Oct. 18, 1938. B. E. RICHARDSON ET AL 2,133,570

FURNITURE CONSTRUCTION

Filed Feb. 18, 1936 5 Sheets-Sheet 1

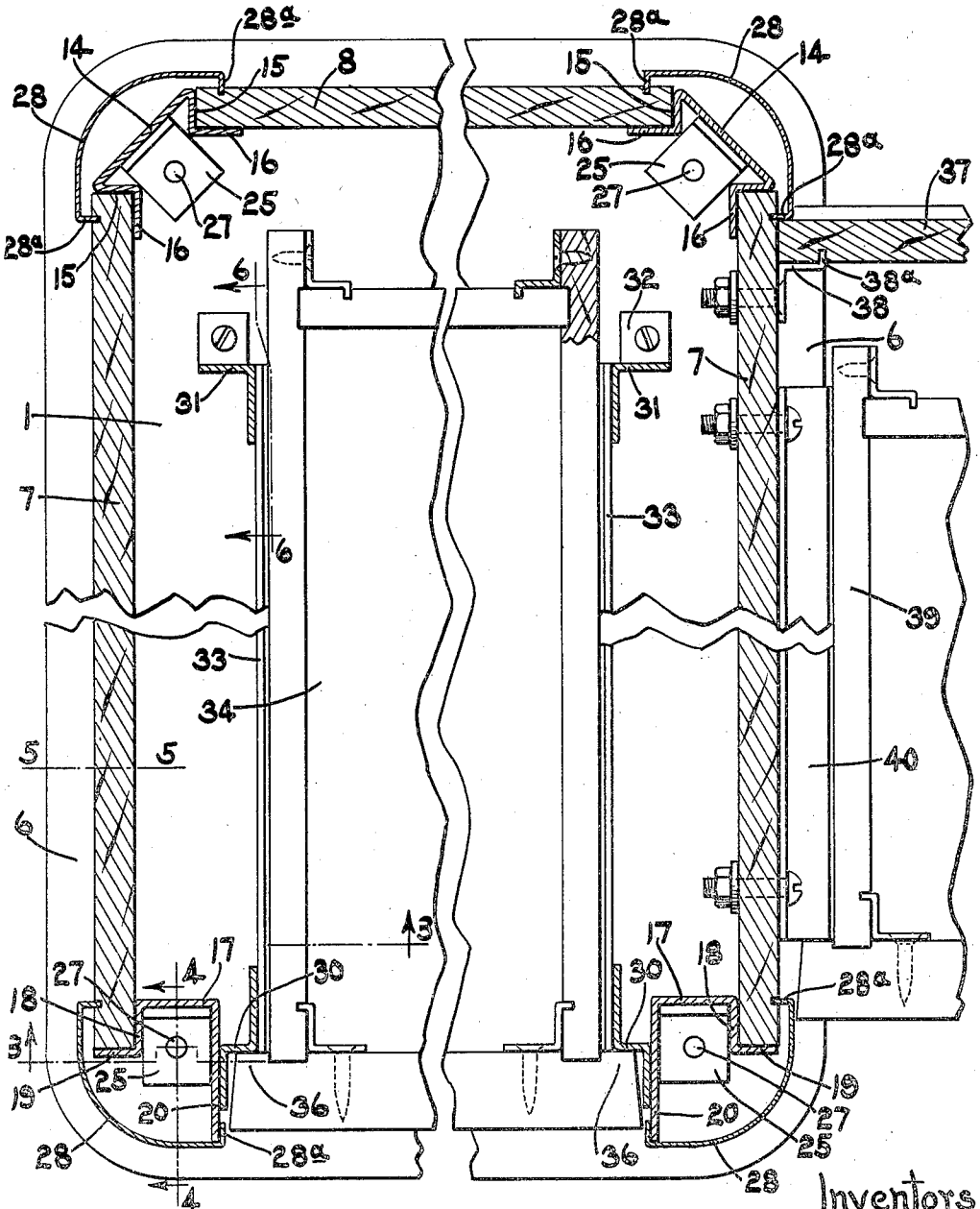


Fig. 1.

