No. 786,334. PATENTED APR. 4, 1905.

N. B. WOOD.

SIGN.

APPLICATION FILED DEC. 2, 1903.

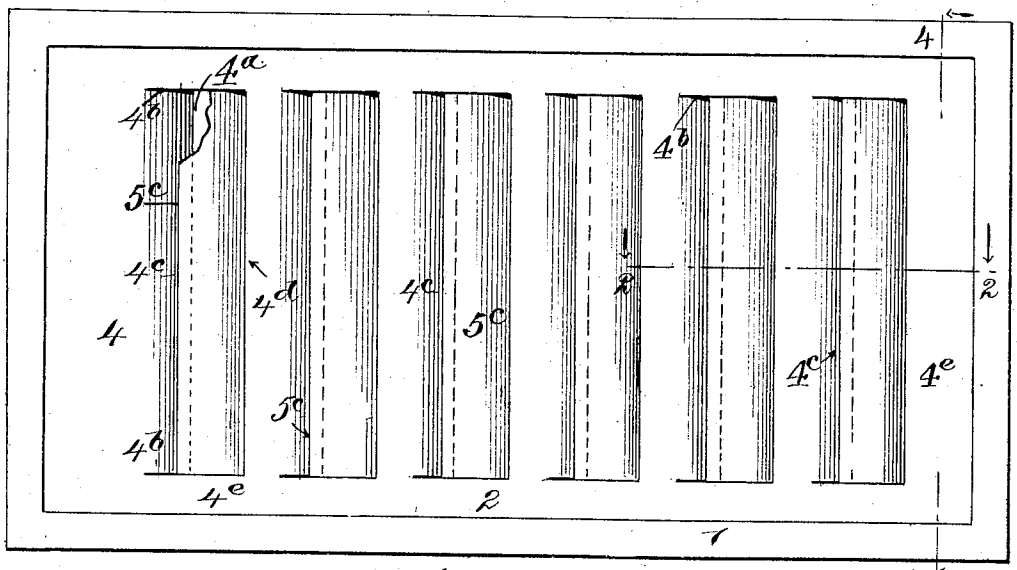

Fig. 1.

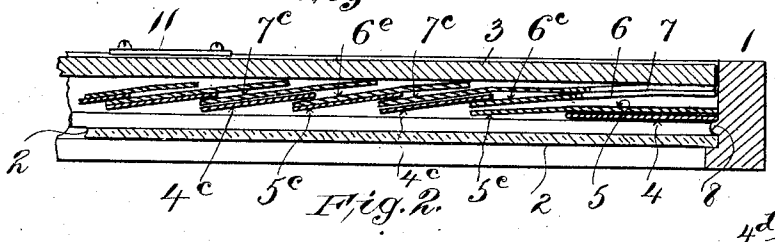

Fig. 2.

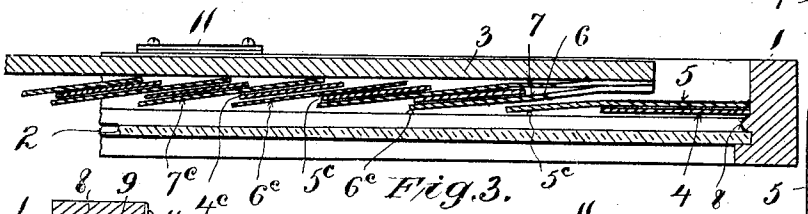

Fig. 3.

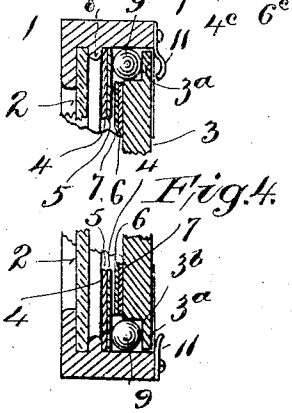

Fig. 4.

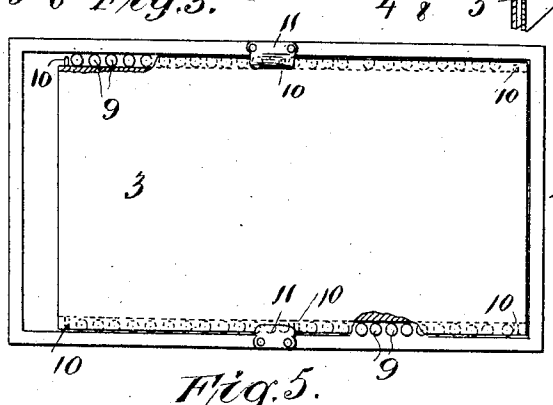

Fig. 5.

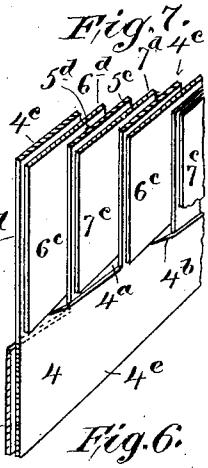

Fig. 6.

