Sept. 2, 1930. E. A. SMITH 1,774,732

INSULATING COVERING FOR FITTINGS

Filed Sept. 14, 1927

Fig. 1.

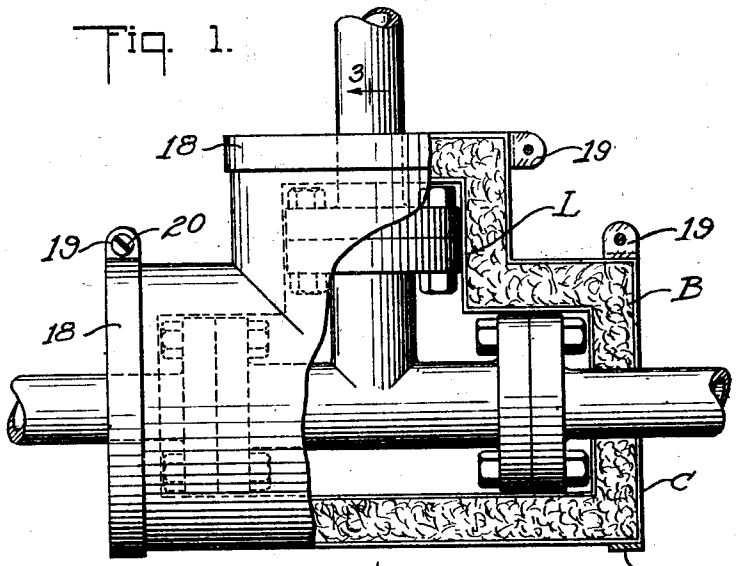


Fig. 2.

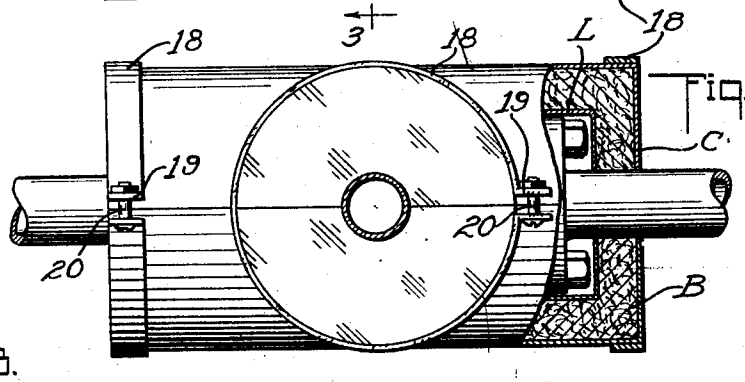


Fig. 3.

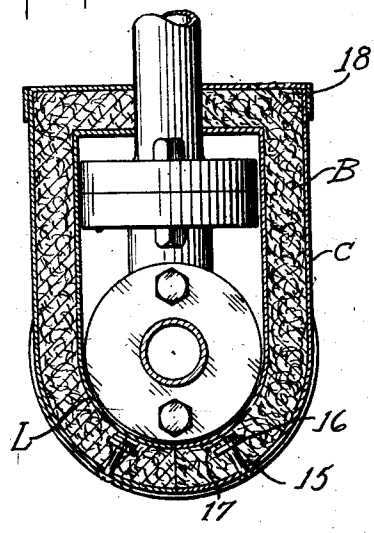


Fig. 4.

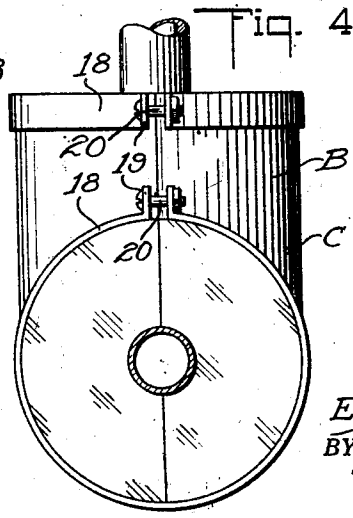
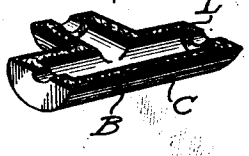


Fig. 5.



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UNITED STATES PATENT OFFICE

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INSULATING COVERING FOR FITTINGS

Application filed September 14, 1927. Serial No. 219,539.