Inventors
Bayard E. Richardson
Richard W. Willey
By Livernois and
Van Antwerp
Attorneys

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FURNITURE CONSTRUCTION

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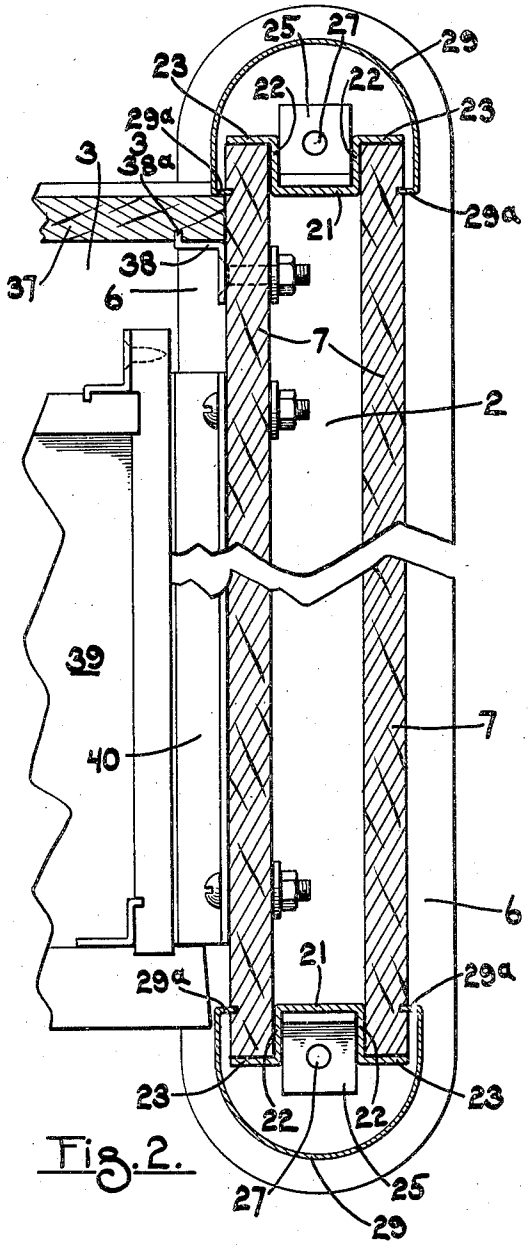


Fig. 2.

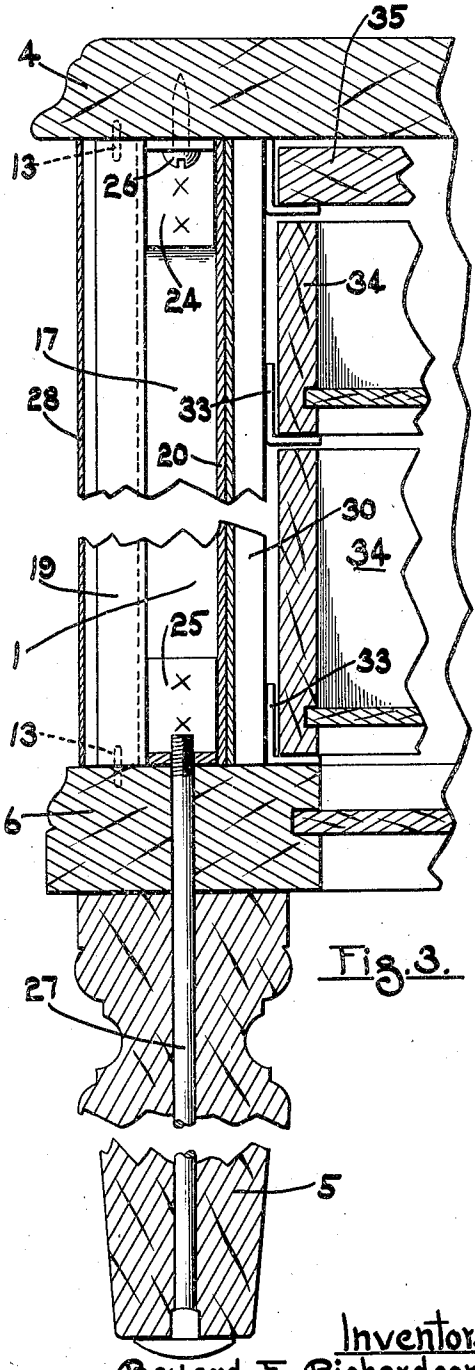


Fig. 3.

