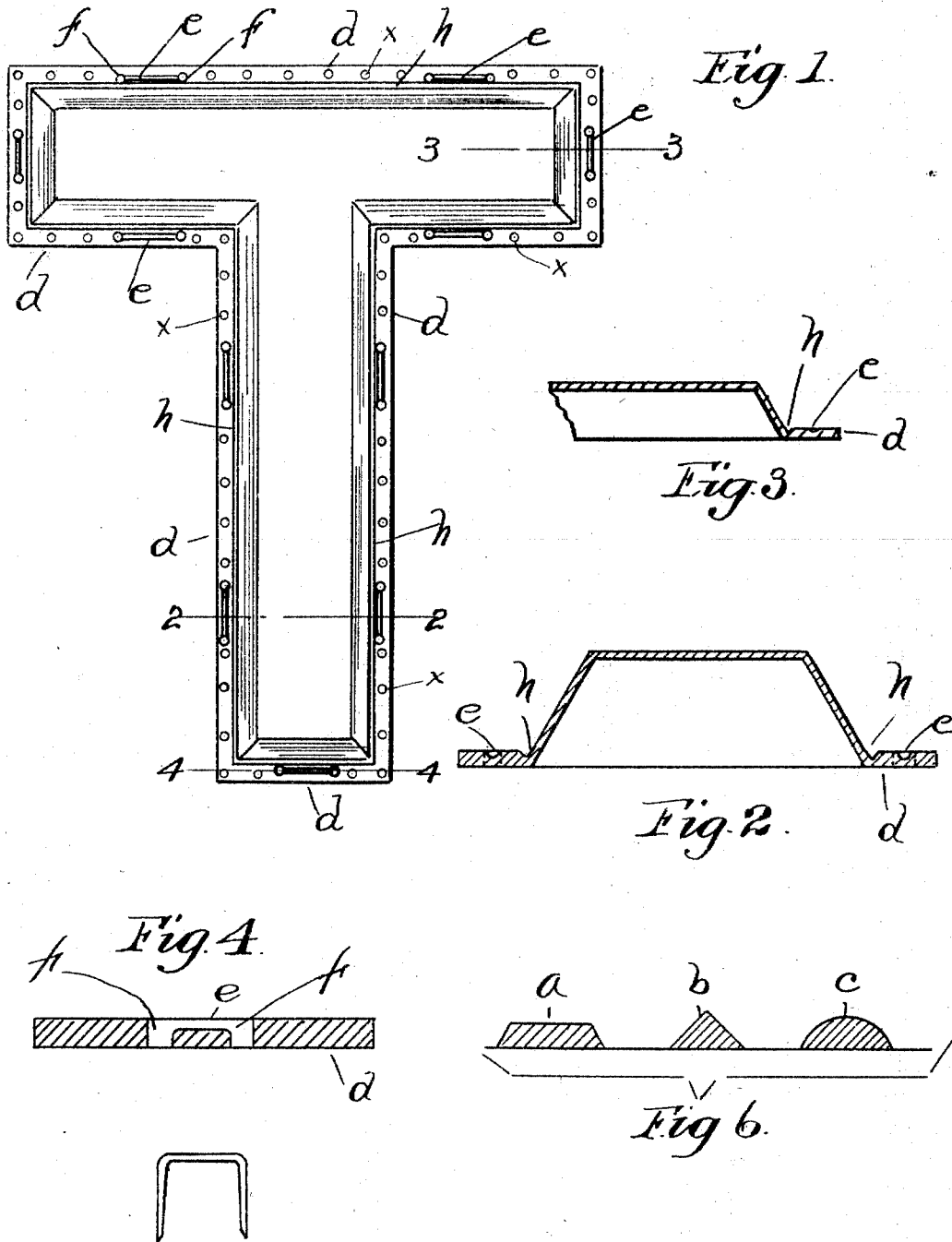


No. 767,060.

PATENTED AUG. 9, 1904.

J. HOTCHNER.
MOLDED SIGN LETTER.
APPLICATION FILED NOV. 2, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH HOTCHNER, OF PROVIDENCE, RHODE ISLAND.

MOLDED SIGN-LETTER.

SPECIFICATION forming part of Letters Patent No. 767,060, dated August 9, 1904.

Application filed November 2, 1903, Serial No. 179,505. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOTCHNER, a resident of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Molded Sign-Letters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to raised letters or characters used on display or advertising signs or other desired reading matter.

The object of the invention is to produce characters by molding them of a non-metallic material into a special form or shape, so they may be readily attached to and detached from the sign and will also be extremely light of weight, the above construction being particularly adapted to large letters for out-of-door signs which will not warp when exposed to the weather.

The invention consists in characters, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a front elevation of one of my raised letters, showing the flange around it. Fig. 2 is an enlarged view of a cross-section on line 2 2 of Fig. 1, showing the flange for attaching the same to the sign. Fig. 3 is a section on line 3 3 of Fig. 1, showing the construction of the end of a letter. Fig. 4 is an enlarged section on line 4 4 of Fig. 1, showing the grooved portion in the flange into which the fastening device may set. Fig. 5 is a staple by which the characters are attached to a backing or groundwork when made of wood. Fig. 6 represents in cross-section the three most common styles of raised letters used.

