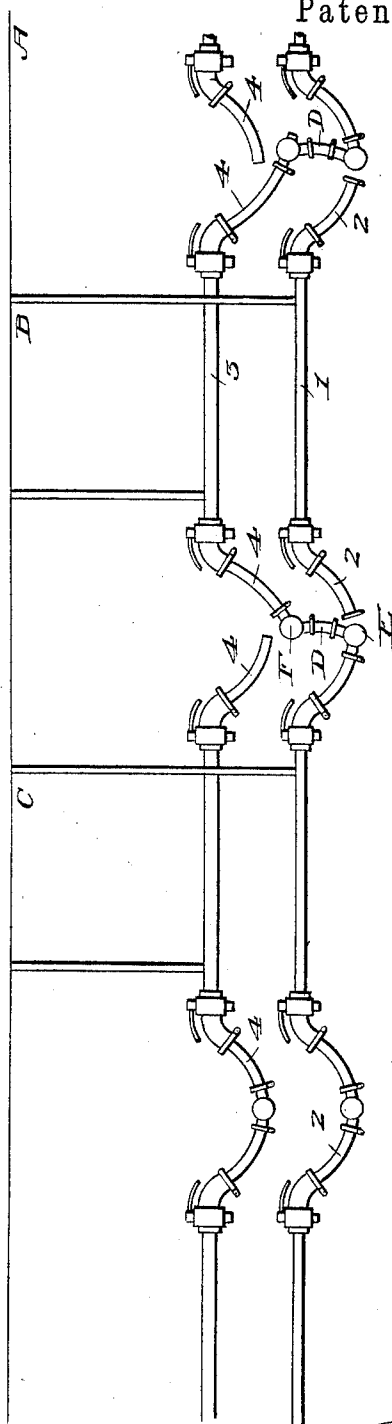


(No Model.)

J. F. COFFIN.
AIR BRAKE FOR RAILWAY CARS.

No. 586,836

Patented July 20, 1897.



Witnesses

Wm. C. Coffin
J. A. Willson

Inventor
J. F. Coffin
By *A. B. Willson*
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH FRANK COFFIN, OF MOBILE, ALABAMA.

AIR-BRAKE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 586,836, dated July 20, 1897.

Application filed March 10, 1897. Serial No. 626,880. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FRANK COFFIN, a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Air-Brakes for Railway-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to air-brakes for railway-cars; and the object of the invention is to provide means whereby, should the air-brake mechanism of one car of the train become damaged or get out of order, it may be disconnected and the air-brake mechanism for the remaining cars so connected that the engineer will have complete control of the train.

With this object in view the invention consists of certain features of construction and combinations of parts which will be hereinafter fully set forth and claimed.

The figure in the drawing is a conventional representation of the lower portions or framework of two coaches and the locomotive-tender, illustrating the application of my invention thereto.

A denotes the tender of a locomotive, B the forward coach, and C the coach immediately behind the coach B.

1 denotes the train-pipe, provided with flexible coupling-tubes 2.

3 denotes the signal-pipe, likewise provided with flexible coupling-tubes 4.

The parts above described are of the well-known construction, and further description of the same is not deemed necessary.

Should the air-brake mechanism of any of the coaches of a train get out of order, heretofore it has been impossible to operate the

air-brake mechanism of the coaches at the rear of the disabled brake mechanism of the preceding coach, thus requiring the services 45 of the trainmen at each coach to apply the hand-brake. My invention is intended to overcome this objection, and to this end I provide a coupling D, having at one end a train-pipe-coupling head E and at the other 50 end a signal-pipe-coupling head F, so that should the air-brake mechanism of one of the intermediate cars become damaged or get out of working order by disconnecting the signal-pipe couplings 4 and the train-pipe couplings 2 and connecting one of the signal-pipe 55 couplings 4 with one of the train-pipe couplings 2 the air will be conducted through the signal-pipe of the car whose air-brake mechanism is out of order to the train-pipe of the 60 car immediately at the rear, thus permitting the engineer to have complete control of the train without employing the services of the trainmen at the hand-brakes.

Having thus described my invention, what 65 I claim, and desire to secure by Letters Patent, is—

The combination with the train-pipes and signal-pipes of a railway-train, said pipes being provided with flexible couplings, of an 70 auxiliary or supplemental coupling having a train-pipe-coupling head and a signal-pipe-coupling head, whereby should the air-brake mechanism of one coach get out of order, the couplings of the signal-pipe and of the train- 75 pipe may be disconnected, and one coupling of each coupled by the auxiliary or supplemental coupling, substantially as set forth.

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

JOSEPH FRANK COFFIN.

Witnesses:

J. W. FOWLER,

JOSEPH N. MCALEER.