S. RUFF.

SECTIONAL BOX RACK.

APPLICATION FILED JUNE 24, 1914.

1,147,975.

Patented July 27, 1915.

Fig. 1.

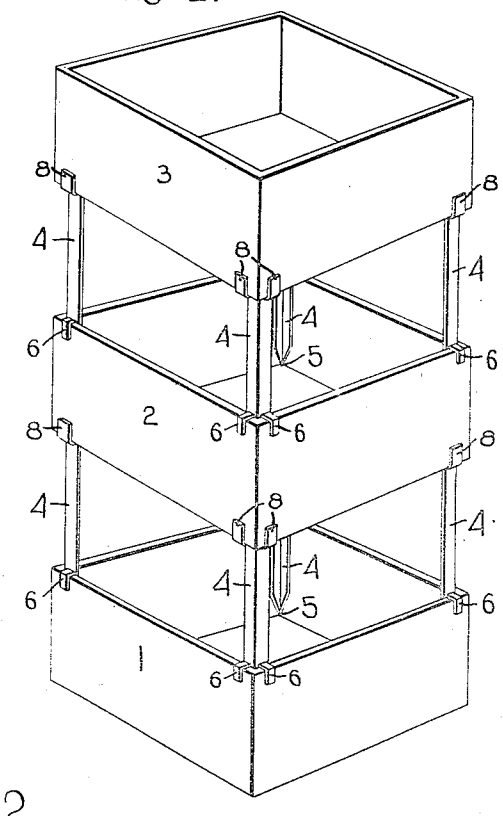


Fig. 2.

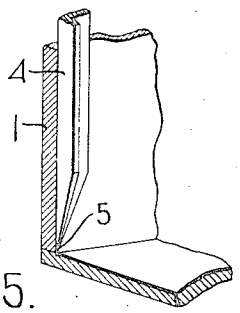


Fig. 3.

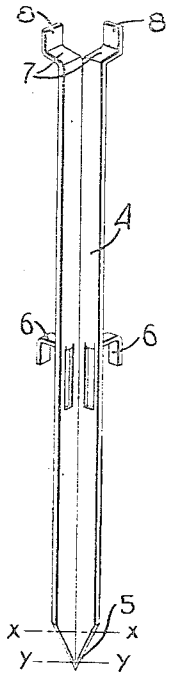


Fig. 4.

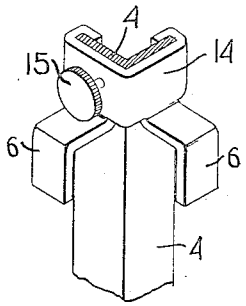


Fig. 5.

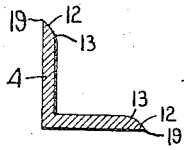
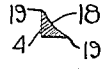


Fig. 6.



Witnesses.

J. Morrill Fuller

William E. Gagen.

Inventor.

Samuel Ruff

by Heard Smith & Tennant.

Att'y's.

UNITED STATES PATENT OFFICE.

SAMUEL RUFF, OF BROOKLINE, MASSACHUSETTS.

SECTIONAL BOX-RACK.

1,147,975. Specification of Letters Patent. Patented July 27, 1915.

Application filed June 24, 1914. Serial No. 846,918.

To all whom it may concern:

Be it known that I, SAMUEL RUFF, a citizen of the United States, residing at Brookline, county of Norfolk, State of Massachusetts, have invented an Improvement in Sectional Box-Racks, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to box racks and has for its object to provide a novel sectional box rack by means of which boxes or crates can be superposed one on the other in such a way that the contents of each box will be visible and accessible. The device is useful wherever the goods to be sold, whether fruits, vegetables, or any other line, are contained in open boxes, but is especially useful in grocery stores, fruit stores and similar places.

Of late years boxes containing about a bushel have come into vogue in grocery and provision stores for containing fruits, vegetables and other articles to be sold, and these boxes are not only used to display the vegetables, fruits, etc., but hold the supply from which sales are made. It is, therefore, necessary that all of the various boxes should be readily accessible to the merchant, and that they should be so placed that the contents can be visible. It is the common custom now to place these boxes about on the floor of the store, but this takes up a lot of floor space and the boxes are often in the way.

By my invention I have provided a novel box rack by which these boxes can be superposed one on the other in such a way that the contents of each box is always accessible and always visible. With my invention, therefore, it is possible to place a large number of boxes containing different fruits, vegetables, etc., on a comparatively small floor space.

My improved box rack comprises a plurality of box-supporting members, one adapted to set into each corner of a box and each provided with means to engage the box and thereby be held in vertical position and also provided at its upper end with a seat or rest on which another box can be placed. These supporting members when not in use can be readily stacked in a comparatively small space.

In order to give a proper understanding of my invention I have illustrated herein a selected embodiment thereof which will now be described.

In the drawings, Figure 1 is a perspective view of a plurality of boxes supported in position by means of my improved rack; Fig. 2 is a sectional view through a corner of the box showing the lower end of one of the box supports; Fig. 3 is a perspective view of one of the box supports; Fig. 4 shows a modified form of the invention shown in Fig. 1; Fig. 5 is an enlarged section on the line *x*—*x*, Fig. 3; Fig. 6 is an enlarged section on the line *y*—*y*, Fig. 3.

