

(No Model.)

F. HAINES.
ARTIFICIAL STONE PAVING BLOCK.

No. 481,354.

Patented Aug. 23, 1892.

Fig:1.

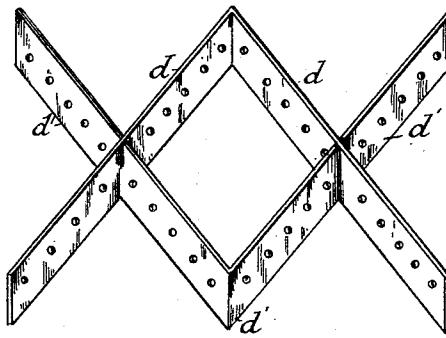


Fig:2.

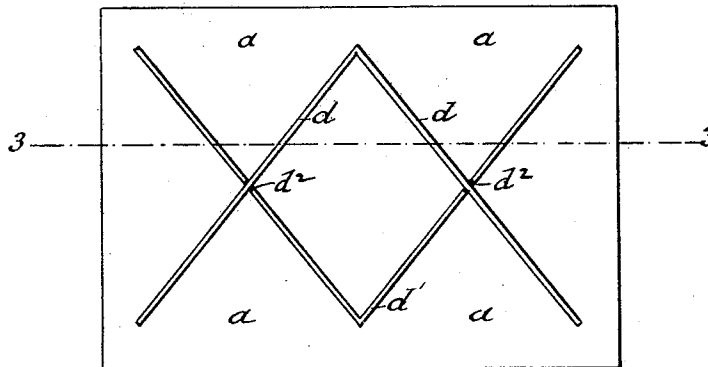
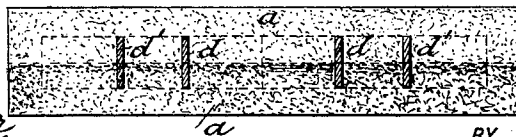


Fig:3.

WITNESSES:

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ARTIFICIAL-STONE PAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 481,354, dated August 23, 1892.

Application filed June 22, 1892. Serial No. 437,630. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN HAINES, a citizen of the United States, and a resident of the city, county, and State of New York, have
5 invented certain new and useful Improvements in Artificial-Stone Paving-Blocks, of which the following is a specification.

This invention relates to certain improvements in artificial-stone blocks for pavements
10 in which a binder of peculiar construction is employed, by means of which the block is enabled to withstand a more considerable pressure strain than has before been possible and by means of which blocks of any desired
15 size can be constructed.

The invention consists of an artificial-stone paving-block which has embedded in the same two metallic V-shaped binder bars or plates that are set on edge in the block and
20 provided with interlocking slots at or near their centers, said V-shaped bars being disposed in opposite direction, as will be fully described hereinafter, and finally pointed out in the claims.

25 In the accompanying drawings, Figure 1 represents a perspective view of two binder bars or plates shown as interlocking with each other. Fig. 2 is a top view of the paving-block with my improved form of binder-bars embedded therein; and Fig. 3 is a vertical transverse section on line 3 3, Fig. 2, of a
30 paving-block with my improved binder-bars.

Similar letters of reference indicate corresponding parts.

35 Referring to the drawings, *a* represents a block of concrete, cement, or other suitable material in which is embedded a binder which is constructed of two intersecting binder bars or plates *d d'*, which are made of V
40 shape or zigzag shape and arranged to interlock with each other at or near the centers of each end or wing, as shown in Fig. 1. For this purpose the interlocking edges of the binder bars or plates *d d'* are provided with
45 recesses *d²*, the recesses of one V-shaped bar or plate extending from the lower edge toward the center, while the recesses of the interlocking bar or plate are extended from the upper edge downward toward the middle, so
50 that the bars or plates readily interlock with

each other, as shown in Fig. 1. They are preferably provided with perforations along their center line, so that the cement or other composition of which the pavement is composed can pass through the perforations and
55 produce the rigid uniting of the bars or plates with the block *a*. The angle at the apex of each V-shaped binder bar or plate can be ninety degrees or less, the binder bars or plates intersecting then at angles correspond-
60 ing to the apex.

In forming blocks or slabs of which the pavement is composed the binder-plates are embedded into the lower course of the block before the same has set and while the same
65 is still in a plastic state, the binder-plates being set on edge into the same. The entire interlocking binder may be pressed down into the lower course of concrete or cement, or one of the binder-plates may first be pressed
70 into the same and then the other, care being taken that they interlock properly at their points of intersection. The upper or rear course is then cast, poured, or worked around the binder, so that the latter is firmly united
75 with the lower and upper layers of the block when the setting or solidification of the two courses is accomplished. The binder-bars become thereby an integral part of the block and form a bond of great strength between the
80 same. The V-shaped binder bars or plates interlock in opposite direction to each other and impart greater resisting power against crushing and tensile pressure and add greatly to the varying capacity of the block and in-
85 crease the strength and resisting power of the same.

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

90 1. An artificial-stone paving-block having embedded therein metallic V-shaped binder bars or plates set on edge and provided with interlocking recesses at or near their end centers, said V-shaped bars being disposed in op-
95 posite direction, substantially as described.

2. An artificial-stone paving-block having embedded therein metallic V-shaped binder bars or plates set on edge and provided with interlocking recesses at or near their end
100

centers, said V-shaped bars being disposed in
opposite direction and provided with open-
ings along the center thereof, so that the ma-
terial forming the block flows through said
5 openings and unites on both sides of the
binder-bars, substantially as set forth.

In testimony that I claim the foregoing as

my invention I have signed my name in pres-
ence of two subscribing witnesses.

FRANKLIN HAINES.

Witnesses:

PAUL GOEPEL,

CHARLES SCHROEDER.