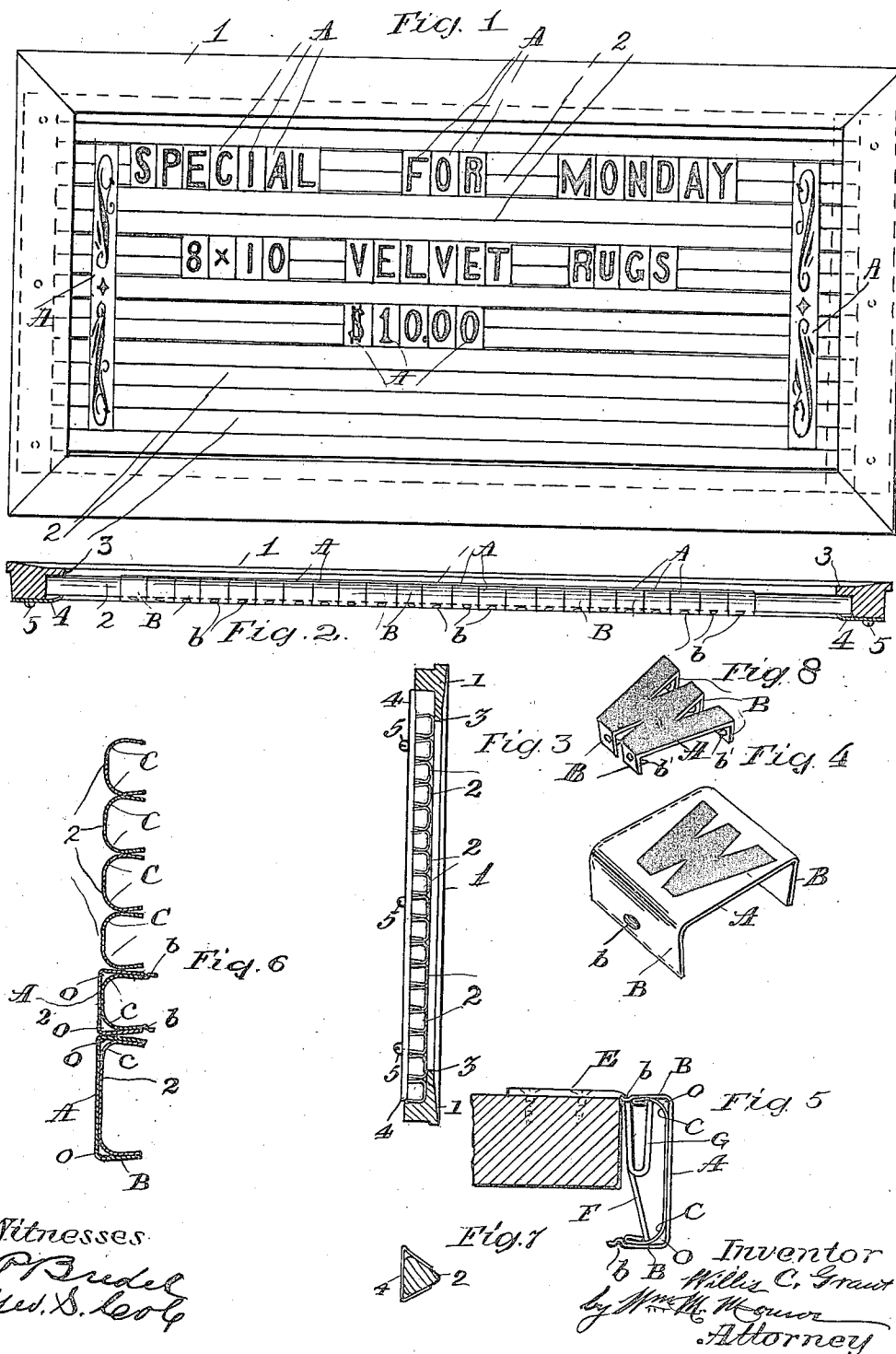


1,163,750.

Patented Dec. 14, 1915.



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CHANGEABLE SIGN.

1,163,750.

Specification of Letters Patent.

Patented Dec. 14, 1915.

