Aug. 14, 1951 F. R. SCHALLERT 2,564,283

FILING CABINET FOR MAPS

Filed Jan. 13, 1947 3 Sheets-Sheet 1

Fig. 1.

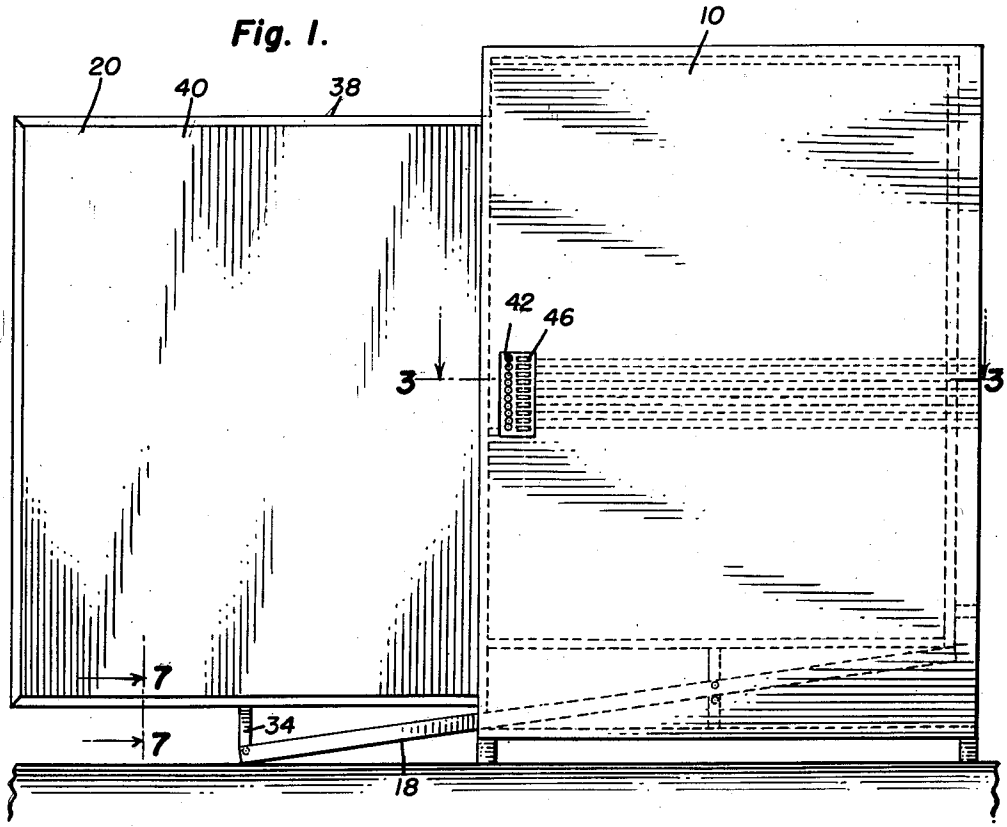
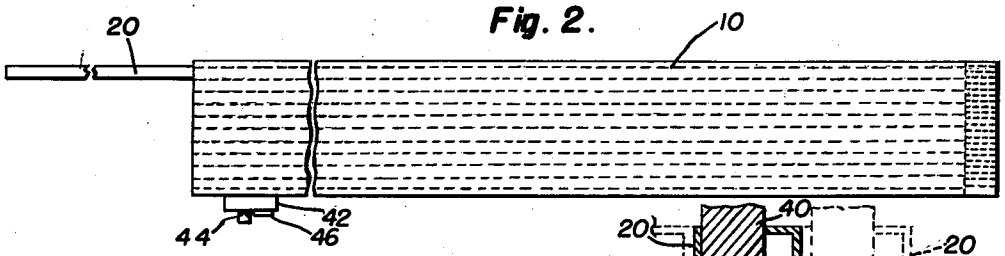


Fig. 2.



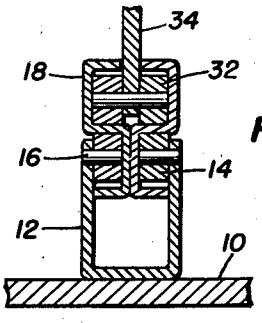
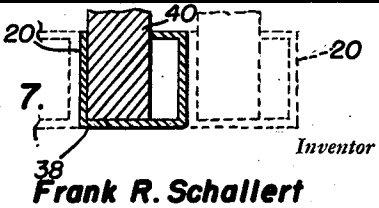


Fig. 6.

