

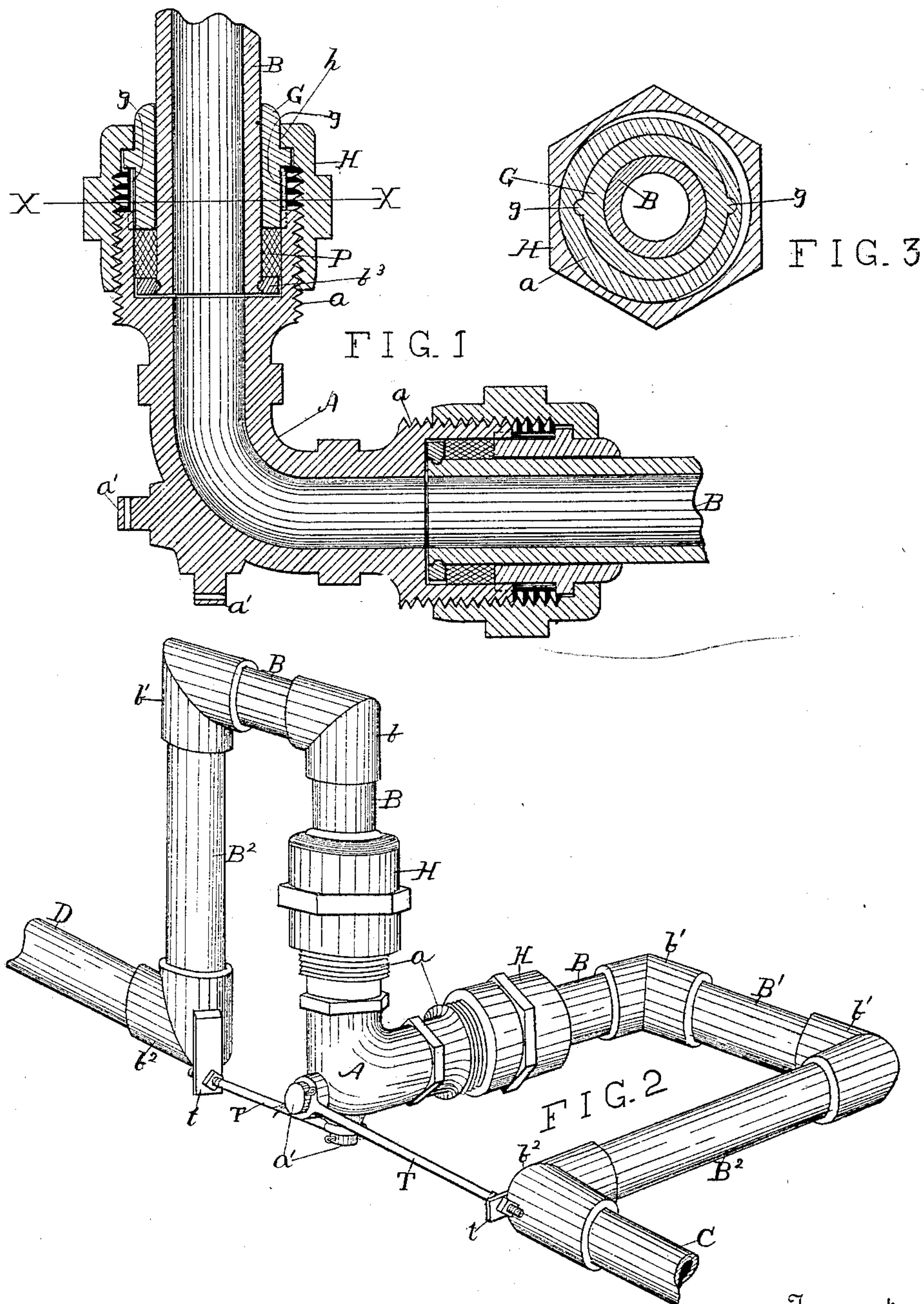
(No Model.)

L. D. JOBES.

STEAM FITTING FOR RAILWAY CARS.

No. 398,620.

Patented Feb. 26, 1889.



Witnesses,

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# UNITED STATES PATENT OFFICE.

LESLIE D. JOBES, OF ERIE, PENNSYLVANIA.

