J. G. BARBOUR.

BRICK.

APPLICATION FILED MAR. 15, 1912.

1,038,823. Patented Sept. 17, 1912.

Fig. 1.

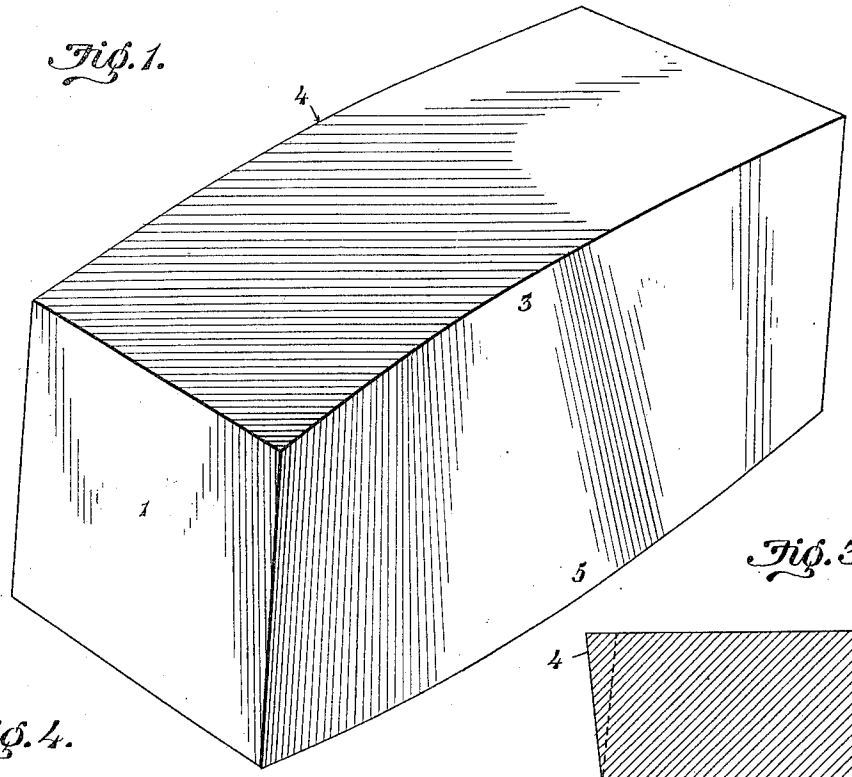


Fig. 3.

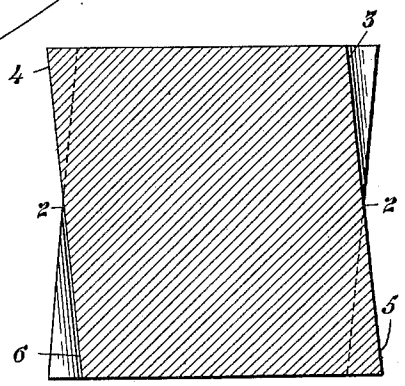
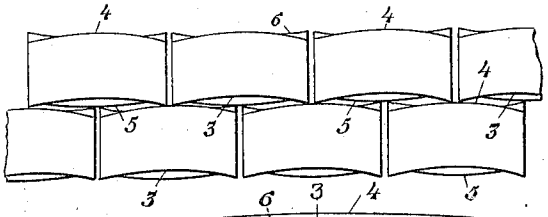
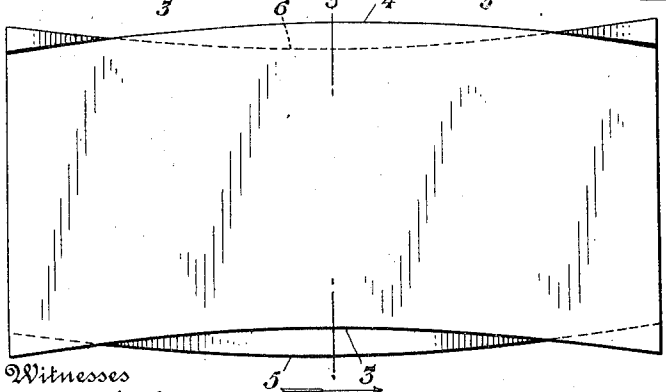


Fig. 4.





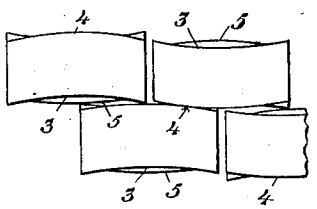


Fig. 5.

Fig. 2.

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UNITED STATES PATENT OFFICE.

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BRICK.

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Application filed March 15, 1912. Serial No. 684,041.

To all whom it may concern:

Be it known that I, JAMES G. BARBOUR, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Brick; and I do hereby declare the following to be a full, clear, and exact description of my invention.

