J. KERWIN.

PORTABLE CROSSOVER.

APPLICATION FILED FEB. 23, 1911.

1,000,270.

Patented Aug. 8, 1911.

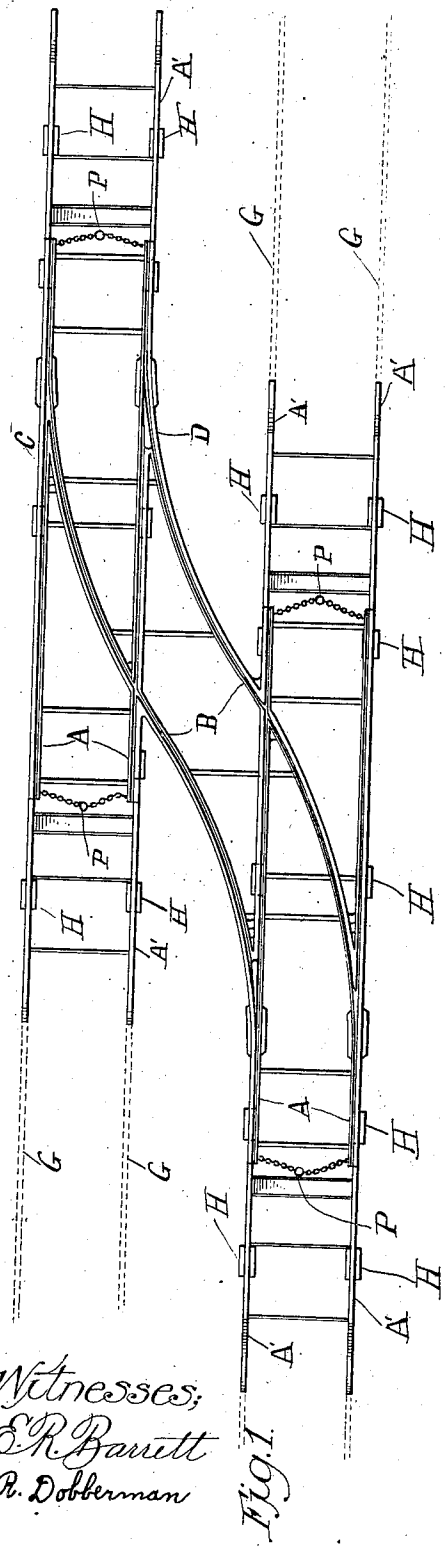

Fig. 1.

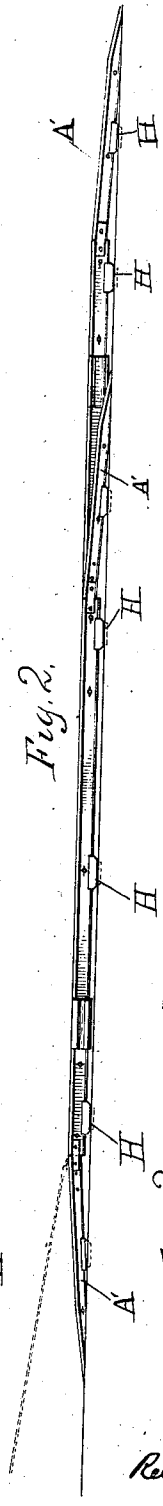

Fig. 2.

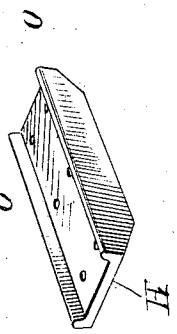

Fig. 5.

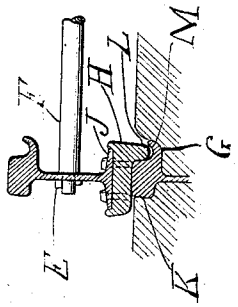

Fig. 4.

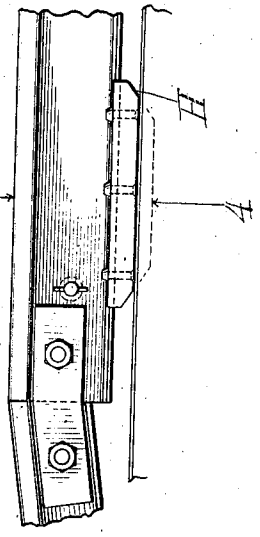

Fig. 3.

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UNITED STATES PATENT OFFICE.

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PORTABLE CROSSOVER.

1,000,270. Specification of Letters Patent. Patented Aug. 8, 1911.

Application filed February 23, 1911. Serial No. 610,293.

To all whom it may concern:

Be it known that I, JOHN KERWIN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Portable Crossovers, of which the following is a specification.

