

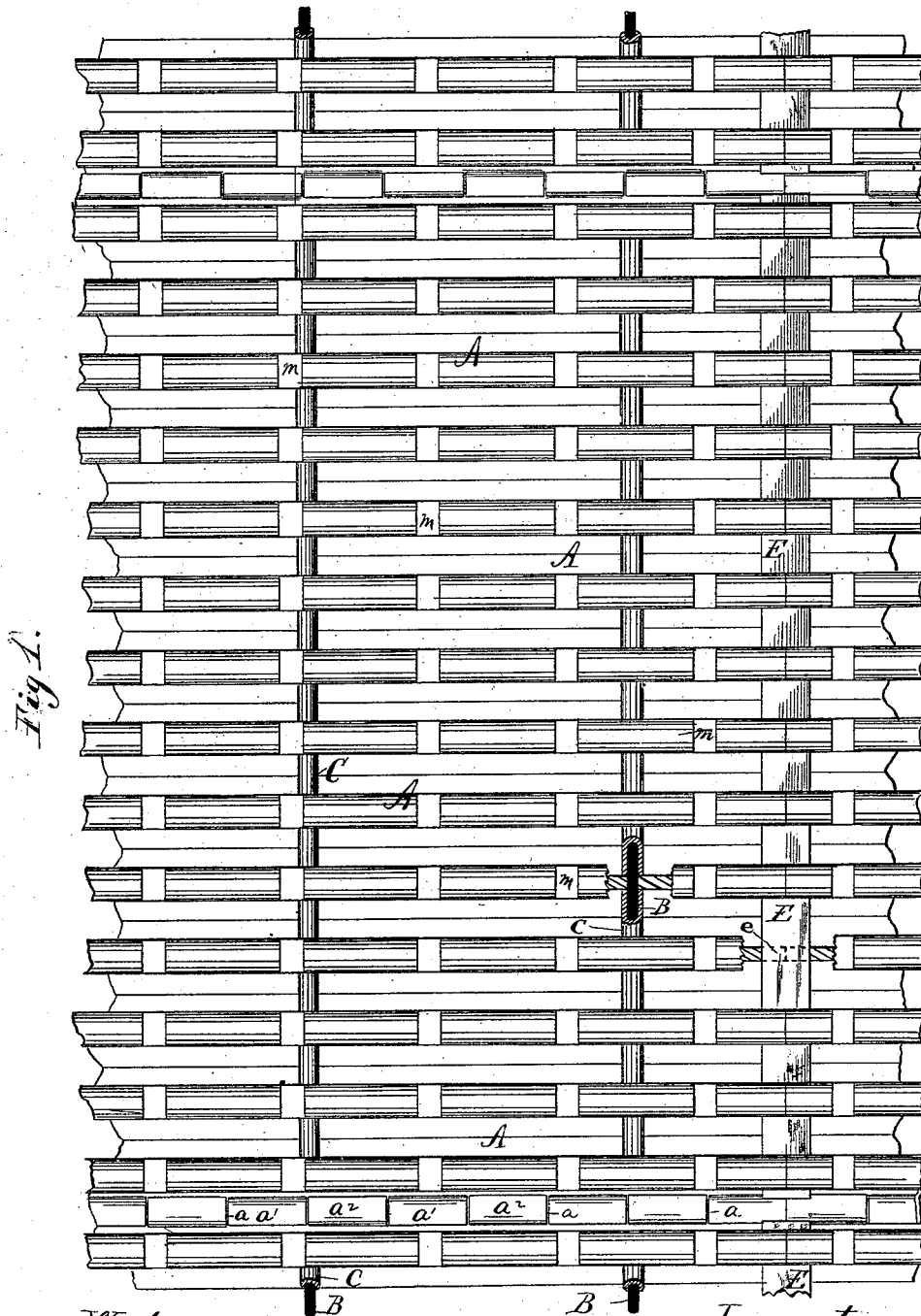
(No Model.)

2 Sheets—Sheet 1.

C. PECK.  
STREET PAVEMENT.

No. 305,328.