Inventors
Bayard E. Richardson
Richard W. Willey
By Livingston & Van Antwerp
Attorneys

Oct. 18, 1938. B. E. RICHARDSON ET AL 2,133,570

FURNITURE CONSTRUCTION

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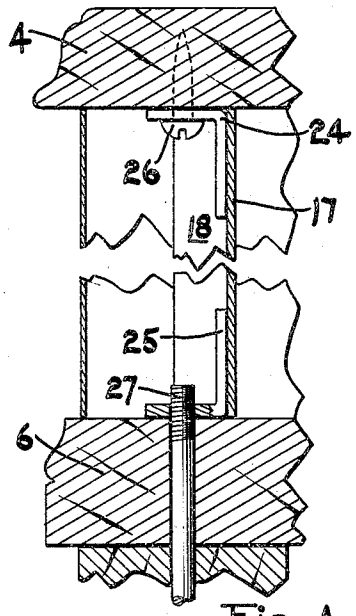


Fig. 4.

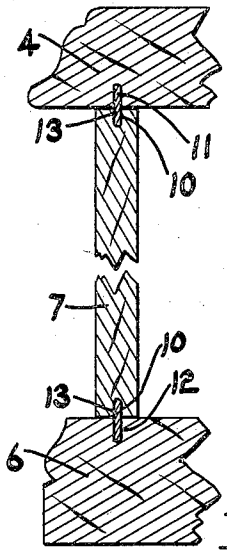


Fig. 5.

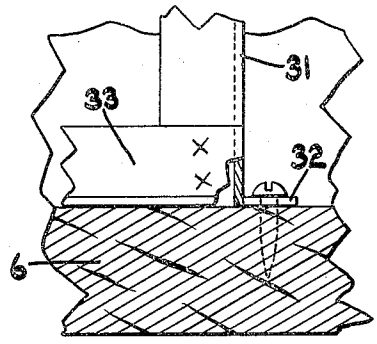


Fig. 6.

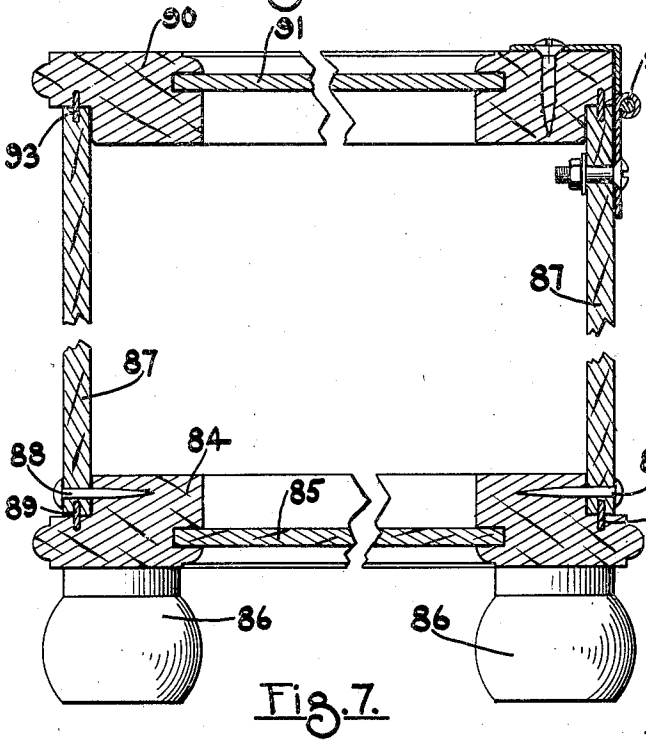


Fig. 7.

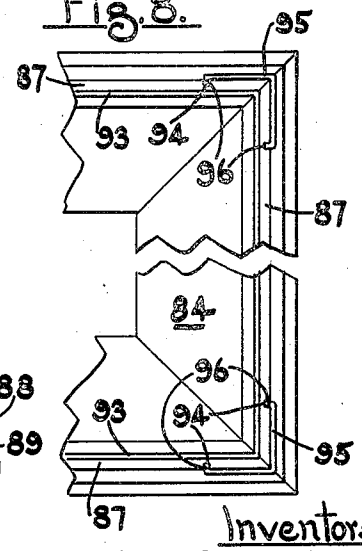


Fig. 8.

