To all whom it may concern:

Be it known that I, FREDERICK R. VERNON, residing in Freeport, county of Queens, and State of New York, have invented certain new and useful Improvements in Boxes, of which the following is a specification.

The object of my invention is to produce a box for packing eggs and like articles where-in the rack will form a practically integral part of the box, so that the setting up of the box will make the complete article without the necessity for placing in the egg-racks separately and at the same time allowing the box to be folded flat when not in use.

In the drawings of this application, Figure 1 is a view showing the blank from which the box is made. Fig. 2 shows one of the division-pieces forming the rack. Fig. 3 shows the parts as they appear in the act of folding the box flat. Fig. 4 shows the box set up and ready for use. Fig. 4 a is a perspective view showing a detail of the box. Fig. 5 shows the blank of another form of my invention. Fig. 6 shows the box set up ready for use.

Referring now to Fig. 1, A A' represent those parts of the blank forming the sides of the box; B, the part forming the bottom; B', the portions of the blank which when folded forms a portion of the rack; C C', the fastening devices for the ends of the box, and E E the portions forming the ends of the box. So far as the main construction of the box is concerned it is that of a form commonly in use, the blank being creased as indicated by the broken lines, the cut-out portions being also clearly shown. That part of the blank lying between the parts which form the sides of the box is creased at three places, twice as indicated at B' and once as indicated at F, midway between B' and B' so that when folded the two parts on each side of the creased line F form a double thickness of material running lengthwise from end to end and extending the full depth thereof, as indicated in Figs. 3 and 4 of the drawings. This portion of the box is cut as indicated in Fig. 1, the cuts G running angularly from the central line, and at the ends of these cuts are cut-out portions H, the whole forming when the parts are folded together a cut substantially of the form shown in Fig. 4 a. These slits or cuts last described are intended to hold the cross pieces K, forming a part of the rack, which are of a form clearly shown in Fig. 2, being substantially rectangular and formed with slits or cut-out portions L on each side.

In preparing the box for shipment the bottom piece is folded on the central line F and the partition-pieces K slipped into the slots G and cut-outs G H. This being done, the double central portion B' may be laid flat, turning on either crease 6', as indicated in Fig. 3. The partition-pieces turn lengthwise of the box, owing to the construction of the parts just described, and the box may be folded on any of its creases, making the total structure lie perfectly flat. The blank in the act of being folded flat is indicated in Fig. 3.

In setting up the box for use the main part of the box is set up in the usual way, as will be evident to those skilled in the art, the double central portion or partition readily assuming its place, as shown in Fig. 4, and it is only necessary to turn the partition K in order to put the merchandise into the separate compartments. It will thus be seen that the egg-rack is a substantially integral part of the box itself, thus obviating the necessity for separate racks to be placed in after the box has been set up.

In Figs. 5 and 6 I have shown a form of my box which is substantially similar to that shown and described in Figs. 1 to 4, the difference being in the method of forming the racks. This is accomplished by substituting for the separate pieces K parts cut out of the double thickness. These parts are cut staggered alternately from each side of the material of this double central portion and of such a size as to leave portions of the material forming the double center intact. These parts being cut out on three sides may be turned to form the divisions of the rack, as clearly shown in Figs. 5 and 6, as for instance, the part K' on the left would be turned toward the right looking at Fig. 5, while the part K', immediately below, would be turned to the left, thus making one complete cross-partition or division-piece. I may, if so desired, in this last construction provide each of the parts forming the double central partition with a flap N', one at each end, the other end of the part being provided with a slot P, so that the parts may be locked together, as shown in Fig. 6, increasing the rigidity of the box and assisting in keeping it in perfect shape; but these parts, however, I may dispense with, if so desired.

By this construction I provide an egg-box...
in which the racks are integral with the box, thus avoiding the necessity of extra racks, which are necessary, as so many are lost or mislaid, and it also makes the work of setting up the box no more than that of any ordinary box, and, furthermore, makes a box extremely strong in construction. The integral partition, which forms a part of the rack, it will be seen, goes into its place automatically—that is to say, the act of setting up the box proper from the assembled conditions shown in the various figures of the drawings causes such partition to assume its proper place. The setting up of the complete box, therefore, requires no more labor than were the partitions absent.

What I claim, and desire to secure by Letters Patent, is—

1. A folding box comprising a bottom formed from a portion of the blank lying between the side walls of the box, side walls foldably connected with the bottom, flaps foldably connected with the ends of the side walls and adapted to be interlocked to form the ends of the box, a partition integral with the bottom and formed by a double fold from a part of the blank between the side walls, and division-pieces connected with the partition to form nests or compartments in the box.

2. A folding box consisting of a bottom having upwardly-foldable parts adapted to form a double partition, division-pieces connected to said double partition, side walls foldably connected with the said bottom, flaps foldably connected with the ends of the side walls and adapted to interlock to constitute the ends of the box, the whole being adapted to lie flat and also adapted upon the act of interlocking the flaps to cause the double partition to assume its position to form the partition for the set-up box, substantially as described.

3. A folding box comprising a bottom having upwardly-foldable parts adapted to form a double partition, division-pieces connected to said double partition, side walls foldably connected with the said bottom, flaps foldably connected with the ends of the side walls and adapted to interlock to constitute the ends of the box, whereby the act of interlocking said flaps causes the bottom to be upwardly folded to form a partition for the set-up box, substantially as described.

4. A folding box having a principal partition integral with the bottom of the box and formed by a double fold taken from that portion of the blank which lies between the part which forms the bottom of the box, and division-pieces connected to said principal partition, all of the parts being adapted to be folded flat and the principal partition being adapted to be placed in position by the operation of setting up the box.

5. A knockdown box formed from a single blank adapted to be set up by folding on predetermined lines, that part of the blank between the part forming the side walls being divided into sections, two of the sections being adapted to be folded together to form the main partition in the box and to be placed in position by the operation of setting up the box, the remaining sections forming the bottom of the box, and division-pieces connected to the main partition.

In testimony whereof I have hereunto set my hand, at the city, county, and State of New York, this 25th day of August, 1902.

FREDERICK R. VERNON.

In presence of—

E. M. HARMON,

LOUIS N. WHEALTON.