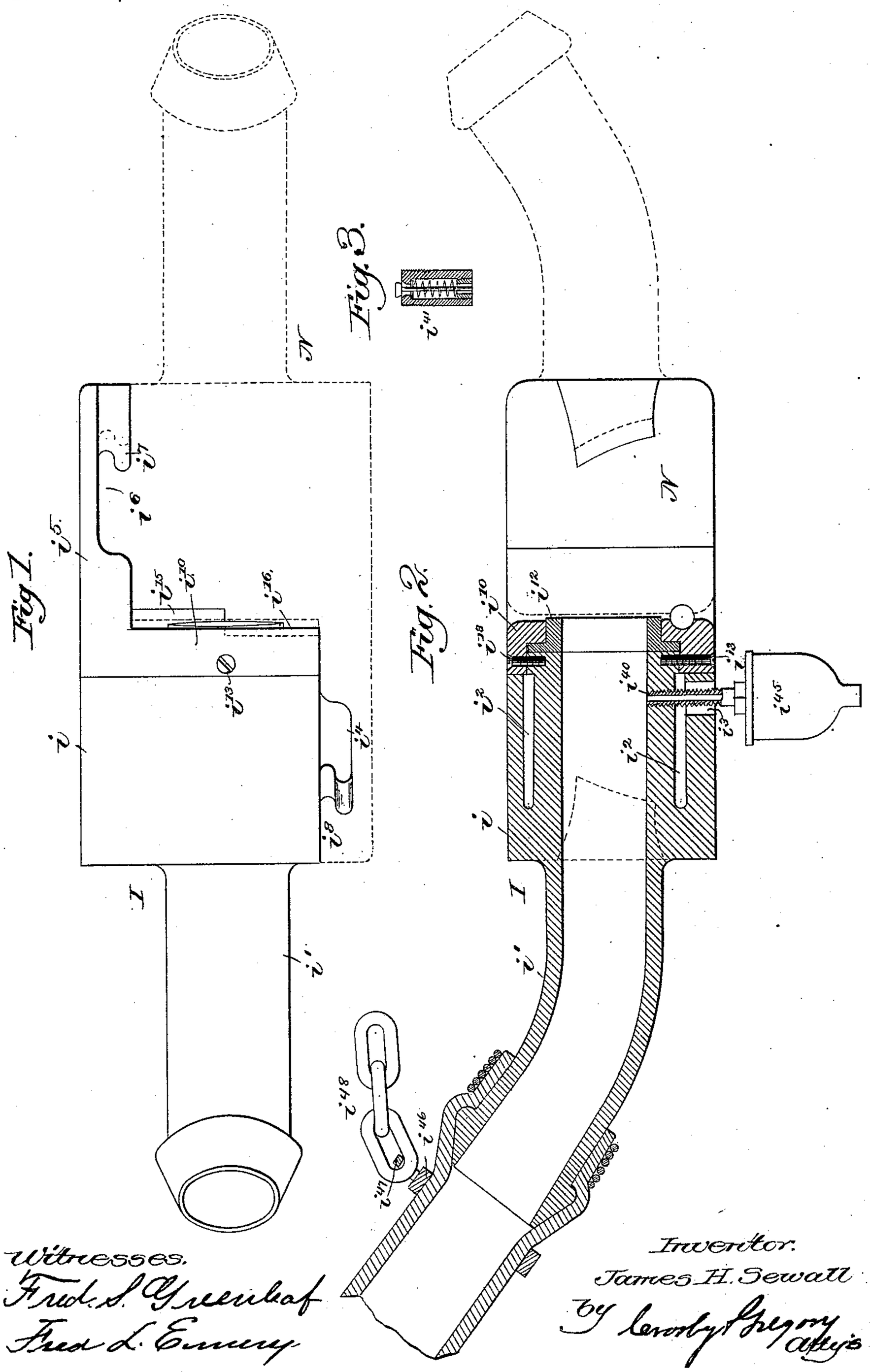
(No Model.)

J. H. SEWALL.

HOSE COUPLING.

No. 421,110. Patented Feb. 11, 1890.



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES H. SEWALL, OF PORTLAND, MAINE, ASSIGNOR TO THE CONSOLIDATED CAR HEATING COMPANY, OF ALBANY, NEW YORK.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 421,110, dated February 11, 1890.

Application filed November 2, 1887. Serial No. 254,065. (No model.) Patented in Canada November 30, 1887, No. 28,117, and in England January 2, 1888, No. 35.

To all whom it may concern:

Be it known that I, JAMES H. SEWALL, of Portland, county of Cumberland, State of Maine, have invented an Improvement in Hose-Couplings, (for which I have received Letters Patent in England, No. 35, January 2, 1888, and in Canada, No. 28,117, November 30, 1887,) of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to construct a hose-coupling especially adapted for connecting hose between two cars or between a car and a locomotive for conveying steam from the locomotive-boiler to the cars, and is an improvement upon the hose-coupling shown in United States Patent No. 363,553, granted to me May 24, 1887.

