

(No Model.)

J. E. JACKSON.
PUZZLE.

No. 449,881.

Patented Apr. 7, 1891.

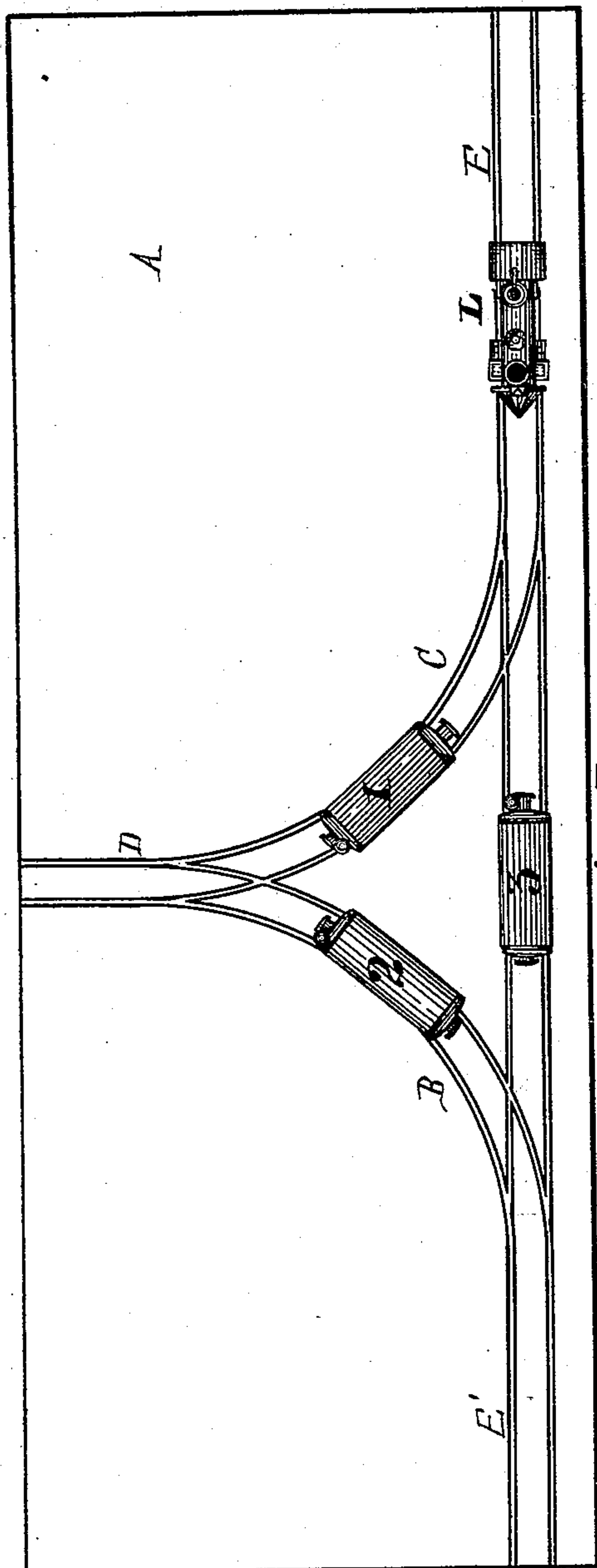


Fig. 1.

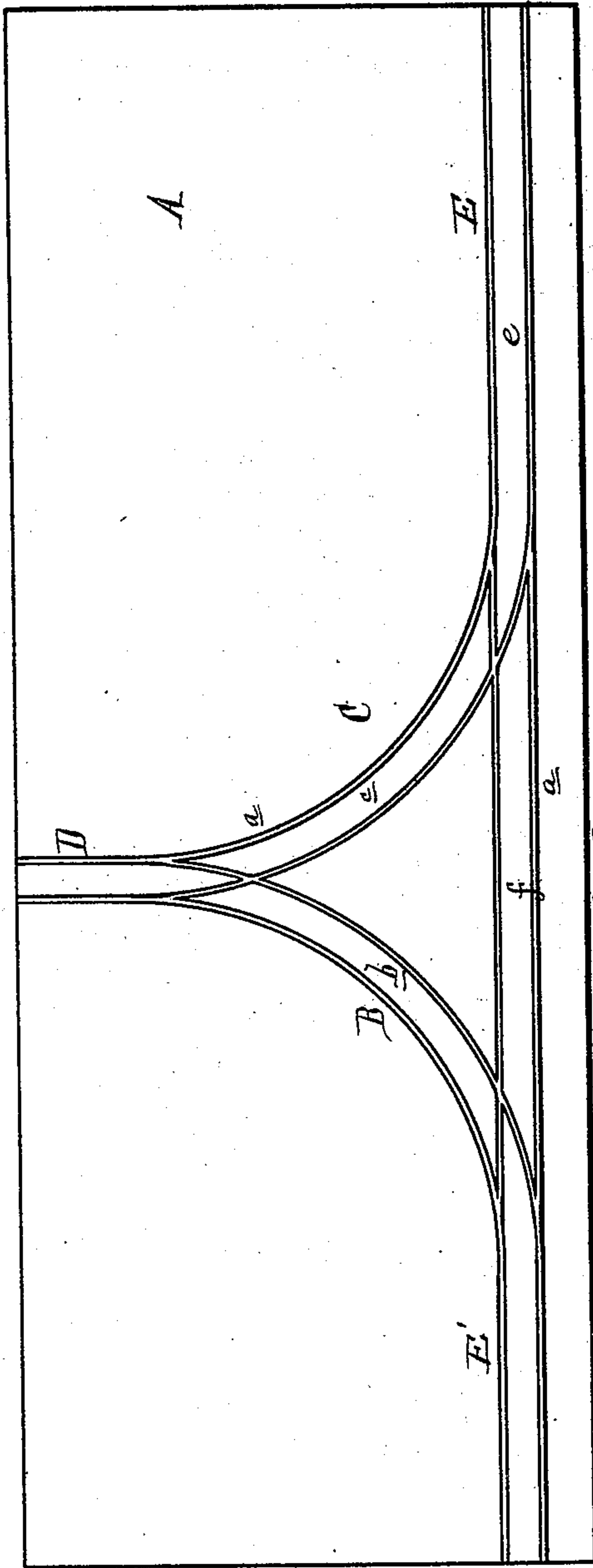


Fig. 2.

