

J. A. Lanzirotti,

Railroad Switch,

Patented Jan. 5, 1864.

N^o 41,074.

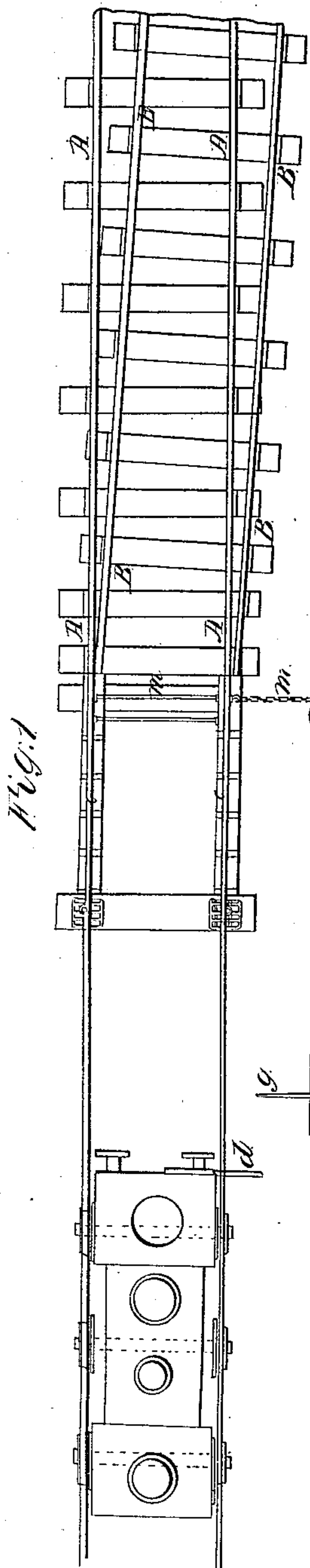


Fig. 1

