Nov. 29, 1927. 1,650,737

J. J. QUINN

FITTING

Filed Aug. 17, 1926

Fig. 1.

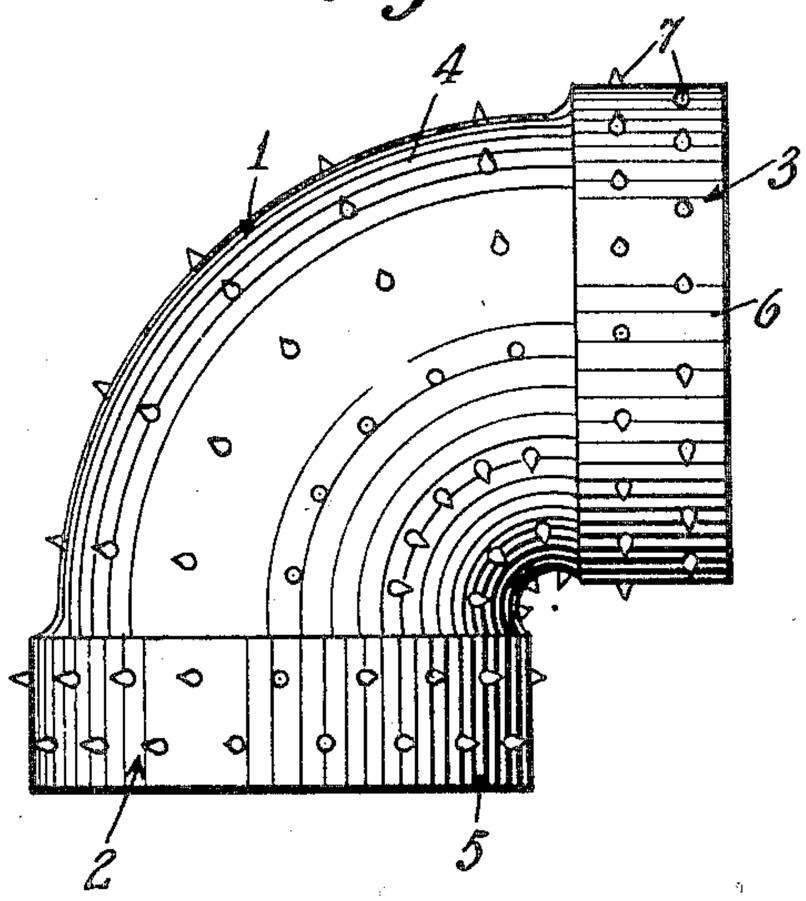


Fig. 2.