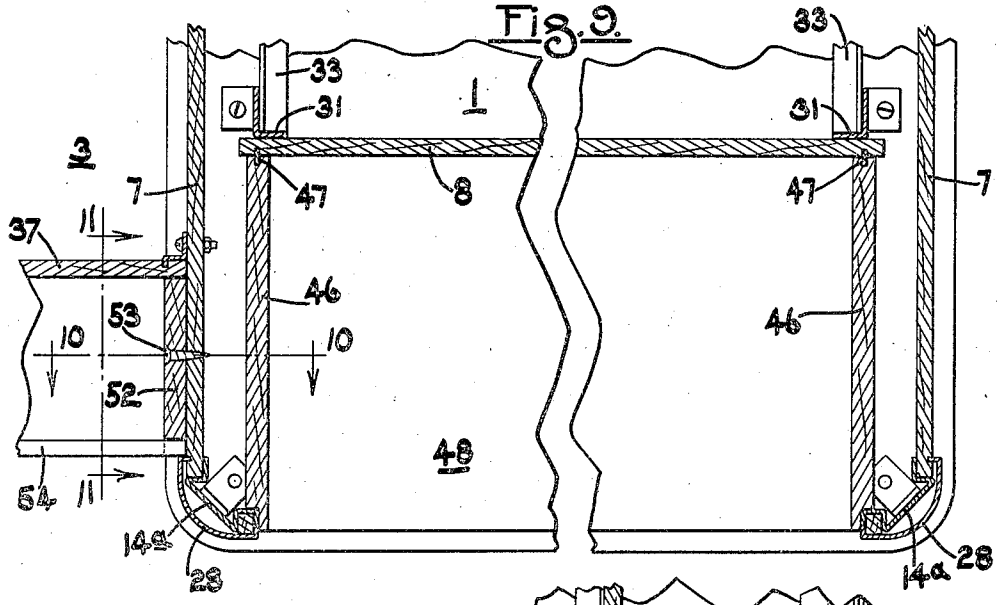
Inventors
Bayard E. Richardson
Richard W. Willey
By Lawrance and Van Antwerp
Attorneys

Oct. 18, 1938. B. E. RICHARDSON ET AL 2,133,570

FURNITURE CONSTRUCTION

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Fig. 9.



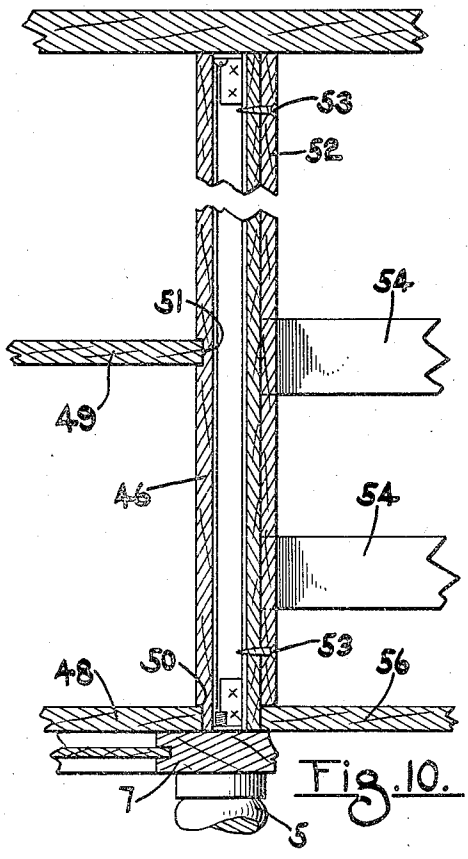


Fig. 10.

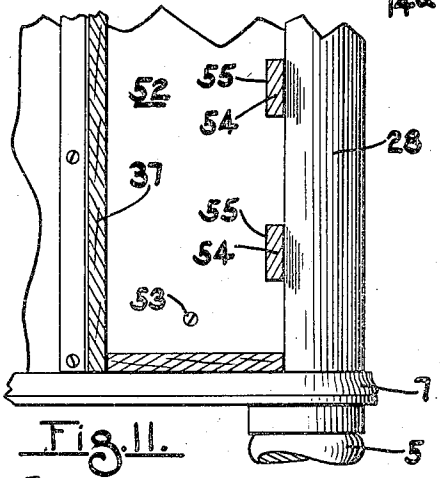


Fig. 11.

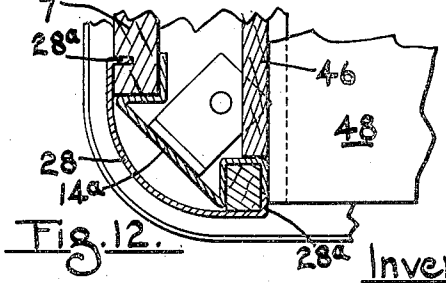


Fig. 12.

