

C. Williams.

Pavement.

N^o 75504

Patented Mar. 10, 1868.

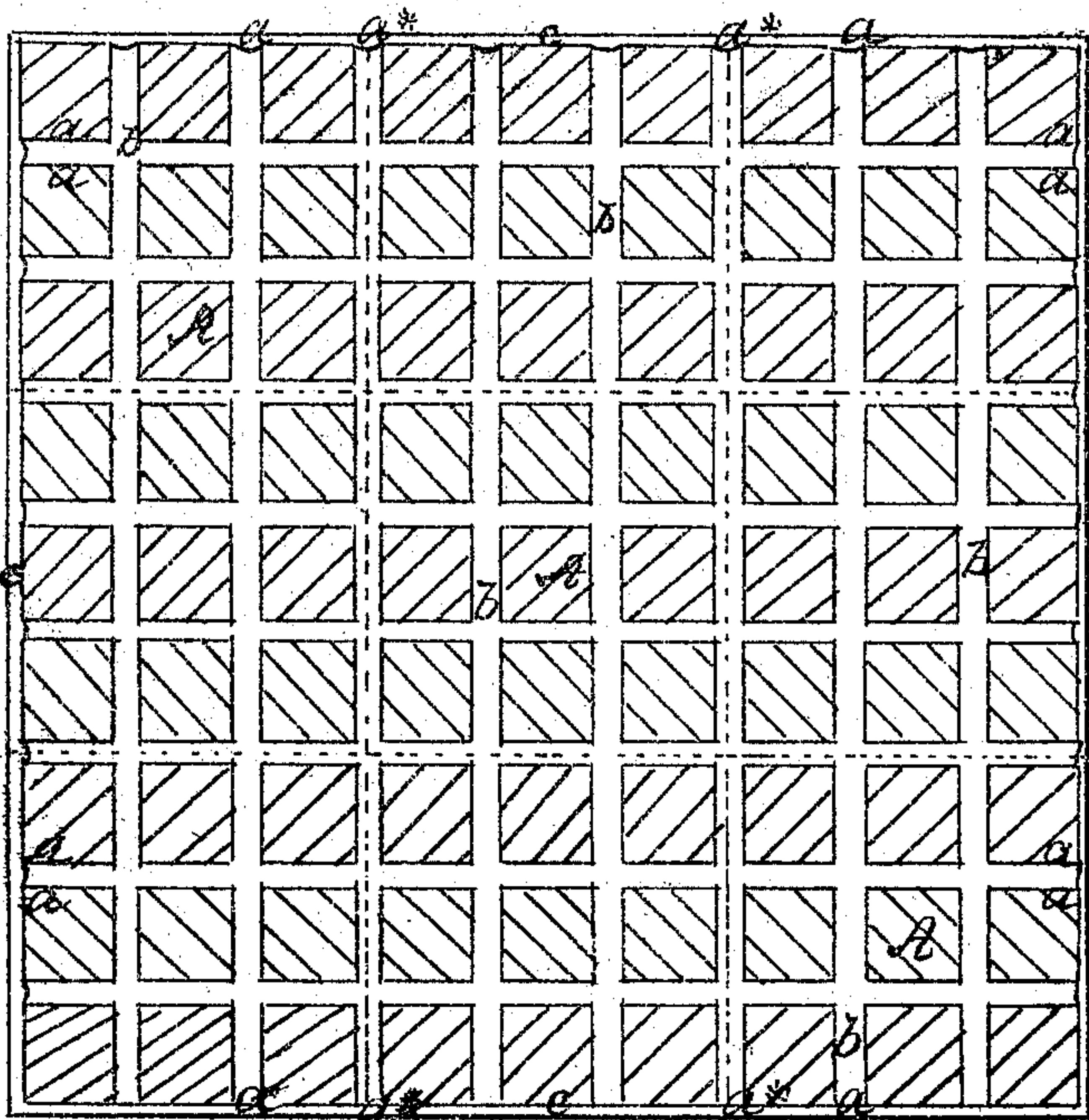


Fig. 1.

