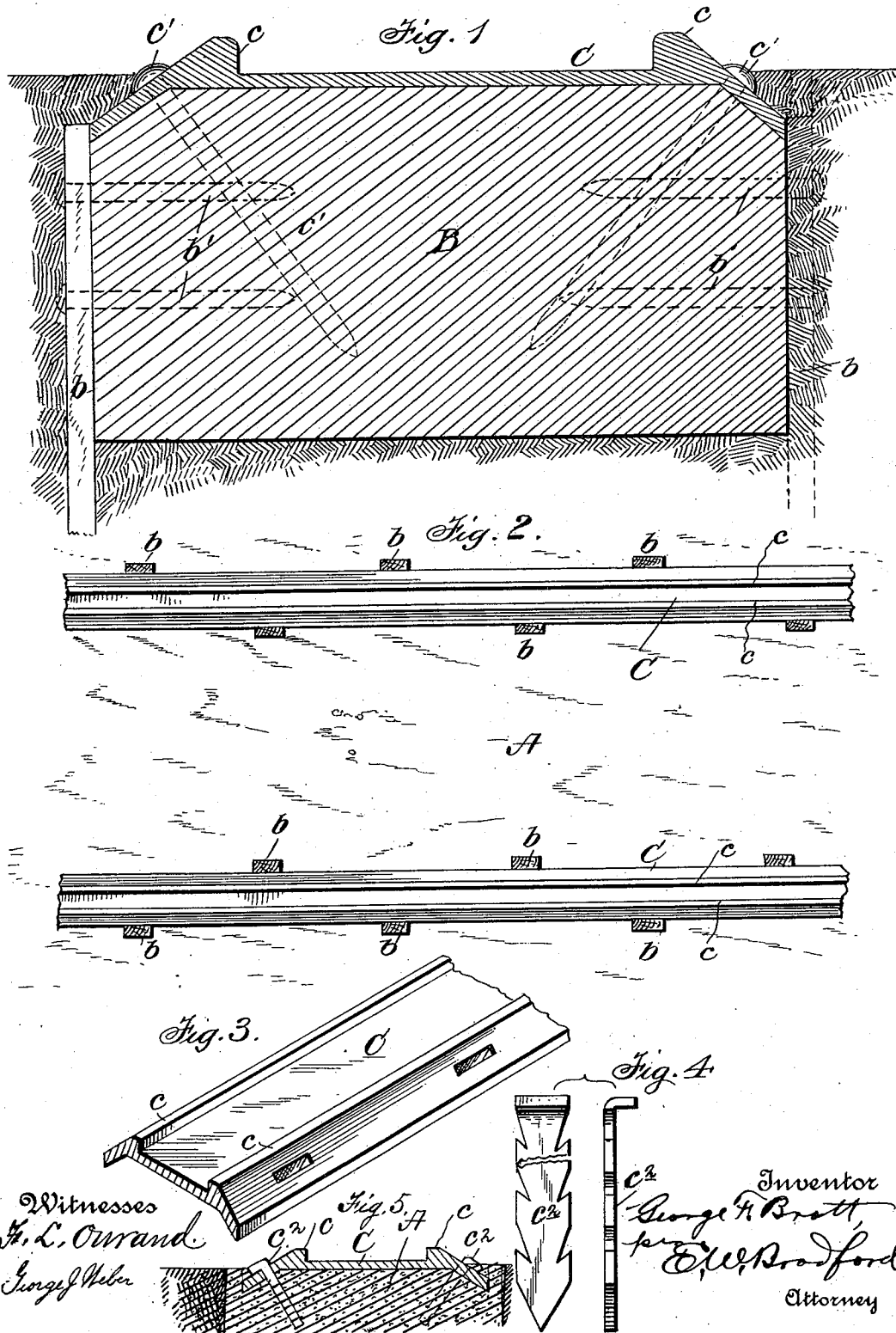


(No Model.)

G. F. BROTT.
ROADWAY.

No. 574,521.

Patented Jan. 5, 1897.



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UNITED STATES PATENT OFFICE.

GEORGE F. BROTT, OF WASHINGTON, DISTRICT OF COLUMBIA.

ROADWAY.

SPECIFICATION forming part of Letters Patent No. 574,521, dated January 5, 1897.

