## J. HOPKE & JOHN W. HEESCH.

Improvement in Laying Concrete Pavements.

No. 124,135.

Patented Feb. 27, 1872.

Fig:1.

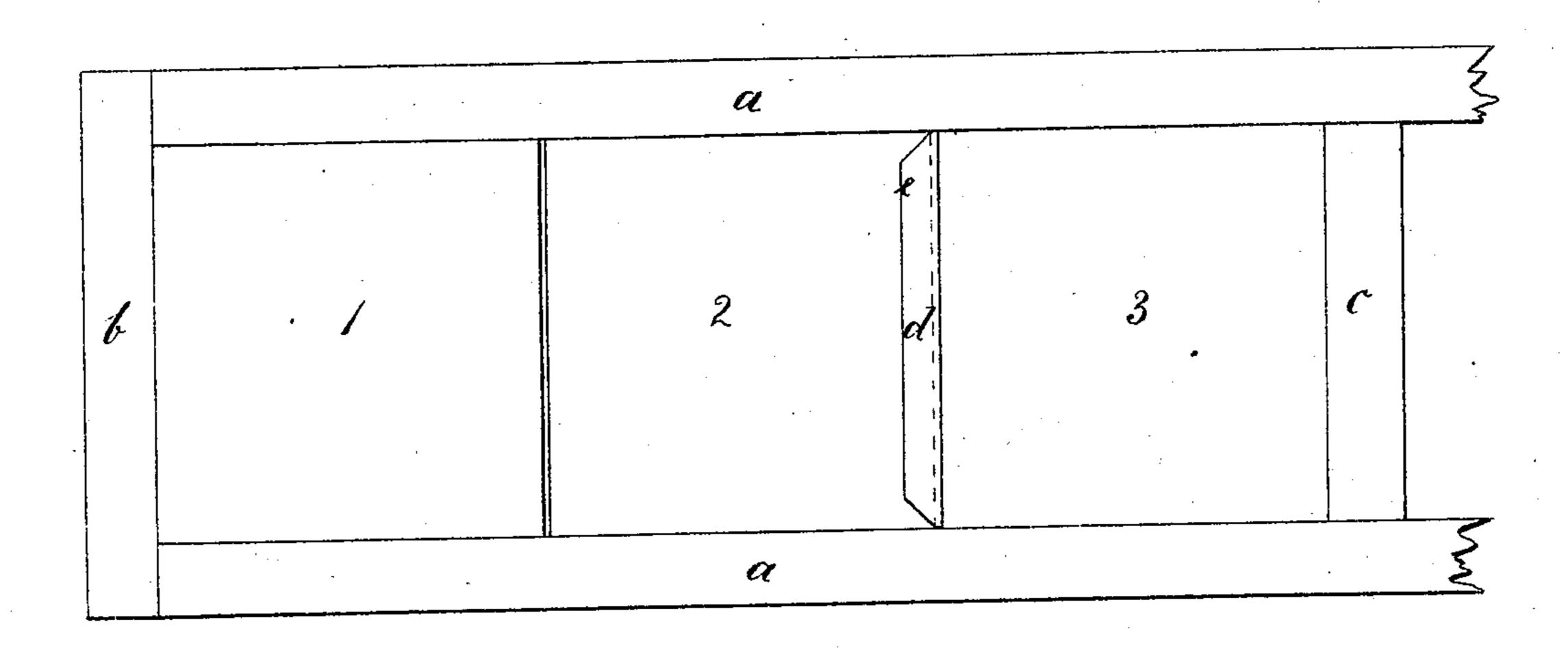


Fig. 2.

Witnesses:

Ab, Wildmand H.Wal. Yurkay. Inventors:

J. Hoopke & J. W. Helsch.
By Van Santooval & Hauf.
Attijs.

## UNITED STATES PATENT OFFICE.

JULIUS HOPKE AND JOHN W. HEESCH, OF HOBOKEN, NEW JERSEY.

## IMPROVEMENT IN LAYING CONCRETE PAVEMENTS.

Specification forming part of Letters Patent No. 124,125, dated February 27, 1872.

To all whom it may concern:

Be it known that we, Julius Hopke and JOHN W. HEESCH, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Laying Concrete Pavement; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a plan or top view of this invention. Fig. 2 is a vertical section of

the same.

Similar letters indicate corresponding parts. This invention relates particularly to concrete pavement of that class which is laid in detached sections or blocks, so that each block can be taken up and relaid without disturbing the adjoining sections. Our invention consists in a movable corner-protector, which is interposed between the block first formed and the block to be formed, and which, after the second block has set, can easily be withdrawn and used in the formation of a subsequent block in such a manner that the corner of the first block is protected while the second block is being formed, and, at the same time, the surface of the protector permits the application of a straight-edge, whereby the adjoining blocks are easily made level and with perfect corners; and, if the blocks are in different colors, our protector also prevents the color of one block from being transferred to the adjoining blocks during the operation of laying, leaving all the blocks clean and well defined.

In order to explain the use of our protector, we will first state how the blocks are laid, and this operation we perform by using two strips, a a, of wood, which we place down edgewise on the ground at such a distance apart as the size of the blocks to be formed requires. These strips are connected at one end by a cross-bar, b, and between them is fitted the movable crossbar c. In making the first block of the pavement, this movable cross-bar is moved away from the stationary cross-bar b to a distance | well defined.

corresponding to the length of the block desired, and the square thus formed is filled with cement or concrete. As soon as this block has set, the movable cross-bar c is moved to form the second square; and between the edge of the block first formed and the block to be formed we interpose our corner-protector d, which is, by preference, made of sheet metal, and which corrresponds in length and height to the length and thickness of the blocks. The upper edge of this corner-protector is bent over at right angles, forming a lip, e, which overlaps the corner of the first block, as shown in the drawing, and the body of the protector is, by preference, made tapering, so that it can be readily withdrawn from between the blocks. After the corner-protector has been adjusted between the block first formed and that next to be formed, the square between the strips a a, the cornerprotector d, and the movable cross-bar c is filled with cement to form the second block, and after this second block has set the crossbar c is moved out to form the subsequent square, and the corner-protector d is withdrawn from between the first and second block and set against the outside edge of the second block, and the third block is formed in the same manner, and so on until the whole pavement is laid.

By our corner-protector, the corners of the different blocks are preserved from injury while the adjoining blocks are being laid, and we are enabled to progress with our work much more rapidly than we can without the cornerprotector, since we are not obliged to wait till the first block has become quite hard before the formation of the second block is begun, but as soon as the first block has set sufficiently to prevent the cement or concrete from running out of shape the formation of the second block can be begun.

Our corner-protector also is of great advantage in laying blocks of different colors, since it prevents the color of one block from being transferred to the edges of the adjoining block during the formation of laying said blocks, and consequently all the blocks, when ready, are

By means of the lip *e*, our corner-protector is rendered stiff, and said lip also forms a handle for withdrawing the protector from between the blocks, while said lip does not prevent the application of a straight-edge used for leveling the blocks.

What we claim as new, and desire to secure by Letters Patent, is—

The corner-protector d, formed as described,

and applied, in combination with the strips a and cross-bars b c, substantially in the manner herein shown and described.

JUL. HOPKE.
JOH. W. HEESCH.

Witnesses:

W. HAUFF, E. F. KASTENHUBER.