Dec. 30, 1930. E. OHNSTRAND 1,786,628

CARD RECORD DESK

Filed Dec. 5, 1924 4 Sheets-Sheet 1

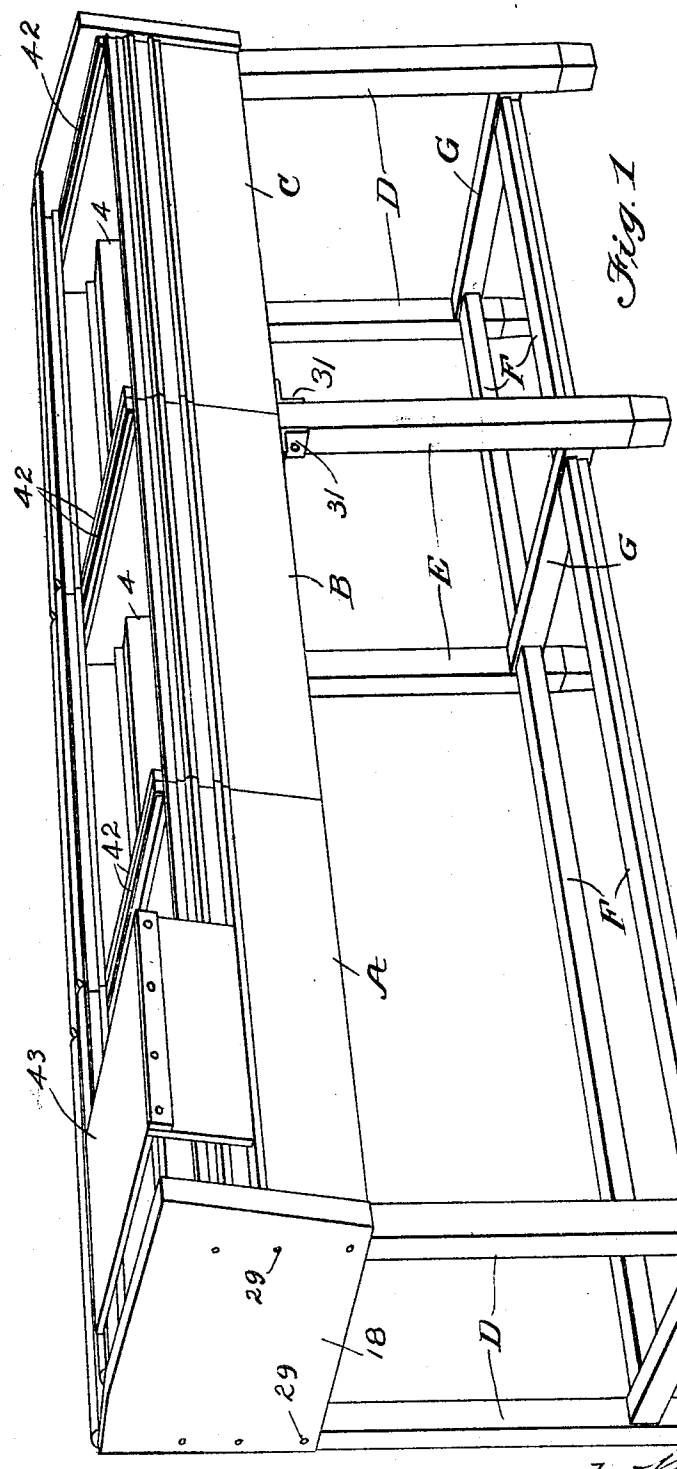


Fig. 1

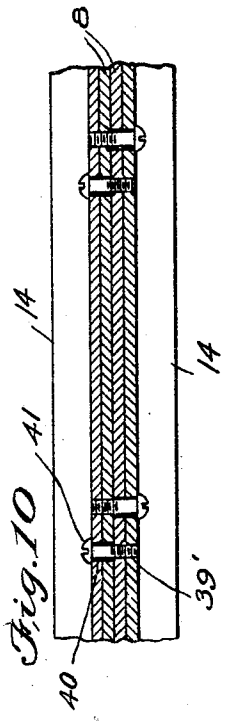


Fig. 10

Inventor
Enoch Ohnstrand
by Roberts, Roberts & Cushman
Att'ys.

