

G. J. RECORD.
REMOVABLE BRACED SHIPPING CAN CASE.
APPLICATION FILED DEC. 8, 1914.

1,154,885.

Patented Sept. 28, 1915.

Fig. 1.

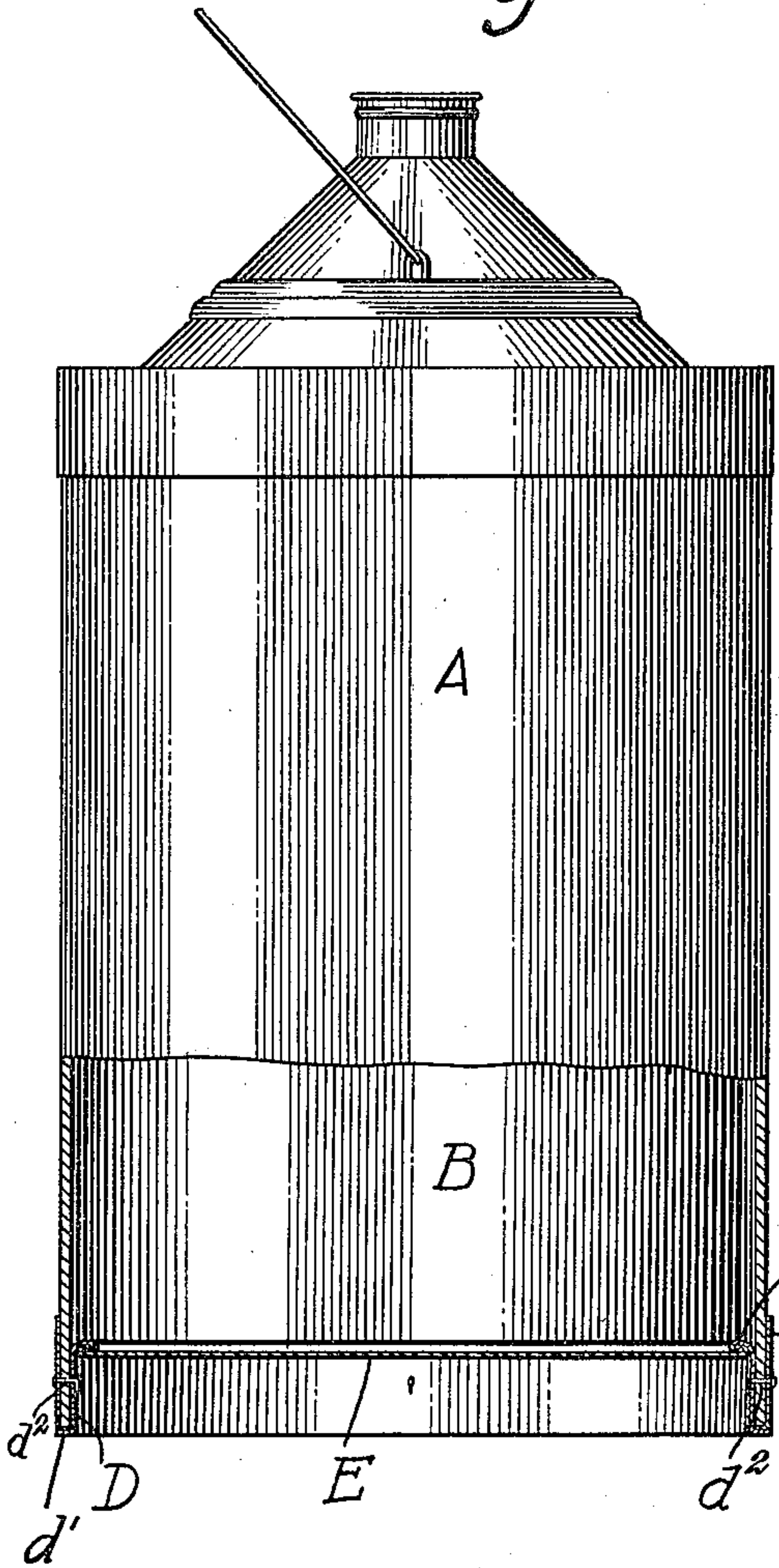


Fig. 2.

