April 24, 1956 F. ROBERTSON 2,742,675

MOBILE WALL UNIT

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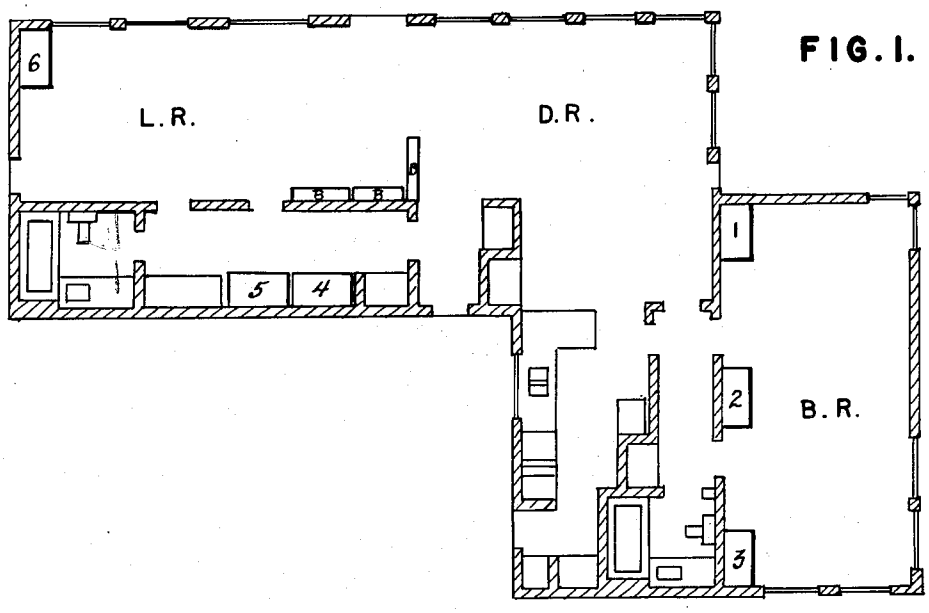



FIG. 1.

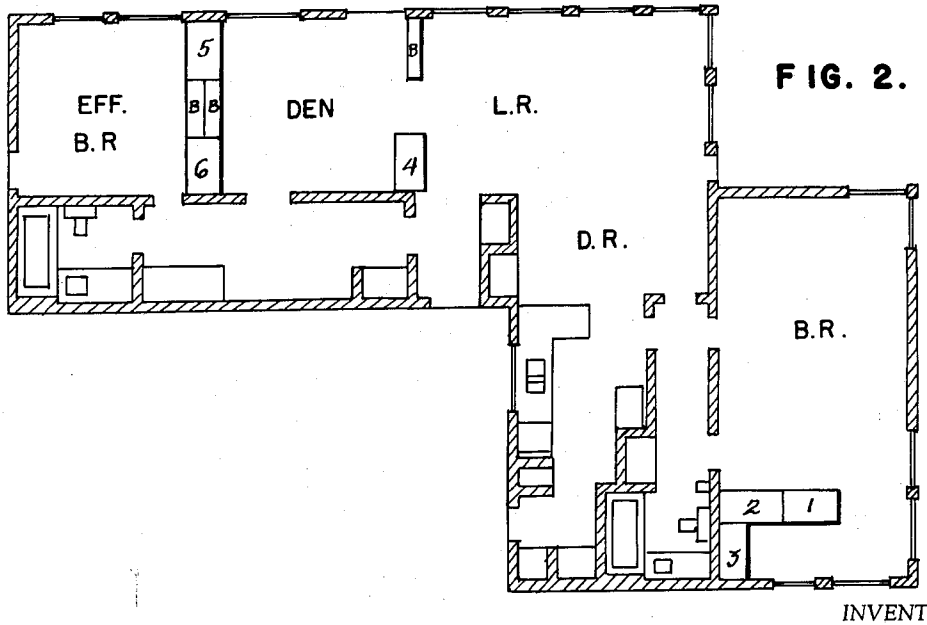



FIG. 2.

