No. 806,563. PATENTED DEC. 5, 1905.

J. OWEN.

COMBINED CURB, GUTTER, AND VEHICLE TRACK FOR HIGHWAYS.

APPLICATION FILED FEB. 27, 1905.

2 SHEETS—SHEET 1.

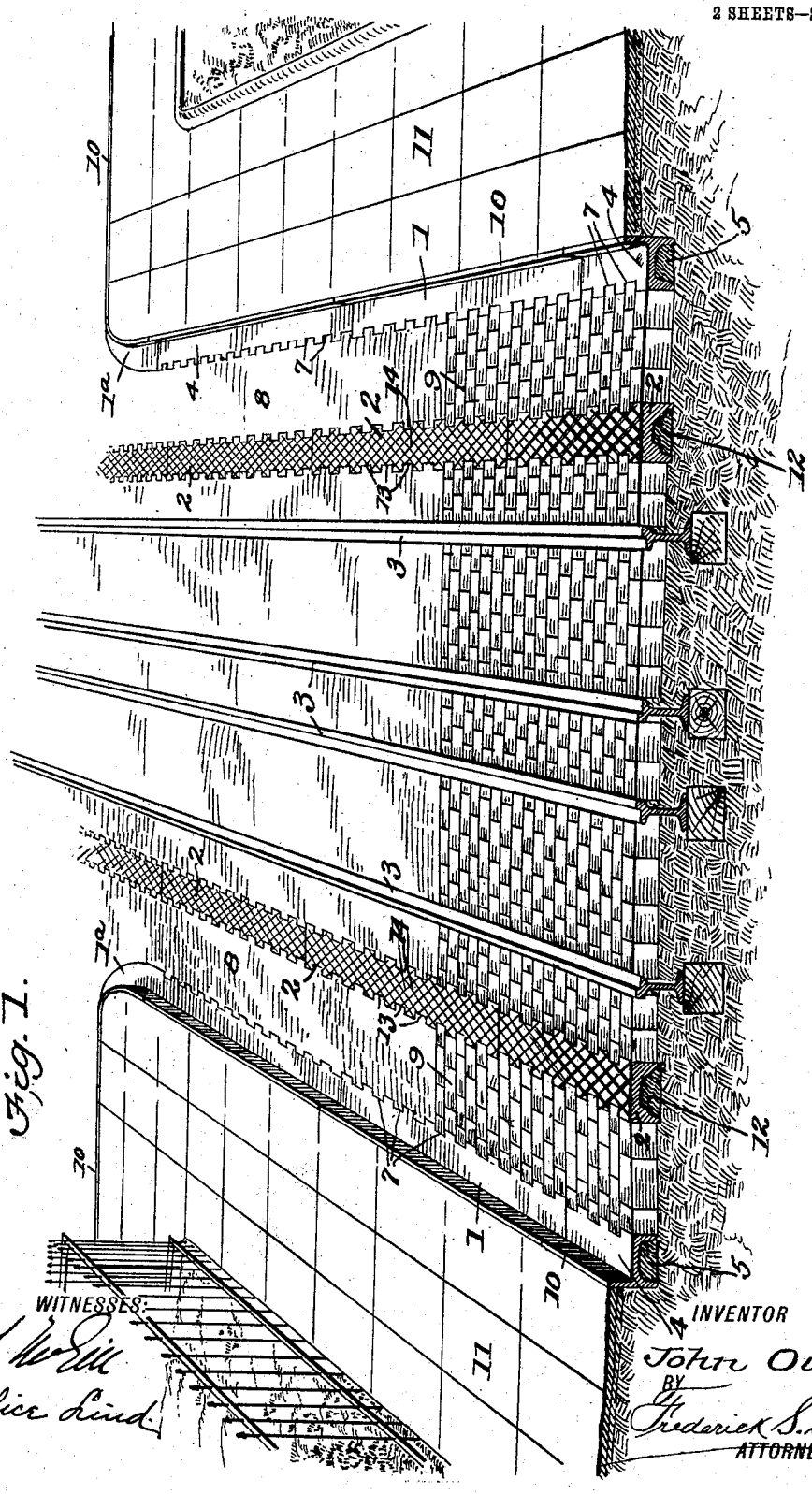


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

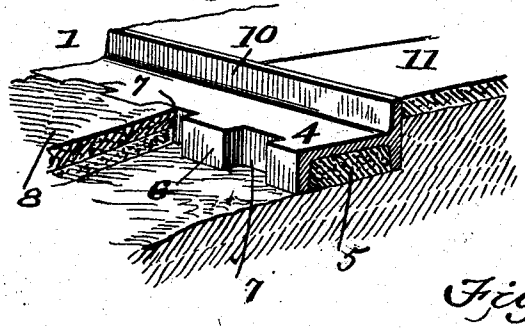


Fig. 3.

