

C. Guidet.
Stone Pavement.

N^o 58,407.

Patented Oct. 2, 1866.

Fig. 5

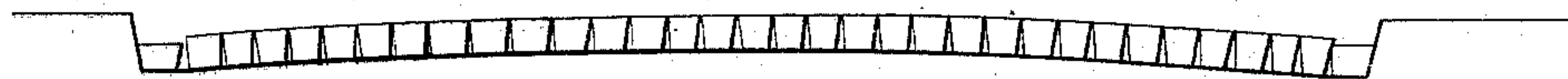


Fig. 1

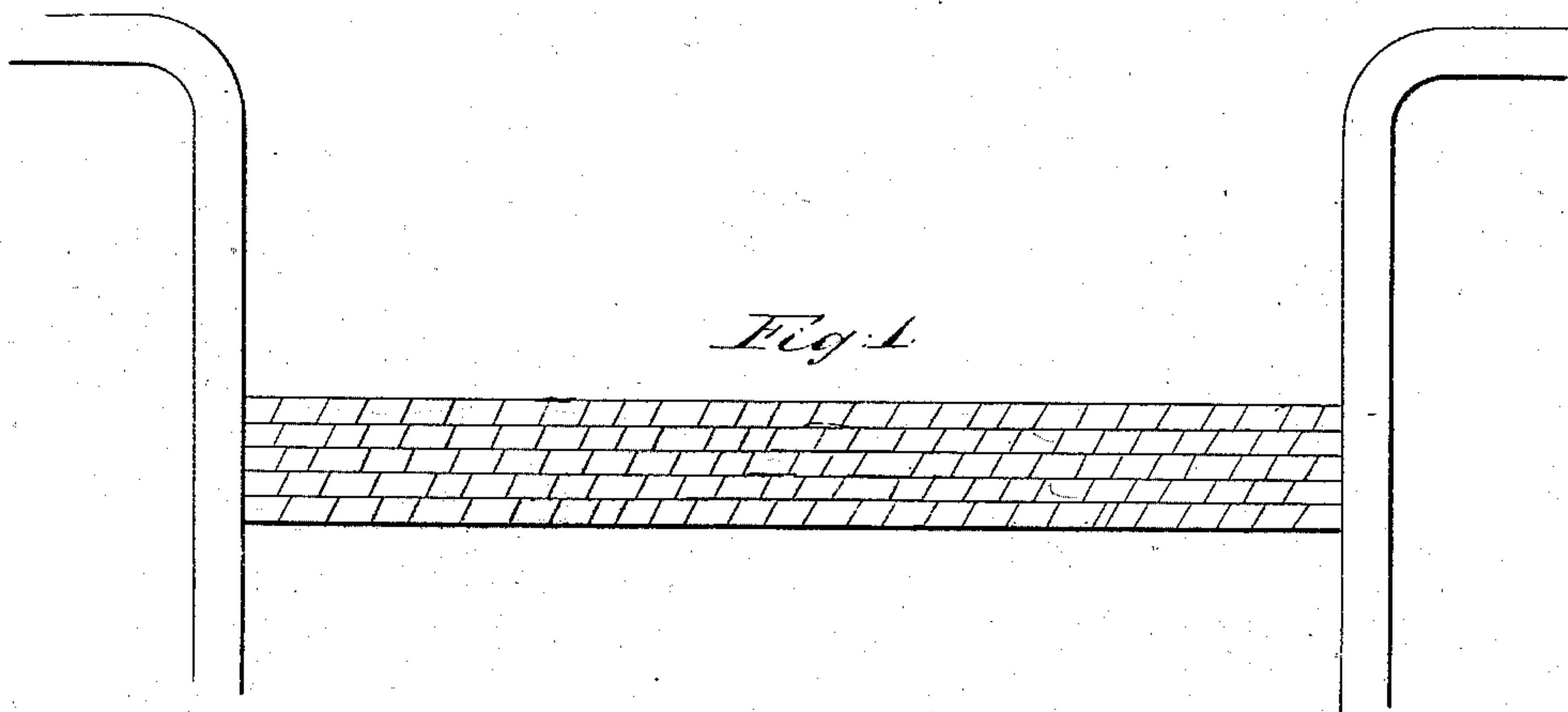


