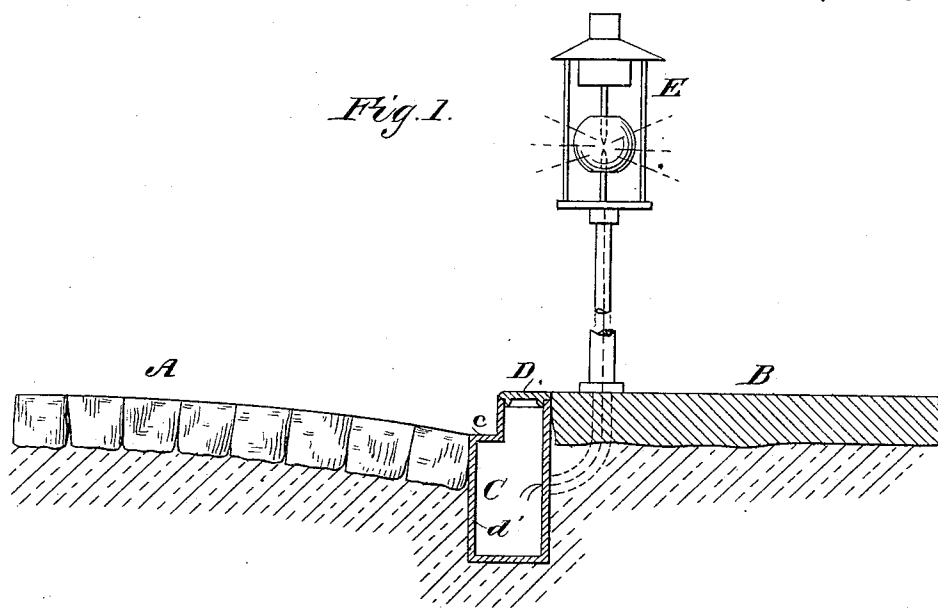
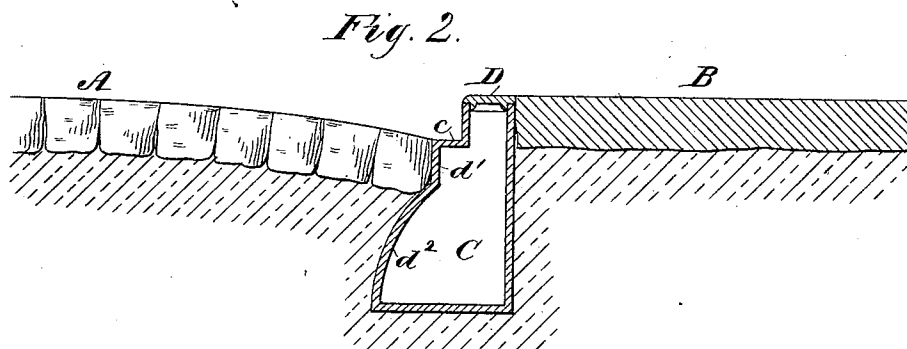
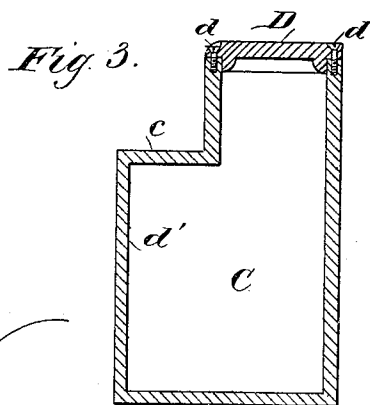


(No Model.)

G. D. SUTTON.
STREET CURB AND GUTTER.

No. 329,342.

Patented Oct. 27, 1885.



Witnesses.

H. P. Parker.
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UNITED STATES PATENT OFFICE.

GEORGE D. SUTTON, OF NEW YORK, N. Y.

STREET CURB AND GUTTER.

SPECIFICATION forming part of Letters Patent No. 329,342, dated October 27, 1885.

Application filed June 17, 1885. Serial No. 168,940. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. SUTTON, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Street Curbs and Gutters, of which the following is a specification.

