J. J. JOVA.

Portable Railroads.

No. 212,557. Patented Feb. 25, 1879.

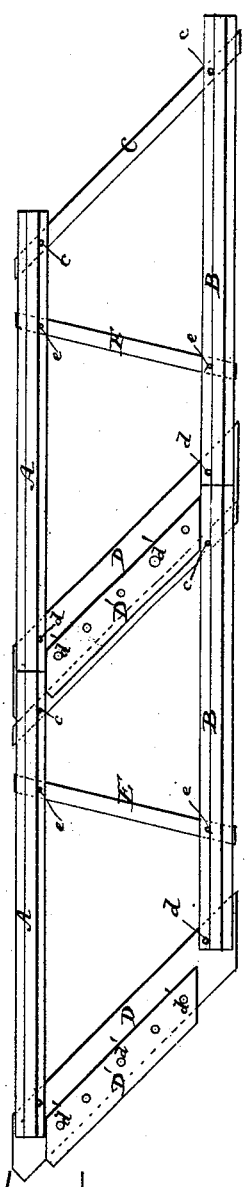

FIG. 1.

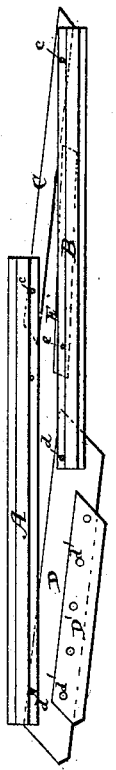

FIG. 2.

WITNESSES:—

W. Colborne Brookes

Chas. C. Stetson

INVENTOR:—

J. J. Jova,

by his attorney C. C. Stetson.

UNITED STATES PATENT OFFICE.

JOHN J. JOVA, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND ATLANTIC STEAM ENGINE WORKS COMPANY, OF BROOKLYN, N. Y.

IMPROVEMENT IN PORTABLE RAILROADS.

Specification forming part of Letters Patent No. **212,557**, dated February 25, 1879; application filed November 9, 1878.

To all whom it may concern:

Be it known that I, JOHN J. JOVA, of New York city, in the State of New York, residing a portion of the time in the Island of Cuba, have invented certain new and useful Improvements Relating to Railways, of which the following is a specification:

My improvement is intended more particularly for use on plantations in Cuba, where the cars are moved by man-power, and the tracks may be secured very slightly, being relieved from the severe loads and racking strains imposed by locomotives; but it may be used with some success in any other situation.

My invention allows the tracks to be laid on quite irregular surfaces, the joints being so distributed as to make this practicable.

My invention in its fullest form allows the rails to be drawn together or collapsed in width, when desired, for more convenient stowage or transportation.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of the specification.

Figure 1 is a plan view of two complete sections as applied together for use. Fig. 2 represents one section collapsed.

Similar letters of reference indicate corresponding parts in the drawings.

A B are the rails, which may be of any ordinary character, but preferably light, and with a broad flange at the base. They are set parallel, but one in advance of the other, and are peculiarly joined. One end of each is joined to the corresponding end of the other by a narrow bar of iron, C, connected to the rails by rivets *c c*. The other ends of the rails are joined by a broader plate of iron, D, connected to the rails by rivets *d d*. On the top of and overhanging each bar D is a shorter plate, D′, fixed to the plate D by rivets *d′*.

The bars C and D are parallel to each other. Another bar extends transversely across the track, inclined in the opposite direction, as indicated by E. This is joined to the rail at each end by a removable fastening, *e*.

When the track is to be collapsed for shipment the sections are separated from each other, if they have been previously joined, and the bar E is taken out by removing the fastenings *e e*. Thus divided, the rivets *c* and *d* serve as pivots on which the connected parts may turn, and by moving the forward rail still farther forward relatively to the other the rails are brought nearer together, until they touch—in other words, the trapezoid is elongated and narrowed. When it is required to readjust the track for use each section is again widened and shortened until the proper distance obtains between the rails, and then the bar E is reapplied and the fastenings *e* strongly secured.

Each section is now in condition for use; but the several sections require to be laid and joined together. In laying the sections care is taken to begin at one end of the track, and to apply the sections successively by abutting them one against another, so that the plate D′ of one section shall overlap upon the bar C of the adjacent section, and the rails A B of the adjacent section shall at the same time be received over the ends of the bar D of this section. When thus applied together the rails of the several sections match properly, and are strongly held in the proper relation.

A track thus laid upon a yielding soil is not sufficiently secured to bear the racking strains of steam traffic, neither is it sufficiently held up at the joints for very heavy loads; but it is capable of greatly facilitating the labor of pushing light cars about on a soft soil. It will both support and guide the wheels of such cars; and, by reason of the joints or junctions being not opposite each other on the two sides of the track, the cars will traverse the joints even if the track is very shaky and the joints become greatly depressed.

It will be understood that my bars E may be permanently fastened whenever there is assurance that the track will not be soon required to be again collapsed. So, also, the tracks may be supported on an artificially-formed foundation at the joints and at other points where the expense will be warranted.

In conducting agricultural operations in many situations these tracks may be of immense use, simply laying the sections on the level or slightly-rolling surface of the ground,

and applying them together by forcing each section into intimate union with its neighbor.

The top plate, D′, may be welded or otherwise formed in one piece with the plate D, if preferred.

The sections may be made long or short, wide or narrow, as circumstances may require. I propose, for ordinary agricultural tracks, a length of about ten feet for each rail, and a breadth of thirty inches between the rails.

The overhanging or cap plate D′, being shorter than the bar D, does not interfere with the collapsing of the sections. When the sections are joined for use it affords a firm bearing quite across the main space, resting on the cross-bar of the adjacent section. When collapsed it lies out of the way, simply protruding a little beyond the opposite rail.

I claim as my invention—

1. The sectional track described, having the rails one in advance of the other, connected by oblique ties, oblique in opposite directions, so as to brace each other, as specified.

2. The cap-plate D on the cross-tie at one end of each section, in combination with the folding joints, and adapted to match over the cross-tie of the adjacent section in use, and to lie along the folded section, projecting slightly beyond the line of the rail, as set forth.

In testimony whereof I have hereunto set my hand this 16th day of October, 1878, in the presence of two subscribing witnesses.

J. J. JOVA.

Witnesses:

D. F. MATTHEW,

ANTONIO SUAREZ DEL VILLAR.