

(No Model.)

F. BUETTNER & F. ORLIKOWSKI.
PAVING BRICK.

No. 426,430.

Patented Apr. 29, 1890.

Fig. 1.

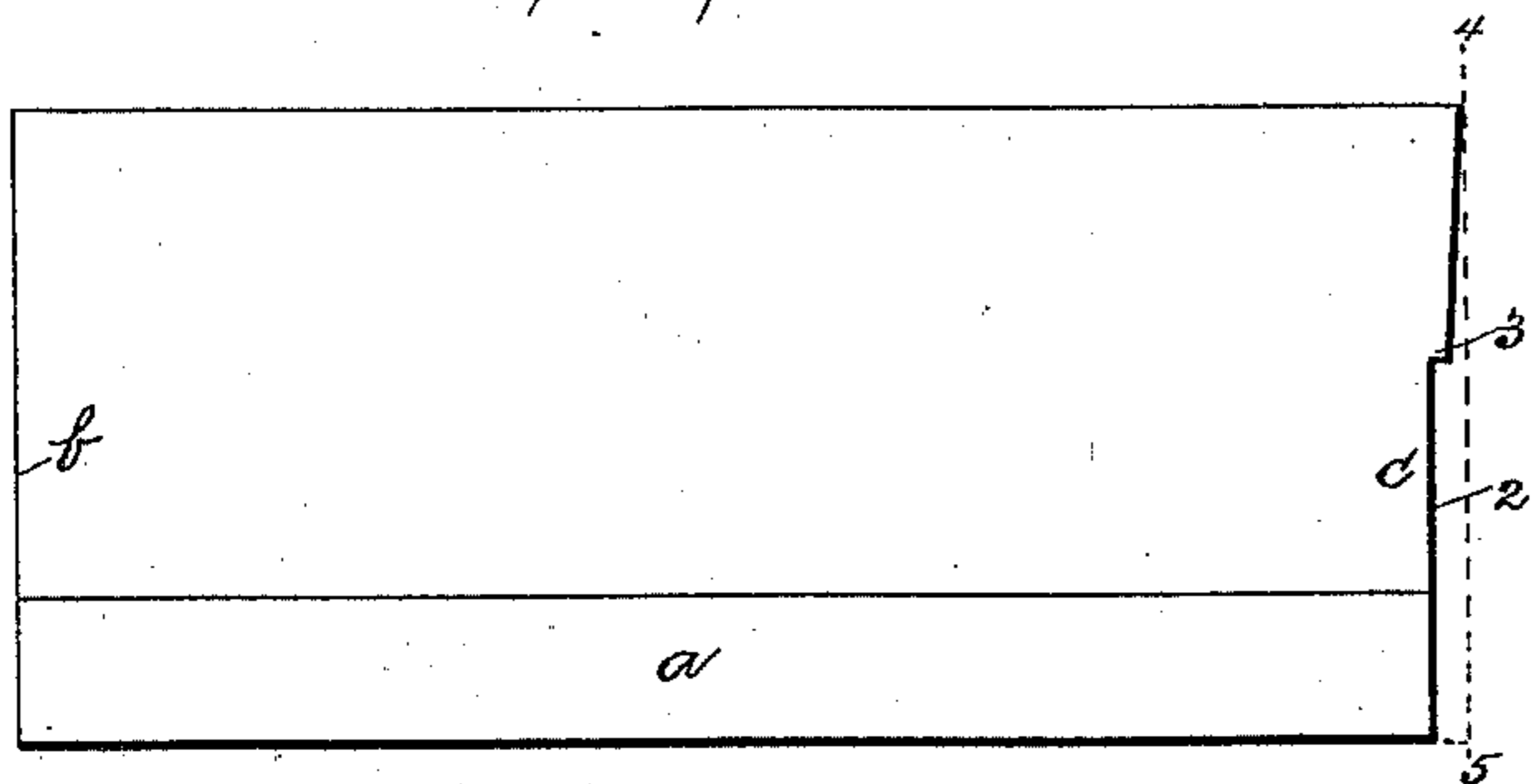


Fig. 2.

