

I. HAWS.
ROAD BED.

APPLICATION FILED SEPT. 13, 1902.

NO MODEL.

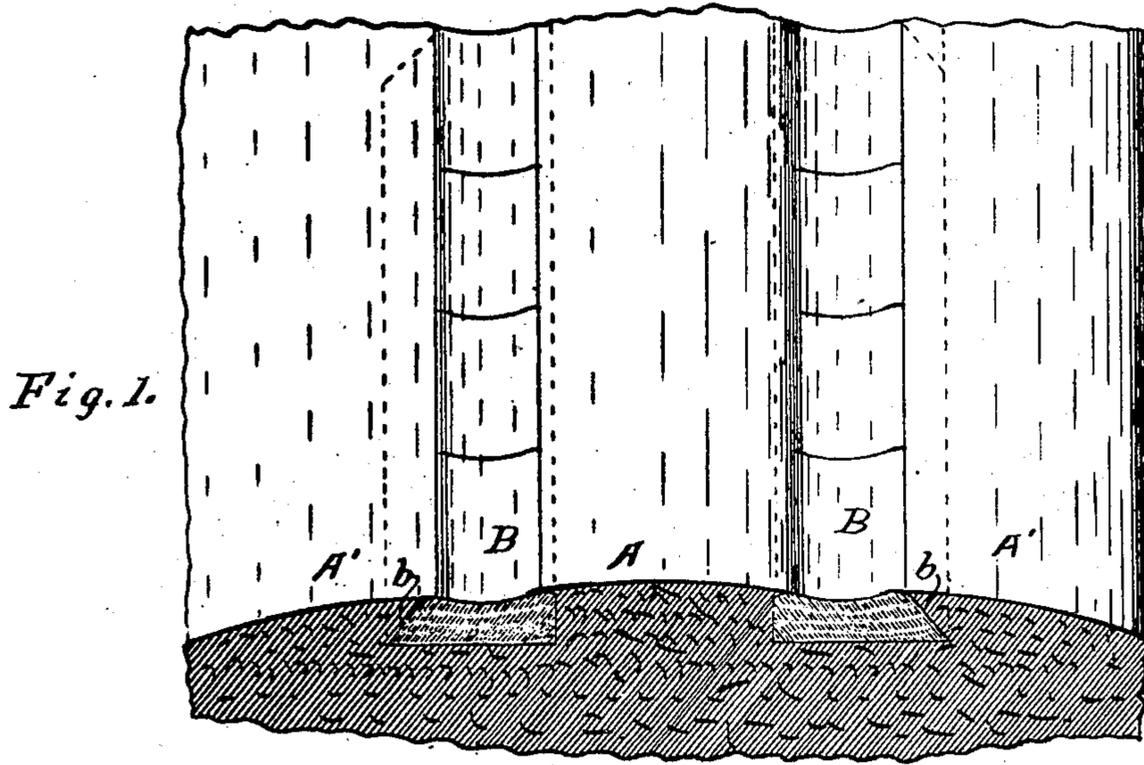


Fig. 1.

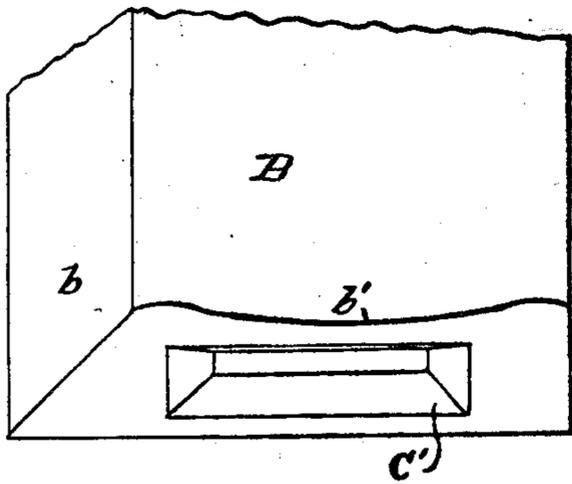


Fig. 2.

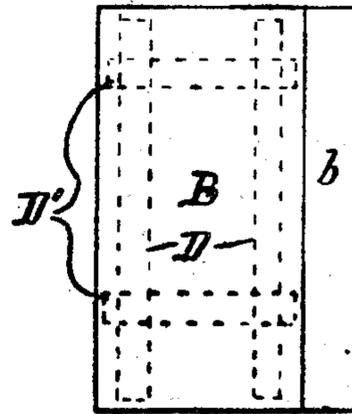


Fig. 4

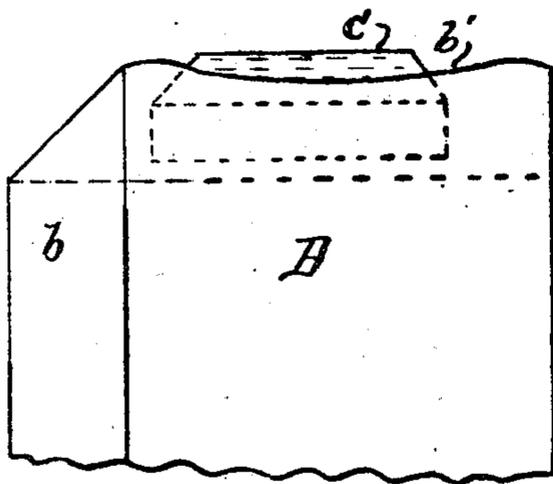


Fig. 3.

