July 22, 1947. J. E. BALES 2,424,217

SHEET METAL STORAGE CABINET

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FIG. 1.

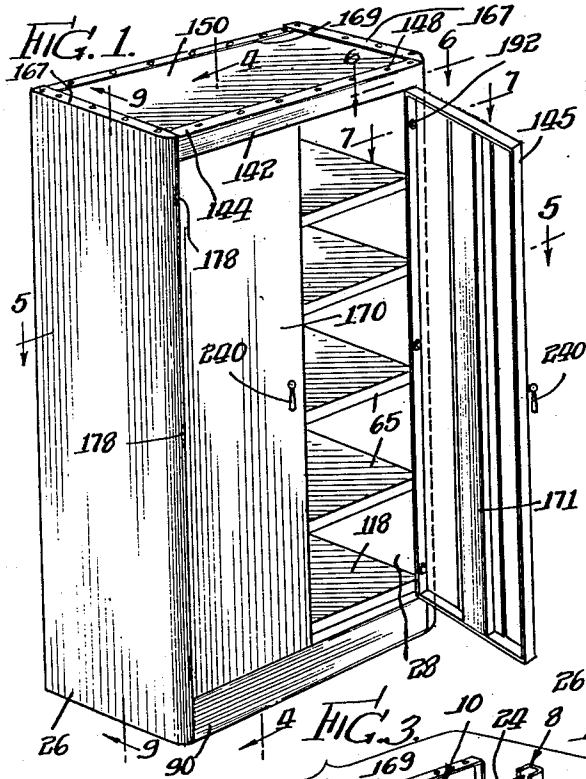


FIG. 2.

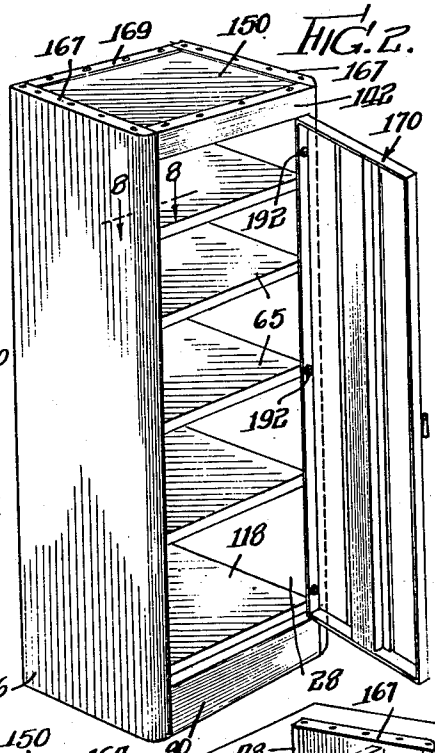
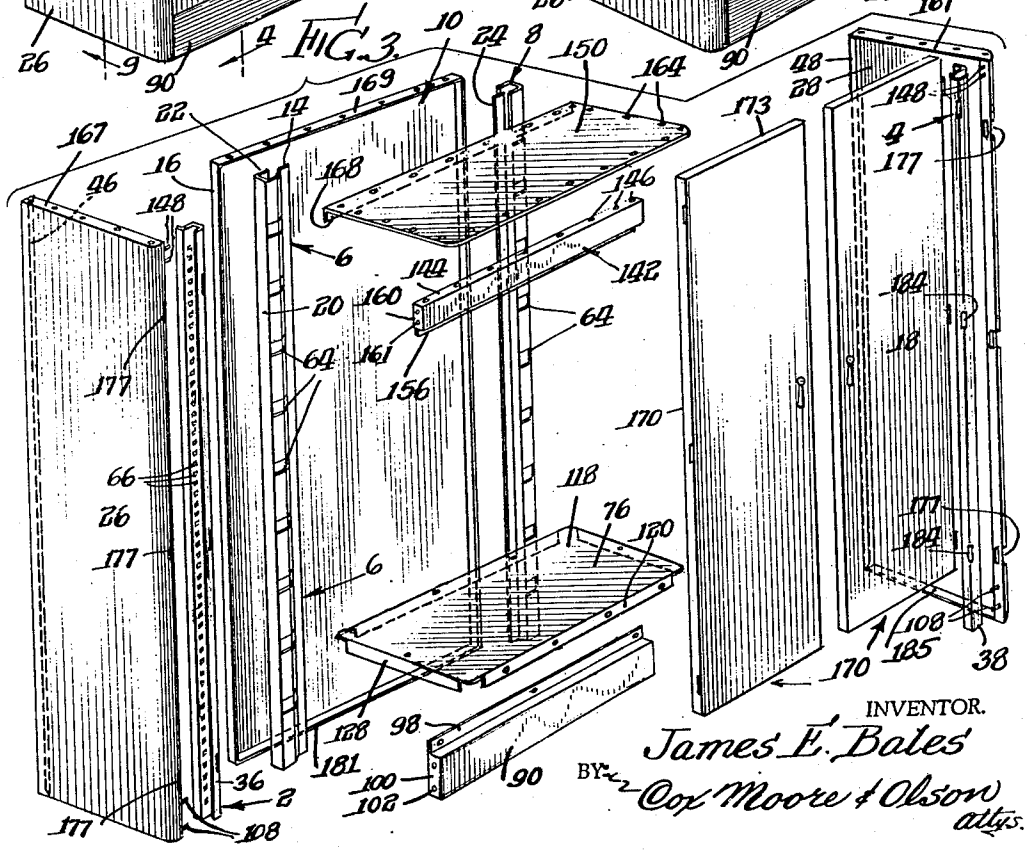


FIG. 3.



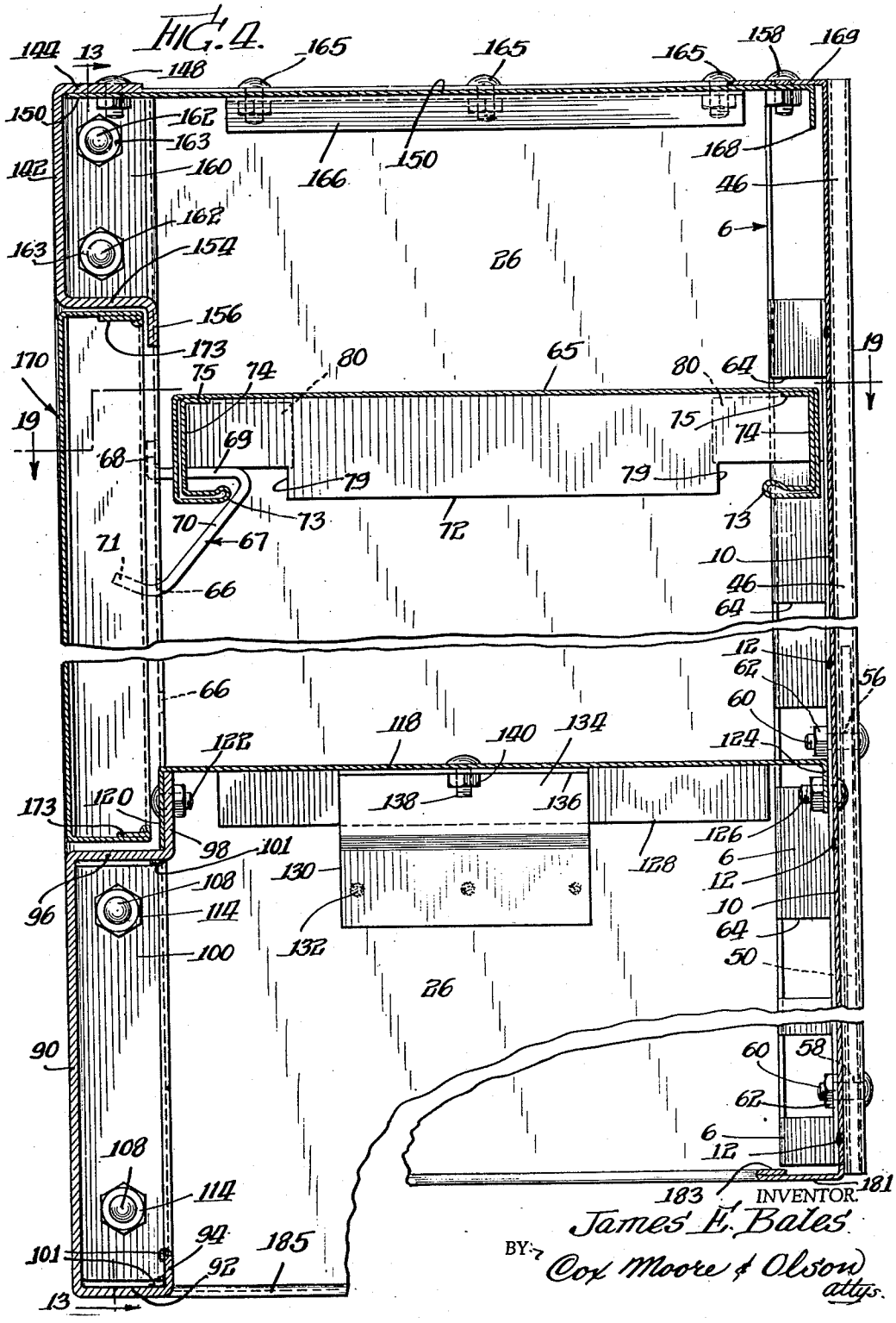
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FIG. 4.



