## J.S.Kelley,

## Nood Pavenent.

No. 106,832.

Patented Aug. 30. 1870.

Fig. L

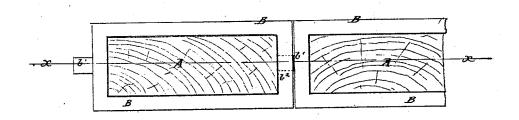
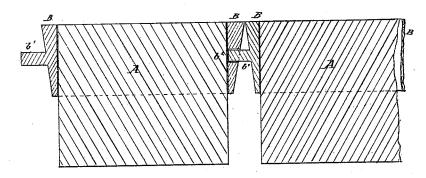


Fig. 2



Witnesses:

S.S. Mabee

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## UNITED STATES PATENT OFFICE.

JOHN STAFFORD KELLY, OF NEW YORK, N. Y.

## IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. 106,832, dated August 30, 1870.

To all whom it may concern:

Be it known that I, JOHN STAFFORD KELLY, civil engineer, of the city, county, and State of New York, have invented a new and Improved Wood and Iron Pavement; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to pavements; and consists in certain improvements in the formation thereof, which will be first described in connection with all that is necessary to a full understanding thereof, and then clearly specified

in claim.

Figure 1 is a plan, and Fig. 2 a vertical sectional view, of two wooden blocks and the

iron bands which surround them.

A is a wooden block, which I preferably make eight inches long, three inches wide, and six inches deep, but the form may be modified to suit circumstances. Thus it will be noted that the block is uniform in its horizontal cross-sectional area. B is a band of iron, corresponding in shape on the interior to that of the exterior surface of the block, and only sufficiently smaller to produce a tight fit when forced thereon. The exterior surface is tapering, and is intended to have the thinner edge downward. The object of this external form is to enable these bands to be forced down without unnecessary resistance as the wood wears away. The depth of these bands may be varied, but is preferably about half that of the blocks.  $b^{1}$  is a stud or projection on the end of one band, which fits into a corresponding socket,

b<sup>2</sup>, on the opposite end of another band.

The bed of the road and the packing may be formed of any material usually employed, and applied in any suitable manner.

In practice the mode of operation is as follows: The blocks A are each fitted with its surrounding band B, and fastened together by

means of studs and sockets  $b^1$   $b^2$ . A line of blocks and bands being laid, they are properly packed, and adjusted to present a uniform surface. Another row of blocks without bands is then laid, and so on alternately.

It is observable that the adjacent rows are not fastened together, and thus the ready removal of one or more rows for the purpose of inserting water or gas pipes is provided for.

I am aware that iron caps, resting upon supporting blocks, have been used heretofore to form a metallic pavement or road; but they are found to be entirely impracticable, because they become loosened by travel, often break in cold weather, furnish a bad foothold for horses, and are rendered very expensive by the large amount of metal required.

My pavement presents the elastic wood to the foot of the animal, while the fibers thereof are held in close proximity, and can, by no

cause, be split or separated.

Having thus described all that is necessary to a clear understanding of my invention, what I esteem as new, and desire to protect by Letters Patent, is—

1. The combination of a wooden block, of unform horizontal cross-sectional area, with an iron band, shaped on the inside to fit upon said block, but tapering on the outside, to enable the band to readily work down with the wear of the wood, or to be driven, without unnecessary resistance, by any suitable implement.

2. A band for wooden paving-blocks, having the lug and socket  $b^1$   $b^2$  on its opposite ends, as and for the purpose described.

The above specification of my invention signed by me this 4th day of May, 1870.

JOHN STAFFORD KELLY, C. E.

Witnesses:

GEO. W. MABEE, JAMES T. GRAHAM.