My invention relates to pipe fittings, flanged or otherwise, such as are used in heating systems, and it has particular reference to insulating coverings therefor which, as heretofore practiced, involve the tedious operations of first applying to a fitting a covering coat of cement, then the insulating casing, usually asbestos or an asbestos composition, and then a finishing coat of cement covered by canvas or any other suitable fabric. To effect the repair of leaky joints of the fitting, it is of course necessary to destroy the insulating casing to effect its removal and thus gain access to the fitting. This obviously renders the material employed unfit for further use and thus necessitating complete rebuilding of the covering, in the manner described, to again insulate the fitting.

It is a purpose of my invention to provide an insulating covering for flanged and similar pipe fittings which is capable of being quickly applied to the fitting to the elimination of the time and skill required in the old method above referred to, and when applied insulating the fitting more effectively by reason of the formation of a dead air space between the covering and the fitting.

It is also a purpose of my invention to provide a covering which, incident to repair, can be readily removed from the fitting without in any manner injuring the covering, thus permitting it to be reused indefinitely.

I will describe only one form of insulating casing embodying my invention and will then point out the novel features in claim.

Fig. 1 is a view showing in side elevation and partly in section one form of insulating casing embodying my invention in applied position to a flanged pipe fitting;

Fig. 2 is a plan view of the insulating covering in applied position to the fitting and with a portion of the covering in section;

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1;

Fig. 4 is a view showing an insulating covering in end elevation and in applied position to the fitting; and

Fig. 5 is a perspective view of one of the casing sections on a reduced scale.

Referring specifically to the drawings, my invention in its present embodiment is shown applied to a flanged fitting of T form, and consequently the covering is constructed to adapt itself to this particular form of fitting although it will be understood that the construction of the covering can be varied to render it adaptable to other forms of fittings such as elbow, Y, and cross fittings. The casing in the present instance is in the form of a hollow housing split longitudinally so as to divide it into two companion sections adaptably connected to each other to permit the ready application and removal of the covering to or from the fitting, and when in applied position providing a dead air space between the housing and the fitting, which greatly adds to the heat insulating properties of the cover.

Specifically, the covering comprises a sectional body B formed of any suitable heat insulating material such as asbestos, mineral wool, and diatomaceous earth. The two sections of the body are identical in construction so that when assembled with their confronting edges in contacting relation, they produce a T-shaped housing in which the pipe fitting is enclosed.

The insulating body B is incased in a protecting casing C preferably, although not necessarily, formed of sheet metal and made of two sections corresponding in form to the sections of the body so that when assembled they completely incase the body so as to effectively protect the latter. The body is permanently secured to the casing in any suitable manner such as, for example, by applying silica of soda to the contacting surfaces of the body and casing, or by the application of screw bolts 15 thereto in the manner illustrated in Fig. 3. As here shown, the screws 15 extend through the casing C and through washers or plates 16, the inner ends of the screws being engaged by nuts 17. The washers and nuts are countersunk, as shown in order to permit the application of a protecting liner L to the inner surface of the insulating body for the purpose of protecting such body against the deteriorating action of water and rust emanating from the fitting.

The sections of the casing C, and conse-

quently the sections of the insulating body, are adapted to be secured to each other to produce the housing for enclosing the fitting, and to this end I provide split bands 18 removably fitted on the end portions of the casing and having out-turned ends to provide ears 19 through which bolts 20 are extended for constricting the bands into firm clamping relation with respect to the casing sections so as to hold the entire insulating covering in embracing relation to the fitting. With the covering in applied position, as illustrated in Figs. 1, 2, and 3, it will be clear that the covering provides a heat insulating medium for the fitting by reason of the heat insulating material employed. Further, however, the covering combines a dead air space in surrounding relation to the fitting which further adds to the insulating property of the covering as a whole.

To remove the covering from the fitting it is only necessary to first move the bands 18 when the two sections can be removed from opposite sides of the fitting, and without, in any manner, injuring the parts of which the covering is composed and thereby permitting the indefinite reuse of the covering as will be understood.

Although I have herein shown and described only one form of insulating casing embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claim.

I claim:

An insulating covering for pipe fittings comprising a sectional body of heat insulating material shaped to house a fitting and to surround pipes extending from the fitting so as to completely house the latter, a sectional liner for the body shaped to provide dead air spaces between the latter and flanges of the fitting and projecting beyond the latter to surround the pipes extending from the fitting, a sectional protecting casing for the body separate from the liner, means for securing the body to the casing, and means for securing the casing sections to each other.

EDWARD A. SMITH.