

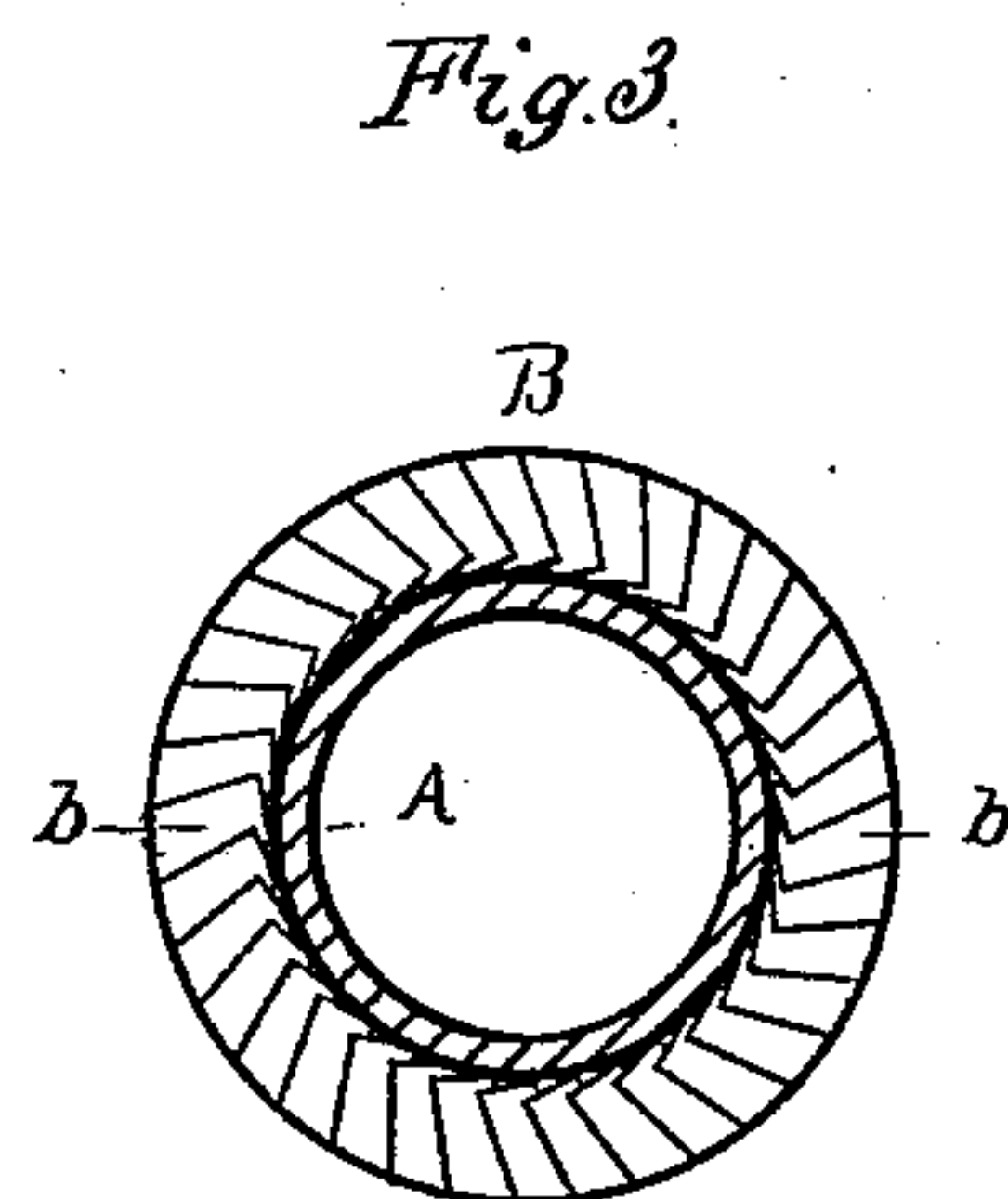
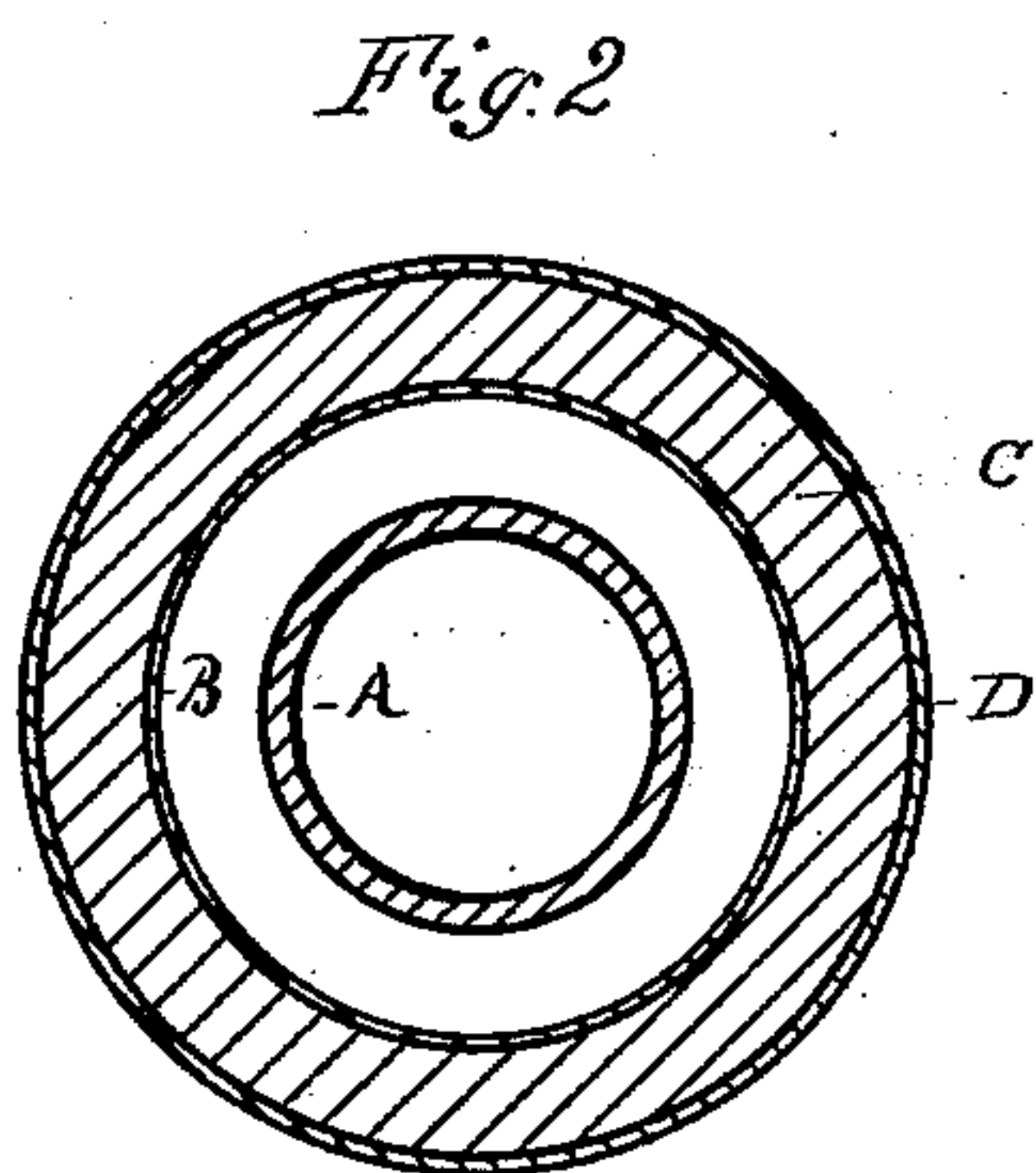