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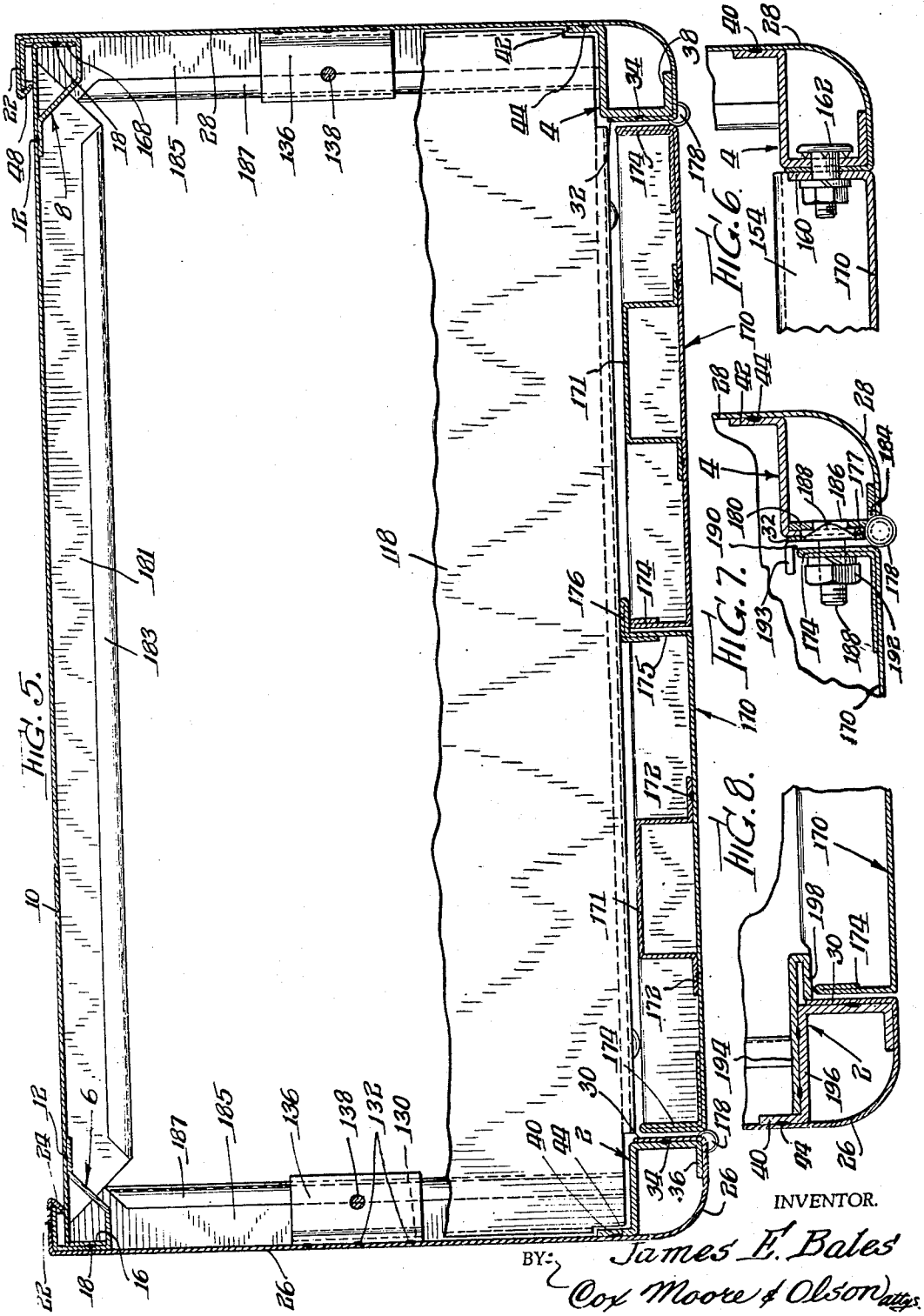


FIG. 5.

FIG. 6.

FIG. 7.

FIG. 8.

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FIG. 9.

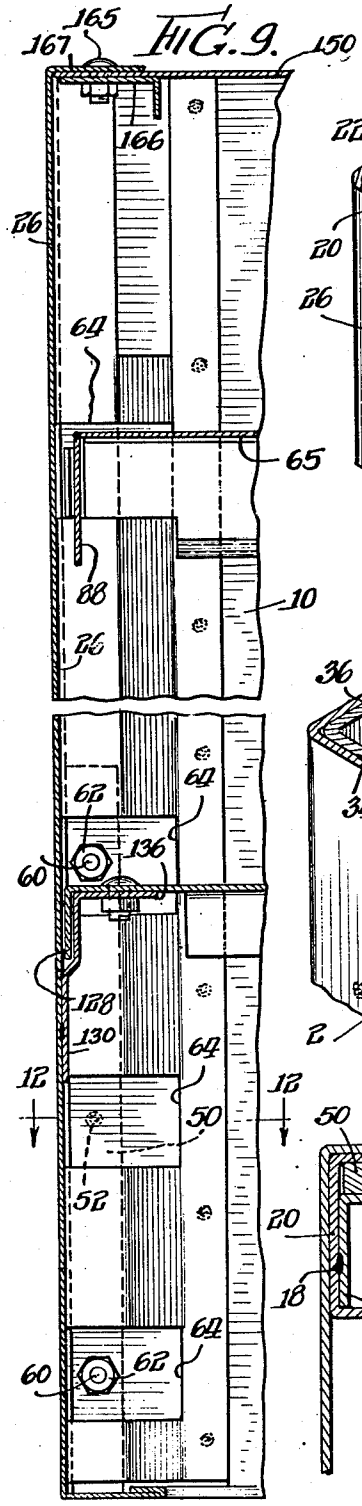


FIG. 10.

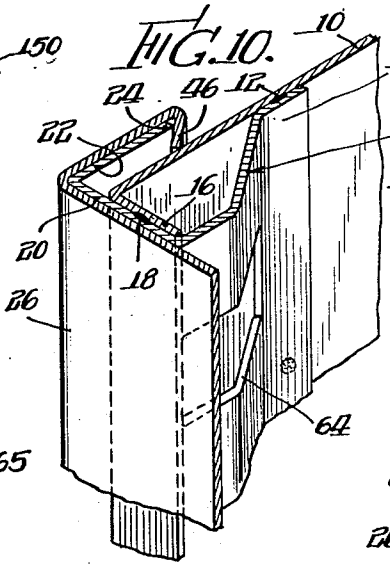


FIG. 11.

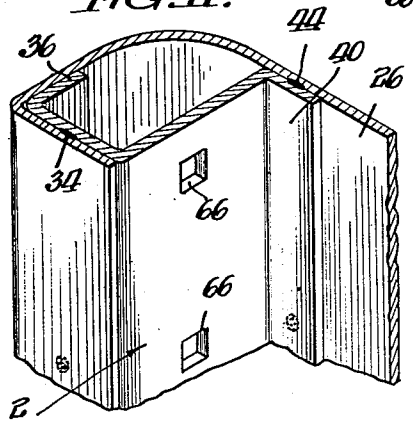


FIG. 12.