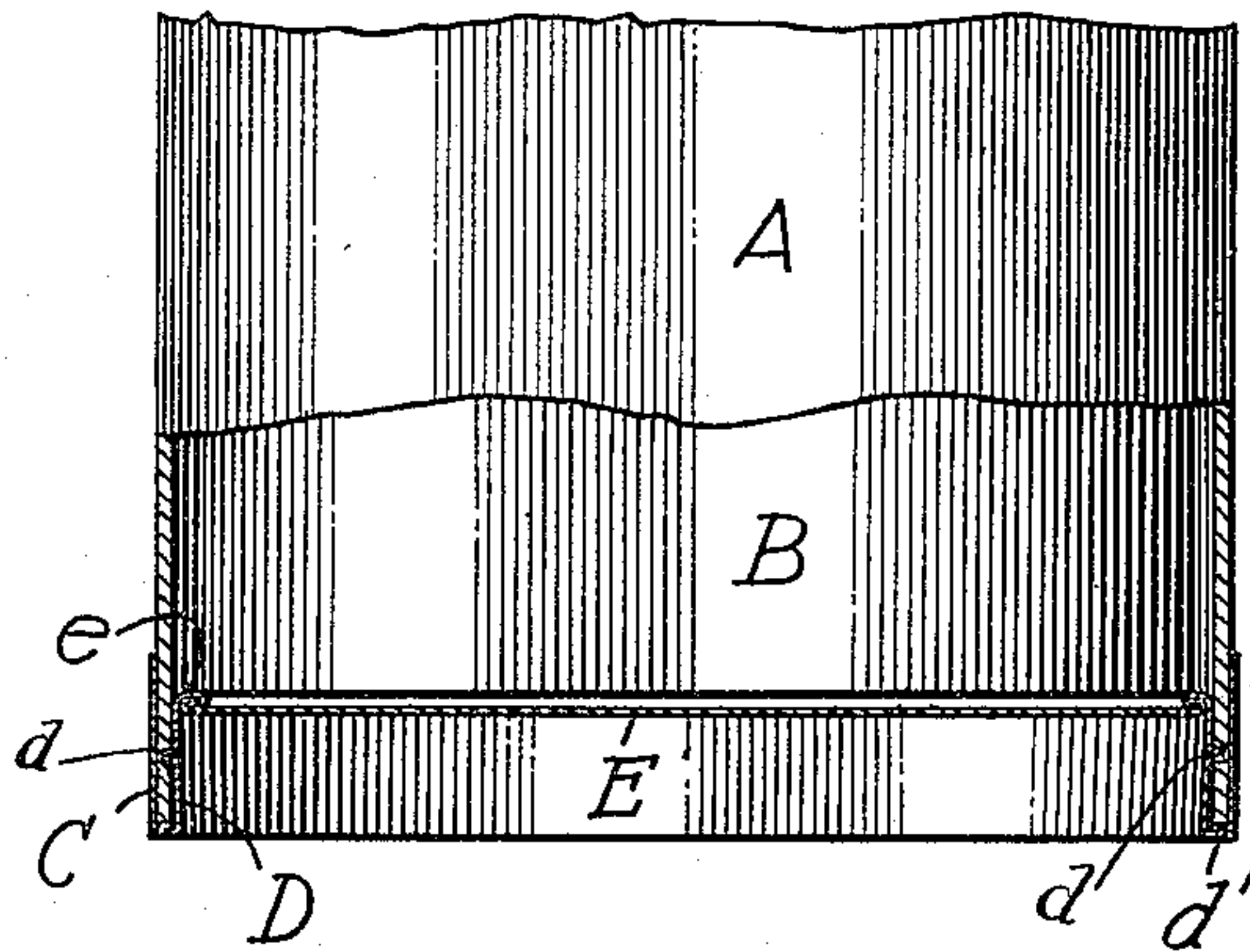


Fig. 3.

