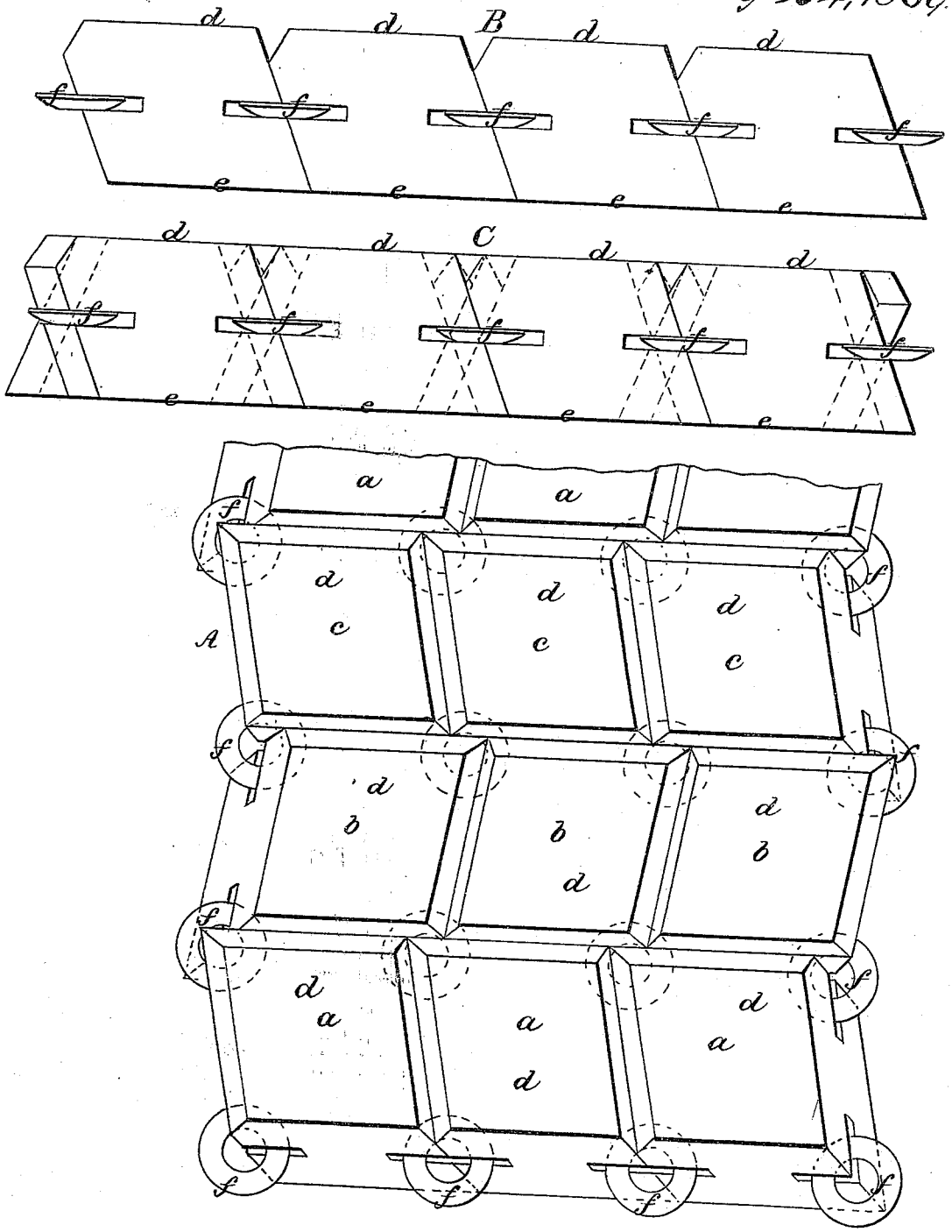
A. Betteley.

Wood Pavement.

No. 94,066. Patented Aug. 24, 1869.



Witnesses

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ALBERT BETTELEY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 94,066, *dated August* 24, 1869.

