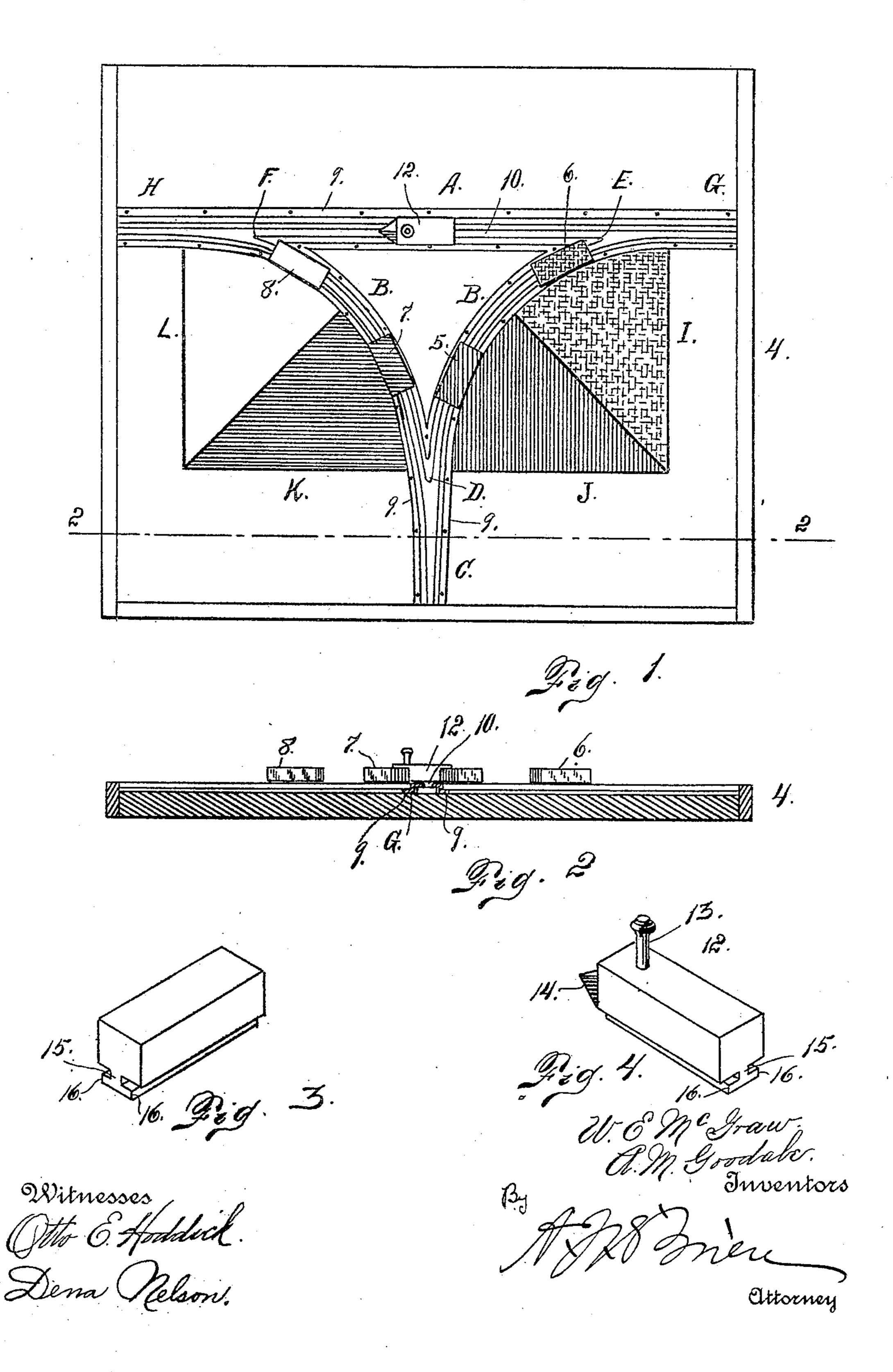
## W. E. McGRAW & A. M. GOODALE.

PUZZLE.

APPLICATION FILED JUNE 24, 1905.



## UNITED STATES PATENT OFFICE.

WILLIAM E. McGRAW AND AUGUSTUS M. GOODALE, OF DENVER, COLORADO.

## PUZZLE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, William E. McGraw and Augustus M. Goodale, citizens of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Puzzles; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in

puzzles.

Our improved construction consists of a railway-track in the shape of a Y, the same being mounted on a suitable support, as a board or plate, and provided with a number of cars shaped to move on the different members of the track, the cars being differently colored to correspond with colored sections adjacent the curved portions of the Y.