Fig. 7.



Inventor

Frank R. Schallert

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Aug. 14, 1951 F. R. SCHALLERT 2,564,283

FILING CABINET FOR MAPS

Filed Jan. 13, 1947 3 Sheets-Sheet 2

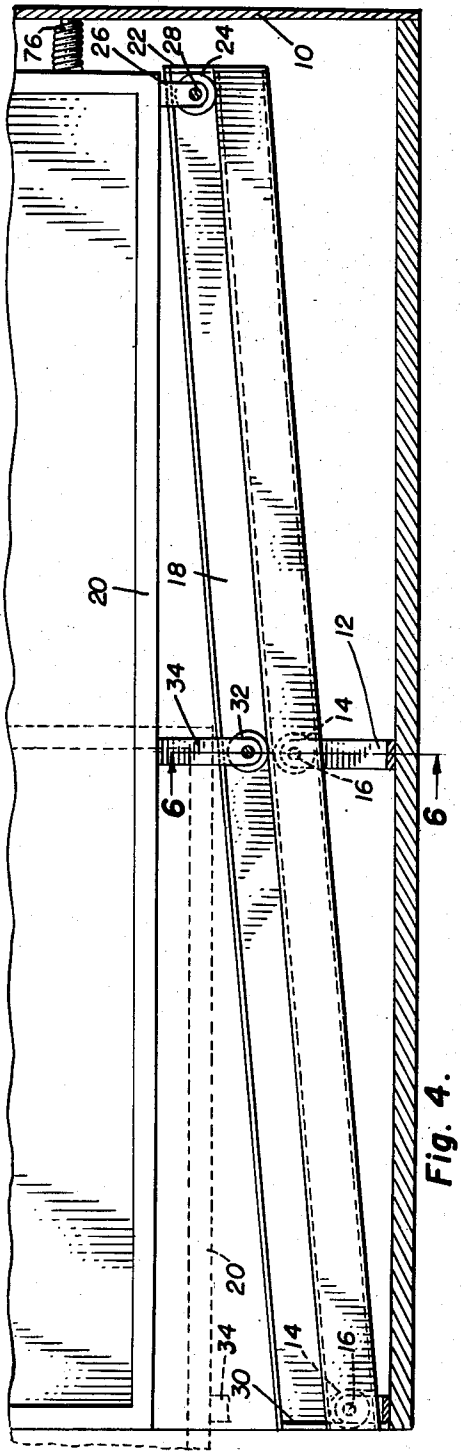


Fig. 4.

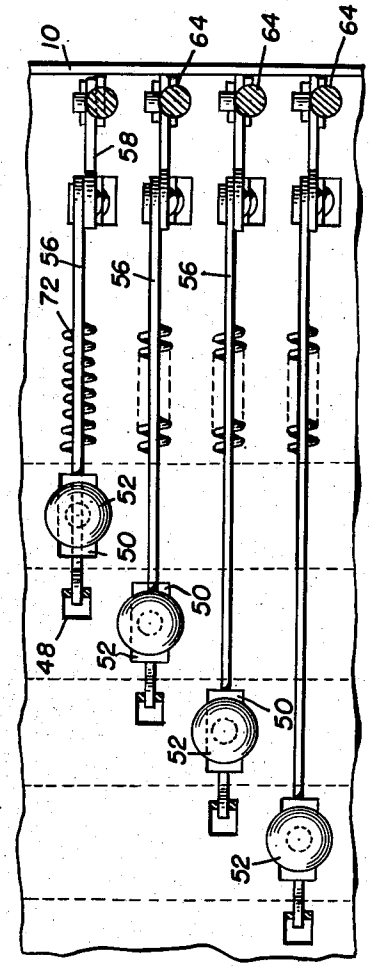


Fig. 5.

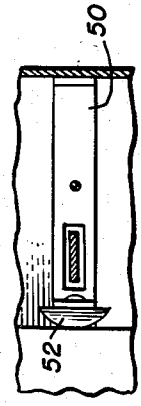


Fig. 8.

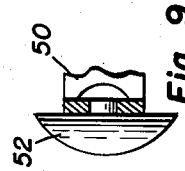


Fig. 9.

