

(No Model.)

W. M. SUHR.

COVERING.

No. 397,822.

Patented Feb. 12, 1889.

Fig: 1.

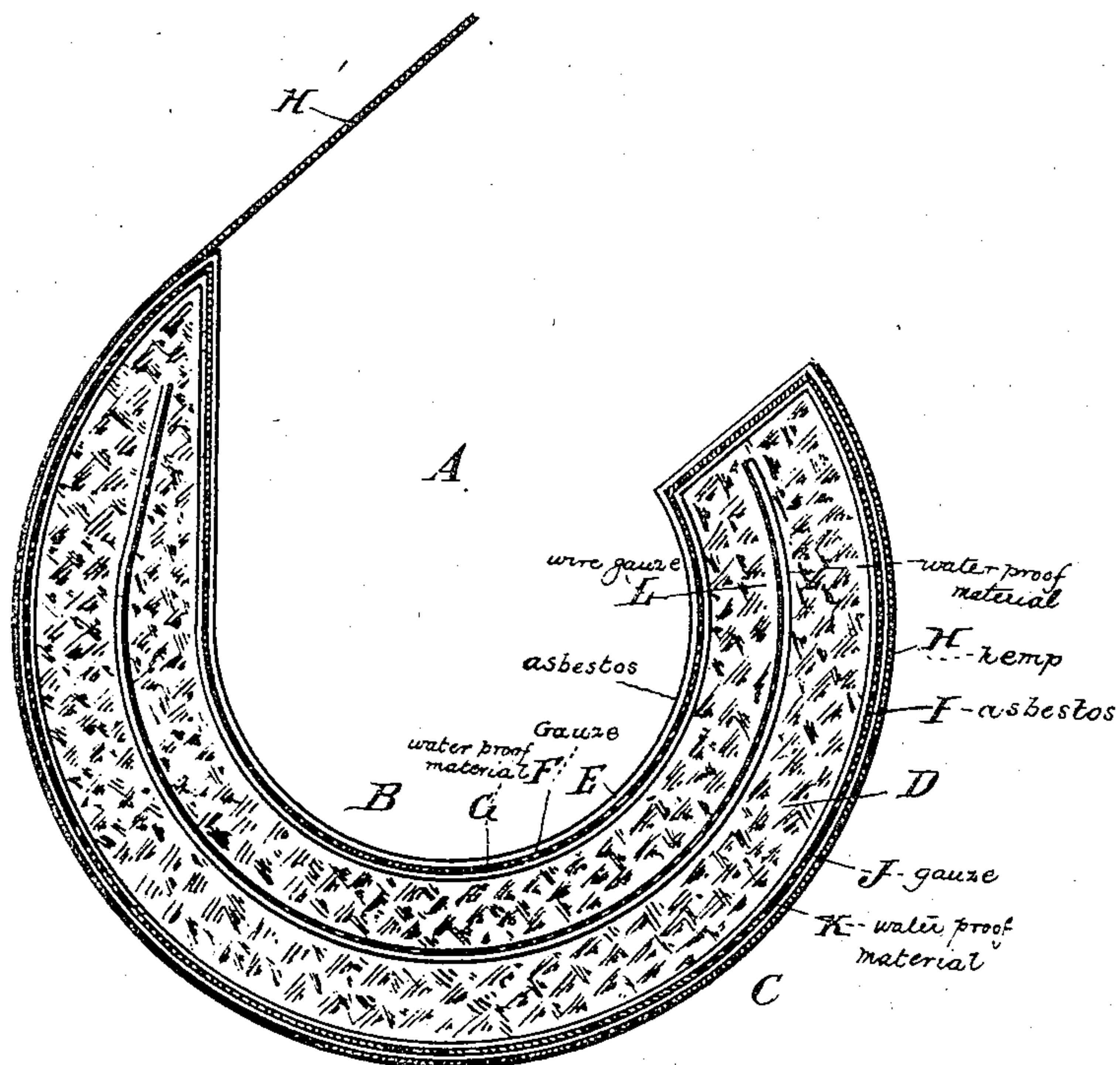
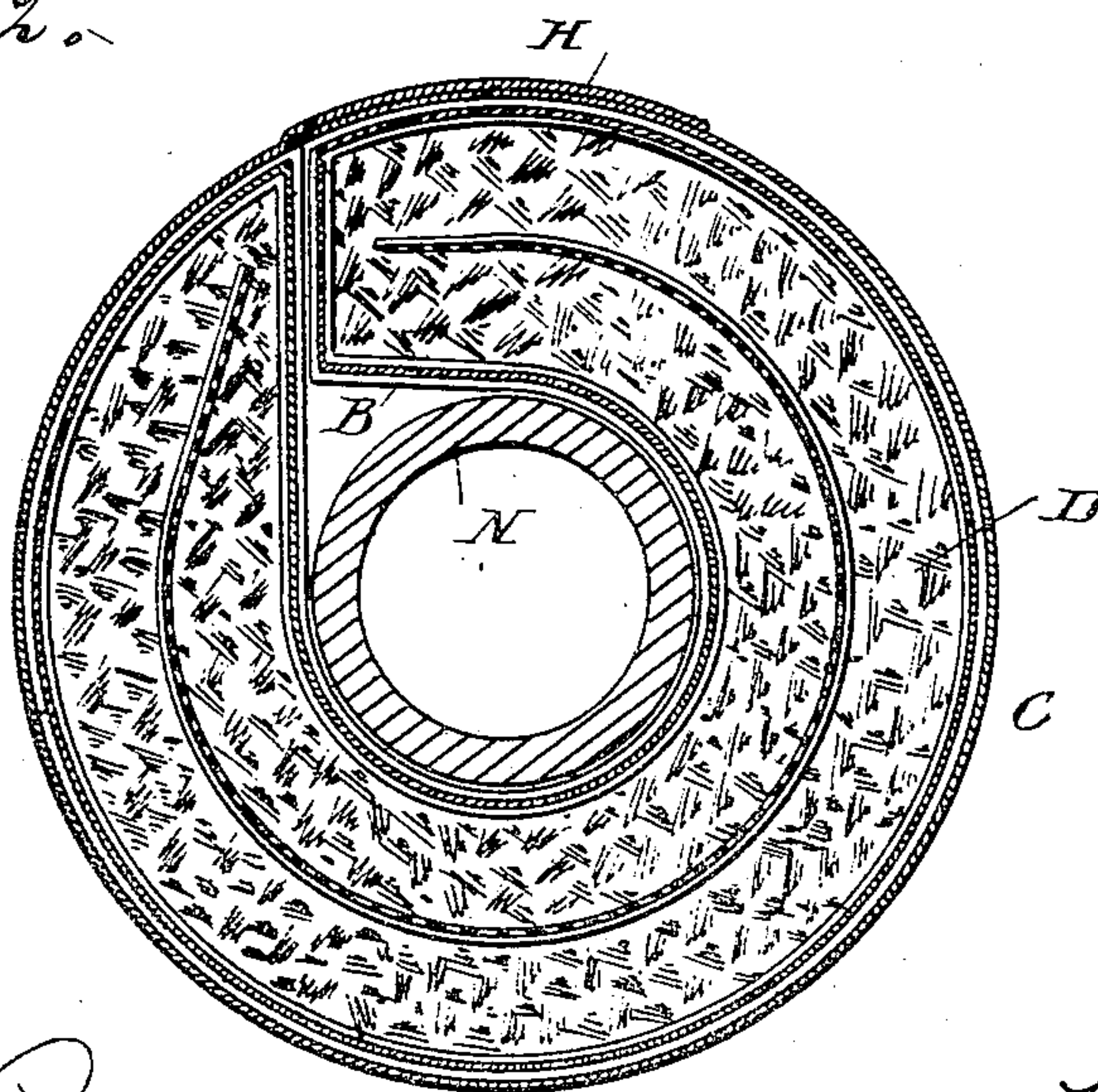


