(No Model.)

N. S. STOWELL.

TRANSFERABLE LETTER FOR SIGNS.

No. 339,232. Patented Apr. 6, 1886.

Fig. 1.

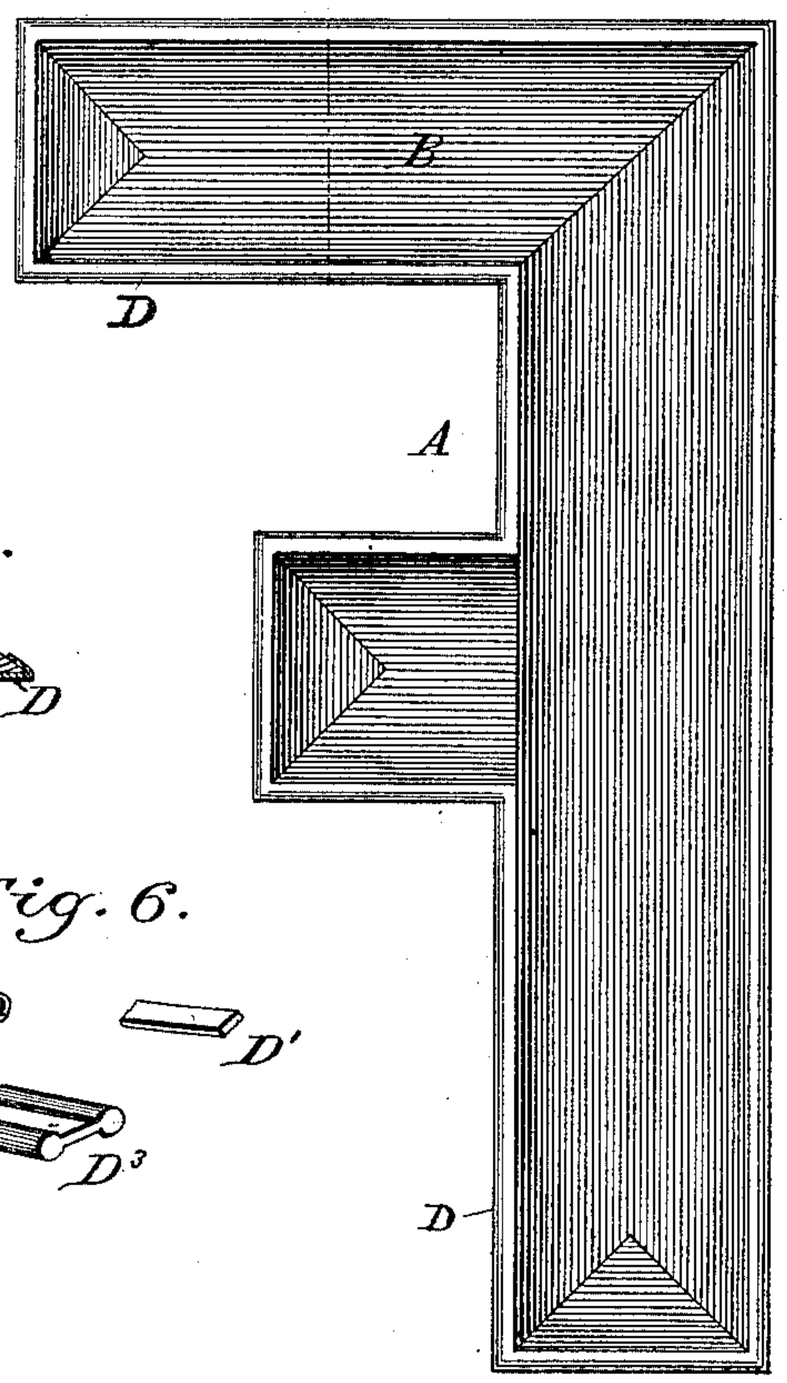

Fig. 2.

Fig. 3.

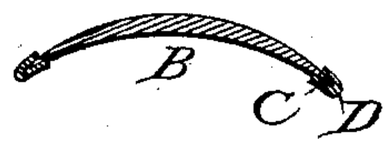

Fig. 6.

Fig. 7.

Fig. 4.

Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

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TRANSFERABLE LETTER FOR SIGNS.

SPECIFICATION forming part of Letters Patent No. 339,232, dated April 6, 1886.

Application filed June 29, 1883. Serial No. 99,527. (No model.)

To all whom it may concern:

Be it known that I, NELLIE S. STOWELL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Transferable Letters for Signs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to transferable letters for signs; and its main object is to produce letters or other symbols adapted to be applied to and removed from their support at will, so that the user or advertiser, upon a change of business locality, will avoid the necessity of a loss of expensive lettering for signs which has been placed upon windows, doors, and other surfaces.

