Dec. 1, 1931. G. S. RIDER 1,834,423

DIRECTORY BOARD FOR OFFICE BUILDINGS

Filed Feb. 7, 1930 2 Sheets-Sheet 1

Fig. 1

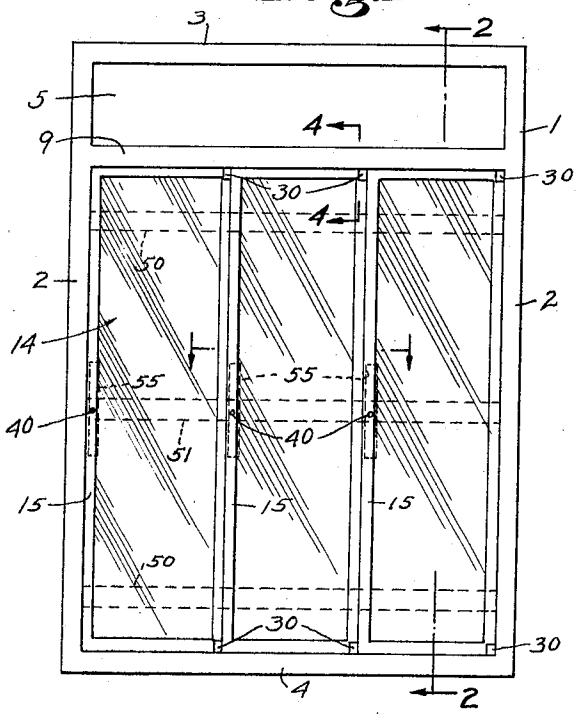



Fig. 2

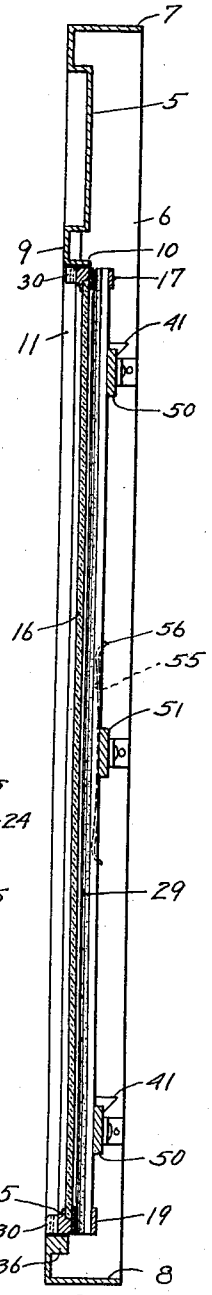



Fig. 3

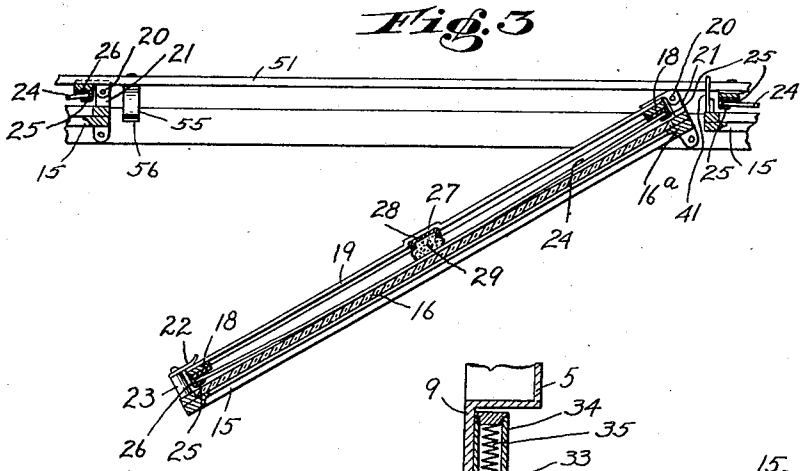
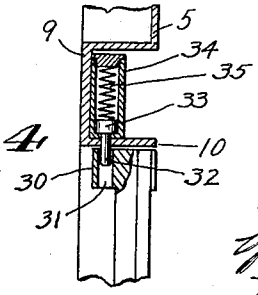