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MOBILE WALL UNIT

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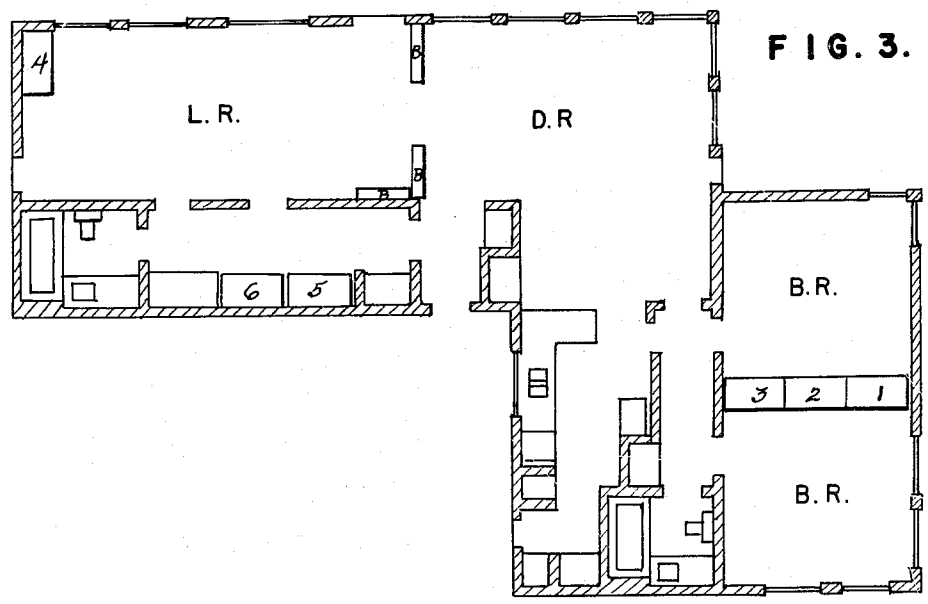



FIG. 3.

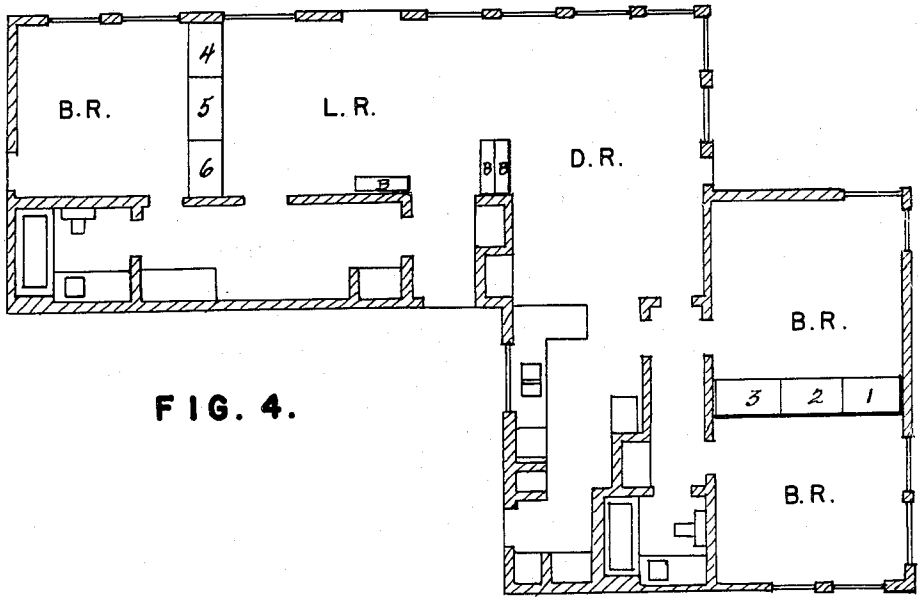



FIG. 4.

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MOBILE WALL UNIT

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FIG. 5.