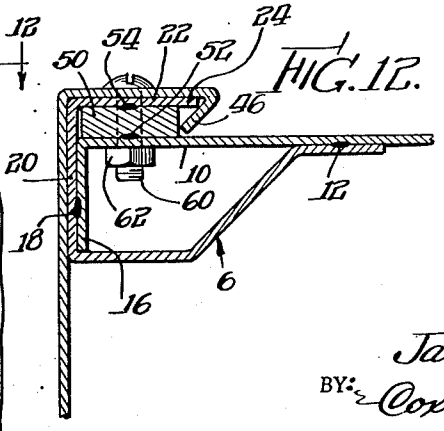
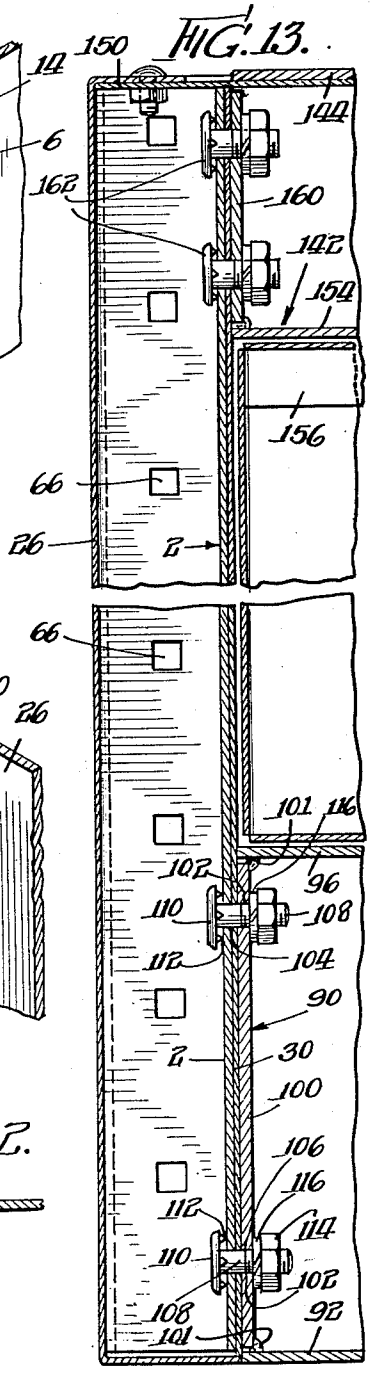


FIG. 13.



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FIG. 14.

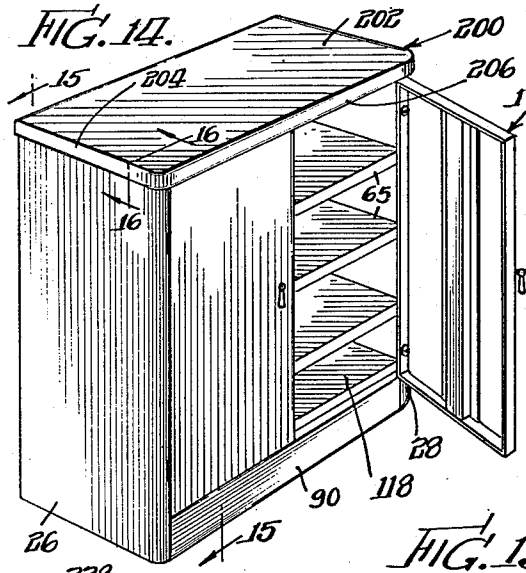


FIG. 16.

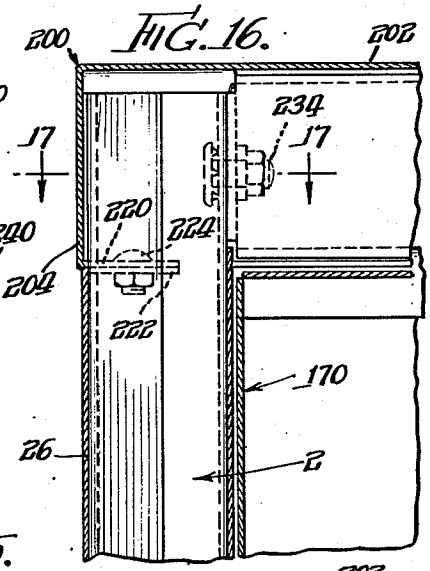


FIG. 15.

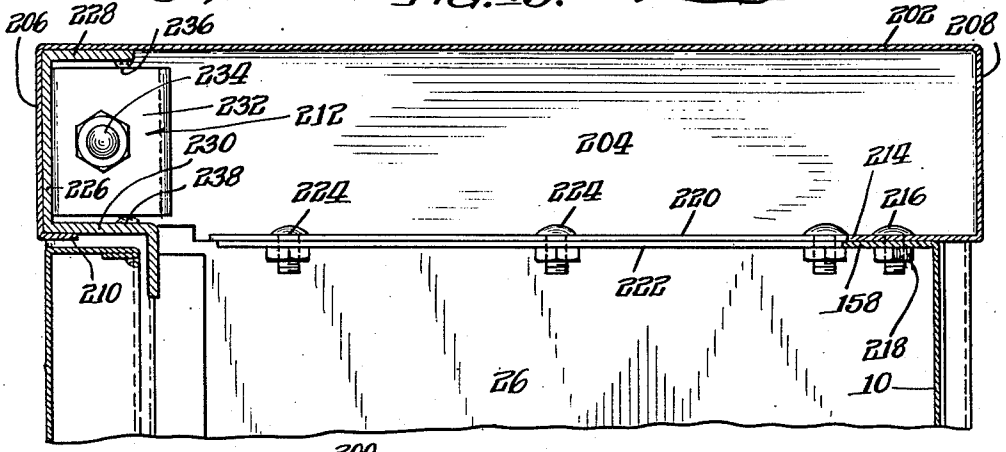


FIG. 18.

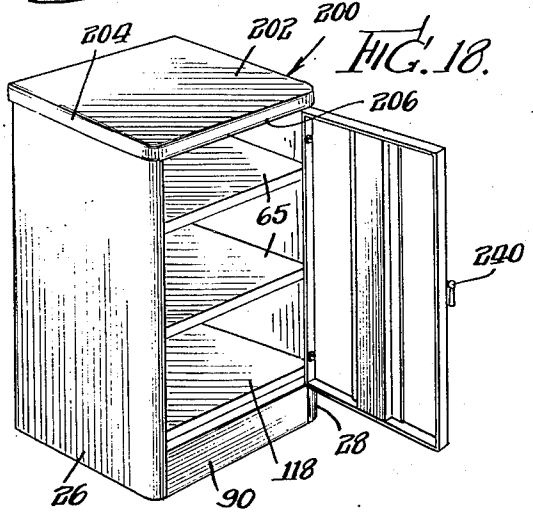
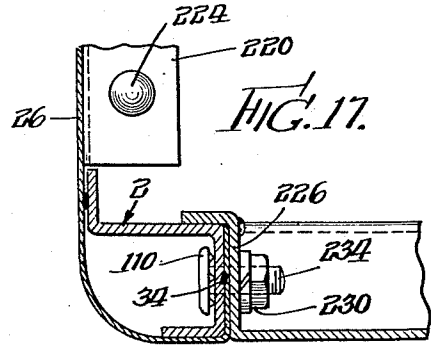


FIG. 17.



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FIG. 19.

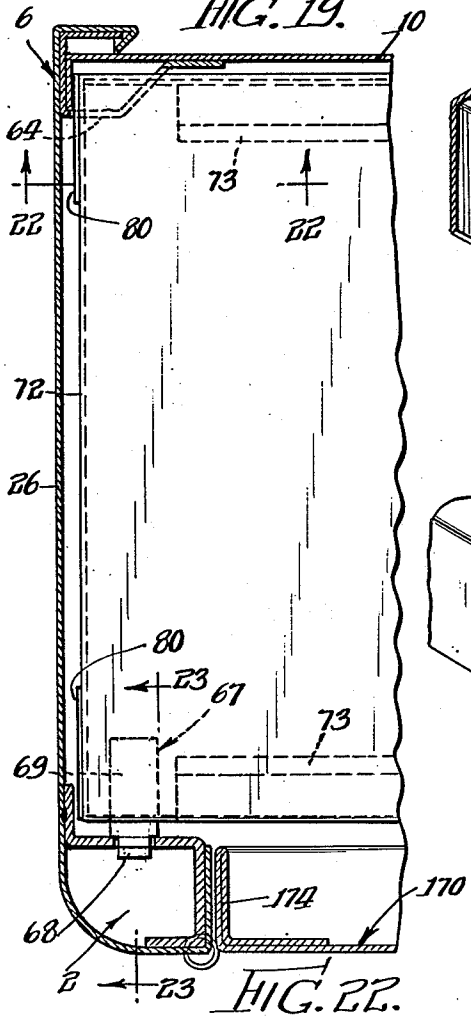


FIG. 20.