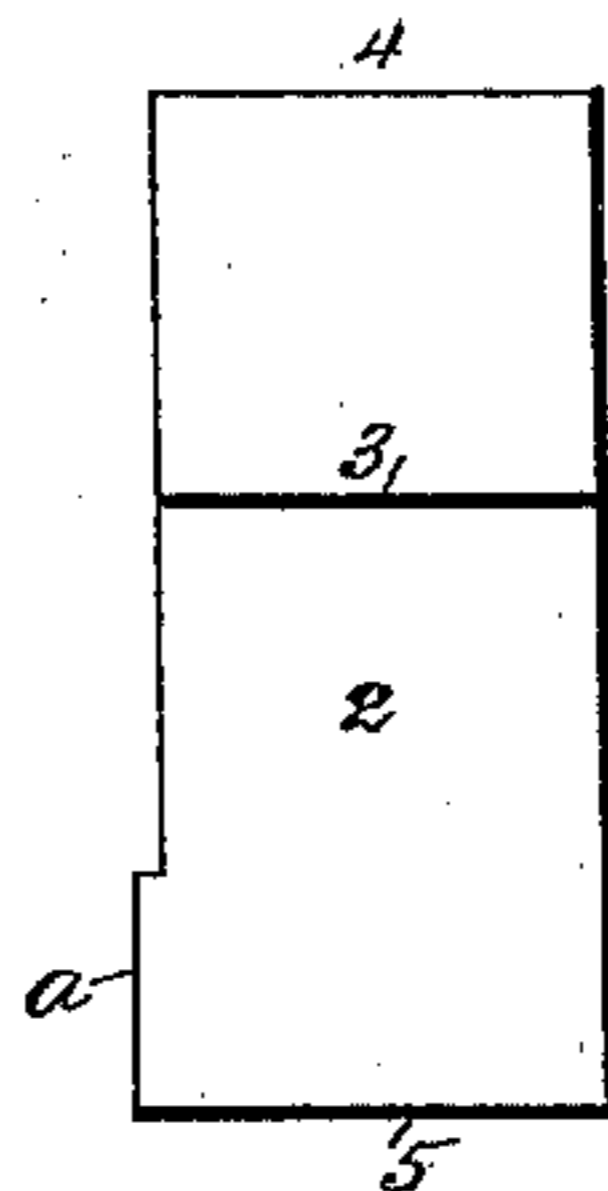


Fig. 3.

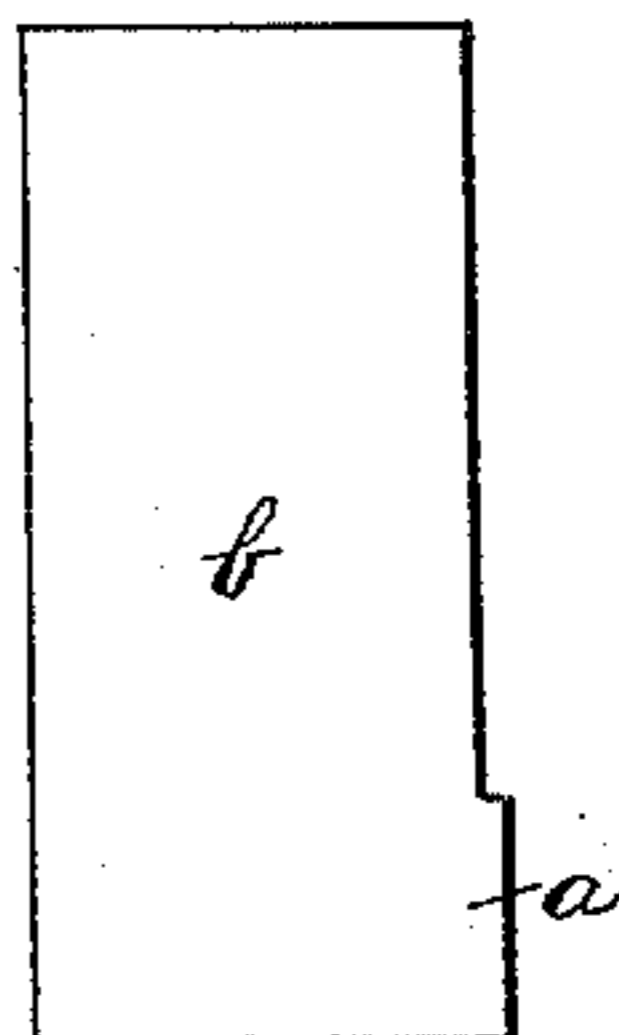


Fig. 4.