My present invention relates to the construction of curbs and gutters for the streets of cities and towns; and it has for its object the combining in a single structure of the curb and gutter, and also the production of a structure possessing all the advantages of the usual curb and gutter, while at the same time serving as a conduit for telegraphic, telephonic, and electric-light wires and cables, or as a conduit for pipes for conveying power, such as compressed air, and for like purposes.

My invention consists in the construction pointed out in the claims at the end of this specification.

Referring to the accompanying drawings, which form a part of this description, and in which like letters indicate like features—

Figure 1 represents a cross-section of one side of a street, including the curb, gutter, and sidewalk, showing the application of my invention. Fig. 2 is a similar view showing a somewhat different embodiment of my invention; and Fig. 3 is an enlarged cross-section of the combined curb and gutter, showing specially one method of securing the detachable top in position.

In the drawings, A represents the carriage-way of the street; B, the sidewalk, and C the combined curb and gutter. As shown, the combined curb and gutter is hollow, and it is designed to be of regulation size, and by preference composed of cast-iron, although any other metal or material adapted for the purpose may be used instead of cast-iron. It may be twenty inches deep, more or less, according to the requirements of the service for which it is intended, and of a width at top sufficient to cover the surface now usually taken up by the curb and gutter of city and town streets. The curb will occupy the same relation to the carriage-way and sidewalk that the stone curb now in use occupies, extending slightly above the surface of the carriage-way, but being substantially on a level with the sidewalk. That portion of the combined

structure which comprises the gutter *c* is some inches below the level of curb, and the carriage-way A lies between the outer edges of the gutters *c*, as usual. The structure C will be sufficiently thick to prevent its interior being affected by frost.

The letter D indicates the detachable top of the curb, and it is made in sections corresponding in length to the sections of the combined curb and gutter. The top D may be corrugated on its outer surface, and is provided near both of its edges with a series of countersunk screw-holes to receive the screws *d*, whereby the top is secured in position. The outer edges of the curb and top may be rounded or beveled, as shown, in order to overcome the objection to sharp or angular edges at those points.

The sections of the combined curb and gutter C may be joined by any suitable method that will secure a water and moisture tight joint, as in connecting the sections of water or gas pipes, and such joints may be provided with any of the usual packings.

In Figs. 1 and 3 the wall *d'* of the structure C is entirely vertical below the surface of the gutter *c*. In Fig. 2 the vertical portion of said wall *d'* extends only a few inches below the surface of the gutter to about the depth of the ordinary paving-block, from which point it curves outward beneath the carriage-way, as shown at *d''*. This form of the structure is to be preferred to that shown in the other views of the drawings, as it enables me to provide a larger chamber beneath the curb and gutter, and also provides a positive support for the row of paving-blocks that abut against the gutter.

E indicates an electric lamp, which may be one of a series which take the current from wires within the hollow structure C, and some of these lamps may be so connected with the interior of the said structure as to ventilate the same in an obvious manner.

When my invention is designed to be utilized as a conduit for electric wires or analogous purposes, it will be made hollow, as shown; but it may be made solid when the object is to provide a combined curb and gutter merely and a substantial wall between the carriage-way and sidewalk.

In crossing intersecting streets the wires or

pipes may be conducted from the hollow structure C through suitable boxes provided with detachable tops. If desired, these tops may lie just below the surface of the carriage-way or on a level therewith. Either plan may be adopted.

My invention is applicable to parks as well as to streets of cities and towns, and will be useful as a conduit for pipes conveying power and for other purposes.

The use of this invention avoids the necessity of tearing up the streets, pavements, and walks, and enables examinations and repairs to be made with the utmost facility.

The hollow structure C may be provided with perforations in its back wall for the purpose of making connections with the wires or pipes within the said structure and the buildings into which the electric current or compressed air or other power is to be carried for use.

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

1. A combined hollow curb and gutter comprising a single chamber without interior division-walls, the curb portion thereof being open at top and provided with a removable cover, substantially as set forth.

2. A combined hollow curb and gutter comprising a single chamber without interior division-walls, and having its outer or gutter wall curved outwardly, substantially as set forth.

3. A combined hollow curb and gutter comprising a single chamber, C, and having a short vertical wall, d' , and a curved wall, d'' , substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 15th day of June, A. D. 1885.

GEO. D. SUTTON.

Witnesses:

HUGO KOELKER,
J. E. M. BOWEN.