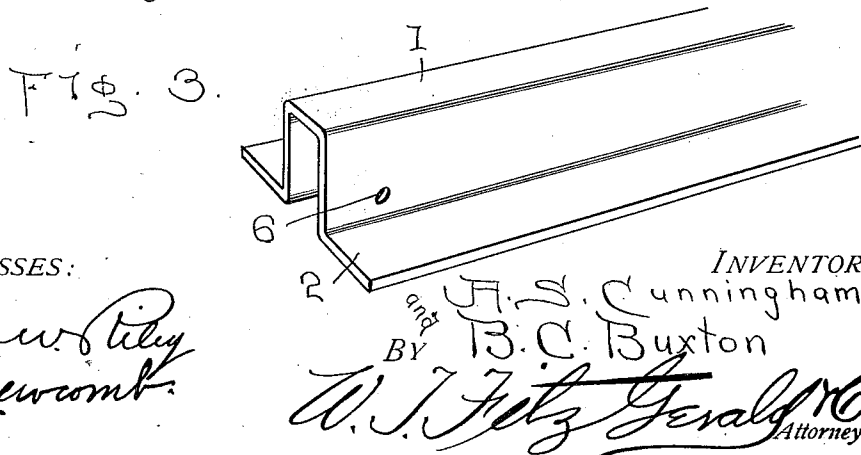
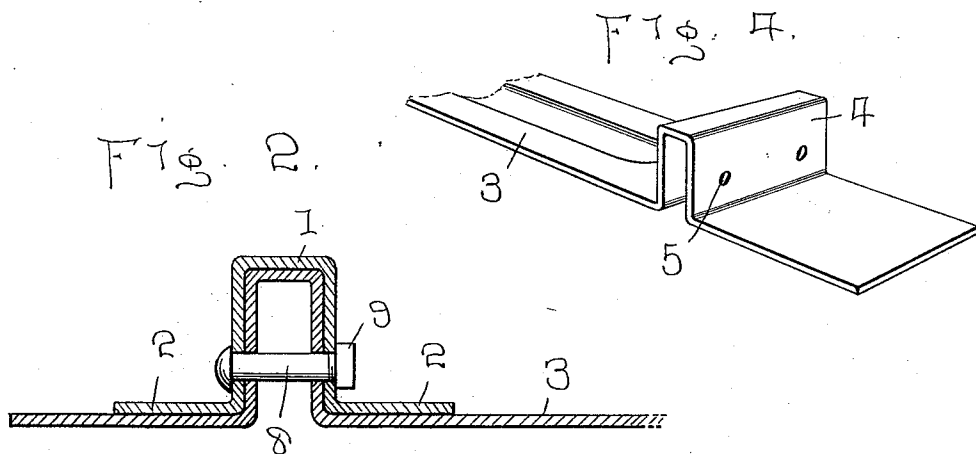
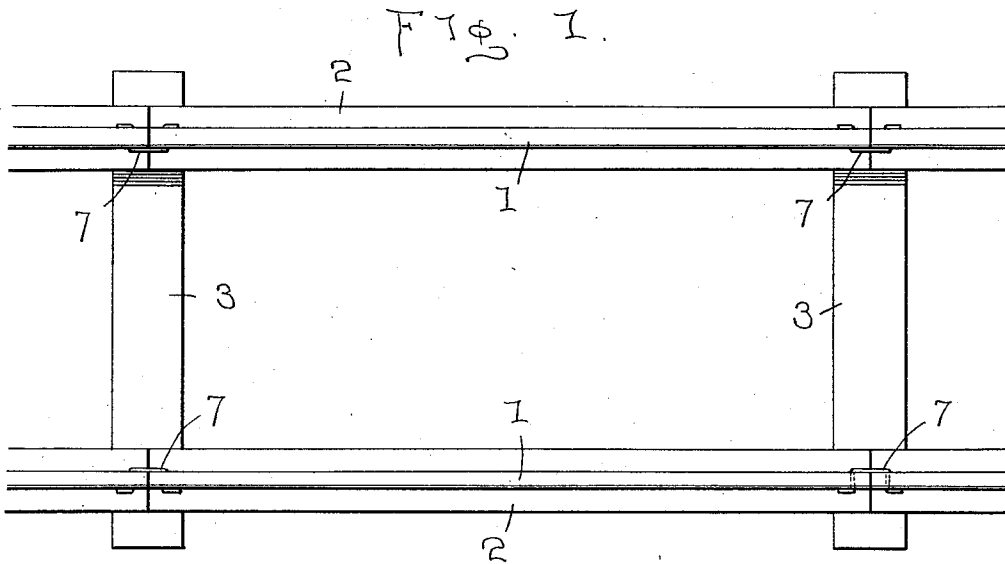


