

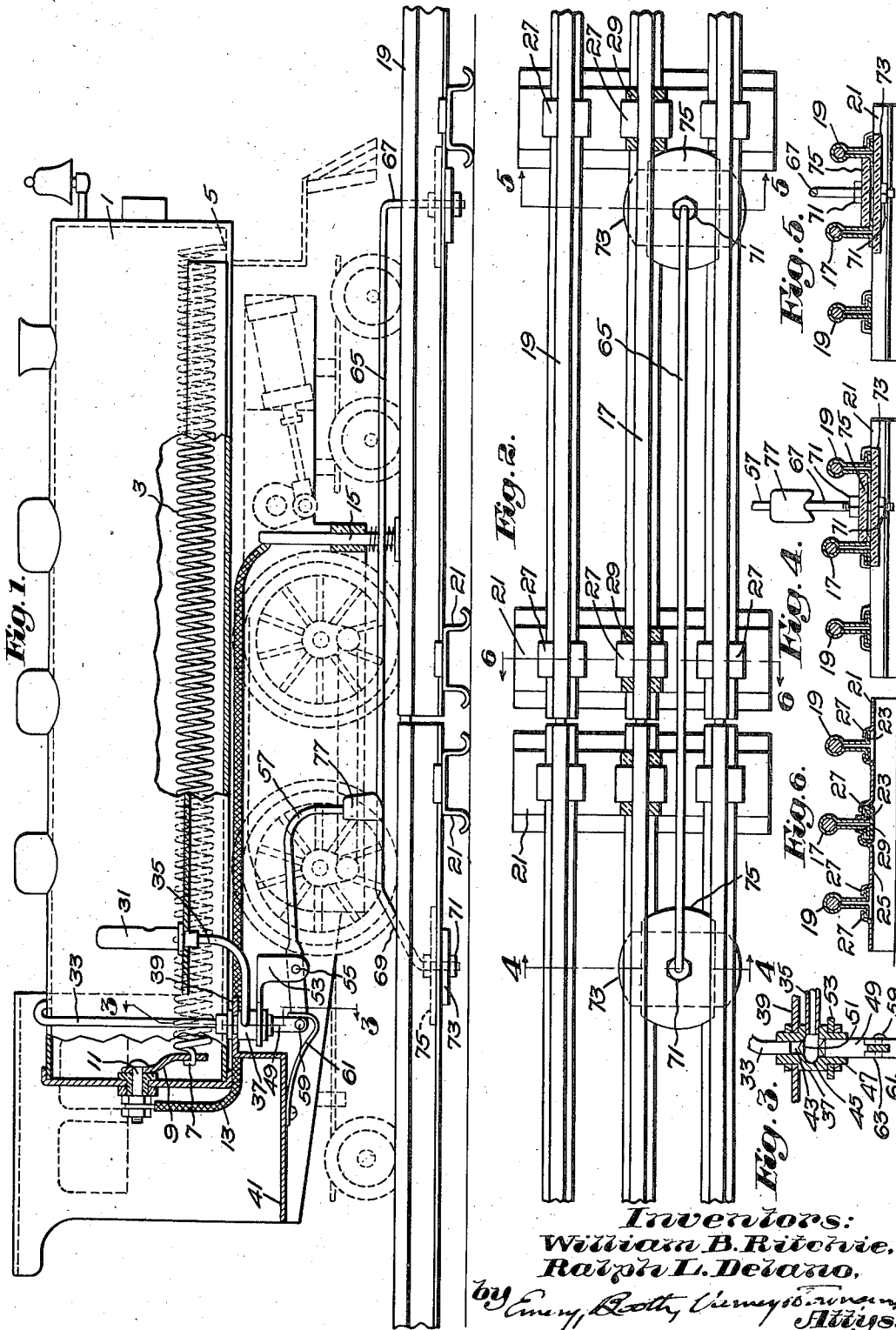
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TOY RAILWAY

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## TOY RAILWAY

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2 Claims. (Cl. 246—174)

Our invention relates to toy railways, and has among its objects the provision, in such a toy, of a vehicle provided with a whistle and having means for generating a pressure fluid for automatically blowing the whistle at selected predetermined positions of the vehicle along the track.

The invention will be best understood from the following description when read in the light of the accompanying drawing of an embodiment of the invention selected for illustrative purposes, the scope of which invention will be more particularly pointed out in the appended claims.

In the drawing:—

Fig. 1 shows a toy locomotive, and a section of a track therefor, constructed according to the invention;

Fig. 2 is a plan view of the track according to Fig. 1;

Fig. 3 is a section on the line 3—3 of Fig. 1; and

Figs. 4, 5 and 6 are respectively sections on the lines 4—4, 5—5 and 6—6 of Fig. 2.