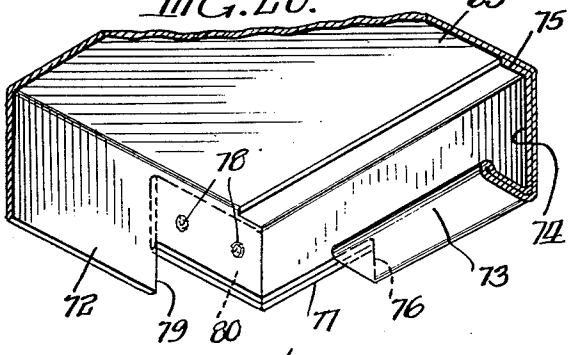


FIG. 21.

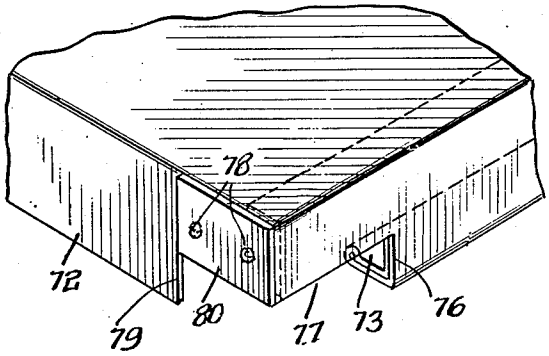


FIG. 22.

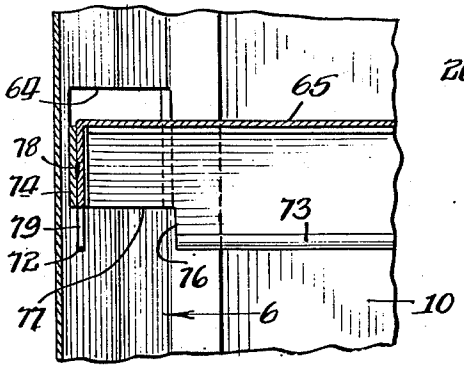
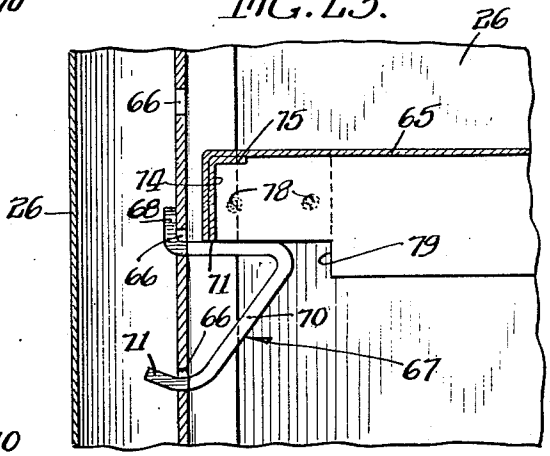


FIG. 23.



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Patented July 22, 1947 2,424,217

UNITED STATES PATENT OFFICE

2,424,217

SHEET METAL STORAGE CABINET

James E. Bales, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a corporation of Illinois

Application March 12, 1941, Serial No. 382,922

16 Claims. (Cl. 312—141)

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This invention relates to cabinet constructions generally formed of sheet metal.

Among the objects of the present invention are to provide a storage cabinet or locker construction having ornamental, smooth outer walls, the front and side walls being devoid of any unsightly joints or observable fastening means for the structure; to provide a storage cabinet wherein the two side walls including front and rear corners thereof are formed of a single sheet of material, whereby to provide a smooth, unbroken finished appearance wholly devoid of joints; to provide a rear wall construction wherein the rear wall is formed of a single sheet of material, and wherein the two end or side walls are joined thereto at the rear by means wherein all edges of the sheet metal or sheet material are hidden, while at the same time providing a very rugged and simple structural arrangement; to provide a storage cabinet, the front of which has one or more doors hinged to the cabinet in a way such that only the relatively small barrels of the hinges are observable, and all hinged leaves are hidden from sight; to provide a cabinet having, in conjunction with the foregoing structural details, a plain top covering all top joints, and which is of sheet material; to provide a cabinet construction having rugged corner front pedestals rigidly formed as hollow posts, and wherein vertical angle irons are combined wtih welded smooth sheet metal sides in a manner to provide hollow structures, giving rigidity, lightness, exterior ornateness, and ease of assembly; to provide a storage cabinet wherein the corner hollow pedestals thus formed are provided with vertically spaced apertures forming means for receiving shelf supports or brackets capable of forming vertical adjustments for receiving the shelves in any desired space; to provide a cabinet construction including the structure itself and the method of forming the construction, wherein the sides of the cabinet form a smooth sheet material exterior, having their rear ends hidden by hooking over end portions of the rear pedestals in such a manner as to provide a smoothly finished hidden juncture between the rear panel and side panels of the cabinet; to provide an improved method of assembling side panels to the front and rear vertical pedestals or corner posts of the cabinet, wherein a single piece of sheet material is welded to the vertical inner wall of the side post, and then is bent around in smooth formation and welded to an angularly disposed face of the front vertical pedestal, and then continues rearwardly, and thence hooked around one of the rear angularly disposed edges

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of the rear vertical pedestal and in a manner to hide all unsightly edges; and, whereby, to provide a completely smooth side wall for the cabinet and front and rear connections therefrom, having no exposed edges or fastening means; to provide a storage cabinet having at the front, cooperating with the door structures, upper and lower front rails which are assembled and secured to the front corner pedestals in a manner providing ruggedness, ease in assembly, fewness of parts, while at the same time hiding the fastening means therefor from exterior view; to provide means for hiding the hinged portion of the doors which are hinged to the front corner pedestals. Another object of the present invention resides in providing a storage cabinet construction which is not only rugged and ornamental in exterior appearance, but which also may be easily assembled or knocked down, so that the parts of the same may be shipped to distant points, and thereafter reassembled with a minimum of time and labor, while at the same time providing an assembled construction which is extremely rugged and ornate. Another object of the invention is to provide a simple, economical, and rugged shelf construction; and to provide a supporting means for such shelf construction; to provide these and other objects of the invention as will be apparent from a perusal of the following specification when taken in connection with the accompanying drawings, wherein—

Figure 1 is a perspective view of one of the storage cabinets showing the double door construction;

Figure 2 is a perspective view of the storage cabinet showing the single door construction;

Figure 3 is a perspective view of the parts that make up the double door cabinet;

Figure 4 is a vertical section taken on the line 4—4 of Figure 1;

Figure 5 is a plan sectional view taken on the line 5—5 of Figure 1;

Figure 6 is a section taken on the line 6—6 of Figure 1;

Figure 7 is a section taken on the line 7—7 of Figure 1;

Figure 8 is taken along the line 8—8 of Figure 2;

Figure 9 is a vertical section taken on the line 9—9 of Figure 1;

Figure 10 is a fragmentary prospective view of the rear lefthand corner of the cabinet;

Figure 11 is a perspective view of the left front corner;

Figure 12 is a plan sectional view taken on the line 12—12 of Figure 9;

Figure 13 is a vertical section taken on the line 13—13 of Figure 4;

Figure 14 is a perspective view of a table top type of cabinet with a smooth top with two doors;

Figure 15 is a vertical section taken along the line 15—15 of Figure 14;

Figure 16 is a vertical section taken along the line 16—16 of Figure 14;

Figure 17 is a plan section taken along the line 17—17 of Figure 16;

Figure 18 is a persective view of a table top cabinet with one door only;

Figure 19 is a plan sectional view of the left side of the cabinet taken on the line 19—19 of Figure 4 showing the shelf supporting means;

Figure 20 is an underside perspective view of the rear corner of the shelf;

Figure 21 is a top perspective view of the front corner of the shelf;

Figure 22 is a fragmentary, vertical sectional view taken on the line 22—22 of Figure 19; and

Figure 23 is a fragmentary view in section taken on the line 23—23 of Figure 19.