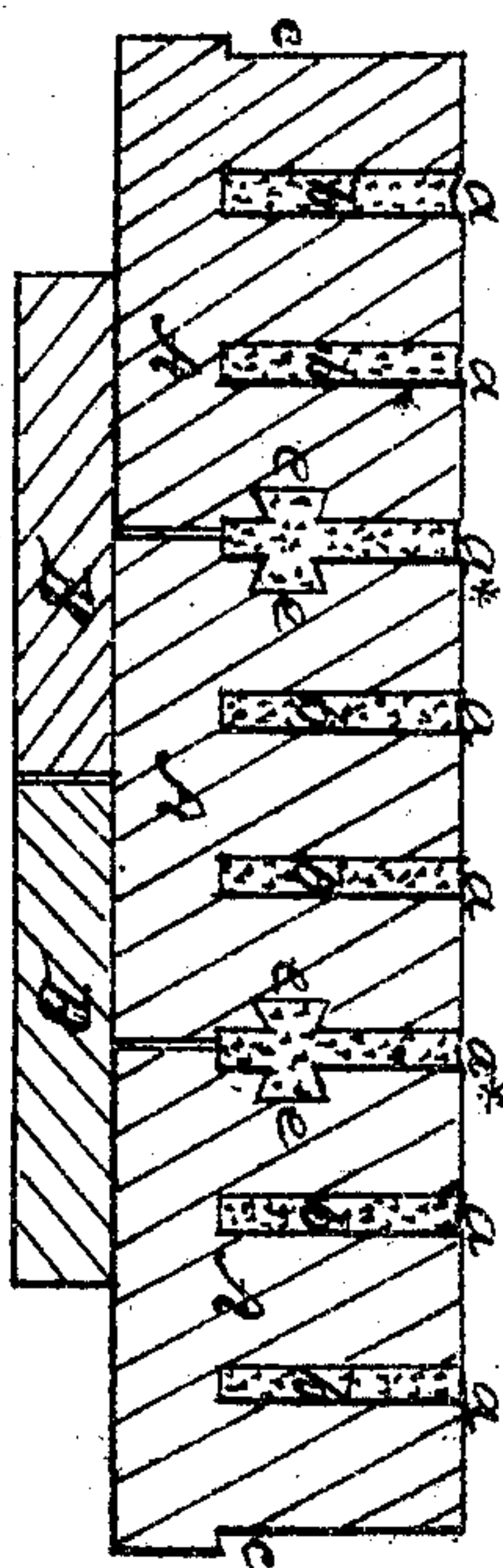
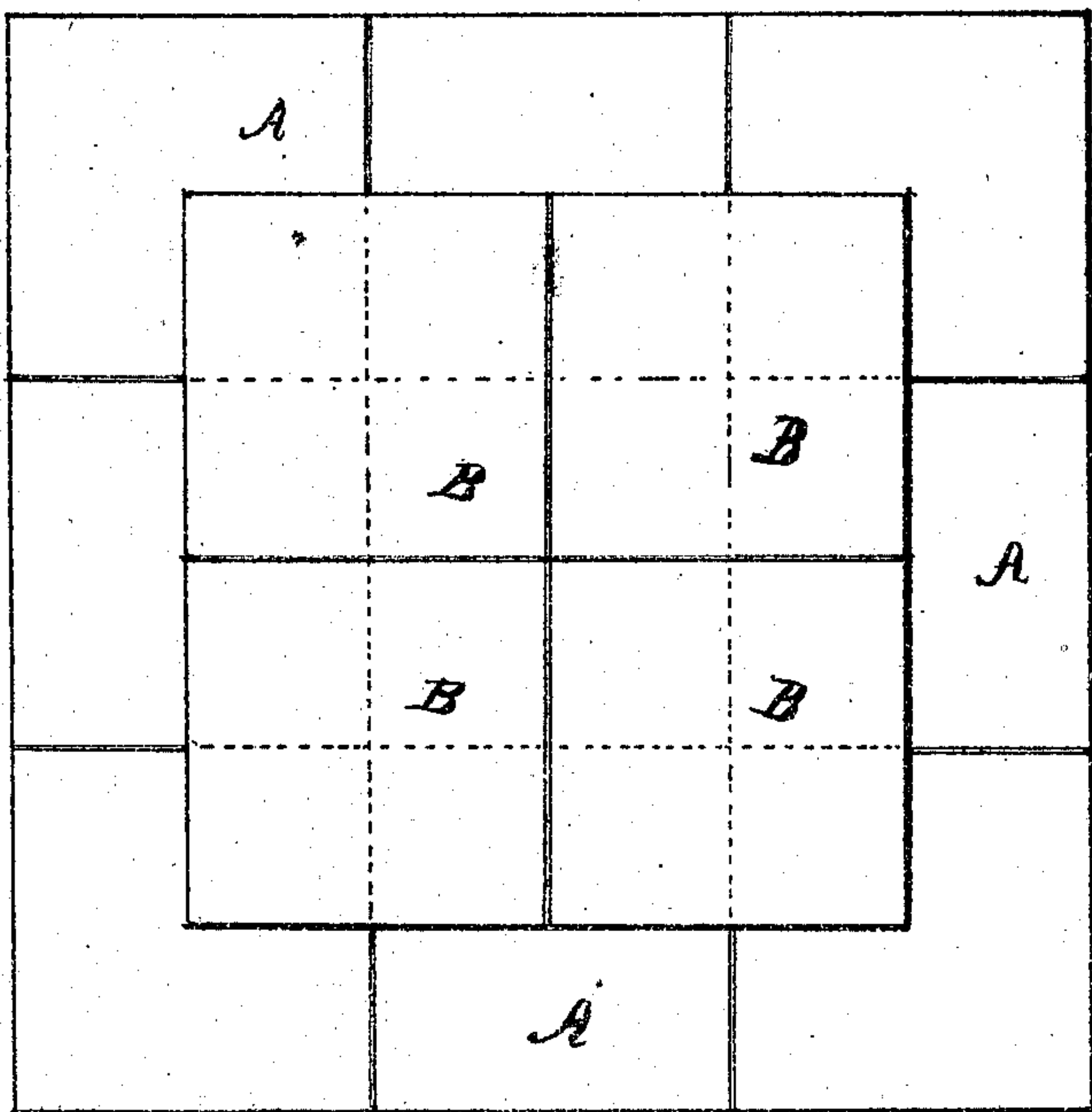