Dec. 30, 1930. E. OHNSTRAND 1,786,628

CARD RECORD DESK

Filed Dec. 5, 1924 4 Sheets-Sheet 2

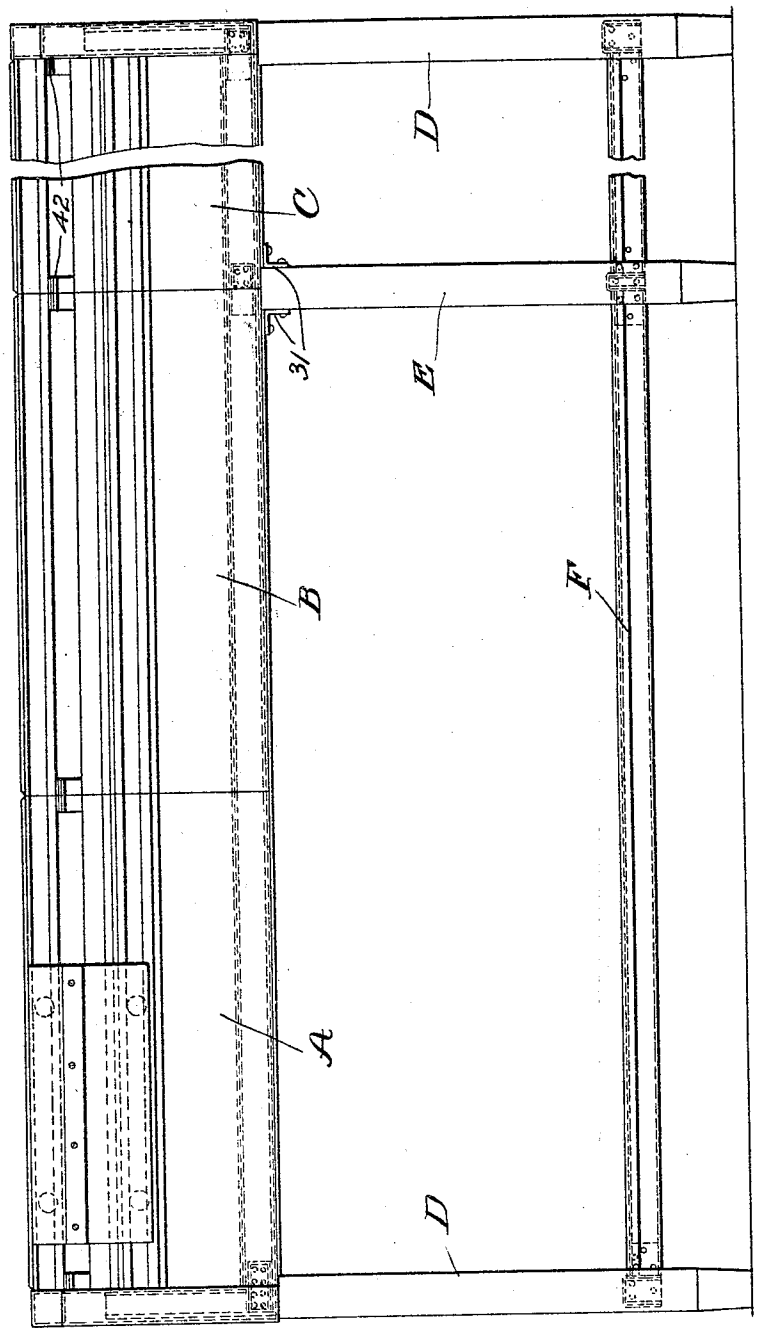


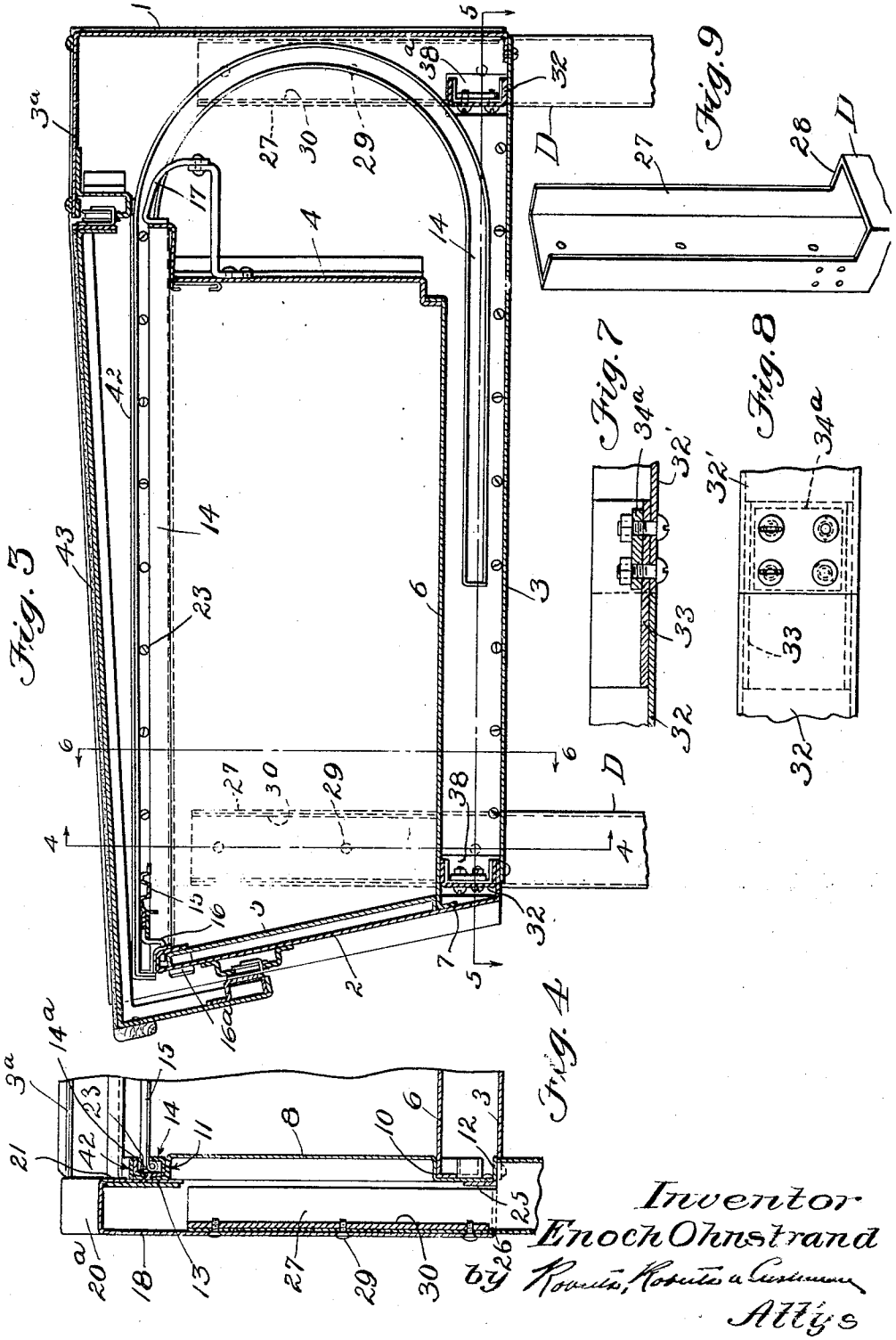
Fig. 2

Inventor
Enoch Ohnstrand
by Roberts, Roberts & Cushman
Attys

Dec. 30, 1930. E. OHNSTRAND 1,786,628

CARD RECORD DESK