Referring now to the drawings in detail, particularly Figure 1 which shows a type of tall cabinet having two doors, or one door, as shown in Figure 2, this cabinet so constructed is preferably taller than the average person, whereby it is unnecessary to cover the exposed joints at the top of the cabinet. This construction is in contradistinction to the lower type of cabinet shown in Figures 14 and 18, wherein a top construction is provided, giving a smooth top for utilitarian purposes and for ornateness.

The cabinet shown in Figures 1 and 2 comprises four corner members of generally heavier gauge material than the gauge of the sheet material walls of the cabinet. The front corner members form in combination with the sheet material side, hollow rigid corner posts and the rear corner members form in combination with the rear sheet material wall hollow rigid corner posts. This cabinet also comprises a single panel for the rear, a single panel for each side or end, an upper panel for the top, a bottom and a top channel member for the front, and one or two doors which, when closed, form a complete front in conjunction with the upper and lower channel members for the cabinet. In addition, there are interior shelves which may be adjustably secured in vertically selective spaced relation.

Referring to Figure 5, it will be noted that the storage cabinet provides two spaced apart, vertically disposed front angle strips or rails 2 and 4, which are disposed at the front corners of the cabinet. These rails are formed of relatively heavy angle iron stock, and preferably of the cross-sectional shape shown in Figures 5 to 8, inclusive, and 11 and 17. The rear corner rails 6 and 8 of the cabinet are shown in Figure 5, and are likewise shown in Figures 10 and 12. These rear corner strips may be, if desired, formed of lighter sheet metal stock. For instance, for purposes of illustration, but not by way of limitation, the front corner rails or strips may be formed of 18-gauge strip material, while the rear corner rails or strips 6 and 8 may be formed of 22-gauge strip, as compared with the sides and back which may be formed of 24-gauge sheet material. The doors may be formed of 22-gauge sheet material, if desired.

It will be seen how these front and rear strips are combined with the side and back panels to form hollow, rigid corner posts or pedestals for the cabinet, and in a manner to eliminate unsightly joints, fastening members, and structural ends.

Referring now to Figures 5, 10 and 12, the rear panel 10 is welded as at 12 to the parallelly disposed short flanges 14 which are a part of the rear corner strip 6. This rear panel 10 thence continues and is bent preferably at right angles to form a flange 16, which is welded as at 18 to an angularly disposed face 20 of a flange integral with the corner strip 6. The face 20 of this strip, as shown in Figure 10, extends rearwardly to the rear of the panel 10, and is bent preferably at right angles in spaced relation to the outer wall of the panel 10, and overlappingly overlies the outermost corner portion of this rear panel 10 as at 22, whereby to provide a free edge 24 for purposes hereinafter set forth. The opposite rear corner construction is identical with that just described. It will thus be noted from Figures 10 and 12 that the panel 10, when welded to the portions 14 and 16 of the strip 6, forms therewith a hollow, rigid, vertically extending corner post or pedestal which is so arranged as to hide the inwardly extending free ends of the rear panel 10.

Referring now to Figures 5 and 11, it will be noted that the two side panels 26 and 28 have their respective front ends 30 and 32 contactingly overlying the outer faces of the front corner strips 2 and 4 which lie parallel to the sides 26 and 28, and are welded thereto as at 34. From this welded zone the side panels 26 and 28 are bent smoothly over front lateral flanges 36 and 38 of each corner strip, and are thus bent in curved conformation and pass over angularly disposed flanges 40 and 42 of each of the respective front strips 2 and 4, and are welded thereto as at 44. Each of these side panels 26 and 28 is thence disposed rearwardly and, as shown in enlarged detail in Figure 10, the ends are bent around the flange portion 20 of the rear strips 6 and 8, and then, at right angles, are bent around the overlapping flange 22 of the rear strips 6 and 8, as hereinbefore described.

The rear ends 46 and 48 of these sides 26 and 28 are formed as hooks, which hook over the free ends 24 of the rear strips 6 and 8, it being understood that this hooked portion 46 extends the entire vertical length of the sides 26 and 28. It is thus apparent that the ends of these portions 46 contact the outer wall of the panels 10 and are thus hidden from view. Inasmuch as these hooked portions 46 are preliminarily formed in the side panels 26 and 28, they comprise preformed hooks which thus facilitate the assembly of the sides and rear panels. Hence, it will be seen that there are provided smooth, overflowing, unbroken exteriors for the sides of the cabinet which extend from inner, opposed vertical walls of the front strips 2 and 4 in curvilinear fashion around the front of these strips 2 and 4, and thence rearwardly, and thence in angularly disposed, unbroken arrangement around the rear corner strips. Thus, insofar as the front posts, shown in Figures 6, 8 and 11, are concerned, there are provided two hollow front posts completely devoid of sharp corners, and which, on the contrary, provide rounded, tubular corner posts.

Means is provided for strengthening the bottom rear corners of the cabinet, and also there is provided means at the bottom for preventing the hook-shaped end of the side panels 26 and 28 from disengagement from the free end

14 of the corner strips 6 and 8. In the present instance this comprises preferably an elongated bar 50 preferably of rectangular cross-section and placed as shown in Figures 4, 9, and 12. Before the end panels 26 and 28 are placed in position and during the assembly of the rear panel 10 to the corner strip 6, the bar 50 is disposed between the back panel 10 and the flange 22. The bar 50 is welded as at 52 and 54 to the back panel 10 and to the portion 22 of the strips 6 and 8, respectively, as shown in Figure 12. This is preferably a spot-weld connection at spaced-apart vertical intervals as shown in Figure 4. In addition, the bar 50 is provided with two apertures 56 and 58 at its upper and lower portions, through which bolts 60 pass, the same passing through registering apertures in the back panel 10 and the flange 22, and also through the hook-shaped rear portion of the side panels 26 and 28, there being four of these bolts; their smooth, curved heads are the only fastening means that appear exteriorly of the rear portion of the cabinet, with the exception of the bolts that support the bottom shelf. Suitable nuts 62 hold the bolts and the members securely in fixed position. In this connection, as shown in Figures 5 and 19, the diagonally disposed walls of the rear corner strips 6 and 8 are provided with a series of apertures 64 disposed in vertically spaced relation, which apertures are adapted to receive the shelf members 65, but two of which apertures 64 are directly opposite the bolts 60 and the nuts 62, thereby enabling the operator to assemble the bolted structure shown in Figure 12, from a point within the cabinet.

In addition, as shown in Figure 4, the front strips 2 and 4 are provided with vertically spaced apertures 66, which are adapted to receive shelf supporting clips 67. These clips have a vertical leg 68, a horizontal portion 69, a main, downwardly inclined portion 70, and a lower, inwardly projecting end 71. The top portion 68 enters one of the apertures 66, while the lower portion 71 enters the next lower spaced apertures 66, whereby to hold these clips 67, as shown in Figure 4, to receive the front end of the shelf 65.