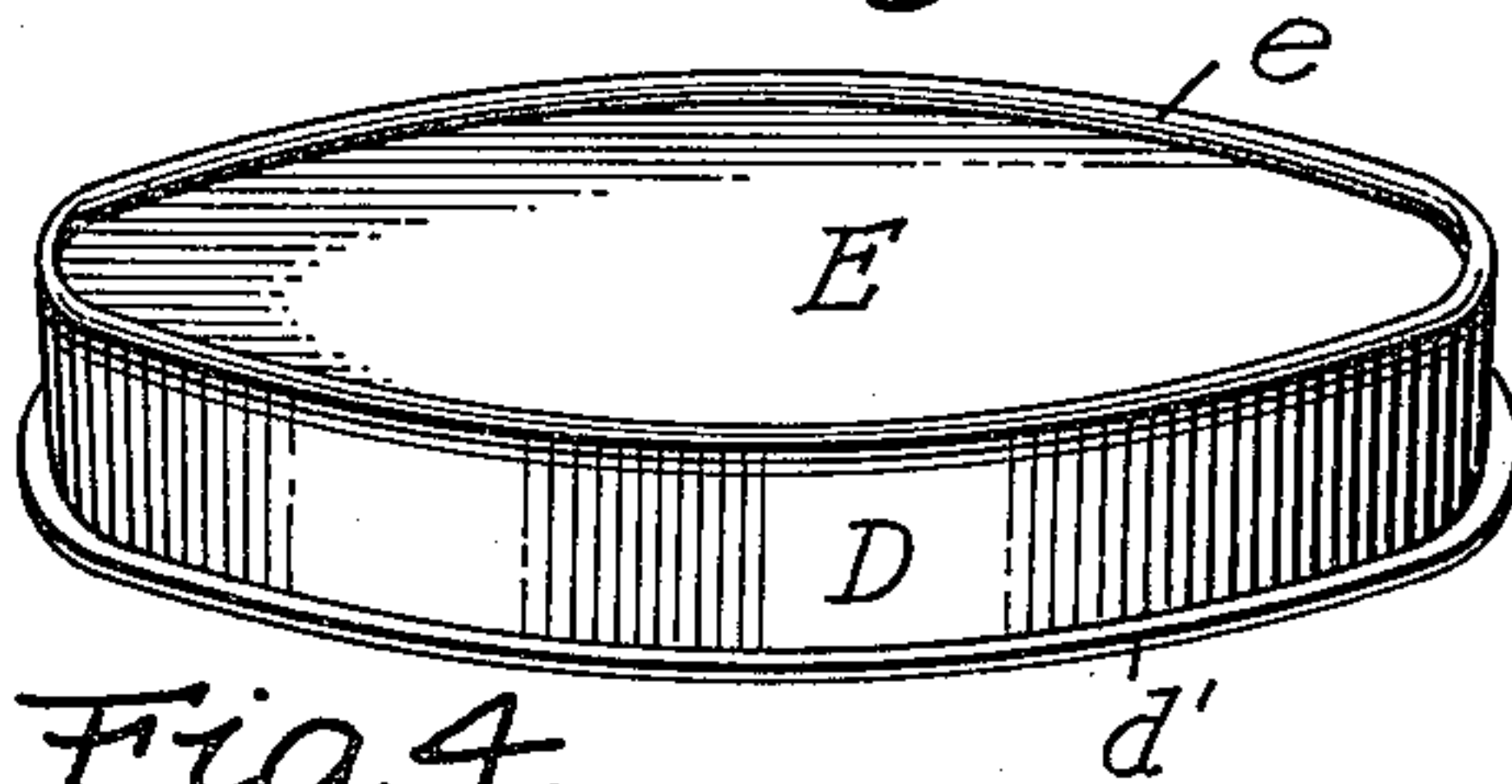


Fig. 4.

