

E. ALCOTT.  
PAVING BLOCK.

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920,807.

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Fig. 1.

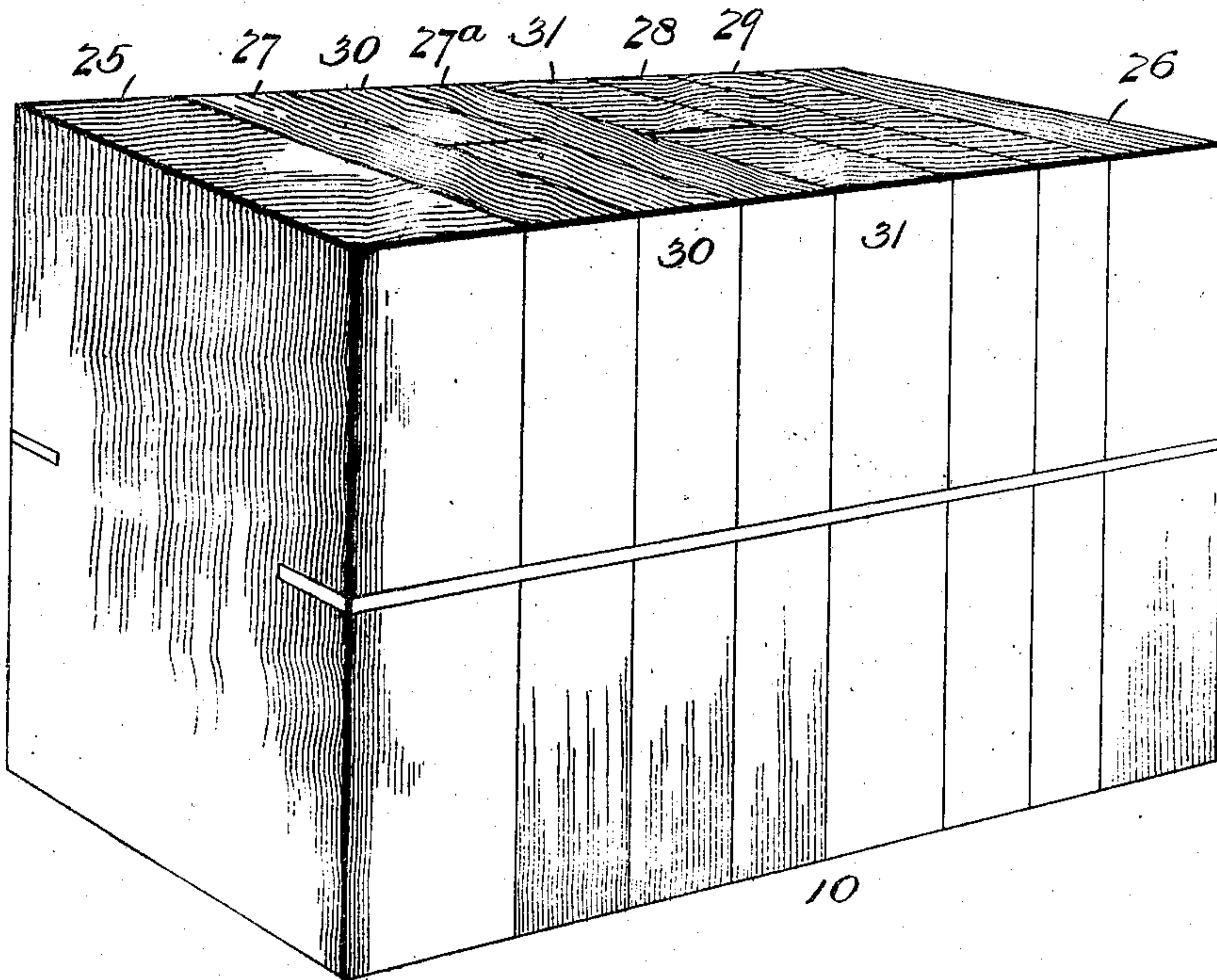


Fig. 3.