We preferably employ four blocks or pieces to represent cars and one block or piece to represent a locomotive, the latter being provided with the representation of a smokestack and a pilot. The normal position of the locomotive is on the straight track, while that of the cars is upon the curved branches of the Y and adjacent the sections outside of the Y of the same color as the cars.

In order to solve the puzzle, it is necessary to so manipulate the cars in connection with the locomotive that the latter may pass from the straight track around the Y and back to the straight track, with its forward extremity pointing in the opposite direction from that of starting, at the same time leaving all of the cars in their original positions—that is to say, adjacent the correspondingly - colored sections of the board or plate.

Having briefly outlined our improved construction, as well as the function or purpose it is intended to subserve, we will proceed to describe the same in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a plan view of our improved construction with the cars and locomotive in their normal positions. Fig. 2 is a section taken on the line 2 2, Fig. 1. Fig. 3 is a perspective view in detail of one of the

pieces representing a car. Fig. 4 is a similar 55 view of the piece representing a locomotive.

The same reference characters indicate the

same parts in all the views.

Let the numeral 4 designate a supportingbase which may consist of a rectangular piece 60 of wood or any other suitable material. Upon this board is formed the representation of two branch railroad-tracks B, curved outwardly on the same side from the main line A, forming what is known as a "Y." This Y is 65 provided with points D, E, and F, where two sections of the track intersect or come together. The tracks also have sections G, H, and C, projecting in each instance beyond the points D, E, and F. These track-sections C, 70 G, and H are each of sufficient length beyond the point to accommodate two cars or pieces representing cars, but are not of sufficient length to accommodate three cars or pieces.

Adjacent the curved sections B of the Y 75 and on the outside of these sections are formed colored areas, (designated I, J, K, and L, respectively.) I designates the yellow area; J, thered; K, the blue, and L the white. The areas I, J, and K are shaded to indicate 80

their respective colors.

The tracks are formed by metal strips 9, arranged on opposite sides of the slots 10. These slots accommodate tongues formed on the lower sides of the pieces representing the 85 cars and locomotive, the said tongues having outwardly-extending flanges at their lower extremities which project underneath the flanges of the said strips which are angleshaped in cross-section. (See Fig. 2.)

The pieces constituting the cars are designated 5, 6, 7, and 8, and they are distinguished by the colors yellow, red, blue, and white to correspond with the correspondingly-colored areas I, J, K, and L. The locomotive is designated 12 and is provided with a part 13, representing a smoke-stack, and a projection 14, representing a pilot. Each car, as well as the locomotive, is provided on its under side with a tongue 15, having laterally-projecting flanges 16, which extend underneath the top flanges of the angle-iron strips 9 in order to hold the pieces upon the track.

Normally the cars and locomotive are in the position shown in Fig. 1, and, as hereto- 105 fore stated, in order to solve the puzzle it is necessary to get the locomotive from its position on the straight track pointing toward

the left to a corresponding position on the straight track pointing in the opposite direction, it being required that the locomotive shall pass around the Y on the tracks and that after passing around the cars 6, 5, 7, and 8 shall be in their respective positions—that is to say, adjacent the areas I, J, K, and L of corresponding color, the cars 5 and 6 being between the points E and D, and the cars 7 and 8 between the points D and F.

Attention is called to the fact that any car can only be moved when in connection with the locomotive. A car may, however, be moved either in the front or rear of the locomotive, and a number of cars may also be moved with the locomotive at the same time

as far as practicable.

Having thus described our invention, what

we claim is—

1. In a puzzle, the combination with blocks representing a locomotive and a number of 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 main track extending beyond the point of intersection of the branches a distance just equal to the length of the said spur, the distance in

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each case being sufficient to hold the locomotive and one car only.

2. In a device of the class described, the combination with blocks representing a locomotive and a number of cars, of a base having a main track and two branch tracks diverging therefrom in reverse directions on 35 the same side of the track, the base adjacent the branch tracks being provided with a number of differently-colored areas equal to the number of the blocks representing the cars, the cars being colored to correspond with the 40 coloring of the said areas, the branch tracks uniting in a spur forming a Y, the main track extending beyond the intersection of the branch tracks in both directions a distance equal to the length of the spur of the Y, the 45 length of the spur and the said extension being only sufficient to hold the locomotive and one car.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM E. McGRAW. AUGUSTUS M. GOODALE,

Witnesses:
Dena Nelson,
A. J. O'Brien.