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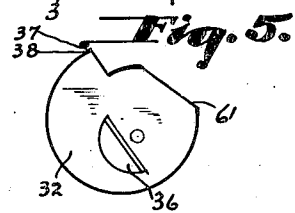
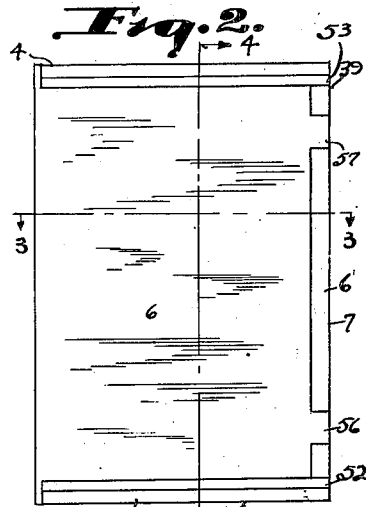
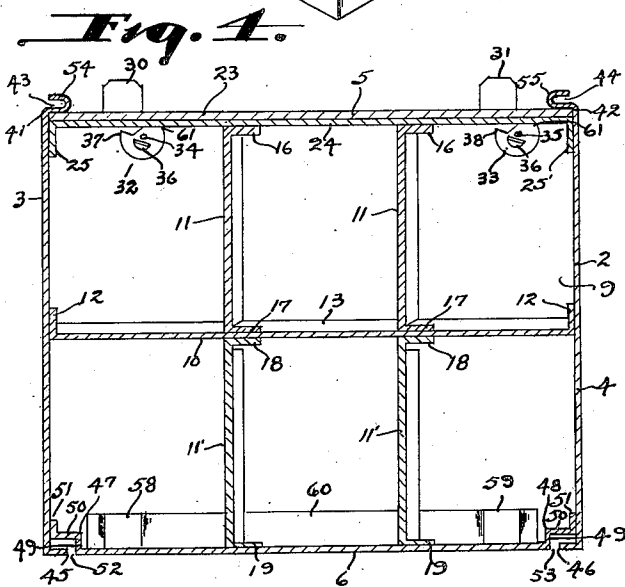
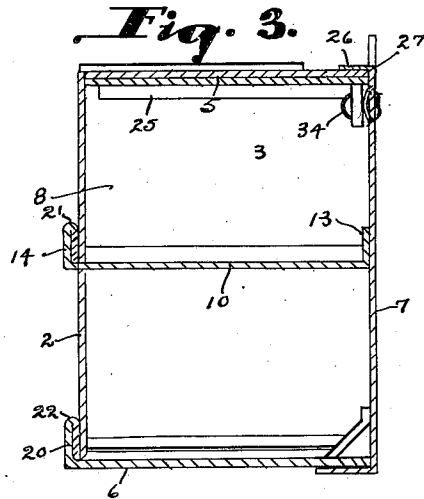
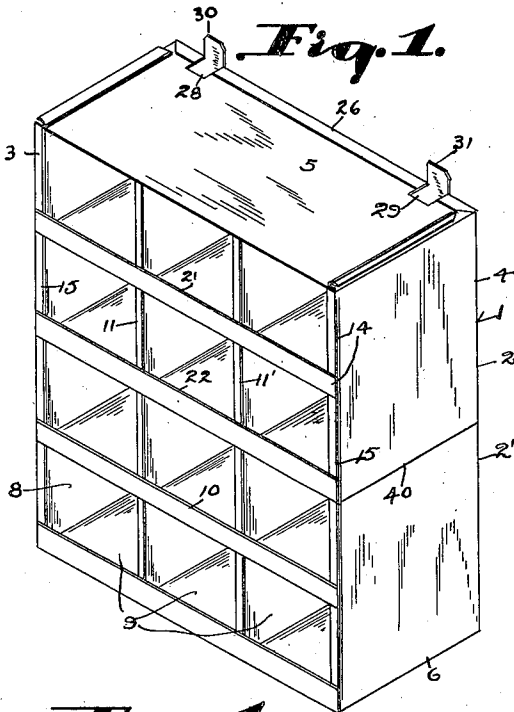
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SECTIONAL BIN

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2 Sheets-Sheet 1



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SECTIONAL BIN.

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My invention relates to sectional bins particularly, though not exclusively, adapted for use in garages and other places for storing various articles in separate compartments.

