(No Model.)

G. W. PARKER.

STREET PAVEMENT.

No. 433,540. Patented Aug. 5, 1890.

Fig. 1.

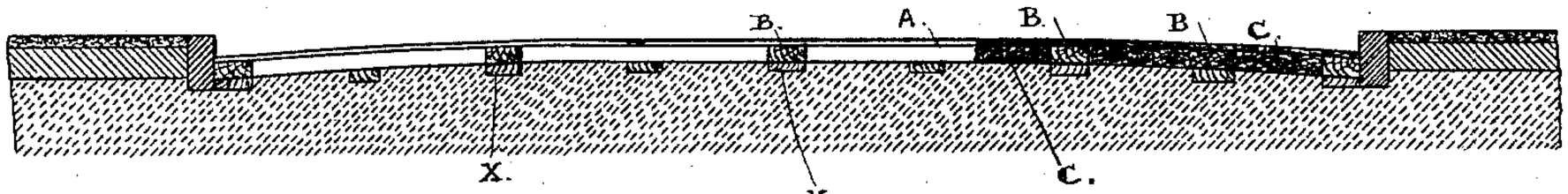


Fig. 2.

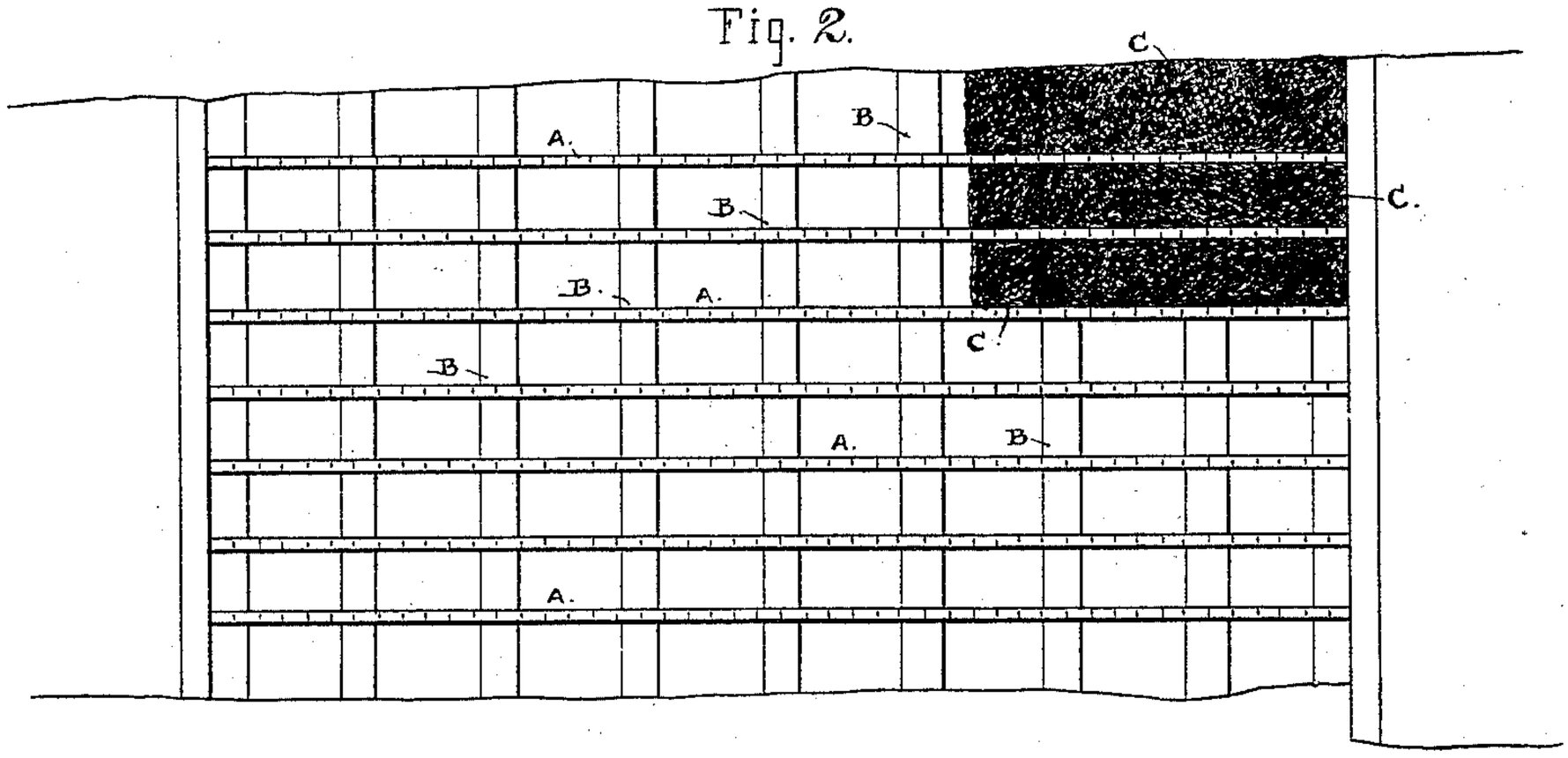


Fig. 3.

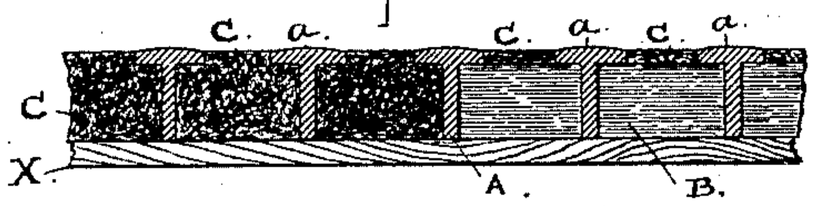
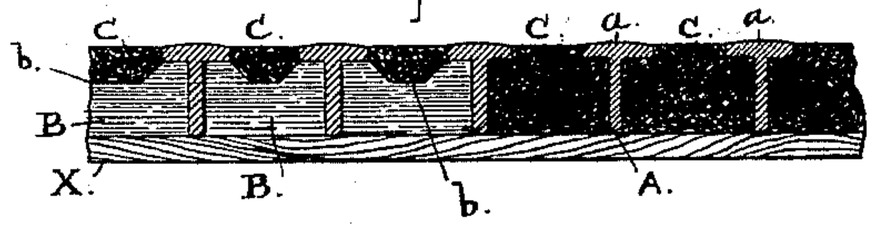


Fig. 4.



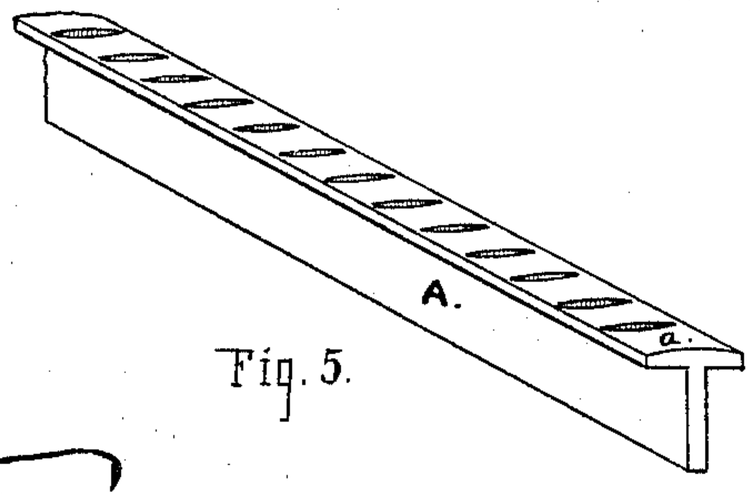


Fig. 5.

Witnesses:

Wm Mayer.

J. E. Ford

Inventor:

George W. Parker

By Smith & Adcock

his Atty's.

UNITED STATES PATENT OFFICE.

GEORGE W. PARKER, OF SAN FRANCISCO, CALIFORNIA.

STREET-PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 433,540, dated August 5, 1890.

Application filed November 4, 1889. Serial No. 329,126. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PARKER, a citizen of the United States, residing in the city and county of San Francisco, and State of California, have invented certain new and useful Improvements in Street-Pavements, of which the following is a specification.