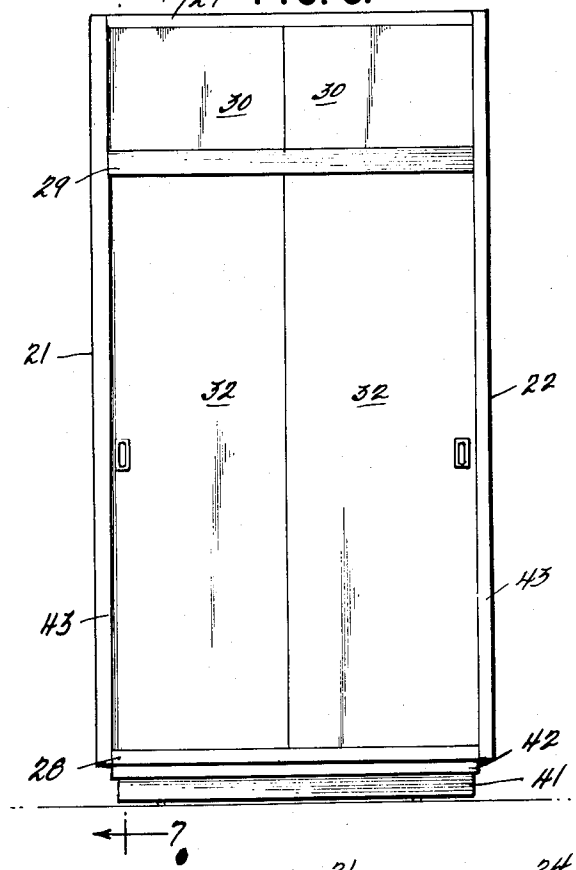



FIG. 6

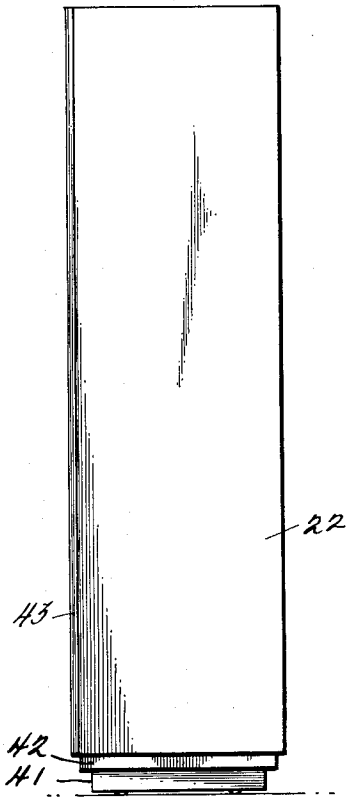
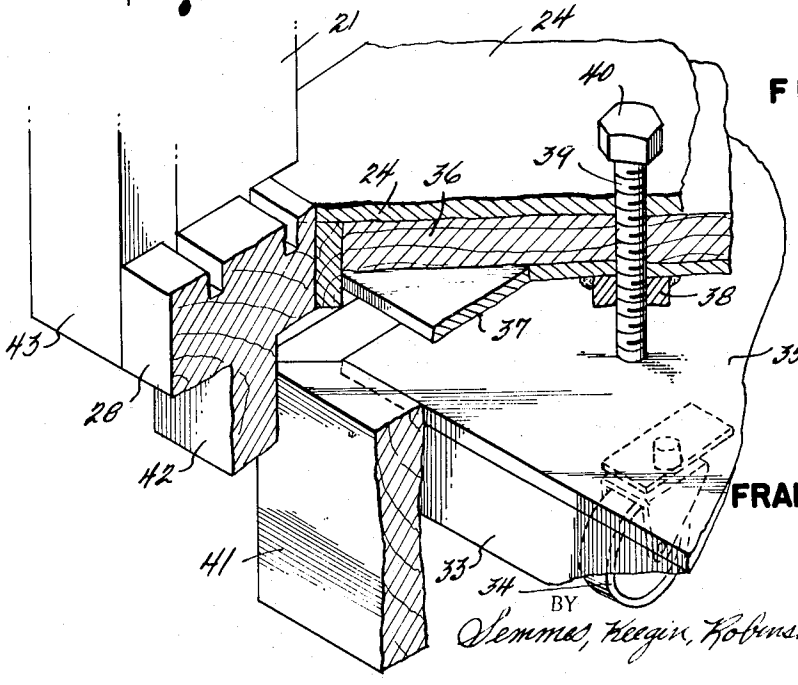



FIG. 12.




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FIG. 7.

