(No Model.)

G. W. VERNON.

AUXILIARY HOSE COUPLING FOR STEAM AND AIR HOSE.

No. 395,673. Patented Jan. 1, 1889.

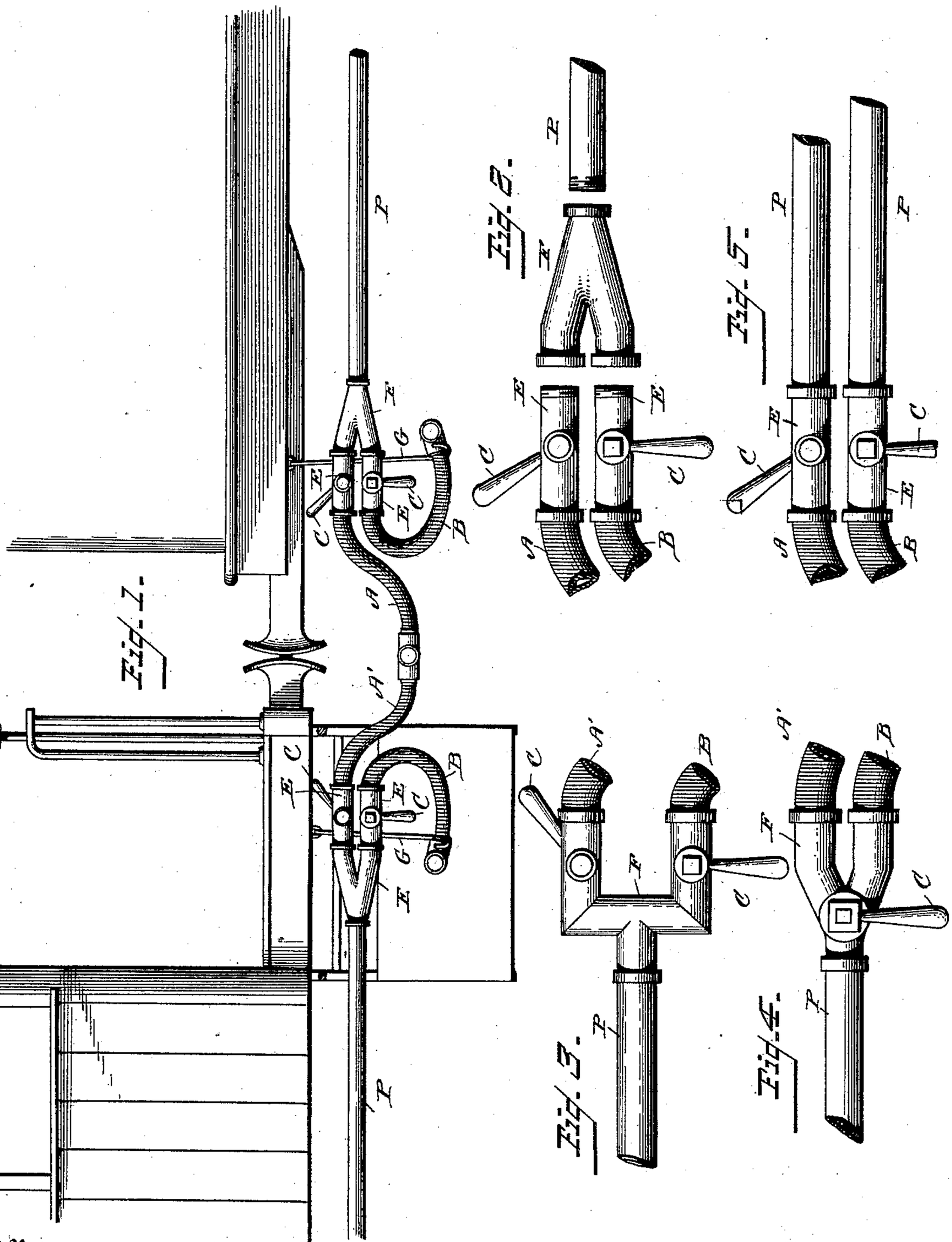

Fig. 1.

Fig. 2.

Fig. 5.

Fig. 3.

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. VERNON, OF GREENSBOROUGH, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO ROBERT L. VERNON, OF SAME PLACE.

AUXILIARY HOSE-COUPLING FOR STEAM AND AIR HOSE.

SPECIFICATION forming part of Letters Patent No. 395,673, dated January 1, 1889.