Heretofore bins, having separate compartments, have consisted of a structure having the partitions fixed to its frame having a width sufficient to accommodate the desired number of compartments arranged in horizontal alinement, and having a predetermined height usually equal to the distance from the floor to the ceiling of the room in which they are positioned. It very often happens, when it is desired to move a usual bin from one place to another, such removal is impossible without remodeling the bin, at considerable expense and delay, for the purpose of altering its dimensions to conform to the size of the space it is to occupy or to permit its removal through doorways. Furthermore, the excessive weight of a usual bin, built in one section and which is filled with stored articles, makes it necessary to remove the articles therefrom, at considerable inconvenience, before the bin can be readily moved from place to place.

The objects of my invention are to provide a simple, practical, durable and highly desirable storage bin adapted to be built in sections and each section having a structure capable of being quickly and conveniently assembled with or disassembled from other similar sections, whereby the various sections of the bin can be removed from place to place without removing its contents and irrespective of the size of the space the bin is to occupy; to provide means adapted to lock said sections securely together, whereby two or more assembled sections appear as a single unit; to provide a sectional bin having a construction particularly adapted to withstand rough usage.

My invention consists in providing a bin consisting of a plurality of sections each having a frame containing a plurality of compartments and the bottom of each of said frames adapted to slidably receive the top of any other section, whereby as many sections as desired may be united as one unit; and in providing simple and effective releasable locking means adapted to secure said sections in engagement with one another.

My invention further consists in the combination and arrangement of parts and in

the details of construction, as herein set forth and claimed.

In the drawings:

Fig. 1 is a perspective showing two sections of my invention in assembled position;

Fig. 2 is a bottom view of one section of my invention;

Fig. 3 is a vertical transverse section taken on a line corresponding to 3—3 in Fig. 2;

Fig. 4 is a vertical longitudinal section taken on a line corresponding to 4—4 in Fig. 2;

Fig. 5 is a plan view of my eccentric locking catch adapted to releasably lock the sections of my invention together;

Fig. 6 is a perspective of the formed two sides and back;

Fig. 7 is a perspective of the formed bottom shown partly broken away;

Fig. 8 is a perspective of the formed top;

Fig. 9 is an enlarged plan view of my eccentric locking catch shown in unlocked position and with the back of my invention partly broken away; and

Fig. 10 is an enlarged plan view of my eccentric locking catch shown in locked position and with the back of my invention partly broken away.

In the preferred construction of my invention I provide bin 1 consisting of sections or receptacles 2 and 2' comprising sides 3 and 4, top 5, bottom 6, back 7 and open front 8. Each section is divided into a plurality of compartments 9 by horizontal partition 10 and vertical partitions 11 and 11'. The horizontal partition is fixed in position by its upturned end edges 12, upturned back edge 13, and upturned front edge 14, respectively, being fixed to sides 3 and 4, back 7 and inturned front edges 15, respectively, of the sides. The upper vertical partitions 11 are maintained in fixed positions by their horizontally bent edges 16 and 17, respectively, being fixed to top 5 and horizontal partition 10. Lower vertical portions 11' are maintained in fixed positions by their horizontally bent edges 18 and 19, respectively, being fixed to horizontal partition 10 and bottom 6. The bent or turned edges of the partitions may be fixed in their respective positions to the adjoining surfaces by suitable means such as soldering or spot welding.

Each of the upturned front edges 14 and 20, respectively, of horizontal partition 10 and bottom 6, is bent upon itself, whereby

tops 21 and 22, respectively, of the horizontal partition and the bottom, are smooth and free from a roughened or cutting surface, and whereby the edges are unadapted to injure the flesh of a person who extends his hands into compartments 9 for placing articles therein or removing articles therefrom. Furthermore, the upturned edges 14 and 20 are considerably strengthened by having one layer of material bent upon the other. Sturdiness of construction is especially desirable and advantageous at these points when it is considered that front upturned edges 14 and 20 are for the purpose of retaining various and weighty articles within the compartments.

The size and the number of compartments 9 in receptacle 2 may vary considerably and is dependent upon the intended uses of the bin and the kinds of merchandise to be stored therein.

Top 5 is bent upon itself whereby upper and lower layers 23 and 24, respectively, are formed. The lower layer has downwardly turned edges 25 and 25', respectively, fixed to the upper edges of sides 3 and 4. Back 7 has upper horizontal inwardly bent edge 26 fixed to the rear longitudinal edge 27 of upper layer 23 of top 5 having spaced apart holes 28 and 29 therein, whereby stops 30 and 31 are formed integral with the back, and extending upwardly and in alinement therewith.