Fig. 3

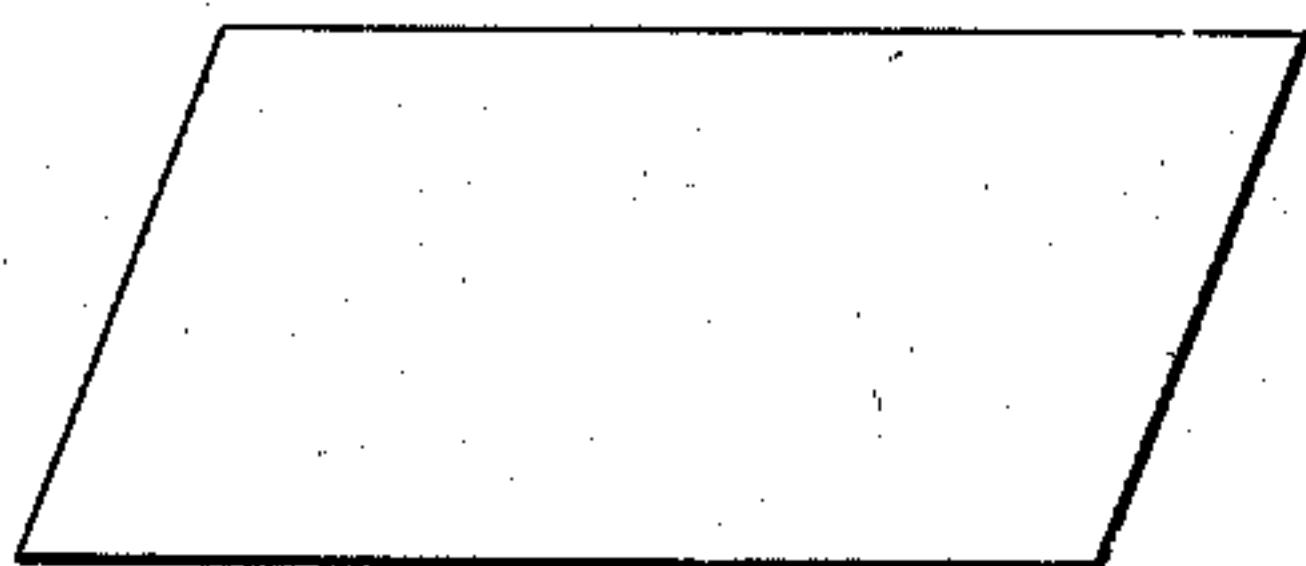


Fig. 2

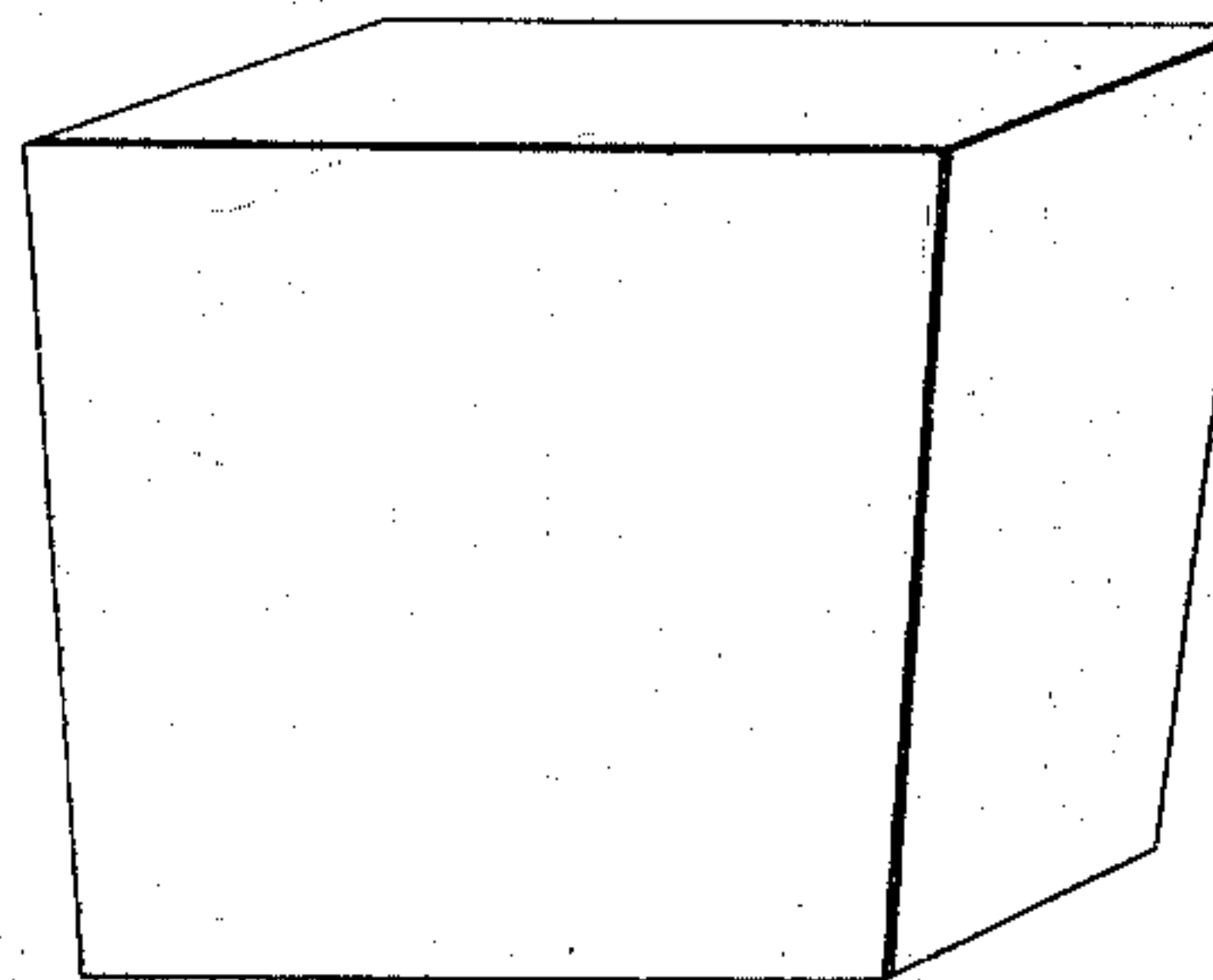
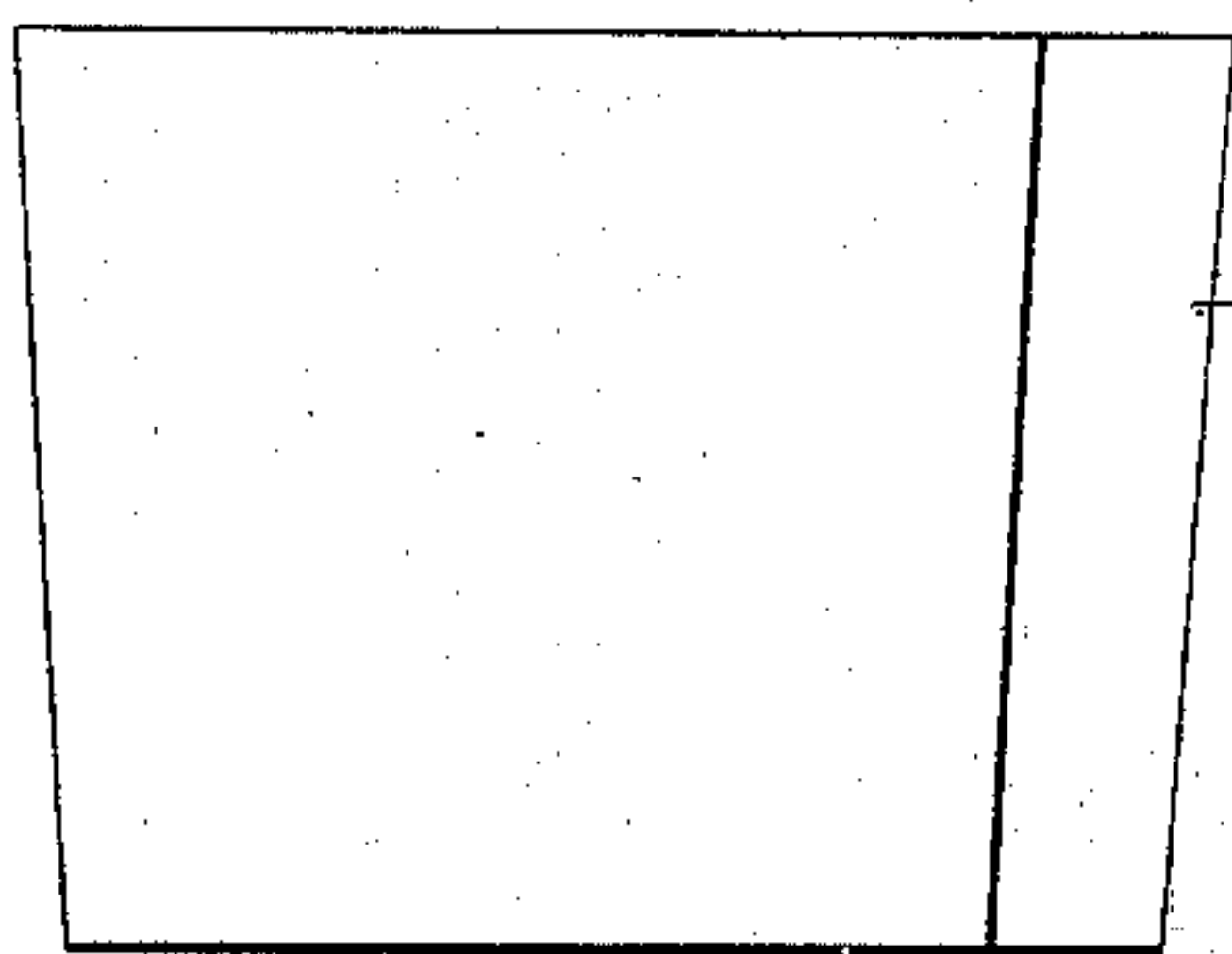


Fig. 4



Witnesses
Albert K. Hook
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Inventor
Charles Guidet
per J. J. Greenway Atty

UNITED STATES PATENT OFFICE.

