May 18, 1926. 1,585,328

E. CHAPOTAT

COLLAPSIBLE PACKING CASE

Filed August 30, 1923

FIG.1

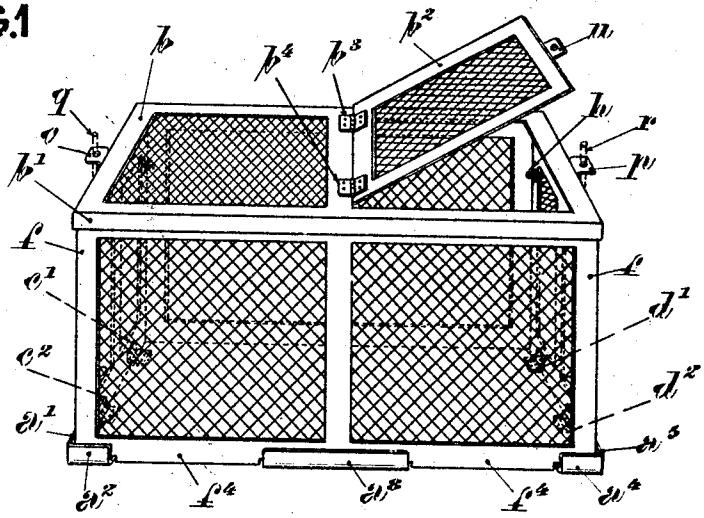


FIG.2

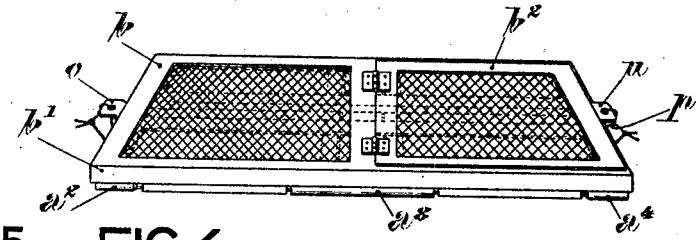


FIG.5

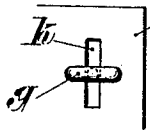
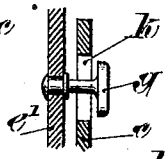


FIG.4



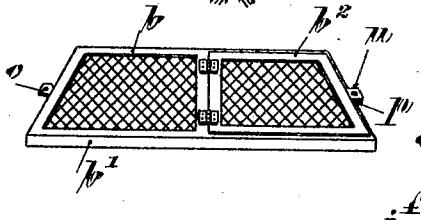
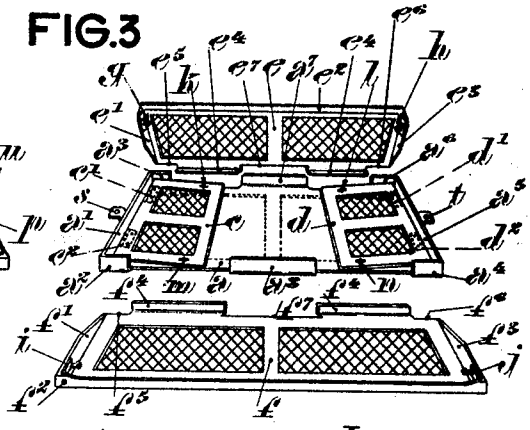


FIG.3



Witnesses
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UNITED STATES PATENT OFFICE.

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COLLAPSIBLE PACKING CASE.

Application filed August 30, 1923. Serial No. 660,218.

The present invention relates to a collapsible packing case of very great rigidity when assembled for use and which will occupy a reduced space when dismantled for transit when empty. This result is obtained by a special system of folding allowing the different elements forming the sides and bottom of the packing case to be arranged one inside the other protected by the edges of the top and bottom being bent up at right angles. These edges which form rigid welded dihedral angles also serve to strengthen the lateral sides of the case at the level of the top and bottom and give them a greatly increased strength.

These cases may be made either with solid sides cut out or joined or with hoops reinforced by corners to form a frame having solid or openwork sides for the transport of live poultry or other goods.

The accompanying drawing shows one form of the invention.

Fig. 1 perspective view of arrangement more especially applicable for the transport of poultry.

Fig. 2 perspective view of same arrangement folded up for transport when empty.

Fig. 3 perspective view on a smaller scale showing the different parts before assembly.

