f*<sup>2</sup>,



within which the wood-veneer body D' fits and over the rim  $d^4$  of which the extreme edge  $f^3$  is adapted to be folded down, as is clearly illustrated in Figs. 2 and 4. By providing the sheet-metal can-body with this seamless ring F at the upper end thereof I am enabled to secure a uniform and close fit and substantially air-tight joint between the upright flange or shoulder  $d$  on the sheet-metal head B and the upper end or mouth of the can, as the meeting surfaces  $d$  and  $f$  may be both formed by dies and with absolute uniformity. The upper end of the wood-veneer body A' abuts directly against the horizontal shoulder  $f'$  of the seamless ring F, which is secured to and thus forms a part of the sheet-metal body of the vessel, and the lower end of the wood-veneer body A' abuts directly against the projecting horizontal rim  $b^6$  of the sheet-metal bottom B, and the strength and stiffness of the wood-veneer body is reinforced by the sheet-metal body. The rims of both the bottom and cover are thus firmly supported against the ends of the wood-veneer body, while the body itself is embraced between the bottom and cover of the package, and the combined sheet-metal and wood-veneer body is at the same time itself supported, braced, and strengthened at its ends by the internal shoulders or abutments  $b$   $d$  on the sheet-metal bodies B D, and by the cooperating wood-veneer heads B' D'.

The wire loops C firmly bind the wood-veneer and sheet-metal bodies together and against the internal shoulders or abutments  $b$   $d$  on the heads B D, so that by their cooperation the peculiar strength of each complements the deficiency of the other.

The upper hoop is provided with integral bail-ears  $c$ , formed by twisted loops in the wire at diametrically opposite points of the hoop.

G is the bail.

The marginal annular depression  $d^5$ , formed in the sheet-metal cover by the depending flange  $d$  and the angular flanges or walls  $d^2$   $d^3$ , enables a pick or pointed instrument to be inserted through the wood-veneer cover D' to split and pry it out or off without injuring the sheet-metal cover D when it is desired to open the can. This channel also affords room for the ring, loop, or handle  $d^6$ , with which the sheet-metal cover D is provided, to enable it to be conveniently removed to open the can.

In manufacturing the can the sheet-metal body B is first formed in the usual manner, and the sheet-metal heads B D and seamless ring F are stamped up into the required form to unite with the sheet-metal body B, the ring F and bottom head B being in the form to receive the wood-veneer heads B' D', as indicated by the dotted lines in Fig. 2. The bottom head B and seamless ring F are then securely soldered to the can-body and, if desired, the soldered seams can be tested. The wood-veneer bottom B' is then put in place

within the flange  $b$  of the sheet-metal bottom B and the edge of said flange turned or crimped over upon the wood-veneer bottom, thus firmly securing the wood-veneer bottom to the sheet-metal bottom. The wood-veneer body A' is then wrapped around the sheet-metal body and the wire hoops C C applied, the edges  $a'$   $a'$  of the wood-veneer body being scarfed and lapping each other, so that any shrinkage of the wood-veneer body that may afterward occur will not expose the tin at the joint. In applying the hoops C C the meeting ends  $c'$   $c'$  of the wire hoops are firmly twisted together into a coil  $c^2$ , by which means the hoops may be applied with great tension to the round wire hoops to slightly embed themselves into the surface of the wood veneer, as indicated in Figs. 2 and 4. The seat  $a^4$  thus formed by the wire hoops in the wood veneer serves to lock the hoops firmly in place and also to give a greater surface bearing upon the wood. After the package has been filled the sheet-metal cover D is pressed tightly home, thus forming a substantially air-tight joint between the meeting surfaces  $d$   $f$  of the cover D and ring F, and then the wood-veneer cover D' is put in place and firmly secured and united to the other parts of the package by crimping or folding the upper edge  $f^3$  of the flange  $f^2$  of the ring F down firmly upon the rim of the wood-veneer cover D'. This also firmly locks and holds the sheet-metal cover D tightly in place, so as to maintain a frictionally-tight joint between itself and the ring F.

