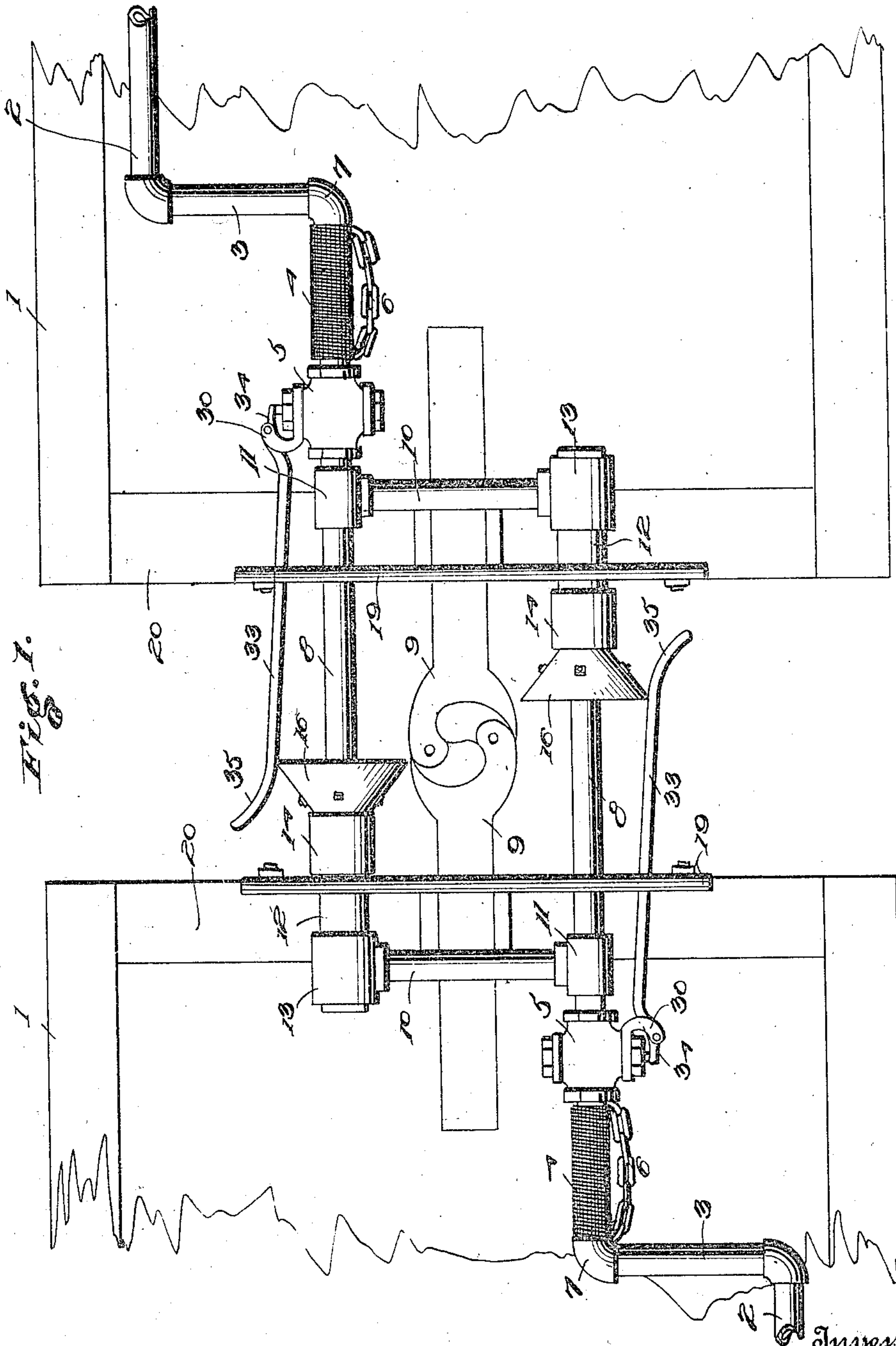


R. A. WINTON.
AIR BRAKE COUPLING.
APPLICATION FILED MAR. 3, 1911.

995,832.

Patented June 20, 1911.