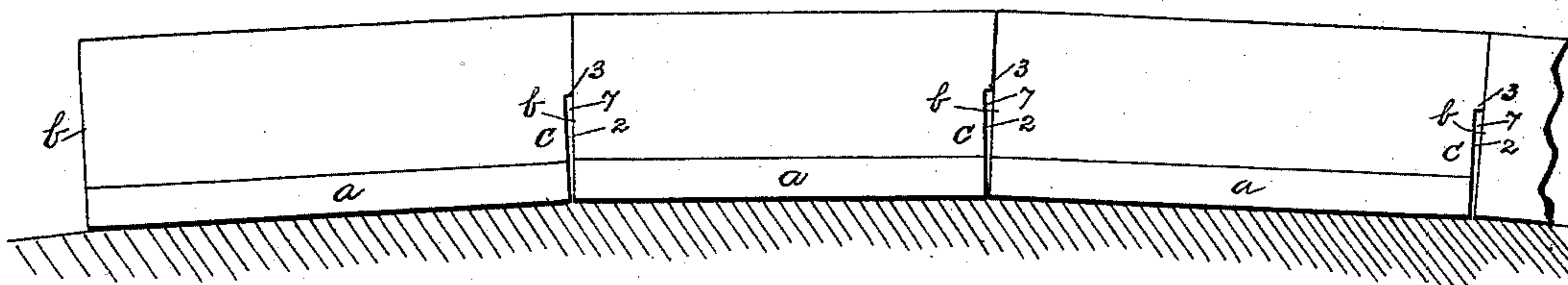
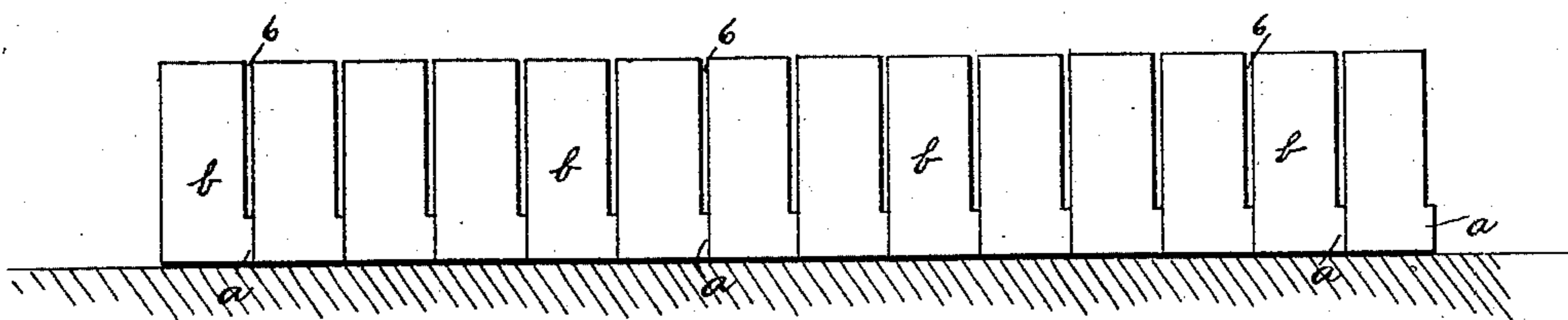


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK BUETTNER AND FRANK ORLIKOWSKI, OF CLEVELAND, OHIO.

PAVING-BRICK.

SPECIFICATION forming part of Letters Patent No. 426,430, dated April 29, 1890.

Application filed January 16, 1890. Serial No. 837,040. (No model.)