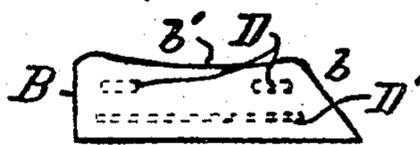


Fig. 5.

Witnesses.

Nellie Gilley.

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UNITED STATES PATENT OFFICE.

ISAAC HAWS, OF HANNIBAL, NEW YORK.

ROAD-BED.

SPECIFICATION forming part of Letters Patent No. 724,286, dated March 31, 1903.

Application filed September 13, 1902. Serial No. 123,320. (No model.)

To all whom it may concern:

Be it known that I, ISAAC HAWS, a citizen of the United States, residing at Hannibal, in the county of Oswego and State of New York, have invented certain new and useful Improvements in Road-Beds, of which the following is a specification.

My invention relates to improvements in the construction of public highways or roads in rural districts; and its objects are, first, to provide a hard smooth unyielding track for the wheels of vehicles without interfering with the foothold of horses; second, to provide a means whereby the track may be laid in short sections or blocks and thoroughly locked together in such a manner as to avert the danger, first, of the ends of the blocks settling or rising to cause an uneven surface; second, to avert the danger of the blocks breaking at the locking-point by reason of the passage of a heavily-loaded wagon thereover, and, third, to so strengthen the blocks as to avert the danger of blocks being crushed and broken by reason of the passage of heavily-loaded wagons thereover. I attain these objects by the construction shown in the accompanying drawings, in which—

Figure 1 represents a perspective of a section of road with my tracks in place. Figs. 2 and 3 show the manner of locking the adjacent ends of the blocks together, and Figs. 4 and 5 show in outline how wood or metal strips may be inserted to strengthen the blocks.

Similar letters refer to similar parts throughout the several views.

I prefer that the blocks B be made of concrete or other kindred substance, and made in blocks, for the reason that hereby they can be manufactured at a given point or points and shipped to various parts of the country, as desired, though, with proper equipment, the trenches can be formed and the track molded in continuous lines therein as the road is being constructed. When manufacturing these tracks, I form the upper surface concave, as at b' , for the purpose of forming a concave trackway for the wheels of the vehicle of such a nature as to tend to keep the wheels in proper position in the tracks, and thus make a very narrow and inexpensive

track as available as a much broader track would be if made flat or convex. I also form a long incline b on one edge, designed to pass under the ground road-bed to hold the tracks in place; also, to facilitate driving from one side into the creek. I place these tracks a proper distance apart to safely accommodate the wheels at each side of the vehicle and fill the space between them with sand or gravel that should be slightly crowning or convex for the purpose, first, of forming a safe footing for the horses and, second, of causing the water in heavy rainstorms to flow toward the sides of the road or into the concave surface of the tracks. By this means a team will be provided an easy sure footing upon a road whereon the wheels of the vehicle will travel upon a hard smooth unyielding bed or track. When constructing the road from previously-manufactured blocks, I deem it best to provide for locking the ends of blocks together by passing a short strong tapering tenon C upon one end of one block into a corresponding mortise C' in the adjacent end of the next succeeding block, and to strengthen the blocks where extremely heavy traffic is carried on I sometimes place longitudinal wood or metal strips D and lateral strips D' in the blocks, practically as indicated by the dotted lines in Figs. 4 and 5.

A' A' in Fig. 1 represent the form of surface for the margin of the road outside of the tracks.

It is not to be inferred from the accompanying drawings that but one pair of tracks are to be used in a road, as two or more may be laid, if desired.

One of the most desirable features of this construction is that while an ordinary concrete, cement, asphalt, or brick paved road presents so hard and unyielding a surface as to render it practically unavailable upon hills in consequence of the inability of the horses to get a foothold by which they can either draw a load up a hill or hold it back when going downhill this affords not only the same advantages as a road-surface for the wheels, but a perfect foothold for the horses, and, furthermore, the tracks avert the danger of washouts, which often occur in ordinary gravel roads, thus embodying in one road the

desirable features both of gravel road and a hard-paved road at a nominal cost.

Having thus fully described my invention, what I claim as new, and desire to secure by
5 Letters Patent of the United States, is—

1. In combination with the crowning surface of a road-bed, tracks formed of concrete blocks having laterally-concave upper surfaces, substantially as and for the purpose
10 set forth.

2. In combination with the crowning surface of a road-bed, the tracks formed of concrete blocks having laterally-concave upper surfaces, and outwardly and downwardly in-

clined projecting edges, substantially as and
15 for the purpose set forth.

3. In combination with a road-bed, tracks embedded therein, said tracks formed of blocks having locking devices consisting of tapered mortises and tenons at adjacent ends,
20 substantially as and for the purpose set forth.

Signed at Grand Rapids, Michigan, September 2, 1902.

ISAAC HAWS.

In presence of—
NELLIE CILLEY,
J. JAY WOOD.