My invention consists in a two-part hose-coupling composed of two like halves or portions, each having a steam-passage through it and a groove or recess around the said steam-passage to present an air-space adjacent to said steam-passage to prevent or to effectually retard condensation of steam; also, in details of construction, substantially as will be hereinafter more fully pointed out.

Figure 1 shows in top view a hose-coupling embodying this invention, one half being shown in full lines and the other half in dotted lines; Fig. 2, a longitudinal section of the coupling shown in Fig. 1, and Fig. 3 a vertical section of a spring-controlled valve controlling the drip-passage.

The two halves I N of the coupling herein shown being substantially alike, only one will be described.

The half or portion I of the coupling is composed of the shell or casing i, having attached to or cast integral with it the nozzle i', the whole having a passage or opening through it for steam. The shell or main body i of the portion I is provided around the steam-passage with a groove or recess i^2, (having at one side a drip passage or opening i^3,) which presents an air-space adjacent to the steam-passage, which prevents or effectually retards condensation of steam. The end portion or piece i^{10}, having a hole through it and reamed out to receive a flanged gasket i^{12}, and also to fit upon the end of the shell i, as best shown in Fig. 2, is secured thereto by screws i^{13}, to thereby form a rigid part of the shell. The shell i is provided at one side with a projection i^4, extending in the arc of a circle about the hinged joint-connection to be described as a center, and the end piece or portion i^{10}, attached to the shell, is provided at the opposite side with a broad extension i^5, which is provided with a recess i^6 of suitable shape to receive the projection i^4, the recess formed in the extension i^5 being of such shape as to leave a rib or flange i^7, which enters the groove i^8 of the projection i^4 of the opposing half of the coupling. The abutting face of the end piece i^{10} is provided at its lower side with a transverse rib i^{15}, and in line with or in continuation of said rib the end portion is grooved, as at i^{16}, to receive the rib of the opposing half of the coupling corresponding to the rib i^{15}, while the said rib i^{15} enters the groove in the opposing half of the coupling corresponding to the groove i^{16}, so that the two ribs and grooves co-operating together form a hinge-joint about which the sections or halves may be turned as a center in one direction only—namely, upward.

The locking devices herein shown lock the coupling against lateral and downward separation, thereby only permitting it to be separated by an upward movement.

The locking devices herein shown are also shown in the patent referred to, and also in the application, Serial No. 237,561, filed by me May 9, 1887, to which reference may be had, so I do not herein lay claim thereto.

The shell i is tapped at its under side coincident with the opening i^3 to receive a nipple i^{40}, passing through the opening i^3, which is somewhat larger in diameter than the nipple, and a small steam-trap i^{45} is secured to the nipple, to thereby provide an automatic controlling device for the drip-passage.

In lieu of the trap, a spring-controlled valve i^{41}—such as shown in Fig. 3—may be used, it being screwed into the shell to communicate with the steam-passage.

I have herein shown the hose to which the

halves of the coupling are attached as provided with rings, as i^{46}, having eyes i^{47}, to which is attached a chain i^{48}, to be connected to any stationary part of the platform, and thereby keep the halves of the coupling from hanging down sufficiently to strike the sleepers or a guard-rail.

In my patent, No. 375,572, dated December 27, 1887, and which was based upon an application concurrent with this, I have reserved for this application the broad claim for the generic invention of the two cases, and have claimed only the species therein shown—viz., a two-part hose-coupling composed of like halves or portions, each of which is composed of a nozzle having a steamway and an attached surrounding shell, between which nozzle and shell an air space or recess is provided. In the present case I do not use the nozzle; neither do I use the external shell in the specific construction shown, although I intend to claim, and do claim herein, broadly, a coupling constructed in either way, or, however constructed, in which the steam-passage is surrounded by an air space or recess in the coupling itself, as distinguished from a coupling which is jacketed by means of an extraneous structure—that is to say, I herein claim the invention common to both the device of this patent and of the construction shown in this case coextensively with the reservation clause beginning on line 103 of page 1 and ending on line 5 of page 2 of the specification of that patent, excepting as said claims are inherently inapplicable to the invention of the patent.

I claim—

1. A two-part hose-coupling composed of like halves or portions, each half having a steam-passage through it and an air-space surrounding the steam-passage, substantially as described.

2. The combination of the two like halves, each composed of a shell i, having a steam-passage through it, and an air-space i^2 surrounding the steam-passage, the gasket i^{12}, and the end portion i^{10}, recessed to receive the gasket and securely fitted to the end of the shell, substantially as described.

3. The combination of like halves, each composed of a shell i, having a steam-passage through it and a drip-passage leading from the steam-passage at the lowest part thereof for the escape of water of condensation, and a controlling device for the drip-passage, an air-space surrounding the said steam-passage, and an outlet for said air-space, substantially as described.

4. A two-part hose-coupling composed of like halves, each having a continuous unobstructed steam-passage through it, and locking devices to connect the two for service, and each having in and as part of itself an air-space surrounding the steam-passage, as distinguished from a jacket applied externally to the coupling, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES H. SEWALL.

Witnesses:
FRED V. CHASE,
JOS. T. WOODWARD.