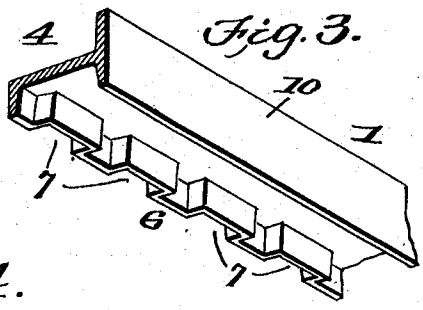


Fig. 4.

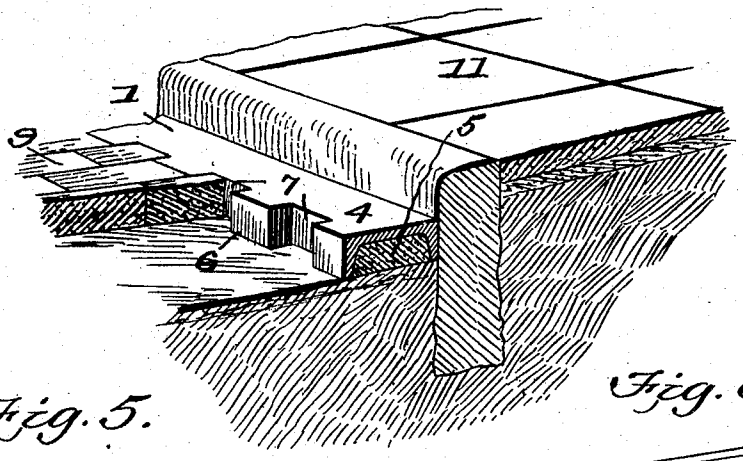


Fig. 5.

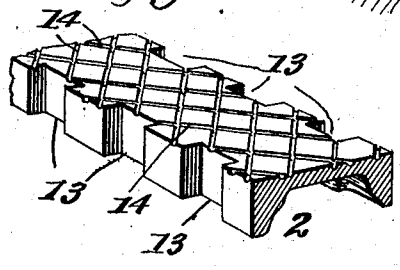
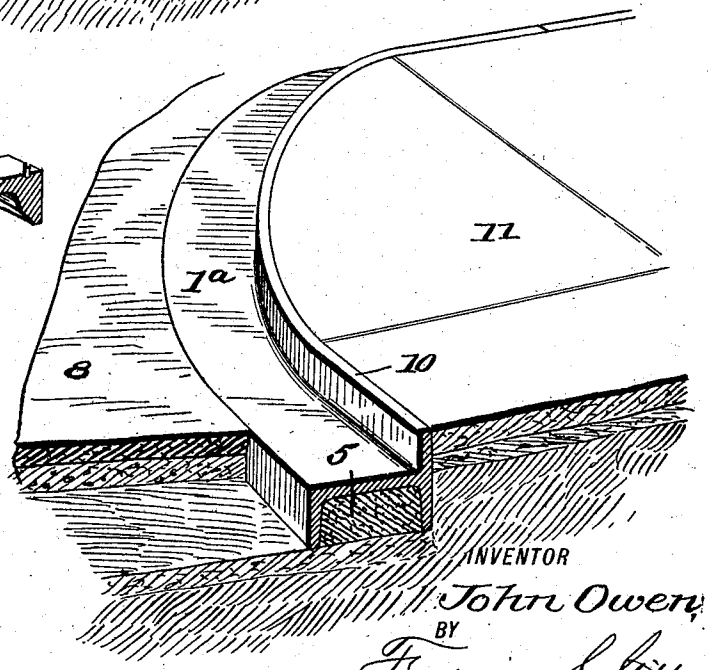


Fig. 6.



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COMBINED CURB, GUTTER, AND VEHICLE-TRACK FOR HIGHWAYS.

No. 806,563. Specification of Letters Patent. Patented Dec. 5, 1905.

Application filed February 27, 1905. Serial No. 247,532.

To all whom it may concern:

Be it known that I, JOHN OWEN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Curb, Gutter, and Vehicle-Track for Highways; 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.

This invention contemplates certain improvements in highways; and it consists in providing tracks for the wheels of wagons or other vehicles, comprising a metallic wheel-plate and a metallic gutter, which may be provided with a flange constituting a metallic curb, said wheel-plate and metallic gutter being spaced apart a distance equal to the normal gage of wagons and the like, whereby the said gutter may serve both as a channel for carrying off water and refuse and as one of the members or tread-pieces of a track for vehicle-wheels, provision being thus made for relieving the congestion of traffic in the streets now so frequently caused by heavy and slow-moving vehicles occupying the street-car tracks and causing blockades and the delaying of the cars.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a sectional perspective view of a portion of a street in which my invention is embodied. Fig. 2 is a similar view illustrating more in detail the element which constitutes a combined metallic gutter, curb, and one member of a vehicle-track. Fig. 3 is a perspective view of said element, shown detached and looking at the under side thereof. Fig. 4 is a view similar to Fig. 2, but showing a slight modification. Fig. 5 is a perspective view of the wheel-plate, which constitutes the other member of the vehicle-track. Fig. 6 is a sectional perspective view illustrating the invention as it is embodied at a corner or curve.