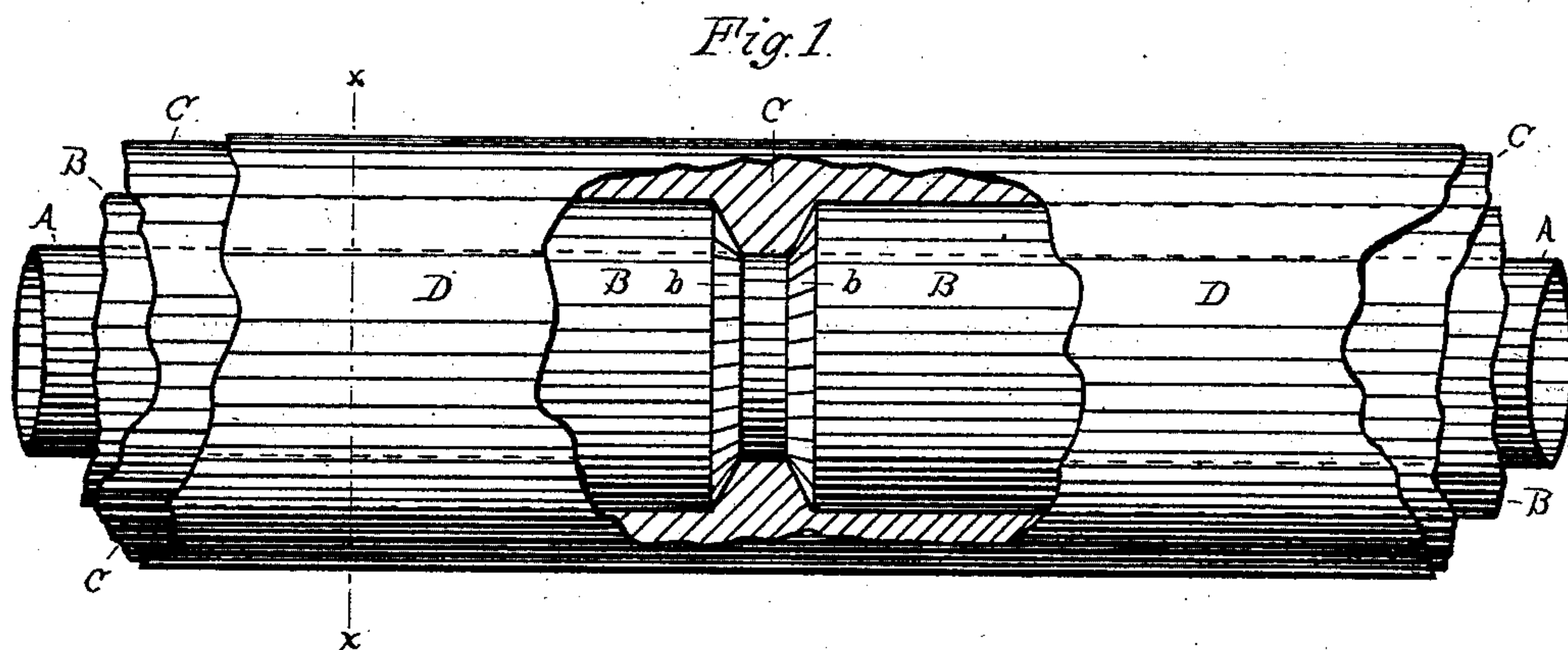
(No Model.)