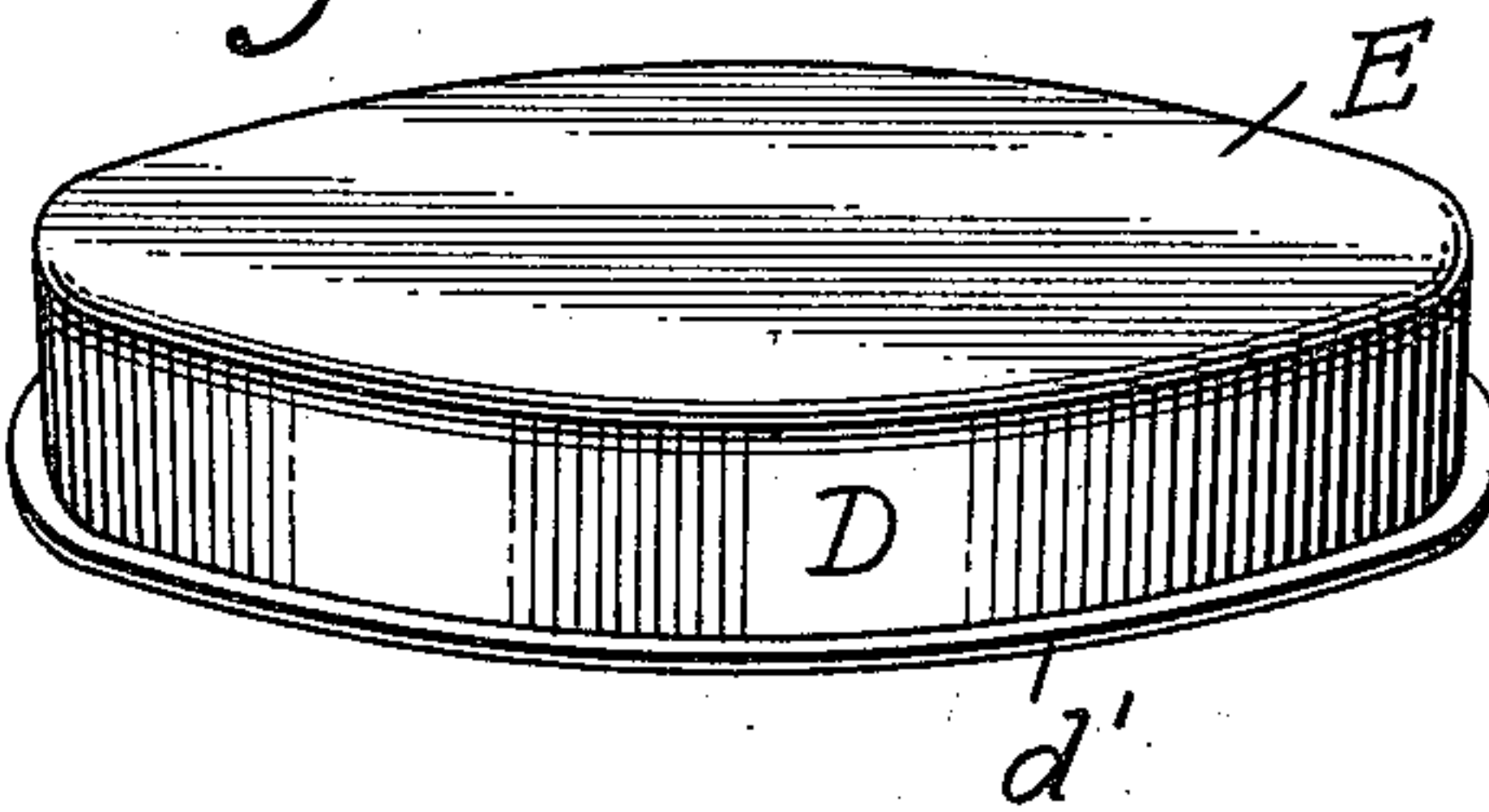


Fig. 5.

