

(No Model.)

J. LYNCH.
STREET PAVEMENT.

No. 448,658.

Patented Mar. 24, 1891.

FIG. 1.

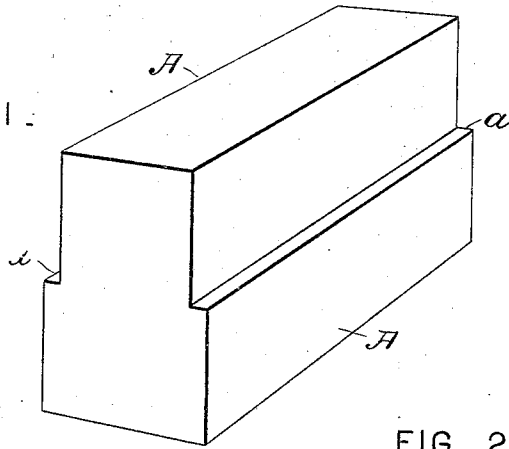


FIG. 2.

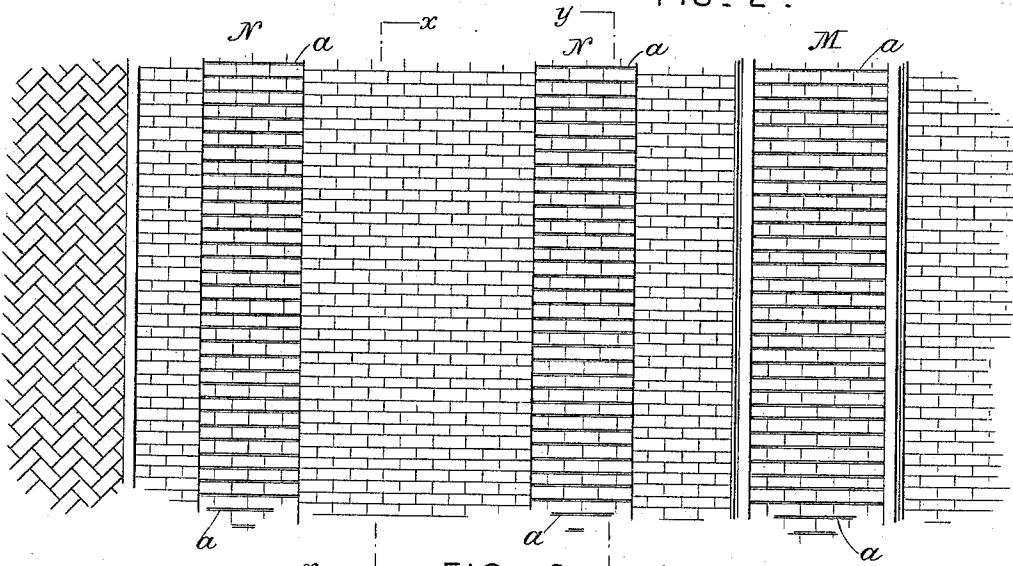


FIG. 3.

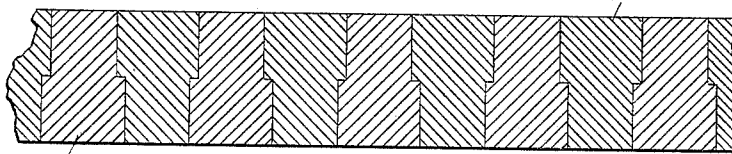
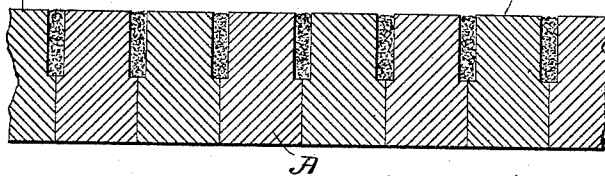


FIG. 4.



Attest
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UNITED STATES PATENT OFFICE.

JOHN LYNCH, OF WASHINGTON, DISTRICT OF COLUMBIA.

STREET-PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 448,658, dated March 24, 1891.

Application filed June 16, 1890. Serial No. 355,571. (No model.)

To all whom it may concern:

Be it known that I, JOHN LYNCH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Street-Pavements and Bricks Therefor; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of the present invention is to provide a brick pavement and brick therefor which are specifically adapted for the varied requirements of city travel and which can be easily and cheaply repaired and kept in order; and the invention consists of a brick for street-pavements of a special construction, and also of a pavement laid therewith, all as hereinafter described and claimed.