The objects of my invention are, first, to produce blocks or bricks having curved side faces so arranged that when the bricks are laid or set, spaces will intervene between the curved surfaces between the blocks or bricks; second, to arrange and form the curved surfaces of the bricks or blocks so that they may be set regardless of the exact relationship of each particular brick; that is to say the bricks or blocks may be placed in position without specific reference to the position of the tops or bottoms of the bricks or blocks or in other words it being immaterial whether one particular edge is located up or down when used as paving bricks or blocks and when said bricks or blocks are laid in walls either edge may be exposed or the face edge or either edge may be the inner edge or back. These objects together with other objects readily apparent to those skilled in the art, I attain by the construction and formation illustrated in the accompanying drawings, although the inventive idea involved is capable of receiving a variety of expressions, one of which is shown in the accompanying drawings for the purpose of illustrating the invention.

In the accompanying drawing: Figure 1 is a perspective view of a brick or block. Fig. 2 is a top view. Fig 3 is a transverse section on line 3—3, Fig. 2. Fig. 4 is a plan view of a section of pavement or wall made up of my improved brick, except the cement or filler. Fig. 5 is a similar view showing the brick in different positions from the positions occupied in Fig. 4.

Similar numerals of reference indicate corresponding portions or parts in the figures of the drawings.

In the accompanying drawing, 1 represents the brick or block proper which is formed of plastic material, such as commonly used in the manufacture of brick or blocks.

The brick or block herein shown is preferably formed by the use of wires which wires cut the brick or blocks into the desired size from the flow of clay as it is moved along and upon a table, such as commonly used in the manufacture of wire cut brick. But so far as the present invention and the brick or block herein described are concerned the same may be formed by molding the plastic material into the desired form, but I prefer to employ cutting wires and so arrange the mechanism to which the cutting wires are attached, that said cutting wires will produce the particular form of brick herein shown, the cutting wires and the mechanism designed to control the cutting wires as they pass through the body of clay pertains to a distinct and separate invention or machine designed to produce the brick or block to which this present invention belongs.

The brick 1 consists of what might be termed upper and lower portions or halves, said portions being divided about midway between the top and bottom edges of the brick or block proper, said division consisting of straight lines located between the ends of the brick or block, said straight lines being illustrated in Fig. 3 at 2, said lines having no vertical or horizontal curvature. Above the line 2 reference being had to Fig. 1, the top half or portion of the brick is provided with oppositely curved surfaces upon its side faces; that is to say upon one side of the brick the surface 3 is concaved and the surface 4 convexed and the surfaces of the lower half or portion of the brick are provided with similar surfaces, but the curvature being in reversed positions; that is to say the lower half is provided with the convexed surface 5 and the opposite side with the concaved surface 6. The curvature of the upper and lower surfaces diminishes as to degree toward the longitudinal center of the brick until the curvature terminates at the juncture between the convexed and concaved surfaces of the upper and lower sections or halves of the brick.

It will be understood that by providing the compound curvatures upon the faces of the brick and forming the surfaces of the upper and lower sections or halves of substantially the same curvature, except in opposite directions, the brick may be laid without any specific reference to which edge of the brick is up or down, or which edge is the face edge of the brick. It will be understood that in laying the brick face to face as shown in Fig. 4 the extreme upper corners

will come in contact with the convexed surfaces of the adjacent brick and the lower corners of each brick will come in contact with the concaved surfaces of the brick which bridges the joint when laid as illustrated in Fig. 4.

It will be understood that with bricks or blocks formed with oppositely concaved and convexed faces, a number of said bricks or blocks can be placed in position to form a pavement without any specific attention being paid as to which particular edge is up or down, or in other words they are interchangeable, but at the same time grooves will be provided for the reception of any suitable binding material used in laying brick or block pavements. It will also be understood that in laying walls provision is made for the reception of cement or mortar and at the same time maintaining a sufficient surface contact between adjacent bricks or blocks to produce a substantial or solid wall.

By the peculiar formation of the brick or block the top and bottom edges of said bricks present a plane surface bounded by straight parallel lines at their ends and having curved longitudinal lines, the longitudinal curved lines being of opposite curvature; that is to say convexed upon one side face of the brick and concaved upon the opposite side, the curvature being also opposite with reference to the top and bottom edges of the blocks or bricks.

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

1. A paving block comprising plane top, bottom, and end surfaces, the longitudinal boundaries of the top and of the bottom being continuous, substantially concentric curves oppositely disposed in the two surfaces, the vertical side surfaces of the block being such that any section of the block parallel to the end surfaces will be a parallelogram.

2. A paving block comprising plane top, bottom, and ends, the longitudinal boundaries of the top and of the bottom being continuous, substantially, concentric curves, the curvature of said top and bottom boundaries being oppositely disposed, the vertical sides being warped surfaces generated by a line lying, at every point in its travel, in a plane parallel to the end surfaces of the block and having as generatrices the top and bottom edges of the block.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

JAMES G. BARBOUR.

Witnesses:
SYLVIA BORON,
F. W. BOND.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."