

(No Model.)

J. R. RUTHERFORD.
ATTACHMENT FOR LOCOMOTIVES.

No. 520,615.

Patented May 29, 1894.

Fig. 1.

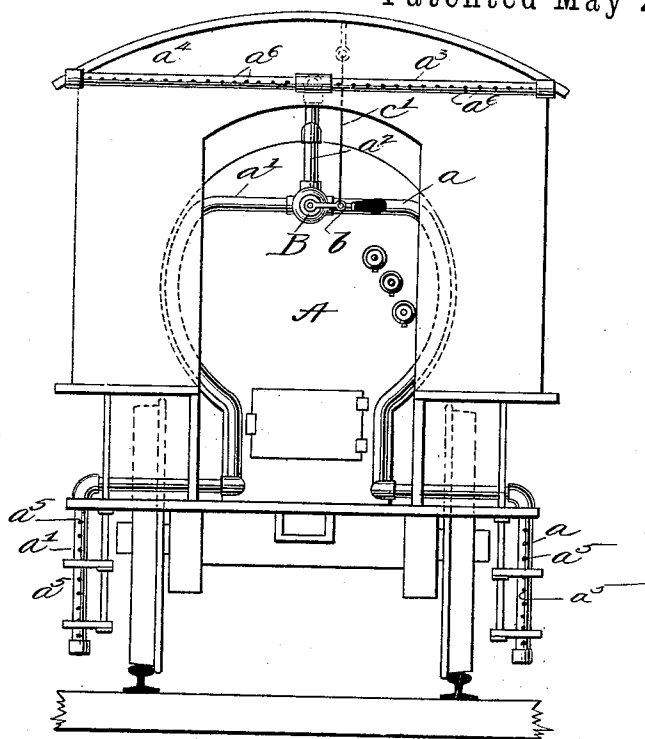
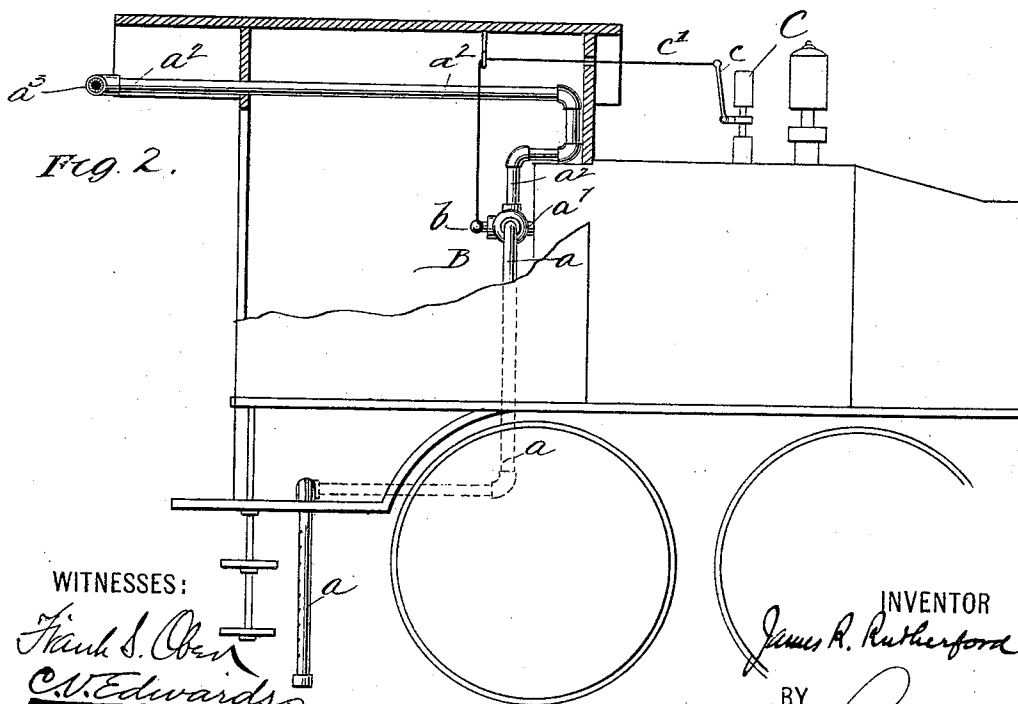


Fig. 2.