Referring now to Figures 4 and 19 to 23, inclusive, the shelf construction and its manner of support within the cabinet is illustrated. This shelf comprises a single sheet or stamping of sheet metal formed with a top 65 and depending flanges, certain ones of which are formed and constructed to provide reinforcing walls to receive the horizontal portions of supporting clips, and certain of which depending walls are folded to eliminate rough edges, to provide ruggedness and, likewise, to reinforce the top portion 65 of the shelf. In general, the sheet metal blank from which the shelf is made, is cut and folded to provide on two of the sides a depending flange 72 of single thickness. On the opposite walls the depending flange is formed longer so as to permit the flange to be folded back upon itself as at 73 to provide a double, smooth edge. This folded back portion is then carried under and upwardly as at 74, and then is bent in parallel fashion under the front and rear edges of the top 65 as at 75, whereby these flanged portions 75 reinforce the front and back edges of the top 65. At the four corners the depending flanges are formed in the manner shown in Figures 20 and 21. In these views it will be seen that the front flanges 73 are cut away as at 76 to provide a double thickness supporting ledge or edge 77, the two thicknesses of the metal

being welded together. In addition, the side walls 72 are cut away as at 78, and there is provided a plate 80 welded to the side walls 72 to form a wall thickness suitably welded together as at 78. The four corners of the shelf are thus exposed at the cut-away portions, and at the rear of the shelf, as shown in Figure 19, the two corners are adapted to be supported and rest in the cut-out slots 64 of the rear corner strip of the edges (see Figure 10 particularly), whereby these two rear corners are detachably supported in a position such that they may be readily dismantled, when desired. The front portions of each shelf are supported by clips 67, preferably of the construction shown in Figures 4 and 19. Inasmuch as there are two of these supporting clips 67 to each shelf, said shelf will be firmly supported at its two front corners in the manner hereinbefore set forth. It will also be noted that the rear corners of the shelf 65 are formed in the same manner as the front corners. The rear corners of the shelf project into the openings 64 of the corner posts 6 and 8, which in combination with the front supporting clips 67 firmly support each shelf.

The bottom of the cabinet comprises a bottom channel 90 having a main front vertical wall portion, which at its bottom is bent at right angles as at 92, and thence inwardly and vertically upwardly as at 94. In addition, it has an upper horizontal flange 96, which has a vertical, upwardly extending flange 98. So also, this bottom channel 90 is provided with two end flanges 100 being spot-welded as at 101 to the upper and lower edges of the flange 94, and also having suitable aperatures 102 in alinement with apertures 104 and 106 in the flange 30 and corner strips 2 and 4, through which bolts 108 pass. These bolts are provided with heads 110, which are spot-welded at 112 to the inner side of the front corner strips 2 and 4, and the bolts 108 pass through said corner strips 2 and 4, the flange 30 on the end of the side panels 26 and 28, and thence through the end flanges 100 of the channel 90. The bolts are secured in position by means of nuts 114 and lock washers 116. These bolts 108, as shown in Figure 17, are arranged with their heads welded to the inner side of the strips 2 and 4 before the side panels 26 and 28 are assembled in position thereon, so that the bolts generally extend from the side panels 26 and 28 in the manner shown in Figure 3 before the general assembly is begun. The bottom channel cooperates with the side panels 26 and 28, the back panel 10, and a bottom shelf 118, forming a rigid, unitary structure.

Bottom shelf 118 (see Figure 4) is provided with a downwardly depending flange 120 and is bolted as at 122 to the flange 98 of the bottom channel member 90. In addition, there is a rear flange 124 which is bolted as at 126 to the back panel 10. It is to be understood that there are preferably a number of bolts spaced horizontally at front and back. Also, the shelf 118 is provided with opposed side flanges 128, which cooperate with a sheet metal clip 130 which is spot-welded as at 132 to the sides 26 and 28. This clip 130 is provided with an offset portion 134, which is spaced from the wall 26 to receive the downwardly extending flange 128 of the shelf 118. In addition, the top of the clip 100 is provided with a horizontal flange 136 which supports the shelf 118 and having an aperture to register with an aperture in the top shelf 118 to receive a bolt 138 which is held in position by means of a nut 140.

There is also an upper channel 142 provided with an upper horizontal flange 144 having along its length a series of openings 146, through which bolts 148 pass to connect the front of the top panel 150 to the flange 144. In addition, the front channel 142 is provided at its lower edge with a rearwardly extending flange 154 having a downwardly depending portion 156, which forms a stop for the upper part of the swinging doors hereinafter described. Also, the upper channel is provided with side flanges 160 having spaced apertures 161 for receiving the bolts 162 which are engaged by the nuts 163.

As shown in Figures 4 and 17, the lower front channel 90 is securely held in position between the sides 26 and 28 by means of these bolts 108, and also the upper channel is held between the sides 26 and 28 by means of the upper bolts 162; and the bottom channel also is held in position by means of the flange 98 and the front flange 122 of the bottommost shelf 118 and likewise the rear panel 10.

In addition, the top 150 is reinforced by means of an L-shaped bracket 166, which is secured in position, as shown in Figures 4 and 9, by means of bolts 165 which pass through the flanges 167 formed on the upper edges of the side panels 26 and 28. This bracket 166 thus prevents the top 150 from buckling in a direction transverse of the reinforcing L-shaped bracket 166.

The rear edge of the top panel 150 is provided with a depending flange 168 which extends parallel to the back portion, and is secured by means of the bolts 158 which pass through an upper flange 169 on the rear panel 10 and the rear edge of the top panel 150.

As shown in Figures 4 and 5, the back panel 10 is provided on its lower edge with a flange 181 bent at right angles to the rear panel 10 and having a portion bent back upon itself as at 183.

There is also formed on the lower edges of each side panel 26 and 28 similar flanges 185 bent at right angles to the side panels 26 and 28, and then folded back upon themselves to form rounded edges 187. These flanges 181 and 185 in combination with the front channel flange 92 form a suitable base for the cabinets.

Referring to the doors, preferably of the construction shown in Figures 13 and 5, each door consists of the rectangular piece of sheet metal 170 provided on its rear face with a reinforcing, rigidifying channel member 171 suitably welded thereto as at 172. The doors are provided with flanges 173 at the top and bottom, and with flanges 174 along the two vertical sides. In Figure 5 the lefthand door has a flange 175 provided with a right angle bent as at 176, which extends laterally and forms a stop for the flange 174 of the righthand door in situations where two doors are used. To this end each flange is bent upon itself to form the angle portions 173 and 174, as shown in Figures 4 and 5.

The hinge structure for the doors is shown particularly in Figure 7, whereby the side panel 28 is cut away at intervals to provide openings 177 to accommodate the barrel 178 of the hinge member, and one leaf of the hinge 180 passes through this cutout 177 of the side panels, and also through a registering cut-out portion 184 of the channel upright strip 4. This leaf 180, in turn, has an opening 186 adapted to receive the head of the bolt 188 which passes through the other leaf 190 of the hinge, and then passes through the side flange 174 of the door 170, and is held in position by means of the nut 192. The leaf 190 of the hinge is bent at right angles as at 193. It will thus be seen that the leaves of the hinge are effectively hidden, and the only parts observable are the barrel portions 178.

As shown in Figure 8 a strip 194 is welded to the rear flange 196 of the post 2. The outer end of this strip 194 extends outwardly and is folded backwardly upon itself as at 198 to provide a stop for the lateral flange 174 of the door 170. This, of course, is a construction used where the single door is utilized, as shown in Figure 2.

The top of the cabinet construction, as shown in Figures 14 and 18, is illustrated in detail in Figures 15 and 16. This construction is used for the top of a cabinet that is relatively low, and where the top would be visible to a person, and also the flat tops of these low cabinets provide a table or place for stacking merchandise or contents of the cabinet. This top 200 is formed of 20-gauge sheet metal having a top face 202 with downwardly extending side walls 204.

The front wall 206 which is formed at right angles to the top 202 has a flange 210 which extends around a channel member 212 similar to the channel member 160 hereinbefore described. In addition, a rear wall 208 is formed at right angles to the top wall 202 and extends inwardly to form another right angle flange 214, which is attached to the upper flange 158 of the rear panel 10 by means of a bolt 216 passing through apertures in the flange 214 and the flange 169, and is held in position by a nut 218. The end walls 204 of the top 202 have flanges which extend inwardly as at 220 and are attached to the upper flange 222 on the end walls 26 and 28 by means of a bolt and nut connection 224, as shown in Figures 15 and 16.

The channel member 212, as shown in Figure 15, is provided with a front face 226, an upper flange 228, a lower flange 230, and side flanges 232. The side flanges 232 are apertured to receive a bolt 234, which projects through a side flange 232 and the upright strip 2, as hereinbefore described. This bolt 234 is similar in construction and is attached in the same manner as the bolt 108.

The upper flange 228 of the channel 212 is welded as at 236 to the top surfaces of the side flanges 232 in the same manner as the lower flange 230 is welded at 238 to the bottom edges of the flanges 132, as shown in Figure 15. This channel member with the upper panel 202 forms a flat top that is rigid in construction and free of any seams or bolt connections.