Patented Sept. 16, 1884.



Witnesses:  
Taylor E. Brown  
H. M. Munday,

Inventor:  
Charles Peck  
per Munday, Everts and Adcock  
his Attorneys:

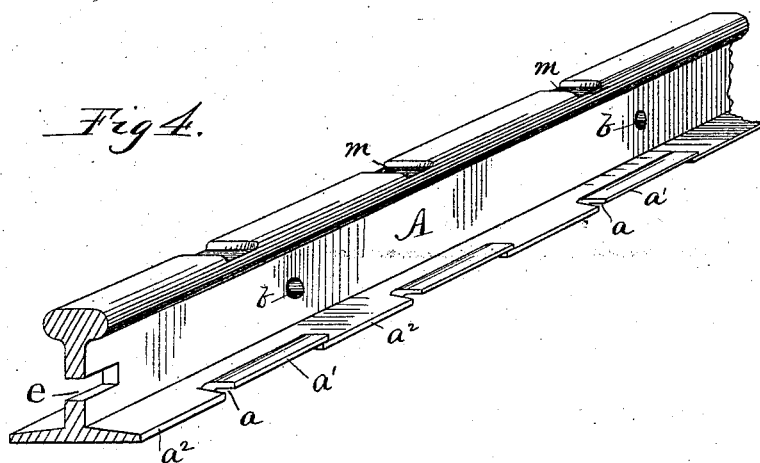
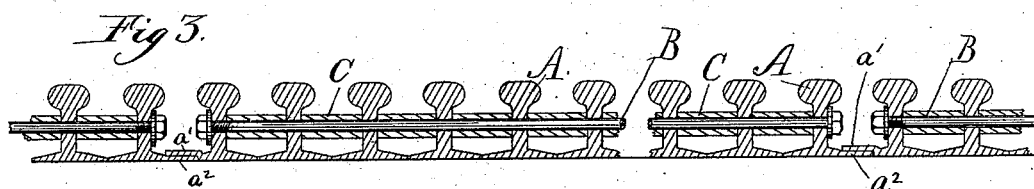
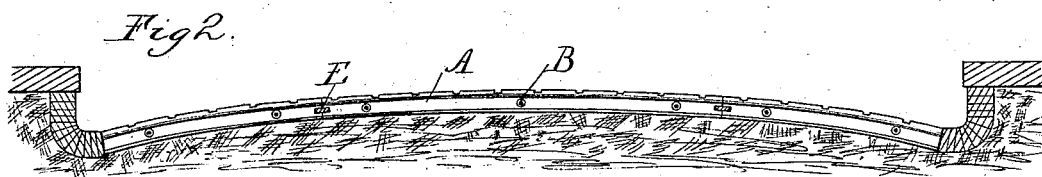
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his Attorneys:

# UNITED STATES PATENT OFFICE.

CHARLES PECK, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND  
CHARLES H. KIRKHAM, OF SAME PLACE.

## STREET-PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 305,328, dated September 16, 1884.

Application filed April 28, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES PECK, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Street-Pavements, of which the following is a specification.

In the Letters Patent to George W. Waite and myself of May 20, 1879, there is shown a street-pavement formed of T-rails laid side by side transversely of the street and secured together by bolts passing through the webs of the rails. This pavement is laid upon a board foundation, and the spaces between the rails is filled with some asphalt or concrete preparation. In a pavement of this kind the rails are subjected to multitudinous blows or concussions by the traffic passing over them, such blows being exerted in the direction in which the teams may be traveling. Being thus struck in alternate directions many times each day, the individual rails in time develop a tendency to rock transversely from one side to the other and to work themselves loose and out of position. In the patented pavement it was attempted to guard against this in a measure by requiring a comparatively hard foundation—such as boards—upon which to lay the rails, and into which their feet will not readily sink, by bolting the rails together (without at the same time locking them apart, however) and by filling up the intercessions between the rails with the plastic concrete. In my present invention I propose to unite the rails together in convenient numbers to form sections, and to bind and lock them together in these sections with such solidity that there can be no play or movement, such as has been described, by any individual rail, thereby permitting the dispensing with the board foundation and otherwise cheapening and improving the pavement. The invention consists in the novel construction and combinations herein-after set forth.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a plan view of a portion of my improved pavement. Fig. 2 is a transverse vertical section of a street paved according to my

invention. Fig. 3 is a partial longitudinal section showing in detail the manner of bolting the rails together, and Fig. 4 is a perspective of a portion of one of the rails.

