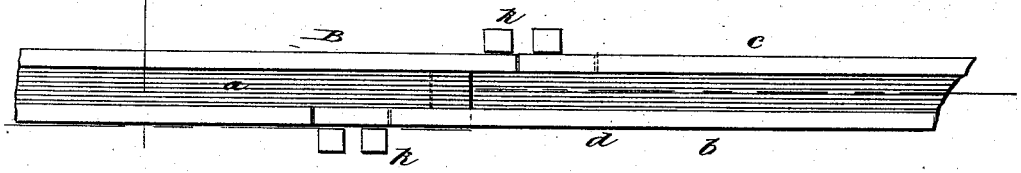
C. H. MATTHIESSEN.

Wagon-Tracks for Roads.

No. 211,173. Patented Jan. 7, 1879.

Fig. 1



A

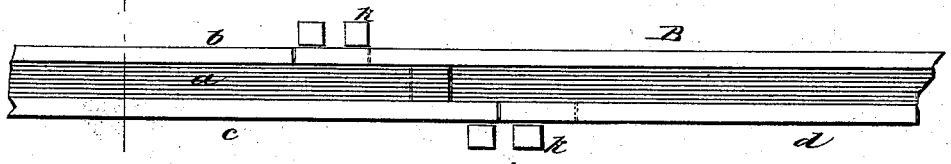


Fig. 2.

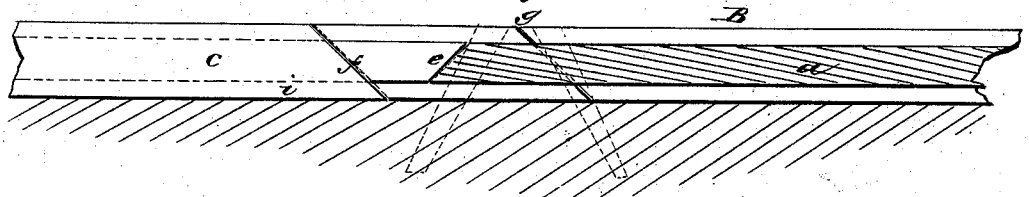


Fig. 3.

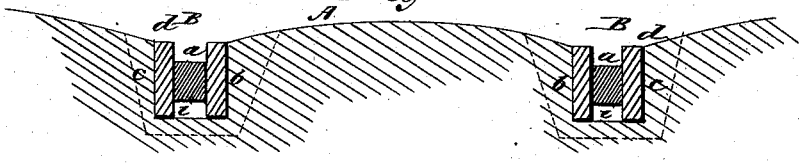
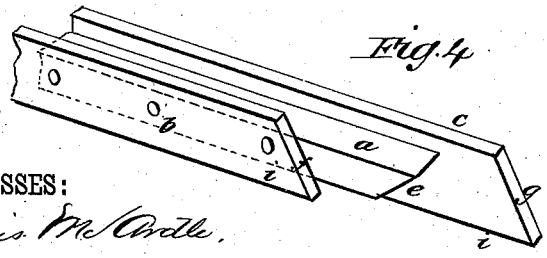


Fig. 4



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UNITED STATES PATENT OFFICE.

CONRAD H. MATTHIESSEN, OF ODELL, ILLINOIS.

IMPROVEMENT IN WAGON-TRACKS FOR ROADS.

Specification forming part of Letters Patent No. **211,173**, dated January 7, 1879; application filed September 6, 1878.

To all whom it may concern:

Be it known that I, CONRAD H. MATTHIESSEN, of Odell, in the county of Livingston and State of Illinois, have invented a new and Improved Wagon-Track for Roads, of which the following is a specification:

In some parts of the country, especially on the prairies, the roads become impassable for wagons at some seasons of the year, in consequence of the mud and ruts. This is mostly caused by imperfect drainage and the character of the soil, and where gravel can only be obtained by hauling it long distances at great expense no remedy has been devised.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

In the accompanying drawing, Figure 1 represents a road-bed with the tracks laid therein. Fig. 2 is an elevation of one track, partially in section, and showing the manner of splicing the ends. Fig. 3 is a cross-section of the road; and Fig. 4 is a perspective view of the end of a length of track.

Similar letters of reference indicate corresponding parts.

A is the road-bed, and B B the tracks, that are laid a suitable distance apart, so as to permit the wheels of wagons to run upon them. The tracks are composed of three pieces—a center piece or rail, *a*, upon which the wheels run, and side pieces, *b c*, that are bolted or spiked to the center piece, *a*. The side pieces, *b* and *c*, project at the upper and lower side of the piece *a*, so as to form projecting flanges, the outer flanges, *d*, at the upper side serving to retain the wheels upon the piece *a*. The lower projections, *i*, rest upon the ground, and the space thereby formed beneath the piece *a* serves as a drain, which is to be connected at intervals with cross-drains for carrying off the water. The size of the pieces *a*, *b*, and *c* will be according to circumstances, such as the amount of travel.

The adjacent ends of the lengths of track are cut with inclines in opposite directions, as shown in Fig. 4. The center piece, *a*, is cut with an incline, *e*, and the side pieces, *b c*, are cut with the inclines *f g* in a direction opposite to the incline *e*, so as to prevent the ends moving vertically, and the cuts are made so that the joints will be broken, or not in line.

The lengths of track are to be laid in an excavation that is first dug out a sufficient depth and the bottom covered with gravel. The track is then put in place and the space at the side of the track filled in with gravel, broken brick, or similar material that will hold the track in place and permit the water to run readily through. The ends of the lengths of track may have a board placed beneath them to prevent them sinking and to retain the track more securely and prevent heaving by frost. Stakes *k* are to be driven at each side of the track at suitable distances apart.

This wagon-track will render roads passable when they would otherwise not be fit for the travel of horses and wagons. It is the wagon-wheels that cut up the road; but if desired the space between the wagon-tracks might be boarded over for the horses to travel upon.

I am aware that it is not new to make a grooved street-rail of two bars of iron bent outwardly at top and bottom and bolted together in the middle, a drain being formed between the two bars or rails with beveled ends; but my object is to form a cheap and readily-constructed device, made of timber, and adapted to meet the exigencies of a new country. In my device the water can only reach the drain by percolating through the ballast in which the rail is bedded.

What I claim is—

A wagon-track each rail of which is formed of three perpendicular wooden pieces, *a b c*, the intermediate one, *a*, being sunk below the other two, and each provided respectively with the ends *e f g*, extended unequally, and inclined, as shown and described.

CONRAD H. MATTHIESSEN.

Witnesses:
GEO. W. SCRIBER,
THOS. N. BROWN.