

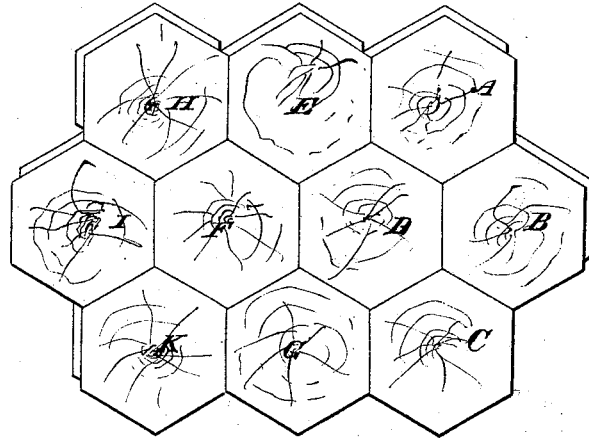
*J. Abbott,*

*Wood Pavement,*

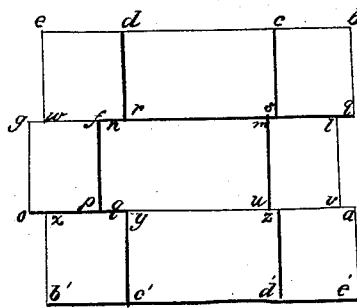
*N<sup>o</sup> 2265.*

*Patented Sep. 25, 1841.*

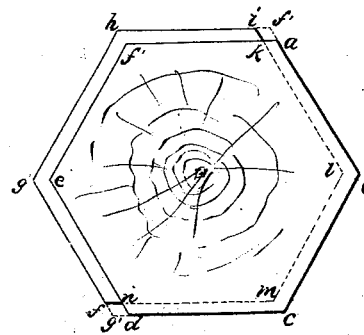
*Fig 3.*



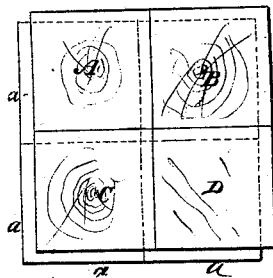
*Fig 2*



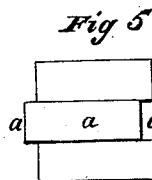
*Fig 1*



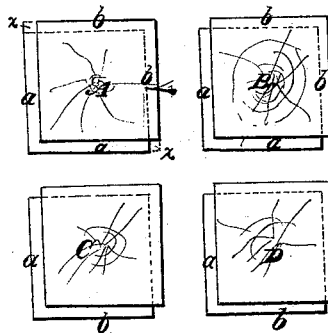
*Fig 6*



*Fig 4*



*Fig 5*



# UNITED STATES PATENT OFFICE.

JOHN ABBOTT, OF WILTON, NEW HAMPSHIRE.

## PRISMATIC BLOCK OF WOODEN PAVEMENTS.

Specification of Letters Patent No. 2,265, dated September 25, 1841.

*To all whom it may concern:*

Be it known that I, JOHN ABBOTT, of Wilton, in the county of Hillsboro and State of New Hampshire, have invented a new and useful Improvement in Prismatic Pavements and the Blocks Composing the Same, and that the following is a full and exact description of the same, reference being had to the accompanying drawings which will be hereinafter explained and which, taken in connection herewith, form my specification setting forth the principles of my invention by which they may be distinguished from others of a similar character, and such parts or combinations as I claim and for which I solicit an exclusive property to be secured to me by Letters Patent.

My improvements are generally to be confined to pavements of wood, but it will be apparent that they are applicable to those formed of prismatic blocks of stone, iron or other suitable materials—and by the term “prismatic,” as herein applied, it is not intended to be understood that the blocks, composing the pavements, shall, in a strict geometrical sense, be regular prisms throughout their lengths, but that they may approximate thereto, more or less, and in the technical language of mechanics, be known by the above term.