This top construction is also used in combination with a single door cabinet as shown in Figure 18 of the drawings. In all types of cabinets the doors, whether single or double, are provided with handles 240, which may be operated as means for opening and closing the doors. The doors may also be provided with locking devices which may work in conjunction with the handles 240.

Changes may be made in the form, construction, and arrangements of the several parts without departing from the spirit of the invention or sacrificing any of its numerous advantages, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a cabinet construction in combination with a vertical sheet-metal corner strip having a first side disposed in a direction from front to

back of the cabinet, said side having a front flange disposed parallel to the front of the cabinet, said first mentioned side having an adjoining second side disposed parallel to said front flange and terminating in a rearwardly extending flange at right angles thereto, a side sheet metal panel having its front edge overlying and welded to the outer face of said first mentioned side of the corner strip and extending over said first mentioned flange and thence across said second mentioned flange and welded thereto to form a hollow corner post and a sheet metal vertical strip welded to the rear face of said second mentioned wall of said corner strip and extending beyond the plane of the outer face of said first mentioned side of said strip, said second mentioned strip being doubled upon itself and extending toward said first side of said first mentioned strip and a door having a flange extending inwardly of the cabinet and adapted in closed position to contact the doubled portion of said second mentioned strip whereby said doubled portion provides a door stop.

2. In a cabinet having a top, two sides and a rear wall, the combination of two rear vertical corner strips each having a wall extending in a plane parallel to the sides of the cabinet, and a connected wall extending parallel to the rear wall of the cabinet and spaced therefrom, there being a diagonally disposed integral intermediate wall, a pair of front corner strips each having a wall extending parallel to the side of the cabinet and a wall extending parallel to the front of the cabinet, sheet metal sides connected to said front corner strips and extending rearwardly and engaged to the spaced wall extending parallel to the rear wall of the cabinet, a rectangular shelf member having depending flanges, said depending flanges being cut away at the four corners of the shelf, the rear corner strips being provided with relatively wide slots disposed in spaced vertical formation, pairs of slots in said rear corner strips lying in corresponding horizontal planes, whereby supportingly to receive the rear corners of said shelf, said front corner strips being provided with a vertically spaced series of slots lying in registering horizontal planes with the slots of said rear corner strips, and bracket members detachably secured in the slots of said front corner strips, said bracket members having horizontally extending wall supports adapted supportingly to underlie depending flanges of said shelf substantially at the front corners of said shelf.

3. In metallic furniture, a back of sheet metal having a forwardly extending flange, a sheet metal strip having a flange welded to the inner face of said back and having a portion disposed forwardly of said flange and lying parallel to the plane of the back, said parallel portion of said strip having a rearwardly extending flange disposed at right angles thereto and extending rearwardly beyond the plane of the back and there provided with an inwardly extending flange having a free edge, said last named flange and edge being spaced from the plane of the back and a sheet metal side overlying and welded to the rearwardly extending flange of the strip, said rearwardly extending flange of the strip being welded to the forwardly extending flange of said back, and having an inwardly extending flange, said inwardly extending flange of said side having a terminal edge portion obliquely bent over the free edge of said strip and extending forwardly toward the back in diagonal relation to the plane of the back and means for securing said inwardly extending flange portion of said side to the inwardly extending flange of said strip and said back.

4. In metallic furniture, a back of sheet metal having a forwardly extending flange, a sheet metal strip having a flange attached to the inner face of said back and having a portion disposed forwardly of said flange and lying parallel to the plane of the back, said parallel portion having a rearwardly extending flange overlying and welded to said forwardly extending flange of said back and disposed at right angles thereto to the plane of the back and extending rearwardly beyond the plane of the back and there provided with an inwardly extending flange having a free edge, said last named flange and edge being spaced from the plane of the back and a sheet metal side overlying and welded to the rearwardly extending portion of the strip, said inwardly extending flange of said side having a terminal edge portion obliquely bent over the free edge of said flange of said strip and extending forwardly toward the back in diagonal relation to the plane of the back, a rigidifying reenforcing member disposed in the space between the plane of said back and the inner face of said strip flange parallel to said back, and fastening means passing through parallel portions of said side, said strip and said back.

5. In metallic furniture, a back of sheet metal having a forwardly extending flange, a sheet metal strip having a flange attached to the inner face of said back and having a portion disposed forwardly of said flange and lying parallel to the plane of the back, said parallel portion having a rearwardly extending flange disposed at right angles thereto and extending rearwardly beyond the plane of the back and there provided with an inwardly extending flange having a free edge, said last named flange and edge being spaced from the plane of the back, and a sheet metal side overlying the rearwardly extending portion of the strip, said rearwardly extending portion of the side having a flange extending inwardly at right angles to said side, said inwardly extending flange of said side having a terminal edge portion obliquely bent over the free edge of said strip and extending forwardly toward the back in diagonal relation to the plane of the back, a rigidifying reenforcing member disposed in the space between the plane of said back and the inner face of said strip flange parallel to said back, fastening means passing through parallel portions of said side, said strip flange and said back, and complemental fastening means attached to said first fastening means and lying in the space between the forward face of said back and the forwardly extending portion of said strip, said strip having an aperture registering with said fastening means to give access thereto.

6. A cabinet construction comprising spaced front and rear vertically extending metal corner strips having angularly disposed walls, the rear corner strip having spaced front and rear substantially parallel walls, the rear wall having a free vertically extending edge and there being an intermediate wall portion lying substantially parallel with the side wall of the cabinet, a sheet metal rear panel of substantially the same gauge metal as the metal of said rear corner strip, said rear panel being rigidly connected to the front wall portion of said rear corner strip, a sheet metal side panel of substantially the same gauge metal as the gauge metal of said rear panel, said side panel having its front edge overlying the

exterior face of one of the wall members of the front corner strip and extending around and overlying a wall thereof which is spaced from the first mentioned wall of the front corner strip and being welded to said second mentioned spaced wall whereby to form with said front strip a hollow post, said side sheet metal panel thence extending rearwardly and overlying the intermediate wall portion of said rear corner strip, the free rear end of said side panel being bent around in contact with and lying parallel to the rear wall of said rear corner strip with the outermost tip of said bent over end abruptly bending over the free vertical edge of said rear wall of said rear corner strip whereby to hold said side and rear panels and said front and back corner strips in assembled position, said sheet metal back having its free edge extending angularly with respect to the plane of said back panel and underlying the intermediate wall of the rear corner strip and the side panel wall and rigidly affixed to one of said latter walls whereby said rear panel, said side panel and said rear corner strip provide a rigidified hollow rear corner post.

7. In a cabinet construction, in combination with a sheet metal front vertical corner strip having a first side extending in a direction parallel to the side wall of the cabinet, said first side having a relatively short flange extending outwardly at right angles thereto and parallel to the front of the cabinet, said front corner strip having a second side provided with a rearwardly extending flange at right angles thereto and extending at right angles to said first mentioned flange, a sheet metal side panel for said cabinet having one end welded to the outer face of said first mentioned side and extending around said first mentioned flange and thence overlying said second mentioned flange and welded thereto whereby to form a hollow vertical post, the junction of said first side of the front corner strip and its short flange having openings and said first side and said one end of said side panel having registering openings, a hinge having a vertically disposed barrel portion disposed at said junction of the first side and its flange with one of the hinge leaves passing through said junction opening and lying within the interior of said hollow post and extending parallel to said first side, a sheet metal door having a front and having a flange disposed at right angles to the plane of the front of the door, said door flange having an opening registering with the opening of the first side when the door is in closed position, the second leaf of said hinge lying parallel to and exteriorly of the outer face of said door flange, said door flange and second leaf of the hinge having registering openings therein, and a bolt passing through the registering openings of said door flange and said second hinge leaf, the head of the bolt being accommodated in the registering openings of said first side and said one end of said side panel when said door is in closed position.