Application filed October 24, 1896. Serial No. 609,926. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BROTT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Roadways; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my said invention is to provide a roadway, especially adapted for country roads, which shall have a hard smooth surface for the wheels of the vehicle, whereby loads may be transported over it by the expenditure of the least possible power, and a footway or track for horses which will be of a substance and nature adapted to furnish a most desirable and advantageous footing, and which, while being perfectly adapted to serve as a track for all kinds of ordinary wheeled vehicles, will also be particularly adapted for use as a track for bicycles, these several advantages being combined in a roadway which can be built rapidly and at comparatively small cost and easily and cheaply maintained, all as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a cross-section through one of the tracks of the roadway of my improved construction; Fig. 2, a top or plan view of a section of said roadway; Fig. 3, a detail perspective of a portion of one of the rails; Fig. 4, a front and edge view of the form of stake used for securing the rail to a concrete base, and Fig. 5 a cross-section through one track built with such a base.

In said drawings the portions marked A represent the portion of the roadway between the wheel-tracks, B the base for said wheel-tracks, and C the plates or rails constituting the surface thereof.

The roadway illustrated in Fig. 2 consists of a track A for the horses, composed of broken stone, gravel, or any suitable composition or combination of materials which will furnish a suitable footing for the horses and at the same time provide a durable roadway. In some places and climates the common dirt

road may be found suitable. At the distance apart equal to the distance between the wheels of standard vehicles two parallel trenches are provided of suitable dimensions, and the bases B, consisting, preferably, of timbers, are laid therein. They are secured in place by stakes *b*, driven deeply into the ground at suitable intervals on each side of each base, to which they are fastened securely by transverse spikes *b'*. (Indicated by dotted lines in Fig. 1.) In Fig. 2 the tops of these stakes are shown exposed, but in practice it is intended to have them beneath the surface of the roadway, as shown in Fig. 1. Said bases, being thus secured and then firmly packed in the material composing the roadway, furnish a solid support for the track. As shown, the top corners of each base are tapered for a purpose which will be presently described.

The rails proper, C, are formed of thin metal with a longitudinal rib *c* extending up near each edge to both afford stiffness to the rail and form a guide for the wheel running thereon. Their edges are formed with downwardly-tapered flanges, which fit onto the correspondingly-tapered corners of the bases, and in these flanges are formed the perforations to receive the devices for securing them to the bases. When wooden bases are used, as shown in Fig. 1, these devices may be any form of spike *c'* of suitable size, and when concrete bases are used, as shown in Fig. 5, the stakes *c''* with barbed edges (shown in Fig. 4) are preferably used. They are driven into the base in a direction at right angles to the surfaces of the tapered flanges, and their points thus extend toward each other, whereby they secure said rails with a binding action. By reason of having the corners tapered, the taper extending from beneath the surface of the roadway to the top of the ribs *c*, as shown in Fig. 1, wheels are enabled to get on and off the track with the greatest ease.

In this construction of roadway, as will be readily seen, a smooth surface is provided for the wheels of a hard smooth character which is best adapted for the purpose, especially for the purpose of a bicycle-track. By means of the side ribs a very thin plate may be used for the surface, as said ribs furnish sufficient

rigidity to support the heaviest loads upon a comparatively thin plate. Thus, while a very practical and serviceable roadway for all purposes is provided, its cost is kept within the lowest possible limit. The tapered edges of the rail also serve a twofold purpose and are an important feature of my improvement. By means of them all fastening devices, such as spikes or bolts through the track-surface, are rendered unnecessary, said edges being fastened to the base below the surface, and nothing being thus left exposed in the construction which can do possible injury to bicycle-tires or other wheels, and again they serve to support the roadway at the corners of the rails in a manner to permit easy passage to and from said rails at all times.

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

1. A track for a roadway, consisting of a suitable base, and a metal plate with a straight plane central surface, and downturned edges, which edges are secured to said base outside the track-surface, substantially as set forth.

2. In a roadway, the combination of a base, and a metal surface therefor, which surface consists of a plate with side ribs and down-

wardly-extending flanges on their edges, which flanges are secured to said base, substantially as set forth.

3. In a roadway, the combination of a suitable base, and a metal surface therefor, consisting of a metal plate having its edges bent downwardly and secured to said base outside the track-surface, substantially as set forth.

4. A roadway composed of a suitable base, and a metal surface consisting of a plate with a smooth top surface, and longitudinal strengthening-ribs projecting upwardly on each side, said ribs being tapered on their outside faces, terminating in the tapered flanges of said plate, substantially as set forth.

5. A rail for tram or road ways formed with a central plane smooth surface, an upwardly-projecting rib on each side thereof, the outside faces of said ribs being formed tapered from their tops downward and outward, terminating in side flanges below the main track-way, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE F. BROTT.

Witnesses:

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