By my improved method of shaping and constructing the blocks, and by causing each to be supported by those about it, I am enabled to give great strength and stability to the roadway, and by connecting each of said blocks to the other, on their sides in opposition, a settlement of the same, and consequent derangement of the traveling surface are prevented.

Figure 1, is a top view of one of my hexagonal blocks. Fig. 2, is a side elevation and Fig. 3 represents a series of blocks, placed together or in connection with each other constituting a paved surface.

The main feature of my improvement consists in constructing a block with three of its sides, viz,  $a b$ ,  $b c$ ,  $c d$ , Fig. 1, grooved or channeled out to a certain depth, and forming a projecting tongue on the opposite sides, which shall correspond with said groove. The groove is represented in Fig. 1, by the letters  $a b c d n m l k$  and in Fig. 2, on two sides of the block by the letters,  $r s t a' z y q n m l v u$ , and it will be seen that the width of this groove is about one third the depth of the block. The tongue

should have the same breadth and depth, around the three sides of the hexagonal prism, as the groove has, so that when one of its grooved sides is placed against the tongued side of another block, the tongue may be inserted in the groove, and the said two sides may be brought into close contact. When a series of hexagonal blocks A, B, C, D, E, F, G, H, I, K are placed together as seen in Fig. 3, the tongues on the sides of the one will enter into the grooves of the side of the others in contiguity with it, and thus each block will be locked into and firmly supported by all those about it. Therefore if the foundation of sand or gravel on which the blocks rest, becomes loosened or washed away from under either of them, it will be kept in its place by the others, and consequently the surface of the street will be preserved from derangement.

Previous to the tongues and grooves being formed on the block, it should have the form of an irregular hexagonal prism  $f' h g f g' c b$ , Fig. 1, that is to say, of such size and shape as will admit of the formation of the grooves and tongues, and leave the top  $a b c d e f$ , as well as the bottom, surface a regular hexagon as seen in Fig. 1. When the grooves on the sides  $a b$ ,  $c d$ , Fig. 1, are plowed out, a portion of each tongue of the next succeeding side (said portions being represented in their cross sections by the letters  $d n f g'$ ,  $a h i f'$  Fig. 1) will be removed, causing two of the tongues or those on the sides  $a f$ ,  $e d$ , Fig. 1, to be somewhat shorter than the third or that on the side  $e f$ . It is by the above peculiar manner of constructing the blocks, that their equal and symmetrical sides may be brought in close contact with each other when placed together, in such manner as to bring the upper surfaces of the blocks into one plane or into that constituting the traveled surface of the street.

Figs. 4, 5, 6, represent the square-prismatic or cubical blocks with the tongues and grooves formed on the sides. Fig. 4, exhibits four of these blocks A, B, C, D, detached from each other the tongues  $a$ ,  $a$  fitting into corresponding grooves in the opposite faces of the next blocks, so that when placed in the same the sides of the blocks are brought completely in contact as seen in Fig. 6. Fig. 5 is a side elevation of one of the blocks in which  $a$  is the tongue and  $b$  is the groove. The block is first

shaped rectangular in its horizontal section and of such size as to permit the tongues to be formed on two adjacent sides of the block. The grooves are next cut on the two  
5 opposite adjacent sides, the cutting of which removes a square portion  $\frac{1}{2}$  (seen in block A Fig. 4,) of the end of each tongue, to the depth of the groove. The blocks may then  
10 mutually supported in position in the same manner as was before described respecting the hexagonal blocks.

Having thus explained the nature of my improvements I shall claim—

15 Constructing the prismatic blocks of

pavements, with grooves and tongues on their sides, by which they may be connected together, the whole being arranged substantially in manner and for the objects or purposes hereinbefore set forth.

20

In testimony that the foregoing is a true description of my said invention and improvements I have hereto set my signature this fourth day of August in the year eighteen hundred and forty one.

JOHN ABBOTT.

Witnesses:

R. H. EDDY,  
EZRA LINCOLN, Jr.