Referring to the drawings, 1 designates the gutter, and 2 the wheel-plate spaced from the gutter a distance equal to the normal width or gage of wagons or similar vehicles, both substantially flush with the surface of the street and both together forming vehicle-tracks at the sides of the street and leaving the middle portion of the street for car-tracks 3 or to serve as a roadway for light equipages, as may be desired.

The gutter 1 is preferably constructed of metal and is of inverted-trough shape, with a substantially flat surface 4, that serves both as a channel to carry off water and refuse and as a tread-surface for vehicle-wheels, and with vertical sides, which constitute supporting-feet, between which is filled in a backing 5 of cement to add strength to the structure and to give it a stable foundation. One side, 6, of the gutter is fluted in such manner that it provides a series of regularly-spaced recesses 7, the walls of which are at right angles to each other, said recesses being designed to receive the material with which the street is paved, such as the sheet-asphalt 8 or the paving-blocks 9, whereby to form a firm joint therewith in the nature of a mortise-and-tenon joint, and each recess preferably corresponding in width to a street-paving block. The other side of the gutter is preferably provided with an upwardly-extending flange 10, designed to form a metallic curbing for the sidewalk 11. As shown in Fig. 4, the flange 10 may be dispensed with where the curbing as already constructed is of metal or where another or separate curbing is desired. As shown in Fig. 6, the metallic gutters 1^a for the curves or corners of the street may dispense with the recesses 7.

The wheel-plate 2, like the gutter 1, is preferably constructed of metal and is of substantially inverted-trough shape. It is also provided with a backing 12, of cement, and both of its sides are preferably fluted, so as to provide recesses 13 for effecting a firm joint with the street-paving. Furthermore, its upper surface, which constitutes the tread-surface for vehicle-wheels, is preferably formed with two sets of grooves 14, extending diagonally of the plate and intersecting each other, the object of said grooves being to prevent said surface from becoming formed with ruts by constant wear.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a combined metallic gutter and curb which also constitutes one member of a track for wagons or other vehicles. This construction and arrangement not only effect a saving in cost by utilizing the same element for several purposes, but also provide means which will divert considerable traffic, especially that of a heavy character, from the middle of the highway and from the car-tracks toward the curb, which is a desideratum in the regulation of traffic, and

is generally recognized as one of the main factors in solving the problems attending such regulation, especially in crowded city streets where there is considerable travel of merchandise-trucks and other similar heavy and slow-moving vehicles.

I claim as my invention—

1. In a highway, a gutter located at the side thereof contiguous to the sidewalk and a wheel-plate the two spaced apart a distance corresponding to the normal gage of wagons or similar vehicles and constituting a track for the same.

2. In a highway, a metallic gutter embedded at the side thereof contiguous to the sidewalk and a metallic wheel-plate also embedded therein the two substantially flush with the surface of the highway and spaced apart a distance corresponding to the normal gage of wagons or similar vehicles and constituting a track for the same.

3. A wheel-plate for a vehicle-track for highways, of substantially inverted-trough shape and provided with fluted sides, for the purpose set forth.

4. A wheel-plate for a vehicle-track for highways, of substantially inverted-trough shape and having fluted sides providing rectangular recesses, for the purpose set forth.

5. A metallic gutter for highways, provided with a flange constituting a metallic curb.

6. A metallic gutter for highways, of substantially inverted-trough shape and provided with a fluted side, for the purpose set forth.

7. In a highway, a metallic gutter at the side thereof contiguous to the sidewalk, of substantially inverted-trough shape with a flat upper face designed to constitute a tread-surface for vehicle-wheels.

8. A metallic gutter for highways, of substantially inverted-trough shape, one of its sides being fluted, for the purpose set forth.

9. A combined metallic gutter and curb for highways, consisting of an inverted-trough-shape body one side of which is fluted and at the other side of which is an upwardly-extending flange constituting the curb.

10. In a highway, a metallic gutter of substantially inverted-trough shape with a smooth flat upper surface designed to constitute one member of a vehicle-track, and a wheel-plate also of inverted-trough shape spaced from said gutter a distance corresponding to the normal gage of wagons or similar vehicles and provided with a grooved upper surface constituting the other member of said track.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN OWEN.

Witnesses:
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GEO. L. MCCLEARY.