

(No Model.)

C. M. O'CONNOR.
PAVING TILE OR BRICK.

No. 400,477.

Patented Apr. 2, 1889.

Fig. 1.

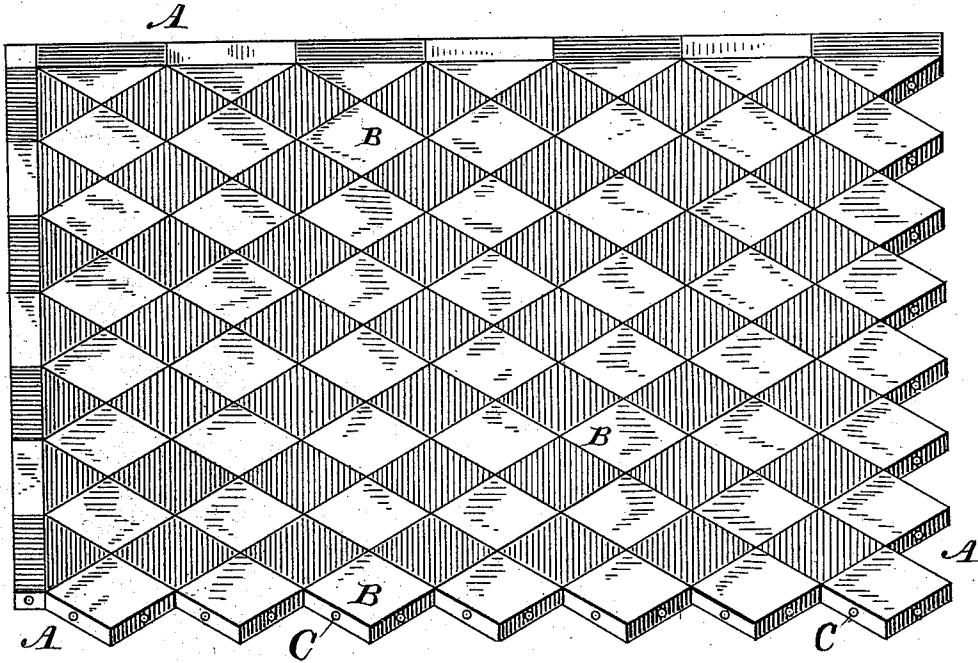
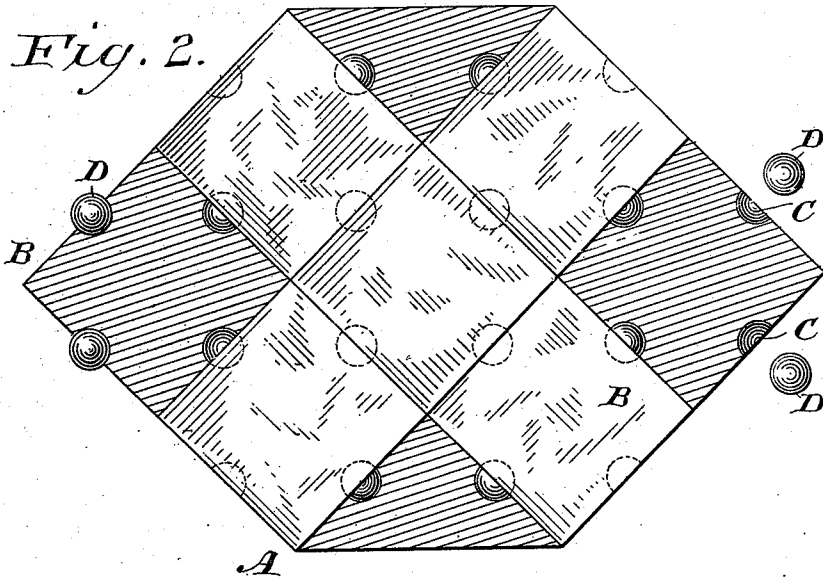


Fig. 2.



WITNESSES

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PAVING TILE OR BRICK.