My invention is adapted to support a plurality of boxes, one above the other at a sufficient distance apart so that the contents of each box are not only visible but readily accessible. For instance, in Fig. 1 I have shown three boxes 1, 2 and 3 supported one above the other, by means of a device embodying my invention, each box being supported by the box below and a sufficient distance thereabove so that free access can be had to each box. A rack embodying my invention comprises a plurality of supporting members, one for each corner of the lower of two boxes, each supporting member having interlocking engagement with the box, whereby it is held in vertical position, and provided at its upper end with a seat on which one corner of another box can be supported. I have shown in Fig. 3 a supporting member 4 embodying my invention. Each supporting member is preferably made of angle-iron and will have its lower end sharpened or pointed, as shown at 5, each member being provided also with positioning fingers 6 which are adapted to embrace the top edge of the box when the pointed end of the member is inserted into the corner of the box.

At the upper end each supporting member is provided with a seat 7 on which the corner of another box can rest. This seat portion may be formed in any suitable way, but when the supporting member is made of angle-iron, I prefer to split the upper end thereof and then bend the two legs of the angle outwardly to form the seat portion, and then upwardly, as shown at 8, to form positioning fingers that overlie the outside of the box to be supported. The fingers 6 may be formed in any suitable way. One convenient construction is that shown in Fig. 3 wherein they are formed by striking

up a portion of the metal of the legs of the supporting member.

In using this device for supporting one box above the other, one of these supporting members will be inserted into each corner of the lower box 1, and the supporting members will be so made that when the pointed lower end 5 thereof engages the bottom of the box the fingers 6 will overlie and embrace the top edge of the box. There will preferably be two of these fingers 6, one on each leg or flange of the supporting member, so that the two fingers 6 of each supporting member embrace two adjacent sides of the box. The sharp pointed end 5 can be pressed into the bottom of the box 1 slightly, as shown in Fig. 2, so as to prevent said end from any lateral movement and the engagement of this pointed end 5 with the bottom of the box, together with the engagement of the fingers 6 with the top edge of the box, serve to hold the supporting member firmly in vertical position. When the four supporting members have been set up in the corners of the box, then another box 2 will be placed on the seats 7 of the four supporting members and will be firmly held on the seats by the engagement of the fingers 6 with the sides of the box. If desired four more supporting members may be inserted into the box 2, as shown in Fig. 1, and a third box 3 placed on top of said supporting members, and thus the stack of boxes may be built up to any desired height.

Each supporting member will be of such a length that the seat portion 7 thereof will be of sufficient distance above the top edge of the lower box to give free access to the contents of the lower box. These supporting members when not in use can be packed away in a small space.

I will preferably make the lower pointed end 5 of the supporting member of such a shape that it can be inserted into the corner of a box without danger of injuring the contents of the box in any way. As seen in Fig. 5 the tapering edges 12 of the supporting member are made at an acute angle to the outer face and the corner 13 will preferably be rounded somewhat. At the tip of the supporting member where the two edges 12 merge, said member is made with a concave face 18, as seen in Fig. 6. This construction eliminates all corners except the corners at the outer faces of the supporting member, and as these corners 19 lie flatly against the sides of the box when the device is being inserted thereinto they will not cut or otherwise injure the contents of the box. It is possible to insert a device constructed in this way into the corner of a box containing any delicate or easily-injured fruit or vegetable without danger of damaging the same.

In the embodiment shown in Fig. 3 the positioning fingers 6 are integral or rigid with the supporting member. In Fig. 4 I have shown an embodiment wherein these positioning fingers are adjustably mounted on the supporting member, and in said construction said fingers are formed on a sliding carrier 14 which can be adjusted longitudinally of the supporting member and can be clamped in any adjusted position by means of a set-screw 15. This construction provides a device which can be used with boxes of different depths, whereas the construction shown in Fig. 3 can only be used with a box of a given depth.

While I have illustrated herein some embodiments of my invention, I do not wish to be limited to the constructional features shown.

I claim:

1. The combination with a box, of a plurality of box-supporting members, one for each corner of the box, each box-supporting member being made of angle-iron and having a pointed lower end to engage the bottom of the box, positioning fingers extending from the sides thereof to embrace the top edge of the box, and a box-receiving seat at the upper end.

2. The combination with a box, of a plurality of angle-iron box-supporting members adapted to be inserted into the corners of the box, each member having a pointed lower end to engage the bottom of the box and having projecting from each side thereof a positioning finger to embrace the top edge of the box, the upper end of each member presenting a box-supporting seat.

3. The combination with a box, of a plurality of angle-iron box-supporting members adapted to be inserted into the corners of the box, each member having a pointed lower end to engage the bottom of the box and having projecting from each side thereof a positioning finger to embrace the top edge of the box, the upper end of each member presenting a box-supporting seat, and box-supporting fingers adapted to engage two sides of a box.

4. The combination with a box, of a plurality of box-supporting members for supporting a second box above the first-named box, each box-supporting member having a shape to fit the sides of the first-named box and having at its lower end a portion to interlock with the box bottom whereby said lower end is held in proper position, and means associated with each member between its ends to engage the top of the box and cooperate with the lower end of said member to hold said member in operative position, each member having at its upper end a box-receiving seat on which said second box is sustained.

5. Box-supporting means comprising a plurality of separate box-supporting mem-

bers, each having a shape to fit into the corner of a box and provided at its upper end with a box-supporting seat and between its ends with means to engage the sides of a box into which it is inserted, the lower end of each member being pointed to interlock with the bottom of said latter box.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL RUFF.

Witnesses:

LOUIS C. SMITH,

THOMAS J. DRUMMOND.