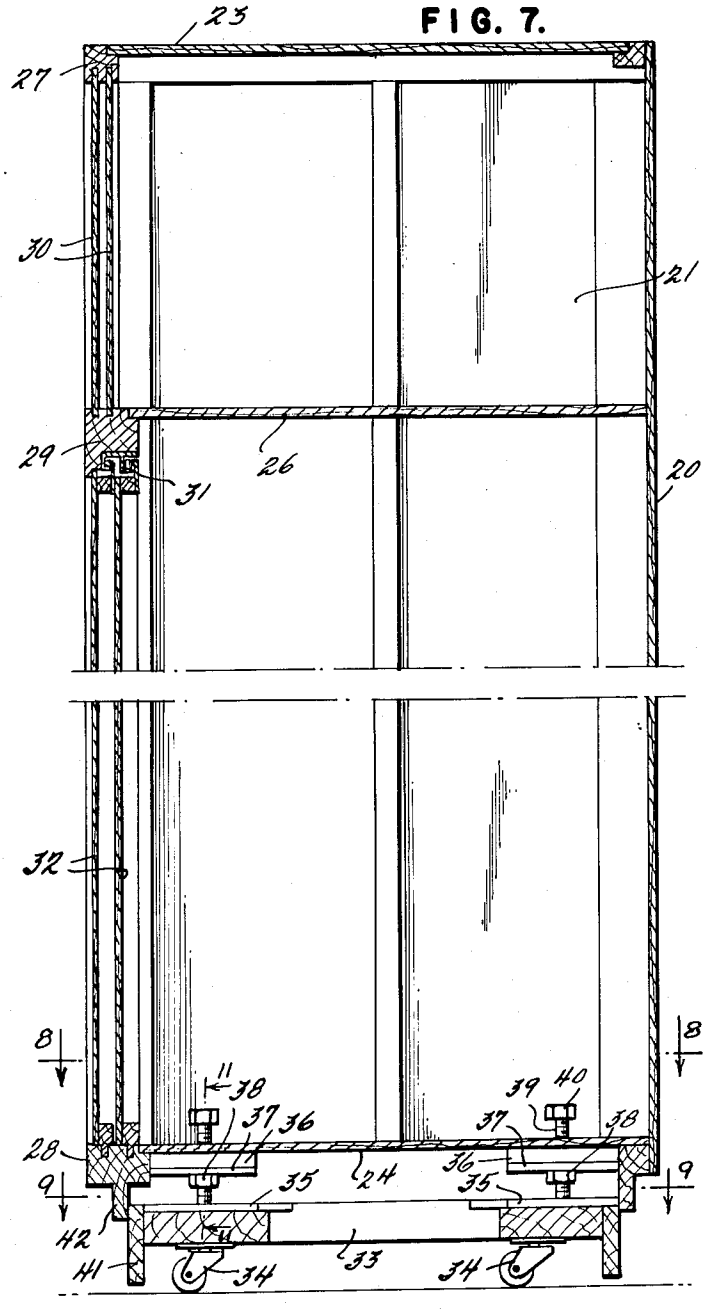



FIG. 11.

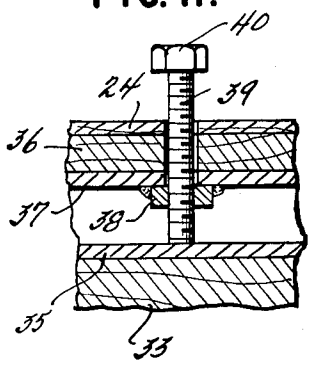
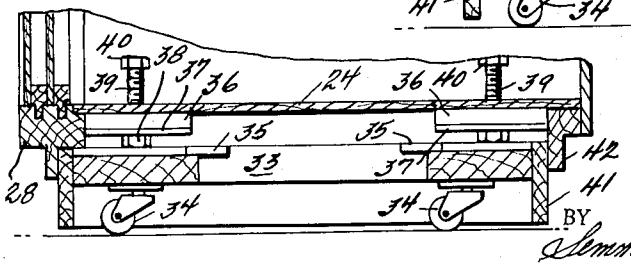



FIG. 10.




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FIG. 8.

