(No Model.)

## J. FINDLAY.

RAIL DOG.

No. 285,352.

Patented Sept. 18, 1883.

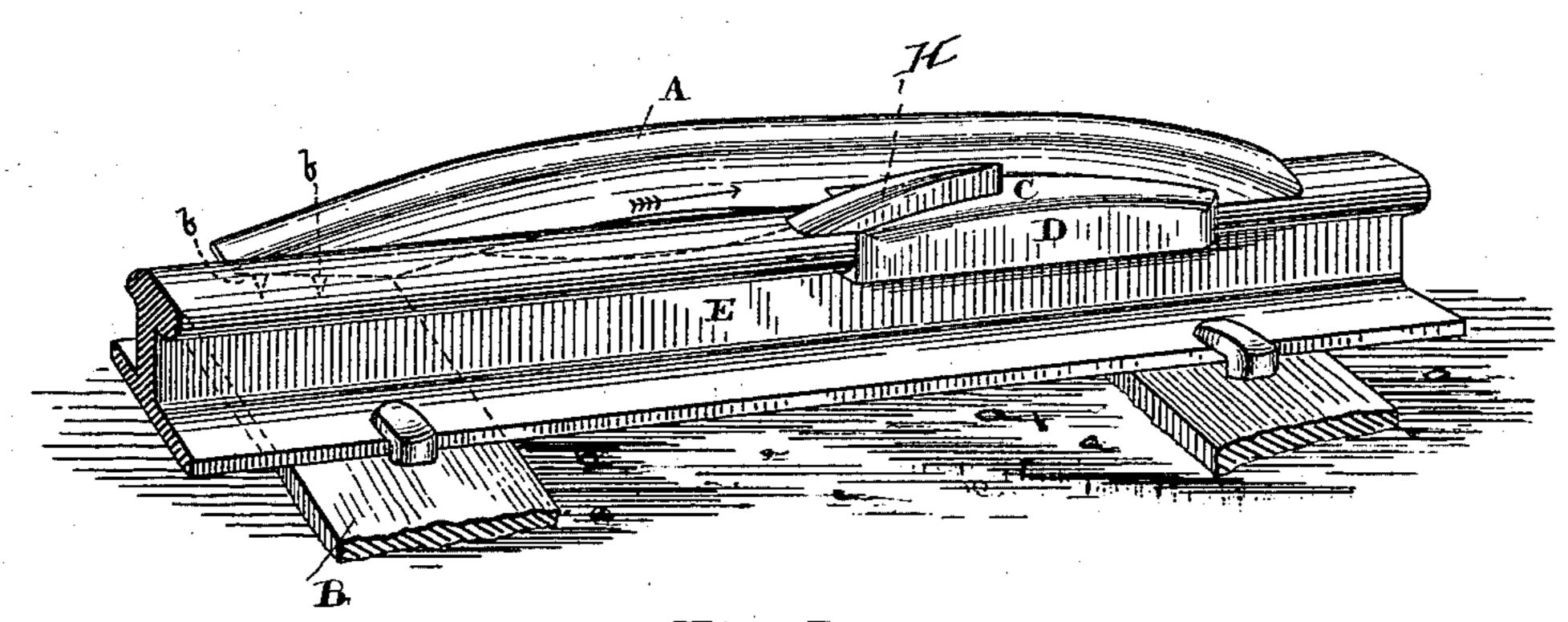
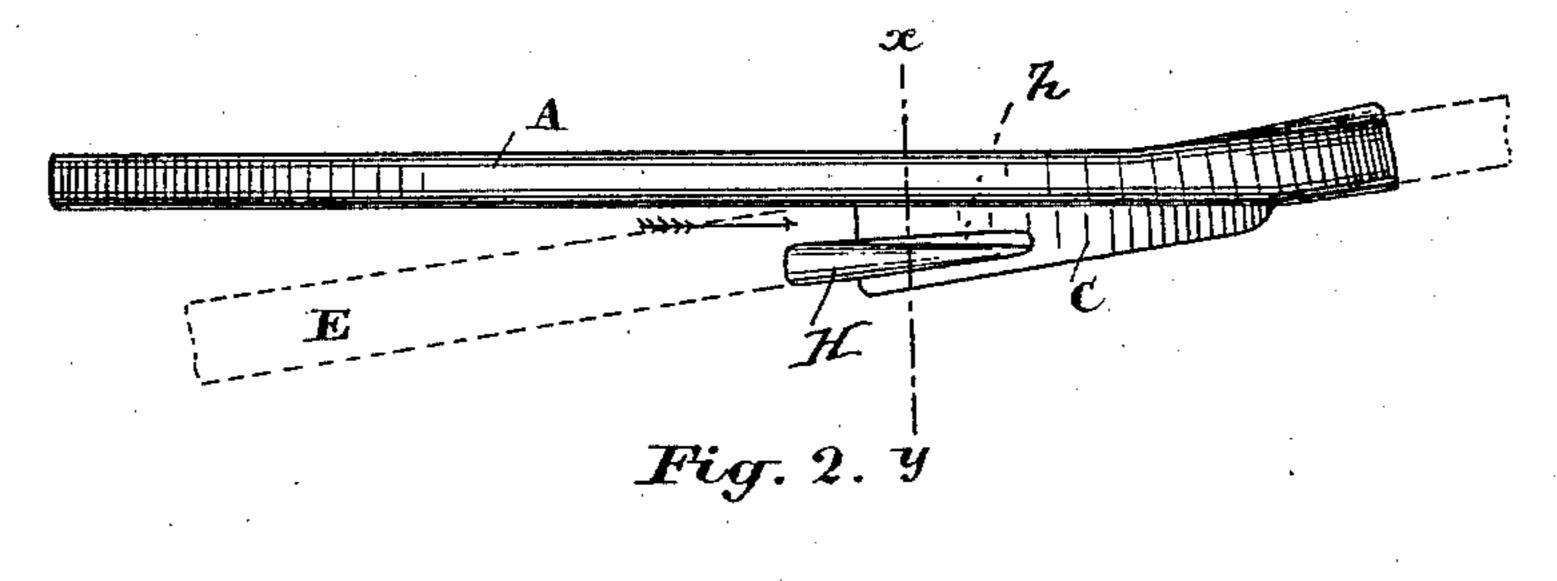


Fig. 1.



