Sept. 7, 1948. S. C. SCHONFIELD 2,448,836

COMBINED MIRROR AND CABINET

Filed May 11, 1945 2 Sheets-Sheet 1

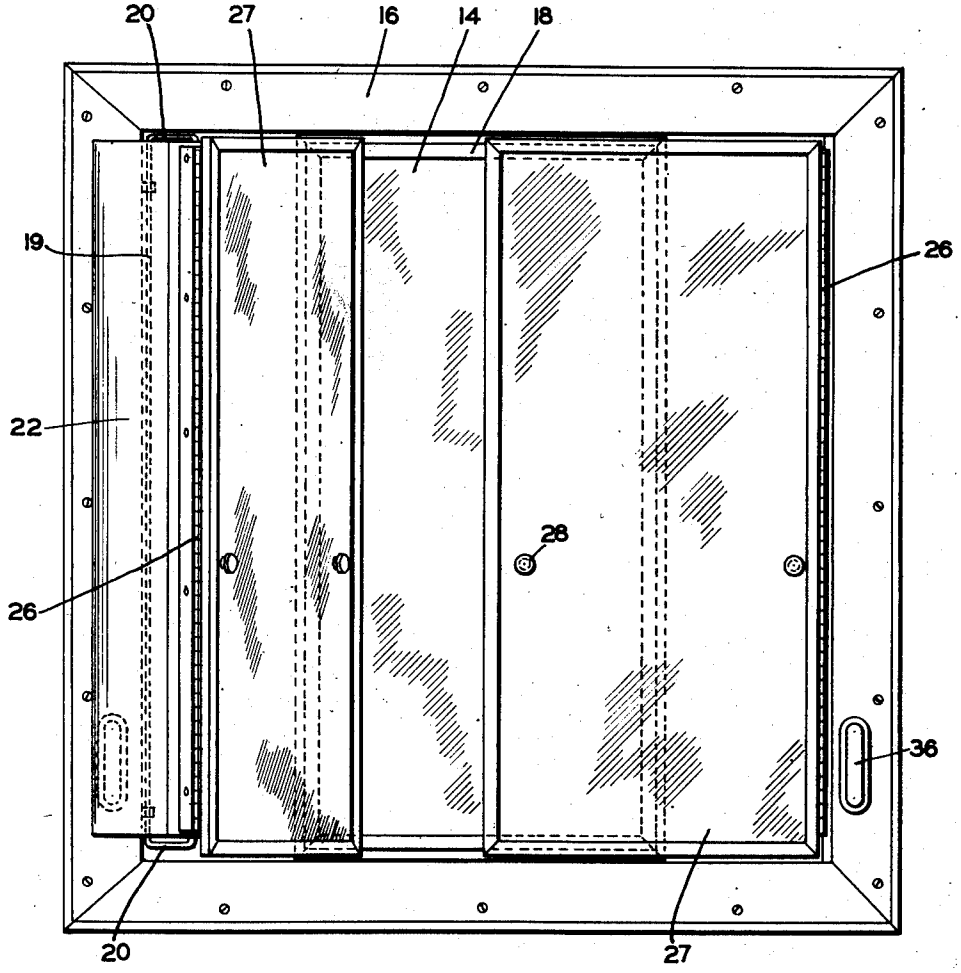


Fig. 1.

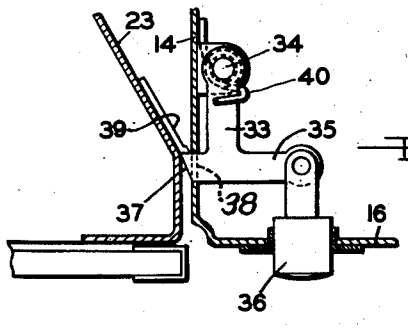


Fig. 5.