A. S. CUNNINGHAM & B. C. BUXTON.
 PORTABLE RAILWAY CONSTRUCTION.
 APPLICATION FILED JUNE 21, 1911.

1,022,467.

Patented Apr. 9, 1912.

2 SHEETS-SHEET 1.



WITNESSES:

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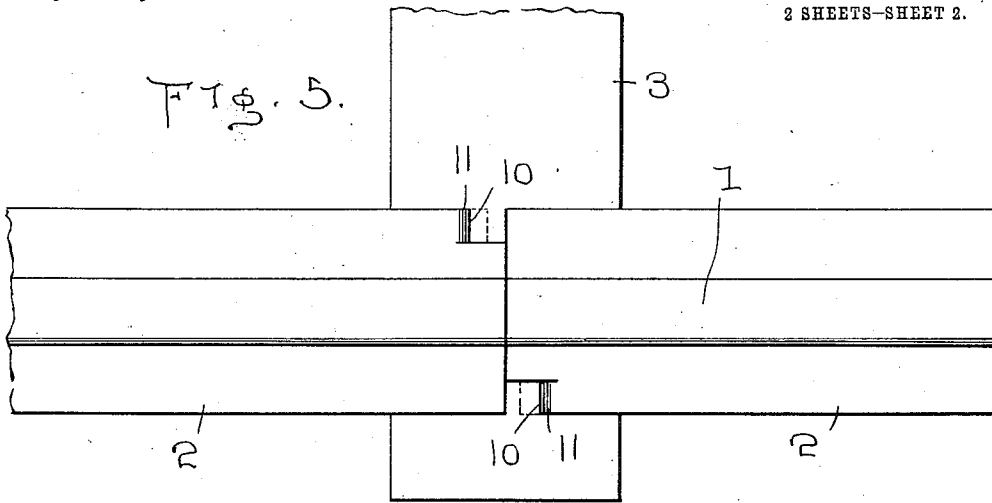


Fig. 7.

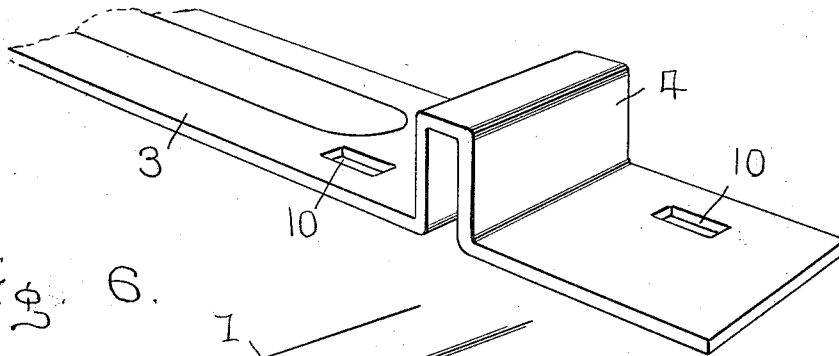
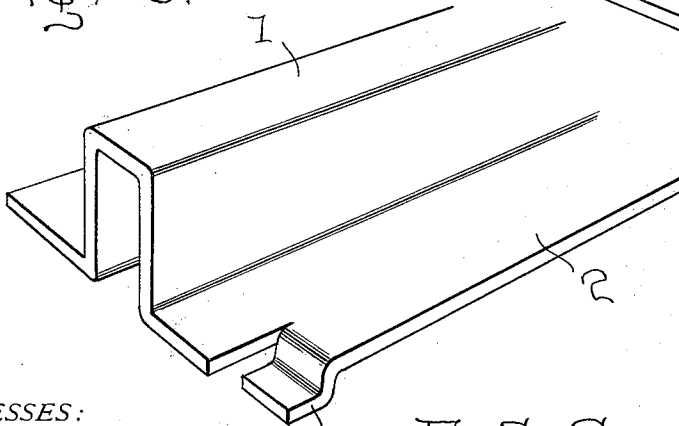


Fig. 6.