Fig. 4



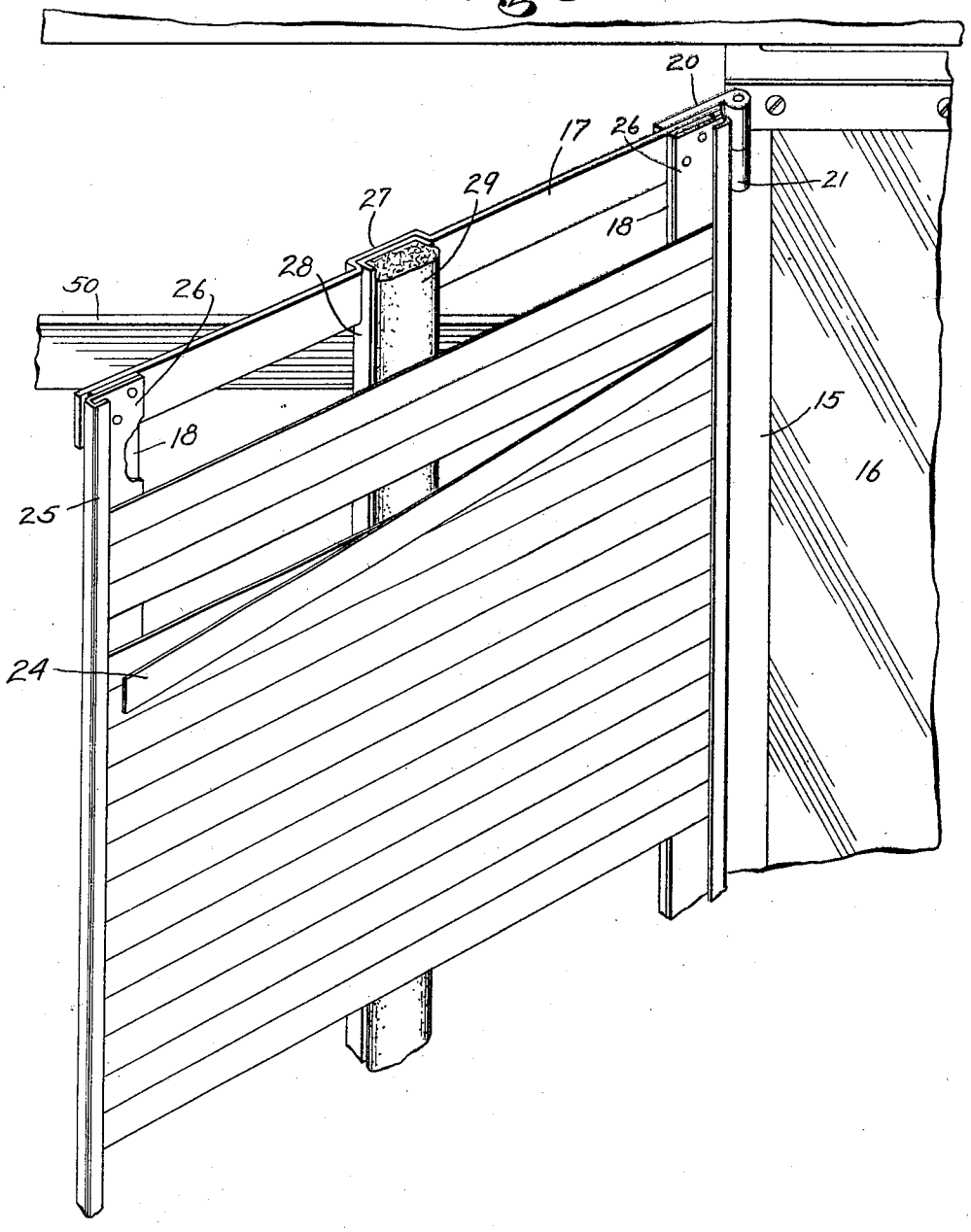

INVENTOR.
Granville S. Rider
BY
Frank A. Ashley
ATTORNEYS.