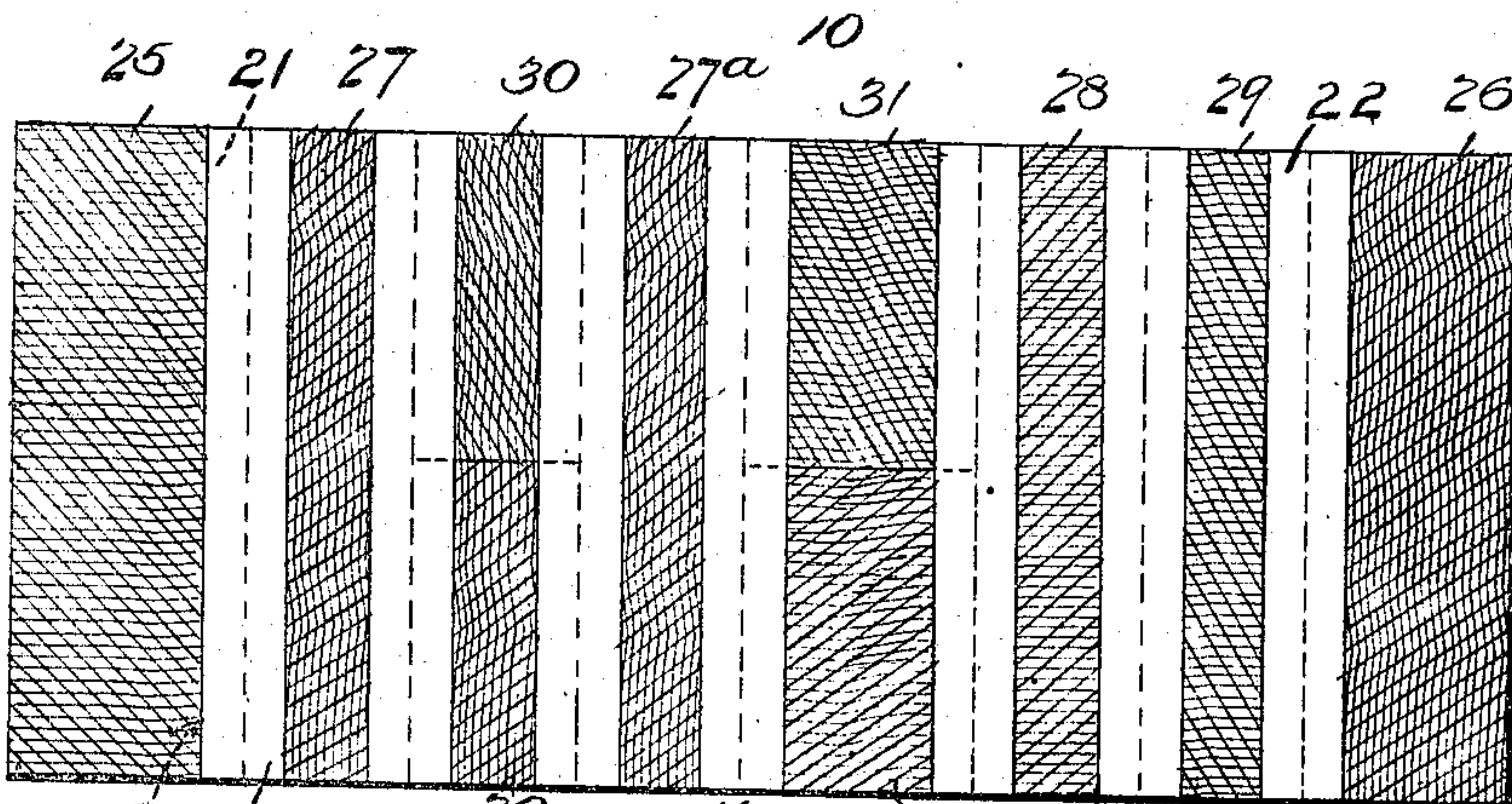
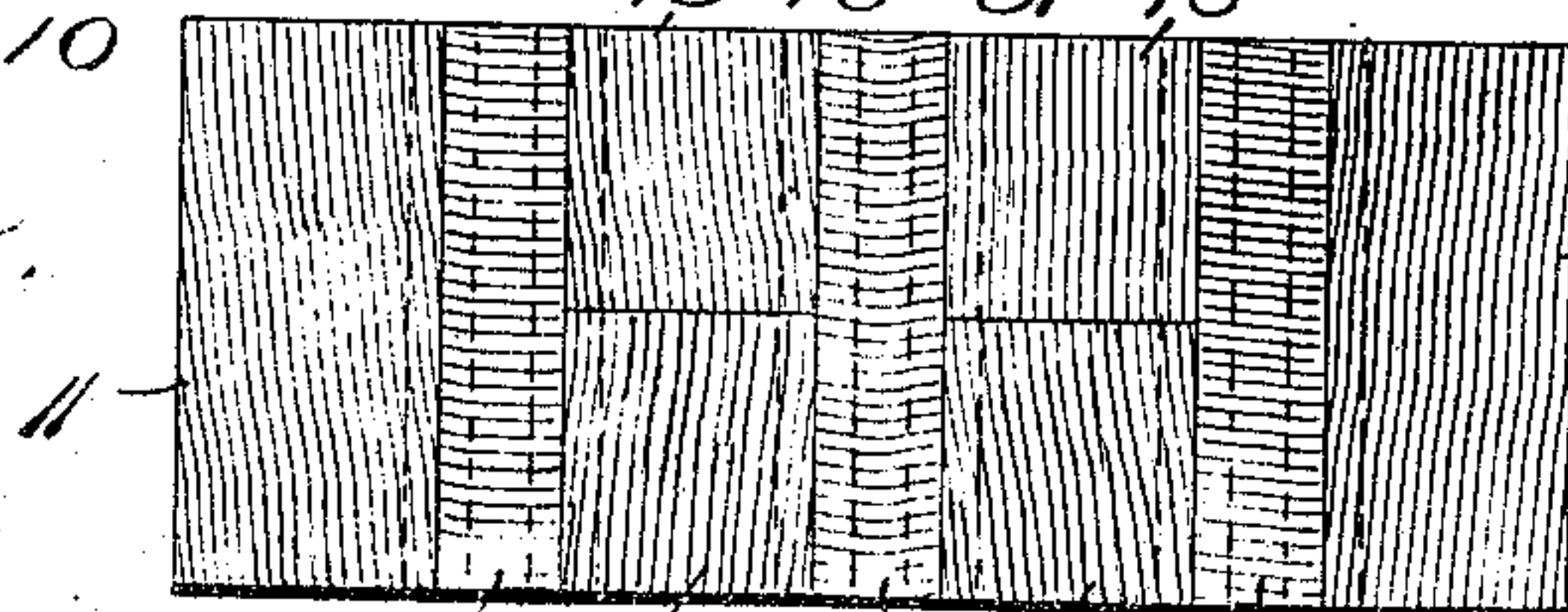


