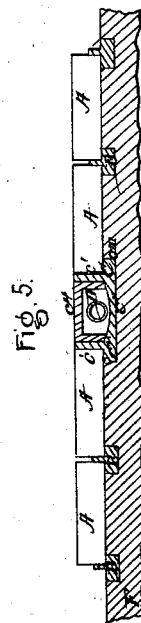
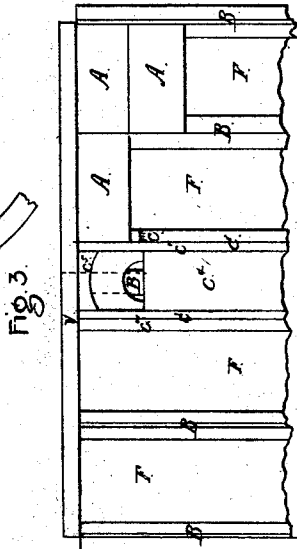
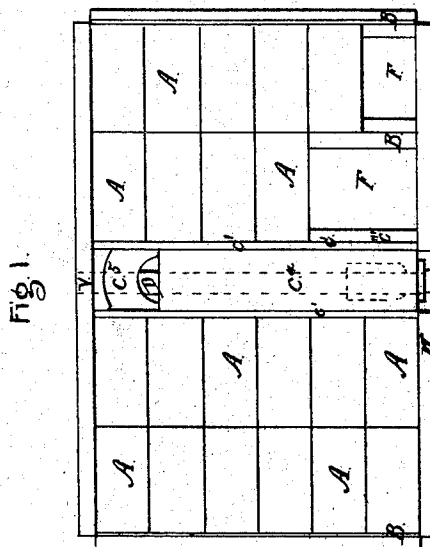
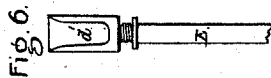
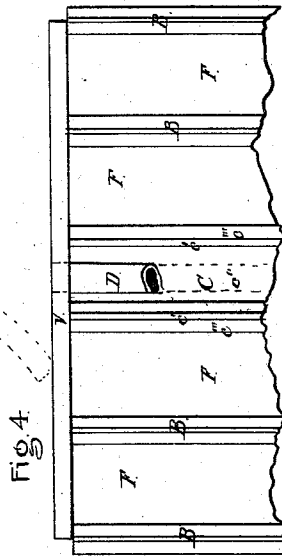
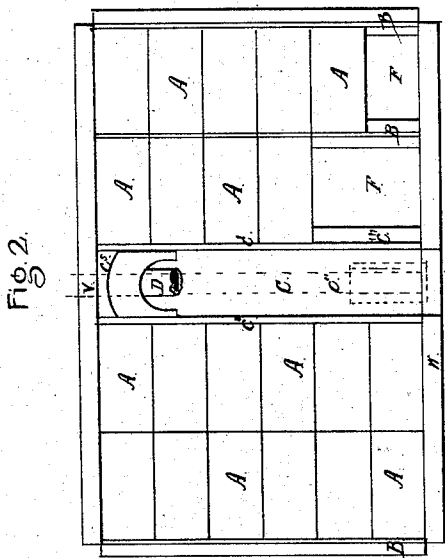


J. Read.

Pavement Gutter.

N^o 83,663.

Patented Nov. 3, 1868.



Witnesses:

Benjamin
Wm. H. Morrison

Inventor:

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United States Patent Office.

JOSEPH READ, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 83,663, dated November 3, 1868.

IMPROVED GUTTER IN FOOT-PAVEMENTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH READ, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Foot-Pavements; and I do hereby declare that the following is a full, clear, and exact description of the construction of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan view of the said improved pavement, showing the roof-spout drain as covered, and a pave-washer hose attached;

Figure 2, a like view of the pavement, showing the roof-spout drain as uncovered, and a section of the pave-washer supply-pipe exposed;

Figures 3 and 4, sectional plan views of the said pavement, showing the arrangement of the supporting iron sills;

Figure 5, a vertical longitudinal section of fig. 1; and Figure 6, the washer detached.

Like letters of reference indicating the same parts when in the different figures.