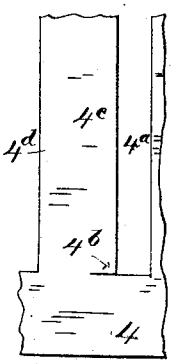

Fig. 7.

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By his Attorney F. A. Bonnu

No. 786,334. Patented April 4, 1905.

UNITED STATES PATENT OFFICE.

NATHAN B. WOOD, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE WOOD CHANGING SIGN COMPANY, A CORPORATION OF NEW YORK.

SIGN.

SPECIFICATION forming part of Letters Patent No. 786,334, dated April 4, 1905.

Application filed December 2, 1903. Serial No. 183,429.

To all whom it may concern:

Be it known that I, NATHAN B. WOOD, a citizen of the United States, residing in New York city, borough of Manhattan, New York, have invented certain new and useful Improvements in Signs, of which the following is a specification.

The object of my invention is to provide a sign in which the advertisement or other display may be alternately changed from one designation to another by means of contrasting colors, lettering, or design, or one or more of the same; and to such end my invention comprises the novel details of improvement that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a face view of a sign embodying my invention. Fig. 2 is a section on the line 2 2 in Fig. 1, enlarged, looking in the direction of the arrows, showing the parts in one position to display a certain coloring, lettering, or the like. Fig. 3 is a similar view showing the parts in a different position to indicate a change in the sign. Fig. 4 is a broken sectional view, enlarged, on the plane of the line 4 4 in Fig. 1. Fig. 5 is a rear view of the sign, partly broken. Fig. 6 is a detail view of one of the sheets of the sign, showing a detail of manufacture; and Fig. 7 is a detail perspective view showing the relative arrangement of the operative parts of the sign.

Similar numerals of reference indicate corresponding parts in the several views.

In the drawings the numeral 1 indicates a frame which may be similar to a picture-frame and which is shown provided at 2 with a front glass and at 3 with a movable back, adapted to slide back and forth in frame 1. The main parts of my improved sign consist of sheets of cardboard, paper, metal, or other suitable material, placed one upon the other, certain of which are adapted to have movement relative to the other, and such sheets are constructed and arranged as follows: At 4 5 are two front sheets fitting within the frame 1, so as not to have movement with respect thereto, and at 6 7 are two rear sheets secured to the back 3, so as to move therewith. The two front sheets are provided with parallel slots and strips or tongues at the sides of such slots, and one sheet is laid upon the other, so that its strips lie partly upon the strips of the latter sheet and lap the slots of the same, and the back sheets 6 7 are similarly arranged, but in reverse order, so that the strips or tongues of the back sheets may slide through the slots of the front sheets and between the strips thereof and when pushed in one direction will overlap the material of the front sheets and when pushed in the reverse direction will be drawn behind said sheets to be concealed from view. In forming such slots and strips or tongues I take, for example, the sheet 4 and provide the same with a series of parallel slots 4^a, and at the top and bottom edges of such slots and on the corresponding sides thereof I cut slits 4^b, which produce projecting strips or tongues 4^c, that extend from the main cross-pieces 4^d, a margin 4^e being left all around. (See Fig. 1.) The sheet 5 is similarly cut to provide strips or tongues 5^c and cross-pieces 5^d, and the two sheets are then placed one upon the other and adjusted to position lengthwise of each other in such manner that the strips of one sheet will pass through the slots of the other sheet and extend behind the cross-pieces thereof, or, in other words, the strips 4^c of sheet 4 pass through the slots of sheet 5 and extend behind the cross-pieces 5^d thereof, and thereby the cross strips and pieces of the sheet 4 conceal or fill the slots in sheet 5, and likewise the cross strips and pieces of sheet 5 conceal or fill the slots in sheet 4. The result of this arrangement is that from a face view of the sheets there is produced substantially the appearance of a single sheet or series of strips. As the strips or tongues of one sheet thus fold behind the cross-pieces of another sheet, they provide guides or ways for corresponding strips of the rear sheets 6 7 to travel on through the spaces formed by the members of the two front sheets. The rear sheets 6 7 are made in substantially the same manner as the

sheets 4 5 and put together similarly, providing the strips or tongues 6^e 7^e and cross-pieces 6^d 7^d; but by preference the strips or tongues 6^e 7^e are made wider than the strips 4^e 5^e, which may be accomplished by merely vertical slits, corresponding with the slots 4^a, instead of making slots wide, as in Fig. 6, by removing the interposed material. The two sheets 4 5 when arranged as described above are preferably pasted together, and the two sheets 6 7 are pasted together and secured by paste or otherwise to the back 3, and the front sheets 4 5 are laid upon the rear sheets 6 7 and adjusted with respect to the latter, so that the strips or tongues 6^e 7^e alternately pass through slots of the front sheet, so that the strips or tongues 6^e 7^e lie behind the strips or tongues 4^e 5^e. As shown in Fig. 5, the back 3 is narrower or shorter than the width of the frame 1, so as to have movement relative thereto. The sheets 4 5 constitute one member and the sheets 6 7 another member of the sign.