Fig. 3.

Witnesses.

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C. WILLIAMS, OF NEW YORK, N. Y.

Letters Patent No. 75,504, dated March 10, 1868.

IMPROVED PAVEMENT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, C. WILLIAMS, of the city, county, and State of New York, have invented certain new and useful Improvements in Pavements; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a plan view of a pavement constructed according to my invention.

Figure 2 is an inverted plan of the same.

Figure 3 is a vertical section of the same.

Similar letters of reference indicate corresponding parts in all the figures.

This invention consists in a pavement formed of wooden blocks constructed with deep vertical grooves filled with suitable cement, whereby a pavement possessing the several advantages of affording a superior foothold to animals traversing the same, and of being extremely solid and durable, is secured.

The invention further consists in the combination, with the wooden blocks, of sub-sills of novel construction, whereby the blocks are firmly supported in their places, and whereby a portion of the pavement may be conveniently taken up, as required, for instance, in repairing sewers or gas or water-mains placed underneath the same.

The invention further consists in a novel means of locking the blocks together, whereby the security with which they are retained in proper position with reference to each other is materially increased.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

A represents rectangular blocks, which may be of any suitable wood, and which are placed with the grain of the wood in a vertical position. These blocks are constructed with deep vertical grooves, *a*, running at right angles to each other, as shown in fig. 1, the said grooves being filled with a hard cement, as indicated at *b*, made of any suitable material, but formed preferably of coal-tar and gravel, or sand, or of other like substances, which will not only be of sufficient hardness to resist in a great measure the wear of travel upon it, and prevent the chipping off or breaking down of the sides of the grooves, but will also exert an antiseptic effect upon the wood.

Each of the blocks A is provided at each of its lateral edges with a narrow rebate, *c*, of a depth equal to that of the grooves *a*, in such manner that when the blocks are placed side by side, as shown in the drawings, the aforesaid rebates being brought together will form grooves, as shown at *a**, which correspond to the grooves *a*, formed wholly within the several blocks, as just hereinbefore fully set forth.

Formed horizontally in the sides or lateral edges of the blocks A, and in communication with the rebates therein just mentioned, are dove-tail grooves *e*, so arranged that the grooves *a**, being filled with cement in the same manner as the grooves *a*, the said dove-tail grooves will also be filled therewith, so that such cement after having hardened will firmly lock the several blocks together, not only tending to prevent the lateral separation of the same, but also, to a certain extent, supporting them against vertical depression.

The same result may be obtained in an equal degree by driving keys of suitable double dove-tailed shape into the two opposite dove-tail grooves, and thus locking the blocks together. Such prevention of downward displacement of the blocks is, however, for the most part, secured by sub-sills B, which are made in rectangular sections or separate pieces of any suitable wood or material, of superficial area and formation corresponding with or they may be smaller than the paving-blocks A, and of any desired thickness, these sub-sills being so placed that the central part of each will support the four adjacent corners, above it, of the blocks A, as shown in figs. 2 and 3.

The blocks being thus firmly supported and held in place, constitute a very firm and durable pavement, a good foothold being afforded to draught or other animals traversing the same, by the depressions formed by the upper portions of the grooves *a**, at the same time that the antiseptic nature of the cement or material with which the said grooves are filled prevents the premature decay of the blocks. Furthermore, the grooves *a** being made water-tight by the cement placed therein, the passage or filtration of water through the pavement is effectually prevented.

An additional advantage resulting from this construction of pavement is that any small portion thereof may be readily taken up when required to enable sewers or gas or other pipes underneath the same to be reached. Furthermore, inasmuch as it is necessary to support the blocks A only at their corners, the sectional sub-sills may, if desired, be made of much less area than the aforesaid blocks, instead of forming a continuous substructure.

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

The construction and arrangement (in a wooden pavement) of the blocks A A, in such a manner that double dove-tailed grooves shall be formed between said blocks, so that when the same are filled with cement, as herein described, such filling will operate as a tie to said blocks, substantially as herein set forth.

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Witnesses:

J. W. COOMBS,

G. W. REED.