

Aug. 16, 1927.

H. G. COLLIS

1,639,487

APPARATUS FOR REMOVING CONTENTS OF EGG CASES

Filed Dec. 22, 1926

Fig. 1.

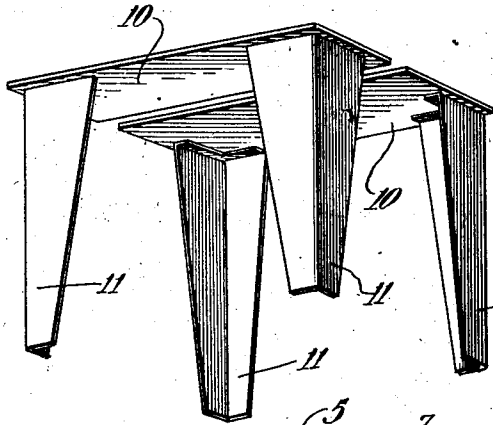


Fig. 2.

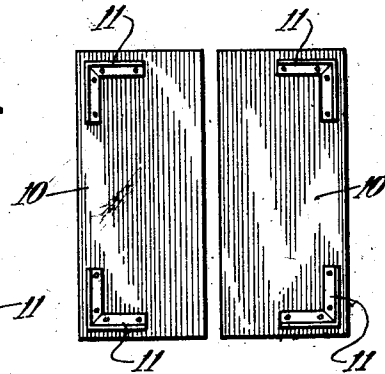
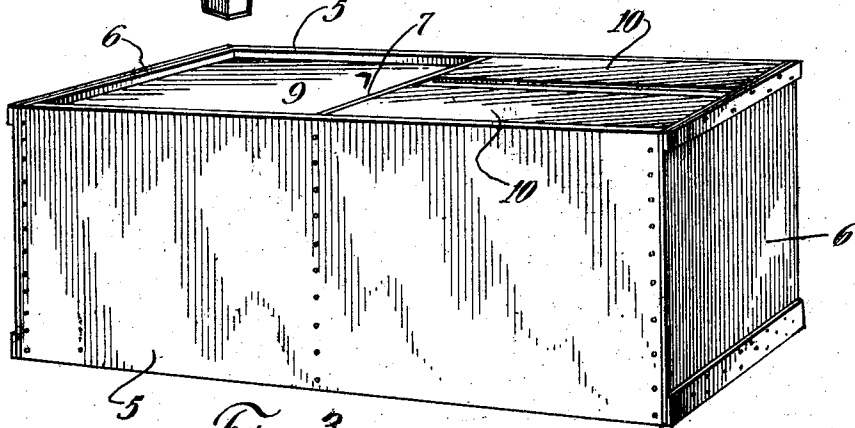


Fig. 3.

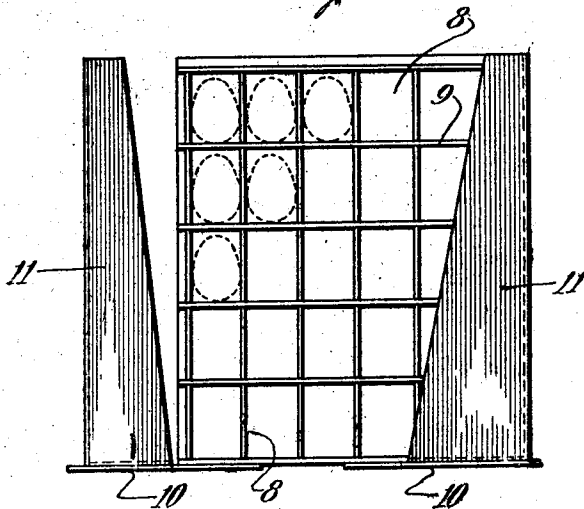
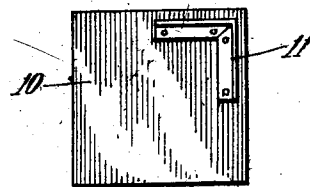


Fig. 4.



Inventor
Harold G. Collis,
By *Wm. H. Wm. H.* *Attorneys*

UNITED STATES PATENT OFFICE.

HAROLD G. COLLIS, OF CLINTON, IOWA, ASSIGNOR TO THE COLLIS COMPANY, OF CLINTON, IOWA, A CORPORATION OF IOWA.

APPARATUS FOR REMOVING CONTENTS OF EGG CASES.

Application filed December 22, 1926. Serial No. 156,298.

This invention relates to certain apparatus designed to facilitate the removal of eggs from a case, the object being to do this in a more speedy and satisfactory manner, and with means which is simple and inexpensive to produce and operate.