Fig. 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## PAVING-BLOCK.

No. 920,807

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Patented May 4, 1909.

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*To all whom it may concern:*

Be it known that I, EDWARD ALCOTT, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Paving-Blocks, of which the following is a specification.

This invention relates to wood pavements of the class which is made up of individual blocks, each of which is composed of a plurality of sections of hard wood held in a rigid relative position to present a most effective wearing surface.

With the above and other objects in view the invention contemplates the employment of sawed sections of hard wood, preferably white oak, owing to its wear-resisting qualities and special adaptability for this purpose, said sections being held in a rigid relative position by means of suitable binders, and the several sections presenting their ends for the wearing surface, and having differently running grain, that is, the grain of the wood in some sections runs in a different direction from that in the other sections, and all of the sections are so arranged as to have the differently running grain in opposition, thus materially strengthening the block body throughout and providing a wearing surface of great resisting and wearing qualities.

In carrying out the invention it will be understood that changes in details and structural arrangement may be resorted to, but certain preferred and practical examples are shown in the accompanying drawings, wherein—

Figure 1 is a perspective view of a form of the improved sectional block, the sections thereof being held in rigid relative position by means of side binders extending longitudinally of the block. Fig. 2 is a plan view showing a preferred arrangement of the sections. Fig. 3 is a horizontal sectional view showing the sections held in rigid relative position by means of transverse binders.

Like characters of reference designate corresponding parts.

In the accompanying drawings, and referring for purposes of example first to the forms of the block shown in Fig. 2, the paving block in its entirety has been designated by the numeral 10, and the same preferably consists of a plurality of sawed white oak sections, the end sections 11—11 being preferably of slighter thickness than the adjoining

sections 12—12, which abut against the two-part or double sections 13—13 which are of the same thickness as the end sections 11—11, said two-part sections 13—13 being spaced apart by a central section 14. While the described arrangement of sections is one that has been found to possess great practical advantages, it will of course be understood that the invention is not in any way limited thereto, as various other arrangements may be resorted to, the object being to provide a compact structure in which each section is held in a vertical position to present its smaller end grain-edgewise to receive the wear incident to heavy traffic.

