

(No Model.)

F. B. MOTT.

COMPOSITION FOR STEAM PIPE AND BOILER COVERINGS.

No. 462,057.

Patented Oct. 27, 1891.

Fig. 1.

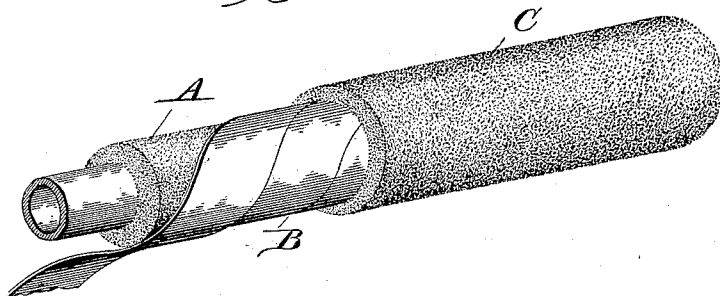
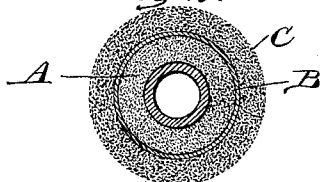


Fig 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK B. MOTT, OF PROVIDENCE, RHODE ISLAND.

COMPOSITION FOR STEAM PIPE AND BOILER COVERINGS.

SPECIFICATION forming part of Letters Patent No. 462,057, dated October 27, 1891.

Application filed May 11, 1891. Serial No. 392,356. (No specimens.)

To all whom it may concern:

Be it known that I, FRANK B. MOTT, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Compositions for Steam Pipe and Boiler Coverings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a section of steam-pipe provided with my improved covering, showing the manner of putting on the two layers of coverings; and Fig. 2 is a transverse sectional view of the pipe and its two layers of covering.

Like letters of reference denote corresponding parts in both the figures.

The invention relates to plastic compositions for covering steam-boilers, steam-pipes, and other hot surfaces to prevent loss of heat by radiation and also to protect the covered surfaces; and it consists in the peculiar combination of ingredients, which will be hereinafter more fully described and claimed.

To prepare and apply this composition, I use the following ingredients, to wit: wool waste, asbestos, marl, graphite, and rice, mixed with water and boiled; but mixed in slightly-different proportions, according to whether it is to be used for the inner or outer layer or application, two separate coatings of the composition being used as a rule, in order to produce the best results. For the inside layer or first coat, which is applied direct to the pipe or boiler, these several ingredients are mixed in the following proportions by weight: wool waste, fifty parts; asbestos, twenty parts; marl, fifteen parts; graphite, fourteen parts; powdered rice, one part. These several ingredients are finely comminuted, mixed with a suitable quantity of water, and boiled for about half an hour. It is then taken off the fire and set aside to cool, and when cool enough to handle it is applied to the pipe,

boiler, or other article to be covered with a trowel or other suitable implement in an even layer about one inch thick, which, while still in a plastic state, is wound spirally with a band of muslin B or other suitable textile fabric. After this first layer or coating (shown at A) has become dry and hard the second or outside coat C is put on over the muslin covering, and to prepare this I vary the proportions of the ingredients somewhat, as follows: wool waste, forty parts; asbestos, thirty parts; marl, twenty parts; graphite, nine parts; ground rice, one part. These ingredients are comminuted as before, mixed with water, and boiled, and are then after cooling applied to the covering of textile fabric B in a layer about one-half inch thick. After this second and final coat has become hard and dry the covering is complete.

The powdered rice serves as a binder for the other ingredients, possessing great adhesive properties, so that when dry a very tough, strong, and durable covering is the result.

This covering, being a poor conductor of heat, will effectually prevent loss of heat by radiation, and, unlike many compositions intended for the same purpose, it does not crack or peel off. It will be found to adhere closely to the pipe and resist the action of heat better than any other covering with which I am acquainted, as it does not char or burn, but retains its solidity and anti-radiating qualities under all conditions, even when subjected to the action of excessive heat.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The herein-described composition for coating heat-radiating surfaces, consisting of wool waste, asbestos, marl, graphite, and powdered rice, in the proportions substantially as specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

FRANK B. MOTT.

Witnesses:

JOHN ANDERSON,
ELIAS H. LEDERER.