A A are the rails, which are ordinary T-rails, as will be noticed. They are bolted together in convenient numbers to form sections of proper size to lay or transport by bolts B, passing through openings *b* in the web of the rails. The feet of the rails meet, or nearly so, as shown. In order to prevent the rocking of the rails, as well as to prevent the foot of one from climbing upon the foot of its neighbor, I positively lock them apart by means of thimbles C, placed upon the bolts B between each adjacent pair of rails, and of the proper length to extend from one to the other of them. These thimbles, by reason of their location midway vertically of the rails, are enabled to receive the shocks imparted to the rails by passing wagons and to transmit the force thereof to the next one beyond, thereby causing the rails to mutually sustain one another. The rails are thus secured together at absolutely fixed distances, and they can no more move toward than they can move away from each other, and when the bolts are firmly tightened the sections become solidly united, so they can be handled and laid as a unit, and when laid they will be no more subject to displacement than stone slabs of the same size. As there are many forms of devices obvious to a skilled person, which will hold the rails apart in substantially the same way as do the thimbles C, I do not wish to be limited to that precise device.

Another feature of my invention consists in locking the sections of the pavement together, so that at their junctions there will be no sinking by either section under the weight of the passing teams. The lock I employ for this purpose is obtained through the medium of the feet of the rails forming the side edges of the sections. I slit the feet of said outside rails at intervals transversely, as at *a*, and bend upward the alternate parts *a'* between the slits. When the rail thus prepared is brought into position with the similarly-prepared rail of the next section, the bent-up portions of the foot of one will overlap the unbent

portions  $a^2$  of the foot of the other. This construction insures the remaining of the sections in the same horizontal plane. If it is desired to space the bearing or upper tread faces of the rails equally, this foot of the outside rails should be made wider than the others; but instead of interlocking the rails in this manner they may be secured against vertical displacement by independent devices—as, for instance, by an X-shaped casting or other similar device, into the opposite recesses of which the feet of the rails may set.

The end locking device which I prefer is a bar, E, laid transversely of the rails and inserted in slots  $e$ , formed in the ends thereof, preferably in the web portions, one half of the width of the bar lying in one set of rails and the other half in the ends of the abutting set or section. This is clearly illustrated in the drawings, and needs no further description. I prefer this method of locking, as the simplest form now known to me; but it is obvious that other forms may be used. The bars shown may be easily and quickly inserted, and they help sustain the individual rail at its end by distributing the weight upon it among the surrounding rails. The roadway formed of two or more series of rails extending from curb to curb and united at their abutting ends in this or some equivalent way is almost as

strong, firm, and solid as though formed of single rails extending entirely across the street.

The rails employed in my improved pavement may be and preferably are prepared with transverse depressions or cuts  $m$  upon their treads or bearing-surfaces, whereby to prevent the slipping of horses traveling over them, and these depressions are made in them at the time of manufacture.

I claim—

1. The combination, in a road-bed pavement, of the rails A, secured together and locked against each other by bolts and thimbles, substantially as specified.

2. The road-bed pavement consisting of T-rails united together in sections, said sections being interlocked with each other at their lateral edges, substantially as specified.

3. The road-bed pavement consisting of T-rails united together in sections, said sections being locked together at their abutting ends by a locking device, substantially as specified.

4. In a road-bed pavement of the kind herein shown, the T-rails having depressions in their tread-surfaces.

CHARLES PECK.

Witnesses:

TAYLOR E. BROWN,  
H. M. MUNDAY.