The sections may be held in the desired position to form the complete block in various ways, examples of which have been shown in the accompanying drawings. For instance, in Fig. 1 the sides of the sections have been shown provided with saw cuts 15—15<sup>a</sup>, which aline with each other to form continuous grooves 16—17 into which metallic binders 18—19 are driven to retain each section in a rigid relative position.

In Figs. 2 and 3 the inside meeting faces of each section have been shown provided with a continuous transverse saw-cut 20, which, when the said sections are in position form locking recesses 21 into which binders 22 are driven, the arrangement being such that each section has an independent locking engagement with the adjoining section.

As has been before stated, the sections forming the paving block are preferably of white oak on account of its well known hardness, and the same are of such a size that they may be readily sawed from the waste pieces from saw mills. Such pieces, after being treated as will be described later on, have their grains running in different directions, and it is contemplated using these differently grained pieces to present a wearing surface of the block which presents opposing grains. An example of such arrangement is shown in Fig. 2 of the accompanying drawings, and by reference to said figure it will be observed that the grain of the end sections 11—11 runs longitudinally, the grain of the adjoining sections 12—12 runs transversely, the grain of the two pairs of sections 13—13 runs longitudinally, and the grain of the central section 14 runs transversely. By this arrangement it will be seen that the crushing or spreading strain on the wearing surface of the block incident



to heavy or continuous traffic is resisted by the differently running grains of each section, thereby causing an even and gradual wear on all of said sections which prevents the formation of any ridges and the like such as are formed on surfaces when the grains all run in the same direction.

Irrespective of whether the block sections are sawed from waste pieces of material or not, a necessary and important feature of the invention is that the sections are specially prepared in order to provide a plurality of sections in the same block which have the grain running in different directions, and which are capable of being so related when assembled as to have the differently running grains in opposition. For instance, one or more sections of the block present the grain running transversely of the end of the block, and this is produced by the ordinary cross-grain sawing. That is also true of those sections of the block wherein the grain runs across the ends transversely but also more or less oblique. Again, other sections of the block, wherein the grain runs in a direction longitudinally of the end of the section, such sections are prepared by the operation of quarter sawing, or in other words sawing with the grain of the wood. Hence, it will be observed that the improved sectional block claimed could not be formed from ordinary sections, pieces, or slabs sawed out in the usual manner.

Figs. 2 and 3 of the drawings exemplify the plan of having the sections with oppositely running or opposing grains arranged in regular alternating relation, while Figs. 1 and 3 suggest one of the variations which may be resorted to by utilizing a more promiscuous arrangement of the sections, while at the same time preserving the idea of having the differently running grains in opposition. And this may be varied within reasonable limits without departing from the scope of the invention.

A practical feature of the invention is embodied in the structure at one or more places two-part sections, 13—13, is that the same increase the number of joints, thus making the wearing surface more even, and at the

same time giving a better foot-hold for traffic. Furthermore, these two-part sections possess the distinctive advantage of contributing to the economical construction of the block from pieces that are ordinarily waste in saw mills.

As is the usual custom in wood pavements, the spaces between each section are filled with tar, or the like, which compensates for all expansion and contraction due to atmospheric conditions.

Referring particularly to the arrangement of sections shown in Figs. 1 and 3, the reference numeral 25 designates one of the terminal or end blocks having a transversely running grain at the end, while 26 designates the other end block having the grain at the end running in a general longitudinal direction. Intermediate narrow sections or pieces 27—27<sup>a</sup>, 28 and 28, having the grain running as shown in Figs. 1 and 3 are sandwiched in the body of the block with the end sections, and with two-part sections 30—30, and 31—31.

Claims:—

1. A paving block composed of a plurality of wooden sections having differently running grains presented on-end at the wearing surface, said several block sections being also arranged to present their differently running grains in opposition to check slipping and resist fracture and uneven wear by the traffic, and fastenings connecting adjoining block sections.

2. A paving block composed of a plurality of wooden sections having differently running grains presented on-end at the wearing surface and arranged to present their differently running grains in opposition, said block sections being provided in their inside faces with transverse grooves, and interior transversely extending binders fitted in said grooves to fasten together the adjoining block sections.

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

EDWARD ALCOTT.

Witnesses:

R. C. BRADDOCK,  
D. P. WOLHAUPT.