Inventors
Bayard E. Richardson
Richard W. Willey
By Lawrence & Van Antwerp
Attorneys

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FURNITURE CONSTRUCTION

Filed Feb. 18, 1936 5 Sheets-Sheet 5

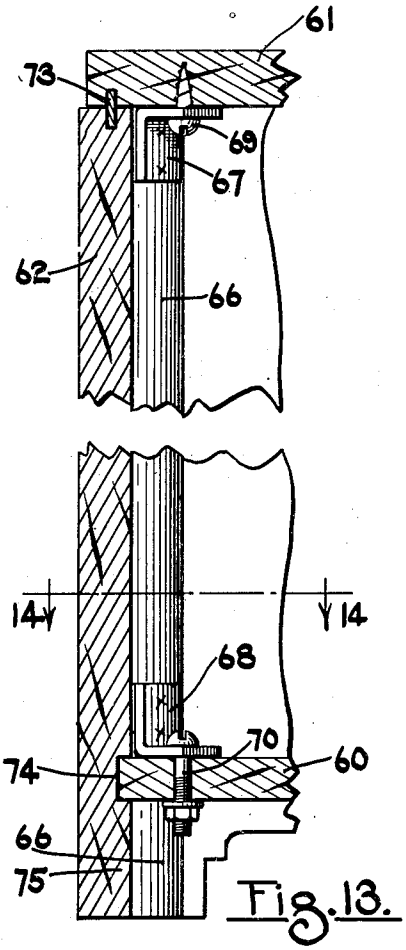


Fig. 13.

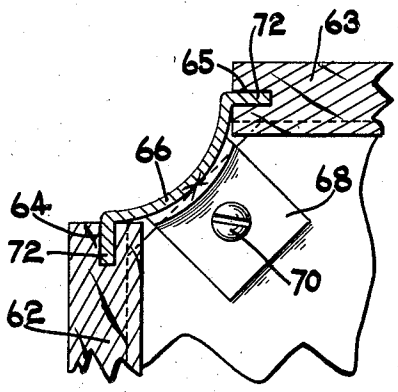


Fig. 14.

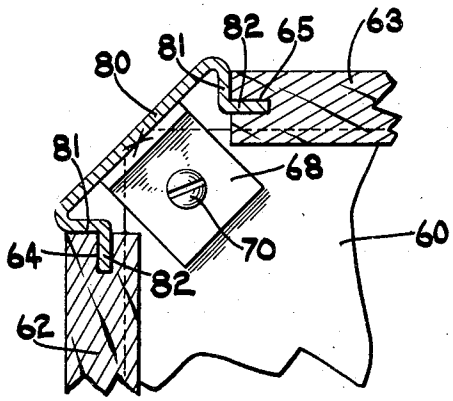


Fig. 15.

Inventors
Bayard E. Richardson
Richard W. Willey
By- Livernance and Van Antwerp
Attorneys

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2,133,570

UNITED STATES PATENT OFFICE

2,133,570

FURNITURE CONSTRUCTION

Bayard E. Richardson and Richard W. Willey,
Grand Rapids, Mich.

Application February 18, 1936, Serial No. 64,441

3 Claims. (Cl. 45—6)

This invention relates to furniture construction and particularly to the so-called "case" furniture. Furniture made in accordance with this invention may be of the knock-down type although it may also be handled in fully assembled condition if preferred.

This invention provides a furniture construction which is cheap and economical to build, which may be easily assembled, which is rigid and durable when assembled and which offers possibilities of various pleasing designs.

The invention provides other novel features of construction and arrangement hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which,

Fig. 1 is a sectional plan view, with parts broken away, of a desk pedestal and adjoining parts of the well section of a desk embodying this invention.

Fig. 2 is a sectional plan view of a narrow pedestal of a desk and adjoining parts of the well section which may be considered as the end of the desk opposite that shown in Fig. 1.

Fig. 3 is a vertical sectional elevation of a portion of the desk pedestal taken on the line 3—3 of Fig. 1.

Figs. 4 and 5 are fragmentary vertical sections of the desk pedestal taken on the lines 4—4 and 5—5, respectively, of Fig. 1.

Fig. 6 is a fragmentary sectional elevation of a detail of the structure taken on the line 6—6 of Fig. 1.

Fig. 7 is a vertical section, with parts broken away, of a cabinet or chest embodying this invention.

Fig. 8 is a fragmentary plan view of the same with the cover removed.

Fig. 9 is a fragmentary sectional plan of the rear portion of a desk pedestal and adjoining parts of the well structure modified to provide book shelves and magazine rack.

