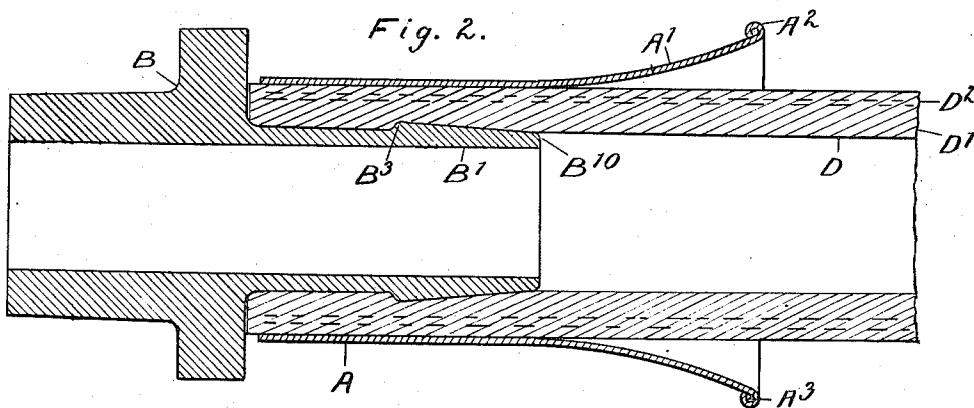
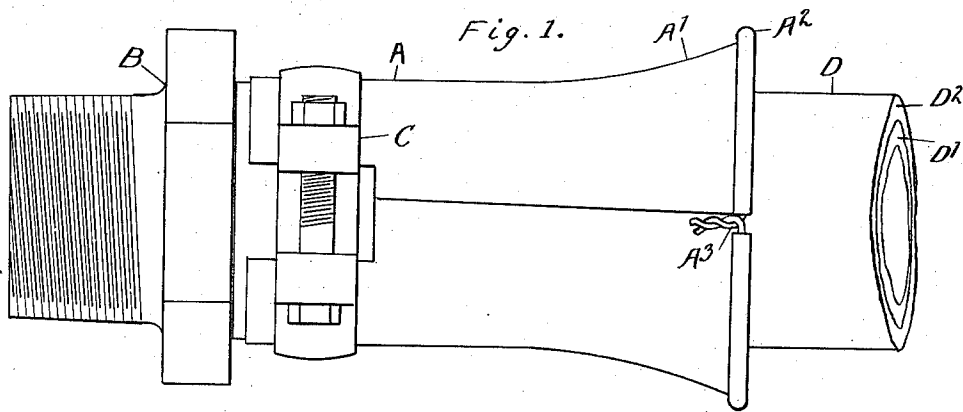


R. W. BURNETT.
HOSE PROTECTOR.
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1,044,013.

Patented Nov. 12, 1912.



WITNESSES

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RICHARD WEBB BURNETT, OF MONTREAL, QUEBEC, CANADA.

HOSE-PROTECTOR.

1,044,013.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed December 14, 1910. Serial No. 597,182.

To all whom it may concern:

Be it known that I, RICHARD WEBB BURNETT, a citizen of the United States of America, residing at No. 42 The Linton, Montreal, Quebec, Canada, have invented new and useful Improvements in Hose-Protectors, of which the following is a specification.

This invention relates to improvements in means for supporting and protecting the flexible hose of air brake or steam heating systems on railway cars and more particularly to the ends connecting with the train pipes.

The object of the invention is to provide a device which will protect the end of the hose where it covers the nipple of the train pipe and which will support and protect the hose beyond the end of the nipple while allowing the utmost flexibility of the hose. Reference is made to the annexed drawings in which:

Figure 1 is a side view, Fig. 2 is a sectional view.