IMPROVED WOOD 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, ALBERT BETTELEY, of Boston, in the county of Suffolk, and State of Massachusetts, have invented Improvements in Wood Pavements; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practise it.

My invention relates to the construction of a wood pavement, with reference to securing such forms of blocks as shall be most enduring to wear and least liable to relative movement after the pavement is laid.

My invention consists in the employment of blocks of polyhedron shape, or with flat or horizontal top and bottom surfaces and rhomboidal side faces, each block in the pavement being kept from rising by the blocks upon two adjacent sides of it, and upon its other two sides resting upon the adjacent blocks, each block being preferably cut off at the salient angles of its upper face, thereby making a groove between each two adjacent blocks, giving a foothold for horses and preventing the blocks from splintering.

The drawing represents a set of these blocks laid together to form a pavement, the blocks of adjacent rows being inclined in alternately opposite directions.

A shows a plan of a portion of the pavement;

B, an end view of adjacent blocks; and

C, a side view of them.

a a denote the blocks of one row;

b b, blocks of a second row; and

c c, blocks of a third row.

Each block *a* has its upper base *d* and its lower base *e*, horizontal, and each base is of a lozenge-form, as shown at A.

From the plane of the upper face, each side face inclines toward the bed of the road, each two opposite faces being parallel.

Each block *c* is precisely like the block *a*, but in each intermediate block *b* the side faces in the direction of the length of the series are inclined in a direction opposite to that of the corresponding faces of the blocks *a* and *c*, the other faces being parallel to the adjacent and corresponding faces of the blocks *a c*.

Thus it will be seen, that though the blocks are so formed that their contiguous faces lie together, yet these faces so lap or extend over and under each other on all sides, that the blocks, as it were, interlock and mutually support each other in vertical directions.

Each block, on its two overhanging or salient upper edges, is cut away or chamfered off, as seen in the drawings, thereby forming, between these edges of the block and the adjacent edges of adjacent blocks, grooves which prevent the slipping of the feet of horses, and also prevent the wood from splintering.

The upper face of each block presents the fibre of the wood endwise, and the fibre runs parallel to the four sides of each block, the block being made by cutting up square joist, or timber square in section, by series of cuts, the line of each cut inclining both to the base and to the side of the joist, the several cuts being in the same directions for one set of blocks; other timber being similarly sawed, but with the inclinations of the cuts running in the opposite directions for the adjacent blocks.

Thus each block is a rhombic prism, the faces of which are formed from the sides of the square timber, and the bases by the end-grain of the timber cut into planes angular to the side faces.

It will be obvious that there is no waste of stock in forming the blocks; that every block lies close to its fellows, and is so supported by them, and so aids in their support; that relative movement of the blocks, by wear or by the strain of hoofs, is impossible; that the grain of the wood is presented in the best position to secure endurance; and that as the faces of the blocks of adjacent rows are parallel, the pavement can be easily constructed, the blocks being as readily laid as if the faces were all vertical, instead of all angular.

In laying adjacent rows, the blocks are preferably laid so as to "break joints," as seen in the drawings.

Instead of making each block of a depth about equal to its thickness, it may be made much longer, and the sides forming either angle of each base or top and bottom face, may be of unequal length, or the block made thinner, or of plank. I prefer, however, a form approximating to that shown.

The blocks may be fastened together at their corners by rings, or disks *f f*, each of which sits into four slots, cut into four adjacent and abutting corners.

The employment of these rings, or disks is not herein claimed, as they are equally well applicable to connecting other wood-pavement blocks, and their specific construction or arrangement may form the subject of claim in a future application for a patent.

I claim a pavement composed of blocks, the face of each one of which is rhombic, or rhomboidal, and the four sides of which incline to the bed of the road, each being held down at two adjacent sides by its adjoining blocks, substantially as shown and described.

ALBERT BETTELEY.

Witnesses:

FRANCIS GOULD,

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