My invention relates particularly to portable cross-overs for use in repairing street railroad or other similar tracks where there are two or more parallel tracks used to accommodate the traffic in opposite directions. When repairs are to be made along such a line of tracks it is customary to treat a comparatively short section of one track at a time and for this purpose the traffic is customarily shunted around the section undergoing repairs, on the parallel track which is used for the time being for traffic in both directions, temporary cross-overs being necessarily installed beyond each end of the portion of track which is out of commission to transfer the traffic to and from the adjoining track. It has been necessary heretofore to construct these temporary cross-overs *in situ*, the rails, frogs and other necessary parts of the cross-over being conveyed to the place where it is to be located and there assembled. The disadvantage and inconvenience of this method of constructing cross-overs has long been recognized and it has been proposed to avoid the same by so constructing the cross-overs that they may be in the main carried on a suitable car in an assembled condition. With this in view the parts have been made as light and few as possible. But even so it has been found impracticable to handle and convey the cross-overs in this manner so that to the best of my knowledge no such devices have ever gone into actual use.

It is the object of my invention to construct a portable cross-over that may be conveyed from place to place without being knocked down or disassembled and which may be readily handled by the means ordinarily at the disposal of those engaged in such repair work. With this object in view I construct a cross-over of material which may be of the usual weight and strength and which is preferably of the standard form employed where the cross-over is set up *in situ*. It is equipped, however, with suitable means whereby it may be hauled or slid on the rails of the track to be repaired, suitable traction means such as electric or other motors or horses being employed for the purpose.

My invention will be more fully understood from the following detailed description taken in connection with the accompanying drawings to which it refers. But it is to be understood that it is not limited to the precise form there shown and described nor to the particular use to which I have referred for other uses and other forms will occur to those skilled in the art to which it relates, which forms and uses will still be within the scope of my invention as pointed out in the claims annexed to and forming part of this specification.

Referring to the drawings Figure 1 is a plan view of my cross-over showing it as in use upon a two-track road the rails whereof are indicated in dotted lines; Fig. 2 represents a side elevation thereof; Fig. 3 a fragmentary enlarged side elevation; Fig. 4 a corresponding cross section on the line 4—4 of Fig. 3 and Fig. 5 a perspective of a detail thereof.

As heretofore stated, the cross-over in its general features may be and preferably is of standard type. Thus there is nothing peculiar to my invention in the parallel rails A with their tapered end portions A′, the cross-over rails B, the frogs C or the switches D. In order to facilitate the assembling of the device, however, when it is first put into use on the track to be repaired, I employ wedges E engaging slots in the ends of the tie rods F in place of the screw and nut construction ordinarily employed. This feature, while it is of advantage in that it facilitates rapid assembling of the cross-over, need not be employed, nor is my invention limited thereto.

The parallel rails A A are arranged to slide upon the permanent rails G G shown in dotted lines in Fig. 1 and in section in Fig. 4, and for this purpose are provided at suitable intervals with shoes H bolted to the feet J of the rails and provided with means for laterally engaging the heads K of the permanent rails. This means in the present instance consists in a flange L depending from the shoe H within the wheel flange groove M of the permanent rail which it is designed to fit loosely. The upper surface of the shoe is provided with longitudinal

marginal flanges O to engage the edges of the foot of the rail to which the shoe is attached and prevent lateral displacement with relation thereto. The cross-over is further provided with attaching means shown as chains P at either end of each pair of longitudinal rails to which the traction means is to be attached.

From the foregoing description the operation of my device and its advantages will be obvious. The cross-over may be conveyed to the road to be repaired in knock down or disassembled condition and assembled at the place where the first cross-over is to occur, it being of course understood that two cross-overs will be necessary, one at each end of the section of track being operated upon. After the repairs on the first section have been completed motors are attached to the cross-over, either one or two as may be found necessary, and it is hauled or slid along the rails to a new location the shoes preventing the rails from getting out of alinement and acting as carriers for the cross-over.

It will be obvious that if desired bolts or other readily removable securing means could be employed for fastening the cross-over in position on the permanent tracks but in practice I have found such means unnecessary for the device may and preferably is made of such weight and strength that it maintains its position without such fastening means.

What I claim is:

1. A cross-over having pairs of longitudinal rails and cross-over rails rigidly connected together, means on the rails adapted to engage the permanent rails, the cross-over as a unitary structure being free to slide longitudinally upon the permanent rails.

2. A portable crossover having the usual longitudinal rails and crossover rails, shoes upon the longitudinal rails adapted to engage and slide upon the rails of a permanent trackway, and tie rods connecting the rails of the crossover formed with shoulders and reduced ends, the ends being slotted and provided with keys.

JOHN KERWIN.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."