(No Model.)

J. F. McELROY.

HOSE COUPLING.

No. 486,118. Patented Nov. 15, 1892.

Fig. 4. Sec. 1-1.

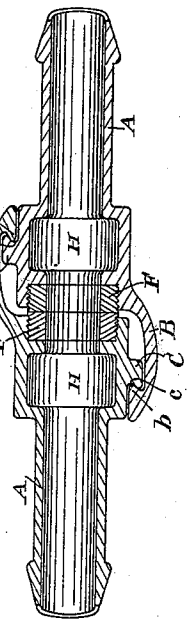


Fig. 6.

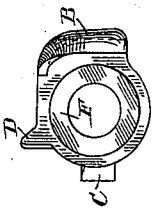


Fig. 5.

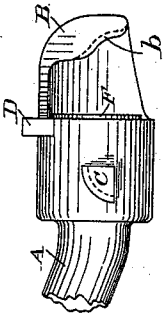


Fig. 7.

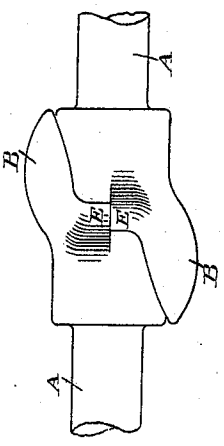


Fig. 1.

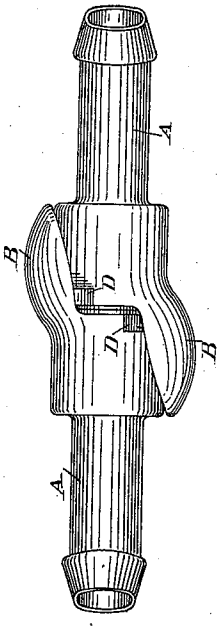


Fig. 2.

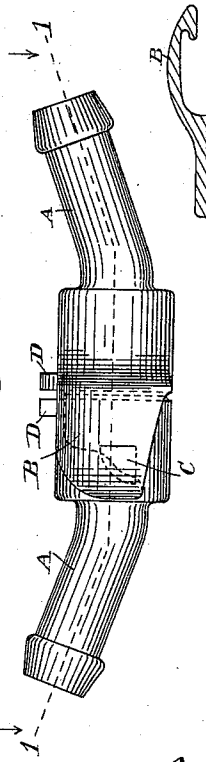


Fig. 8.

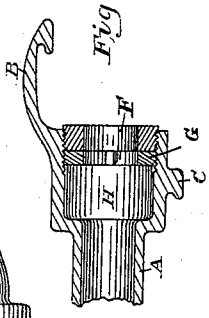
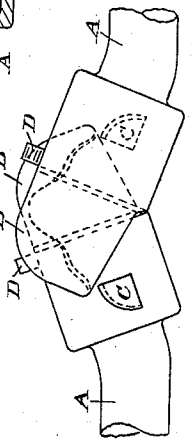


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES F. McELROY, OF ALBANY, NEW YORK, ASSIGNOR TO THE CONSOLIDATED CAR-HEATING COMPANY, OF SAME PLACE.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 486,118, dated November 15, 1892.

Application filed December 9, 1891. Serial No. 414,506. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. McELROY, a citizen of the United States, residing at the city and county of Albany, State of New York, have invented a new and useful Improvement in Hose-Couplings.

My invention relates to devices for connecting hose-pipes; and the object of my invention is to construct a hose-coupling adapted particularly for uniting hose between two cars for conveying steam from the locomotive-boiler to the cars, and so arranged that the coupling may be broken automatically by the separation of the cars. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan. Fig. 2 is a side elevation showing the two parts of the coupling united. Fig. 3 shows the manner of opening the coupling. Fig. 4 is a horizontal section along the lines I I on Fig. 2. Fig. 5 is a side elevation of one-half of the coupling. Fig. 6 is an end elevation. Fig. 7 is a modification of Fig. 1. Fig. 8 is a horizontal section similar to Fig. 4, showing one manner of arranging the gasket.

