(No Model.)

J. L. BREED.

PAVING BLOCK.

No. 402,897. Patented May 7, 1889.

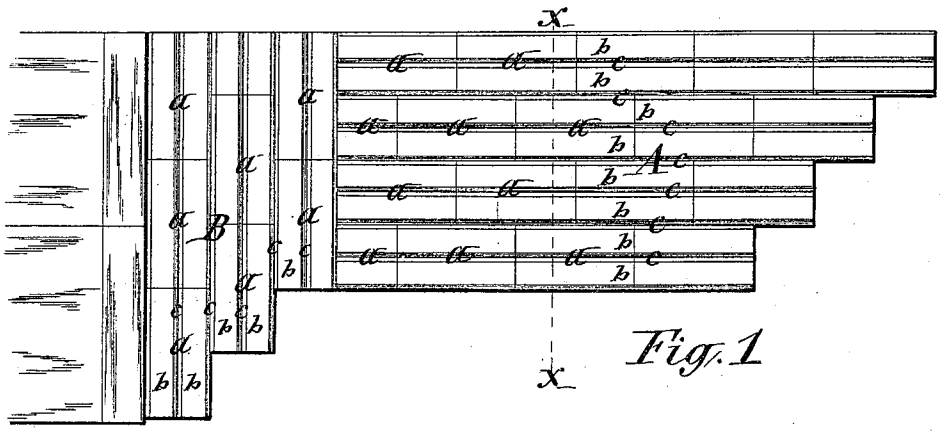


Fig. 1

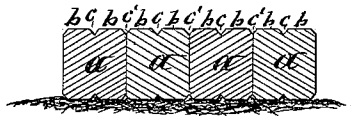


Fig. 2

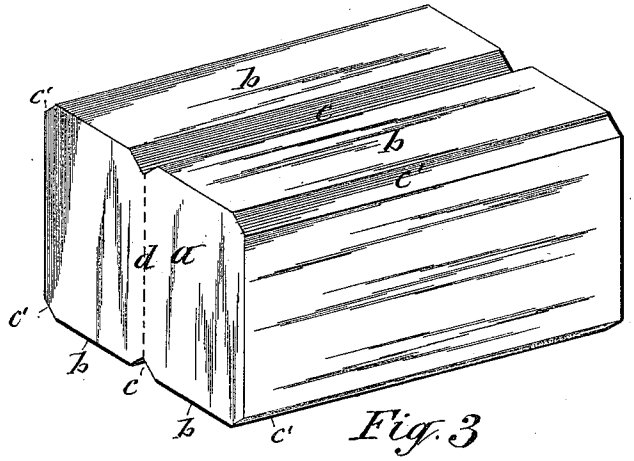


Fig. 3

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES L. BREED, OF SYRACUSE, NEW YORK.

PAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 402,897, dated May 7, 1889.

Application filed December 3, 1888. Serial No. 292,445. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. BREED, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Paving-Blocks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates more particularly to paving-blocks designed to be molded of clay and burned or vitrified to impart to them the required solidity and rigidity; and the invention consists in forming said blocks with grooves in the top surfaces, and preferably also in their bottom surfaces, all of which grooves run in one direction, said blocks being designed to be laid with their grooves transversely to the line of the street in the central or main portion of said street, and with the grooves lengthwise the street in the portions constituting the gutters, and when thus laid the main portion of the street is devoid of longitudinal ruts, and the transverse grooves serve to conduct the water to the gutters, in which the longitudinal grooves facilitate the carrying off of the water and keep the gutters comparatively clean.

The invention is fully illustrated in the annexed drawings, in which—

Figure 1 is a plan view of a section of street-pavement embodying my invention. Fig. 2 is an enlarged vertical section on line *x x*, Fig. 1; and Fig. 3 is a still further enlarged perspective view of one of the paving-blocks.

A A designate the paving-blocks, which I preferably mold of clay or other suitable earthy material and burn the same in a suitable kiln, so as to vitrify said blocks, and thus render them hard, compact, and capable of resisting wear and abrasion as well as breakage when used as a paving of streets.

I preferably form the block *a* elongated or of rectangular form in its horizontal plane for the purpose of providing it with sufficient bearing-surface by which to lay it upon the foundation usually prepared for block pavements. The top surface of said block I form with a groove or grooves, *c*, running in one direction only and with smooth or unbroken surfaces *b b* between the grooves, and when the block is elongated as aforesaid I form the grooves lengthwise of said block, as shown in Figs. 1 and 3 of the drawings.

By providing the bottom surface of the block *a* with similar longitudinal grooves it is obvious that the block may be laid with either of the grooved surfaces upward, and consequently the operation of laying the pavement is greatly facilitated. One of the important advantages of the grooves on the under side, however, consists in their affording to the block a better hold on its foundation, so as to prevent the block from slipping in a direction at right angles to the grooves. The sides of the block I form smooth for the purpose of allowing it to be removed individually from the pavement when required. The top and bottom edges of the sides I bevel, as shown at *c′ c′*, so as to form with the adjacent block a groove similar to the central groove, *c*. In order to obviate forming grooves at right angles to the grooves *c*, I form the ends of the block with plain vertical faces in uniform planes throughout at right angles to the top and bottom faces of the block, as shown in Fig. 3 of the drawings.

Although I prefer to form the block with the central groove, *c*, yet I do not wish to be limited specifically to such form, inasmuch as the block may be divided along the line of said groove, as indicated by the dotted line *d* in Fig. 3 of the drawings.

In paving a street with my improved paving-blocks, I lay said blocks with their grooves *c c* transversely to the line of the street, at the main or central portion thereof, as shown at A in Fig. 1 of the drawings.

In the gutter B, I lay the blocks with the grooves *c c* lengthwise of the street. In this manner I obviate forming longitudinal channels or ruts in the main portion of the street and provide the same with transverse channels, which serve as footholds for the horses traveling upon said pavement, and also conduct the water to the gutters and serve to maintain clean the intermediate smooth surfaces, *b b*, while the gutters are provided with longitudinal channels which assist in carrying off the water.

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

1. The improved paving-block composed of vitrified clay and formed rectangular, and with grooves and beveled edges all formed in the top and bottom faces of the block and extending lengthwise thereof, and the end faces of said block being each in a uniform plane throughout at right angles to the top and bottom faces of the block, substantially as described and shown.

2. A street-pavement composed of rectangular blocks of vitrified clay, each of said blocks being formed with grooves and beveled edges all in the top and bottom faces of the block and lengthwise thereof, and having plain end faces in uniform planes throughout at right angles to the top and bottom faces, the blocks in the main or central portion of the street being laid with the grooves of the blocks transversely of the line of the street, and the blocks in the gutters laid with the grooves of the blocks lengthwise of the street, substantially as described and shown.

In testimony whereof I have hereunto signed my name, in the presence of two witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 1st day of December, 1888.

JAMES L. BREED. [L. S.]

Witnesses:
JOHN J. LAASS,
C. H. DUELL.