(No Model.)

E. W. McKENNA.

AIR BRAKE ATTACHMENT.

No. 348,289. Patented Aug. 31, 1886.

Fig. 3.

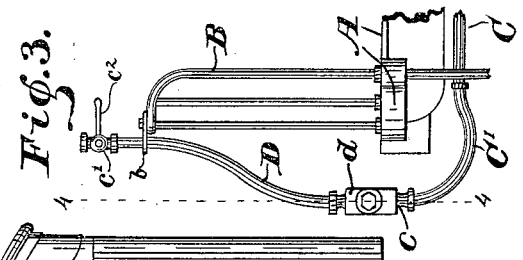


Fig. 2.

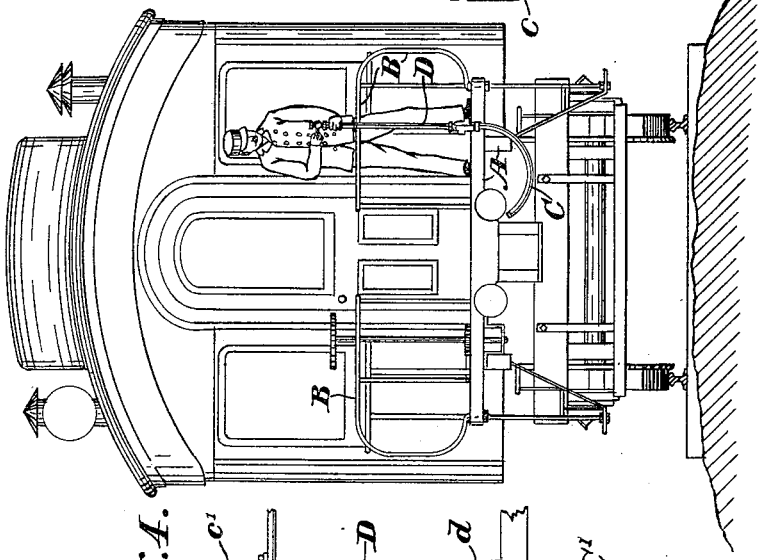


Fig. 4.

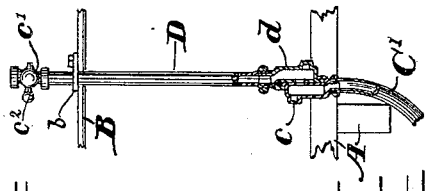
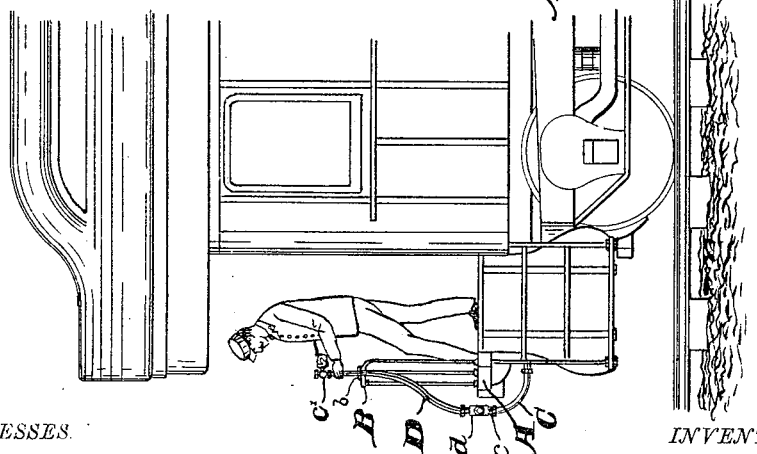


Fig. 1.



WITNESSES.

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AIR-BRAKE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 348,289, dated August 31, 1886.

Application filed August 25, 1885. Serial No. 175,256. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. McKENNA, of the city of Louisville, county of Jefferson, and State of Kentucky, have invented certain new and useful Improvements in Air-Brake Attachments, of which the following is a specification.

The object of my said invention is to provide a device adapted to be attached to the air-brake at the rear end of the train, whereby a brakeman or other employé standing on the rear platform of a train of cars may be enabled to operate the air-brake, and thus control the train without depending upon the engineer. This object is accomplished by providing a separate tube having a half-coupling upon one end similar to the ordinary air-brake tube-couplings and a stop-cock at the other end, said separate tube being adapted upon occasion to be coupled to the flexible portion on the end of the air-pipe of the brake and be carried up alongside the hand-rail to the platform, where it may be held by hand or clamped, and the stop-cock operated by means of a key or wrench in the hands of the brakeman or other person having care of the matter.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of the end of a passenger-coach provided with my invention; Fig. 2, an end elevation of the same; Fig. 3, a side elevation similar to a portion of Fig. 1 on an enlarged scale; and Fig. 4 a detail view, partly in section, looking toward the right from the dotted line 4 4 in Fig. 3.

In said drawings the portions marked A represent the frame-work of the car, B the ordinary hand-rail, C the pipe or tube of the air-brake, and D the device which is coupled thereto and embodies my invention.

The car and the brake are or may be of any ordinary or well-known construction, the pipe C of the latter having the usual flexible end or portion, C′, which extends from car to car in a train and connects the permanent portions, which are secured underneath the car, said flexible portions being provided with the usual coupling, *c*.

The device D consists, as before stated, mainly, of a separate and preferably flexible tube provided at one end with a half-coupling, *d*, which is adapted to be joined onto the half-coupling *c* on the flexible portion C′ of the brake-pipe, and is adapted to be carried up alongside the hand-rail, and there held by the clamp *b* or by the hand of the operator. At its upper end it is provided with a stop-cock, *c*′, which may be operated by a key or wrench, c^2, or in any other desired manner.

The operation of my said invention is as follows: During the making up of a train, when backing it about the yard or at any other time when it is desired to run the train backward, the device D is coupled to the flexible portion C′ at the rear end of the car, instead of said flexible portion being shut off or closed. When it is desired to stop the train, the brakeman or other person in charge, instead of signaling the engineer, simply turns the stop-cock, and thus effects the stoppage of the train, avoiding all uncertainty, either in the matter of signaling or of immediate application of the brake.

I am aware that cars have heretofore been provided with the so-called "conductor's valve," by which a similar object is accomplished, each car being fitted with the same as a permanent fixture thereto; but I am not aware that any separate and removable device capable of being attached to any car, as herein set forth and claimed, and thereby rendering a single device capable of supplying a whole train with its advantages with no expense, except the slight cost of the device itself, has ever been known prior to this invention.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a railway-car, an air-brake and its pipes, and a flexible removable pipe or tube, D, connected to the brake-pipes at its lower end, its upper end extending to above the platform of the car and provided with a cock, substantially as and for the purposes set forth.

2. The combination of a car, an air-brake, its pipe C, a flexible portion, C′, thereon, having the usual half-coupling, *c*, a separate tube or pipe, D, having a half-coupling, *d*, upon

one end adapted to be coupled to the half-coupling *c*, and a stop-cock, *c'*, at the upper end, said device being thus adapted to be coupled to the end of said brake pipe or tube and be carried up alongside the hand-rail to a convenient position to be used, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 20th day of August, A. D. 1885.

EDWARD W. McKENNA. [L. S.]

In presence of—

C. BRADFORD,

CHARLES L. THURBER.