Similar letters refer to similar parts throughout the several views.

The two halves of the coupling herein shown being substantially alike, a description of one will be sufficient.

Heretofore hose-pipe couplings used between cars for the purpose of carrying steam from the locomotive have been provided with a hinged joint similar to that described in Letters Patent No. 363,553, to James H. Sewall, dated May 24, 1887, or in a modified form thereof shown by Balmore and Gold in their patent, No. 462,464, dated November 3, 1891.

By the use of my invention I do away with the hinged joint described in said patents and all other locking contrivances in the interior chamber, and at the same time I provide a means of coupling a hose placed on a railway-train in such a manner that it may be broken automatically and which will perform its work positively, and which is more simple in its operation and inexpensive in construction than that of any other hose-coupler with which I am familiar.

Each half of my coupler is preferably constructed of a single piece of metal having an upwardly-pointing neck or end A, which is attached to the hose to be coupled, the body portion having a passage through it for water, steam, air, or other fluid, and provided with an internal chamber H, entirely devoid of any hinging device whatever.

Each half of my coupler is provided with a wing B, which is formed upon the side of the body of the coupler and extends beyond the coupler-head, overlapping the adjoining half of the coupler, and is provided near its end with the projecting flange *b*, fitting into the recess *c* in the cam-lug C. On the side of each coupler opposite the wing B, I arrange the cam-shaped lug C, which is provided with said recess *c*, of suitable shape to receive the projection *b* on the end of the wing B, as shown in Fig. 4. The wings B B thus extend beyond the coupler-heads and come into contact with the cam-lugs, respectively, and securely unite the parts of the coupler. It is evident, however, that by this construction a rotary motion will take place between the two coupler-heads while the coupling is being made. In order to stop this rotary motion when the coupling is completed, I place a lug D on each of the coupler-heads in such a position that the wings B B will be retarded in their rotary motion by coming into contact with them when the coupling is made, and thus prevent further rotation of the coupler-head. I have thus formed a secure and rigid hose-coupling.

In Fig. 7 I have shown a modification by means of which the lugs D D may be omitted, substituting therefor the shoulders E E upon the adjacent sides of the wings B B, so arranged that the shoulders E E shall come into contact when the coupling is made, and thus prevent rotation of the coupler-head.

For the purpose of attaching the gasket, as shown in Fig. 4, I construct a female thread in the coupler-head, so that the gasket can be screwed into its place. It is evident that the gasket may be adjusted to make a tight joint by using a shim for a backing and screwing the gasket tightly against it.

Another method of adjusting the gasket is that shown in Fig. 8, in which the threaded portion of the head extends to the internal chamber H of the coupler and is there pro-

vided with a threaded ring G, which may be made to screw in or out with the gasket and provides a firm backing for the gasket when the coupling is connected.

In order to open my coupler, it is simply necessary to press the center portion thereof upward, which may be done by operating the upwardly-pointed necks A A. Thus the coupling, hanging by gravity between the cars, will remain locked, unaffected by the motion of the train; but when the cars are uncoupled and separate the necks A A are pulled by the hose attached to the separating cars and the center of the coupling is raised, disconnecting the coupler-heads.

My hose-coupling is very simple in its construction and positive in its operation, performing the work required of it in a satisfactory manner.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A two-part hose-coupling composed of two like halves or portions, each half consisting of a body portion having a suitable passage therethrough, a locking-wing, a projecting flange near the end of said locking-wing, and a cam-lug with which the projecting flange on the locking-wing engages to make the coupling, said locking-wing coming into contact with the locking-wing on the adjoining coupler-head when the coupling is made, substantially as described, and for the purpose set forth.

2. A two-part hose-coupling composed of two like halves or portions, each half consisting of a body portion having a suitable passage therethrough, a coupler-head provided with a female screw, a gasket screwed into said coupler-head and extending into the internal chamber of the coupler, a threaded ring in contact with said gasket in the internal chamber, a locking-wing, a cam-lug with which the locking-wing engages, and projections for the purpose of retarding the rotation of the coupler-head, substantially as described, and for the purpose set forth.

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