

J. P. BYRNE.

Cast-Metal Gutters for Streets.

No. 146,652.

Patented Jan. 20, 1874.

Fig. 1.

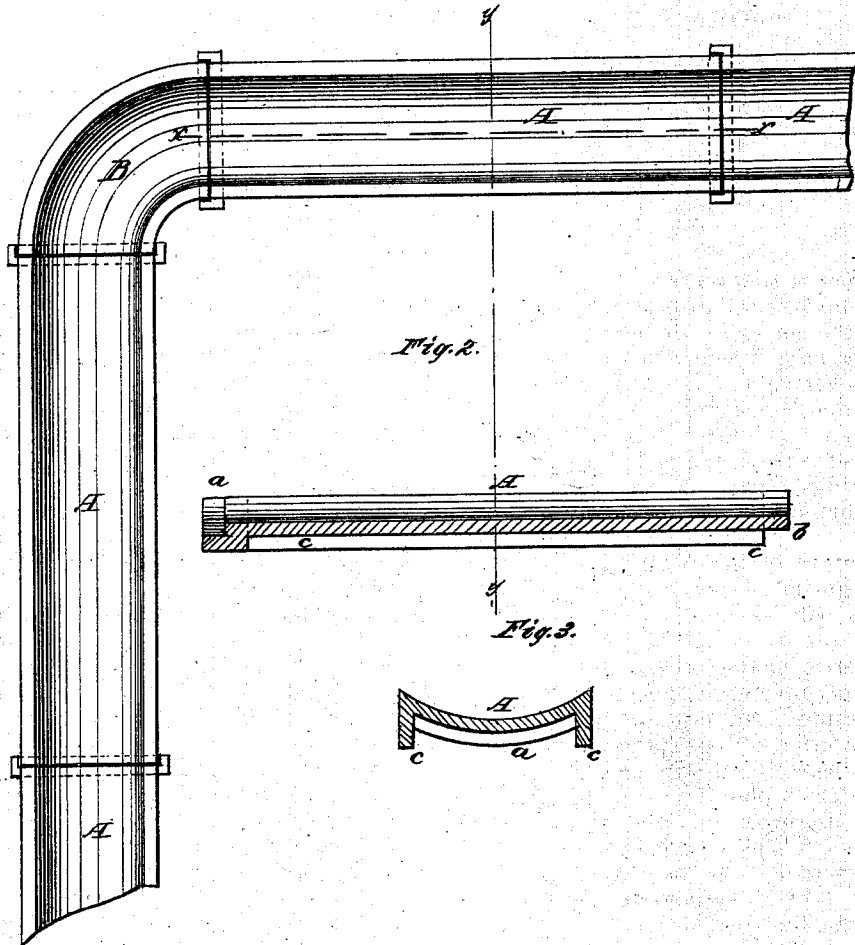


Fig. 2.



Fig. 3.



WITNESSES:

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JOHN P. BYRNE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CAST-METAL GUTTERS FOR STREETS.

Specification forming part of Letters Patent No. **146,652**, dated January 20, 1874; application filed December 13, 1873.

To all whom it may concern:

Be it known that I, JOHN P. BYRNE, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Cast-Metal Gutters for Streets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in a concave gutter of cast-iron or other suitable metal, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of a portion of gutter, such as might be used at the corner of two streets or alleys. Fig. 2 is a longitudinal vertical section of the same through line *x x*, and Fig. 3 is a transverse vertical section through the line *y y*.

This improved gutter is made in longitudinal sections A A, of any lengths suitable for easy handling. One end of each section is provided with a portion of its upper surface *a* depressed, so as to form a rabbet equal in depth to the thickness of the plate at its other end *b*, so that when the end *b* of the next plate is laid, resting on the rabbet *a* of the first section, the upper concave face of the gutter forms an even, continuous surface-line. For corners,

the section is curved, as shown at B, Fig. 1, the ends of such curved section being constructed in the same manner as described for the straight sections A A. Each section of this gutter is provided with a vertical flange, *c*, under each edge, projecting down a sufficient depth to form a wall, against which the general pavement rests. These vertical flanges *c c* are as much shorter than the whole length of each section as the length of the rabbet *a*, and located on each section one-half such length of rabbet *a* from each end of each section, thus locking the sections together in a continuous line on both sides, and preventing any one from moving laterally in the rabbet *a*. For example, if the whole length of a section be four feet and three inches, and the rabbet three inches long, then the vertical flanges *c c* would be four feet long, located one and a half inch from each end of the section.

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

A concave metal gutter made in longitudinal sections, and each section provided with a rabbet, *a*, and vertical side flanges *c c*, constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN P. BYRNE.

Witnesses:

T. L. McDERMOTT, M. D.,
W. N. LONGWORTH.