Application filed June 7, 1888. Serial No. 276,316. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. VERNON, a citizen of the United States, residing at Greensborough, in the county of Guilford and State of North Carolina, have invented certain new and useful Improvements in Auxiliary Hose-Coupling for Steam and Air Brakes; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to auxiliary hose-coupling for steam and air brakes and other purposes for railway cars and engines, and has for its object to supply an extra hose-coupling between cars and between cars and engines for immediate use in case of a hose-coupling already in use becoming unserviceable from any cause, without causing any delay to the train, and obviating the necessity of putting on a new hose whenever one becomes disabled, as is the case now. To accomplish this I attach two instead of one hose to each end of the main air-pipe of each car, and two to the main air-pipe on rear of engine-tender, one to be in regular service, and the other hung up under car-platform out of way to be used to take the place of the one in service in case of its becoming disabled from any cause, the air or steam being changed from one to the other by means of hand or other suitable cut-offs in the air or steam pipes.

Reference is made to the accompanying drawings, which show the plan of attaching the two hose to the main pipes.

Figure 1 is a side elevation of part of a car and engine, showing the application of the hose-couplings, the supplemental coupling hung up. Fig. 2 is a side elevation of the coupling, showing the parts detached. Fig. 3 is a side elevation of a T form of the branch pipe, which can be used instead of the Y. Fig. 4 is a side elevation of the Y form of pipe with a three-way valve applied. Fig. 5 is a side elevation of a modification, showing separate pipes.

In Figs. 1 and 2 there is illustrated a double end to the main pipe P, which is made by the use of a Y-pipe, F, which is screwed onto the main pipe P, and into its double ends are screwed the two pipes E, carrying the hand cut-offs C C and the two hose-couplings A and B. The hose A is coupled to the hose-coupling D on the opposite car, and B is hung up by hook and rod G, connected to any suitable part of the car for immediate use in case A gives out, there being two hose-couplings on the end of every car and on rear end of every engine-tender.

In the event of the primary hose-coupling A D becoming disabled from any cause the air or steam is cut off from it, and it is then uncoupled, and the supplemental hose B coupled to the other car in place of it, when the disabled hose can be supported by the hook G until the next station is reached, when it can be removed and a sound hose put in place in readiness to replace the other hose in case it should become disabled. The uncoupling and coupling of the sections, so as to change from one to the other, is readily done without any material loss of time, and the delays and annoyances experienced under present conditions and arrangement are overcome.

The construction is simple, and can be applied at very small cost to pipes already in use on the cars.

Many modifications in the details of construction and arrangement of parts can be made without departing from the spirit of my invention, although the construction which shows the separate cut-offs in the forks or branches of the pipe is considered the best. For instance, instead of the form of the Y shown in Fig. 1, the T form of branch pipes shown in Fig. 3 may be employed, and instead of using separate cut-offs in the branches, as shown, I may use a three-way valve in the fork of the Y-pipe, as shown in Fig. 4. The same objects sought by the branch pipes shown in Figs. 1, 2, 3, and 4 can be accomplished by using two instead of one main supply air or steam pipe under each car or engine-tender and having a hose-coupling to each end of both pipes, the pressure being equal in both pipes. Under such a

construction as shown in Fig. 5, by means of the cut-offs C C at each end the air or steam can be thrown through either hose-coupling, A or B, as in the case of the double or branch ends, to one pipe. The double ends to one main pipe, however, are preferable, owing to its being much the cheapest mode of attaching the two hose-couplings, the only thing necessary for the purpose being the Y-pipe, besides being easier to reach, as they are close together and more compact than the other form. The double ends can be one above the other, as shown, or side by side. The cut-offs C C should be on opposite sides, so that they can be easily handled.

Whenever a hose-coupling is disabled a new one should be supplied at a terminal point or at a point where the train stops long enough for it to be done without delay to the train. It can then be put in service, and the auxiliary hose hung up for the next emergency, or the auxiliary hose can be continued in service and the new hung up as an auxiliary hose.

Having described my invention and set forth its merits, what I claim is—

1. The combination, with a steam or air brake supply-pipe of a railway-car, of a branch pipe connected with said pipe at each end of the car, a hose connected with said supply-pipe for coupling it with the pipe of an adjoining car, a supplemental hose normally uncoupled and attached to the branch pipe with the free end suspended beneath the car, and adapted to be coupled with the pipe of the adjoining car in event of the primary coupling-hose becoming disabled, a hook for suspending the free end of the supplemental hose, and valves in the pipes to cut off the air or steam from one hose-coupling and direct it into the other, substantially as described.

2. The combination, with a steam or air brake supply-pipe of a railway-car, of a forked pipe connected to said supply-pipe at each end of the car, a primary coupling-hose for connecting one branch of said forked pipe with the pipe of an adjoining car, and a valve to said hose, a supplemental hose normally uncoupled and having its free end supported beneath the car and its other end connected with the second branch of said pipe, while the free end is in readiness to be coupled with the pipe of the adjoining car in the event of the primary coupling-hose becoming disabled, and a valve for controlling the passage of air or steam through such supplemental hose, substantially as and for the purposes set forth.

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

GEORGE W. VERNON.

Witnesses:
EWELL A. DICK,
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