Figs. 4 and 5 are detailed views in section and elevation respectively of the method of affixing together the lateral sides.

According to the invention the sections forming the bottom a and the lid b have their edges a', a^2, a^3, a^4, a^5, a^6, b' . . . bent round at right angles either by pressing or by being cut out and raised in a bending machine and welded to form the dihedral angles a', a^2, a^3, a^4, a^5, a^6, etc., . . . in such a way as to obtain a rigid frame standing out a few centimetres all round the bottom and top formed by the sections a and b.

Two of the sides c, d of the packing case are pivoted to the bottom a by hinges c^1, c^2, d^1, d^2, arranged in the space formed between the bottom and the frame a^1, a^5. When closed these sides c, d, lie against the bottom a (Fig. 3) whilst when the case is in position they are pivoted through 90° on their respective hinges and come into place against the frame a^1, a^5 which limits their movement and serves to support them.

The other two sides e, f are formed in the same way by two sections having edges e^1, e^2, e^3, and f^1, f^2, f^3, bent at right angles by pressing or by being cut out and welded at the junction points in such a way as to form a continuous band round three sides. The fourth side e^4, f^4, is cut out to form inclines e^5, e^6, e^7 and f^5, f^6, f^7, corresponding respectively as to position and size to the plain lateral edges a^3, a^6, a^7, a^2, a^4, a^8 of the bottom a.

When the case is dismantled (Fig. 2) the sides e and f fit into the interior of the skeleton frame formed by the bottom a and the raised edges. When assembled for use the plain sections e^4, f^4 are held against the inclines of the same size between the parts a^3, a^6, a^7, a^2, a^4, a^8 in such a way as to form a type of pinless dismountable hinge, then the sides e and f being turned through 90° are prevented from turning further by the edges a^3, a^6, a^7, a^2, a^4, a^8 which serve to support them.

When the four lateral sections b, c, d, e are raised (Fig. 1) they are held in this position by rivets having enlarged heads, g, h, i, j arranged to turn in the sections e and f and which after being engaged in the slots k, l, m, n, in the sections c and d are turned through 90° (Figs. 4 and 5).

The lid b may comprise a door b^2 carried on hinges b^3, b^4 to allow the poultry or other merchandise to be inserted. When it is employed on the sides of the packing case Fig. 1, it is held closed by two or more staples o, p, affixed to other staples s, t carried on the bottom a by rods q, r, a bolt or padlock passing through the rods q, r, to keep them in place.

For returning the packing case empty a band is passed through the holes in the staples holding the folded sides between the bottom and the lid (Fig. 2).

The door b^2 is provided with a similar staple combining with the staples p to ensure its closing.

The sections forming the sides and the lid may be of solid metal or any other material or formed of a skeleton frame with a solid or openwork covering or provided with wire netting, as shown in the drawing, when these cases are to be used for the transport of living animals, such as fowls, carrier pigeons or the like.

What I claim is:

1. A collapsible packing casing comprising a top and bottom having flanges on their opposing sides at their end and side edges, said flanges being at right angles thereto; and wall members hinged to the bottom and

arranged, when the case is set up, to bear against the inner sides of the end flanges of the top and bottom, and side wall members arranged to fit between the top and bottom and to bear against the inner sides of the side flanges of the top and bottom, said side wall members having inwardly extending flanges at their upper and lower sides to bear against the top and bottom and also having inwardly extending flanges at their ends to bear against the outer sides of said end wall members, all of said flanges coacting to provide for pivotal movement of the lateral walls and of the bottom, and means to secure said end wall members and said side wall members together.

2. A collapsible packing casing comprising a top and bottom having flanges on their opposing sides at their end and side edges, said flanges being at right angles thereto; and wall members hinged to the bottom and arranged, when the case is set up, to bear against the inner sides of the end flanges of the top and bottom, and side wall members arranged to fit between the top and bottom and to bear against the inner sides of the side flanges of the top and bottom, said side wall members having inwardly extending flanges at their upper and lower sides to bear against the top and bottom and also having inwardly extending flanges at their ends to bear against the outer sides of said end wall members, and means to secure said end wall members and said side wall members together, the flanges of the top being arranged to bear against the outer sides of the flanges of the bottom when the case is collapsed and being of such depth as to cause the end and side wall members to be enclosed between said top and bottom end flanges of the top and bottom.

In witness whereof I affix my signature.

EMILE CHAPOTAT.