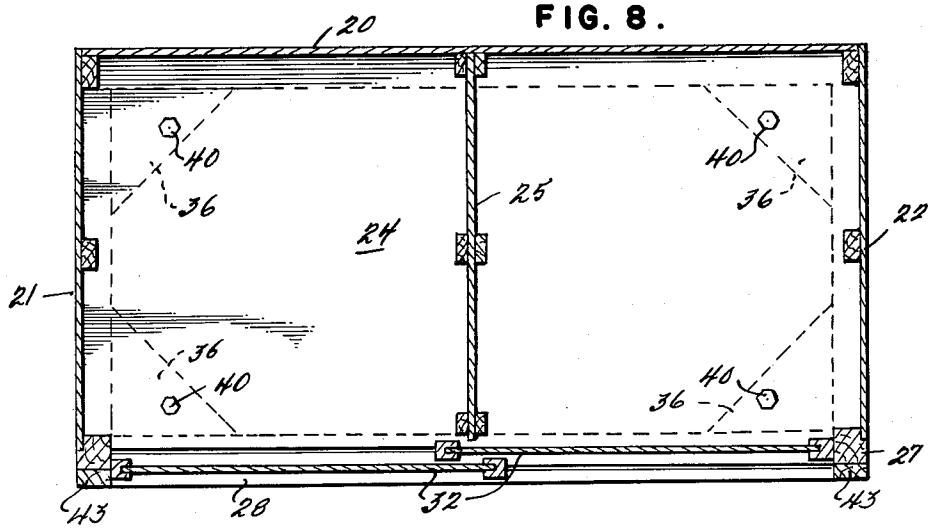
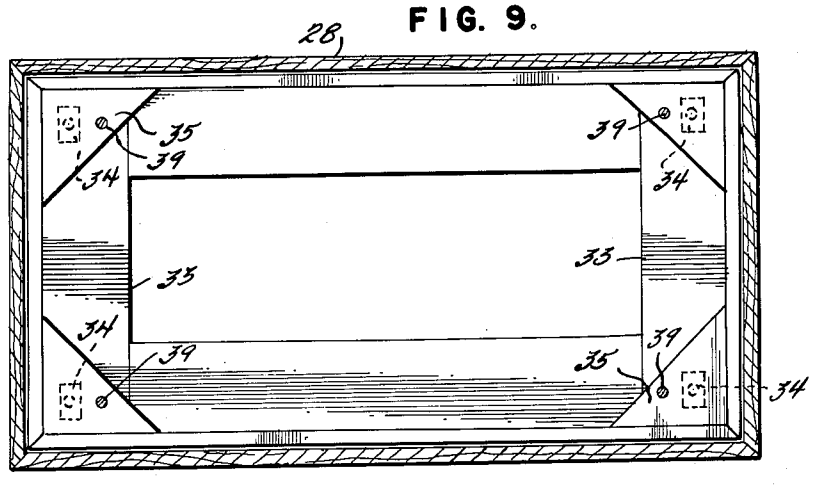



FIG. 9.




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United States Patent Office

2,742,675

Patented Apr. 24, 1956



2,742,675

# MOBILE WALL UNIT

Frank Robertson, San Antonio, Tex.

Application September 30, 1952, Serial No. 312,257

4 Claims. (Cl. 20—4)

This invention relates to mobile wall or partition units and more particularly to units which can be moved about and arranged to divide a floor space into different numbers and arrangements of rooms as and when desired.

It has been and still is customary to build houses with rooms of permanent size and in permanent arrangement by means of permanently installed walls or partitions. The room arrangement can be changed only by tearing down the permanent walls or partitions and then rebuilding new walls or partitions at the new places which will give the new arrangement of rooms desired. This, of course, is a very expensive and time-consuming procedure and is very annoying to people who live in the house while the alterations are being made. The cost is often prohibitive to people of moderate means.

On the other hand, it is frequently desired and often imperative that the room arrangement in a house be changed either by changing the number of rooms or changing the lay-out of the rooms. For instance, in the twenty-five year history of the average family with children, the home first may have few rooms of quite large size. As children come along, one or more of the larger rooms need to be broken into smaller rooms, each being for the individual child, boy or girl. Then when the children are grown and are no longer occupants of the home, it is frequently desired to convert back to more spacious living quarters or possibly to change the arrangement to rooms suitable for renting, such, for instance, as would be known as "efficiency" apartments—this latter feature lending itself admirably to retired couples being more able to meet long time installment payment plans now being encouraged by agencies attempting more housing in America, and thus guaranteeing greater security for aged couples.