Referring to the drawing, the locomotive is provided with a boiler 1 which is heated by a resistance coil 3, the latter at one end 5 being grounded to the boiler, while its opposite end 7 is electrically connected, by means comprising the support 9, stud 11, and cable 13, to a shoe 15 which is in sliding contact with the so-called third rail 17.

The wheels of the vehicle are supported on the outer pair of rails 19, the third rail 17, as shown, being between the rails 19. The tracks, as will be understood by those skilled in the art, are made in detachable sections, each of which latter comprises ties 21 for supporting the rails and holding the latter in assembled relation. As shown, the flanges 23 of the outer rails 19 rest upon the upper webs 25 of the ties, which latter are struck up to provide clips 27 for engaging these flanges and securing the rails to the ties. The third rail 17 is similarly supported by and secured to the ties except that a sheet of insulating material 29 is inserted between the flange 23 of this rail and the clips 27. In this way the third rail is insulated from the ties and the outer rails, and enables the pair of rails 19 and the single third rail 17 to serve as the opposite sides of a line for energizing the heating resistance 3.

As shown, the locomotive is provided with a whistle 31 adapted to be supplied with steam from the boiler through the pipes 33 and 35, fluid communication between these pipes being controlled by a valve in the valve casing 37.

As shown, the valve casing 37 is secured to a bracket 39 formed integrally with the floor 41

of the engine cab. Herein the valve casing is provided with a bore 43 with which communicates the pipe 33 leading from the boiler, the bore 43 opening into a chamber 45 with which communicates the pipe 35 leading to the whistle. Below the chamber 45, and aligned with the bore 43, is a larger bore 47 in which is reciprocally mounted a needle type valve 49 having a conical end which is adapted to seat on the valve seat 51 formed at the end of the bore 43 so as to close communication between the pipes 33 and 35. As illustrated, carried by the valve casing 37 is a bracket 53 which pivotally supports at 55 a lever 57, one end of which latter is pivotally secured at 59 to the lower end of the stem portion of the valve 49. Secured at one end thereof to the floor 41 of the engine cab is a flat spring 61 the other end of which is bifurcated, as shown at 63, and embraces the end of the lever 57 adjacent the pivotal point of connection of the latter to the valve 49. This spring acts normally to hold the valve in closed position.

As illustrated, for opening the valve 49 and blowing the whistle, the track carries an elongated cam member 65 in the form of a rod having at opposite ends downturned portions 67 and 69, the latter of which is inclined. As shown, the ends of these downturned portions 67 and 69 are screw threaded for receiving a pair of nuts 71. Between each pair of nuts is an upper clamping member 73, adapted to fit between and engage the upper sides of the flanges of adjacent rails 17 and 19, and a lower clamping member 75 adapted to engage the lower sides of these flanges. In the present embodiment of the invention these clamping members are of insulating material so as to prevent short circuiting of the third rail with the other rails. As shown, the upper member 73 is of such width that opposite edges thereof engage with the webs of the two rails, which acts to position the cam member 65 accurately with relation to said rails. Conveniently the width of the lower clamping member 75 is less than the width between the adjacent edges of the flanges of the two rails so that when the member is turned 90° from the position shown by Fig. 2 the cam member may be readily lifted from between the rails.

As shown, the lever 57 at its end opposite the valve 49 has a downturned portion which carries a shoe 77 for engaging the cam member 65 when the locomotive is moved in position for it to do so, the inclined portion 69 of the cam member permitting the engagement of the shoe with the cam member without material shock.

It will be understood that, for a given speed of the locomotive, the duration of the blast of the whistle is determined by the length of the cam member 65. It will also be understood that by employing several cam members of different lengths a series of blasts of different duration may be secured so as to cause the whistle to blow blasts which imitate the common whistle signals employed in railroading.

10 It will be understood that wide deviations may be made from the above described embodiment of the invention without departing from the spirit of the latter.

We claim:

15 1. A toy railway having, in combination, a track comprising rails and adapted to support a wheeled vehicle having a whistle and a valve for controlling said whistle, means for operating said valve comprising a lever carried by said vehicle and  
20 extending lengthwise thereof, an elongated rod parallel to said rails forming a cam for actuating said lever, means for supporting each of the opposite ends of said rod comprising a pair of mem-

bers adapted to receive the adjacent flanges of a pair of said rails between them, said members having aligned perforations through which the adjacent end of said rod extends, and relatively movable means carried by said rod above and below said members for clamping said members to said rails.

2. A toy railway having, in combination, a track adapted to support a wheeled vehicle having a whistle and a valve for controlling said whistle, 10 means for operating said valve comprising a lever having a pivot carried by said vehicle and a portion which extends from said pivot downwardly and lengthwise of said vehicle, a cam positioned between the rails of said track for engagement 15 by the free end of said lever, said cam having an elongated, substantially horizontal portion in the plane of said lever, and means adapted to be removably and adjustably clamped to the flanges of opposed rails of said track for supporting said 20 cam adjacent the opposite end portions thereof.

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