

No. 853,034.

PATENTED MAY 7, 1907.

S. Z. RUFF.

PAVEMENT BLOCK AND METHOD OF MAKING THE SAME.

APPLICATION FILED SEPT. 18, 1905.

Fig. 1.

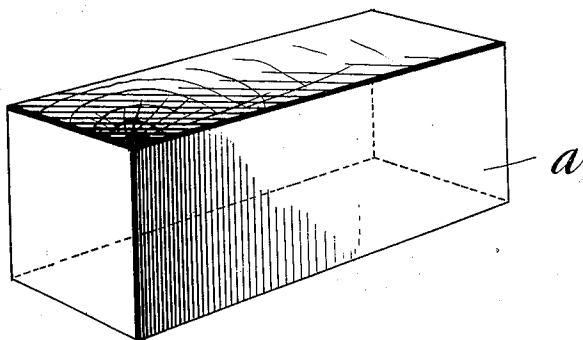


Fig. 2.

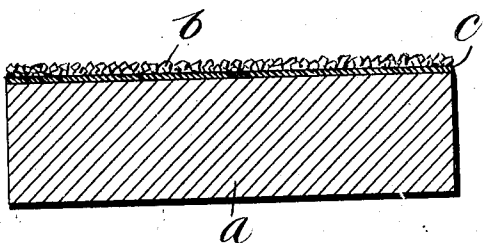
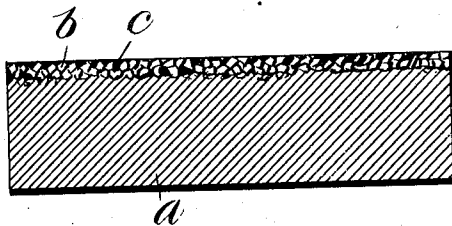


Fig. 3.



Witnesses

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PAVEMENT-BLOCK AND METHOD OF MAKING THE SAME.

No. 853,034.

Specification of Letters Patent.

Patented May 7, 1907.

Application filed September 18, 1905. Serial No. 278,987.

To all whom it may concern

Be it known that I, SOLON ZOCHRY RUFF, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Pavement-Blocks and Methods of Making the Same; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in pavement blocks and methods of making the same. It is a well known fact that wooden pavements are in many respects superior to all others, but to these pavements there are two serious objections, namely, that they become very slippery, especially in wet weather, and that they wear unevenly.

The object of my invention is to obviate these difficulties by making a pavement block which will wear evenly, and always presents a rough upper surface.

With this object in view, my invention consists in the improved pavement blocks hereinafter described and the method of making the same.

In making the block, I take any soft wood, such as spruce, white pine, juniper, loblolly pine, old field pine, or soft cypress, and cut it up into rectangular blocks, usually six or eight inches long, two inches wide and three inches deep. These blocks are then creosoted or treated with any suitable preserving preparation to keep them from rotting. This treatment is given to the wood after it is sawed into blocks. The blocks are preferably sawed in the direction of the grain, so that the end of the grain appears on the top of the block. The top of each block is then dipped into melted asphalt or tar, and the top of the block is then dipped into a receptacle containing small particles of broken hard rock. I prefer to use trap rock which is very hard and durable, broken and screened so that the particles are approximately a quarter to one-half of an inch in diameter. When the block is removed from the receptacle containing the broken rock or gravel, a layer of gravel adheres to the entire top of the block. Sand is then sprinkled over the top of the block, which is then put into a hydraulic or steam press and subjected to a heavy pressure, which forces the particles of rock down into the upper part of the wood, where they are firmly held. The sand coat-

ing serves a double function, namely, to fill in the small holes between the gravel, but its chief use is to prevent the block from sticking to the press dies. The heavy pressure to which the block is subjected also compacts the upper part of the wood, and the gravel is driven so firmly into the wood that it will remain there under ordinary conditions until it is worn out. The layer of tar or asphalt and gravel on the top of the block also prevents the evaporation of creosote or other preservative agent, and prevents wear of the block and slipping of the horses' hoofs.

In making the blocks it is not absolutely necessary that the wooden blocks should first be treated with asphalt or tar, although this is a convenient means for causing the particles of broken rock to adhere thereto.

The pavement is laid in the usual way, the blocks being laid on a cement or other suitable foundation, either close together, or with interstices between, as may be desired. When the pavement is laid, a layer of coarse hot sand is spread over the top thereof.

Both ends of the block can be treated so as to allow them to be reversed when the top end becomes worn, thereby giving double life to the block. By simply removing the blocks and turning them over, laying the worn end in cement on the concrete base, the pavement is made as good as new.

In the accompanying drawings:—Figure 1 represents in perspective an ordinary wooden block. Fig. 2 represents a cross section of the same, with broken stone or gravel thereon before it is put in the press, and Fig. 3 represents a section of the finished block after it has been subjected to hydraulic pressure.

a represents the wooden part of the block, *b* the stone or gravel, and *c* the tar.

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

1. The method of making pavement blocks, which consists of forcing a layer of broken stone or gravel into the top thereof under a pressure sufficient to compact the upper part of the block, making the whole block of diminished cross section, substantially as described.

2. The method of making pavement blocks, which consists in causing a layer of broken stone or gravel to adhere to the top of a wooden block and forcing said stone into said block under a pressure sufficient to compress

the upper part of the block and make it of diminished cross section, substantially as described.

3. The method of making pavement blocks, which consists in treating wooden blocks with a preservative agent and with an adhesive material, dipping said blocks into broken stone or gravel and subjecting the same to a pressure great enough to compact the upper part of said blocks and render them of diminished cross section, substantially as described.

4. The method of making pavement blocks, which consists in creosoting wooden blocks, dipping them into melted asphalt, dipping the tops thereof into broken stone or gravel and then subjecting the whole to a heavy pressure sufficient to compact the upper part of said block and force the broken stone there-

into, making the whole block of diminished cross section, substantially as described.

5. An improved pavement block composed of wood having one or more stone surfaces formed by forcing the stone under pressure into the wood, substantially as described.

6. An improved pavement block, composed of soft creosoted wood, with a layer of broken stone or gravel forced into one or both ends thereof under pressure, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

SOLON ZOCHRY RUFF.

Witnesses:

H. L. COBBS,

EMMET C. DIBBLE.