Inventor

Frank R. Schallert

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Aug. 14, 1951 F. R. SCHALLERT 2,564,283

FILING CABINET FOR MAPS

Filed Jan. 13, 1947 3 Sheets-Sheet 3

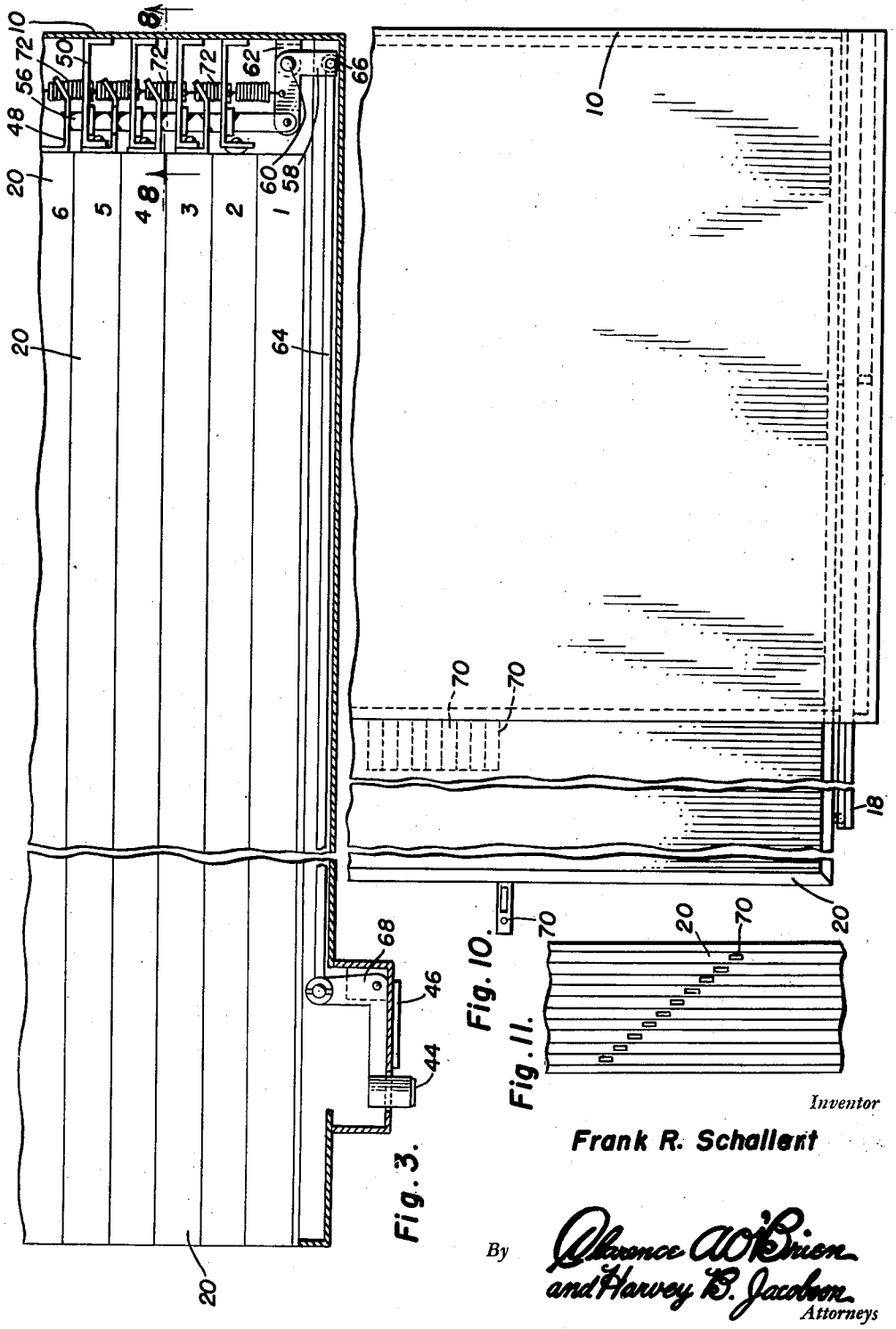


Fig. 3.

Fig. 10.

Fig. 11.

Inventor

Frank R. Schallert

By Lawrence O'Brien and Harvey B. Jacobson

Attorneys

Patented Aug. 14, 1951 2,564,283

UNITED STATES PATENT OFFICE

2,564,283

FILING CABINET FOR MAPS

Frank R. Schallert, Monrovia, Calif.