It also has in view the production of letters which shall combine cheapness, lightness, and at the same time durability in organization, and, furthermore, an adaptability of easy and ready application and removal without injury to the letters or supports.

These advantages are obtained by making the letters or symbols with concaved or recessed back and providing their under edges with suction-strips of rubber or other suitable material practically impervious to air, to enable said letters, when applied to a smooth surface, to be held in position by atmospheric pressure.

The letters made in accordance with my invention may be in outline similar to those in common use, and the material used may be metal, glass, porcelain, celluloid, gutta-percha, vulcanite, wood, or other suitable rigid material or compound, and of a color or character to suit the prevailing custom or taste of the designer.

Referring to the drawings, Figure 1 is a back view of my improved letter with the rubber strips or other packing applied to its edge. Fig. 2 is a transverse section showing the packing applied to a letter having a broad flat edge. Fig. 3 is a sectional view showing the packing on the usual thin edge of a letter formed of sheet metal. Fig. 4 is a back view of a fragment of a letter in which the edges are grooved to receive a suitable packing. Fig. 5 is a sectional view of Fig. 4 on the line *y y*. Fig. 6 represents some of the forms of rubber strips or other packing employed. Fig. 7 is a small section of wide thin rubber packing adapted to be stretched over the edges of letters and characters of suitable form.

The letter or symbol A has a concave or recess, B, at its back.

The letter may be curved or angular, or of other suitable shape in cross-section, and the recess may embrace the entire inner surface of the letter or be confined to a portion of its inner surface.

The letter and packing of rubber, softened leather, oil-cloth, or other suitable material, may be united by an adhesive compound, or by other suitable means, or they may be left separate until they are joined in the process of application.

The packing may be made of any desirable suitable shape, either as a flat band, D, of sufficient width to be stretched over the edges C of the letter or symbol, as shown in Figs. 2 and 3, or as a thick flat strip, D′, adapted to be placed under the edge of the letter in applying it to the surface, or in the form of a tube, D^2, which may be placed under the edge of the letter and pressed down to form an air-tight packing, or be inserted in a groove, F, made in the edge of the letter, so that a portion of it shall project from the groove to come in contact with the surface to which it is applied, or a strip, D^3, having its edges thickened and adapted to be placed in grooves F on the edge of the letter and project against the surface to which the letter is secured without departing from the spirit of my invention.

Having made my letter or symbol of the desired form, I prepare the smooth surface or support on which the letters or symbols forming the sign are to be placed by removing any roughness or particles of dust or other foreign substance. I then place the rubber packing in position on or beneath the edge of the letter and then adjust the letter carefully so that its edges C correspond on all sides, fitting closely down upon the support. I then extract the air from the chamber formed by the recessed back of the letter and the surface or support by any well-known means. One of the most convenient devices for this purpose is a small hollow tube or needle secured to an air-pump, or the

well-known hypodermic syringe, the hollow-pointed needle of which is passed through the elastic air-tight packing between the edge of the letter and the surface or support to which it is secured, and when inserted the piston of the air-pump is drawn outward, removing the air from the chamber to the barrel of the pump or syringe. On removal of the needle from the elastic packing the contractile power of the packing is so great that the needle-hole is closed as fast as the needle is withdrawn, so that no air is admitted to the chamber, and the letter is securely held to the surface by atmospheric pressure from without, until such time as it is desired to remove the letter from the surface, when the needle is again inserted, as before, and the chamber is filled with air, when the letter can easily be removed by the hand and secured to any other suitable surface in the same manner as hereinbefore stated. The same object is attained of attaching and removing the letters by making a small opening at any desired point through the letter and covering it with a valve, or sealing over the opening a soft elastic material, E, (shown in Fig. 5,) possessing sufficient contractile power in its substance to close the opening made through it by an instrument of sufficient size to extract the air from the chamber. Other well-known means for removing the air from the chamber may be substituted, but those named are sufficient for all practical purposes.

I am aware that flat metal-foil letters have been formed with rubber attached to the back thereof and made to extend beyond the letter to constitute a shading and protection therefor, and to which adhesive substance might be applied in securing them to glass; also, that enameled letters having a concave back adapted to be cemented to a plate of glass have been used; but such I do not claim.

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

1. As a new article of manufacture, a transferable letter or symbol for forming signs, consisting of a body of rigid material having a suitable concavity or recess at the back and a rubber strip or equivalent material around its edges, the whole adapted to be placed against a smooth surface to form an air-chamber, as and for the purpose set forth.

2. The method of forming signs which consists in attaching transferable letters and other characters composed of rigid material concaved or recessed on their under side, and having the edges of their concaved portions provided with strips of elastic material practically impervious to air, by applying said letters with their concaved sides to a smooth surface or support to form air-chambers, and then extracting the air from the air-chambers, whereby the letters are held in place by atmospheric pressure, substantially as set forth.

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