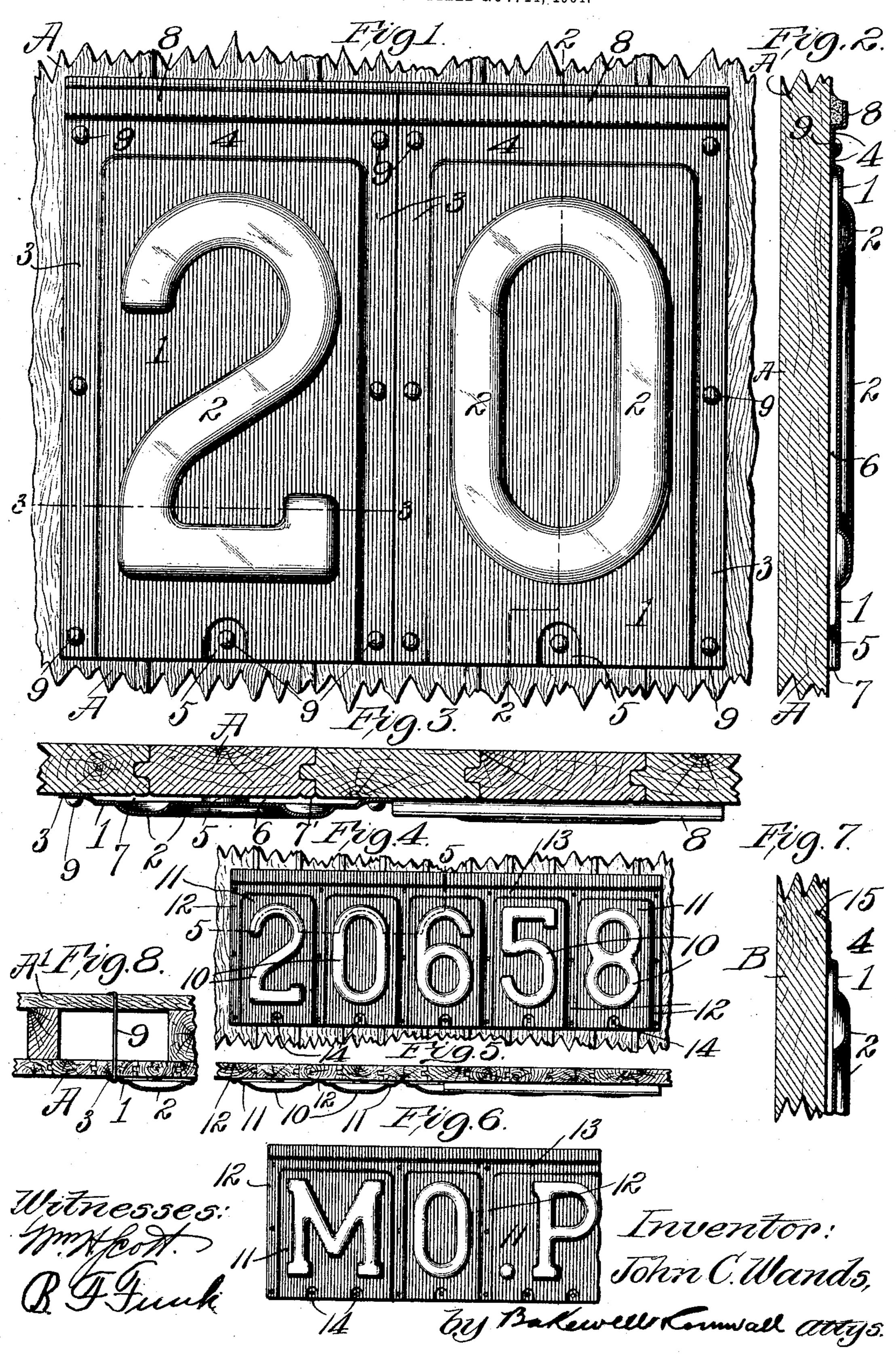
J. C. WANDS.