WITNESSES:

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ATTACHMENT FOR LOCOMOTIVES.

SPECIFICATION forming part of Letters Patent No. 520,615, dated May 29, 1894.

Application filed December 26, 1893. Serial No. 494,699. (No model.)

To all whom it may concern:

Be it known that I, JAMES RICE RUTHERFORD, a citizen of the United States, residing at Paris, in the county of Lamar and State of Texas, have invented certain new and useful Improvements in Attachments for Locomotives, of which the following is a full, clear, and exact description.

This invention relates to locomotives generally, and has for its particular object the construction of a simple safety device to be attached to a locomotive to prevent train robbers or other unwelcome intruders from getting in a position on the locomotive or tender where they can control the engineer.

The invention consists of the details of construction hereinafter described and claimed.

In the accompanying drawings: Figure 1 represents the rear elevation of a locomotive provided with my improved safety attachment, and Fig. 2 is a side elevation partly in section of the same.

Referring to the drawings by letter, A represents the boiler-head of the locomotive; a , a' , a^2 the steam pipes of my apparatus; B the valve controlling the passage of the steam into the pipes; and C an extra whistle so connected to the valve B that when the valve handle b is turned to allow the passage of steam to the pipes a , a' , a^2 the whistle lever c will be pulled by the cord c' and the passage of steam to the extra whistle opened, and thus the whistle will be sounded to apprise the train crew of the danger.

From the boiler, at any convenient point, is led a pipe a^7 to the valve B, which in the drawings is shown as an ordinary three way cock, but which may be provided with any number of ways according to the number of pipes a , a' , a^2 provided. The pipes a , a' , a^2 may be of any number sufficient to lead the steam to the jets at the points of ingress or entrance to the cab. As shown in the drawings, the pipes a , a' , lead, on opposite sides of the cab, from the valve along the boiler-head to the floor at the respective sides, along the floor to the outside of the frame of the cab and then turn downward at a point adjacent to the steps of the cab or any other point which may appear more serviceable for the discharge of steam at or against any intruder. The ends of the pipes a , a' may be left open to permit the outflow of steam when the valve B is opened, but I prefer to close

them and make a number of small holes a^5 in the sides of the pipes a , a' in such way as to cover, and when the valve is opened, throw a jet of steam across, the entrances to the cab.

The pipe a^2 leads up from the valve B to the top of the boiler head to the inside face of the cab, and up the same to the roof, and then backward across the roof of the cab to the outside frame sill of the cab, where it is divided into two parts a^3 , a^4 , which lead along the frame-sill to the outside edges thereof. Along the pipes a^3 , a^4 , at intervals, are holes a^6 for the outlet of the steam. These holes are placed toward the under sides of the pipes a^3 , a^4 , so that the escape of steam will be downward in such direction as to cover the tender.

The valve B may be located in the pipe a^7 and the pipes a , a' , a^2 joined at a point beyond the valve, so that, when the valve is opened, steam will be admitted to all the pipes a , a' , a^2 at once, or I may provide any other suitable form of valve. It is obvious, also, that the valve handle b need not be in the center of the boiler-head, but may be anywhere within convenient reach of the engineer or fireman. Nor is the arrangement and size of the steam pipes a , a' , a^2 material, for they may be of any convenient size or location or arrangement in the cab, or on its outside.

By means of proper attachments, pipes, valves and openings I may extend the steam current to any car or place on car or train.

Having thus described my invention, I claim—

In a locomotive steam engine, the combination with the cab or housing for the engineer, of steam pipes connecting with the boiler and extending to the entrances of the cab or housing and there provided with open jets, a valve in said pipes whereby when the occasion arises, the engineer may cause steam or hot water to be projected across said entrances to prevent the entrance of intruders, and an alarm whistle whose operating lever is connected with said valve, substantially as and for the purpose set forth.

In testimony whereof I subscribe my signature in presence of two witnesses.

JAMES RICE RUTHERFORD.

Witnesses:

EDWIN MOORE,
R. B. LEACH.