Figs. 10 and 11 are sectional elevations of the same on the lines 10—10 and 11—11, respectively, of Fig. 9.

Fig. 12 is an enlarged fragmentary detail view of the corner construction of Fig. 9.

Fig. 13 is a vertical cross sectional view through the corner of a modification.

Fig. 14 is a horizontal section taken along the line 14—14 of Fig. 13, and

Fig. 15 is a horizontal section similar to Fig. 14 but disclosing a modified form of construction.

Like numbers refer to like parts in all the figures.

Referring to Figs. 1, 2 and 3 principally, the desk made in accordance with this invention and illustrated by the drawings has a drawer containing pedestal 1 at one end of the desk and a narrow pedestal 2 at the opposite end of the desk between which is the well space 3. The desk has the usual top 4 supported by the pedestals and extending over the well space and the pedestals are supported by legs 5. It is to be understood that a drawer bearing pedestal may be used at both ends of the desk, if desired, in substitution for the narrow pedestal 2 or two narrow pedestals 2 may be used at opposite ends of the desk, if preferred, these details having no bearing upon the essence of the invention.

Each pedestal has a base 6 of flat nature, the outer edge of which is exposed in the finished desk and may be ornamentally designed as desired. Vertical side panels 7 are provided for the pedestal and in the drawer bearing pedestal a vertical rear panel 8 is also provided, the narrow pedestal 2 having no rear panel. The drawer pedestal 1 does not have a front vertical panel but is provided with an opening in which the drawers 9 are located.

In order to properly locate the vertical panels in the pedestal and to prevent lateral movement thereof their top and bottom edges are grooved at 10, see Fig. 5, and corresponding grooves 11 and 12 are provided to register therein in the lower surface of the top 4 and in the upper surface of the base 6, respectively, and splines 13, preferably of steel, are inserted in these grooves.

At the ends of the panels vertical locating members are provided which extend between the base 6 and the top 4, these serving to connect the base and top to the structure. These locating members, while all essentially the same and serving the same purpose, are of different specific shapes. At the rear corners of the drawer bearing pedestal 1 the locating members are designated by 14 and have right angularly arranged abutment portions 15 engaged by the vertical edges of the adjoining panels and inwardly extending flanges 16 engaged by the inner surfaces of the said panels. At the front corners of the pedestal 1 the locating members are designated by 17 and have an abutting portion 18 engaged by the inner surface of the adjoining panel and a flange 19 engaged by the vertical edge of the panel. These members 17 also have flanges 20 extending vertically at the edges of the front opening of the pedestal. In the narrow pedestal 2 the front and rear locating members are designated by 21 and have parallel abutting portions

22 engaging the inner surface of the adjoining panels and flanges 23 engaging the vertical edges of the panels.

In all styles of these panel locating members top and bottom attaching angles 24 and 25 are provided which lie adjacent the top 4 and the base 6, respectively, and are provided with openings through which attaching means pass to attach the members respectively to the top and base of the desk. The attaching means may consist of a wood screw 26 or a threaded bolt 27 which bolt 27 passes upwardly through the leg 5 of the pedestal and through the base 6 and serves to hold the leg 5 onto the base as well as to attach the angles 25 thereto.

At the outside of the corners of the pedestal 1 and at the ends of the pedestal 2 ornamental cover members 28 and 29 respectively are used both to conceal the corner structure of the desk and to add to the rigidity thereof. These corner cover members are arcuate in shape and are made of spring metal and have flanges 28*a* and 29*a* at their vertical edges which enter grooves in the outer surfaces of the adjacent panels except in such instances as at the front of the pedestal 1 where there is no front panel, the flanges 28*a* hook over the edges of the flanges 20 of the corner retaining members 17. These corner covering members 28 and 29 are applied after the other parts of the corner construction have been assembled and snap into place and are retained by the resiliency of the material of which they are made.

Drawer guides are provided inside the drawer bearing pedestal 1 consisting of vertical members 30 at the front joined, as by welding, to the flanges 20 of the front corner retaining members 17 and rear vertical members 31 having flanges 32 by which they may be fastened to the base 6. Horizontal angle members 33 extend between and are attached, as by welding, to the front members 30 and the rear members 31 and serve as guides upon which the drawers slide.

The drawers 34 are of suitable construction and at the top, directly under the top 4 of the desk, an extension slide 35 may be mounted to slide in guides 33 the same as the drawer guides. Preferably the front drawer guide members 30 are offset inwardly providing a shoulder against which the overhanging ends of the drawer fronts 36 abut when the drawers are closed, thus serving as stops to limit the inward movement of the drawers.