SIGN LETTER.

APPLICATION FILED NOV. 14, 1904.



## United States Patent Office.

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## SIGN-LETTER.

SPECIFICATION forming part of Letters Patent No. 785,988, dated March 28, 1905.

Application filed November 14, 1904. Serial No. 232,629.

To all whom it may concern:

Be it known that I, John C. Wands, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and use-5 ful Improvement in Sign-Letters, of which the following is 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, reference being had to the accompanying 10 drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of my improved sign applied to a suitable support. Fig. 2 is a vertical sectional view of the same 15 on the line 2 2 of Fig. 1. Fig. 3 is a view, partly in section and partly in elevation, taken on the line 3 3 of Fig. 1. Fig. 4 is a side elevational view of a slightly-modified form of my invention. Fig. 5 is a view, partly in sec-20 tion and partly in plan, on the line 55 of Fig. 4. Fig. 6 is a side elevational view of a form of my invention similar to that illustrated in Fig. 4 and having letters in lieu of numerals. Fig. 7 is a fragmentary sectional view of a 25 modified form of one of the sign units, and Fig. 8 is a detail horizontal sectional view through a portion of a support to which my invention is applied.

This invention relates to signs, and is par-3° ticularly adapted to be used on structures wherein the sign will be subjected to the ac-

tion of the elements.

One of the objects of the invention is to provide a sign which may be easily and econom-35 ically manufactured and which will possess the requiste strength without adding materially to its weight and which when properly placed and exposed to the elements will not deteriorate on account of rust, oxidation, or 4° by contact with discoloring-gases. The sign is particularly designed to be applied to the exterior of cars and will contain the necessary designating characters, such as numerals or letters. However, I would have it understood 45 that I do not limit its application to railways, as it is apparent that it may be used in other capacities with equal efficiency.

Broadly, the invention consists in forming the sign of a single sheet of metal, preferably

sheet-steel, comprising sign units on each of 50 which are one or more characters which may be embossed in the sheet by appropriate dies, then coating the characters with a suitable material—such as enamel, paint, &c.—and then coating the remaining portion or back- 55 ground for such characters with a material of a different color, whereby the contours of the

characters will be easily discernible.

The invention also consists in providing means whereby the sign will be prevented 60 from deterioration due to its being exposed to the action of the elements. The latter object is accomplished by providing a novel construction whereby the rain, snow, &c., will be prevented from being introduced between the 65 sign-letter and its support. As a result the life of the sign will be materially lengthened, and the effect of the contrast between the character and its background will permit the character to be easily discernible, so that frequent 70 mistakes on the part of railroad employees heretofore experienced will be avoided.

In the drawings, A indicates a car side constituting a support upon which my invention

is attached.

In Figs. 1, 2, and 3 I have illustrated the preferred form of my invention, wherein a sign is shown as comprising a plurality of similar units, each of which differs from its companion units only in the character dis- 80 played. Therefore a description of one of them will be applicable to the remaining ones.

1 designates the body portion of the sign unit, which consists of a sheet of metal upon which is a designating character 2, embossed 25

in said sheet by suitable dies.

3 indicates the side flanges which are integral with the plate, and 4 indicates a flange offset from the body portion and lying in a plane parallel thereto. Fastening devices 9, 90 preferably in the form of wire nails, are passed through the flanges 4 and into the side walls of the car. The flanges 3 and 4 might properly be termed "marginal" flanges, inasmuch as they extend from both sides and one 95 edge of the sign unit. It will be observed that there is no flange at the lower edge of the sign, but a depression 5 is made in the