Dec. 1, 1931. G. S. RIDER 1,834,423

DIRECTORY BOARD FOR OFFICE BUILDINGS

Filed Feb. 7, 1930 2 Sheets-Sheet 2

Fig. 5




INVENTOR.
Granville S. Rider
BY
Frank C. Ashley
ATTORNEYS.

Patented Dec. 1, 1931 1,834,423

# UNITED STATES PATENT OFFICE

GRANVILLE S. RIDER, OF FLUSHING, NEW YORK, ASSIGNOR TO NATHAN SCHOENTHAL, OF NEW YORK, N. Y.

## DIRECTORY BOARD FOR OFFICE BUILDINGS

Application filed February 7, 1930. Serial No. 426,473.

My invention relates to directory, card or sign exhibiting structures, and its nature and advantages will be sufficiently understood from the following description of an embodiment especially adapted for use as a directory or bulletin board, for office buildings, hotels, etc.

The general object is to provide such a card exhibiting or directory structure which may have the desired attractive or decorative appearance, is at the same time of reasonably simple and economical construction, has great security against tampering by unauthorized persons, and has new and improved facilities for operation by authorized employees in inserting or readjusting the data strips or other cards.

Another object is to provide a novel and improved construction or arrangement of individual exhibiting panels in a main frame, improved means or arrangements in the individual panels for easy insertion or other manipulation of the data strips and secure retention thereof, also new and improved means of pivotally and detachably mounting the individual panels as units in the main frame in such manner that they may easily be removed by authorized persons while removal by unauthorized persons is made difficult or impractical by the nature of the mounting devices.

A further object is to provide a hinge structure or arrangement such that the panels may be swung when desired through a full half circle and flat against other panels or the main frame without interference between the panels, and also such that no intermediate vertical frame stiles are necessary, so that none of the horizontal frame space need be devoted to such stiles.

The characteristics and advantages of the invention are further sufficiently explained in connection with the following detail description of the accompanying drawings, which shows one representative embodiment. After considering this example, skilled persons will understand that many variations may be made without departing from the principles disclosed and I contemplate the employment of any structures that are properly within the scope of the appended claims.

Fig. 1 is a front elevation of an exhibiting structure adapted especially as a building directory, and embodying the invention in one form.

Fig. 2 is a section at 2—2, Fig. 1, enlarged.

Fig. 3 is a section at 3—3, Fig. 1 on the same scale as Fig. 2.

Fig. 4 is a sectional detail at 4—4, Fig. 1, enlarged.

Fig. 5 is an enlarged, perspective, fragmentary view showing a panel in partly open and partly disconnected position.

The rectangular main frame 1 is usually of bronze, or other suitable metal of substantially heavy section and pressed or otherwise fabricated to provide side facing strips 2, a top facing strip 3 and bottom facing strip 4. The upper portion of the main frame may be arranged as a fixed exhibiting space or panel having a depressed back wall 5. From the facing strips extend rearwardly, corresponding outer side, top and bottom walls 6, 7 and 8, respectively. Below the upper exhibiting space or panel 5 is a transverse facing strip 9, and from the lower edge of this strip, and from inward edges of the strips 2 and 4, rearwardly extend relatively shallow walls 10, 11 and 12, respectively, defining the main frame opening or aperture to receive one or usually, as shown, a plurality of the individual exhibiting panels 14. The main frame also has transverse upper and lower strips 50 and an intermediate strip 51 crossing the main frame aperture and secured as by brackets 52 at the sides thereof, these strips being positioned for engagement by the panels when in closed position.

Each of the panels 14 is hingedly and detachably mounted as a unit in the main frame, as will appear, and each includes two main parts, section or leaves hingedly connected to each other. The outer section or leaf of each panel includes a rectangular frame 15 in which a cover glass 16 is mounted in any usual or suitable way. The inner section or leaf comprises a frame including a top strip 17, vertical side strips 18 and a bottom strip 19 similar to the top strip. At top and bottom

corners at one side the inner leaf is hinged to the outer leaf by hinge members 20 cooperating with lugs 21 mounted on or integral with one of the frame strips of the outer leaf. Normally the two leaves are held together, or in closed position as in Fig. 2, by swing clips 22 pivotally mounted on lugs 23 extending from the side member of frame 15 rearward from the hinged side of the panel.

