No. 893,786. PATENTED JULY 21, 1908.

G. & O. D. COLLIS.

SECTIONAL STACKED LETTER TRAY.

APPLICATION FILED APR. 29, 1907.

Fig. 1.

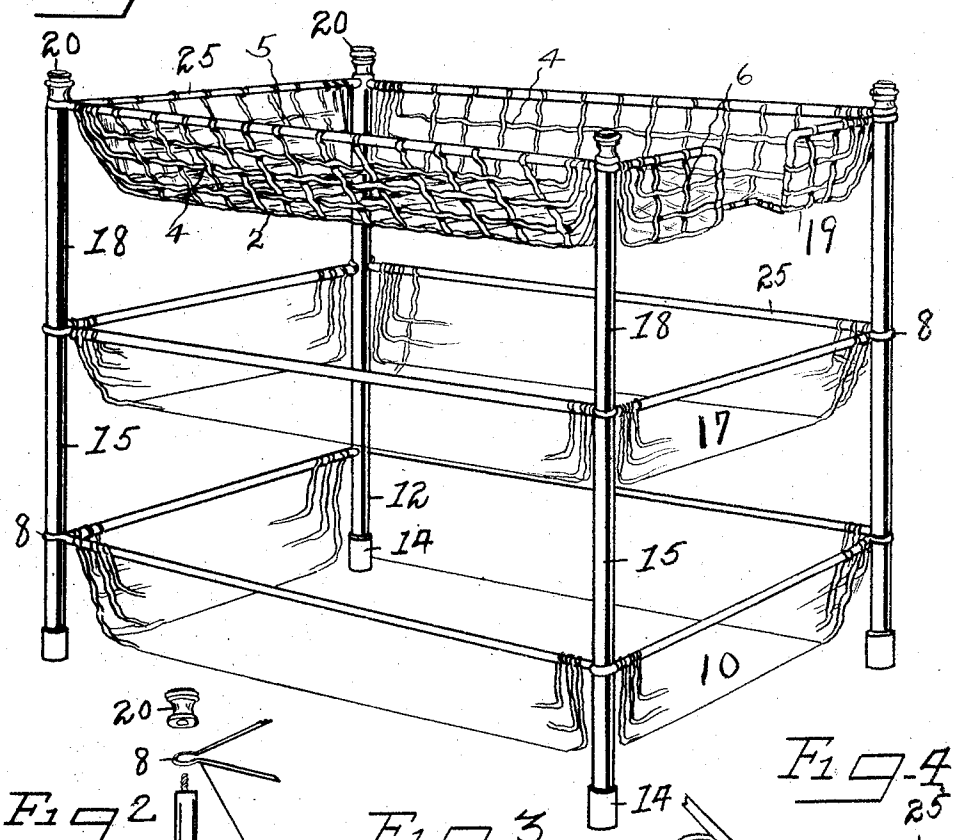


Fig. 2.

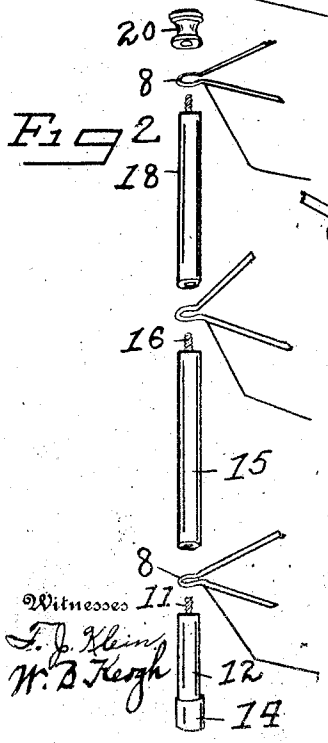


Fig. 3.

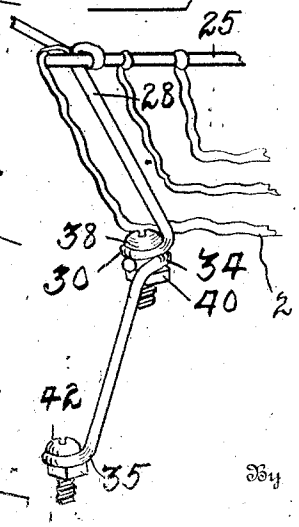
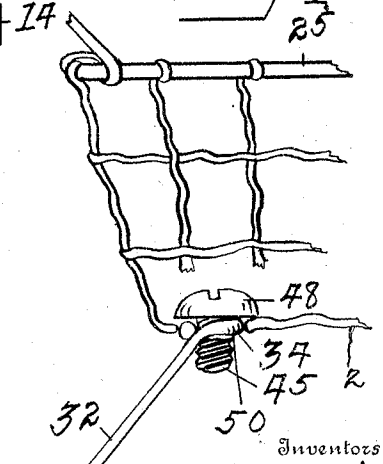


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE COLLIS AND OLIVER D. COLLIS, OF DUBUQUE, IOWA, ASSIGNORS TO THE COLLIS COMPANY, OF DUBUQUE, IOWA, A CORPORATION OF IOWA.

SECTIONAL STACKED LETTER-TRAY.

No. 893,786. Specification of Letters Patent. Patented July 21, 1908.