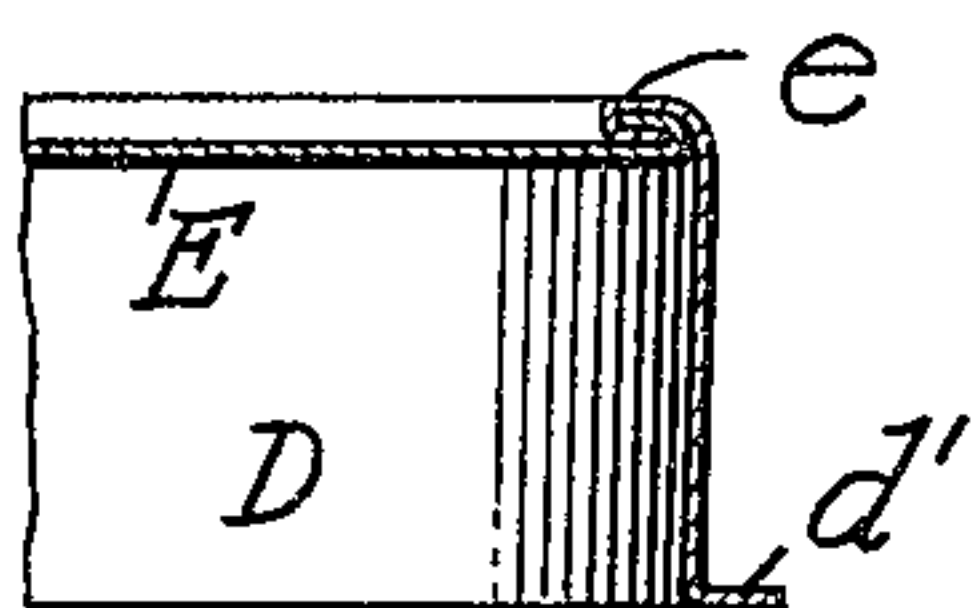
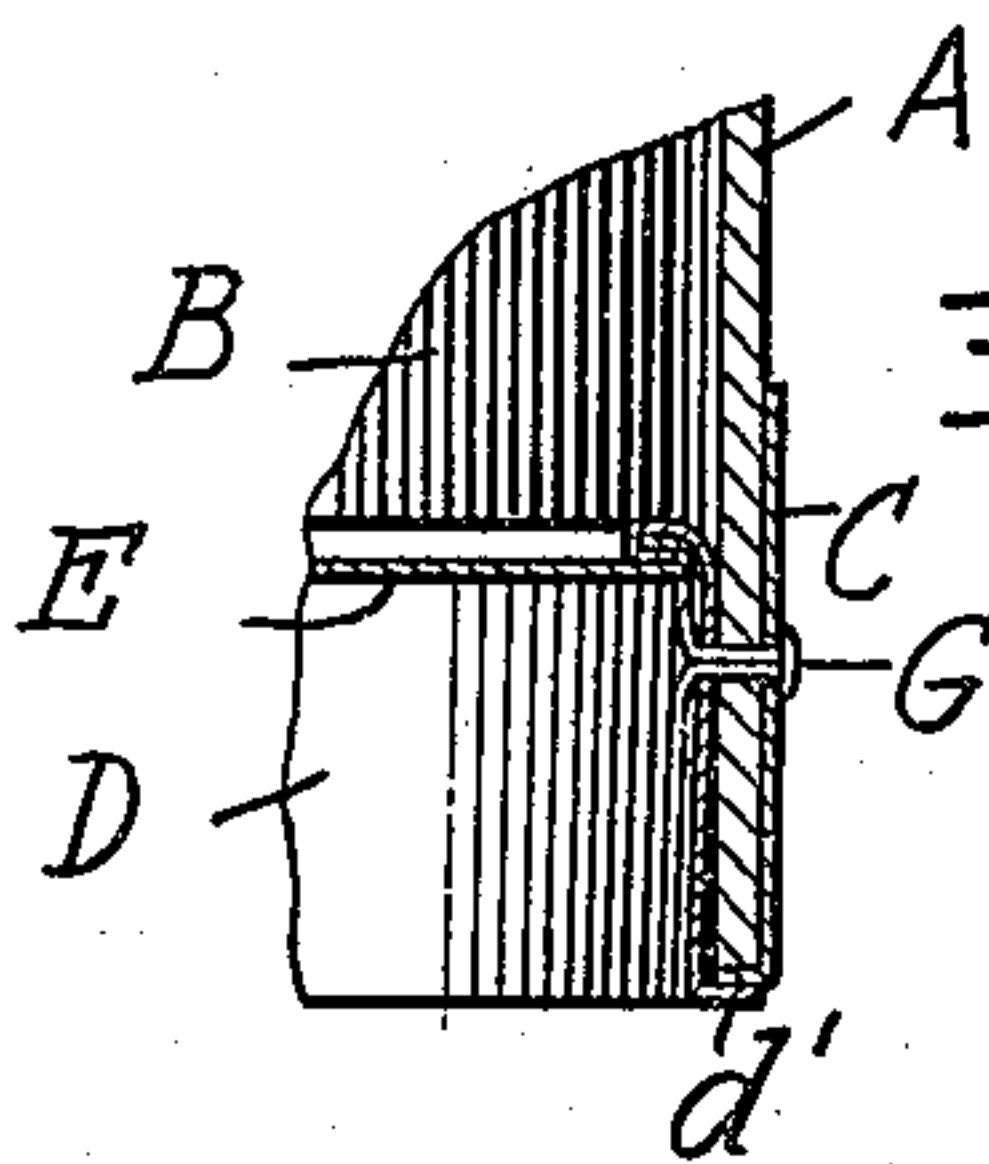


Fig. 6.