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To all whom it may concern:

Be it known that I, WILLIS C. GRANT, a citizen of the United States, and resident of Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Changeable Signs, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The objects of the invention are to provide a sign in which the letters, figures, or other characters are changeable and are preferably held upon loosely confined bars or supports, so that the letters can readily be attached to and removed therefrom. The letters are also attached to the bars by means of an elastic gripping pressure upon the outer sides thereof. The bars and letters are formed in predetermined regular proportioned relative sizes, so that the same series of bars will be adapted to support letters of more than one size and the letters can be arranged in any order desired to form words to compose a sign or advertisement and can be used if desired in several sizes to give variety to the composition of the sign.

The invention further comprises the combination and arrangement of parts and construction of details as hereinafter described, shown in the accompanying drawings and specifically pointed out in the claims.

In the accompanying drawings Figure 1 is an elevation of a sign, showing the frame, bars and removable letters thereon; Fig. 2 is a vertical longitudinal section therethrough; Fig. 3 is a vertical transverse section therethrough; Fig. 4 is a perspective view of one of the letters; Fig. 5 is a transverse section of a bar and the means for attaching the bar to the edge of a shelf; Fig. 6 is an enlarged transverse section of some of the bars showing letter plates; and Fig. 7 a triangular bar. Fig. 8 shows a modified form of letter plate.

In these views 1 is a frame, 2, 2, are bars preferably formed of sheet metal, which rest lightly upon each other in the frame, and are confined elastically by means of the shoulder 3, and sheet metal plates 4, 4, fastened by means of screws 5, 5.

The letters or characters of any kind are printed or painted or stamped upon thin

spring metal letter plates, A, A, the upper and lower ends of which are turned backward at B, B far enough to exert a spring gripping effect upon the sides of the bar. To increase the gripping effect in retaining the letter plates in position each backwardly turned edge is indented at b, b, at exactly the points which just engage the inner edges of the bar, and by spring action make it difficult to remove the letter plate therefrom. It would not ordinarily be possible to remove the letter plate from the bar by inserting a nail or a tool underneath the center of the letter plate, since the union is so close, hence the letter plates can not be picked off by school boys or mischievous persons and are protected from being stolen, or more injury. To facilitate removing them when desired the outer corners of the bars are given a wide curvature at C and the angles of the letter plates with the integral rearwardly bent portions are more acute thus leaving a slight opening O at the angle into which the point of a sharp instrument can be inserted, and by means of which the letter plates can quickly be removed.

It will be seen that in this device the letter plates are not secured by pressing the bars together, upon each other but the slight projections on the holding members of the plates are sufficient to retain them. The projections can sometimes be dispensed with since the holding members are turned slightly inward as well as backward so as to exert a decided spring pressure upon the bars. These letter plates are not attached by sliding them along the bars but can be attached at any point and hence are more easily placed where required.

The bars are preferably of the shape shown in cross section and for convenience can be made of channel shape, of sheet metal, and with well rounded corners as described. The bars shown in Fig. 7 have spreading sides, so that the projections b easily grip them. In Fig. 5 is shown means for attaching one of the bars upon which letter plates can be mounted on the edges of a shelf or to a wall. Here a bracket or brackets E are formed of sheet metal and the arms F and G are formed integrally therein, and one of them G, turned back so that the extremities of the arms support the backwardly turned edges of the bar.

This device is particularly convenient for

attachment to the edges of shelves upon which goods are exposed for sale so that the goods can be easily located and prices can be displayed in convenient proximity to the goods.

Having described the invention what I claim as new and desire to secure by Letters Patent is:

1. The combination with a bar, having a front face and inwardly extending sides, and rounded front edges, of a letter plate resiliently attached thereto, said plate provided with rearwardly and inwardly extended integral holding portions, the outer corners of said plate bent at a more acute angle than the angles of the front corners of said

bar providing openings for the insertion of a lifting tool.

2. The combination with a bar having rearwardly and inwardly extended sides, of a letter plate provided with integral rearwardly extending resilient holding portions, said resilient holding portions extending beyond the rear edges of the sides of the bar and having projections engaging said edges.

In testimony whereof, I hereunto set my hand this 10th day of April, 1911.

W. C. GRANT.

In presence of—

WM. M. MONROE,
P. BREDEL.