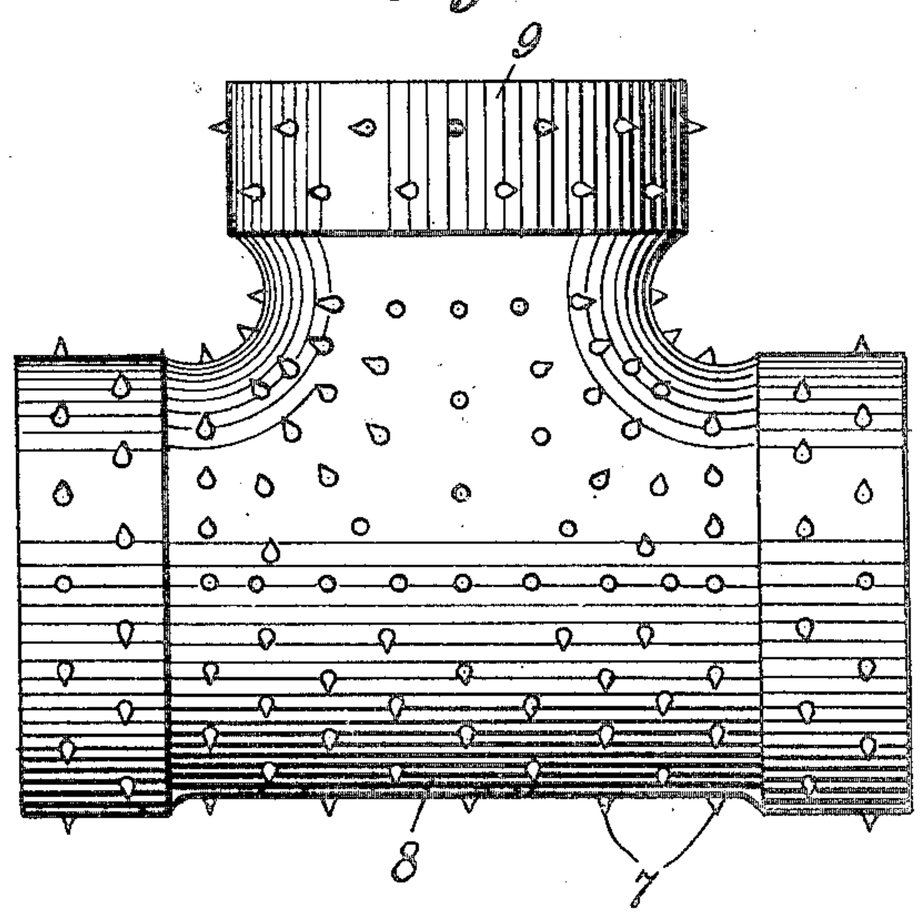
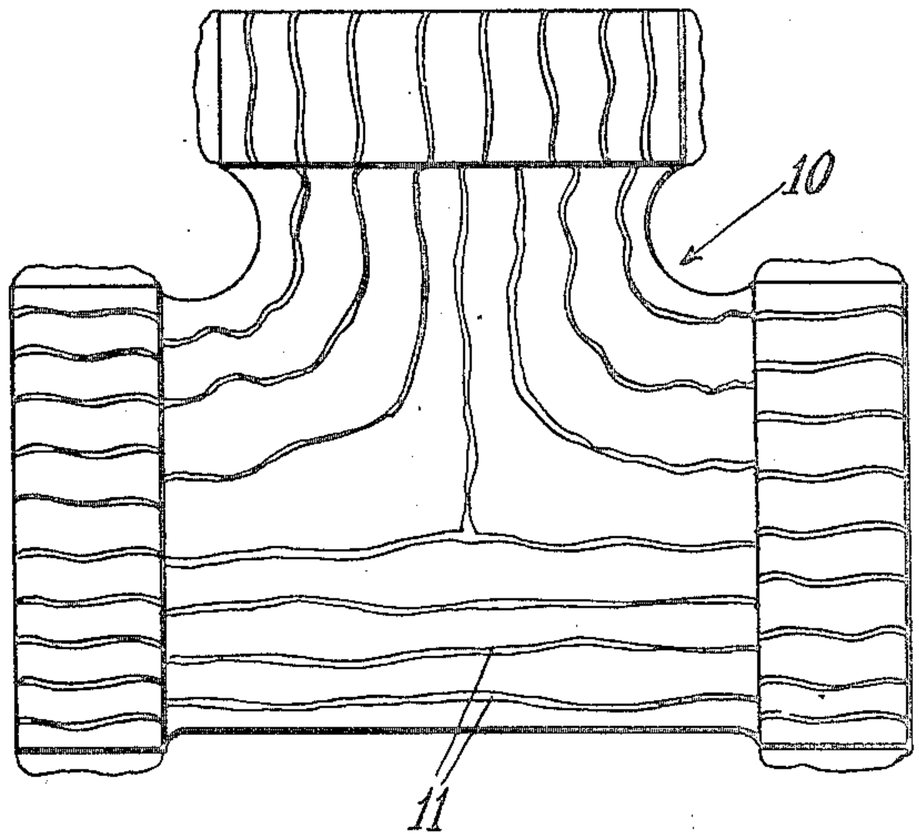


Fig. 3.



INVENTOR

BY

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Patented Nov. 29, 1927. 1,650,737

UNITED STATES PATENT OFFICE.

JOHN J. QUINN, OF ENGLEWOOD, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO JEREMIAH J. LANE, OF ENGLEWOOD, NEW JERSEY.

FITTING.

Application filed August 17, 1926. Serial No. 129,705.

