

C. Williams.
Wood Pavement.

N^o 80,260.

Patented Jul. 21, 1868.

Fig. 1.

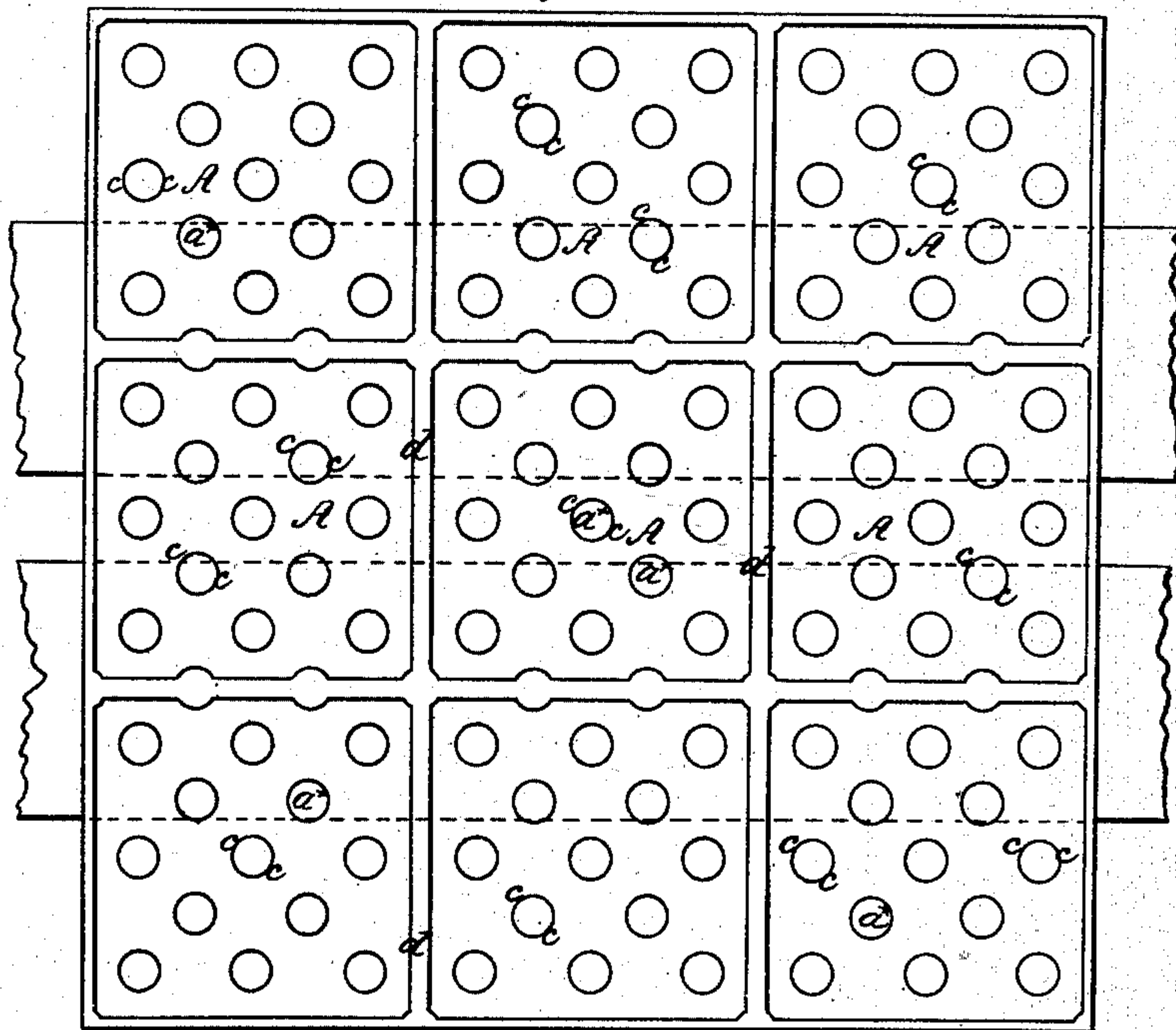


Fig. 2.