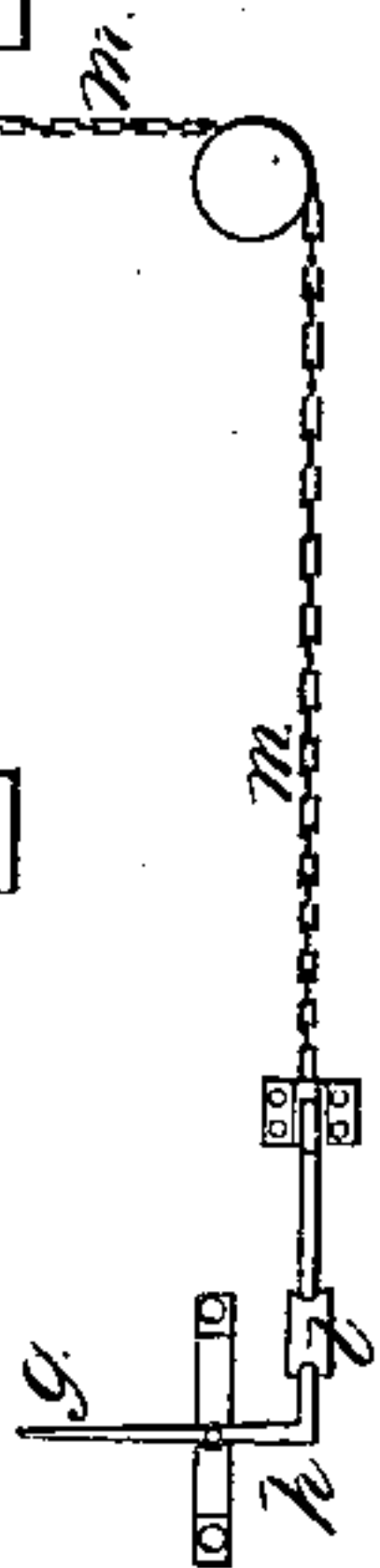


Fig. 2

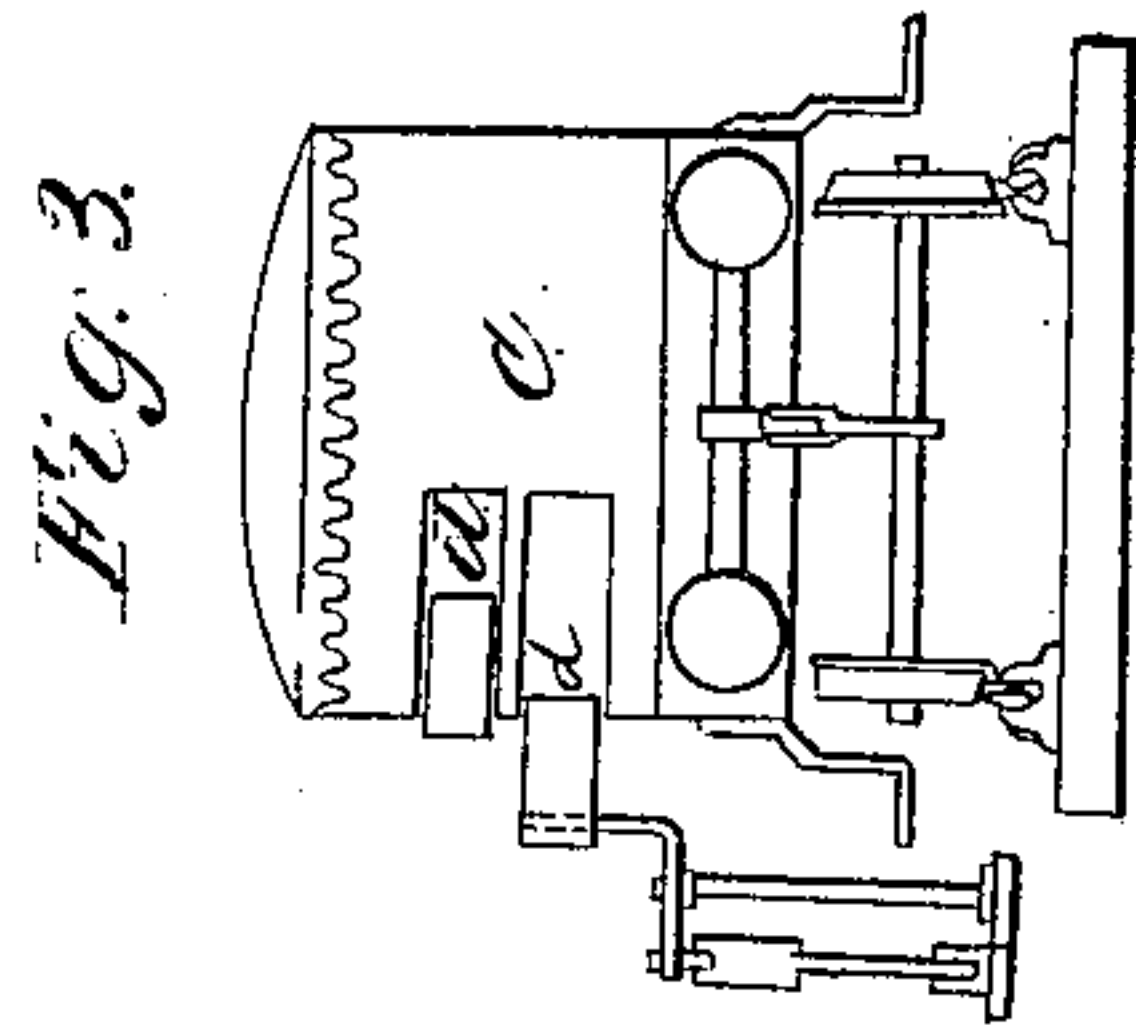
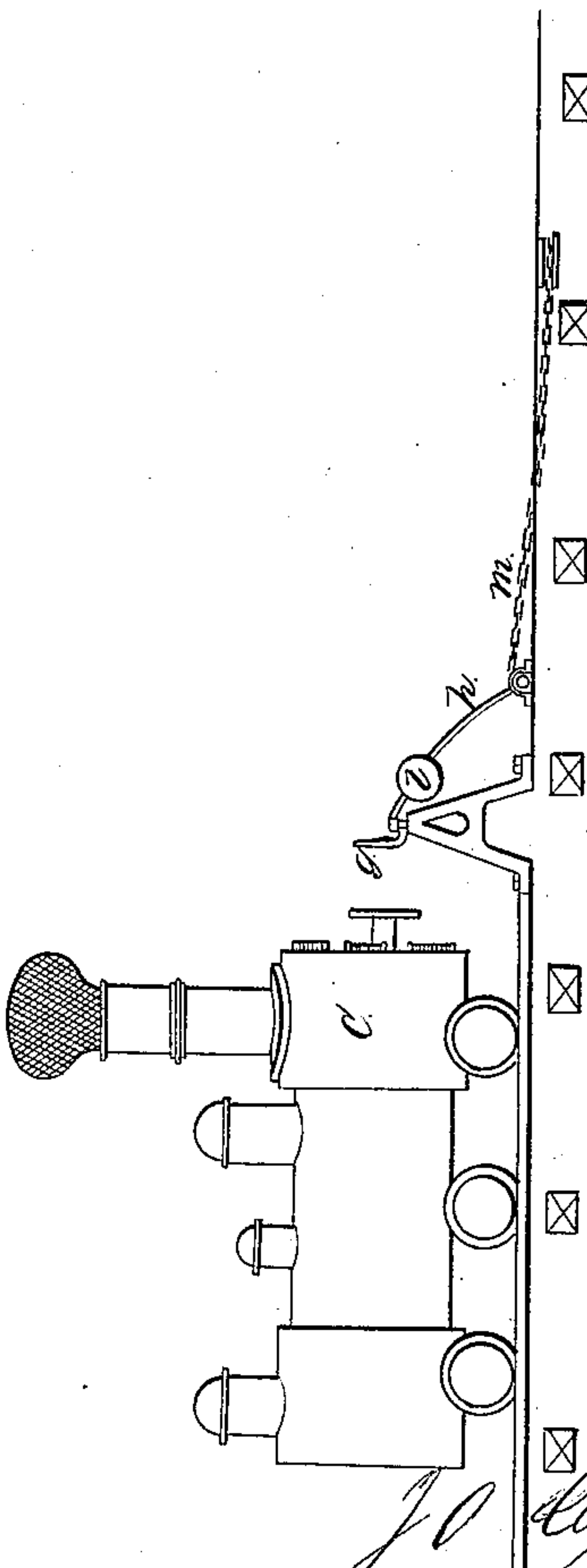