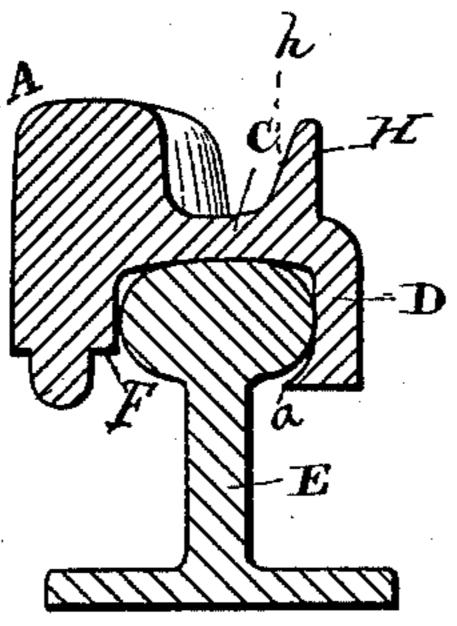


Fig. 3.

Witnesses.

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## United States Patent Office.

JAMES FINDLAY, OF TORONTO, ONTARIO, CANADA.

## RAIL-DOG.

SPECIFICATION forming part of Letters Patent No. 285,352, dated September 18, 1883. Application filed October 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, James Findlay, a subject of the Queen of Great Britain, residing at | the city of Toronto, in the county of York, in 5 the Province of Ontario, Canada, have invented certain new and useful Improvements in Rail-Dogs, of which the following is a specification.

My invention relates to certain improvero ments on what is commonly known as a "raildog," used in the event of a run-off, for the purpose of guiding back onto the rails the wheels of the engine or railway-carriage; and the object of the invention is to provide means 15 for holding the dog in position when placed upon the rail to accomplish its intended purpose; and it consists in forming on that portion of the dog which extends over the top of the rail a curved flange or lip designed to ex-20 tend below the bottom of the T-head.

In the drawings, Figure 1 is a perspective view of a rail with my improved dog placed in position. Fig. 2 is a plan of my improved dog, showing the rail in dotted lines. Fig. 3

25 is an end section through x y.

A is the guiding-rail or dog proper, one end of which rests upon the top of the rail. The other end, extending at an angle from the rail, rests on one of the sleepers, B, being tapered 30 gradually down to a point, so as to present the least possible resistance to the wheel about to be mounted.

C is the body-piece of the dog A, designed

to extend over the top of the rail.

D is a flange extending downwardly from the edge of the body-piece C, and provided with a curved lip, a, extending below the bottom side of the T-head of the rail E. On the under side of the dog A a flange, F, is formed, 40 which, with the curved lip on the flange D, prevents lateral movement of the body-piece C on the rail, and thus renders it impossible to lift the dog straight up from off the rail, it being necessary to raise the bottom end of the 45 dog A, and, as it were, roll the flanged bodypiece off the T-head of the rail. A spike or spikes, b, (shown in dotted lines, Fig. 1,) is formed on the bottom surface of the end of the dog A, which rests on the sleeper B. 50 spike holds the dog in position and prevents

lateral strain upon the body-piece fitting over the T-head of the rail.

To prevent the car-wheel from running off the dog, I employ a guide-projection, H, having inclined side h, against which the flange 55 of the wheel will impinge, and this action will tend to gradually throw the car in the direction of travel of the rails E. In practice I deem this feature to be important.

It will be observed that the device is cast of 60 metal in one piece, and that each end of the dog proper is tapered, so that the car will ride on and off the said dog without any considerable jar. This last feature I also consider important.

I am aware of Patents No. 167,421, No. 180,062, and No. 181,766, all of which show dogs having pivoted switch-rails, and make no claim to the construction shown by them.

In the drawings only one dog is shown, but 70. it is of course understood that two of them are necessary in replacing a car, one for each rail. Description of the manner of using or placing the dogs on the rails is not deemed necessary, further than to say that they are turned edge- 75 wise, with the flange D down, and placed against one side of the T-head of the rails, then turned to the position shown by Fig. 3 of the drawings.

What I claim as my invention is— 1. A car-replacer or rail-dog formed in one piece, and consisting of the dog A, having tapered ends, one of which is provided with a body, C, adapted to rest upon the rail E in a position coincident to the line of travel, hav- 85 ing a guide-projection, H, constructed with an inclined side, h, and a flange, D, having the lip a, all substantially as and for the purpose set forth.

2. In a car-replacer or rail-dog, the combi- 90 nation, with the dog A, having inclined ends and a flange, F, on its under side, of the body C, formed integrally with the said dog, and in a position coincident with the line of travel of the rails E, having a guide-flange, H, con- 95 structed with an inclined side, h, and a flange, D, constructed with a lip, a, substantially as described.

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Witnesses:

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