My invention relates to improvements in composite pavements for sidewalks and roadways which are formed of spaced metal bars or rails and a paving composition—such as asphalt or similar substance or material—between said rails, and it relates more particularly to that class of pavement which is constructed of metal rails tied or bound together in parallel rows at intervals apart and a filling of paving composition between the rails, the surface being finished flush with the tops of the rails. A composite pavement of this character is seen in the Letters Patent of the United States No. 215,493, dated the 20th day of May, 1879, and also in the Letters Patent No. 305,328, issued on the 16th day of September, 1884, to Charles Peck.

As an improvement upon such pavements my invention has for its object to so form and lay the metal rails that while they are firmly held and confined against lateral and longitudinal movements they can be raised and taken up separately and independently at any portion of the pavement and as readily relaid without destroying or disturbing the adjacent surface.

The invention is designed to reduce the cost of the metal rails and also the labor and expense of laying these composite pavements.

The nature of these improvements and the manner in which I produce and apply the same to secure the desired objects will be fully understood from the following description, in which reference is had to the accompanying drawings.

Figure 1 represents a vertical cross-section of a street or roadway pavement constructed in accordance with my said invention. Fig. 2 is plan or top view of the metal rails and spacing-blocks laid in place and with a small portion of the filling material also laid. Figs. 3 and 4 are longitudinal sections on a larger scale. Fig. 5 represents in perspective a portion of one of the rails.

A indicates the metal rails; B B, spacing-blocks that hold the rails in position on edge and also separate them the desired distance one from the other; and C is a filling of paving composition or a substance in its natural state—such as bituminous rock—which is laid in and firmly packed between the rails and over the spacing-blocks. The rails are made with a broad tread or top flange and without a bottom flange. They are bent to conform to the curvature of the street-surface from curb to curb when the pavement is arched or raised in the center; but for sidewalks and level pavements they are straight. The broad top flange *a* is notched or otherwise suitably roughened on the top to prevent slipping and afford a firm holding-surface for draft-animals when traveling across the pavement from curb to curb, and the top of the flange is slightly arched along the center over the rail. Rails of this form are rolled out at considerably less cost than those with top and bottom flanges. They are made in lengths to suit the width of the pavement to be laid, either in single lengths to reach from curb to curb for a narrow street or for sidewalks or in shorter sections for wide streets and roads, the ends of the sections being made to fit together with butt-joints. The spacing-blocks B should fit squarely against the web or body of the rail and under the projecting flange or head. They are cut to required length to separate the rails at suitable intervals, and in height they are made equal to the space under the top flange between that part of the rail and the sleeper or foundation on which the foot of the rail is set. They can be made of wood, as the paving material is laid over them to cover their tops, and to give greater thickness of such material over them the blocks are cut away, as shown in Fig. 4 of the drawings, the material being packed into the groove *b* thus formed in the block. In laying these rails and blocks a firm foundation is first prepared on the bed of the street, and sills or sleepers *x x* are laid lengthwise to take the bottom edge of the rail. The blocks B are cut of equal length and height to space the rails uniformly, and after one rail is set the blocks are placed at intervals apart, and the paving ma-

terial is filled in and properly packed after the manner of laying pavements to obtain a firm solid body. It is also spread over the top and rolled down or otherwise worked to produce a finished surface flush with the tops of the rails after a portion or section of the pavement is laid. The spacing-blocks may be spiked down to the sleepers when wooden blocks are used; but no fastenings are necessary between the rails or between the rails and spacing-blocks. When laid in this manner, any one or more of the rails can be taken up and the filling removed from over the road-bed without disturbing the adjacent portions of the pavement, and after any street-work—such as laying gas or water pipes or sewer-connections—the pavement can be relaid without difficulty.

In laying a sidewalk over a cellar or excavation it will be necessary to provide a solid or closed bed or support for the rails and the filling between the rails.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A pavement for sidewalks, streets, and roadways, consisting of the T-rails without bottom flanges, spacing-blocks, and a filling of paving composition or material laid between the rails, substantially as described.

2. In a pavement for sidewalks, streets, and roadways, the combination of T-rails having a top flange and no bottom flange, the spacing-blocks which support the rails and also permit them to be raised vertically, and a filling of paving composition or material, substantially as described.

3. In a pavement for sidewalks, streets, and roadways, the combination of T-rails, spacing-blocks with grooves or cut-away portions, and a filling of paving substance or material laid between the rails and over the spacing-blocks, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

GEORGE W. PARKER. [L. S.]

Witnesses:
EDWARD E. OSBORN,
JAMES L. KING.