Accordingly, a principal object of this invention is to provide non-permanently installable walls or partitions for dividing floor space in houses into re-arrangeable room lay-outs both as to size of rooms and number of rooms.

Another object of this invention is to provide non-permanently installable wall or partition units which may be juxtaposed with other like or different wall or partition units to form a non-permanently installed wall or partition for dividing floor space in houses into re-arrangeable room lay-outs both as to size of rooms and number of rooms.

Another object of this invention is to provide non-permanently installable walls, partitions, wall units and partition units of the character stated and which are so constructed as to be easily movable when desired to different places and into different unit arrangements in the floor space and also when desired to be brought into firm and rigid contact against the ceiling over the floor space.

Another object of this invention is to provide a mobile wall or partition unit adapted to be associated with other units to make a wall or partition of a desired length and which unit is equipped with casters rendering the unit



easily mobile without requiring a person to use much strength or force.

Another object of this invention is to provide simple and easily operable jack means for raising and lowering a cabinet relatively to a base member therefor to raise and lower the cabinet relatively to a ceiling above the cabinet.

A further object of this invention is to provide a mobile wall unit of the character and having the equipment stated and which is simple and inexpensive in construction, sturdy and durable, and readily and easily movable from place to place and easily anchorable in firm and steady contact with a ceiling as desired.

Other objects of this invention will be in part obvious and in part pointed out hereinafter.

In accordance with the invention disclosed in my copending application filed August 11, 1952, Serial No. 303,720, now abandoned, I provide a plurality of similar wall or partition units which may be moved about easily so that a given arrangement of floor space may be subdivided into various numbers and sizes of rooms and arrangements of rooms. In order to make this economically feasible, the invention consists of a movable wall or partition section so constructed that the man or woman of the house can move it around almost as easily as a piece of furniture, thereby eliminating the use of skilled labor, for instance, carpenters, painters and other workmen. The units are provided with casters and with adjustable bases and tops, as well as with adjustable slip moulds whereby the units can be moved about and rearranged to place the wall or partition where it is desired to be without marring or mutilating the walls, ceilings or floors or even having any attachment thereto. At the same time the units are so constructed that when they have been moved to the desired place they can be expanded vertically so that they will have firm and steady contact with the floor and also with the ceiling and the slip moulds can be adjusted to cover any space that might be present between two adjacent units. Preferably the mobile wall units are in the form of cabinets having such depth and width as desired for ample storage space. With this construction it is possible with a certain number of units to make extensive re-arrangements in the number and sizes and arrangements of rooms without requiring any additional units. For instance, I have found that with six units and three bookcase sections, it is possible in identically the same space to make at least 10 different arrangements providing one bedroom, at least 10 different arrangements providing two bedrooms, 10 different arrangements providing three bedrooms, 10 different arrangements providing four bedrooms, 10 different arrangements for a two family unit, and 10 different arrangements providing special use or efficiency rooms.

The present invention relates to a mobile wall or partition unit similar to the unit disclosed in my said copending application except that the mechanism for raising and lowering the cabinet is specifically different from the mechanism for raising and lowering the cabinet disclosed in said prior application and the casters are not fixed to the cabinet as in the specific arrangement shown in said prior application but rest on the floor at all times and at the same time are confined beneath the cabinet.

The invention accordingly consists in the features of construction, combinations of elements and arrangements of parts which will be more fully described hereinafter and the scope of the application of which will be pointed out in the claims that follow.

In order that a clearer understanding of this invention may be had, attention is hereby directed to the accompanying drawings forming a part of this application and

illustrating certain possible embodiments of this invention and in which:

Figure 1 is a lay-out of a floor arrangement providing one bedroom and employing six of the units embodying this invention and three bookcase sections;

Figure 2 is a lay-out of a different floor arrangement employing the six mobile wall or partition units and three bookcase sections and providing one bedroom, a den and a so-called efficiency apartment;

Figures 3 and 4 are similar views but showing two different arrangements providing two and three bedrooms respectively;

Figure 5 is a front elevation of a mobile cabinet unit embodying this invention;

Figure 6 is a side elevation thereof;

Figure 7 is a sectional view thereof and is taken on the line 7—7 of Figure 5 and showing the cabinet raised.