To detachably retain the exhibit cards, here represented as narrow cardboard directory slips 24, the side members of the inner leaf are provided with channels, and in the present particular example these channels 25 are formed as integral parts of strips 26 of thin sheet metal secured to the main strips 18. At the center of the top and bottom frame strips 17 and 19 are rearwardly bent formations or sockets 27, receiving the ends of a vertical channel strip 28, which retains a cushion strip 29 of suitable resilient or compressible material such as sponge rubber. The outer portion of this compressible strip projects substantially beyond the side flanges of the channel strip 28, and its outer face is slightly forward of the normal flat plane of the directory slips, so that after inserting the ends of the slips in the channels in an obvious way they have slight resilient bearing against the outer face of the cushion strip and are thus temporarily retained in desired positions, and then when all adjustments are made for any panel and the leaves thereof are closed and secured, (Fig. 3) the cushion strip 29 is compressed and squeezes the central portions of all the directory slips with substantial force against the cover glass 16 so that accidental dislocation is practically impossible.

For the mounting of the complete panel as a unit in the main frame in a desired manner, one of the side strips such as 16*a* of frame 15 of the outer leaf (preferably the side strip at the same side as the hinge connection 20—21), is provided at the top and bottom with lugs 30, projecting substantially outward. Each of these lugs has a vertical bore or pin socket 31 (see Fig. 4). The upper socket is engaged by a hinge pin 32 having a head 33 mounted in a sleeve 34 which is located in a channel formation of the main frame between the upper panel 5 and the horizontal frame strip 10. The hinge pin passes through a hole in strip 10 registering with hole or socket 31 when the panel is in position. In sleeve 34 is a spring 35 urging the hinge pin downward to engage in hole 31. At the bottom of the panel, the pin hole or socket 31 in the bottom lug 30 may be engaged by a fixed hinge pin held in a lug 36 on the main frame.

The panel being in position as shown, to remove it, it is only necessary to insert a small rod-like implement such as a nail upward through the hinge hole 31, thus forcing the hinge pin 32 back into its socket and out of the hole. Thereupon the panel may be swung forward sufficiently to clear the frame, and the lower hinge connection is disconnected merely by lifting the panel slightly. The panel may be reinserted by reverse operations as easily understood. By this arrangement unauthorized persons will not readily perceive or understand the mode of mounting of the panel and unauthorized removal is practically prevented, whereas if ordinary hinge structures, or ordinary manipulable devices such as screws or nuts were employed, the mode of removal would be relatively obvious; and at the same time the exposed hinge formations are limited to the relatively small lugs 30, and the decorative appearance of the structure is not impaired.

I also provide suitable means at the free edge of the panel for locking it in closed position. Such means may consist of a keyed lock, or preferably a keyless lock of the character disclosed in a companion application Serial No. 426,475, filed Feb. 7, 1930, and sufficiently represented here by the keyhole 40, and latches 41 cooperating with upper and lower horizontal main frame strips 50. Details of this lock or latch and operating arrangement are not claimed herein.

It is desired to avoid placing any handle or knob on the outer face of the panel, in order to discourage the idea that it may be opened. To facilitate the opening of the panel by authorized persons in the absence of a knob or handle, frame strip 51 is provided in a position corresponding to the side member of each panel, at its free side, with an outwardly acting spring device, consisting as here shown of a vertically directed "flat" or strip spring 55 of sheet metal, riveted at its center to strip 51.

The spring is normally bowed as shown in Fig. 3, and has reversely curved ends 56 to slidably engage the panel side member. When the panel is shut and latched the spring is flattened and stressed as shown in Fig. 2, and when the panel is unlocked the spring will immediately throw the free edge of the panel outward sufficiently to permit grasping and further manipulation.