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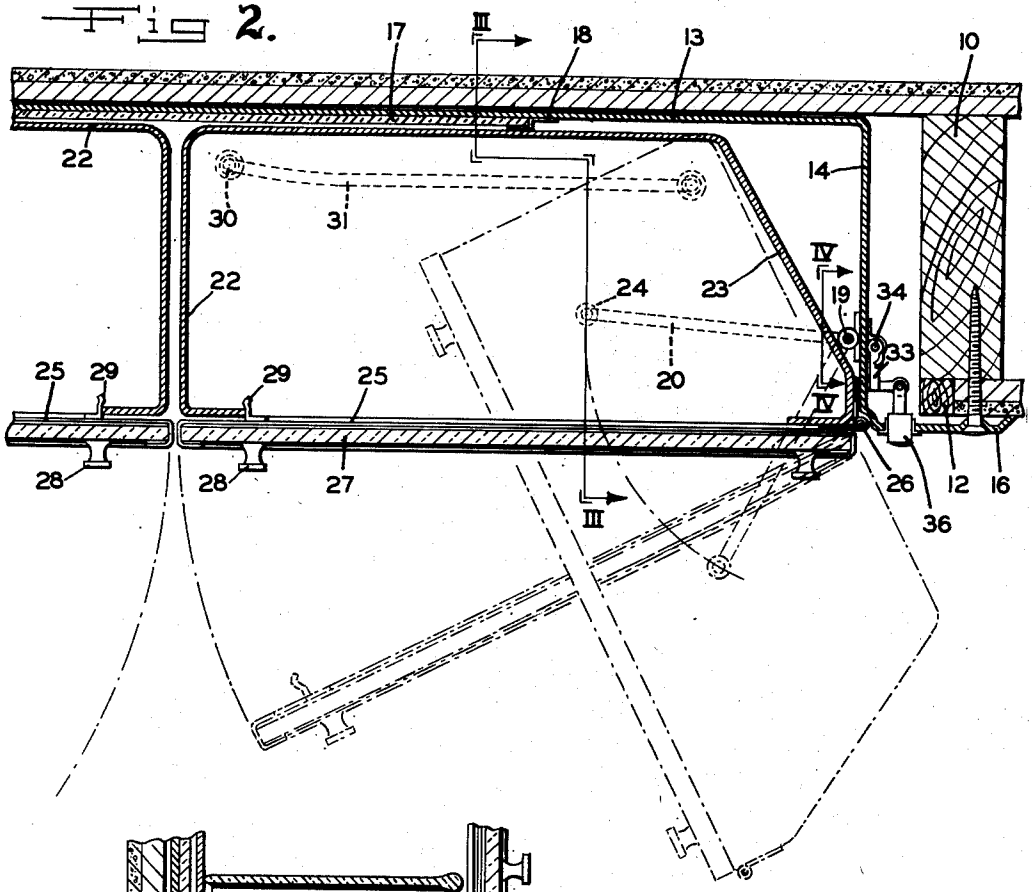
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Fig. 2.



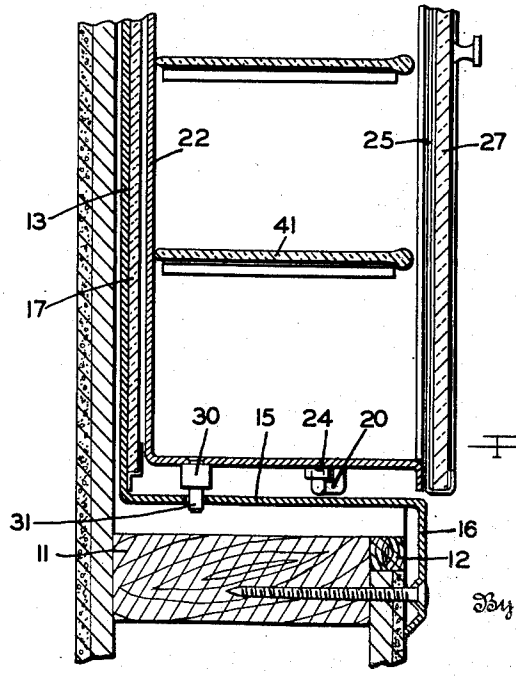


Fig. 3.

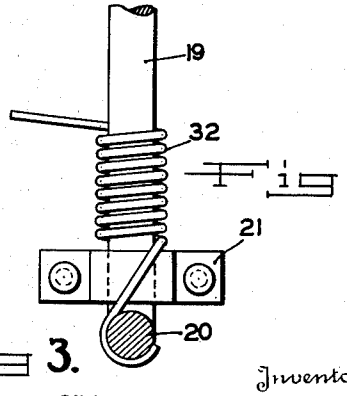


Fig. 4.