Figure 8 is a horizontal sectional view through the lower part of the cabinet and is taken on the line 8—8 of Figure 7;

Figure 9 is a horizontal sectional view through the base of the unit and is taken on the line 9—9 of Figure 7;

Figure 10 is a view of the bottom portion of the unit similar to the showing of the bottom part of the unit in Figure 7 but showing the cabinet lowered on the casters;

Figure 11 is a sectional view through one of the jack lifting devices and is taken on the line 11—11 of Figure 7, only fragments of the adjacent parts being shown; and

Figure 12 is a perspective view partly in section of the construction at a lower corner of the unit.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Referring to the drawings the mobile wall unit shown for illustration of a possible embodiment of the present invention includes a cabinet having a back panel **20**, side panels **21** and **22**, a top panel **23**, a bottom panel **24**, a central vertical panel **25**, and if desired central horizontal panels **26** dividing the cabinet into upper and lower compartments on each side of the center panel **25**. At the front of the cabinet a top frame member **27** extends across the top, a sill **28** extends across the bottom and an intermediate door header **29** extends across the front. Sliding doors **30** for the upper compartments are slidably received between the top frame member **27** and the header **29**, and the under side of the header **29** has tracks **31** from which the sliding doors **32** for the lower compartments are slidably suspended. It is to be understood, of course, that the styling of the interior of the cabinet as to compartments, shelving, drawers, hooks, hangers, etc. and their arrangement may be varied as a matter of choice and any suitable type of doors may be used.

Beneath this cabinet is a dolly comprising a rectangular frame **33** provided with casters **34**, and on its top at each corner having a horizontal bearing plate **35**. Secured to the underside of bottom panel **24** of the cabinet are backing pieces **36** and to the underside of these backing pieces **36** are secured screw plates **37** each having a nut **38** welded to the underside. Jack bolts **39** extend through the bottom panel **24** of the cabinet, the backing pieces **36**, the screw plates **37** and nuts **38** and have their lower ends bearing down on the dolly bearing plates **35**. The bolts **39** have heads **40** exposed above the upper face of the bottom panel **24** and are accessible so that the bolts **39** may be screwed in one direction to elevate the cabinet upwardly from the dolly and to the ceiling above the cabinet and may be screwed in the other direction to lower the cabinet toward the dolly and from the ceiling. In the drawings, Fig. 7 shows the cabinet in elevated position and Fig. 10 shows the cabinet in lowered position.

The dolly is provided with a finish frame **41** and the cabinet carries around its lower edges an apron **42** which overlaps the outside of the finish frame **41** and masks the space between the top of the dolly and the bottom panel **24** of the cabinet. The finish frame **41** and apron **42** not only make the appearance of the lower part of the unit pleasing in appearance, but also serve to confine the dolly in place beneath the cabinet and against inadvertent displacement therefrom. The cabinet may also have facing trim **43**.

To install the mobile wall unit at the location where it is desired to be, the bolts **39** are adjusted so that the cabinet is lowered on the dolly and out of contact with the ceiling. The unit then can be rolled on its casters to the desired location without interfering contact with the ceiling of the room. When the cabinet has been rolled to the desired location the bolts **39** are turned to raise the cabinet upwardly from the dolly and into firm contact with the ceiling of the room. Thus, it is apparent that with the mobile wall unit of the character described a single unit or a plurality of units may be moved about quickly and easily from one location to another with very little effort, and that a plurality of such units may be easily assembled at desired locations to establish different lay-outs of rooms and sizes of rooms from the same floor space, the assembled units functioning in the nature of mobile walls or partitions while at the same time providing storage facilities. When the units have been moved to the desired locations and the cabinets of the units elevated by means of the jack bolts **39** into firm contact against the ceiling the units are restrained from becoming displaced until the jack bolts have been turned to lower the cabinets from the ceiling. As stated in my prior copending application with regard to the flexibility of room arrangements and sizes of rooms made possible with mobile wall units of the character described, using six of these mobile wall units and three book case sections, the identical floor space may be divided into at least 60 different room arrangements providing one, two, three or four bedrooms as desired or, if desired, providing rooms for special uses or so-called efficiency apartments.