At the rear of the well space 3 of the desk, between the pedestals, a vertical back panel 37 is located. The vertical edges of this back panel 37 engage the inner surfaces of the inner panels of the respective pedestals and are prevented from moving outwardly by the projecting flanges 28*a* and 29*a* of the corner covering members 28 and 29. Inward movement of the panel 37 is prevented by the attaching clips 38 fastened to the adjacent pedestal panels and having flanges 38*a* entering grooves in the inner surface of the panel 37 which prevent edgewise movement of the panel relative to the pedestal. Vertical movement of the panel is prevented by engagement with the underside of the top 4 by its upper edge and by engagement with the edges of the respective base members 6 of the pedestals by the lower edges of the panel.

A well drawer 39 is located beneath the top 4 in the well space and is mounted to slide upon suitable drawer guides 40 attached to the pedestals.

In the modified construction illustrated in Figs. 9, 10, 11 and 12 the rear of the desk pedestal 1 and the well sections 3 are utilized to provide book shelves and magazine rack. In the pedestal the back panel 8 is moved inwardly so that it abuts against the rear vertical post 31 of the drawer guides. Vertical side panels 46 extend between the rear panel 8 and the back of the pedestal, these side panels 46 being grooved at their vertical edges for splines 47, the vertical surfaces of the rear panel 8 having grooves to receive said splines 47. The rear corner retaining members 14*a* are essentially the same as the members 14, being slightly modified for the different structure, and the outer vertical edges of the side panels 46 bear against these corner retaining members 14*a*. A bottom shelf 48 and an intermediate shelf 49 are inserted in the space partially enclosed by the rear panel 8 and the side panels 46, the bottom edges of the side panels 46 being rabbeted at 50 to receive the ends of the bottom shelf 48 and also being grooved at 51 to receive the ends of the shelf 49 by means of which it is supported. This structure provides two shelves open and accessible at the rear of the desk pedestal.

The back panel 37 of the well space is also located inwardly in this modified structure and side members 52 are provided located against the inner side panels of the pedestals and held in place by screws 53. The vertical edges of the side members 52 engage respectively the front surface of the back panel 37 and the flange 28*a* of the corner cover member 28. Horizontal bars 54 have their ends inserted in notches 55 cut into the vertical edges of the side members 52 and are thereby supported and retained in position to hold magazines or other articles which may be inserted in this space.

It will be noted that very little change in construction is required to provide the book shelves and magaizne rack in this desk. The same panel 8 is used at the back of the desk without any change in machine work and requiring only the additional side members 46 and shelf members 48 and 49 with the slight modification of the rear corner locating members 14*a* to provide the book shelves. In the magazine rack structure the same back panel 37 is used without change of machine work and the holding clip 38 is moved inwardly holding it in place against the pedestal panel. A bottom shelf 56 is added and also the side members 52 and the horizontal rails 54 to provide this feature, these parts fitting into place and being retained without change of construction of the desk.

Referring now to Figs. 13 and 14, these disclosing a modification, numeral 60 indicates the base of the desk while 61 is the top thereof. Both the top and the bottom of the desk are cut away at their corners as indicated at Fig. 14 whereby conformity with the remaining structure is had.

The side and back panels, indicated by numerals 62 and 63, respectively, have grooved edges 64 and 65. See Fig. 14.

A vertical corner post 66 has angle clips 67 and 68 welded thereto at its ends. The upper angle clip 67 is fastened onto the underside of the top 61 by means of a screw 69. The bottom angle clip 68 is fastened to the base of the desk by means of the bolt 70.

The corner member 66 is curved inwardly as clearly shown in Fig. 14 and terminate in flanges 72 at right angles to each other. These flanges are adapted to enter the grooves 64 and 65 where-

by the side panel 62 and the rear panel 63 are held from lateral movement.

The side panel 62 has a spline 73 located at its upper edge. This spline 73 also enters the underside of the top 61 whereby these two members are held together. Similarly the other panel 63 has a splined connection with the top member 61.

Also, the panel 62 has a groove 74 near its lower edge, this groove 74 receiving the base 60. The other panel 63 is likewise grooved to receive the base. The panels 62 and 63 are extended as indicated at 75, see Fig. 13 to form suitable leg constructions.