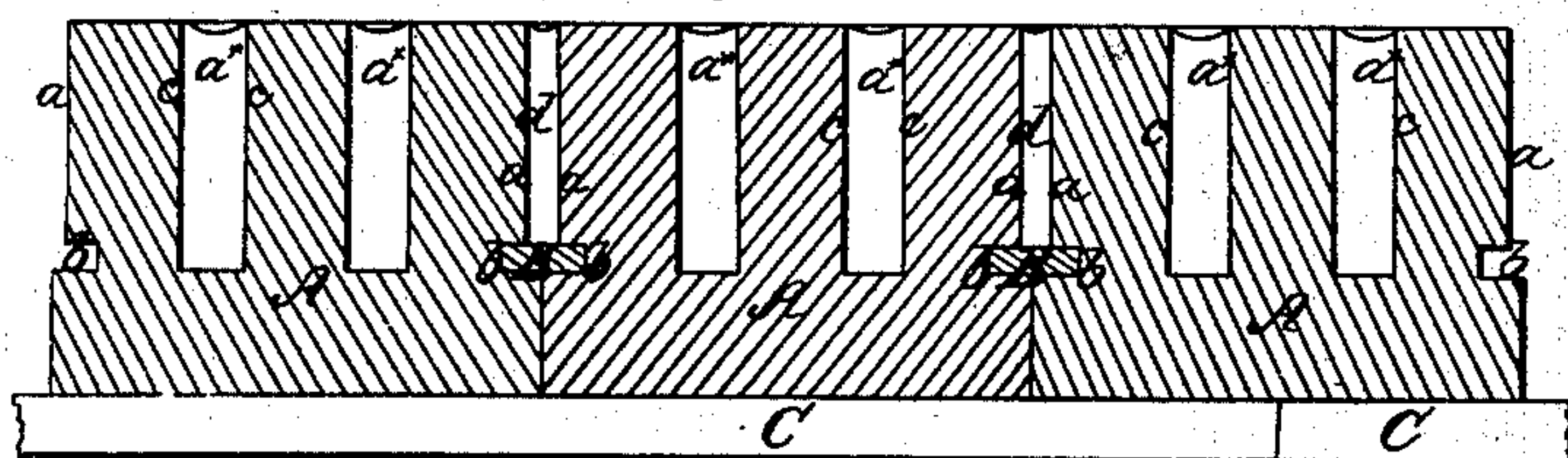
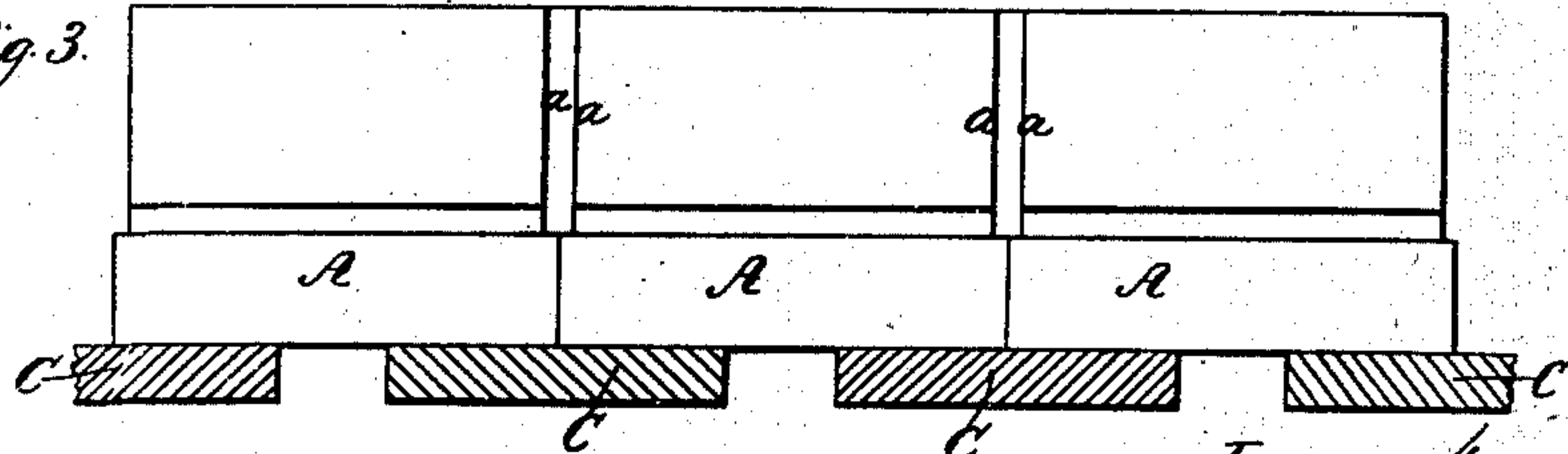


Fig. 3.



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United States Patent Office.

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

Letters Patent No. 80,260, dated July 21, 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 a vertical transverse section of the same, taken in the line *x x* of fig. 1.

Figure 3 is an edge view and partial section of the same, taken at right angles to fig. 2.