An exemplification of this invention is set forth in the accompanying drawing in the manner following:

Figure 1 is a view in perspective showing a two compartment egg case with the removing apparatus fitted into one compartment, and with a second apparatus ready for insertion in the other compartment thereof;

Fig. 2 is a plan view of the apparatus for one case compartment;

Fig. 3 which is an end elevation thereof shows the apparatus inverted together with the contents of the case; and

Fig. 4 which is a view similar to Fig. 2 shows a modification of the device.

A standard two compartment egg case is shown in Fig. 1, the same comprising sides 5 and ends 6 together with a vertical partition 7 parallel with the ends. As the present improvements are concerned with apparatus which is duplicated for each compartment, the description to follow will be directed toward a case generally without regard to the number of compartments therein.

Within the case is contained a quantity of eggs arranged in layers within superposed fillers 8 having intervening horizontal separators 9. If the egg case cover be removed, as indicated in Fig. 1, the operation of removing eggs requires that the topmost layer be first taken off after which the succeeding layers, one at a time, are exposed for handling. This is a slow and painstaking operation at best.

According to my invention use is made of plates 10, preferably two in number, from each of which depends a pair of angled legs 11. As shown, these legs may taper away from the plates to which they are connected. The plates are of a size to cover about one-half the open top of the egg case, so that, when assembled therewith, as indicated in Fig. 1, a substantially complete closure therefor is provided. The legs are desirably formed of sheet metal having a suitable strength, and so spaced as to occupy positions adjacent two contiguous corners of the case. With two such plates, each mounting two legs, all four corners of the case are

occupied when the apparatus is positioned operatively in place.

In applying the device to the case, the several legs are slid between the vertical walls of the case and the separators therein, until the two plates 10 are substantially flush with the top of the case, as shown at the right end of Fig. 1. When the two leg units have been so applied, the entire case is inverted, as shown in Fig. 3, permitting the leg units to be laterally withdrawn. The unit shown to the left of Fig. 3 is in process of removal, while the other unit is shown as in the position when the case is first inverted and then lifted up and away from the eggs which remain stacked in the fillers. After lateral removal of the several leg units, the eggs remain stacked in their fillers, but without external protection otherwise. In this position they may be readily and quickly removed for such use as may be desired.

The construction shown in Figs. 1 and 2 may obviously be altered, one suggestive modification thereof being shown in Fig. 4. In this view the plate 10 is of a size approximately one-fourth the exposed top side of the case, and carries but a single angled leg 11. The only difference between this construction and the one already described is that, instead of two leg units, four of the kind shown in Fig. 4 are required for insertion in the case. In other words, each plate has associated with it but a single leg instead of two. In all other respects, however, the construction and operation of the removing apparatus is the same.

I claim:

1. In combination with a rectangular case having an open top with a vertical stack of egg fillers and separators therewithin, angled legs insertable within the case, one of said legs adjacent each corner thereof to the outside of the fillers and separators therewithin, and plate means connecting the legs and overlying the open top of the case, the case when inverted being removably vertically along the legs without touching the separators and fillers which rest upon the plate means, the legs and plate means being thereafter movable laterally to leave the separators and fillers exposed on all sides, substantially as described.

2. In combination with a rectangular case open at the top for receiving therewithin a vertical stack of fillers and separators, a leg

unit comprising a plate which overlies a portion of the open case top and a depending angled leg which fits into a corner of the case to the outside of the fillers and separators therewithin, there being a similar unit for another of the case corners, the case, upon inversion, being slidable vertically from off the leg units following which the leg units are slidable laterally from the stack of fillers and separators, substantially as described.

3. In combination with a rectangular case having an open top for receiving therewithin a vertical stack of fillers and separators, means insertable into each corner of the case to the outside of the fillers and separators therewithin and extending in part over the open top of the case, the case upon inversion being slidable vertically from off said means which latter is then slidable laterally away from the stack of fillers and separators, substantially as described.

4. In combination with a rectangular case having a compartment with an open top for receiving therewithin a vertical stack of separators and fillers, a pair of plates overlying a portion of the top, and each extending substantially the distance of one side of the compartment, a pair of angled legs affixed to each plate and spaced for insertion within the compartment adjacent two corners thereof and to the outside of the fillers and separators therewithin, the two leg units when so positioned removing the compartment sides from contact with the fillers and separators therewithin, the case, upon inversion, being removable vertically without touching the fillers and separators leaving only the leg units adjacent thereto which latter are then removable laterally so as to expose all sides of the stack of fillers and separators, substantially as described.

HAROLD G. COLLIS.