

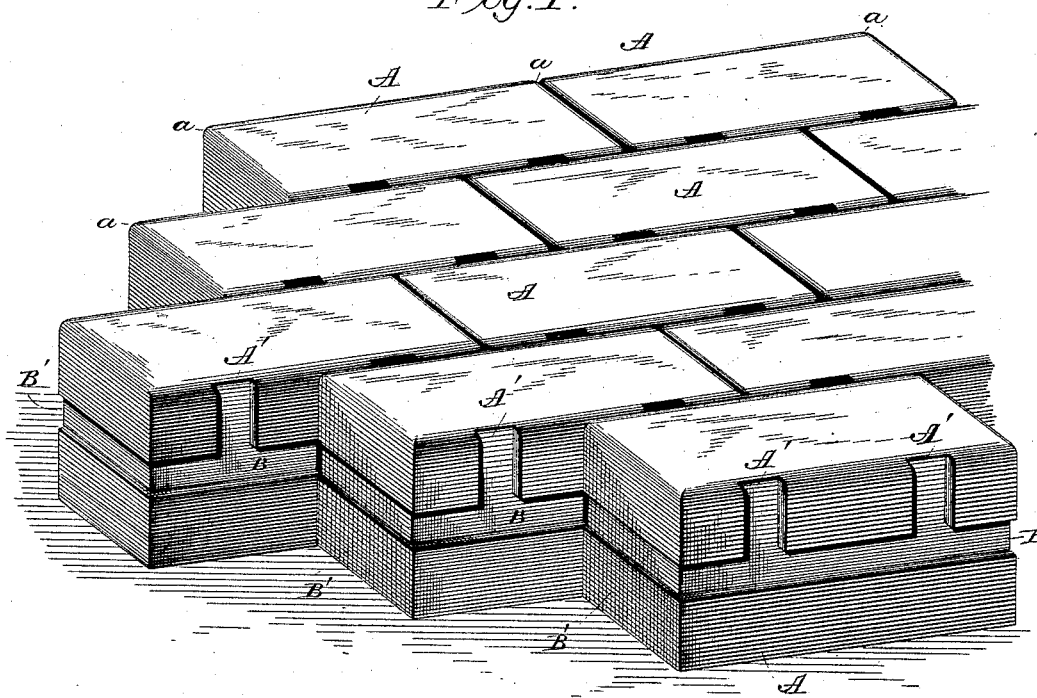
(No Model.)

P. ARNOLD.  
PAVING BLOCK.

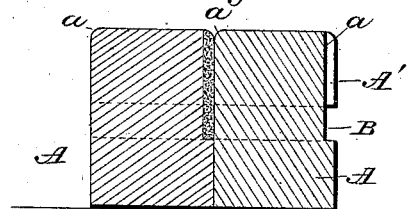
No. 422,690.

Patented Mar. 4, 1890.

*Fig. 1.*

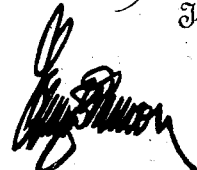


*Fig. 2.*



Phineas Arnold.  
Inventor

Witnesses  
L. S. Elliott.  
M. Johnson

by  Attorney

# UNITED STATES PATENT OFFICE.

PHINEAS ARNOLD, OF CANAL DOVER, OHIO.

## PAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 422,690, dated March 4, 1890.

Application filed January 11, 1890. Serial No. 336,687. (No model.)

*To all whom it may concern:*

Be it known that I, PHINEAS ARNOLD, a citizen of the United States of America, residing at Canal Dover, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Paving-Blocks; 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.

This invention relates to certain new and useful improvements in the construction of paving-blocks; and it consists in providing a block on one of the vertical sides thereof with a horizontal channel, which is intersected by two vertical channels which extend to the upper portion of the block, the end of said block having horizontal end channels of less depth than the channels on the side of the block, as will be hereinafter fully set forth, whereby I am enabled, by the use of cement or other binding material, to secure the blocks firmly to each other, the upper edges of the block being beveled for the purpose of providing a conduit into which the cement or binding material may be poured to fill the vertical and horizontal channels, as well as provide a foothold for draft-animals.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a pavement constructed with my improved blocks, and Fig. 2 is a perspective view of several of the blocks placed adjacent to each other.

A refers to one of my improved blocks, which is preferably made of fire-clay or other composite material adapted to be used for street pavements or roadways, and these blocks A, in constructing a pavement, are laid so that the joints will be broken and the face of one block will be adjacent to the back of the other, thereby rendering necessary only to groove or recess one of the faces. The upper corners or edges of the block are rounded or beveled, as shown at *a*, and one of the long faces or sides is provided with vertical recesses or grooves A', which intersect a horizontal groove or recess B, which is located about midway between the bottom and upper

face of the block. The vertical grooves or recesses A' and the horizontal groove B are of considerable depth, and the end or ends of the block are provided with horizontal recesses B', which are of less depth than the recess B. These horizontal recesses B' may be on each end of the block when they are comparatively shallow, or only on one end when they are of the same depth as the recess B. These recesses are formed in the paving-block when the same is molded.

In laying a pavement with my improved blocks they are placed upon a suitable foundation end to end, so that one of the long vertical sides will be on the same line, and the next row of blocks is adapted to break joints therewith. After the blocks are properly laid in position, a binding and waterproofing material—as asphalt, cement, or other suitable material which will harden—is poured into the channels formed by the beveled edges *a*, and passes through the recesses or ducts *a'* into the horizontal channels B and B', so as to bind the blocks securely to each other and make them water-tight. As the blocks when first laid are placed closely to each other, but a small amount of cement or asphalt will be required to fill the grooves or recesses, as it will not pass below the horizontal channels in the paving-blocks.

I am aware that prior to my invention it has been proposed to provide a rectangular paving-block with horizontal grooves or corrugations and an upper beveled edge, a pavement made of such blocks being adapted to be held together by cement; but in this case, as the blocks sit quite a distance from each other, a large quantity of cement has to be used, as it is not only required to fill the horizontal grooves or corrugations, but also a space between each of the faces of the block, and in addition to the excessive quantity of material a large amount will pass beneath the paving-block, where it answers no useful purpose.

I am also aware that a concrete paving-block has been provided having a horizontal groove on one or more faces, intersected by a vertical groove, said grooves being for the purpose of permitting the insertion of a suitable implement, so that the blocks can be removed when necessary for making repairs.

I claim—

1. A rectangular paving-block made up of molded material and provided on one of its sides with a horizontal groove or recess intersected by vertical grooves or recesses A', the ends of said blocks having recesses B', and a smooth side, the upper edges of the blocks being rounded or beveled, substantially as and for the purpose set forth.
2. A rectangular paving-block made up of molded material and provided with a beveled upper edge and a smooth vertical side or face, vertical grooves or ducts A', intersecting a central horizontal groove or recess B, and

shallow end recesses B', connecting with a groove or recess B, said blocks being adapted to be laid substantially as shown, so that they will abut against each other, the grooves A', B, and B' being adapted to be filled with a binding material, substantially as and for the purpose set forth.

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

PHINEAS ARNOLD.

Witnesses:

WILLIAM HENRY SQUIRES,  
GEO. W. BETSCHER.