

H. O. AMES.

Improvement in Street Gutters.

No. 131,588.

Patented Sep. 24, 1872.

Fig. 1.

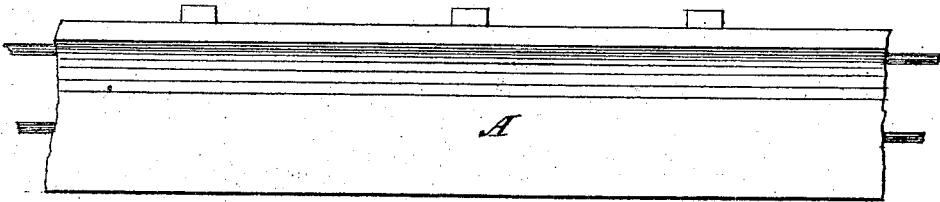


Fig. 2.

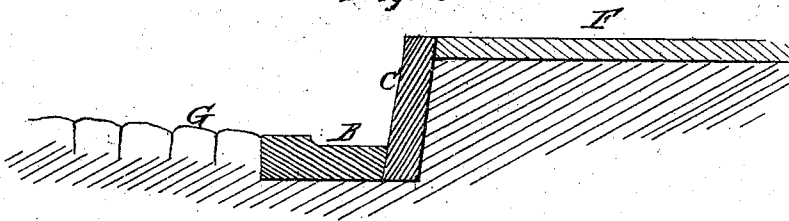


Fig. 3.

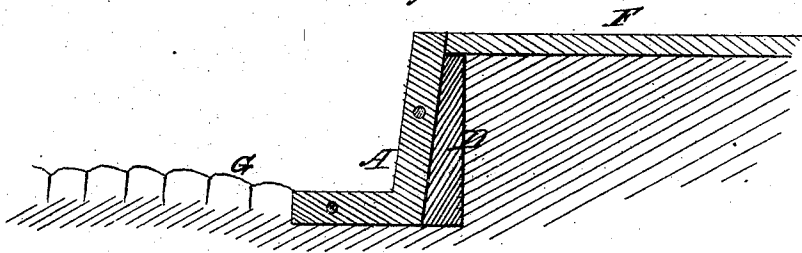
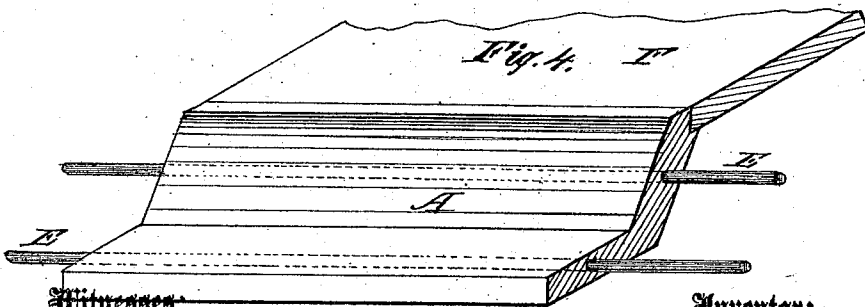


Fig. 4.



Witnesses:

R. D. Storck
N. A. Graham

Inventor:

H. O. Ames

PER

Munnell
Attorneys.

UNITED STATES PATENT OFFICE.

HUGH O. AMES, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN STREET-GUTTERS.

Specification forming part of Letters Patent No. 131,588, dated September 24, 1872.

To all whom it may concern:

Be it known that I, HUGH O. AMES, of New Orleans, in the parish of Orleans and State of Louisiana, have invented new and Improved Curbs and Gutters for Streets, of which the following is a specification:

My invention consists in the construction of curbs and gutters for streets of cement in molds of the form required, the said cement being rammed hard in the molds, which may either be constructed of boards or plank in two parts, representing the upper and lower sides of the gutter and curb, or the earth-bed of the street may constitute the lower side of the mold, while the upper side will be formed of a half mold of planks. The curb and gutter will be formed together in one structure, or each may be formed separately. When the curb is high buttresses of metal or stone may be arranged behind in the earth-bed for strengthening it, and the gutter and curb or either may be strengthened by one or more metal rods incorporated with the cement when being packed in the mold.

Figure 1 is a plan view of a gutter and curb formed together according to my improvement and strengthened with iron rods, as aforesaid. Fig. 2 is a transverse section of a gutter and curb made separately. Fig. 3 is a transverse section of Fig. 1, and Fig. 4 is a perspective view of Fig. 1.

Similar letters of reference indicate corresponding parts.

I use Portland or other cement separately or in combination with a concrete cement compounded in the most approved proportions, which I pack in a mold suitably shaped to produce the curb and gutter together on the proper angles of inclination to each other for the right positions relatively to the sidewalk and street bed, as shown at A, Figs. 1, 3, and 4; or I may form each separately, as shown in Fig. 2, in which B represents the gutter, and C the curb. The molds will be substantially such as are

used in the construction of concrete walls, the peculiarity of which is that they can be taken off or removed when the molded concrete is sufficiently hard to retain its shape; or I may only use the half of such molds and employ the earth-bed for the other half, which will save the expense of one-half the mold and the labor of removing it. D represents a metal buttress, which I propose to use in some cases for re-enforcing the curb when the height is such as to require it; and E represents metal rods that may be incorporated with either the curb or gutter, or both, in the construction of them in the molds for making them very strong for use where heavy-laden carts are frequently backed up on the gutter and against the curb with great force. F represents the sidewalk, and G the wagon-road.

When a mold of two parts is used the earth-bed will be built up to the gutter and curb as soon as the mold is taken away, but generally the earth-bed for the gutter will also be the mold for forming it. By this plan I am enabled to build continuous gutters and curbs, which will not only be much cheaper than stone, particularly where stones are scarce, but they will be far better, because of being continuous, so that the water will not leak through the joints and wash away the earth foundation or support, as it does where short stones are used, so that they become displaced.

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

1. A cement gutter and curb, as described.
2. The combination, with the curb and gutter, together or either separately, of the strengthening-rod E, substantially as specified.

HUGH OSWALD AMES.

Witnesses:

ANDREW HERO, Jr.
GEO. FRUW.