Figs. 1 to 4 illustrate a few of these possible room arrangements. In these arrangements the same six mobile wall units are used and the same three book case sections. In these figures the mobile wall units are designated by the numerals **1**, **2**, **3**, **4**, **5** and **6** respectively, and the book case sections are designated by the letter B. Fig. 1 shows a floor arrangement providing one bedroom and a large space suitable for living room and dining room. In this arrangement the six mobile wall units are placed against the walls for convenient use for storage purposes, and are not arranged to partition off any particular space.

In Fig. 2, two of the mobile wall units and two of the book case sections have been moved and brought together to divide what was the living room-dining room space in Fig. 1 into two separate rooms, one room being a den and the other room being a room suitable as an efficiency apartment. The three mobile wall units that were shown in the bedroom of Fig. 1 have been re-arranged in Fig. 2 to provide an alcove in the same bedroom space.

In Fig. 3, three of the mobile wall units have been brought together to divide the bedroom space shown in Fig. 1 into two separate bedrooms thus giving a floor arrangement having two bedrooms, a large living room and a large dining room, with two book case sections therebetween.

In Fig. 4, three of the mobile wall units have been brought together in what was the large living room-dining room space in Fig. 1 to form a separate bedroom from a part of that space. By retaining the two bedrooms shown in Fig. 3, this arrangement of Fig. 4 provides three bedrooms, a living room and a dining room.

From the above it is apparent, by means of these mobile wall units, a given floor space can be divided to make a very great variety of room arrangements not only as to the number of rooms but also as to the size of the rooms. At the same time, because the wall units may be moved about readily and easily and without much effort, the room arrangements can be changed easily and quickly whenever desired either to divide up a space into a plurality of smaller rooms, or to make larger rooms

from a plurality of smaller rooms. Further, when in place the units may be anchored against the ceiling and released from the ceiling readily and easily and without much effort. It is also apparent that the construction of the mobile wall units as disclosed is simple and attractive in appearance, affords copious storage space and that the elevating and lowering mechanism involved is simple, sturdy, durable and easy to manipulate.

As many changes could be made in the above construction, and as many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is understood that all matter contained in the above description or shown in the accompanying drawings be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A mobile wall unit of the character described, including a cabinet section having a bottom panel, backing pieces secured to said panel, a plurality of spaced nut members secured non-rotatively to said backing pieces, a dolly section beneath the cabinet section, bearing plates on said dolly section and jack bolts extending through said panel, backing pieces and each of said nuts and bearing downwardly on said dolly section bearing plates, said jack bolts being turnable in said nuts to selectively raise the cabinet section away from the dolly section and into firm contact against a ceiling above the unit and to lower the cabinet section toward the dolly section and away from the ceiling, said jack bolts being severally operable to level said cabinet section.

2. A mobile wall unit as set forth in claim 1 and in which said jack bolts have heads exposed and accessible for turning above the bottom panel of the cabinet section.

3. A mobile wall unit as set forth in claim 1 and including mobile floor engaging means on said dolly section adapted for constant floor engagement independent of the relative positions of said cabinet section and said dolly.



4. A mobile wall unit of the character described, including a cabinet section, a dolly section beneath the cabinet section, jack mechanism carried by the cabinet section and engaging said dolly section and operable selectively to raise the entire cabinet section away from the dolly section and into firm contact against a ceiling above the unit, and to lower the cabinet section toward the dolly section and away from the ceiling, said jack mechanism being selectively operable to level said cabinet section, mobile floor engaging means on said dolly section adapted for constant floor engagement independent of the relative positions of said cabinet section and said dolly and operable for moving the wall unit to different locations, and an apron extending downwardly from the bottom of the cabinet section and surrounding said dolly section whereby the dolly section is confined in place beneath the cabinet section and the space between the dolly section and the cabinet section is concealed.

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