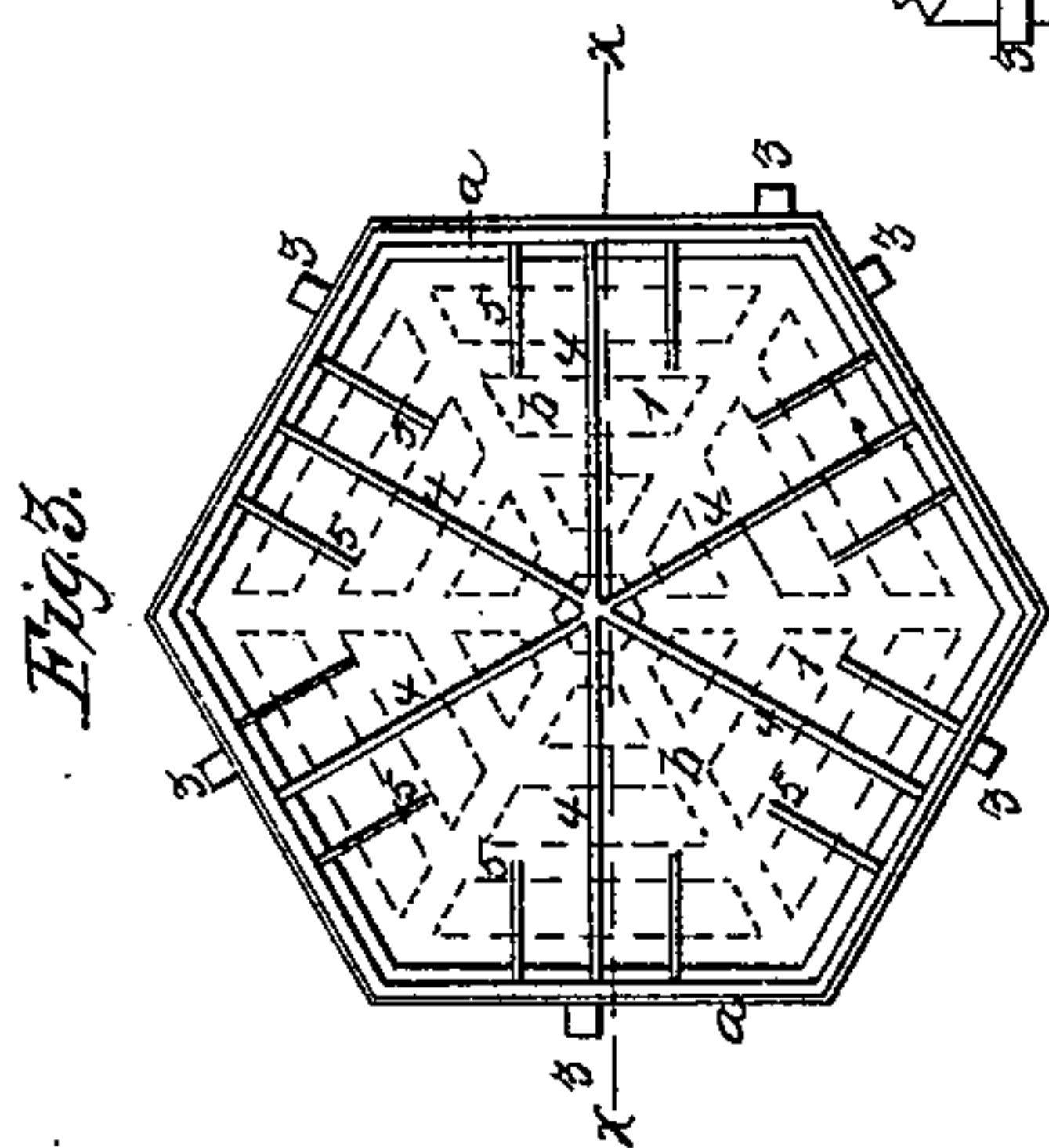
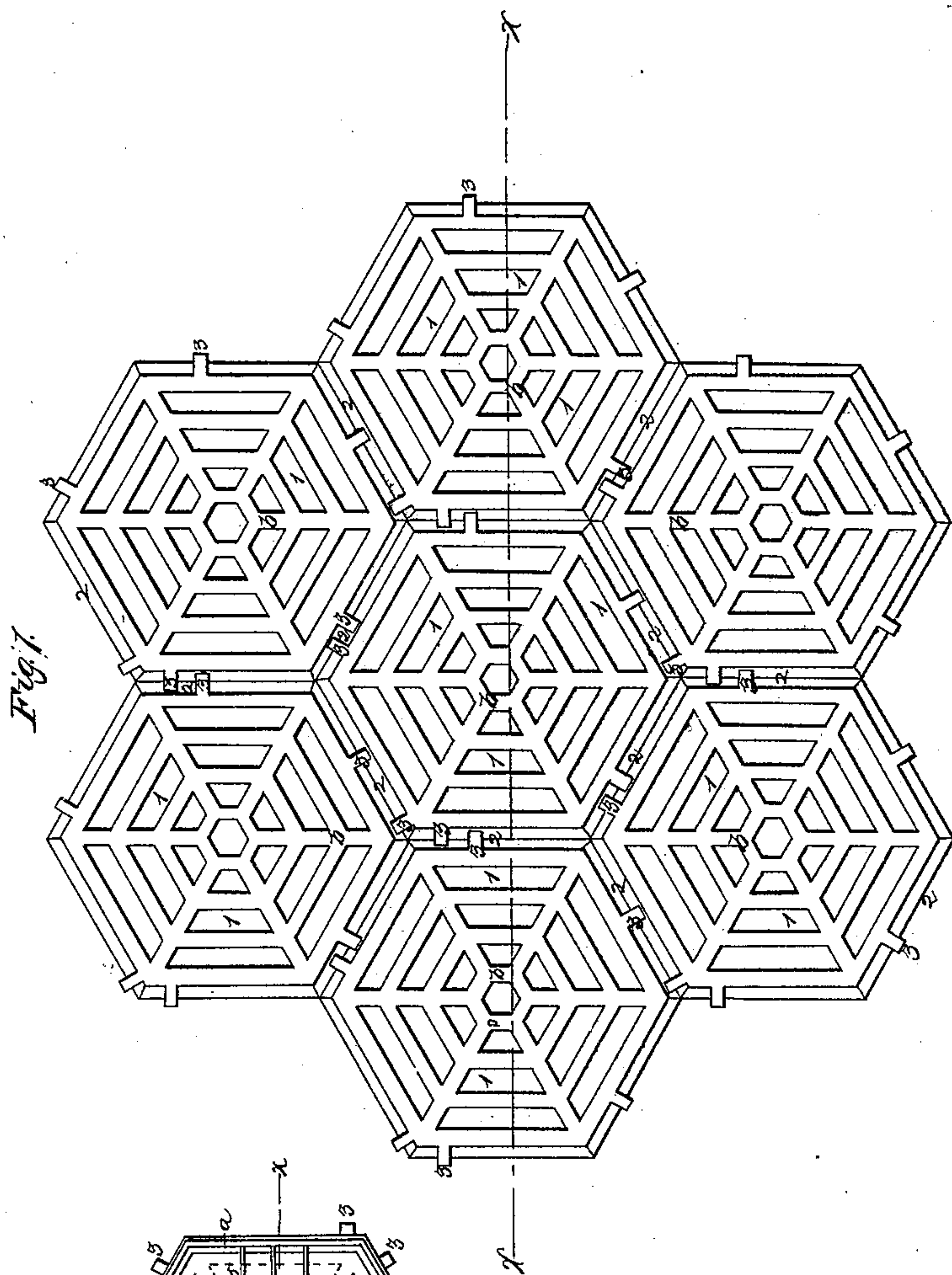