The construction just described is very simple in construction but yet is neat looking and modernistic in design. And, due to the metal construction, in part, it is very stout and rigid. The outer face of the post 66 is finished to conform with the remaining exposed surfaces. The insertion and tightening of the fastening means 69 and 70 causes all of the parts to be locked securely together but nevertheless they may be readily assembled and taken apart as desired.

Referring now to Fig. 15, this view showing a modification very similar to that shown in Figs. 13 and 14, numeral 60 indicates the base with the panels 62 and 63, grooved at 64 and 65, respectively.

The corner member 80 has angle clips fastened at its ends whereby the top of the desk may be fastened to the base. The lower angle member 68 is shown bolted at 70 onto the base 60.

The corner post 80 has inturned portions 81 and terminal portions 82. The terminal portions enter the grooves 64 and 65 and prevent movement of the panels endwise or laterally. Thus a sturdy construction is had.

Referring to the modification shown in Figs. 7 and 8, numeral 84 indicates a lower frame, having a panel 85 and supports 86, which receives side panel members 87 along the outer faces of its four sides.

The panel members 87 are fastened to the lower frame by means 88 and have splines 89 as shown.

The upper cover 90, having a panel 91, is hinged at 92 onto one of the panels 87. A spline 93, see Fig. 7, extends entirely around the juncture between the cover 90 and the chest walls 87 and makes a tight juncture.

As shown in Fig. 8, the several panels 87 have vertical notches 94 near their ends. Resilient angle members 95, having inturned flanges 96 are adapted to be sprung into the grooves 94 and thus hold the panels 87 together at their vertical edges whereby any other fastening means are eliminated. This makes for a cheap and efficient construction.

Having thus revealed our invention, we claim as new and desire to secure the following combinations or their equivalents by Letters Patent of the United States:

1. In a desk construction including a pedestal, aid pedestal having a base, a top spaced above the base, three panel members, these panel members being located at the sides and rear of the base and top and being between the same, connecting and fastening means between the rear panel, the base and the top, holding means connected to the top and bottom and located at each front edge of each of the side panels, each of said holding means consisting of a metal strip having a first portion extending along the inner side of and parallel to the adjacent panel near the front edge thereof whereby inward movement of the panel is prevented and having a second portion substantially parallel to and in offset relation to the first portion connected thereto by a connecting portion, said second portion extending outwardly beyond the ends of the side panels and an arcuate member having inturned flanges at its ends, one flange locking over the terminal edge of the second portion and the other flange being cooperatively associated with the outside edge of the adjacent side panel member opposite its engagement with the first portion whereby the panel is held against the first portion of the said holding means and whereby the arcuate means conceals the holding means and forms an ornamental corner construction.

2. In a desk construction having two pedestals, each pedestal comprising an inner panel, an outer panel and a rear panel together with means for maintaining these panels in operative relationship, an abutment member vertically located at the rear of and at the inner side of each of the inner panels, means securing said abutment member to said inner panels, a well panel having grooves therein, said abutment member abutting the inner side of said well panel and having a flange extending into said groove, the rear and inner side panels having grooves in their outer sides adjacent the adjacent edges thereof, an arcuate member (for each pedestal) curved through substantially 90° located at the well panel corner of said pedestals with its convex side outward and its sides spaced from the outer sides of said rear and inner side panels, flanges on the sides of said arcuate member extending to and into the grooves of said inner and rear panels and having inturned flanges, said flange which extends toward said inner panel contacting against the rear side of the well panel whereby it is prevented from moving away from the said abutment.

3. In a desk construction including a pedestal, said pedestal having a base, a top spaced above the base, three panel members, these panel members being located at the sides and rear of the base and top and being between the same, connecting and fastening means between the rear panel, the base and the top, holding means connected to the top and bottom and located at each front edge of each of the side panels, each of said holding means consisting of a metal strip having a first portion extending along the inner side of and parallel to the adjacent panel near the adjacent edge thereof terminating in a flange overlying the said edge of the panel whereby inward and longitudinal movement of the panel is prevented and having a second portion substantially parallel to and in offset relation to the first portion connected thereto by a connecting portion, said second portion extending outwardly beyond the ends of the side panels and an arcuate member having inturned flanges at its ends, one flange locking over the terminal edge of the second portion and the other flange being cooperatively associated with the outside edge of the adjacent side panel member opposite its engagement with the first portion whereby the panel is held against the first portion of the said holding means and whereby the arcuate means conceals the holding means and forms an ornamental corner construction.

BAYARD E. RICHARDSON.
RICHARD W. WILLEY.