Fig. 3



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J. A. LANZIROTTI, OF PARIS, FRANCE.

IMPROVEMENT IN AUTOMATIC RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. 41,074, dated January 5, 1864.

To all whom it may concern:

Be it known that I, JEAN ANTOINE LANZIROTTI, of Paris, in the Empire of France, have invented a new and improved means or apparatus for shunting trains or of working automatically railroad switches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The object of this invention is to enable a train to be shunted or moved from one line of rails to another without the aid of an attendant.

The invention consists in fitting to the front or sides of locomotives, tenders, or carriages, in front of a train, a projecting rod or rods which comes or come in contact with a weighted lever or levers at the side of the rail, which, through the medium of rods or chains, draw the points together and cause the course of the train to be diverted.

The arrangements preferred for carrying this invention into effect are represented in the accompanying drawings.

Figure 1 is a general plan showing its application to two lines of rails, A A and B B. Fig. 2 is an elevation, and Fig. 3 a front view, of the mechanism for working the switches.

A series of plates, rods, or arms, *d*, are arranged in the front part of the locomotive, wagon, tender, or other vehicle placed at the head of the train. These plates are capable of a sliding motion in grooves, or are otherwise movable and adjustable at the will of the superintendent of the railway depot or service, or of the engineer, conductor, or other person in charge of the train. The plate being adjusted at the start of the train, it projects from the side of the locomotive or other vehicle to which it may be applied. These plates are arranged in such manner that they cannot be removed from their own slides and each should bear the mark or inscription of its particular place of destination.

When the train arrives at the switch or the crossing of two lines of railway, A A and

B B, as shown in Fig. 1, the projecting plate *d* will come in contact with the hinged or pivoted bar *g* and shifts or tips it, whereby the lever *h*, weighted at *l*, becomes disengaged. The weighted lever, thus disengaged, will fall and by its fall operate, through chains or connecting-rods *n*, the switch *o*. The crossing from one line of rails to another is effected in this way in advance of the train and without attendant.

It will be understood that for each crossing or change of rail leading to the same destination a similar contrivance will be used and it will be operated by the same plate or arm, but at all crossings of rails leading to a different destination the mechanism, although the same in construction and operation, is arranged at different elevation relatively to the rails, so that it cannot be operated by any other plate than that which bears the mark or inscription to the place to which the rails lead.

In addition to the contrivance at the head of the train there may be used on the last car a mechanism or device for replacing the weighted lever or switch in its normal position; and,

Having now described the nature of the said invention and in what manner the same is to be performed, I declare that I claim—

Combining with locomotives, tenders, or carriages, in front of the train, a series of adjustable rods to operate at the sides of the rails, levers, or other appliances arranged on diverging lines of rails at different elevations, or more or less projecting laterally, so that by the adjustment of the said rods the switches at the points of contemplated change of rail may be worked automatically, substantially as herein shown and described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

J. A. LANZIROTTI.

Witnesses:

GEO. HUTTON,

E. JAUME,

Ingr.