Eccentric plates or catches 32 and 33, respectively, are mounted on rivets 34 and 35, respectively, fixed in holes 34' and 35' in back 7. The catches 32 and 33, respectively, are positioned adjacent holes 28 and 29 so that the catches may be manually rotated by actuation of finger contact outwardly extending flanges 36, whereby projecting points 37 and 38, respectively, are adapted to extend through holes 28 and 29 in top 5 and in engagement with lower edge 39 of back 7 of upper section 2 and whereby the upper section 2 and lower section 2' are locked in the position as shown in Fig. 1 with the bottom of the upper section in close contact with the top of the lower section at 40.

Upper edges 41 and 42 of sides 3 and 4 are bent U-shaped, whereby grooves 43 and 44 are formed for slidably receiving inturn horizontal edges 45 and 46, respectively, of sides 3 and 4 of the lower section and which is made possible by the construction of bottom 6 having portions 47 and 48 bent upwardly at 49 then outwardly at 50 and then upwardly at 51, whereby space 52 is formed between inturned edge 45 of side 3 and upturned portion 49 of bottom 6 and similar space 53 is formed between inturned edge 46 of side 4 and upturned portion 49 of bottom 6. The spaces 52 and 53, respectively, are adapted to receive curved portions 54 and 55, respectively, of U-shaped edges 41 and 42, respectively, of sides 3 and 4, whereby inturned edges 45 and 46, respectively, of sides 3 and 4 are adapted to enter grooves 43 and 44 of the adjoining section for sliding upper section 2 into engagement with lower section 2' to a point where the stops 30 and 31, formed on the upper edge of back 7 are adapted to engage the lower edge of back 7 of section 2 for maintaining the front edges and rear edges, respectively, of the adjoining sections in alinement with each other, as shown in Fig. 1. Manual rotation of eccentric catches 32 and 33, respectively, causes points 37 and 38 of the catches to project upwardly through holes 28 and 29 in top 5 of the bin, thereby permitting the points to engage the lower edge of back 7 at slots 56 and 57 in inturned edge 6' and, respectively, adjacent angular portions 58 and 59 formed in rear longitudinal inturned edge 60 of bottom 6, whereby section 2 is locked in engagement with section 2', as heretofore explained.

When it is desired to separate sections 2 and 2' eccentric catches 32 and 33 are manually rotated until bases 61 contact lower edge 24 of top 5 whereby the respective points 37 and 38 are removed from slots 56 and 57 and disengaged from the lower edge of back 7, thereby permitting inturned edges 45 and 46, respectively, of sides 3 and 4 of the upper section to be slidably removed from the respective grooves 43 and 44 of the lower section.

In Fig. 6 I show a perspective of the formed sides 3 and 4 and back 7 integrally connected, whereby this portion of my invention is adapted to be stamped, by suitable machinery, from a single sheet of material and then formed by suitable means. Top 5 and bottom 6, also, are adapted to be stamped and formed from respective pieces of sheet material and then assembled with the integrally formed sides and back. Downwardly turned ends 25 and 25', respectively, of top 5 are provided with notches 62 and 63 at their outer ends, whereby assembling the top and sides and back is greatly simplified, as end 64 of the top may be inserted at 65 of side 3 and then by slightly bending the top the other end 66 of the top may be inserted at 67 of side 4 and then the top may be slid rearwardly so that rear edge 60 engages the under side of inturned edge 26 of back 7. It is understood that the word "plurality", as used herein means two or more.

It is apparent that I have invented a simple, practical, efficient and highly desirable device for the purposes intended. An advantage of my invention is that the sections of the bin may be positioned one upon the other so that the complete number of sections appear as one unit and are substantially as sturdy in construction as if they were originally built together and comprise a single bin. Such a construction is espe-

cially advantageous when it is considered that it is comparatively a simple matter to rearrange the sections or remove them from place to place without the necessity of remodeling the bin or tearing it apart for the purpose of removal or changing its location.

Furthermore, my invention may be used for other purposes than the construction of storage bins. It is apparent that such uses of my invention as in the construction of lockers, bookcases, etc. is especially advantageous, and if desired the sections may be connected horizontally as well as vertically in the same manner.

While I have chosen to illustrate the form and construction of my invention by the herein drawings and explanations of the same, it is understood that my invention resides in the combination, arrangement of parts and the details of construction, as hereinafter claimed, and that changes in the precise embodiment of the invention can be made within the scope of what is claimed without departing from the spirit of the invention.

