Aug. 9, 1932. C. R. FRANKLIN ET AL 1,870,676

PACKING CASE

Filed Nov. 16, 1929

Fig. 1.

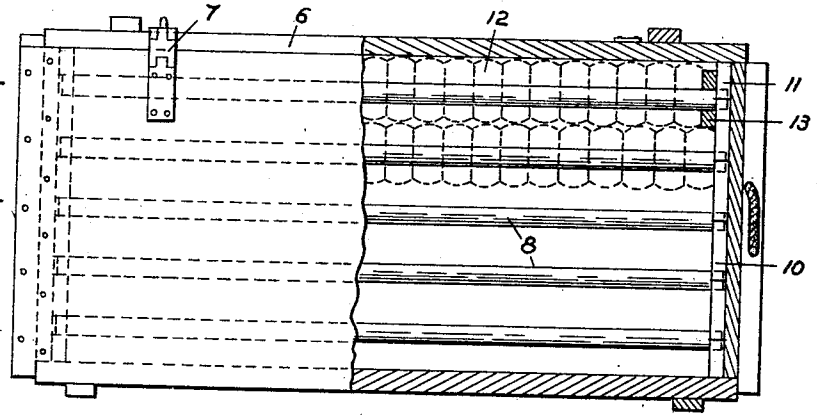


Fig. 2.

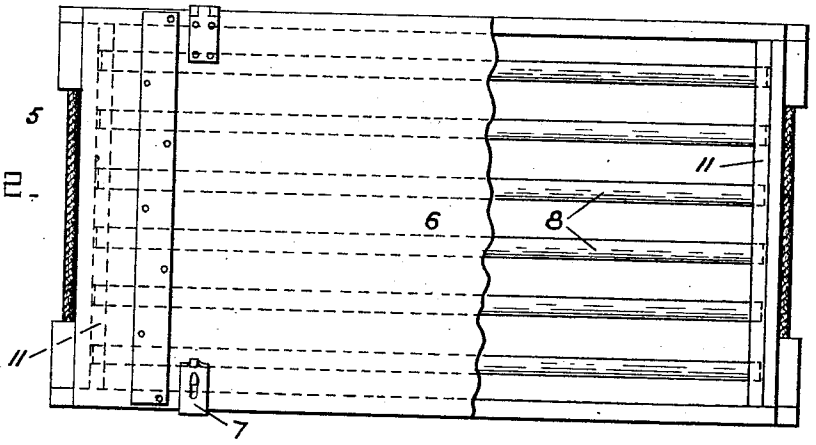


Fig. 3.

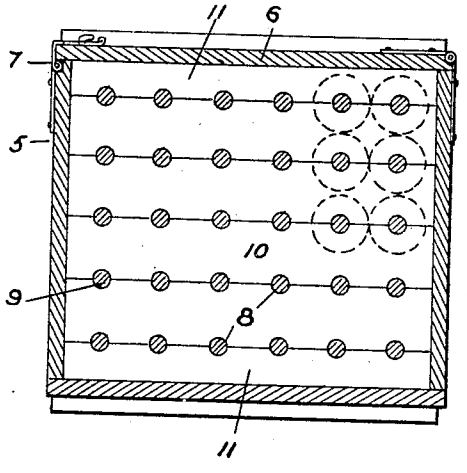
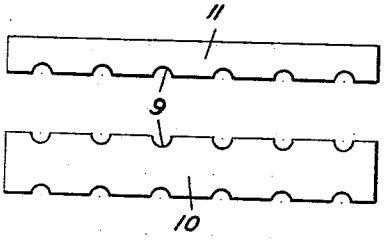


Fig. 4.



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UNITED STATES PATENT OFFICE

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PACKING CASE

Application filed November 16, 1929. Serial No. 407,744.

(GRANTED UNDER THE ACT OF MARCH 3, 1883, AS AMENDED APRIL 30, 1928; 370 O. G. 757)

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to us of any royalty thereon.

This invention relates to improvements in packing cases and has reference more particularly to a special case for containing perforated articles such as the powder rings used as the propellant charge for trench mortar projectiles.

The principal objects of the invention are to provide a packing case suitable for storage as well as transportation and having a supporting arrangement for the articles to be placed therein which will not only facilitate their preparation for packing and form a convenient means for unpacking and dispensing but will also insure against breaking and deformation.

With the foregoing and other objects in view, the invention resides in the novel arrangement and combination of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

A practical embodiment of the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a longitudinal sectional view of the improved packing case;

Fig. 2 is a plan view thereof with the cover removed;

Fig. 3 is an end view of the case, parts being broken away to show the separators in elevation; and

Fig. 4 is a view in detail of the separating plates.

Referring to the drawing by numerals of reference:

The packing case consists of a box 5, preferably of wood and having smooth inside walls. A hinged cover 6 is arranged to be secured by fasteners 7.

The means for supporting the articles that are to be placed in the case comprises a series of racks, each consisting of a number of rods 8 individually supported in semi-circular recesses or bearings 9 formed in separating plates 10. The recesses are formed in both the upper and lower sides of the plates 10 so that when the plates are positioned one above the other against the end walls of the box the rods will be confined between adjacent plates. The lowermost and the uppermost plates 11 are provided with recesses on only one side.

The rods are designed to carry perforated articles 12 which are to be placed in the case and, accordingly, they are dimensioned to closely fit the perforation in the article and thereby hold the article against movement transversely of the rod. The rods are arranged so that when assembled in the box, each row of the article will be spaced from adjacent rows.

When the articles are resilient they may be compressed so that when the rod is placed in the opposite recesses of the separating plates the articles will exert a pressure on the plates to securely hold them in position. However, when the articles are non-resilient or brittle, a resilient washer 13 is placed on each end of the rod to serve the above purpose as well as to protect the end articles. When the cover 6 is lowered and secured the separating plates will be held against vertical displacement.

The supporting arrangement is particularly advantageous when used for powder rings as it prevents shifting of the rings during transport and affords ventilation between the rows. The final operation in forming the powder rings consists in sewing the ends of a tube together and the operator may conveniently place the completed ring on the rod. When the powder rings are to be sent into the field for use by troops they are repacked—sixteen of them being placed in a cylindrical carton. The operator may place the end of the loaded rod into a carton, hold the ring that is flush with the top of the carton and then withdraw the rod.

We claim:

1. A packing case comprising a box, a plurality of separating plates placed one above the other in the ends of the box, the upper and lower sides of the intermediate plates

and the inside of the top and bottom plates formed with spaced recesses, and a plurality of rods, the ends of each rod fitting in opposite recesses of the separating plates, and the rods dimensioned according to the perforation in the articles to be carried thereby.

2. A packing case comprising a box, a plurality of separating plates placed one above the other in the ends of the box, the upper and lower sides of the intermediate plates and the inside of the top and bottom plates formed with spaced recesses, and a plurality of rods, the ends of each rod fitting in opposite recesses of the separating plates.

3. A packing case comprising a box, removable plates superposed in the ends of the box, adjoining plates cooperating to form spaced bearings and rods, the ends of each rod receivable in opposite bearings.

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