Filed Dec. 5, 1924 4 Sheets-Sheet 3



Inventor
Enoch Ohnstrand
by Roberts, Roberts & Cushman
Attys

Dec. 30, 1930. E. OHNSTRAND 1,786,628

CARD RECORD DESK

Filed Dec. 5, 1924 4 Sheets-Sheet 4

Fig. 5

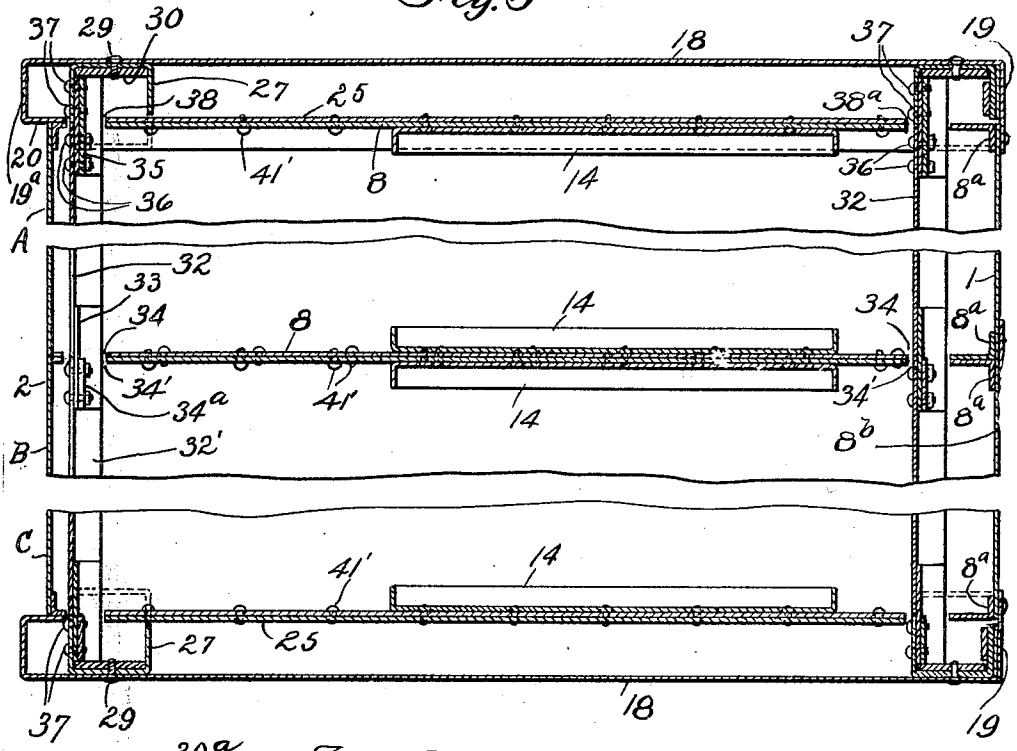
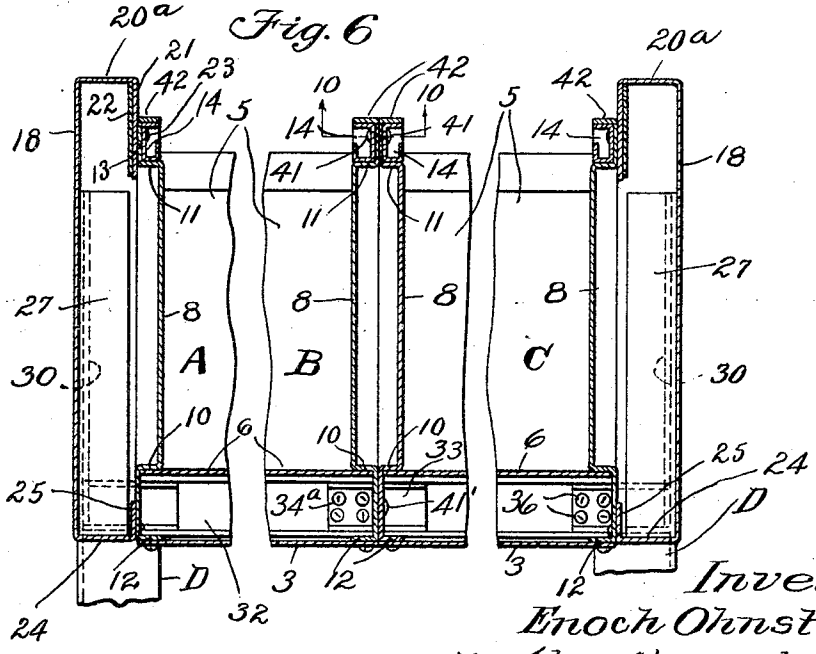


Fig. 6



Inventor
Enoch Ohnstrand
by Roberts, Roberts & Cushman
Att'ys

Patented Dec. 30, 1930 1,786,628

UNITED STATES PATENT OFFICE

ENOCH OHNSTLAND, OF MOHAWK, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO REMINGTON RAND INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

CARD-RECORD DESK

Application filed December 5, 1924. Serial No. 754,142.