Witnesses.

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JAMES E. JACKSON, OF GREENVILLE, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO JOHN C. COMPTON AND JOSEPH A. OSBORNE, BOTH OF CLEVELAND, OHIO.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 449,881, dated April 7, 1891.

Application filed November 21, 1889. Serial No. 331,135. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. JACKSON, a citizen of the United States, residing at Greenville, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Puzzles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to puzzles; and its object is to produce an inexpensive device wherein the problem presented to be solved is perplexing and wherein an interesting study and pastime are afforded.

The invention consists in the peculiar nature of the puzzle as presented in the construction and combination of the several parts described herein, and pointed out in the claims.

Figure 1 is a plan of my puzzle, showing the locomotive and cars placed on the track; and Fig. 2 is a plan view of the same, showing track alone.

The device consists of a board or other suitable material which forms a base A, wherein is made grooves or to which is secured wires or rails *a* to represent the main track and a Y of a railroad, and four movable blocks or figures, one of which represents a locomotive and the other three of which represent railway-cars.

In the drawings, E represents the main track of a railroad, and B and C are the branches diverging therefrom on the same side of the main track, but in reverse directions, and unite in a spur D.

In carrying out the invention the locomotive L is placed on the main track E at *e*, its pilot pointed toward the Y. One of the cars 3 is placed on the main track at *f* between the diverging branches B and C, another car 2 is placed on the branch B at *b*, and the third car 1 is placed on the branch C at *c*.

It is well known that in running a locomotive around a Y it will be turned end for end when it is again upon the main track—i. e., by placing the locomotive with its pilot pointing to the left, as shown in the drawings, then

running it around the Y by traversing either branch B or C first, the pilot will point to the right after making the circuit and reaching the main track.

The problem presented is to place the locomotive and cars as shown, run the locomotive around the Y to reverse it, and leave the cars as they were found—3 at *f*, 2 at *b*, and 1 at *c*.

The problem presented by my puzzle may be solved as follows: Place the locomotive and cars as seen in the drawings, the locomotive L on the main track E at *e* with the pilot pointed toward the Y, car 3 on the main track between the branches B C at *f*, car 2 on the branch B, and car 1 on branch C at *c*. Run the locomotive down the branch C and pull car 1 back on the main track and push it down to car 3 on the main track between branches B and C. Then back the locomotive, run it down branch C onto the spur D and back up branch B, and push car 2 out on the main track at *e'*. Then run the locomotive down the main track, and push cars 1 and 3 out to or beyond *e*. The locomotive then stands on the main track reversed from its first position; but it has yet to make the circuit twice more to complete the solution. Now back the locomotive down branch C onto spur D, run up branch B onto the main track, when the pilot will point in the same direction as when it started first. Then back down the main track and get cars 1 and 3 and pull them on the main track between branches B and C. Now run on and get car 2 and back with it on branch B and leave it there. Then back the locomotive onto spur D, run up branch C to the main track, back up and get car 1, and pull it out on main track at *e*. Then push said car 1 back on branch C and run the locomotive up on the main track, and it is reversed, as desired, and all the cars are left as they were first placed.

In the solution of the problem what is known as "running switches" are not allowed. The cars can only be pushed or pulled by the locomotive. Neither can but one car or the locomotive alone be upon the spur D at one time. Neither can more than two cars or the locomotive and one car be upon the main

track at the left of the Y, as at E', at one time. The main track between the branches of the Y will hold the locomotive and one car.

The main track and the branches and spurs of the Y may be of any length so long as the problem presented is observed; but to prevent a misunderstanding of the manner in which the puzzle is to be solved I make the spur D long enough to hold only the locomotive and extend the main track at E' beyond the point of intersection of the branches C sufficiently to hold only the locomotive and one car.

What I claim as my invention is—

1. In a puzzle, the combination, with four blocks representing a locomotive and three cars, of a base having a main track and two branch tracks diverging therefrom in reverse directions on the same side of the main track and uniting in a spur forming a Y, the said spur being of sufficient length to hold only the locomotive or one car, substantially as described.

2. The combination, in a puzzle, of four blocks or figures, one of which represents a locomotive and the other three of which represent cars, with a base A, having a main

track E and branches B and C diverging therefrom in reverse directions on the same side of the main track and uniting in a spur D to form a Y, said spur D being of a length to hold the locomotive, and the main track extending beyond the point of intersection of the diverging tracks at E' sufficient to hold the locomotive and one car, substantially as and for the purpose specified.

3. In a puzzle, a main track E, having two branches B C diverging therefrom in reverse directions, so as to unite in a spur D, said spur being of a length to hold the locomotive, the main track extending beyond the point of intersection of the branch B at E', so as to hold the locomotive and one car, the distance on the main track between the diverging branches B C being sufficient to hold the locomotive and one car, and four blocks of figures, one of which represents a locomotive and the other three of which represent cars, substantially as and for the purpose set forth.

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Witnesses:

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