To all whom it may concern:

Be it known that we, FRANK BUETTNER and FRANK ORLIKOWSKI, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Paving-Bricks; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in paving-bricks; and the invention consists in a brick constructed substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a brick constructed according to our invention. Figs. 2 and 3 are end elevations representing the opposite ends, respectively, of the brick. Fig. 4 shows a section of street as paved by our improved style of brick. Fig. 5 is a section of the pavement taken at right angles to the view shown in Fig. 4.

A represents the brick, which is of common pattern, with the exception hereinafter noted. In the first place it has formed upon its lower edge and extending laterally to one side a rib or projection *a*, which projection, rib, or ledge is, say, an eighth of an inch deep and three-quarters of an inch high. Otherwise the two sides of the brick are flat and uniform. At one end *b* the brick likewise is plain and of the usual construction, while at the opposite end *c* it has the formation clearly shown in Fig. 1. In the first place it is made with a recess or offset 2, running from the bottom about three-fifths of the way upward, where there is a shoulder 3. From this shoulder the end of the brick inclines slightly to a vertical line to the upper edge of the brick. The line of the recess 2 is parallel to the opposite end of the brick, and the line running from shoulder 3 to the top line 4 is at an inclination to this line and to a straight vertical line, as appears in dotted line 4 to 5, which is at right angles to the respective edge and parallel to the end *b*. Thus it occurs, when the bricks are placed in position in the street running in lines transverse thereto and on a

somewhat arched foundation, that when the straight end *b* of one brick is placed against the notched and inclined end of the opposite brick both bricks will rest upon the foundation and their edges at the top will be brought into close contact. In this way the bricks placed end to end will come so snugly together that the joint will be scarcely perceptible, and thus no crevices, cracks, or the like will appear between them at the ends on the surface of the street; but running in the opposite direction there will be a space between the bricks equal to the width of the rib *a* at their base, which, as before stated, is about an eighth of an inch in depth. These open spaces between the bricks will run transversely to the street. Then in order to complete the pavement a molten pitch or other hardening, cementing, or binding substance will be poured in the crevices or spaces 6 between the bricks, and owing to the space 7, (seen in Fig. 4,) created by reason of the peculiar construction of one end of each brick, as described, the said pitch or other suitable binding material will run into the space between the ends of the bricks and fill the same to the top, so that all the bricks will be thereby bound and firmly united not only at their sides, but at their ends as well. In this way we are enabled to knit all the bricks together and form them, as it were, in a solid mass, making one brick help another in sustaining the burden that comes upon it. This makes a much firmer and more durable pavement than can be obtained where the binding occurs only upon the sides, as is the usual construction. We are furthermore enabled to build a solid row of bricks, so far as the surface is concerned, running from side to side of the pavement, each brick fitting closely up against the end of the next one in succession and protecting itself, as well as the opposite brick, from chipping off and wearing at this point, and making a symmetrical as well as a durable pavement thereby. This, however, does not prevent us from thoroughly cementing the ends of the bricks together, which we are enabled to do by forming the recess at the end, as described. The incline from 3 to 4 at end *c* affords room to accommodate the bricks to the arch or curvature of the street, and

with good abutments the bricks will form an arch from side to side where there is, say, a twenty-one foot street with a six-inch crown.

Having thus described our invention, what
5 we claim as new, and desire to secure by Letters Patent, is—

1. A paving-brick having a rib or projection along its lower edge at one side and formed with a recess at one end terminating
10 in a shoulder in the end of the brick, said recess extending from said shoulder to the bottom edge of the brick, substantially as described.

2. A paving-brick having a rib or projec-

tion along its lower edge at one side and 15 formed with a recess at one end terminating in a shoulder 3, and an inclined portion at said end extending from said shoulder to the upper edge of the brick, and the opposite end of the brick straight and at right angles to 20 the edge thereof, substantially as described.

Witness our hands to the foregoing specification this 8th day of January, 1890.

FRANK BUETTNER.

FRANK ORLIKOWSKI.

Witnesses:

H. T. FISHER,

N. S. McLANE.