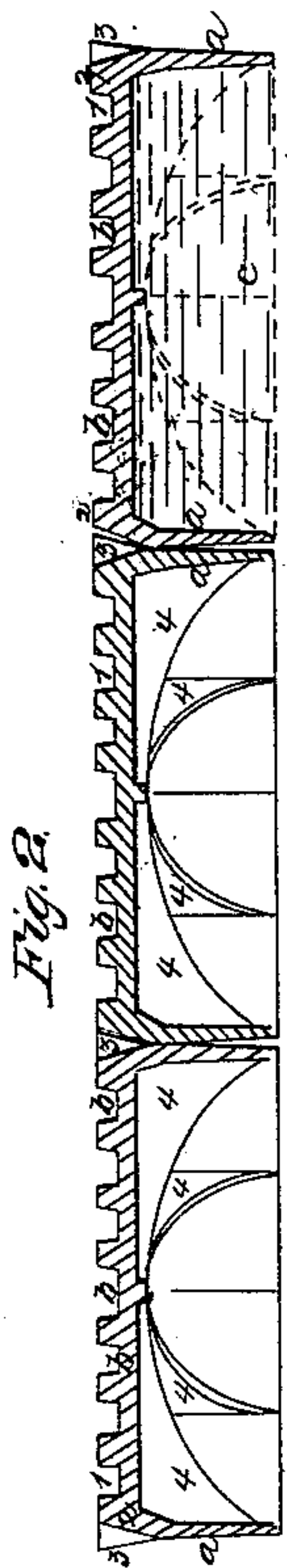