This invention relates to ledger or card record desks employed for filing cards, such as insurance records, stock records, order lists, etc. which are constantly in use and must be kept within convenient reach of a user, and objects of the invention are to provide a ledger desk constructed of a number of separable units which may be detachably connected to each other to increase or diminish the size of the desk; and to provide a new and improved record desk having the unique features of construction and arrangement hereinafter described.

A preferred embodiment of the invention is illustrated in the accompanying drawings in which:

Fig. 1 is a perspective view of the ledger desk;

Fig. 2 is a front elevation of the desk;

Fig. 3 is a transverse section of the desk;

Fig. 4 is a section on the line 4—4 of Fig. 3 with posting board removed;

Fig. 5 is a fragmentary section on the line 5—5 of Fig. 3;

Fig. 6 is a fragmentary section on the line 6—6 of Fig. 3;

Fig. 7 is a detail section showing the joint between the reenforcing rails of adjacent sections;

Fig. 8 is a side elevation of the joint shown in Fig. 7;

Fig. 9 is a perspective of the upper portion of one of the legs; and

Fig. 10 is an enlarged detail section on line 10—10 of Fig. 6.

The illustrated embodiment of the invention comprises a ledger or card record desk of sheet metal or other suitable material which is made up of card receiving sections or units A, B and C, and although but three such units are shown it is to be understood that the size of the desk may be increased or decreased according to the requirements as will be hereinafter pointed out. To support the desk pairs of legs D are arranged at each end thereof and a pair of legs E intermediate the ends, longitudinal braces F and cross braces G being suitably connected to the lower portions of the legs for providing a sturdy and rigid construction.

The card receiving sections or units A, B and C are similarly constructed, each forming an open topped receptacle, and each unit or receptacle comprises an outer shell having a rear wall 1, an outwardly inclined front wall 2, a bottom 3 which is removably secured to the front and rear walls as by screws, and an inturned flange 3^a integral with the rear wall and extending a short distance toward the front wall. Within the outer shell is an inner shell which has a rear wall 4, an outwardly inclined front wall 5 over the upper margin of which the front wall 2 of the outer shell is folded and fixed as by screwing and a bottom 6 having a downwardly bent flange 7 welded to the front wall 2 of the outer shell, the front wall 5 resting on the bottom wall 6.

The metal of the side walls 8 of the inner shell intermediate the ends is forced inwardly as by stamping, thereby providing upper and lower shoulders 11 and 10 respectively, and the lower shoulder 10 is fixed as by welding to the bottom 6. The rear ends of the sides 8 are provided with inturned flanges 8^a (Fig. 5) which abut against the rear wall 1 of the outer shell and the flanges adjacent the intermediate units are fastened to the rear wall 1 by rivets. A reenforcing strip 8^b or splice plate is secured as by screws to the rear wall 1 to cover the joint between the sections. The bottom end portions of the side walls 8 extend below the bottom 6 of the inner shell and are provided with inturned flanges 12 to which the bottom 3 of the outer shell is fastened as by screws. The upper end portions of the side walls 8 extend upwardly at substantially right-angles as indicated at 13, and secured as by welding and screwing to the shoulder 11 and flange 13 are guide angles 14 and 14^a forming channels which guide the movement of a flexible metal curtain or apron 15, of the type disclosed in my Patent No. 1,378,976, issued May 24, 1921.

As indicated in Fig. 3 the guide channels 14 extend longitudinally of the units and curve downwardly and inwardly so that the curtain 15 can be moved out of the way or into position to cover the open top of the inner shell. A clip 16 is secured to the curtain

bar and provided with a downwardly offset end portion adapted to extend into the space formed between the flanges on the upper edges of the outer and inner walls 2 and 5 respectively as shown in Figure 3 for engagement by the bolt of a lock 16ª for locking the curtain in closed position. A lock 16ª is provided on the walls 2 and 5 which locks the curtain rail in position by engagement of the bolt or movable locking member of this lock with the offset end of clip 16 when it is positioned between the flanges on the upper edges of walls 2 and 5 in the manner shown in Figure 3. A supporting member 17 is suitably secured to the rear wall 4 of the inner shell to hold the intermediate portion of the curtain from sagging when the curtain is moved out of use.