Application filed April 29, 1907. Serial No. 370,746.

To all whom it may concern:

Be it known that we, GEORGE COLLIS and OLIVER D. COLLIS, both citizens of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Sectional Stacked Letter-Trays, of which the following is a specification.

Our invention relates to letter or package trays, and the object is to provide a series of separable letter trays that may be manufactured singly and nested when shipped and then built up or added to at pleasure when used.

It consists preferably of woven wire trays of the size and shape desired and in means for removably attaching them together one above the other.

The following specifications will explain in detail the mode of manufacturing and shipping, together with the manner of uniting them together.

Figure 1 is a perspective view of three trays showing the preferable mode of attaching them together. Fig. 2 is a perspective view of the different parts of the legs or standards before they are united together. Fig. 3 and 4 show partial side elevations of modified forms of our invention.

Like characters of reference denote corresponding parts in all of the drawings.

Referring to the drawings 2 designates the bottom of the tray, 4 the sides, 5 the rear end and 6 the front end, and is constructed of wire woven together. The end 6 is cut away for the purpose of readily removing the letters from the tray. At each corner the wire is formed into a ring or loop 8.

The legs or standards are formed in sections according to the number of trays with which they are used. In Fig. 1 when there are three trays the lower tray 10 is provided with the standards 12 having feet 14. On the upper end of each of these standards 12 is formed a screw 11. The section 15 which sustains the next tray 17 above is provided with a screw threaded opening in its lower end adapted to be engaged by the upper end of the standard 12. On the upper end of the standard 15 is formed a screw 16 the same as the screw 11 on the standard 12. The standards 18 which engage and sustain the upper tray 19 are duplicates of the standards 15 having the screw threaded opening in their lower end and a screw thread 21 on the top of each. On the top of each standard 18 is a screw having an ornamental head which screw holds down the top tray and gives the combined tray a finished appearance. The manner of setting them up for use with this standard is by inserting the screw of the standard 12 through the loop 8 and then screwing the said standard into the lower end of the standard 15, bringing the shoulders of the standards 12 and 15 against the top and bottom sides of the loop 8 thus holding the loop or corner of the tray rigidly between the ends of the two standards 12 and 15, and then by screwing upon the top of the standard 15 the head screw 20 the top tray is held down and combine the two trays rigidly together. If it is desired to add another tray, then the head screw 20 is removed and another set of standards 18, are brought into engagement with the standards 15 the same as the standards 15 were connected to the standards 12 and then the head screw 20 is brought into engagement with the top of the standards 18 and the third tray is added, and thus the trays may be added at pleasure. It will be seen that the adding of one or more trays will in no manner interfere with the use of any tray beneath, as the letters can be removed readily from the end 6 of each of the trays.

In Figs. 3 and 4 is shown a different mode of forming the legs or standards, though their operation is practically the same as those shown in Figs. 1 and 2. In Fig. 3 there is attached to the railing rod or wire 25, that surrounds the tray and in which the loops 8 are formed, a rod 28, which extends down in the inner corner of the tray at the angle of the tray and through between the meshes of the tray at the bottom and then twisted into a loop 30. In this Fig. 3 the loop is shown for convenience as projecting outwardly, but preferably these loops should project inwardly beneath the tray where they will be out of sight. The standards 32 which join these loops 30 with the loop 8 are each provided with a loop 34 at the upper end and a loop 35 at the lower end which loops are arranged in parallel planes and the standards set at an angle. The trays are removably attached together by inserting a screw 38 through the loop 30 and loop 34 then screwing them rigidly together by a nut 40 and then inserting a screw 42 through the loop 35 and 8 in the lower tray and securing

it with a screw 44. If the standards 32 are attached to the lower tray then they serve as legs with the loops 35 as feet.

In Fig. 4 the rod 28 is dispensed with and a bolt 45 provided with a large head 48 is passed through between the meshes of the tray at the bottom corners and engages the loop 34 and removably secures the standards 32 by a screw 50, or the loop may be screw threaded and the bolt engage the loop and be screwed therein. By this mode all that is necessary to add a tray is to insert the bolts through the loops 8 of the lower tray and the loop 35 of the standard 32 and tighten the screw on the end of the bolt.

The manner of shipping the trays is by removing the standards and then packing or nesting the trays.

Having now described my invention what I claim is:

1. In a device of the character described, a plurality of wire trays a plurality of tray standards secured to the bottom of said trays, and means carried by each tray for securing thereto said standards of the next adjacent tray.

2. In a device of the character described, a plurality of wire trays, standards detachably secured to the bottom thereof, loops formed in said trays and means for securing said standards of each tray to the loops of the tray next adjacent.

3. In a device of the character described, a plurality of wire trays, rods secured thereto, standards secured to said rods, loops formed in said trays and means for securing the standards of each tray to the loops of the tray next adjacent.

4. In a device of the character described, a plurality of trays, and means carried by the bottom of each tray for securing thereto the top of the tray next adjacent.

5. In a device of the character described, a plurality of wire trays, a plurality of tray standards secured to the bottom of said trays, and means carried by the top of each tray for securing thereto the standards of the next adjacent tray.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE COLLIS.
OLIVER D. COLLIS.

Witnesses:
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