M. FLEGLE.

COVERING FOR STEAM PIPES, BOILERS, &c.

No. 348,959.

Patented Sept. 14, 1886.



Witnesses:

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UNITED STATES PATENT OFFICE.

MARTIN FLEGLE, OF MINNEAPOLIS, MINNESOTA.

COVERING FOR STEAM PIPES, BOILERS, &c.

SPECIFICATION forming part of Letters Patent No. 348,959, dated September 14, 1886.

Application filed March 15, 1886. Serial No. 195,354. (No model.)

To all whom it may concern:

Be it known that I, MARTIN FLEGLE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Coverings for Steam-Pipes, Boilers, &c., of which the following is a specification.

My invention relates to a non-conducting covering for pipes, boilers, &c., to prevent radiation of the heat.

The objects of the invention are to provide a covering which is non-combustible, which is effective as a non-conductor of heat, and which is adapted to permit expansion of the pipes or other surfaces covered without affecting the efficiency of the covering.

My invention is illustrated in the accompanying drawings, in which Figure 1 shows a section of pipe provided with my improved covering. Fig. 2 is a transverse section on the line xx of Fig. 1, and Fig. 3 is an end view of one of the tubular coverings for the pipe.

A represents a steam-pipe. B B are tubular sheet-metal coverings for incasing and forming air-spaces around the pipe. The covering is made in sections, preferably about two feet long, and the ends of the sections are placed about three-eighths of an inch apart. The ends b are slit at frequent intervals, and are crimped inward at an angle, preferably of about sixty to seventy degrees, and the tubular sections are held out from the pipe by these bent ends b . The edges of the sheet metal forming the tubes are held together by angle-joints or in any well-known manner. The tubular covering should stand out from the pipe sufficiently to form an air-space of about five-eighths of an inch between the pipe and covering. Surrounding the tubular covering is a non-conducting composition, C, put on in a plastic state and allowed to dry and shrink on the tubular covering about the pipe. The space between the ends of the tubes B is filled with this plastic compound, so that the air-spaces formed by the tubes are separated from each other. The bent ends b being somewhat flexible allow expansion of the pipe A without breaking the surrounding composite material C.

Any well-known composition adapted to the purpose may be used for the covering C; but

I prefer to use a composition of my own invention, which is made as follows: Three parts, by measure, of wood pulp, a like quantity, by measure, of paper-pulp, and two parts, by measure, of kaolin, mixed and reduced to a soft plastic state by water, having copperas in solution in proportion of two ounces to the gallon of water. Then one equal part, by measure, of thick flour-paste, and a like quantity of lime, thoroughly slaked and in the state commonly known as "lime-putty," are reduced to a soft plastic condition by salt-water having salt in solution in the proportion of one pound to the gallon of water, and the two mixtures are then combined, and the composition is in a plastic state ready for use. The tubes B having been fitted to the pipe and in proper position, the plastic compound is then spread around the tubes and filled into the spaces between their ends and allowed to dry and make a close fit by shrinkage. A canvas cover, D, is secured around the outside, and should be painted to exclude moisture.

I do not herein make any claim for the compound above described, but reserve the right to claim the same in a separate application for patent to be filed by me.

What I do herein claim, and desire to secure by Letters Patent, is--

1. A covering for steam pipes, boilers, &c., comprising disconnected air-spacing tubes surrounding the surface to be covered, and a non-conducting compound incasing such air-spacing tubes and sealing the ends thereof, substantially as set forth.

2. A covering for steam pipes, boilers, &c., comprising separated air-spacing tubes having inwardly-bent ends fitting around the surface to be covered, and a non-conducting compound covering said tubes and sealing the ends thereof, substantially as and for the purpose set forth.

3. The combination, with a steam-pipe or other surface to be covered, of the tubes B, having slit inwardly-bent ends b , and the non-conducting composition C, substantially as and for the purpose set forth.

MARTIN FLEGLE.

Witnesses:

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