Closing the outer ends of the desk are dummy or false end panels each comprising an outer wall 18 having an inwardly bent flange 19 which is removably secured as by screws to the rear wall 1 of the outer shell and the flange 8ª of the inner shell. The forward part of the wall 18 extends beyond the front wall 2 of the outer shell and is formed with a front wall 19ª substantially parallel with the wall 2, the end portion of the front wall 19ª being bent inwardly to form a flange 20 which is suitably secured to the front wall 2. The upper end portion of the outer wall 18 is provided with a top wall 20ª and a depending wall or flange 21 which extends parallel to the outer wall 18. The curtain guide 14, flange 13 of the side wall 8, and inner wall 21 are suitably secured together as by screws 23 (Fig. 3). The lower end portion of the outer wall 18 is formed with a bottom wall 24, and an upstanding inner wall 25 which extends in parallel relation to the outer wall 18 and is removably secured as by screws to the side wall 8 of the inner shell. Formed in the opposite ends of the bottom wall 24 of the end panels are rectangular holes 26 to receive the supporting legs D.

The supporting legs D are hollow and substantially square in cross-section. As clearly indicated in Fig. 9 each leg is formed with an integral channel-shaped extension 27, a ledge 28 being provided on the leg so that when the extensions are inserted into the holes 26 in the bottom wall 24 of the end panels the flanges 12 on the side walls 8 of the inner shell rest on the ledges. The legs D are securely held in place by screws 29 which extend through the outer wall 18 of the false panels, the extension 27 and a reenforcing plate 30 which is fixed as by welding to the inside of the extension. The intermediate legs E are constructed similarly to the legs D with the exception of the extension 27, these legs bridging the joint between units B and C and secured to the under side of these units as by angle pieces 31 fixed thereto as by screws.

In order further to strengthen and reenforce the construction, rails 32 of channel construction are arranged inside the desk adjacent the front and rear walls. The reenforcing rails at the forward part of the desk are screwed to the extension 27 of the legs. Each reenforcing rail is provided at right hand end with a splice channel 33, a portion of which is welded thereto and the remainder projects beyond the end of the rail through an opening 34 (see Fig. 5) in the side wall 8 of the inner shell.

From an inspection of Fig. 5 it will be observed that the projecting portion of the plate 33 in the unit B is arranged to extend through an opening 34 in the unit B and an opening 34′ in the unit C and overlap the end of a rail 32′ in the unit C, the overlapping portions being secured together as by bolts and nuts and having an additional plate 34ª through which the bolts extend for providing rigid joint. The opposite end of the rail 32 is rigidly fastened to one side of the leg extension 27 by plates 35, bolts and nuts 36, and screws 37, the plate 35 extending through holes 38 and 38ª in the side wall 8 and the inner wall 25 of the end panel respectively. It will thus be observed that one end of each reenforcing rail is provided with a plate welded thereto which overlaps the end of an adjacent rail or leg extension and in this manner the rails not only strengthen the structure of each unit but also reenforce the legs thus to insure stability thereof.

To provide a finished appearance to the desk finishing strips 42 are fixed as by screwing to the curtain guide channels 14 and cover the joint between the upstanding end of the side wall 8 and the guide channels. As most clearly indicated in Figs. 1 and 2, the forward ends of the strips 42 extend downwardly over the ends of the guide channels 14 so that when the side walls 8 of adjacent units are drawn together in close juxtaposition by the screws 41 the finishing strips provide substantially a smooth exterior surface leaving no wide gaps.

In order to provide tight joints at the junctions between units the end walls 8 are preferably secured together along their juxtaposed margins. As shown in Figs. 6 and 10 this is accomplished by screws 41 which extend through the juxtaposed flanged end walls 8 and also through the curtain channels 14. Preferably the screws are applied alternately from opposite sides with each screw threading only into the channel and end wall on the side opposite its head, thereby drawing the parts tightly together. Thus only alternate holes in each channel and end wall are tapped, the other holes being large enough to clear the screws, and the untapped holes in one channel and end wall register with the tapped holes in the other channel and end wall (Fig. 10). By correspondingly posi-

tioning the tapped holes in the false ends the end curtain channels may be made interchangeable with those at the junctions, in which case the tapped holes in the channels are not used at the ends for the reason that the screws 23 (Fig. 6) can be applied only from the channel side and not from the inside of the false ends. The lower margins of the end walls may also be secured together at the junctions and also to the false ends at the ends of the series by screws 41′ but this requires the removal of bottoms 3 to affix the screws and ordinarily is not necessary.