2 SHEETS—SHEET 1.



Witnesses

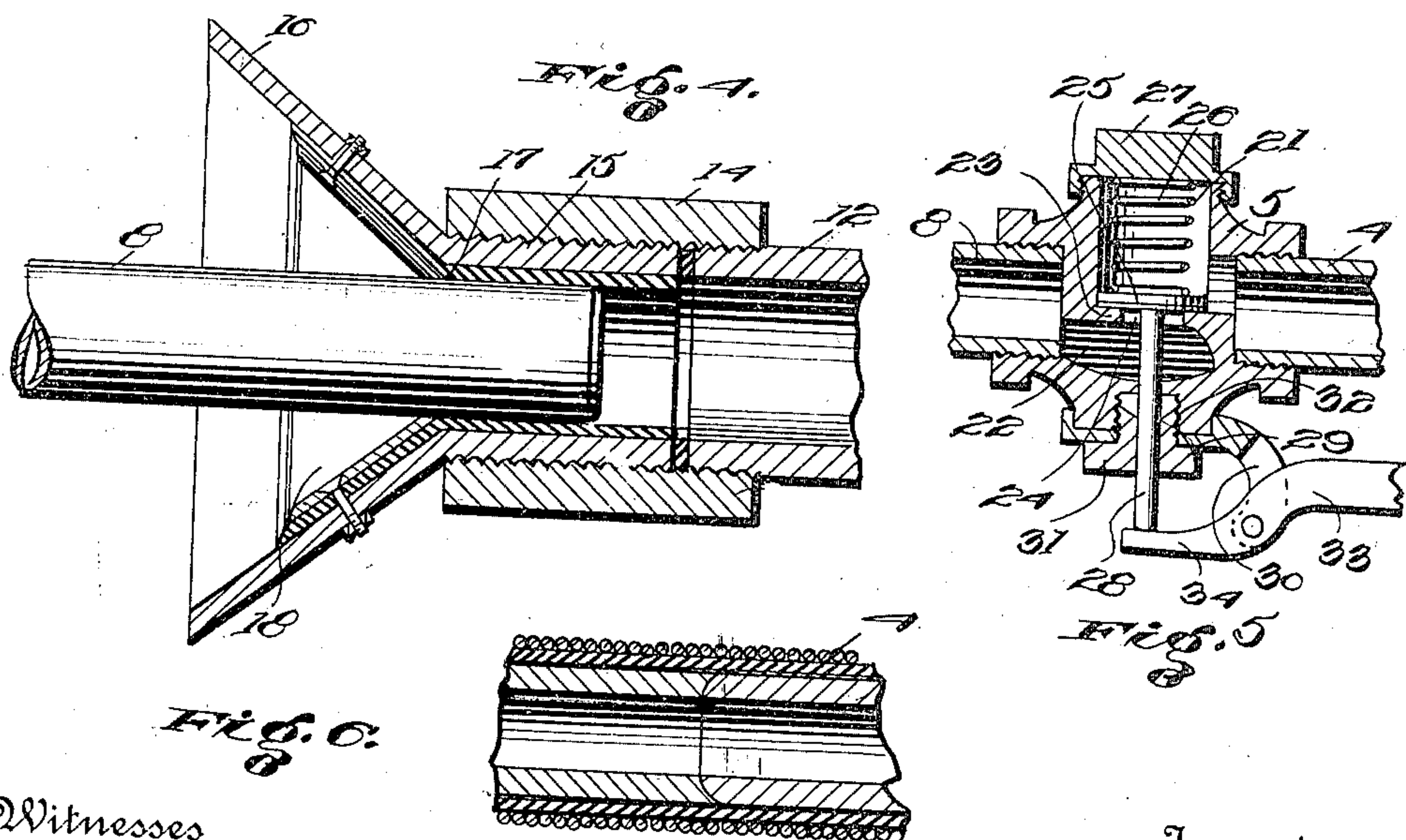
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ROBERT A. WINTON, OF BOWIE, TEXAS.

AIR-BRAKE COUPLING.

995,832.

Specification of Letters Patent. Patented June 20, 1911.

Application filed March 3, 1911. Serial No. 612,002.

To all whom it may concern:

Be it known that I, ROBERT A. WINTON, a citizen of the United States, residing at Bowie, in the county of Montague and State of Texas, have invented certain new and useful Improvements in Air-Brake Couplers, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to couplers for air pipes in railway cars and the principal object of the same is to provide a means which will open the valves of the air pipes when the cars are coupled.

