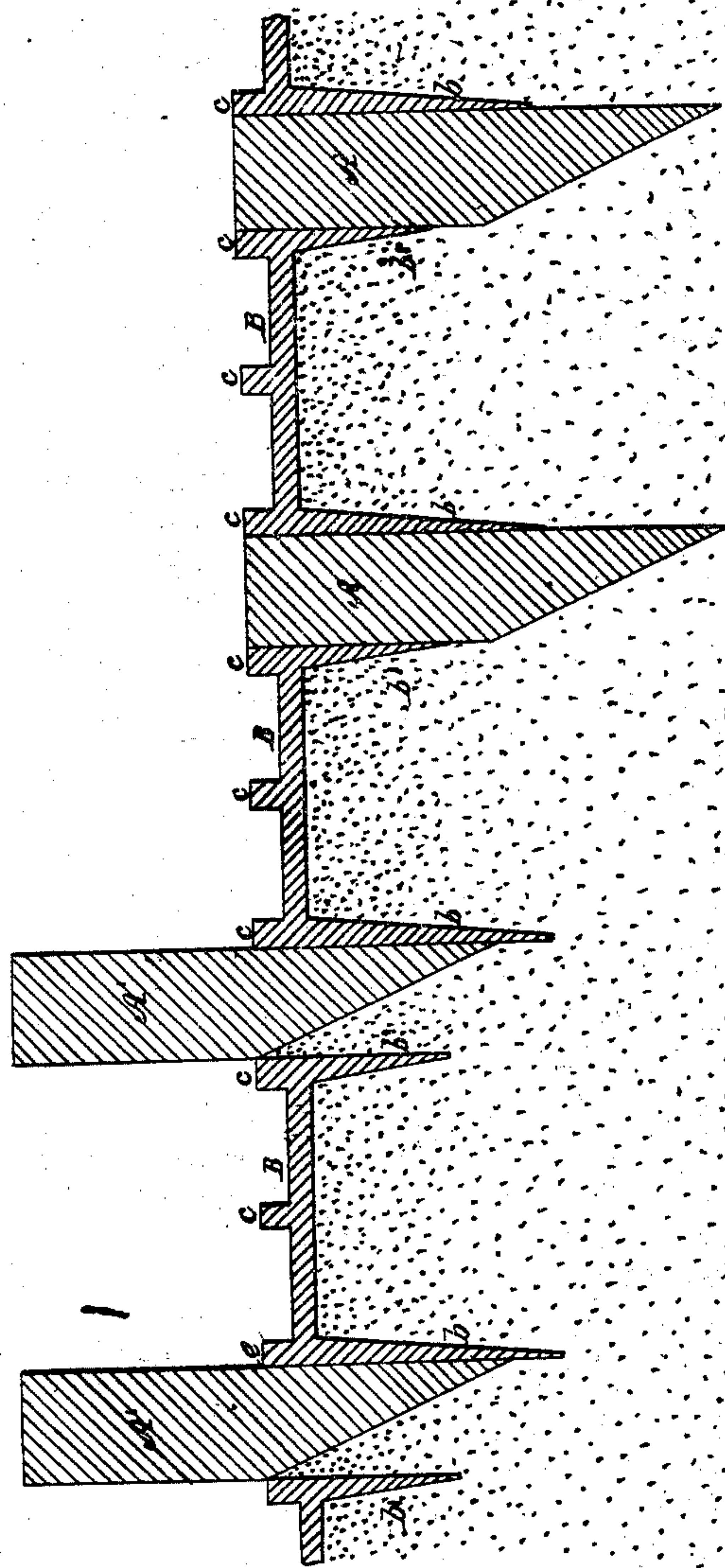


H. M. Stow.
Street Pavement.

Nº 72111

Patented Dec. 10, 1867.



Witnesses.

Chas B. Page Jr.
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UNITED STATES PATENT OFFICE.

HENRY M. STOW, OF SAN FRANCISCO, CALIFORNIA.

IMPROVED STREET-PAVEMENT.

Specification forming part of Letters Patent No. 72,111, dated December 10, 1867.

To all whom it may concern:

Be it known that I, HENRY M. STOW, of San Francisco, in the county of San Francisco and State of California, have invented a new and useful Improvement in Street-Pavements; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

The nature of my invention consists in forming a pavement of alternate tiers of wedge-shaped wooden blocks and cast-iron plates, with projecting wedge-shaped flanges, to be driven into a foundation of sand or loose earth, as hereinafter more fully described and shown.

The drawing shows a section of my pavement lengthwise of the street, or crosswise in respect to the blocks and intermediate cast-iron plates.

A A are cross-sections of the wedge-shaped wooden blocks, in the position they occupy when the pavement is completed, and A' A' are cross-sections of similar blocks not yet driven down to their places. B B B are cross-sections of cast-iron plates, with projecting wedge-shaped flanges *b* and *b'*, and shallower flanges or ribs *c c c*.

The wooden blocks may be from four and a half to seven inches long, or deep—that is to say, from the square top to the point of the wedge—from one to three inches thick, and of any convenient width, according to the size of the lumber from which they are made. They are to be made in wedge form by beveling one side only, as clearly shown in the drawing.

The cast-iron plates should be from three to four inches wide, and from one-fourth to three-eighths of an inch thick, the flanges and ribs being of about the same thickness. These plates may be cast of any convenient length.

To put down this pavement the street is first filled with a bed of sand or loose earth to the depth of the wooden blocks to be used. The cast-iron sections or plates are then to be laid down in tiers across the street, with tiers of wooden blocks between them, as shown by A' in the drawings. When any desired length of pavement is thus laid, the wooden blocks are to be driven down to the position shown by A A; but before said blocks are driven the outer cast-iron plates should be so confined that the section of pavement so laid cannot

be spread by the driving. The sand or earth forming the foundation-bed should be thoroughly wet when the pavement is put down. The sand or earth between the different tiers of wooden blocks will, by the driving down of said blocks, be divided into sections, and confined in separate chambers, so that no particle of sand or earth can be pressed out of its own chamber. Consequently said sand or earth must become greatly compressed and compacted by driving down the wedge-shaped blocks, and will form a foundation so firm that the most heavily-laden wagons, in passing over the pavement, will not in the least depress any of the blocks, or produce any unevenness in the surface of the pavement.

The shallower flanges *b'* on the lower side of the cast-iron plates are not altogether indispensable to the invention; but I prefer to use them. The deeper flanges *b* should be about half the depth of the wooden blocks. The ribs *c c c* on the upper sides of the cast-iron plates are intended to give a foot-hold to horses and other animals traveling on the pavement. The blocks and plates should be so laid as to break joints, and the blocks may be saturated with coal or gas tar, or any of the liquid hydrocarbons, or with any pitchy or resinous matter which will tend to preserve the wood from decay.

When the blocks are all driven down their upper ends may be subjected to a coating of boiling-hot coal-tar and asphaltum, or oil and asphaltum, or any other suitable pitchy substance, and then covered by a thin layer of sand.

Having thus fully described my invention, and the method of carrying it into effect, what I claim as new, and desire to secure by Letters Patent, is—

1. The cast-iron plates with projecting wedge-shaped flanges, to be driven into the sand or earth, substantially as and for the purpose set forth.

2. A pavement composed of alternate tiers of cast-iron plates with projecting wedge-shaped flanges and wedge-shaped wooden blocks, driven into the sand or earth, substantially as described.

HENRY M. STOW.

Witnesses:

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