body portion of the sign unit, the floor of which is in the same plane as the planes of the marginal flanges, so that the body portion of the unit will not only be stiffened, but a bear-5 ing will be made by means of which the sign may be attached to its support. By arranging the marginal flanges and the floor of the depression 5 in planes different from the plane of the body portion an appreciable space is 10 provided between the inner surface of the body portion and the support to which it is attached. This space is designated by the reference-numeral 6, and when the sign has been secured to its support the air is per-15 mitted to pass up between the sign and its support and circulate, so as to prevent deterioration or decay on account of dampness or from other natural causes. In order that the necessary circulation may take place between 20 the sign unit and its support, I have provided two entrance-openings 7 and 7', which are formed by the side flanges 3 and the depression 5. The flange 4 on the upper edge of the body portion carries an outwardly and up-25 wardly disposed projection, (designated by the numeral 8,) which forms a groove or trough into which a cementitious material may be deposited to seal the joint between the sign and its support when the sign is in place. Thus 30 the entrance of water or other deteriorating elements between the sign and its support will be prevented.

In Figs. 4 and 5 I have illustrated an entire sign, the units of which are united in a single sheet, the characters being designated by the numerals 10. In this form (illustrated in Figs. 4 and 5) the body portion 11 is provided with side flanges 12 and an end flange 13, the depressions 14 in this form being similar to those designated by the reference-numeral 5 in

Fig. 1.

In Fig. 6 I have illustrated a construction of sign similar to that indicated in Fig. 5, with the exception that letters instead of numerals

45 are employed.

In Fig. 7 a slightly-modified form of sign is illustrated, in which I illustrate an angularly-disposed spur carried at the upper edge of the flange 4, which spur is designated by the numeral 15 and extends across the entire upper edge of the sign and is adapted to be inserted into a kerf or groove 16, formed in the wooden support B.

In Fig. 8 I have illustrated a sectional view of a portion of a car comprising the outer wall A and the inner wall A', properly spaced apart, the fastening device 9 being illustrated as a long wire nail passing through both walls and having its inner end clenched against the

60 inner wall A'.

From the foregoing description it will be apparent that a sign constructed in accordance with the one illustrated and described will possess the requisite qualifications, and the liability of the characters being obliter-

ated on account of the action of the elements will be avoided.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A sign comprising a sheet having marginal flanges except on one edge, and a spacing depression in the sheet at the flangeless edge thereof; substantially as described.

2. A sign comprising a sheet having mar- 75 ginal flanges on three edges, the top edge having means for preventing the introduction of moisture between the sign and its support;

substantially as described.

3. A sign comprising a sheet having a sign 80 character embossed thereon, the sheet being of a color different from that of the embossment, marginal flanges carried by the sheet, ventilating-openings at one edge of the sheet, and means carried by one end flange for preventing the introduction of moisture between the sheet and its support; substantially as described.

4. A sign comprising a sheet having marginal flanges on three edges and an offset on 90 the remaining edge, the floor of said offset being in the same plane as the planes of the

flanges; substantially as described.

5. A sign comprising a sheet having a sign character thereon, marginal flanges on three 95 edges of the sheet, said flanges being in a plane different from the plane of the sheet, and a flange on one of the marginal flanges and arranged to prevent the introduction of moisture between the sign and its support; sub- 100 stantially as described.

6. A sign comprising a sheet having a sign character thereon, marginal flanges on three edges of the sheet and in planes different from that of the sheet, and a flange carried by one of the marginal flanges and in a plane different from the plane of the marginal flanges;

substantially as described.

7. A sign unit comprising a sheet having a sign character thereon, a marginal flange on three edges of the sheet, a flange carried by one of the marginal flanges, and a depressed offset carried in the sheet at the flangeless edge thereof; substantially as described.

8. A sign comprising a sheet having back-wardly-bent marginal flanges in a plane different from the plane of the sheet, an outstanding flange carried by the upper marginal flange, and a depression at the flangeless edge of the sheet, the floor of said depression being in the same plane as the plane of the marginal flanges; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this

11th day of November, 1904.

JOHN C. WANDS.

Witnesses:
B. F. Funk,
George Bakewell.