R. M. BADDELEY.

SKELETON FRAME AND RECEPTACLE.

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1,103,646. Patented July 14, 1914.

Fig. 1

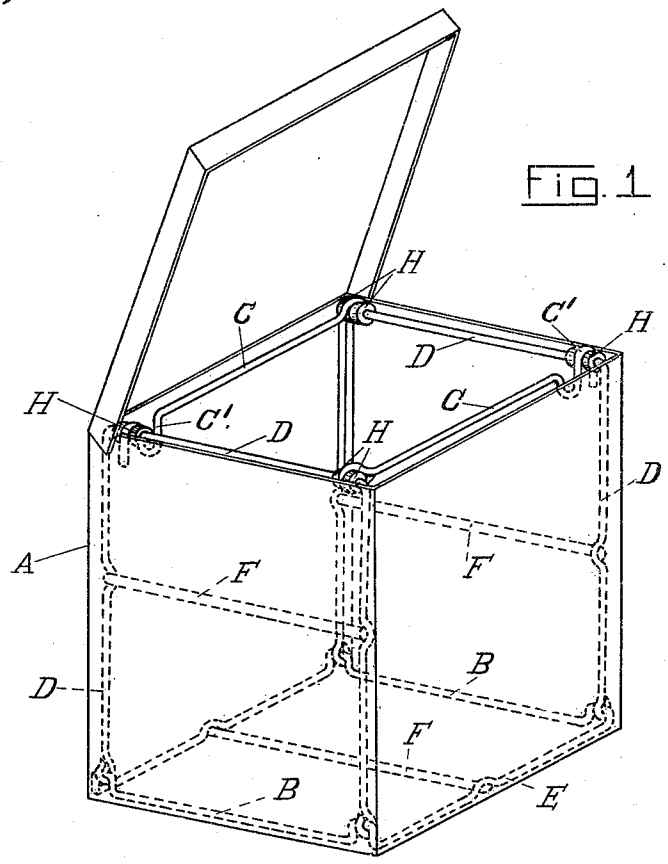
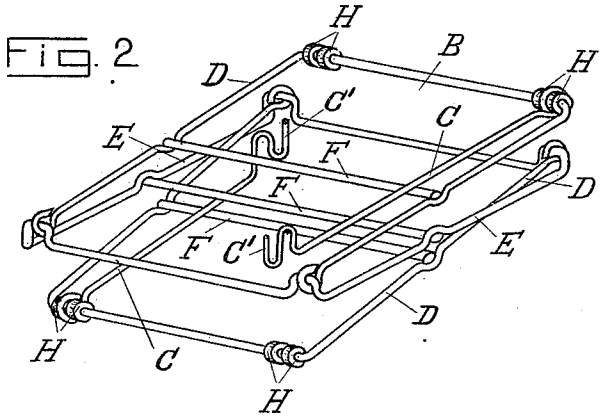


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

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SKELETON FRAME AND RECEPTACLE.

1,103,646. Specification of Letters Patent. Patented July 14, 1914.

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To all whom it may concern:

Be it known that I, ROSE MARY BADDELEY, a subject of His Majesty the King of the United Kingdom of Great Britain and Ireland, and a resident of Onehunga, in the Provincial District of Auckland and Dominion of New Zealand, have invented a Skeleton Frame and Receptacle, of which the following is a specification.

The object of this invention is to produce a cheap and efficient means for the package and carriage of goods such as biscuits, confectionery, preserves and the like.

At present such goods are usually packed in tins which are returned to the manufacturer when empty, so that besides the cost of the tin in the first place, considerable expense is incurred by return freight apart from the fact that much valuable time and space are necessitated.

By this invention a receptacle or shell of stout paper, cardboard, waterproof material or the like, and a skeleton framework preferably of galvanized wire are employed, the frame work being adapted to be fitted inside the receptacle to stiffen and strengthen same and so prevent damage to the contents. After use the receptacle or shell can be discarded and the framework collapsed and returned, and it will be obvious that it will take a good number of the latter to occupy the space of an empty tin, thus the saving in return freight is considerable.

Referring to the accompanying drawing; Figure 1 shows in perspective a cardboard box fitted with a skeleton framework for stiffening and strengthening purposes. Fig. 2 is a perspective view of the skeleton framework collapsed or as it is when being returned to the manufacturer.

The receptacle or shell A may be made any suitable shape and be composed of cardboard, stout paper, waterproof material or any material or metal that will combine cheapness with the requisite strength.

The skeleton framework B is fitted inside the receptacle A and serves considerably to stiffen and strengthen same. The framework B is also made collapsible preferably by forming the top rods C with one of their ends C′ hooked to allow of their being disengaged from the tops of the sides D and so permit the framework B to be folded as shown in Fig. 2. Side movement of the rods C when in position is prevented by small collars or projections H formed on each side of the rod both at the pivoted and hooked ends.

The sides D and bottom E of the framework may be strengthened by additional stays or cross pieces F either diagonally placed or otherwise so as not to interfere with the folding up of the framework.

It will be appreciated from the illustration in Fig. 1 that the vertical members of the sides D of the frame are all pivoted at their lower ends to the corners of the bottom E and that each of the top horizontal members of the sides has pivoted thereto one of the cross rods C, which rods at their other ends are formed with hooked portions to engage over the top member of the opposite side, so as to enable the framework as a whole to be erected. The hooked portions of the cross-rods loosely engage over the top members of the sides so that the disengagement can be speedily and easily effected. To collapse the frame, it is, as will now be obvious, merely necessary to disengage the hooked portions whereupon the cross-rods will swing down alongside the side upright members close to which they are freely pivoted. One of the sides with its cross rod is then folded over the upper surface of the bottom E, while the other side with its cross rod is folded underneath the bottom E, as a result of which the frame will be totally collapsed, as shown in Fig. 2.

The advantages gained by the use of the above invention are that a cardboard receptacle or shell complete with wire framework can be produced for less than a tin of the same size: and will serve the same purpose equally as well the wire framework making the box rigid and strong. After use the box which is the cheapest part may be discarded the framework collapsed and alone returned, and as numbers of these latter will only occupy the same space as an ordinary empty tin a considerable saving is effected in return freight, space and handling. Again the production of the complete receptacles after the first lot is even less, as the frameworks are used again in new boxes, this being a much more sanitary arrangement than the re-use of old tins.

What I claim is:—

1. A collapsible frame of the kind described comprising a base consituted by a member bent to form a rectangular figure,

two substantially ⊓-shaped members having their free ends pivoted at the respective corners of said base portion; two cross members pivoted to diagonally opposite corners of said -shaped members and formed at their free ends with a hooked portion adapted to engage with the corresponding corner of the opposite -shaped member and to be disengaged therefrom to enable the frame to be collapsed, and means to limit lateral movement of the pivoted ends and the hooked portions of said cross members.

2. A device of the kind described comprising an outer casing and a collapsible frame adapted to be arranged snugly within said casing, said frame comprising a base portion constituted by a wire bent to form a plane four-cornered figure, two substantially ⊓-shaped pieces of wire having their free ends pivoted at two corners of said base portion, two cross wires pivoted at one end to diagonally opposite corners of said ⊓-shaped pieces of wire and formed at their other ends with a hooked portion adapted to engage with the corresponding upper corner of the opposite ⊓-shaped piece of wire and means to limit lateral movement of the pivoted ends and the hooked portions of said cross wires.

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Witnesses:

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