SPECIFICATION forming part of Letters Patent No. 400,477, dated April 2, 1889.

Application filed October 22, 1888. Serial No. 288,786. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES M. O'CONNER, of the city of Lock Haven, county of Clinton, and State of Pennsylvania, have invented certain new and useful Improvements in Brick or Paving Tile, of which the following is a specification, reference being had to the accompanying drawings.

The object of my improvement is to provide means by which paving-tiles may be easily laid in all positions required in practice, so as to secure an even surface to a tile floor or pavement and prevent that rising of the edges of one tile above another, which occurs where common tiles or bricks are used.

I am aware that the edge of one tile has heretofore been secured to that of another by means of rigid projections from one fitting into corresponding indentations in the other. The objections to this method are that the projections are rigid and unyielding; hence after laying one tile, for example, having a projection, when another tile is to be laid opposite it having a corresponding depression it is necessary to have room enough to permit the tile last laid to pass down outside of the projection until the depression comes opposite to it. The result is that when a finishing-course of tile is to be laid next a curb, for example, and it is desirable to have a tight fit all around the tile, it is impracticable to secure it, because there is not room enough to slip the tile in place past the rigid projection. I overcome this difficulty in large measure by having corresponding sockets in all of my bricks or tiles, and by providing a loose ball to approximately fill the sockets when the tiles are laid in place. I am able, therefore, to first lay a course of tile; then in laying the next course to place a loose ball in one of the sockets of either course and press the tile to place within less space or working-room than would be required if a rigid projection from one of the tiles were employed, because the ball will revolve in its socket and aid the pressure of the tile last laid vertically into position; or two tiles that are to lie adjacent to each other and be bound together by the ball may be simultaneously laid by inclining them toward each other and placing the ball in one of the sockets between the tiles, and then pressing

both the tiles down to position. I find in practice that the difficulty of getting tiles into place so as to fill a given space is considerably diminished by using loose balls instead of rigid projections. I also find that a given space to be filled by tiles or bricks can be filled more completely and with less joint-spaces where loose balls are used to bind the tiles together than where rigid projections are used.

In the accompanying drawings, Figure 1 is a perspective view of a section of pavement constructed with my device, having the edges exposed so as to show the sockets; and Fig. 2 is a plan view, partially in section, of a portion of pavement showing the relation and position of the balls and sockets.

In the following description I will designate the subjects of the drawings as "tiles," though it should be understood that bricks or any form of paving or building materials are intended to be comprehended.

Referring to the letters on the drawings, A represents a section of pavement, being composed of square and triangular blocks, the triangular blocks being required to fill in spaces in constructing a rectangular form of pavement. B represents one of the blocks. C represents semi-spherical sockets in the sides of the blocks. D indicates spheres or balls made to fit within the sockets. When in position, the balls D are half buried in the sockets and half protruding beyond the surface of the edges of the tile. The sockets are placed in corresponding positions in the different tiles, so that when the tiles are placed in position in paving, the socket in one tile shall open into a socket in another. A ball being first placed in position and the tiles laid, the sockets in two adjoining tiles inclose it, so that the edges of the tiles shall come in contact and be secured vertically in position. If the loose ball-connection is used, we have the smallest form which will bind the edges of the tile together, and one which, revolving within its socket as one tile is pressed into place between others, will allow it to be forced into position in the smallest space intended for it. By binding tiles together in this manner the size of the tiles may be increased in practice and yet the evenness of the completed structure be preserved. The number

and size of the balls and sockets may be increased at will. The drawings illustrate but one socket and one ball for each edge of a tile, which in most cases will be found all
5 that is necessary, and is the simplest in construction and the easiest form to be used in laying pavements.

What I claim, and desire to secure by Letters Patent of the United States, is—

10 A paving-block having semi-spherical sock-

ets within its edges and loose balls or spheres fitting within the sockets, as and for the purpose set forth.

In testimony of all which I have hereunto subscribed my name.

CHAS. M. O'CONNOR.

Witnesses:

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