The improved hose protector and support comprises a sleeve A which, in certain aspects of the invention, is constructed of sheet metal. This sleeve is split longitudinally throughout its length, whereby it is divided into opposing sections adapted to confine the hose and to overlap each other at their side edges, as hereinafter described. The metallic connection which, in practice, is secured to the car frame, is indicated at B, and it is provided with an outwardly directed tubular nipple B¹ having an intermediate exterior ridge B², and an outer edge B¹⁰, there being a groove intermediate the ridge B² and the body portion of the nipple. The hose D is fitted over the nipple B¹ in the usual manner, extending over the groove just mentioned which is formed by the provision of the ridge B². The hose preferably consists of an inner rubber edge D¹ and a reinforcing cover D². The sleeve A is clamped over the hose, in order to confine the latter firmly in the nipple groove, by means of a suitable clamp C embracing the inner ends of the sleeve sections, said clamp being capable of adjustment in order to hold the inner end portion of the hose into the nipple groove with the required amount of pressure. The side edges of the sleeve sections overlap each other slightly, as previously intimated, in order to wholly inclose the hose and to protect and support it efficiently, without the possibility of wear.

It will be noted that the outer end portion or mouth of the sleeve is curved or flared away from the hose. The sleeve extends outward considerably beyond the outer edge B¹⁰, of the nipple, and the flare begins at a point approximately over or opposite the outer edge B¹⁰, the sleeve sections closely confining the hose and holding it against the nipple approximately throughout the area constituted by the outer curved surface of the whole nipple. This is one of the important features of the invention, inasmuch as a certain amount of flexibility of the hose is permitted at a point immediately beyond the nipple edge, but on the other hand it is not possible for the hose to be bent to any great extent adjacent the outer nipple edge, by reason of the curve given to the flared portion A¹ of the outer sleeve end.

A further important feature of the invention resides in the fact that the flare at the outer end of the sleeve is capable of adjustment within certain limits, the adjusting means coöperating with the clamp C to hold the sleeve sections together in exactly the relation desired. This effect is produced by providing means at the outer extremity of the sleeve to draw the sleeve sections together to the desired extent, these means preferably comprising a wire or the like A³, the ends of which may be twisted together, as shown, in order to hold the sleeve sections in the desired position, with the desired amount of flare. Owing to the fact that the sleeve sections are constructed of sheet metal, it is possible to draw said sections together to a greater or less extent by tightening or loosening the wire A³. This wire is preferably confined in the rolled edge at the extremity of the sleeve, as shown, and such rolled edge prevents the abrasion of the hose when the latter is bent or twisted in any direction.

With a sleeve closely fitting over the hose where it covers the nipple and with a rigid curved flare extending from just beyond the outer edge of the nipple, the hose is protected from outside injury the whole length of the sleeve and is supported from the edge of the nipple in such a way that the utmost flexibility is secured to the hose while the inner tube is protected from being cut or chafed by the edge of the nipple and all kinking or creasing of the hose is prevented. This is secured by the gradual curve of the flared end of the sleeve which permits of

only a safe bend to the hose. Furthermore the rim of the flared end of the sleeve prevents any chafing on the surface of the hose.

Having now described my invention and its mode of operation, what I claim and desire to secure by Letters Patent is:—

1. The combination with a nipple and a hose fitted over the same, of a longitudinally split sleeve embracing the hose and confining it around the nipple, said sleeve comprising sheet metal sections, means to clamp said sections on the nipple, and means at the outer extremity of the sleeve to adjustably secure said sections together.
2. The combination with a nipple, and a hose fitted over the same, of a sheet metal sleeve split longitudinally to form sections confining the hose against the nipple over substantially the whole outer surface of the latter and flaring away from the hose beyond the outer nipple end, and means in connection with the outer extremity of the sleeve to draw the sleeve sections together and thereby change the flare.
3. A hose protector comprising a longi-

tudinally split sleeve the sections of which have overlapping edges and flared end, and a wire embracing the sleeve sections at the extremity of the flared ends and affording means to adjustably draw the sections together.

4. The combination with a nipple, and a hose fitted over the same, of a longitudinally split sheet metal sleeve embracing the hose around the nipple, the sleeve extending out beyond the nipple end and being flared from a point substantially over said end to the outer extremity of the sleeve, means to clamp the sleeve sections on the nipple, over the hose, and a wire associated with the outer extremity of the sleeve, to adjustably draw the sleeve sections together.

Signed at Montreal this twenty-first day of November, 1910, in the presence of two witnesses.

RICHARD WEBB BURNETT.

Witnesses:

HANBURY A. BUDDEN,
M. E. E. HAIL.