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UNITED STATES PATENT OFFICE.

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REMOVABLE BRACED SHIPPING CAN-CASE.

1,154,885.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed December 8, 1914. Serial No. 876,108.

To all whom it may concern:

Be it known that I, GEORGE J. RECORD, a citizen of the United States, residing at Conneaut, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Removable Braced Shipping Can-Cases, of which the following is a specification.

It has long been common to provide cans having cylindrical bodies with protective wooden shipping jackets or cases of the same form. In manufacture, the thin strips or veneers of wood which constitute the body of the case are often wrapped tightly around the can hooped thereon and supplied with a wooden bottom, on which the can rests. It is manifestly difficult to withdraw the can from such a case. Destruction of the case and injury to the can are the risks incurred in this operation. Jacketed cans in many instances are consequently left in that condition until repair becomes necessary. This is often the work of tin smiths who know little about the method of fitting on the case or jacket and destroy it in removing it to get at the leaks in the can. In view of these objections jacketed cans are often left unrepaired, each can being used only once or until it leaks, the relatively large attendant expense also contributing to this end. The bottom of the case also necessarily bears the strain of gravity due to the can and contents resting thereon. This strain is of no utility, but the contrary, as applied to the ordinary wooden case bottom. It becomes important to utilize said strain, in combination with the action of other parts, for bracing the can body; also to permit the withdrawal of the case bottom which will allow the case body to be easily lifted off the can, so that separation of can and case is easy without injury, notwithstanding a very tight fit between these parts, and these parts may be put together again after can-cleaning or can mending and used as before with no repair of the case.

My Patent No. 1,117,951 granted November 17th, 1914, on which this invention is an improvement, made use of outer and inner metallic hoops or bands for the upper ends of the case, affording a remedy against the defects above mentioned as pertaining to tightly bound wooden hoops, but still using a wooden bottom which rests on an inwardly bent annular flange of the lower inner band of the case. This wooden bottom is a sepa-

rate part, liable to warp by heat and dryness or to swell under the influence of moisture. In the former case it will not bear evenly and adequately on all points of the upper portion of the annular flange forcing, as it should, the vertical part of the inner band against the wall of the case body and embedding the fastening points of the former in the latter more securely.

My present invention dispenses with all need for the said separable and movable wooden bottom by extending the annular flange inward to the center, filling the middle space with sheet metal constituting a bottom, which is integral with said flange and inner band and retains the upwardly and inwardly bent curvature of said flange as in said patent and for the same purpose. If the can were introduced into a shipping case having such a flange, as in said patent, but having no bottom, it would require to be of a diameter only slightly less than the interior diameter of the shipping case to remain securely inclosed and bear on said flange with the tightening effect stated. Also the can bottom would be unprotected and might be indented or penetrated by any rough or sharp object on which it might be accidentally set.

My present construction will permit outward stress to be exerted on the lower inner metal band by the weight of a can which has a less diameter than the inner diameter of the upper flange of said band, beside securely retaining said can within said case and protecting its bottom.

My improvement is to be distinguished from end plugs for packages containing confectionery and other loose articles, which plugs are sometimes provided with an annular metal wall and an integral disk form part and have a certain similarity in appearance to my band integral with the bottom, but are not devices spread by weight for binding nor intended to work in that way.

My invention therefore consists in a shipping case for cans having a lower inner metal hoop or band provided at top with an annular upwardly and inwardly bent flange and a metal bottom extending across the interior space surrounded by said flange, the said bottom, flange and band being operative as one piece and the weight of a can of any size on said bottom or flange serving to force said band outward against the wooden body of the case. This device is, of course, pref-

erably used, as in the case of said patent, with an outer metal band affording a firm grip on the wood between the two metal bands. The inner band at least is also preferably provided with teeth which are forced into the case body by the action above described.

In the accompanying drawing: Figure 1 represents a vertical central section through a can and its case embodying my invention, showing the bottom and inner band of the latter held by small nails; Fig. 2 represents a similar view of the lower part of the same, using teeth or points for fastening; Fig. 3 represents a detail view of the bottom and inner hoop rigidly connected; Fig. 4 represents a similar view of these elements made integral; Fig. 5 represents an enlarged vertical section of a part of the periphery of Fig. 3, showing the joint; and Fig. 6 represents a detail view, partly sectioned, showing another means of fastening the inner band and bottom.