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COMBINED MIRROR AND CABINET

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9 Claims. (Cl. 312—112)

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This invention relates to a combined mirror and cabinet structure and more particularly to a unitary assembly which may be secured in or on a wall of a building structure and which combines article storage and mirror facilities in an economical and expeditious manner. Assemblies constructed according to this invention may be employed as medicine cabinets in household bathrooms and lavatories, as utility cabinets generally, and as article or clothing storage cabinets in halls, bedrooms, etc., although it should be understood that suitable modifications will be utilized in these respective categories of uses. The primary object of the invention is the provision of a cabinet structure which is unitary and self-contained in nature whereby the same may be distributed and marketed as a "package" item but which nevertheless incorporates as an inherent part of the structure a plurality of adjustable mirrors which may be moved from flush unobstructive positions to angularly related positions normally associated with "triple" mirrors.

A further object of the invention is the provision of a combined cabinet and mirror structure having the attributes mentioned above which is simple in design and economical to construct while possessing a substantially higher degree of utility than heretofore provided in structures proposed for comparable functions. Another object of the invention involves such design and arrangement of the component parts of the structure that the same may be folded into a minimum space whereby the structure may be built into the conventional stud building wall or, alternatively, if applied to the outer surface of an existing wall will require a minimum of projection. A still further object of the invention is the provision, in a structure of the general character outline, of improved arrangements for movably mounting or supporting certain of the elements of the assembly and of novel and improved arrangements for manipulating the assembly.

The above and other objects and advantages of the invention will become apparent upon consideration of the following detailed specification and the accompanying drawing wherein there is specifically disclosed a representative embodiment of the invention which is suitable for use as a combined medicine cabinet and mirror in a household bathroom. As such, this embodiment has detailed design features enabling the structure to be built into a recess in the wall of the room but it should be understood that this illustrated embodiment is exemplary only and not limitive of the invention.

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In the drawing

Figure 1 is a front elevation of a combined mirror and cabinet structure according to the principles of the invention;

Figure 2 is a horizontal section through the cabinet of Figure 1;

Figure 3 is a fragmentary vertical section through the cabinet of Figure 1, the view being taken along the line III—III, of Figure 2;

Figure 4 is a fragmentary view, on an enlarged scale, of a detail of the cabinet structure of Figure 1; and

Figure 5 is a detail view, on an enlarged scale, of a latching arrangement utilized in the structure of Figure 1.

Referring first to Figures 2 and 3, which show the recess in the building wall in which the illustrated embodiment of the invention may be installed, reference numeral 10 designates a conventional stud while reference numeral 11 designates a plate of the frame structure of the wall. In accordance with usual practice a plaster stop 12 surrounds the opening of the recess provided by the studs 10 and plate 11, it being understood that a stud extends along either side of the recess while a plate is provided both at the top and bottom of the recess.

In accordance with the illustrated embodiment, I may provide an open-faced sheet-metal housing having a rear wall 13, side walls 14, top and bottom walls 15, and a flange 16 extending outwardly of the front edges of the walls 14 and 15. Flange 16 overlies the plaster or other surface finish of the walls of the room and is secured to the studs 10 and plates 11 by means of the screws shown. In a manner now to be described all the parts of the assembly are carried by the open-faced housing thus described so that simply by securing the housing in the recess of the building wall the installation of the assembly is accomplished. If, as suggested above, the cabinet structure of the invention is to be hung on the outer surface of an existing wall, suitable and obvious changes would be made in the design of this housing as will be understood.

Secured to the rear wall 13 of the housing is a mirror 17 preferably of the silvered plate glass type and a pre-formed metal strip 18 may be used to frame the mirror and to hold the same against the front surface of the wall 13. Journaled on the inner surface of each of the side walls 14 is a rod 19 having a laterally extending arm 20 projecting from each of its top and bottom ends. As indicated, the rods 19 are swiveled in the mounts 21, at least two of which are pro-

vided on each wall 14, and thus revolve about vertical axes. Arms 20 support the inner or shelf housings now to be described and in a manner which will also be described.