Figure 1 is a perspective view of a brick. Fig. 2 shows a portion of a street-pavement laid with these bricks. Fig. 3 is a cross-section taken on a line through the smooth part of the pavement, as, for example, *x x*. Fig. 4 is a cross-section taken on a line through a part of the pavement laid with open joints at the surface, as, for example, *y y*.

The brick A is made of the regulation brick size and shape, with the exception that it has a narrow ledge or shoulder *a* formed on both sides at exactly the center line thereof. This ledge is one-fourth of an inch in width and runs lengthwise of the brick from end to end. The brick is preferably made so that its average thickness is the same as a regulation brick—that is, above the ledges *a*, Fig. 1, it is one-fourth of an inch thinner than a regulation brick and below said part it is one-fourth of an inch thicker, thus making the cubic contents and weight of the brick the same as it would be if made of regulation size.

In laying a pavement with these bricks the foundation of concrete is prepared in the usual way. The bricks are then laid on their edges, breaking joints as to courses, with the narrow edges uppermost, or with successive courses alternating in reversed position, according as the surface-joints are to be close or open. This form of brick permits a smooth

pavement to be laid with a close surface, where such a pavement is desired—as, for example, in the gutter and on such parts of the roadway as are most traveled by wheels of vehicles, and a smooth pavement with open joints, or joints that will afford foothold for horses, on such other parts of the road as may be desired. For example, Fig. 2 shows one-half of a street paved in the manner contemplated by this invention. When the pavement is to be made with a close surface, the successive courses of bricks are reversed in laying, as shown in Fig. 3. Each alternate course will have the narrow edge of the brick uppermost and the intermediate courses will have the broad edges uppermost, the shoulders of the latter resting on the ledges of the former. This construction also distributes the weight coming on any brick or course of bricks over an increased surface at the bottom of the brick-course. For example, the weight on a narrow brick on the street-surface is distributed over the broader surface of the under face of the brick and the weight on a wide brick or course of bricks at the street-surface is distributed by means of the shoulders over three courses of bricks, one course on each side. Moreover, as the tires of wheels of heavy wagons are wider than the narrow edge of a brick, it follows that the weight of heavy vehicles will as a rule be distributed over a bearing-surface of three to five bricks. In laying the bricks thus they are preferably dipped in tar as they are laid, which causes them to bind together and make tight joints. When the pavement is to be laid with open joints, the bricks are set in the manner illustrated by Fig. 4, with all the bricks resting on their broad edges and with the courses running across the line of travel. The open spaces thus formed between the upper parts of the courses are then filled in with gravel and tar or asphalt. The whole forms a smooth pavement; but the joints of material softer than the bricks give good foothold for the horses.

In paving a street the space M between the car-tracks is laid with open joints, and between the car-track and the curbstone one or more sections N, of a width less than the gage of wagon-wheels, are also laid with open joints, so that a horse or a pair of horses can travel

on the track laid with open joints, and the wheels can run on the adjacent parts of the pavement laid with close joints. These sections N can be laid at any point in the roadway. In the present case one such section is shown near the car-track and another near the gutter, with a broad stretch of pavement laid with close joints between. It is well known that a thin coating of ice on a smooth asphalt or like pavement makes it dangerous for horses and even stops travel; but with a pavement laid as herein described horses can always travel on these sections N. At other times light teams can travel on any part of the roadway and heavy teams can take the section where the horses can get a good foothold. When any section of the roadway gets worn, the pavement can be easily repaired and the bricks can be used again by reversing them. Sections of the pavement thus laid with open joints will afford all the foothold for horses that a Belgian-block pavement gives and at the same time will be practically a smooth pavement for carriage-wheels. Driving over such parts of the pavement will not give the rattle and jar to carriage-wheels that is experienced in driving over a stone pavement.

I am aware that it has been heretofore proposed to lay pavements with smooth tracks for the wheels of vehicles and rough sections for horse travel, and I am also aware that bricks and blocks for pavements and building purposes, &c., have been made with lateral projections or ledges, and I do not claim the same, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

A street-pavement made with reversible bricks having ledges running lengthwise of the bricks at the middle line thereof and laid with the narrow edges of the bricks uppermost on sections designed for horse travel and with the edges of the bricks alternately reversed on sections designed for wheel travel, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN LYNCH.

Witnesses:

G. Y. ATLEE,
STORY B. LADD.