CHARLES GUIDET, OF NEW YORK, N. Y.

IMPROVED BELGIAN PAVEMENT.

Specification forming part of Letters Patent No. 58,407, dated October 2, 1866.

To all whom it may concern:

Be it known that I, CHARLES GUIDET, of the city, county, and State of New York, have invented certain new and useful Improvements in the Street-Pavement known as "Belgian" or stone-block pavement; and I do hereby declare and ascertain my said improvement, referring to the accompanying drawings, in which—

Figure 1 is a plan of a street with a section of pavement on my plan laid down. Fig 2 is a block of my pavement in perspective. Fig. 3 is a geometrical plan; Fig. 4, an elevation. Fig. 5 is a vertical section of a street with the blocks in place.

Having for the last twenty years been engaged in laying the well-known Belgian or block pavement in Europe and the United States, and being well acquainted with the various modes employed therein and the advantages and defects thereof, I have observed that in those streets where there is a great traffic—such, for instance, as Broadway in the city of New York—in that part that is paved with Belgian pavement straight joints running transverse with the line of travel wear rapidly away, and in a few years along the line of the joints, so that the face of each block of stone becomes uneven, rounding off toward each joint, and the uneven surface thus produced causes the pavement to be very slippery and dangerous for horse travel, forming receptacles for water, dust, or mud at each joint.

To obviate the difficulties arising from this cause, and the insecurity of the diamond pavement, which is worthless for travel, is the object of my present invention, consisting of the employment of an improved form of stone blocks and mode of laying the same, differing in form and measure from any heretofore used, having bevel side joints that prevent the wheels of carriages, drays, &c., from cutting and wearing out the transverse joints, which will make a durable, strong, and even pavement.

The construction which I deem best and most advantageous is as follows, although the dimensions given can be varied within certain

limits, while the joints are kept from being right angles to each other. The stone blocks may be of trap rock, granite, or of any syenite equal in hardness, and of uniform quality. The blocks are of a rhomboidal form on their upper surface, the two long sides being straight and parallel, and the short sides being also parallel and somewhat inclined from a right angle thereto, the inclination being about one and a half inch to two inches in a breadth of block of four to five inches. If it is too great it weakens the acute corner too much, and if too little it is not effective. The blocks should be from eight to ten inches long, and they should have a depth of from eight to nine inches. The lower end of the blocks should be shorter than the upper ends to insure good joints, the difference not being more than two inches, and no block should be less than seven inches on its base in length, or three and a half inches in width.

The purposes and advantages of this invention may be summed up as follows: It furnishes a pavement of small deep-set blocks, as in the Belgian pavement, with lines, seams, or joints, on which the feet of draft-horses hold, running across the street at right angles to its length, while the joints between the said lines run diagonally, so that no joint is presented parallel to the line of travel. This prevents the wear (so injurious to the Belgian pavement) into ruts, while at the same time there are no long angular seams or joints, as are found in the Russ pavement and in bridge-stones in cross-walks, that are so dangerous to horses by causing their feet to slip sidewise, and thus trip them and cause them to fall—a defect so serious as to cause the abandonment of the Russ mode of laying pavement.

It is obvious that if the diagonal line were extended much beyond the space between the sides of an ordinary paving-stone, as set forth above, the horses' feet could slide far enough back and sidewise to trip them down, as constantly happens in the Russ pavement and on bridge-stones, unless they are cut into channels with great labor, and even this is found to not fully remedy the evil, while by my method there are no diagonal joints exceeding

eight or nine inches—a distance too short to cause a horse to fall.

I am aware that cross-walks of thin flagging-stone have been heretofore used with their joints running at an inclined angle, and this I do not claim, but confine myself to the forming and laying of street-pavement, as I have above specified, which has never to my knowledge been so formed or laid.

Having thus fully described my improvement in Belgian pavement, what I claim is—

The employment of rhomboidal blocks in which the angles are unequal and the planes of their sides are not at right angles, arranged substantially as and for the purpose set forth.

CHARLES GUIDET.

Witnesses:

J. J. GREENOUGH,
MOSES M. ROBINSON.