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

This invention relates to that variety of pavement, formed for the most part of wooden blocks placed on end, and the invention consists in the construction of the pavement of sections formed of wooden blocks, securely locked together, whereby the pavement may be laid down and taken up with much greater readiness than when the blocks are continuously joined together, without in the least detracting from the stability of the pavement.

The invention further consists in the construction of the paving-blocks with vertical holes, filled with a hard cement of any suitable kind, whereby a very secure foot-hold is afforded to horses or other draught-animals travelling thereon.

The invention further consists in locking-keys, made rectangular in their cross-section, and so combined with the paving-blocks that the latter are not only in a measure supported against downward pressure, but may also be much more easily detached or separated from each other, when, for any reason, it is desired to take apart the sections just mentioned, than would be possible if the aforesaid keys were made of dove-tail form.

The invention further consists in a novel construction of the sub-sills or substructure, which supports the blocks or sections, whereby the substructure may be conveniently laid down and taken up, without necessitating the removal of adjacent portions of the pavement, and whereby a material reduction in the quantity of lumber required for such substructure is secured.

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

The pavement is formed of sections, one of which is shown in each of the figures, and which are formed of wooden paving-blocks, A, which are placed on end, and which are preferably made of rectangular form. The sides or edges of each of these blocks are furnished with narrow rebates, *a*, at the lower part of each one of which is a rectangular groove, *b*. Formed in the upper side of each of the blocks A, and arranged with reference to each other, in any suitable or desired manner, are a number of deep holes, *c*, which are filled with any appropriate hard cement, indicated at *a**, the said cement being, however, made, by preference, of coal-tar and sand or gravel, or of some like material, which will exert a more or less preservative action upon the wood. The cement in the holes *c* is designed to wear away somewhat faster from the effects of travel upon the pavement than the surface of the blocks A, so that recesses or depressions are formed in the surface of the pavement, which insure a good foot-hold for the draught or other animals traversing the same.

The aforesaid blocks being placed side by side, as represented more fully in fig. 1, flat wooden keys, shown at B, in fig. 2, and made rectangular in their cross-section, are driven into the adjacent grooves *b*, the two opposite edges of each key fitting into the two opposite grooves of adjacent sides of the blocks, in the manner represented in the fig. 2, just mentioned, so that the edges or sides of the blocks being by these means locked together, each of the blocks is in a measure supported by the others against the downward pressure of the animals or vehicles passing over the same, at the same time that, when it is desired to separate the blocks, as, for instance, in repairing the pavement, the said blocks may be forced laterally from each other, thus, in many cases, obviating the necessity of taking up an entire "section" in making such repairs, and, furthermore, by closing the joints between the lower portions of adjacent blocks, renders the pavement, or rather the sections composing the same, practically water-tight.

The grooves or channels formed between the blocks by the coming together of the rebates *a* thereof, are filled, as shown at *d*, with a cement, the same or similar to that with which the holes *c* are filled, as hereinbefore fully set forth, the said cement-filled grooves being supplemental, as it were, to the aforesaid holes *c*, in providing a foot-hold for the draught or other animals traversing the pavement.

A sufficient number of the blocks *A* are thus put together to form a rectangular or other properly-shaped section, of any desired or convenient size, the said sections being, in the construction of the pavement, laid down with their edges snugly in contact, in such a way that each section may be taken up separately without disturbing the others, while the greater surface of the sections, as compared with that of the separate blocks, renders the pavement much more firm and stable than would be the case if the blocks were laid down separately.

In order that the aforesaid sections shall be more effectually supported in proper position with regard to each other, a series of sub-sills, or, in other words, a substructure, composed of planks, *C*, of any suitable width and thickness, is laid underneath the same, the joints between the ends of each series of planks or sills breaking joints with the contiguous one, such planks or sills being arranged in a position parallel with each other, as shown in dotted outline in fig. 1, and under the joints, between the blocks of the several sections, as also indicated in figs. 2 and 3; but, if preferred, the said sills or planks may be placed only underneath the parallel joints between the sections, the sills, when thus employed, securing the same result as when used in the manner first herein described, but possibly in a somewhat inferior degree. Furthermore, inasmuch as the planks or sills *C* are required only underneath the joints between the blocks or sections, as the case may be, it follows that much less timber or material is required in their construction than would be the case if the substructure formed a continuous flooring underneath the aforesaid blocks or sections.

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

The arrangement and formation of spaces *d*, between and around the blocks *A*, by means of grooves *b* and keys *B*, in combination with the rabbeted sides *a* of said blocks, substantially as set forth

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Witnesses:

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