Fig: 2.



WITNESSES:

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COVERING.

SPECIFICATION forming part of Letters Patent No. 397,822, dated February 12, 1889.

Application filed April 17, 1888. Serial No. 270,936. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. SUHR, of the city, county, and State of New York, have invented a new and Improved Covering, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved covering adapted for protecting boilers, steam or water pipes, or any hot or cold surfaces requiring a non-conductive and protecting covering.

The invention is an improvement in the covering for which Letters Patent No. 383,599 were granted to me May 29, 1888; and it consists of a covering provided with an inner wall composed of fire-proof material, gauze, and water-proof material, of an outer wall composed of fabric, fire-proof material, gauze, and water-proof material, and of a filling located between the said two walls and made of mineral wool, rock wool, or similar substance.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional end elevation of the improvement in an open position, and Fig. 2 is a like view of the same in a closed position as applied to a pipe.

The improved covering A is provided with an inner wall, B, and an outer wall, C, between which is placed a filling, D, made of a non-conducting and protecting material—such as mineral wool, rock wool, asbestos fiber, hair, cork, or like substance. The inner wall, B, is made of three layers, of which the outer one, E, is made of fire-proof material—such as asbestos—on the inside of which is glued or otherwise secured the gauze F, which is again covered by the third layer, G, formed of water-proof material. The outer wall, C, is composed of four layers, of which the outer one, H, is formed by a fabric of cotton, hemp, wool, or other similar material saturated in a fire-proof liquid—such as silicate of soda,

alum, or other substance. The layer I next to the fabric H is of fire-proof material—such as asbestos—and is covered by a gauze, J, soaked in a fire-proof substance—such as silicate of soda—and this gauze J is covered by a water-proof material, K, similar to the one above described in relation to the inner wall, B.

The fabric H is provided with an overlapping end, H', adapted to lap over, as shown in Fig. 2, so as to secure the covering firmly to the pipe N or to the boiler to which it is to be applied, the overlapping end H' being secured by tacks, glue, or in any other suitable manner to the other end of the fabric.

In order to hold the filling D in place between the two walls, I employ a stiffener, L, placed in the middle of the filling D, and preferably made of wire-gauze covered by a water-proof or fire-proof material such as that above described in reference to the inner and outer walls, B and C.

The entire covering is made either in sheets for covering straight surfaces or in the manner illustrated in the drawings, so as to be better applied to curved surfaces, as boilers, pipes, &c. The sides of the covering are then left open, so that the pipe can be placed on the inner wall, B, as shown in Fig. 1, and then the sides are closed until they meet and locked in place by the overlapping end H' of the fabric H.

It will be seen that the covering protects the boiler, pipe, or other surface to which it is applied from both heat and water, being non-conductive, water-proof, and fire-proof. The water-proof material forms a protection against moisture and exposure to water or steam.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A pipe-covering comprising an inner and outer wall between which is placed a filling, said inner and outer walls each being made of a fire-proof material, a water-proof material, and gauze between said fire-proof material and water-proof material, substantially as shown and described.

2. In a covering, an inner and an outer wall,

each made of a fire-proof material, a water-proof material, and a connecting-gauze between the two, in combination with a filling placed between the two said walls and a fabric secured on the outer wall and provided with an overlapping end, substantially as shown and described.

5 3. In a covering, an inner wall and an outer wall, each made of a fire-proof material, a

water-proof material, and a gauze between the two, in combination with a filling placed between the said two walls and a stiffener placed in the said filling, substantially as shown and described.

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Witnesses:

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C. SEDGWICK.