What I claim as new and desire to secure by Letters Patent is:

1. A sectional bin comprising a plurality of receptacles each of which consists of two sides, a back, a top, and a bottom suitably secured together, said sides having their upper edges bent U-shaped, whereby a groove is formed at the top edge of each of said sides and extending transversely of said receptacle and said sides having their lower edges bent L-shaped and extending inwardly and adapted to fit into said grooves, respectively, and the central portion of said bottom extending in alinement with said L-shaped edges and having its outer transverse edges, respectively, spaced apart from said L-shaped edges and bent upwardly then outwardly and then upwardly, whereby the bottom of one of said receptacles is adapted to be secured adjacent the top of another of said receptacles as by said grooves slidably receiving said L-shaped edges, whereby a plurality of said receptacles are adapted to be secured together in vertical alinement, substantially as and for the purposes specified.

2. A bin comprising a receptacle having the upper edge of each side bent U-shaped, whereby a groove is formed at the top edge of each of said sides and extending transversely of said receptacle, said sides having their lower edges bent L-shaped and extending inwardly, a top fixed to said sides and having a pair of spaced apart holes therein adjacent the rear edge thereof, a back fixed to said sides, and having a pair of spaced apart outwardly extending stops integral with the top edge thereof, and adjacent and in alinement with said holes, the bottom edge of said back having an inwardly bent edge having a

pair of spaced apart slots therein, respectively, in alinement with said holes and said stops, a pair of spaced apart manually operative eccentric catches rotatably mounted on the inner side of said back adjacent the top edge thereof and respectively in alinement with said holes and slots, a bottom fixed to said sides and top and having its outer transverse edges spaced apart from said L-shaped edges, respectively, and in alinement therewith, whereby the bottom of one of said receptacles is adapted to be secured to the top of another said receptacle, as by said L-shaped edges of one receptacle adapted to slidably fit into said grooves of another receptacle and the back of the upper receptacle adapted to engage said stops on the lower receptacle and said eccentrics are adapted to be manually rotated for engaging the points with the lower edge of the back adjacent said slots in said upper receptacle.

3. A sectional bin comprising a plurality of receptacles each having a portion of its edge bent U-shaped, whereby a groove is formed at the top edge of each of its sides, having their lower edges bent inwardly, a top fixed to said sides, and having a pair of spaced apart holes therein and adjacent the rear edge thereof, a back fixed to said sides and said top and having an inwardly bent edge having a pair of spaced apart slots therein, respectively, in alinement with said holes, respectively, a pair of spaced apart manually operative catches rotatably mounted on the inner side of said back adjacent the top edge thereof and, respectively, in alinement with said holes and said slots, a bottom having its outer transverse edges spaced apart from said L-shaped edges, respectively, whereby the bottom of one of said receptacles is adapted to be secured to the top of another of said receptacles, as by said L-shaped edges of the lower receptacle adapted to slidably fit into said grooves of the upper receptacle and said eccentrics are adapted to be manually rotated for engagement with the lower edge of the back of said upper receptacle and adjacent said slots therein.

4. A sectional bin comprising a plurality of receptacles each having the upper edges of their sides bent U-shaped, whereby a pair of grooves are formed therein, and said sides having their lower edges bent inwardly, a top fixed to said sides and having a pair of spaced apart holes therein adjacent the rear edge thereof, a back fixed to said sides and having a pair of spaced apart upwardly extending stops integral with the top edge thereof and having an inwardly bent bottom edge having a pair of spaced apart slots therein, a pair of spaced apart manually operative catches rotatably mounted on the inner side of said back adjacent the top edge thereof, a bottom having its outer transverse edges spaced apart from said L-shaped edges,

respectively, and in alinement therewith, whereby the bottom of one of said receptacles is adapted to be secured to the top of another said receptacle, as by said L-shaped edges of one receptacle adapted to slidably fit into said grooves of another receptacle and the back of the upper receptacle adapted to engage said stops on the lower receptacle and said eccentrics adapted to be manually rotated for engagement with the lower edge of the back adjacent said slots in said upper receptacle.

5. A sectional bin comprising a plurality of receptacles each consisting of a back, a formed portion having two spaced apart and parallel sides integrally connected with said back, said sides having a groove formed in each of its upper edges and having their lower edges bent inwardly and adapted to fit into said grooves, respectively, said back having an inturned upper edge having a pair of spaced apart slots therein and having a pair of integral upwardly extending stops adjacent said slots, respectively, a bottom comprising a plate having each of its transverse sides bent upwardly, whereby a pair of upper flanges are formed and adapted to be secured to said sides, respectively, substantially as and for the purposes specified.

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