When the parts are adjusted together and the back 3 is moved to the right, as in Fig. 2, the strips 6^e 7^e will be shifted behind the corresponding strips of the front sheets and concealed, and thereby the lettering or design placed upon the front sheets will be exposed to view. Any suitable lettering or design for an alteration of the sign will be placed upon the strips of the back sheets, and when the back 3 is adjusted to the left the strips 6^e 7^e will be pushed through between the corresponding strips of the front sheets, (see Fig. 3,) concealing the latter and exposing to view the lettering, &c., upon the back sheets. The front sheets may be colored to contrast with the rear sheets, so that when the latter are in one position one color will be exposed and when moved to another position a different color will be exposed to attract attention, and likewise different designs and other arrangements familiar to the sign-makers art may be adopted on the front and back sheets to vary the design as one set of sheets is adjusted with respect to the other.

As indicated in the drawings, a rib 8 may be provided all around frame 1, against which the front sheet 4 may lie to provide a space between that sheet and the glass 2 to keep the strips from the back sheets from engaging the glass as they are projected through between the front sheets. To permit the back 3 to readily slide with respect to frame 1, said back may be mounted upon ball-bearings, and in order that such bearings may act efficiently when the sign is placed at an angle to the vertical, as along the upper corner of a railway-car, the back 3 is shown provided with longitudinally-disposed recesses or grooves providing webs 3^a, whereby the balls 9 may rest in the races formed between the frame 1, the front sheet 5, the web 3^a, and the edge 3^b of the back 3. Pins or stops 10 at the ends of the back and between said ends limit the movement of the balls. The back 3 being thus freely mounted may slide within the frame without undue friction, and such sign being placed in a railway-car the sudden stopping or starting of the car may be utilized as a means for causing the shifting or changing of the sign. In other words, when the car is suddenly brought to a stop the back 3 may shift in one direction with respect to the frame 1, and when the car is suddenly started the reverse shifting may take place, thereby causing the automatic shifting of the sign. However, it is also contemplated that any suitable mechanism may be provided for causing the back 3, with its attached sheets 6 7, to shift back and forth for alternately exposing the different displays on the front and rear sheets.

At 11 are indicated clips attached to frame 1 and overlying the back 3 to keep the various parts in position. By having the front sheets fitted snugly within frame 1 and the rear sheets adapted to move relatively to the front sheets the changing of the display is readily effected by the movement of one set of sheets relatively to the other.

My invention is not limited to the particular details of arrangement shown and described—as, for instance, instead of strips and tongues and cross-pieces being produced from a sheet of material by cutting slots, &c., the same may be made by taking separate strips of material and pasting them in proper parallel positions upon cross-bars, thus virtually building up the sheets—and other modifications may be made in the details set forth without departing from the spirit of my invention.

Having now described my invention, what I claim is—

1. A sign comprising a pair of sheets provided with slots and strips, the strips of one sheet overlapping the slots of the next sheet, and another pair of sheets provided with overlapping strips respectively located between strips of the first-named sheets and adapted to slide across the latter and to be concealed behind the same, substantially as described.

2. A sign comprising a pair of sheets provided with slots and strips placed one upon the other with strips of one sheet passing through the slots of the other sheet and overlapping the transverse pieces thereof providing openings therebetween, and another pair of sheets provided with strips overlapping each other and alined with the spaces between the corresponding first-named strips and arranged to slide in front of the latter to conceal them and to slide behind said strips to expose the latter to view, substantially as described.

3. A sign comprising a pair of sheets provided with transverse slots and having slits at corresponding sides of said slots providing extended strips, the strips of one sheet passing through the slots of another sheet, and

another pair of sheets provided with strips respectively located between two strips of the first-named sheets and arranged to slide therebetween over the faces of the first-named strips to conceal the latter, substantially as described.

4. A sign comprising a member having strips, part of one strip overlapping part of an adjacent strip and providing spaces therebetween, and another member having strips lying partly one upon another arranged adjacent to the first-named strips and alined with said spaces to pass therethrough, a frame to which the first-named strips are attached, said frame having horizontally-disposed guiding-ways, and a back to which the second-named strips are attached, said back being guided by said ways and arranged to have movement with respect to said frame for causing the last-named strips to alternately conceal and expose the first-named strips, substantially as described.

5. In a sign the combination of a frame having horizontally-disposed guideways, transverse strips secured to said frame and having openings between them, with a back for said frame arranged to have movement therein, strips carried by said back arranged to slide between the first-named strips to alternately expose and conceal the latter, and antifriction-balls located between said frame and said back, the latter having two bearing-surfaces for the corresponding balls, said balls being mounted to travel along said ways, substantially as described.

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