My invention consists in the production of a new form of letter or character, as illustrated in the drawings. These characters are cast hollow, forming a shell with very thin walls. All around the base of this thin shell and projecting out laterally therefrom is a flanged portion *d*. This flange materially assists in stiffening the thin letter, its main object be-

ing to present a surface through which said letter may be readily fastened to the background of the sign. The flange is perforated at intervals *f, f*, the holes being used for the fasteners. The space between each pair of these holes may be grooved, as shown at *e*, Fig. 4, so that the fastenings may come flush with the top face of the flange. When these letters are used on illuminated signs, holes may be made at short intervals all around said flange, as illustrated at *x*, Fig. 1, to allow the light to shine through from the back and light up the letters. A V-shaped groove *h* is made in the flange *d* all around on its upper side where it joins the wall of the letter, thus making a distinct dividing-line between the lower edge of the gold-leaf on the letter and the painted flange, which is tinted the color of the groundwork of the sign.

The characters may be made by pouring or pressing a liquid or plastic material into a mold or form, which material soon becomes hardened, and the letters are then ready for use. The material used may be rubber, fiber, celluloid, or the like and must be tough and strong and of a non-metallic nature. It is obvious that by molding this tough material the walls of the characters may be made very thin, and therefore extremely light in weight. This material when molded has a smooth hard surface capable of receiving the gold-leaf, which may be applied directly to it without first having to be prepared by applying several coats of paint, as is the case where wood or metal is used.

In the construction of large out-of-door signs it has heretofore been the custom to make the raised letters solid and of wood in one of the three forms in cross-sections *a*, *b*, or *c*. (Shown in Fig. 6 in the drawings.) Characters of large size made in this manner are necessarily very heavy and take a strong backing to support them. They also warp and twist more or less when exposed to the weather. The wooden letter must be painted several coats before it is in condition to receive the gold-leaf to complete its finish. Metal letters when used on signs exposed to the weather throw off the paint and gold-leaf in a short time and are therefore worthless

for this purpose. In the practical construction of sign-boards having raised wooden letters the backing or groundwork of the sign is first painted a priming coat. The letters
 5 are also painted a priming coat and then secured by nails through their faces to the already primed backing. The heads of these nails are then set into the wood and the holes filled up. The whole sign, including the letters,
 10 is then painted several more coats. The letters are next gilded and a finishing-coat of paint applied to the backing all around the gilded letters, which requires careful work and considerable time by a skilful workman,
 15 so as not to touch the gilded letters. It is nearly impossible to remove the letters from the backing thus secured without splitting and destroying them.

In the construction of a sign-board to receive my improved letters the groundwork may be painted and finished entirely independent of the letters by unskilled labor. The letters having been gilded independently are readily attached to the finished background in the manner above described, thus
 25 saving much time and expense.

One very important feature in my present construction of letter is that on account of their extreme light weight I am also enabled
 30 to use them on a sign with a background of cloth or fabric, to which my letters may be attached by sewing with an ordinary thread, if desired. Letters of the old construction cannot on account of their weight be used on
 35 cloth-back signs, as the heavy letters cause the cloth to sag and tear. In constructing signs with cloth backgrounds there is obviously a great saving of labor, weight, and expense. Letters constructed in this manner may be
 40 made up in quantities and finished and sold as an article of manufacture to the trade, as they are not easily broken, do not warp or get out of shape, and their form admits of their being very easily attached to or detached from any
 45 sign without marring their face.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A molded sign-letter comprising a convex character provided with thin walls and a flat stiffening-flange surrounding the same, said flange being provided with a groove adjacent the wall of the character, and means for securing said character to a backing or base. 50

2. A molded sign-letter comprising a convex character provided with thin walls and a surrounding stiffening-flange, said flange being flattened to fit flush against a base or support and provided with a groove adjacent the wall of said character. 55

3. A molded sign-letter comprising a convex character provided with thin walls and a surrounding stiffening-flange, said flange being flattened to fit flush against a base or support and provided with a groove adjacent the wall of said character, and staples adapted to secure said flange to said base or support. 60

4. A molded sign-letter comprising a convex character provided with thin walls and a surrounding stiffening-flange, said flange being flattened to fit flush against a base or support and provided with a groove adjacent the wall of said character, holes being formed in said flange for the passage of securing-staples, each pair of holes being united by a groove or recess formed in the face of the flange. 65

5. A molded sign-letter comprising a convex character provided with thin walls and a surrounding stiffening-flange, said flange being provided with a plurality of light-openings. 70

6. A molded sign-letter comprising a convex character provided with thin walls and a surrounding stiffening-flange, said flange having its exposed face provided with a groove adjacent the wall of said character, said flange being also provided with a plurality of light-openings. 75

In testimony whereof I have hereunto set my hand this 31st day of October, A. D. 1903.

JOSEPH HOTCHNER.

In presence of—

HOWARD E. BARLOW,
 FRANK A. FOSTER.