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UNITED STATES PATENT OFFICE.

ALLAN STERLING CUNNINGHAM, OF OSKALOOSA, IOWA, AND BENJAMIN C. BUXTON,
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PORTABLE RAILWAY CONSTRUCTION.

1,022,467.

Specification of Letters Patent.

Patented Apr. 9, 1912.

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To all whom it may concern:

Be it known that we, ALLAN STERLING CUNNINGHAM and BENJAMIN C. BUXTON, I, ALLAN S. CUNNINGHAM, residing at Oskaloosa, county of Mahaska, and State of Iowa, and I, BENJAMIN C. BUXTON, residing at Barrington, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Portable Railway Construction; and we 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.

This invention relates to railway construction and more particularly to railway construction especially adapted for mines.

An object of the invention is to provide a portable railway track adapted to be positioned in the mine entries and in rooms or compartments of the mine, and,

Another object is to construct a portable railway which may be quickly laid or removed with a minimum amount of labor and expenditure of time.

Other objects and advantages will be hereinafter set forth and pointed out in the specification and claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a plan view of a section and portions of the joining section of the portable railway, as used in a mine entry. Fig. 2 is a sectional view through the track at the joint, showing a bolt and nut employed for securing the parts together. Fig. 3 is a detail perspective view of one end of one of the meeting rails. Fig. 4 is a detail perspective view of one end of the connecting bar. Fig. 5 is a fragmentary top plan view of a portion of the track at the point where the ends of the rails meet and are secured to the connecting bar, this form of connection being specially adapted for use in the rooms or compartments of a mine. Fig. 6 is a detail perspective view of one end of one of the rails, as shown in Fig. 5, and, Fig. 7 is a

similar view of one end of the connecting bar employed in this form.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 represents the rails, which are hollow and preferably in the form of an inverted U, with the base flanges thereof turned outwardly at right angles, as shown at 2. In this construction ties are dispensed with, the only support for the track being the connecting bars 3, which are positioned transversely of the rails 1 and rest upon the ground, the rails resting upon said bars or plates. The connecting bars or plates 3 are provided near their opposite ends with the U-shaped upwardly extending offset portions 4, which are slightly smaller than the U-shaped portions of the rails 1 and are adapted to have the latter positioned thereover. The offset portions 4 are provided with registering fastener openings 5 in the opposite portions thereof and placed at suitable distances, the purpose of which will presently appear.

The connecting bars 3 are placed at the proper distances upon the ground in the entry of a mine or other places where the track is to be employed, said bars to be positioned parallel to one another, and the rails are then placed so that one end of each rail rests upon the upwardly extending offset portion 4 of a connecting bar and covers about one-half of said offset. The rail is provided with perforations 6 in its opposite sides and near its end to coincide with one set of the apertures 5 in the offset 4 in the connecting bar 3.

Suitable fastening means, such as a U-shaped wire 7, is passed through the openings 5 and 6, the ends thereof being bent against the rails 1, to securely retain the rails 1 and the securing bars or plates 3 in position.

If desired, the parts may be temporarily locked together by bolts 8 being passed through the apertures 5 and 6 and nuts 9

secured upon the ends thereof, as shown in Fig. 2. The locking means, however, is not essential but the wire is preferred.

It will be seen that as the plates 3 rest upon the ground and the rails are secured thereto, the track may be readily laid or removed and yet the parts be securely fastened together to prevent any accident, or rails or supports for rails becoming loose. It will be apparent that this form of track will be especially desirable in mine entries where it may be laid when the mine is opened and used until the mine is worked out or abandoned, at which time it may be readily removed for transportation to another mine or other place for further use.