Application January 13, 1947, Serial No. 721,725

2 Claims. (Cl. 40—65)

1

This invention relates to improvements in filing cabinets and the like particularly adapted for the orderly storage of maps, charts, records and the like.

An object of this invention is to provide an improved filing cabinet which includes a plurality of panels, each panel provided with depending brackets having rollers at the lower ends thereof, the brackets and rollers constituting a panel supporting assembly which is operatively connected with a part of a track, the track being slidably located at the bottom of the cabinet and at an angle of inclination and being so arranged that after one of the frames is pulled outwardly of the cabinet a predetermined amount, the track is displaced outwardly, but is capable of being returned by a part of the panel supporting assembly when the frame is returned, together with an improved assembly for latching and releasing the frames with respect to the cabinet.

Another object of this invention is to provide an efficient, inexpensive and durable device of the character described which lends itself well to commercial manufacture.

Other objects and features of novelty shall become readily apparent to those skilled in the art, in following the description of the preferred embodiment of the instant invention illustrated in the accompanying drawings, wherein:

Figure 1 is an elevational front view of the instant invention showing the securing means in its extended position;

Figure 2 is a plan view of the invention shown in Figure 1;

Figure 3 is an enlarged sectional view taken substantially on the line 3—3 of Figure 1 and in the direction of the arrows;

Figure 4 is an enlarged sectional view showing the track and guide means used in conjunction with the instant invention and forming a portion thereof;

Figure 5 is an enlarged fragmentary detail of the bank of latches used in conjunction with the instant invention;

Figure 6 is a sectional detail view of the track and guide means used in conjunction with the instant invention and taken substantially on the line 6—6 of Figure 4 and in the direction of the arrows;

Figure 7 is a sectional detail of the frame construction taken susbtantially on the line 7—7 of Figure 1 and in the direction of the arrows;

Figure 8 is a sectional detail of construction substantially on the line 8—8 of Figure 3 and in the direction of the arrows;

2

Figure 9 is a fragmentary sectional detail view of one of the rubber bumpers used in conjunction with the instant invention;

Figure 10 is a fragmentary front view of a modified form of the instant invention, and

Figure 11 is a fragmentary end view of the present invention showing the staggered slide pole used in conjunction with the preferred embodiment illustrated herewith.

Referring now in detail to the illustrated preferred embodiments of the instant invention, like reference characters are used throughout to indicate similar elements.

This invention may be used in many environments. Included therewith are map storing, cards and sample displaying, blueprint storing and the invention might even be used in the classroom to retain a plurality of blackboards for selective use.

A receptacle or housing 10 made of any suitable material, for example, pressed fiber, metal, wood or others, is provided of general rectangular configuration.

A plurality of tracks 18 are disposed in the bottom of the receptacle 10, each track being of similar construction. As shown in Figure 6, the track 18 is composed of a pair of S-shaped members held fixed in side-by-side relationship so as to provide an upper chamber and laterally opening recesses which support the rollers 14. These rollers are mounted on small shafts 16 which are carried by the substantially U-shaped bracket 12, this bracket being disposed on the bottom of the housing 10.

A frame 20 of a plurality of similar frames is disposed above the track 18 and the frame has a supporting assembly provided on its lower edge, the assembly consisting of two units. One unit includes a depending bracket 26 having a shaft 28 carried thereby, this shaft supporting rollers 24. The rollers 24 are located in the chamber which is provided at the top edge of the track 18. The second unit comprises a depending bracket 34 which has rollers 32 at the lower end thereof carried by a suitable shaft, the rollers 32 also being located in the chamber at the upper edge of the track 18. It will be noted, from an inspection of Figure 4, that the bracket 26 is shorter than the bracket 34 so that the lower edge of the frame 20 may be held horizontal even though the track 18 is arranged at an angle with respect to a horizontal plane.

When the frame 20, disclosed in Figure 4, is extended outwardly with respect to the cabinet or receptacle 10, the rollers 32 contact a stop 30

which is disposed at the outer end of the track and in the line of travel of the rollers 32. Accordingly, when the frame 20 is extended to such position with respect to the cabinet that the rollers 32 come into contact with the stop, upon further pulling of the frame 20 outwardly of the receptacle 10, the track 18 will slide on its support rollers 14, thereby extending it with respect to the receptacle 10. In view of the location of the bracket 34, that is, intermediate the front and rear ends of the frame 20, the frame may be extended considerably before the track 18 is extended.