C. J. Shepard.
Iron Pavement.

No 16,757.

Patented Mar. 3, 1857.



Witnesses:
Lemuel W. Sewell
H. S. Lincoln

Inventor:
C. J. Shepard

UNITED STATES PATENT OFFICE.

CHARLES J. SHEPARD, OF BROOKLYN, NEW YORK.

CAST-IRON PAVEMENT.

Specification of Letters Patent No. 16,757, dated March 3, 1857.

To all whom it may concern:

Be it known that I, CHARLES J. SHEPARD, of Brooklyn, in the county of Kings and State of New York, have invented, 5 made, and applied to use a certain new and useful Improvement in Cast-Iron Pavement for Streets; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the 10 annexed drawing, making part of this specification, wherein—

Figure 1, is a plan of my improvement as formed of hexagonal blocks and Fig. 2, is a 15 vertical section of the same at the line x, x , and Fig. 3, is a plan of the under side of one block.

Similar marks of reference denote the same parts.

20 Stone wood and metal pavement blocks have heretofore been formed in a wedge shape, and setting together in the arched form of the street or driven into the sand or other foundation,—metallic blocks have also 25 been formed with projections or lugs setting into recesses in the adjoining blocks, and bricks or tiles for pavements have also been formed so as to interlock with each other; my invention therefore does not relate to 30 forming cast iron pavements so as to interlock the one block with those adjoining, but consists in forming the upper part of the sides of the block partially conical or tapering, and forming wedge shaped projections 35 so set that they do not come opposite to each other when laid but overhang the tapering or inclined parts of the adjoining blocks, thereby any strain tending to force one block down into its bed of sand or other material 40 does not act on the adjoining block to tilt the same and work it loose but tends to press the same away horizontally, thereby the strain on one block is thrown on those adjoining for several feet around, and no one 45 block can come up or go down without moving those surrounding for some distance.

In the drawing a, a , are the sides of my hexagonal blocks, and b, b , are the tops of said blocks; these blocks are to be formed 50 with suitable grooves 1, 1, in their upper surface to afford foot hold for the horses, and 2, 2, are the inclined or tapering upper sides of the blocks on which the wedge formed projections 3, 3, are cast. It will be 55 seen that these projections are at unequal distances from the angles of the blocks, so

that the same will set onto the adjoining blocks without any two of the wedge shaped projections coming opposite to each other.

The block is strengthened by the arching 60 ribs 4, 4, and by small ribs 5, 5, on the under side of the top, which make a light block of a uniform strength.

In cases where more convenient on account of accommodating rail road tracks, or 65 other structures blocks or bars may be used in a square or other suitable polygonal shape having the double wedge forms acting as before detailed.

The blocks are to be inverted before laying and pressed full of clay, cement or other 70 suitable material, and when being laid are to be turned over onto a smooth and substantial foundation prepared to receive them; and the blocks being set closely together upon an arching or even a flat surface, are held permanently in place, and no 75 one block can be moved in any direction without influencing those adjoining; I have herein shown the top of my paving block 80 closed or solid, but holes might be formed therein if preferred.

I do not claim double inclines in themselves as wooden paving blocks have been formed as pairs of double wedges set in 85 alternate opposite directions; but I am not aware of any metallic paving block having ever before been formed in a polygonal shape with the vertical or nearly vertical sides to steady the blocks and with the inclines around the upper parts of said sides 90 taking projections from the adjoining blocks, which projections are at unequal distances from the angles of the blocks to prevent any two coming opposite to each other when 95 laid as specified.—therefore

What I claim and desire to secure by Letters Patent is—

Forming polygonal metallic paving blocks with the inclines 2, 2, at the upper part of 100 the straight sides, and with the projections 3, 3, to take the inclines of the adjoining blocks at unequal distances from the angles of said blocks, substantially, as and for the purposes specified. 105

In witness whereof I have hereunto set my signature this thirty first day of December 1856.

CHAS. J. SHEPARD.

Witnesses:

LEMUEL W. SERRELL,
H. S. LINCOLN.