Supported above the desk and movable longitudinally thereof across the several units is a posting board or work table 43 of the type shown and described in my Patent No. 1,372,536, granted March 22, 1921. The posting board is mounted on antifriction rollers and the supports therefor are similar to that described in the said patent. In use this board is moved over the desk to a position convenient to the particular group of cards to be consulted, and the desired information taken from the cards and noted on a memorandum or ledger book supported by the table.

From the foregoing it will be understood that additional units may be added by removing the false end 18 and legs D at one end of the desk and attaching the additional units in the same manner as units A, B and C are connected, the false end and end legs being replaced at the end of the extended series. It will also be understood that intermediate legs, such as shown at E, by virtue of the reenforcing rails 32, are needed only at recurrent junctions, that is, every other junction. The receptacles, when added in end to end relation, will have their side walls in registry, that is the edge portions of each side wall 8 will be in concident relation and the receptacle thereby present the same appearance as if they were constructed in one unit.

It is to be understood that numerous changes in details of construction and arrangement may be effected without departing from the spirit of the invention especially as defined in the appended claims.

I claim:

1. A ledger desk comprising a plurality of card holding units, each unit comprising an open-top receptacle, reenforcing rails extending across the front and rear of the receptacle, rigidly connecting elements on certain of said rails arranged to extend into an opening in the adjacent receptacles and overlap against a rail therein, and means for detachably connecting the abutting portions of said rails.

2. A ledger desk comprising a plurality of receptacles, reenforcing members extending longitudinally inside of said receptacles, a plate fixed to one end of each member arranged to extend through an opening in an adjacent receptacle to overlap a member therein, means for detachably connecting said overlapping portions together, and means for securely fastening the adjacent sides of said receptacles together, said means comprising screws alternately extending through the side of one receptacle into threaded engagement with the other receptacle.

3. A ledger desk comprising a plurality of receptacles arranged with their sides in abutting relation, and means for detachably connecting the abutting sides of said receptacles together, said means comprising screws alternately extending freely through the side of one receptacle and into threaded engagement with the other receptacle, said screws being arranged in pairs spaced from adjacent pairs.

4. A ledger desk comprising a receptacle, dummy ends for said receptacle having holes in the bottom thereof, legs to support the receptacle having extensions projecting into said holes, ledges on said legs to support a portion of the receptacle, and means for detachably connecting said extensions to the dummy ends.

5. A ledger desk comprising a receptacle, legs to support the receptacle, channel-shaped extensions on said legs projecting into openings in the base of the receptacle, reenforcing members extending longitudinally of the receptacle, means for detachably connecting the central portion of the extensions to one end of the receptacle, and means for detachably connecting one side portion of the extensions to said reenforcing members.

6. A ledger desk comprising a receptacle, dummy ends for said receptacle having holes adjacent the lower corners thereof, legs for said receptacle, reduced, channel-shaped extensions on said legs projecting into said holes, means for detachably connecting one side of said extensions to said dummy ends, reenforcing rails extending longitudinally of said receptacle, and means for detachably connecting a side portion of the extensions adjacent to said first mentioned side to the ends of said rails.

7. A sectional ledger desk, comprising duplicate receptacle units, each unit having the side walls formed for registry in abutting coincident relation with an adjacent unit, means extending transversely of each unit in aligned relation on a series of units having detachable connection for mounting said units in rigid desk forming relation, end members having registering abutting cooperation with the sides of the units at the end of the desk, supporting legs mounted in said end members, and means for attaching said end members and legs to the first mentioned means.

8. A sectional ledger desk, comprising duplicate receptacle units, each unit having side walls formed for registry in abutting relation with an adjacent unit, bar members

carried by each unit and extending transversely thereof, the bar members on adjacent units being in aligned relation, means for detachably connecting the bar members of adjacent units for rigidly mounting said units in desk forming relation, end members applied to the side walls of the units at the free ends of the desk, legs carried by said end members and means for detachably connecting said end members and legs to said bar members.

Signed by me at Boston, Mass., this 17th day of October, 1924.

ENOCH OHNSTRAND.