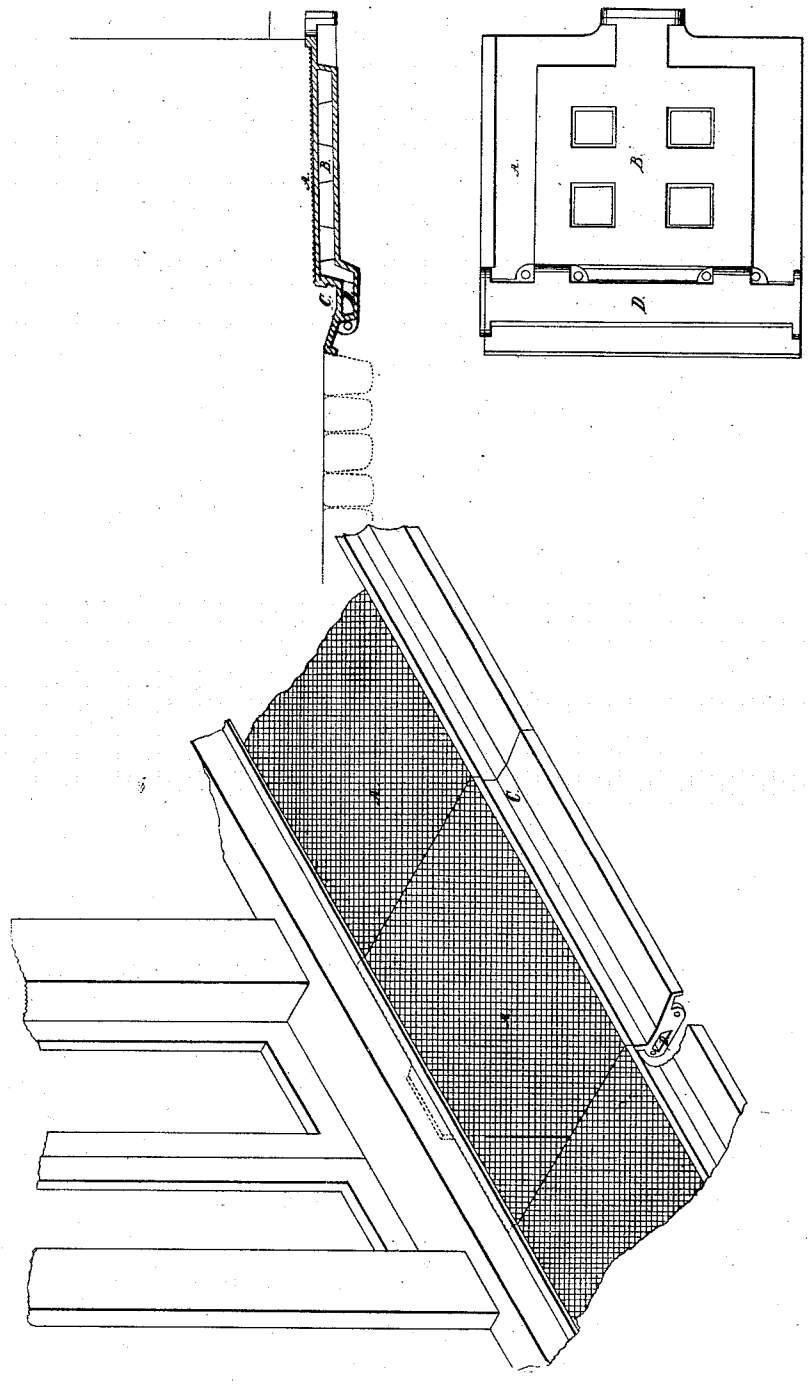
M. Pennock.

Iron Pavement.

No. 41,412. Patented Jan. 26, 1864.



Witnesses:

J. W. Bromley

C. W. Reed

Inventor:

Morton Pennock

per Munn & Co

attys

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UNITED STATES PATENT OFFICE.

MORTON PENNOCK, OF KENNETT'S SQUARE, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND SAMUEL PENNOCK, OF SAME PLACE.

IMPROVEMENT IN CAST-IRON PAVEMENTS AND GUTTERS.

Specification forming part of Letters Patent No. **41,412**, dated January 26, 1864.

To all whom it may concern:

Be it known that I, MORTON PENNOCK, of Kennett's Square, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Cast-Iron Pavements; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of my invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference in the three figures indicate corresponding parts.

This invention consists in arranging a hollow space or channel under the metal plates which constitute the pavement in such a manner that, by admitting steam or heated air into said channel, the pavement can be kept free from snow and ice; and it also consists in the arrangement of a metal gutter with a similar channel, in combination with the pavement, in such a manner that, by admitting steam or air under said gutter, the same can be freed from ice and snow, and at the same time the water accumulating in it prevented from freezing; also, in the use of a metal gutter with a channel underneath independently of the metal pavement.

To enable those skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawings.

The plates A, which constitute the pavement, are made rough on their upper surfaces to prevent the slipping of the feet, and they are made of cast-iron or of any other good conductor of heat. Under these plates, and firmly connected to their under surface, is a channel, B, which may be subdivided by suitable partitions into smaller channels to receive steam or hot air, which is introduced through a suitable aperture. By these means the snow and ice which may accumulate on the plates A can be readily reduced to a liquid state, and the surface of the plates can be kept free and clean in the cold as well as in the warm season. These plates are principally intended for sidewalks or for steps of stairs on the outside of buildings. When they are used for sidewalks, each plate may be provided with a gutter, C, made out of the same metal as the plate, so that when the plates are placed side by side a continuous metal gutter is formed. This gutter C is furnished on its under side with a channel, D, which may be separate from the channel B, under the plates, or in communication with the same. The channel D, like the channel B, serves to admit steam or hot air, so that the ice or snow that may accumulate in the gutter can be rendered fluid in a short time and without any further trouble, and the water which may run down into the gutter from the pavement is prevented from freezing.

It is obvious that the gutter may be used in connection with the ordinary pavement.

By these means the sidewalk can be kept perfectly clean of snow and ice, and the water passes readily off into the sewer through the gutter, which is always open and unobstructed.

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

1. The channel B under the metal plates A, substantially as and for the purpose described.

2. The combination, with the plates A, of a gutter, C, of metal, with a channel, D, substantially in the manner and for the purpose set forth.

3. The gutter C, made of metal or other good conductor of heat, and provided with a channel, D, substantially as and for the purpose specified.

MORTON PENNOCK.

Witnesses:

M. M. LIVINGSTON,

S. F. COHEN.