Normally housed within the walls 14 in side by side relation is a pair of open-faced inner or shelf housings 22 each having rear, side, and top and bottom walls. As in the case of the housing first described, the housings 22 are preferably formed of sheet metal and may conveniently be formed by stamping and drawing operations as will be understood. For a purpose to be later described the rear outer corner of each of the housings 22 is relieved as shown at 23. One of the arms 20 underlies each of the bottom walls of the two housings 22 and has its outer free end pivotally connected thereto as shown at 24. Similarly, arm 20 overlies the top wall of each of the housings 22 and is pivotally connected thereto, it being understood that the upper and lower arms 20 are parallel with each other. Thus, the housings 22 are pivotally supported on the arms 20 of the rods 19, the housings being cradled between the upper and lower arms 20 so that upon outward swinging movement of these arms the housings 22 will be moved forwardly and outwardly from a position shown in full lines in Figure 2 to a position indicated in dotted lines in this figure.

Each of the housings 22 is provided with a door 25 swingably mounted on the outer front edges of the housings 22 preferably by means of the piano hinges 26. A mirror 27 is attached to the front surface of each of the doors 25 and these mirrors are of such dimensions that when the doors 25 are closed and the housings 22 moved back into the retracted positions the surfaces of the mirrors 27 lie in a common plane substantially flush with the plane of the wall. Doors 25 have forwardly extending knobs 28 which facilitate the opening and closing of the doors and spring catches 29 are employed to frictionally retain the doors in closed position. To prevent the housings 22 from moving outwardly when the doors 25 are opened by thrusts applied to the knobs 28 and to guide the movement of the inner adjacent edges of the housings 22 upon outward swinging movement of these housings I provide a guide pin 30 extending downwardly from the bottom wall of the housing 22. Guide pin 30 is adapted to slide transversely in a slot 31 formed in the bottom wall 15 of the principal or outer housing. As indicated in Figure 2, the slot 31 extends generally parallel with the rear wall 13 of the outer housing so that as the arms 20 swing outwardly to move the housing 22 outwardly the inner rear edge of the housing 22 is held closely adjacent the rear wall 12. This is desirable since, when the mirror 27 is swung outwardly into angular relation with the mirror 17, the rear or inner edge of the mirror 27 should be fairly close to the mirror 17 to enable maximum use to be made of the "triple" mirror provided.

The structure described above may be employed, of course, as a conventional medicine cabinet with a mirrored door but being, however, double compartmented and having two doors. It is desirable to facilitate the movement of the housings 22 and the mirrors carried thereby to outward inclined positions whereby the single plane mirrors of the retracted assembly may be expeditiously and quickly changed into a "triple" mirror with its attendant advantages. For this purpose, I provide spring biasing means in the form of the torsion springs 32 to normally urge the arms 20 to outward positions. Referring

to Figure 4, springs 32 are encircled about the rods 19 and have ends lying against the side walls 14 and opposite ends entrained about adjacent portions of the lowermost of the arms 20, note Figure 5. To restrain the action of the springs 32 I provide a pair of releasable latches, one for each of the housings 22, each consisting of a T-shaped member 33 pivoted to the outer surface of the wall 14 as at 34. Lever 33 has one leg 35 pivotally engaged by a push-button 36 which extends out through an opening formed in the flange 16 and an opposing leg 37 extending through a slot 38 in the wall 14 into engagement with a pawl 39 formed on the housing 22. A spring 40 biases the latch 37 into operative engagement with the pawl 39 but upon inward movement of the button 36 the lever 33 is rocked counter-clockwise about pivot 34 (as viewed in Figure 5) thereby withdrawing latch 37 and allowing spring 32 to move the outer side edge of the housing 22 outwardly in the manner explained above. The relieved or angular side surface 23 of the housing 22 enables the housing 22 to clear the corner of the outer housing which is adjacent the button 36. It should be observed that the pawl 39 is of ratchet form so that upon retraction of the housing 22 the latch 37 will automatically again engage the pawl 39 to retain the housing in retracted position.