The projecting lugs 30 provide an offset hinge mounting for the panel, so that when a plurality of panels are mounted in the main frame as shown in Figs. 1 and elsewhere, the panels are all aligned, the free edge of one panel abuts against the hinged edge of the next, and when any panel is swung out as sufficiently shown in Fig. 3, it may be folded flat against the outer faces of the other panels, which do not interfere with this hinge action. The inner leaf of the panel may then be unlatched as above referred to, and swung out to any convenient position, or flat against the face of an adjacent panel or the

main frame, for manipulation of the data strips.

I claim:—

1. An exhibiting structure of the character described, comprising a main frame having a panel aperture, and a panel hingedly mounted therein, the panel having outwardly offset hinge members whereby it may be swung out through a half rotation and positioned in a plane slightly forward of the general outer plane of the main frame, said panel hinge members being located at the top and bottom of the panel respectively and within the limits of upper and lower members of the main frame, and cooperating hinge members on said main frame members and engaging in the panel hinge mmebers.

2. An exhibiting structure of the character described, comprising a main frame having a panel aperture, and a plurality of independent panels hingedly mounted therein in plane alignment when closed, each panel having its hinged side in close abutting relation to the free side of an adjacent panel, and the panel hinge member being outwardly offset to provide for substantially full half rotation without conflict with other panels or the frame.

3. An exhibiting structure of the character described, comprising a main frame having a panel aperture, an exhibiting panel having outwardly projecting hinge lugs, one of the lugs having a vertical hole extending therethrough, and a hinge pin reciprocably mounted in the frame and entering the lug hole which is accessible by the projecting position of the hinge lug for insertion of a rod like implement through the hole to push back the hinge pin and release the panel for detachment from the frame.

4. An exhibiting structure of the character described, comprising a main frame having a panel aperture, an exhibiting panel having outwardly projecting hinge lugs, one of the lugs having a vertical hole extending therethrough, a hinge pin reciprocably mounted in the frame and entering the lug hole which is accessible by the projecting position of the hinge lug for insertion of a rod like implement through the hole to push back the hinge pin and release the panel for detachment from the frame, and a spring urging the hinge pin to active position.

5. An exhibiting structure of the character described, comprising a main frame having a panel aperture, an exhibiting panel having outwardly projecting hinge lugs, one of the lugs having a vertical hole extending therethrough, a hinge pin reciprocably mounted in the frame and entering the lug hole which is accessible by the projecting position of the hinge lug for insertion of a rod like implement through the hole to push back the hinge pin and release the panel for detachment from the frame, and a detachable hinge connection between the other lug and the frame.

6. An exhibiting structure of the character described, comprising a main frame having a panel aperture, an exhibiting panel having outwardly projecting hinge lugs, one of the lugs having a vertical hole extending therethrough, a hinge pin reciprocably mounted in the frame and entering the lug hole which is accessible by the projecting position of the hinge lug for insertion of a rod like implement through the hole to push back the hinge pin and release the panel for detachment from the frame, and a spring urging the hinge pin to active position and another detachable hinge connection between the panel and frame.

7. An exhibiting structure of the character described, comprising a main frame having a panel aperture, an exhibiting panel having outwardly projecting hinge lugs, one of the lugs having a vertical hole extending therethrough, a hinge pin reciprocably mounted in the frame and entering the lug hole which is accessible by the projecting position of the hinge lug for insertion of a rod like implement through the hole to push back the hinge pin and release the panel for detachment from the frame, and a detachable hinge connection between the other lug and the frame, said other connection comprising a pin mounted in the frame and entering a hinge socket in the corresponding hinge lug.

8. An exhibiting structure of the character described, comprising a main frame having a panel aperture of width to accommodate a plurality of independently mounted, vertical panels, a plurality of panels in the aperture, each having at one side a hinge connection on a vertical axis to upper and lower main members whereby each panel is movable to closed or open position independently of the others, each panel having an independent latch and latch operating means thereon, a transverse bar supported by the main frame at the rear and extending widthwise of the panels, and bowed strip springs carried by the bar, each spring bearing against a panel near its free side when in closed position and acting to initially move the panel to open position when the panel latch is released.

In testimony whereof I have affixed my signature.

GRANVILLE S. RIDER.