When returning the frame 20, it is moved inwardly until such time that the rollers 24 contact the stop 22 which is disposed at the inner end of the track 18. At this time, further inward movement of the frame 20 will return the track 18 to the position disclosed in Figure 4.

The construction of the said frames 20 are preferably as follows: a suitable metallic outline of generally rectangular configuration, 38, is adapted to receive in frictionally binding engagement therein, a suitable back member 40 preferably of pressed fiber or some other similar material. Obviously, maps, charts, etc., may be secured herein.

A suitable keyboard 42 is provided on the side of the said receptacle or housing 10 and a plurality of actuating buttons 44 are provided on said keyboard. Suitable indicating cards 46 may be provided adjacent the said buttons 44. Secured to the back end of each frame 20 is a latch 48 which has a suitable hasp provided therein. An arm 50 provided with a rubber bumper (see Figure 8) 52 at one end thereof, is secured to the said receptacle or housing 10. The function of this bumper is to provide a stop means for the said frames 20. A latch keeper 56, adapted to mate the said hasp is pivotally disposed on a pivoted right angular toggle member 58 which is secured by means of a suitable pivot pin 60 to a suitable perch 62 secured to the said housing 10. An actuating arm 64 is pivotally secured to the said toggle member at 66 and is pivoted to a second toggle member at the other end thereof as seen at 68. It is obvious from an inspection of Figure 3 that upon actuation of the button 44, the said latch keeper 56 is disengaged allowing the frame 20 to be removed by pulling tab 70 (see Figure 11). A suitable resiliently biasing means 72 is provided on said arms 50 and operatively secured to the said toggle link 58, thereby biasing the latch keeper 56 in the latch or toward the latch at all times. Any resilient biasing means may be used however, a simple coil spring 72 provides the preferred construction. The second embodiment of the instant invention is seen in Figure 10 wherein the slides, latch, guides and rails are in the horizontal position. This forms the sole distinction between the preferred embodiment and the second preferred embodiment.

In order to urge the said frames 20 from their files or closed position a suitable spring biasing means 76 is operatively secured to the said housing 10 and is adapted to abut the said frame 20, compressing the said spring 76 thereby storing potential energy in said spring. Upon the release of the said latch keeper 56 the potential energy stored in the said spring 76 is permitted to spend itself by urging said frame 20 outwardly.

There has been described but preferred embodiments of the instant invention however, it is apparent to those skilled in the art that various changes including omissions and additions may be made herein without departing from the spirit of the invention. Accordingly, limitation is sought only in accordance with the scope of the following claims.

Having thus described the instant invention, what is claimed as novel and improved is as follows:

1. A filing cabinet comprising a receptacle which includes a back, bottom and side walls, a plurality of tracks carried by said bottom and inclined toward said back wall, said receptacle having an open front and said tracks terminating at said open front and adjacent to said bottom, stops secured to the ends of said tracks, a plurality of vertically disposed frames mounted in said receptacle, a first of said frames having a supporting assembly at its lower edge, said supporting assembly including first rollers located in one of said tracks and second rollers located within and guided by said one of said tracks, said second rollers being located at the rear portion of said first frame, said first rollers being located intermediate the front and rear ends of said first frame, said first rollers being vertically spaced from said first frame a sufficient distance to maintain the bottom of said first frame in the horizontal position, said rollers being arranged to contact said stops to limit the movement of said first frame, a plurality of springs attached to the back of said receptacle and contacting said frames, said springs being retained under a compression load by said frames when said frames are disposed within said receptacle, latch means mounted in said receptacle for releasing each of said frames individually, and said frames being urged from said receptacle gravitationally and resiliently by means of said springs.

2. The construction of claim 1 and a plurality of bumpers attached to said receptacle back and contacting said frames to limit the travel of said frames inwardly of said receptacle, brackets secured to the bottom of said receptacle and having rollers carried thereby, and the last-mentioned rollers supporting said tracks.

FRANK R. SCHALLERT.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
883,069	Yawman	Mar. 24, 1908
997,965	Cobb	July 18, 1911
1,990,020	Blackwood	Feb. 5, 1935