My improvement relates to the gutters or drains which are usually sunk across the foot-pavements of cities and towns, for the purpose of conducting off the water of the roof-spouts and pave-washer pipes attached to the houses, and has for its object the avoidance, in a perfect manner, of the objectionable features of the said parts of foot-pavements as heretofore constructed.

The nature of my invention consists in the peculiar construction and mode of combination with the pavement, as hereinafter described, of a metallic water-conductor.

Referring to the drawings,

A A are the slabs, tiles, or enlarged bricks, forming the surface of the pavement;

B B, the iron sills;

C, the iron drain;

D, the pave-washer supply-pipe;

E, a detachable pave-washer; and

F, the gravel ballast.

The roof-spout drain C consists of two upright ribs, c' c' , a bottom plate, c'' , and two side flanges, c''' c''' , all cast or rolled in one piece of iron, (see fig. 5,) so as to form, when laid, a straight continuous trough, of rectangular section, reaching from the building v to the curb w , open at its upper side, and the flanges c''' c''' projecting horizontally, for the support of the ends of the surface-slabs or bricks adjoining the said drain. This drain C is also provided or fitted with a detachable iron cover, c' , having two side flanges, which project at right angles downward, so as to fit in close contact with the inner sides of the ribs c' c' , and the bottom, c'' , of the trough or drain c , whilst its upper surface c' is even with the surface of the pavement when finished. (See fig. 5.)

This cover c' extends across, from the curb w , to within about six or eight inches of the house-wall v , and thus leaves an open space at the upper end of the drain for the entrance of the water from the roof-spout, a small plate, c' , having a sunken surface, being fitted in the said space for receiving and guiding the spout-water into the drain C.

Along in the drain C there is arranged a pave-washer

supply-pipe, D, which, coming through the house-wall v , extends along, within the drain C, to the curb w , where it is intended to be made tapering, so that a suitable pave-washer hose can be readily attached or detached, as occasion may require.

Fig. 6 represents a section of hose connected with a guiding-shoe, d' , which fits into the lower end of the drain C, so that it may receive the tapering end of the pipe D.

The bricks of the foot-walks of cities and towns are very liable to become uneven and loose, especially along beside the roof-spout drains across the pavement, and these exposed gutters are also nuisances, especially when not kept clean. The push-carts of bakers, grocers, and others are daily rolled across over them, and the adjoining side bricks of the pavement, as well as of the gutter itself, are soon loosened thereby, so that the drain-water runs under them, and, consequently, when the loosened bricks are trodden upon, dirty or muddy water is squirted upward and over the pantaloons or skirts of the pedestrians.

It will be seen that my described mode of constructing and applying the drain C, avoids all these objections, because, being constructed with the side flanges c''' c''' , the adjoining ends or sides of the bricks are supported thereby in such a solid and durable manner that the said passing carts cannot loosen or force them downward, and the drain C being impervious, its water cannot get under either it or the bricks, and, besides, being closely covered by a heavy detachable plate, c' , the upper surface of which is always even or flush with the upper surface of the pavement, it does not produce any obstruction whatever to the pedestrian, and yet allows a ready removal for cleansing the drain when required. It also affords an excellent means for continuing, or conducting and protecting to the curb, the pave-washer pipe, which usually projects through the wall of the adjoining dwelling, and thus avoids another nuisance common in cities.

I am aware that the surface-stones or blocks of street-pavements have before been supported upon iron sills, constructed in their transverse sections as herein described, and therefore I do not desire to claim the said mode for supporting the surface-bricks of foot-pavements; and I am also aware that iron troughs, having detachable covering-plates, have been sunk across foot-pavements so as to produce water-drains having their covering-plates even with the surface of the pavements; and therefore I do not desire to claim, broadly, the application of a covered iron drain; but, having fully described my improvement,

What I claim as new therein, of my invention, and desire to secure by Letters Patent, is confined to the following, viz:

I claim, in combination with the foot-pavement of a city or town, the iron drain C, having the side flanges c''' c''' , and the detachable covering-plate c' , constructed and applied, substantially as and for the purposes described.

JOSEPH READ.

Witnesses:

BENJ. MORISON,

WM. H. MORISON.