## STEAM-FITTING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 398,620, dated February 26, 1889.

Application filed December 14, 1888. Serial No. 293,616. (No model.)

*To all whom it may concern:*

Be it known that I, LESLIE D. JOBES, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Steam-Fittings for Railway-Cars; and I do hereby 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.

This invention relates to steam-fittings for railway-cars; and it consists in improvements in the construction of the universal joint in the steam-conduits at the ends of the cars, as will be hereinafter fully described, and pointed out in the claims.

My invention is illustrated in the accompanying drawings as follows:

Figure 1 is a longitudinal section through the joint. Fig. 2 is a perspective view of the joint and its connections. Fig. 3 is a transverse section through one of the joints on the line  $xx$  in Fig. 1.

Like letters of reference designate like parts in all the figures.

The construction and operation of the device are as follows:

Fig. 2 shows the position of all the parts when the pipes are all in place. C marks the pipe which connects with the service-pipes of the car. D marks the pipe which connects with a like pipe on the adjoining car by means of a coupler. The slip-joint and coupler are not shown, as they form no part of my invention. A is an elbow having screw-threaded joint-sockets  $a a$  at its ends and pivot-lugs  $a' a'$ , which set at right angles to each other and in an extension of the axial line of the joint-sockets  $a a$ . T T are tie-rods, which are journaled on the pivots  $a' a'$  and are adjustably secured at their opposite ends to lugs  $t$  on the elbows  $b^2 b^2$  on the pipes C and D. The elbow A has its arms extending at right angles to the tie-rods, one arm being horizontal and the other vertical, and the two elbows  $b^2 b^2$  have their arms, which are not connected with the pipes C and D, arranged so that the one on the pipe C lies horizontal and parallel with the horizontal

arm of the elbow A and the one on the pipe D stands vertical and parallel with the vertical arm of the elbow A. In the sockets  $a a$  of the elbow A are swiveled goose-necks, which may be of one pipe, or made, as shown, of the pipes B B' B<sup>2</sup> and elbows  $b b'$ . These goose-necks have their ends B<sup>2</sup> fixed in the elbows  $b^2 b^2$ , respectively. When the whole device shown in Fig. 2 is in place on a car, the end D will be the free or movable end, and the end C will be the fixed end. It will be seen that the pipe D can be moved in any direction desired—horizontally, vertically, or in a circle.

In Figs. 1 and 3 the construction of the stuffing-boxes by which the pivoted ends of the goose-necks are packed is shown, as follows: The pipe B has a flange,  $b^3$ , at its lower or inner end. The packing P is put in as commonly. The gland or follower G has on its outer lower side a spline,  $g$ , and the socket  $a$  has on its inner wall a groove to receive the spline  $g$ , and the nut H goes over the socket  $a$  and grapples with the follower G by an internal flange,  $h$ . This form of stuffing-box is particularly desirable for the place on account of its compactness and because it will keep dust off of the working-faces. The object of the spline and groove is to keep the follower from turning with the pipe B and working the nut H loose.

I am aware of the constructions shown in the following patents: English Patent No. 5,839 of 1882; United States Patents Nos. 193,679, of July 31, 1877; 210,459, of December 3, 1878; 276,186, of April 24, 1883; 289,120, of November 27, 1883; 331,806, of December 8, 1885, and 393,908, of December 4, 1888.

While my present construction embraces many primary features which are found in some or all of the constructions cited, such features do not constitute my present invention.

What I claim as new is—

1. The elbows A, having sockets with stuffing-boxes at the ends of its arms and pivot-lugs  $a'$  at its angle in axial line with said sockets, in combination with two goose-necks swiveled and packed in said sockets and the tie-rods T, journaled on said pivot-lugs  $a'$

and adjustably connected with lugs on the swinging ends of said goose-necks.

2. The elbow A, having externally-screw-threaded and internally-grooved sockets *a* at its ends and pivot-lugs *a'* on opposite sides of its angle in axial line with said sockets, goose-necks pivoted in each of said sockets, splined glands on said goose-necks fitting in said grooved sockets, nuts on said sockets acting on said glands, and tie-rods pivoted on

said pivot-lugs and adjustably connected with the swinging end of the goose-neck, which is pivoted concentrically therewith.

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

LESLIE D. JOBES.

Witnesses:

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