

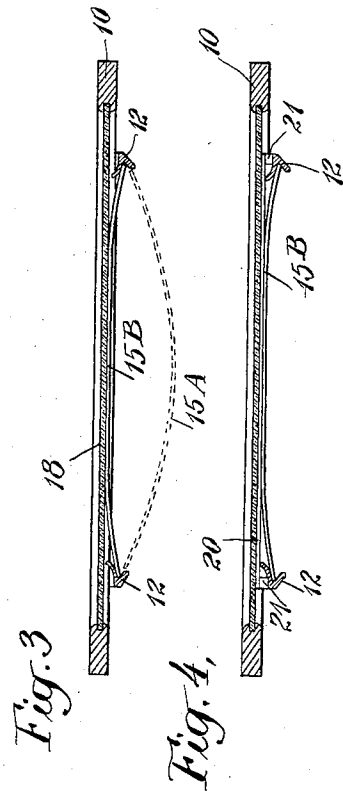
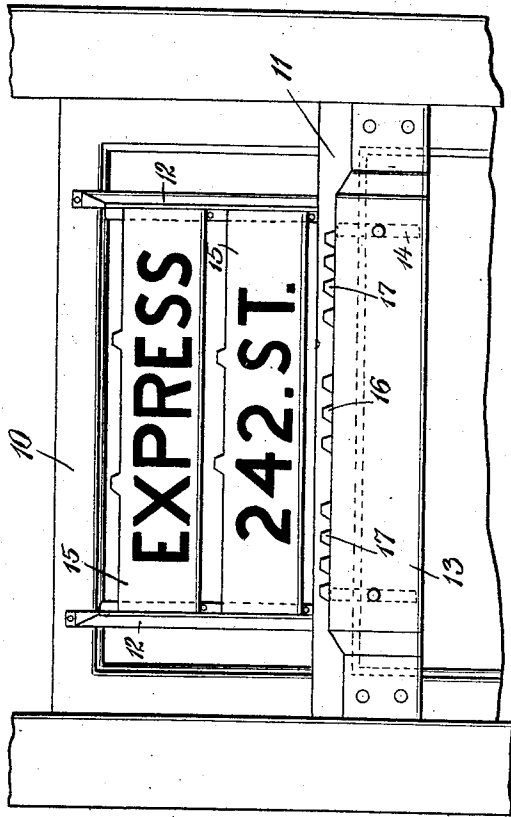
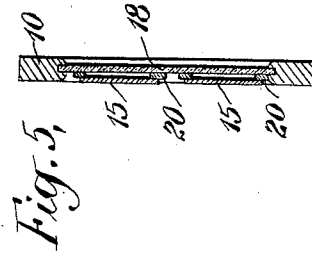
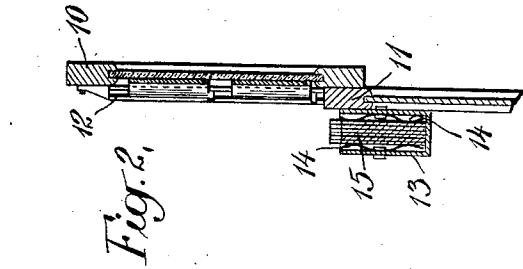
N. LITCHFIELD.

CAR SIGN.

APPLICATION FILED JULY 3, 1911.

1,062,598.

Patented May 27, 1913.



WITNESSES:

Gertrude Newer
J. M. Millward

INVENTOR

Norman Litchfield
BY
E. W. Marshall
ATTORNEY

UNITED STATES PATENT OFFICE.

NORMAN LITCHFIELD, OF GLEN RIDGE, NEW JERSEY.

CAR-SIGN.

1,062,598.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed July 3, 1911. Serial No. 636,770.

To all whom it may concern:

Be it known that I, NORMAN LITCHFIELD, a citizen of the United States, and a resident of Glen Ridge, in the county of Essex and State of New Jersey, United States of America, have invented certain new and useful Improvements in Car-Signs, of which the following is a specification.

My invention relates to changeable signs, especially for use in railroad or trolley cars, and its object is to provide a simple and inexpensive structure which has advantages over those which have heretofore been in use.

I will describe my invention in the following specification and point out the novel features thereof in the appended claims.