In Figs. 5, 6 and 7 each connecting bar or plate 3 is shown as being provided within its base, with elongated slots 10 to the opposite sides of the offset upwardly extended portions 4, one of said slots being near one edge of the plate 3, while the other is adjacent the opposite edge thereof. Each rail, when to be used with this form of connecting plate, is provided at each end with the L-shaped locking finger 11, said finger being formed by slitting the horizontal portion of the rail to one side of the U-shaped portion thereof and bending the outer corner thus separated, first downwardly and then horizontally in the same direction as the portion from which it has been separated. In laying this track the rails are locked to the connecting bars or plates 3 by inserting their fingers 11 in the slots 10 of said plates, which latter are placed upon the floor of a room or compartment of a mine, or other place where the track is to be temporarily used. As will be seen, by referring to Fig. 5, the meeting ends of the rails will be positioned adjacent one another and thus prevent separation of the rails at their meeting points, which would permit the wheels of the car or other vehicle traveling thereupon to ride off of the rail and probably cause serious damage. It will be seen that this second form of track may be readily assembled and quickly taken up to move the same to another room or to another part of the same room or in fact, to any place desired. It will also be evident that any section or sections may be added or removed, when desired, without disturbing the adjacent sections.

It is especially desirable to have such forms of track in the entries of mines and within the rooms or compartments of mines, so that practically no time or labor is expended in laying or removing tracks, which must be continually changed and, as the laying and removing of this track in either of its forms, do not damage the parts in the least, it may be used any number of times

and will last indefinitely, serving for use in a number of mines or like places.

We prefer, in practice, to either concave or convex the central portion of the connecting bars 3 longitudinally between the offset portions 4, to give greater strength to said connecting bars. This, however, may be left to the judgment of the manufacturer. We have illustrated the convolution as extending practically the entire distance of the connecting bars 3 between their offset portions 4. It will be evident, however, that if desired these portions may be provided with a number of convolutions arranged in such manner as to give the bar 3 the greatest possible strength and durability.

As the parts are of extremely simple formation and the proportions may be varied as desired, it will be seen that the same construction may be employed at crossings, curves, switches, etc., as well as where a straight track is desired and the parts may be manufactured and sold at an extremely low figure.

What we claim is:

1. A portable track comprising rails, connecting plates to be positioned upon a flat surface and adapted to receive the rails thereupon, said connecting plates being provided with upward extensions, said rails adapted to fit over said upward extensions, and means for securing said parts in such relation to one another.
2. A portable track comprising connecting plates having upwardly extending offset portions near their opposite ends, rails having hollowed out ends adapted to be positioned over said extensions of said plates, and means carried by said plates to temporarily secure the same to each other.
3. A portable track comprising connecting plates adapted to rest upon a surface and support rails, rails adapted to have their opposite ends resting upon said connecting plates to form the track, the meeting ends of the rails resting adjacent one another upon said connecting plates, said plates and said rails being provided with means whereby they may be temporarily locked together, and means integral with each rail and forming a part thereof adapted to rest upon said connecting plates to prevent said rails from rocking.
4. A portable track comprising rails, connecting plates having strengthening convolutions, said connecting plates adapted to be positioned upon a flat surface to receive the rails thereupon, said connecting plates being provided with upward extensions, said rails being adapted to fit over said upward extensions, and means for securing said plates in such relation to one another.

5 A portable track comprising rails, connecting plates to be positioned upon a flat surface and adapted to receive the rails thereupon, said connecting plates being provided with upward extensions, said connecting plates also being provided with convolutions longitudinally thereof between their upward extensions, said rails being adapted to fit over said upward extensions, and means
10 for securing said parts in such relation to one another.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

ALLAN STERLING CUNNINGHAM.
BENJAMIN C. BUXTON.

Witnesses:

R. B. MITCHELL,
A. W. NUTZ.

Witnesses to the signature of Benjamin C. Buxton:

H. J. LAGESCHULTS,
A. L. ROBERTSON.

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