15 This invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a bottom plan view of the coupler as it would appear when mounted upon a car. Fig. 2 is an end view of the coupler showing the means for mounting the coupler on the car. Fig. 3 is a view of one side of the air pipe coupling means showing the coupler as it would appear when about to be joined. Fig. 4 is a sectional view through the end portion of one coupler. Fig. 5 is a sectional view through a valve used in connection with this invention. Fig. 6 is a sectional view through the spring portion of the pipe.

30 Referring to the accompanying drawings by numerals it will be seen that the improved air coupling device is attached to the bottom of the car 1. The pipe 2 is provided at each end of the car with an angular extension 3 which engages with a length of resilient piping 4. A valve 5 is connected with the outer end of the resilient piping 4 and a chain 6 connects the valve 5 with the joint 7 which connects the pipe 3 with the piping 4. This chain 6 prevents the resilient piping from becoming extended to a greater degree than desired. A pipe 8 is connected with the outer end of the valve and extends beyond the end of the car to a point beyond the coupler 9 which connects the cars together. A pipe 10 is connected with the pipe 8 by means of a joint 11 and extends across the car where it is connected with a pipe 12 by means of a joint 13. The pipe 12 extends beyond the end of the car to a point less than the end of the car coupler, and has a sleeve 14 threaded upon its outer end.

55 A female member 15 having a flared outer end 16 is threaded into the sleeve 14 and is provided with a resilient lining 17 the outer

portion of which is covered by a metal covering 18. A bracket 19 is suspended from the end sill 20 of the car and passes beneath the pipes 8 and 12 to support the pipe coupling means.

The valve 5 comprises a hollow body portion which is divided into the compartments 21 and 22. The compartments are separated by means of a wall 23 through which there is formed an opening 24. A valve 25 is positioned in the compartment 21 and is held against the opening 24 by means of a spring 26 which is held under tension by means of a threaded cap 27. The stem 28 of the valve extends through an opening formed in the wall of the chamber 22 and extends beyond the valve. A plate 29 having hinge ears 30 is placed upon the valve and is held in place by means of a plug 31 which surrounds the stem 28 and is threaded into the socket 32. A lever 33 is pivotally mounted between the hinge ears 30 and has its end 34 contacting with the outer end of the stem 28. The body portion of the lever extends parallel with the piping 8 and has its end portion 35 curved to form a cam.

In the operation of this device the cars are coupled in the ordinary manner by bringing the two cars together. When the couplers 9 are joined the pipe 8 enters the female member as shown in Fig. 4 and the cam end of the lever rides over the flared outer end 16 and is thus rocked upon its pivot point to press the stem 28 inwardly to open the valve. The flared outer end of the female member guides the pipe 8 so that the air pipes will not fail to be coupled and the metal lining 18 protects the resilient lining 17 so that there will be no danger of the resilient lining being torn.

What I claim is:—

1. An air coupling means comprising a pair of spaced pipes, a valve connected with one of said pipes, an operating lever pivotally connected with said valve and extending parallel with said valve pipe, the end of said lever being bent to form a cam, and a female member connected with the other of said pipes and provided with a flared outer end portion, the valve pipe of one car being adapted to enter the female member of the contacting car whereby the flared outer ends of the female members contact with said levers to open said valve.

2. An air coupling device of the character

described comprising a pipe, a valve for said pipe, an operating lever pivotally connected with said valve and extending parallel to said pipe, a second pipe spaced from said first mentioned pipe, a third pipe connecting said second pipe with said first mentioned pipe, a female member connected with said second mentioned pipe and having a flared outer end, a resilient lining for said female member, and a metal covering for said resilient lining, the first mentioned pipe of one car being adapted to enter the female member of the adjoining car whereby the flared outer end portion of the female mem-

ber contacts with said lever to operate the same and open said valve. 15

3. In a coupling, a male member, a valve controlling said male member, a female member, a resilient lining for said female member, a metal covering for a portion of said lining, and means carried by said female member for operating said valve. 20

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

ROBERT A. WINTON.

Witnesses:

R. A. ALLRED,

J. E. WALLHALL.