The housings 22 may, in certain embodiments of the invention, be provided with shelves and such are shown at 41 in Figure 3. It should be understood, however, that the interiors of the housings 22 may be arranged in a variety of ways—depending on the use to which the cabinet structure is to be put and while I have referred herein to "shelf housings" the term should be taken as generic or illustrative only.

Reference should therefore be had to the appended claims in determining the scope of the invention.

What I claim is:

1. A combined mirror and cabinet structure comprising an open-faced housing adapted to be secured in a recess in a building wall, a mirror secured to the rear wall of said housing, a pair of open-faced shelf housings each having an inner side wall and an outer side wall and movably mounted in said housing in side by side relation, each of said shelf housings supporting at least one shelf and having a mirrored closure door pivotally connected thereto and operative when closed to conceal the shelf or shelves therein, and means swingably and slidably supporting said shelf housings in said first mentioned housing for movement in a horizontal plane in such manner that the adjacent inner side walls of said shelf housings move away from each other in said first mentioned housing while the outer side walls of said shelf housings move outwardly of said first mentioned housing.

2. A combined mirror and cabinet structure comprising an open-faced housing adapted to be secured in a recess in a building wall, a mirror on the rear wall of said housing, a pair of open-faced shelf housings movably mounted in said first mentioned housing in side by side relation, each of said shelf housings having a mirrored door pivotally connected thereto, a pair of arms swingably mounted on the opposite side edges of said first mentioned housing for movement about vertical axes, the free ends of said arms being pivotally connected to said shelf housings for movably supporting the same, and means to guide the inner adjacent side edges of said shelf

housings away from each other along the rear wall of said first mentioned housing during outward movement of the outer side edges of said shelf housings.

3. A combined mirror and cabinet structure comprising an open-faced housing, a mirror on the rear wall of said housing, a pair of open-faced shelf housings each having an inner side wall and an outer side wall and movably mounted in said first mentioned housing in side by side relation, each of said shelf housings having a mirrored door pivotally connected thereto, means mounting said shelf housings in said first mentioned housing comprising means to movably support said shelf housings in such manner that the outer side walls thereof move outwardly of said first mentioned housing while the inner side walls thereof move apart within said first mentioned housing.

4. Structure according to claim 3 further including biasing means tending to move said outer walls of said shelf housings outwardly of said first mentioned housing, and latch means having manually engageable operating means accessible from outside said first mentioned housing to restrain the action of said biasing means.

5. Structure according to claim 3 further characterized in that said mounting means comprises a pair of yokes swingably mounted on opposite sides of said first mentioned housing and each having arms pivotally connected to the top and bottom of adjacent shelf housings.

6. A combined mirror and cabinet structure comprising in combination an open-faced housing having a mirror attached to its rear wall, a shelf housing mounted in said first mentioned housing and having a front door with a mirror thereon, and means mounting said shelf housing in said first mentioned housing for sliding and angular movement in a horizontal plane whereby the face of the mirror on said door may move from a position in front of and generally parallel to said first mentioned mirror to a position extending angularly outward of said first mentioned mirror.

7. A combined mirror and cabinet structure comprising in combination a recessed support having a mirror extending along the rear wall of said support, a pair of open-faced shelf housings received in said support in side by side relation

and each having a mirrored door swingably attached thereto, and means mounting said shelf housings in said support for sliding and swinging movement in a horizontal plane whereby the mirrors on said doors may be moved apart to positions extending angularly outward of said first mentioned mirror.

8. Structure according to claim 7 further characterized in that said mounting means comprises a pair of vertically aligned arms on each side of said support and swingably mounted on the support for movement about a vertical axis, the outer free ends of said arms being pivotally connected with the adjacent shelf housings, and means to guide the movement of the inner adjacent edges of said shelf housings along paths extending generally along said first mentioned mirror.

9. A combined mirror and cabinet structure comprising in combination a recessed support having a mirror extending along its back wall, a pair of shelf housings movably mounted in said support in side by side relation, arms swingably mounted on said support and having free ends pivotally connected with said housings whereby portions of said housings may be swung forwardly and outwardly of said support, a mirrored door swingably mounted on each of said shelf housings, spring means biasing said portions of said housings to outward positions, and readily releasable latch means to restrain the operation of said spring means.

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