To open the package, a pointed instrument is inserted through the wood-veneer cover D', preferably near the rim thereof or at the channel  $d^6$ , and the wood-veneer cover split out and pried off. The sheet-metal cover D may be then removed, as the intumed flange  $f^3$  on the ring F is slightly larger in size than the sheet-metal cover D.

I claim—

1. In a shipping-package, the combination with a combined sheet-metal and wood-veneer body of a combined sheet-metal and wood-veneer bottom, the sheet-metal bottom being provided with an interior flange or shoulder soldered to the sheet-metal body at the end thereof, and the rim of the sheet-metal bottom being folded or hemmed over the rim of the wood-veneer bottom, and the rim of the combined bottom projecting laterally under and abutting against the end of the combined body, substantially as specified.

2. In a shipping can or package, the combination with a combined sheet-metal and wood-veneer body, of a seamless ring having a depending flange soldered to the sheet-metal body at the end thereof, a horizontal flange extending across the end of the wood-veneer body and an upright flange, a sheet-metal cover having a shoulder or flange  $b$  fitting within said seamless ring and forming a tight frictional joint therewith, and a wood-veneer cover on top of said sheet-metal cover and



having the upper edge of said upright flange of the seamless ring folded down upon the same, substantially as specified.

3. In a shipping-package, the combination  
5 with a sheet-metal body of a wood-veneer body a wood-veneer bottom, a sheet-metal bottom having an interior flange or shoulder fitting within the sheet-metal body, and having its rim folded over the wood-veneer bottom, the  
10 rim of wood-veneer bottom projecting laterally under the end of the wood-veneer body for it to abut against and a wire hoop surrounding the same, having integral bail-ears formed therein by twisted loops, the meeting  
15 ends of said wire hoop being twisted together substantially as specified.

4. In a shipping-package, the combination  
with a sheet-metal body of a wood-veneer body, a wood-veneer bottom, a sheet-metal bottom  
20 having an interior flange or shoulder fitting within the sheet-metal body, and having its rim folded over the wood-veneer bottom, the rim of wood-veneer bottom projecting laterally under the end of the wood-veneer body  
25 for it to abut against, and a wire hoop surrounding the same, and embedded in the wood veneer thereby holding it securely in place, the meeting ends of said wire hoop being twisted together substantially as specified.

30 5. In a shipping-package, the combination of a sheet-metal body and a wood-veneer body of a removable sheet-metal head having a depending flange or shoulder fitting in the mouth of the sheet-metal body and forming a tight  
35 frictional joint therewith, and a wood-veneer cover or head secured on top of said sheet-metal cover by an inturned flange connected with the sheet-metal body, substantially as specified.

40 6. In a shipping-package, the combination of a sheet-metal body and a wood-veneer body of a removable sheet-metal head having a de-

pending flange or shoulder fitting in the mouth of the sheet-metal body and forming a tight frictional joint therewith, and a wood-veneer  
45 cover or head secured on top of said sheet-metal cover by an inturned flange connected with the sheet-metal body, said sheet-metal cover being smaller in size than said inturned flange so that it may be removed after the  
50 wood-veneer cover has been split out, substantially as specified.

7. In a shipping-package, the combination of a sheet-metal body and a wood-veneer body of a removable sheet-metal head having a de-  
55 depending flange or shoulder fitting in the mouth of the sheet-metal body and forming a tight frictional joint therewith, and a wood-veneer cover or head secured on top of said sheet-metal cover by an inturned flange connected  
60 with the sheet-metal body, said sheet-metal cover having an annular channel or depression to permit a pointed instrument to be inserted through the wood-veneer cover for removing the same, substantially as specified.  
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8. In a shipping-package, the combination of a sheet-metal body and a wood-veneer body of a removable sheet-metal head having a de-  
depending flange or shoulder fitting in the mouth of the sheet-metal body and forming a tight  
70 frictional joint therewith, and a wood-veneer cover or head secured on top of said sheet-metal cover by an inturned flange connected with the sheet-metal body, said sheet-metal cover having an annular channel or depression to permit a pointed instrument to be inserted through the wood-veneer cover for removing the same, and a ring or handle attached to the sheet-metal cover in said depression, substantially as specified.  
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EDWIN NORTON.

Witnesses:

H. M. MUNDAY,  
S. E. CURTIS.