

C. HENSE.

ARTIFICIAL-STONE PAVEMENT.

No. 191,962.

Patented June 12, 1877.

Fig. 1.

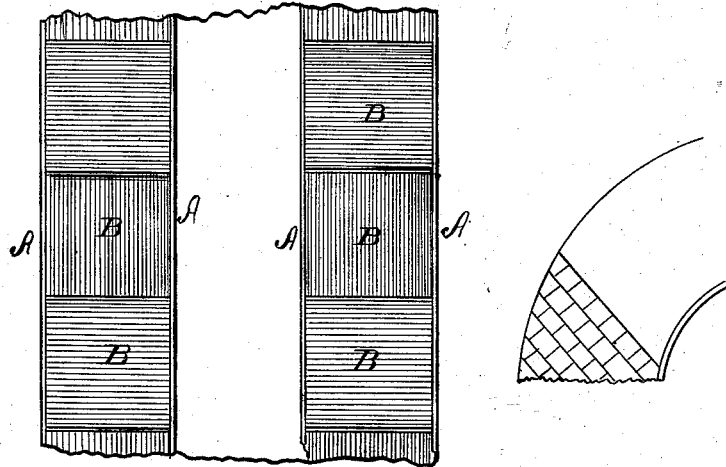


Fig. 2.

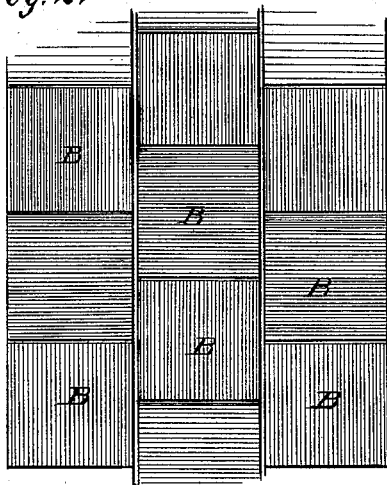
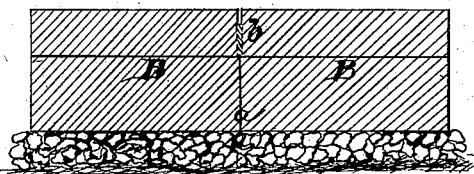


Fig. 3.



WITNESSES  
*Frank. L. Durand*  
*Frank. L. Durand*

INVENTOR  
*Charles Hense*  
By *Alexander Mason*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLES HENSE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR  
TO GEORGE W. COOK, OF SAME PLACE.

## IMPROVEMENT IN ARTIFICIAL-STONE PAVEMENTS.

Specification forming part of Letters Patent No. **191,962**, dated June 12, 1877; application filed  
June 1, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES HENSE, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Artificial-Stone Pavements; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in a new and improved method of laying artificial-stone pavements, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, showing the first stage of my process for laying artificial-stone pavements. Fig. 2 is a plan view of the completed pavement. Fig. 3 is a section of the same.

In the carrying out of my invention any compound or composition for artificial stone may be used, and such compounds or compositions generally consist of a foundation and a top-dressing, the latter having a larger proportion of cement than the former.

In laying this class of pavements I first place on the road-bed a series of parallel strips or scantlings, A A, at suitable distances apart, forming a series of narrow divisions across the intended pavement.

In alternate divisions or sections thus formed I lay the foundation part of the artificial stone, and with a trowel or other suitable instrument cut through the same, at suitable intervals, to form the material into any desired sized blocks B B.

These cuts in the material do not leave openings between the block, as the material will settle and come together again, as shown at *a* in Fig. 3; but, being once cut, the material will not again unite into one homogeneous mass.

The top-dressing is then spread over the

foundation in each section, and with a suitable instrument said top-dressing is pressed down into the cuts, leaving a portion thereof, as at *b*, in each cut, whereby the blocks become united near the top in such a manner that rain, sand, &c., cannot pass down between them.

When these alternate sections have become sufficiently hard, the strips A A are taken up, and the remaining alternate sections of the pavement are laid in the same manner. In laying these latter sections, it will be seen there are solid side bearings for the same, which is of great importance in obtaining a perfect pavement.

These last sections, when laid, unite with the first hardened sections only in a certain measure, forming divisions for the blocks of the two sections to break apart, and the top-dressing is crowded down between the sections, in the same manner as described for the first sections between the blocks.

The blocks B of the pavement thus laid are united by tight joints, as described, which will allow no water, dirt, &c., to pass down between them, while any frost or upheaval of the ground from underneath will break the blocks at the joints, and at no other places, as the cuts through the material at these points render it weaker there than at any other place, and the blocks will settle down in their places again.

When necessary to take up any part of the pavement, the blocks can easily be separated, though, unless the commencement is made at the end, one block will necessarily have to be broken to make a start.

In laying my pavement care should be taken to exclude all wood or pieces of wood, as, if any moisture should strike such wood, it would swell and crack or break the blocks.

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

The within-described method of laying artificial-stone pavements, by first dividing the road-bed into sections, then laying the foun-

dition of alternate sections and cutting through the same at proper intervals, then putting on the top-dressing and pressing the same down into the cuts, and, when these alternate sections have become hard, then laying the other sections in the same manner, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of May, 1877.

CHAS. HENSE.

Witnesses:

FRANK GALT,  
J. C. SCHROEDER.