8. In a cabinet construction having a front, a rear wall and two side walls, the combination of four vertically disposed spaced apart corner strips comprising two rear and two front strips, the rear strips each including a wall portion lying parallel to the plane of the rear wall and having an intermediate portion lying parallel to the plane of the side wall, said intermediate portion having a connected angularly extending free edge lying parallel to but rearwardly and in spaced relation of the plane of the first mentioned portion of said rear strip, upper and lower panels joined to the top and bottom portions of the front strip providing a door opening therebetween, door means hinged to at least one of said strips and closing the opening between said panels, a pair of sheet metal side panels each having its front edge affixed to one of the walls of a front strip and extending laterally rearwardly and overlying the intermediate wall of a rear corner strip and thence extending around the last mentioned portion of said rear corner strip and hooked over the free edge of said rear corner strip, and a single rear panel extending across the rear of the cabinet and having a portion spaced from the end of said rear panel fastened to the first mentioned wall portion of the rear corner strip, said rear panel having its opposite ends bent at right angles to the plane of the rear panel and fastened to the intermediate portion of the rear corner strip whereby to provide a hollow corner post, and a top panel for said cabinet, said side and rear metal panels and said upper front panel having flanged portions fastened to said top member.

9. A front corner strip construction for a cabinet or the like comprising an elongated metal strip of relatively heavy gauge metal having a first wall extending in a direction from front to back of said cabinet, and having at its front an integral flange extending substantially at right angles thereto, the rear of said first mentioned wall having an integral second wall extending at right angles thereto in a direction outwardly toward the side of said cabinet and substantially beyond the vertical edge of said first mentioned flange, said second wall having an integral flange extending in a direction from front to back of the cabinet with its vertical edge facing to the rear, whereby providing a substantial space between the edge of said first flange and the outer junction of said second wall and its flange, said first mentioned wall being provided with an aperture, a sheet metal side panel of relatively lighter gauge metal than said angle iron and welded to the outer face of said first mentioned wall and extending around the outer face of said first mentioned flange, thence across the intervening space between said wall members, and thence across the outer face of said second mentioned flange and welded thereto, said sheet metal side panel having an aperture registering with the aperture of said first wall, and a bolt passing through said apertures, the head of said bolt being welded to the inner face of that portion of the wall surrounding said aperture, whereby to secrete the welded bolt in such position and whereby to form a hollow post with the head of the bolt secreted therein and with a shank of the bolt extending outwardly through the opening in one of said walls.

10. In a cabinet construction, in combination with a front vertical corner strip and a rear vertical corner strip, a rear panel and a side panel, said rear vertical corner strip and said rear panel having flanged portions bent and interconnected to provide a vertical hollow post with one of the flanges of said strip extending inwardly and to the rear of said rear panel in spaced relation therefrom, said side panel being connected to the front corner post and extending rearwardly with its rear end contactingly overlying the hollow post and bent around the inwardly extending flange of said strip, the free end of said rear panel having a hook shape hooking over said free edge of said flange of said corner strip whereby to hold said side panel in a central relation to said rear vertical corner post and said strip.

11. A sheet metal cabinet having front and rear corner posts, the rear corner posts being hollow and having shelf supporting slots therein which slots register in horizontal planes, a shelf construction therefor of generally rectangular shape having its sides formed with depending flanges the corner portions of which are formed of metal of double thickness, the flanges of the rear corners being cut away at their bottoms to provide shallower corner portions of double thicknesses of metal adapted to project into the slotted portions of said rear corner posts, said double thicknesses being supported upon the upper surfaces of the slots of said hollow rear posts.

12. In a sheet metal cabinet having front and rear corner posts, the rear corner posts being hollow and having shelf supporting slots therein which slots register in horizontal planes, a shelf construction therefor of generally rectangular shape having its sides formed with depending flanges, the flanges of the rear corners being cut away at their bottoms to provide shallower corner portions adapted to project into the slotted portions of said rear corner posts, said corner portions being supported upon the lower surfaces of the slots of said hollow rear posts.

13. A storage cabinet comprising vertically disposed rear corner strips each being bent to provide spaced apart, substantially parallel walls, and intermediate wall portions angularly disposed with respect to said parallel wall portions, one of said parallel wall portions forming a free, vertically extending edge, a back panel fastened to one of said parallel wall portions and lying in front of and in spaced relation to the other free edge of said rear corner strip, said back member terminating in a flanged portion lying parallel to and connected to one of the intermediate angularly disposed portions of said rear corner strip whereby to provide a hollow rear vertical corner post, a side panel overlying the outer surface of one of the intermediate portions of said strip and extending around and bent over the free edge of said strip, and a vertical reinforcing member disposed between the rear panel and said free edge, and fastening means passing through the bent around portion of the side panel and through the rear panel, and cooperative fastening means lying within the hollow post and connected to the first mentioned fastening means, said corner strip having vertically disposed spaced apart slots therein, a shelf member having corner portions projecting in registering slots, one of said slots lying opposite the fastening means, whereby to permit operation of said second mentioned fastening means therethrough to assemble the same.

14. A sheet metal cabinet construction having rear corner strips formed of sheet metal bent to provide angularly disposed side walls having their edges spaced apart, sheet metal rear and side panels including a flange of said side panel all of substantially similar gauge metal attached to said corner strips in a manner to provide therewith rear, hollow, vertically extending corner posts, and a vertically disposed reinforcing bar enclosed between one of the walls of said corner strip and the sheet metal back panel, and fastening means passing through a flange of the side and through the rear panel and through a wall of said corner strip and extending into said hollow post, and cooperative fastening means disposed within the hollow post for locking said fastening means in securing position, said rear corner strip lying wholly within the cabinet and having an opening giving access to said cooperative fastening means.

15. A cabinet construction comprising spaced vertically extending front strips of metal of angular cross section, the metal being of the order of 18 gauge, more or less, rear corner metal strips of angular cross section, the metal being of the order of 22 gauge, more or less, sheet metal side panels, and a rear sheet metal panel, the metal of the panels being of the order of 24 gauge, more or less, said front wall strips providing intermediate adjoining wall portions disposed at right angles and each wall portion terminating in a free flange, said flanges lying at right angles to each other, the front edge of the side panel being welded to one of the wall portions and extending around the adjoining flange and overlying and welded to the spaced other flange to provide a hollow post, said side panel thence extending rearwardly of the cabinet, the rear strips each comprising parallel terminal flanges and intermediate angularly disposed wall portions, two adjoining intermediate wall portions being disposed at right angles, said rear panel terminating in a right angled flanged portion contacting one of the intermediate wall portions and welded thereto and the rear free flange of said side panel overlying the flanged portion of said rear panel and bent around the inwardly extending free flange of the strip and hooked over the free edge of said free flange, fastening means passing through the inwardly extending free flange of the side panel, the free flange of the strip, and through the rear panel.

16. A cabinet construction comprising vertically disposed and spaced apart sheet metal front and rear corner strips, side panels and a rear panel, said front corner strips having flanged walls angularly disposed, one each of said sheet metal side panels being attached to one of the angularly disposed walls of each front corner strip and bent around the flange thereof into contact with the flange of the other angularly disposed wall of said front corner strip and fastened thereto whereby to provide a pair of hollow front corner posts, each rear corner strip including spaced front and rear parallel walls and a connecting intermediate side wall extending parallel to a side panel, each of said side panels being continued rearwardly from the front corner post into contact with the intermediate side wall of each rear corner strip, said rear panel being connected to the front wall of each rear corner strip and having a flange lying parallel to and connected to said intermediate side wall of said rear corner strip, said flange of the rear panel lying between the front and rear parallel walls of said corner strip, each of said side panels terminating in a flange extending substantially parallel to and spaced from said back panel and having a bent edge hooked over the free edge of the rear wall of said corner strip, a portion of the front wall of each of said rear corner strips having a vertically disposed spaced series of cut-outs to provide shelf supports, a shelf having its side edges formed with depending flanges, the rear corners of said flanges being cut-away at the bottoms to provide exposed shallower corner portions, the rear shallower corner portions lying in the cut-outs of the front walls of the rear corner strips, and a reinforcing bar lying within each of the rear corner strips between the rear panel and the rear wall of each corner strip and at the base of said corner strip, and a fastening element passing through a flange of each side panel and through the back panel and through a wall of each of the rear corner strips, and a

cooperative fastening element disposed within the hollow portion of each rear corner strip for securing said fastening means, said last named fastening element being accessible through one of the shelf supporting cut-outs of the rear corner strip.

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