A designates the wooden or paper body of the case, B the can fitting therein, C the metallic outer lower hoop or band similar to that shown in my aforesaid Patent No. 1,117,951, it being held in place by fastening devices such as d^2 , Fig. 1, or G, Fig. 6, hereinafter described, or as described and shown in said patent.

The can rests on case bottom E, as usual some little height above the lower edge of the case body, the part of the latter below said plane of support receiving on its exterior face the outer band C and on its interior face the flanged inner hoop or band D, which has substantially the construction of the inner lower band disclosed in said patent, but is practically integral with the flat bottom E aforesaid, in other words the two elements will act in practice as though they were one piece. This is effected either by making the said bottom and inner band in two pieces rigidly joined, as in Fig. 1, or by making them actually in one piece only, as in Fig. 4. In the former case there may be a doubly welded joint e between them, rolled flat into the form shown in Figs. 1 and 5. This is a preferred construction, as the device thus made is greatly stiffened and strengthened at the joint, bracing more or less the hook D and bottom E. This bottom and band in either case constitute a removable part or element of more or less resilient metal, circular in form with downward wall, in effect the inner band of my said patent having its inwardly bent upper flange extended across the surrounded space to form a case bottom.

The action of the inner hoop D is substantially as in my former patent above mentioned, the pressure of the weight of the can and its contents bearing down on the flat central disk which constitutes the case bot-

tom proper, and acting on the rounded corner and upper part of the inner hoop or band D so as to force the latter out against the wood of the case, bracing both this part of said case body and the said bottom. This outward pressure holds the said bottom removably in place by the binding of the flange against the case. As shown in Fig. 2 this inner band D may be provided with teeth or points d embedded in the wood of the case and preferably forced into the latter by a suitable tool or machine after said inner hoop is in place. The pressure of the weight of the can and contents on the case bottom E, transmitted through the bent inner hoop as before described or directly on the inner part of inwardly curved flange e or on both said bottom and said flange, will tend to hold these points embedded. Nevertheless, they will yield under suitable strain of prying applied by any convenient instrument. There is then no obstacle to lifting off the remainder of the case or jacket intact, leaving the can uncovered and free. To facilitate this, I fit the case body more loosely on the can than is usual in such manufactures, and am enabled to do so by the special bracing construction of the part comprising my case-bottom and inner hoop, which increase the protection of the can.

Fig. 1 shows the substitution of nails d^2 for the teeth or points d . These are easily driven and of course add to the safety of the fastening. Of course, they must be withdrawn or cut off before the bottom and the inner hoop can be removed. Or holes may be punched through the outer and inner bands and the intervening wood of the case, as shown in Fig. 6, and a flexible bifurcated or other fastening G may be forced through each of such holes and the flexible blades of it may be spread like those of a paper fastener. Many other kinds of well known detachable fastening devices may be substituted.

The bracing band or hoop D has at its lower edge an outward flange d' which extends under the lower end of the case and protects the same. As the said band is thus the lowest of the parts or devices concerned in the incasing of the can it affords a broad foot or base resting on the floor or other support and receiving the weight of the case directly on said flange and of the can and contents on bottom E and through hoop D to its lower flange d' .

I am aware that an inner lower band for a shipping case provided with an upwardly and inwardly bent flange surrounding an open space and arranged to be acted on by the weight of a can and used with a separate interposed wooden bottom is not new, this construction being found in my own patent aforesaid.

I am also aware that it is not new to

provide cylindrical packages of confectionery and other loose material with disk-form end plugs having annular walls for fitting into the ends of said packages.

5 I do not claim either of said devices in this application, but

What I do claim is:

10 A shipping case for cans consisting of a wooden body provided with an inner metal band for the lower end of said body, an outer metal band opposite the said inner band and means for holding said bands together on the intervening wood, the said inner band being provided with a can sup-

porting bottom extending across the space 15 within said band, the said bottom and band acting as one piece and having an intervening inwardly and upwardly bent part whereby the weight of a can on said bottom transmits an outward pressure to said band causing it to bind against the wood. 20

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE J. RECORD.

Witnesses:

M. R. SMITH,
RUTH DORMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."