Referring to the drawings, Figure 1 is an elevation of a portion of a car window,—in this case a side window,—with one of my improved signs shown in conjunction therewith. Fig. 2 is a sectional end elevation of the device which is shown in Fig. 1. Fig. 3 is a sectional plan view of a portion of this same device.

A modified structure is illustrated in Figs. 4 and 5, these figures being a sectional plan view and a sectional side elevation, respectively. The section in Fig. 5 is taken from the center of Fig. 4.

Like characters of reference designate corresponding parts in all of the figures.

10 designates the upper sash of a car window. 11 is its lower sash. A pair of brackets 12, 12 are affixed to the upper sash. These are each provided with vertical grooves or channels, and these grooves are arranged to face each other.

13 is a box-like receptacle open at the top which is fastened to the lower sash in a horizontal position. Inside of this receptacle and near the ends thereof are oppositely disposed springs 14.

The signs proper are designated by 15. These are made of spring sheet metal such as steel with the desired letters, numbers or other symbols on both sides thereof. These symbols may be made in any desired manner, preferably by lithographing them upon the surfaces of the metal. One of these signs has a tab 16 projecting upwardly from the center of its upper edge. The others each have a pair of tabs such as 17, 17 disposed at equal distances from the center. All of the tabs are however, in different positions so that they cannot overlap one

another. The same characters as those upon the respective signs, or abbreviations of these characters, are placed upon at least one of the tabs of each sign, but on account of the small scale of the drawings this is not illustrated.

The signs are arranged to be placed in the receptacle 13 as is shown in Figs. 1 and 2 and are held therein by the springs 14 which press them together and thus prevent them from rattling. They may be removed from the receptacle by grasping the tabs between the thumbs and fingers, and as the tabs are symmetrical in respect of the length of the signs, they may be readily drawn out from the receptacle.

The sheet metal signs are all of the same length. The brackets 12, 12 are so placed that the bottoms of their vertical grooves are at a fixed distance apart somewhat less than the length of the signs. By referring to Fig. 3 the manner in which the sheet metal signs are placed in the brackets may be seen. One of them is first bent as shown at 15^A so that its ends may be inserted in the channels in the brackets 12. Then it is forced back until it buckles back against the glass 18 in the upper sash 10. It is shown in this position at 15^B. The brackets are so placed that when the sheet metal signs are thus inserted between them they will still be under pressure produced by their elasticity, so that they will be forcibly pressed against the glass. This not only securely holds them in place, but effectively prevents rattling. As the characters are on both sides of the sign they may be read from inside or from outside of the car.

In the modification which is shown in Figs. 4 and 5 metallic strips 20 are run horizontally between the brackets 12, 12 and affixed thereto. Spacing brackets 21 may be interposed between the brackets and the strips 20 and all these parts riveted together. With this construction, the proper spacing of the brackets is insured and the signs are buckled back against the strips instead of against the window glass. Only the top and bottom edges of the signs will touch the horizontal strips so that but small portions of the surfaces of the signs will be covered by the strips.

What I claim is.—

1. In a support for flexible signs, the combination with a pair of brackets at a fixed distance apart and a flat support substan-

5 tially parallel to the plane of the brackets and at a fixed distance therefrom, the distance between said brackets and the distance between the plane of the brackets and the flat support being such that the flexible sign maintains a fixed position when sprung between the brackets and against the flat support.

10 2. In a support for flexible signs, the combination with a pair of parallel grooved brackets at a fixed distance apart, and a flat support parallel to the plane of the grooves in the brackets and at a fixed distance therefrom, the distance between said grooved
15 brackets and the distance between the plane of the grooves and the flat support being such that the flexible sign maintains a fixed position when sprung between the brackets and against the flat support.

20 3. In a support for flexible signs the combination with a pair of brackets having parallel V-shaped grooves at a fixed distance

apart and a transparent plate parallel to the plane of the grooves in the brackets at a fixed distance therefrom, the distance between said grooved brackets being less than the length of the sign which they are adapted to support and the distance between the plane of the grooves and the transparent plate being such that the flexible sign maintains a fixed position by reason of the pressure produced by its elasticity when sprung between the brackets and against the transparent plate with its opposite edges inserted in the grooves and both its surfaces are visible and unobstructed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NORMAN LITCHFIELD.

Witnesses:

WILLIAM P. DALTON,
DICKINSON E. GRIFFITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."