This invention relates to a fitting for a pipe line which it is desired to insulate, as by a coating of asbestos material. By the word "fitting" as employed in this application, I refer to those devices for joining together a plurality of pipes which are out of axial alinement with each other. This is the generally accepted meaning of the word in the trade. Straight lengths of pipe have been coated with asbestos by known methods and in an efficient manner, but in coating a fitting such as an elbow or a T difficulty has been experienced. It is the present practice to coat the fittings by plastering the material thereon. The exterior of the fitting is smooth and furnishes a poor bond for the material. It has been customary to wire the fitting or to wrap it with twine or other material before applying the coating thereto. Then it has been necessary to apply the coating in two layers. The first layer has to be given time to dry and then it is necessary to return later to apply the second layer. The coating during drying will shrink and crack. In order to hasten the drying of the first layer it has been customary to heat the pipe as by building a fire in the heating plant of which the fitting forms a part.

It is the object of my invention to provide a fitting of novel and improved form which shall avoid the expensive procedure outlined above and which shall permit the coating to be applied in one layer and to be applied rapidly without the heating of the pipe.

A further object of my invention is to provide a fitting which shall retain a coating thereon and prevent its cracking or shrinking.

A still further object of my invention is to provide a fitting which shall not only perform the above functions, but shall also provide a grip for a wrench or other tool which the ordinary fittings do not provide.

In the accompanying drawings in which I have shown a selected embodiment of my invention

Figure 1 is an elevation of an elbow fitting constructed according to my invention.

Figure 2 is an elevation of a T fitting having my invention embodied therein.

Figure 3 is an elevation of a T fitting showing another form which my invention may take.

Referring now to the drawing in detail and more particularly to Figure 1, I have shown therein a fitting in the form of an elbow 1 having the two branches 2 and 3, which are joined together by the curved portion 4, and which have the usual flanges to connect the fitting to pipes. The curved portion 4 is the part to which it is very difficult to apply the coating. A coating of asbestos material is about one-half inch thick when applied to one inch pipe, and therefore it is difficult to make such a thick coating adhere to the rounded surface of the fitting. The same is true to a great extent of the coating which must be applied to the flanges 5 and 6 at the ends of the branches 2 and 3. As stated above, it has been customary to apply one layer, dry the same, and then apply the second layer to form the required thickness. The first layer has been held on the pipe by wiring or the like, which will corrode in time and cause loosening of the coating.

In order to avoid the above difficulty and the others mentioned, I provide a plurality of projections 7, extending outwardly from the surface of the fitting. These projections may be formed in a variety of ways, but I have shown them here as comprising a plurality of pointed lugs cast integral with the fitting, a construction which I have found to be very efficient. The number and arrangement of these lugs may be varied as desired.

In Figure 2 I have shown a T fitting formed of two intersecting branches 8 and 9, and having applied to the outer surface thereof the pointed lugs 7.

In Figure 3 I have shown a T fitting 10 having its outer surface formed with a plurality of corrugations 11, preferably made in the wavy form shown.

Other forms may suggest themselves to those skilled in the art, but the gist of my invention resides in a fitting having the outer surface provided with outwardly extending projections. These may be formed in any way so long as the roughened surface is provided to hold the coating in place and to prevent its shrinkage. It will be noted that the projections are relatively short so as to be completely embedded in the covering or coating and completely covered thereby. I have found that with my invention a coating may be applied very rapidly to a fitting and by a helper instead of by more skilled labor. All that is necessary to do is to apply the plastic material with the hand and smooth it over with a trowel.

The entire work is done in a very short time and it is not necessary for the laborer to return at a later time to finish the job. The saving of labor has been found to be approximately 50% of the amount of labor required by the older methods in prior use.

The roughened surface formed by the projections will not only hold the coating in place and prevent shrinkage thereof, but will also furnish a grip for a wrench or other tool, thus greatly aiding the ease with which the fitting is installed. As is well known to those skilled in the art fittings are provided with flanges such as shown in the drawing and these flanges are provided with screw-threads on their interior, which threads are adapted to engage corresponding threads on the exterior of pipes, the ends of which are received within the flanges. By this means two or more pipes are joined together by a fitting. The roughened surface on my fitting furnishes a convenient grip for tightening of a fitting upon a pipe to which it may be applied.

I am aware that various changes in details may be made within the scope of my invention and I do not intend to limit myself except by the appended claim.

I claim:

As an article of manufacture, a pipe fitting adapted to join together a plurality of pipes out of axial alinement with each other, said fitting having its outer surface provided with relatively short projections adapted to bind a heat resisting plastic material to the fitting to prevent cracking thereof, and adapted to be completely embedded in said material.

In testimony whereof, I have affixed my signature to this specification.

JOHN J. QUINN.