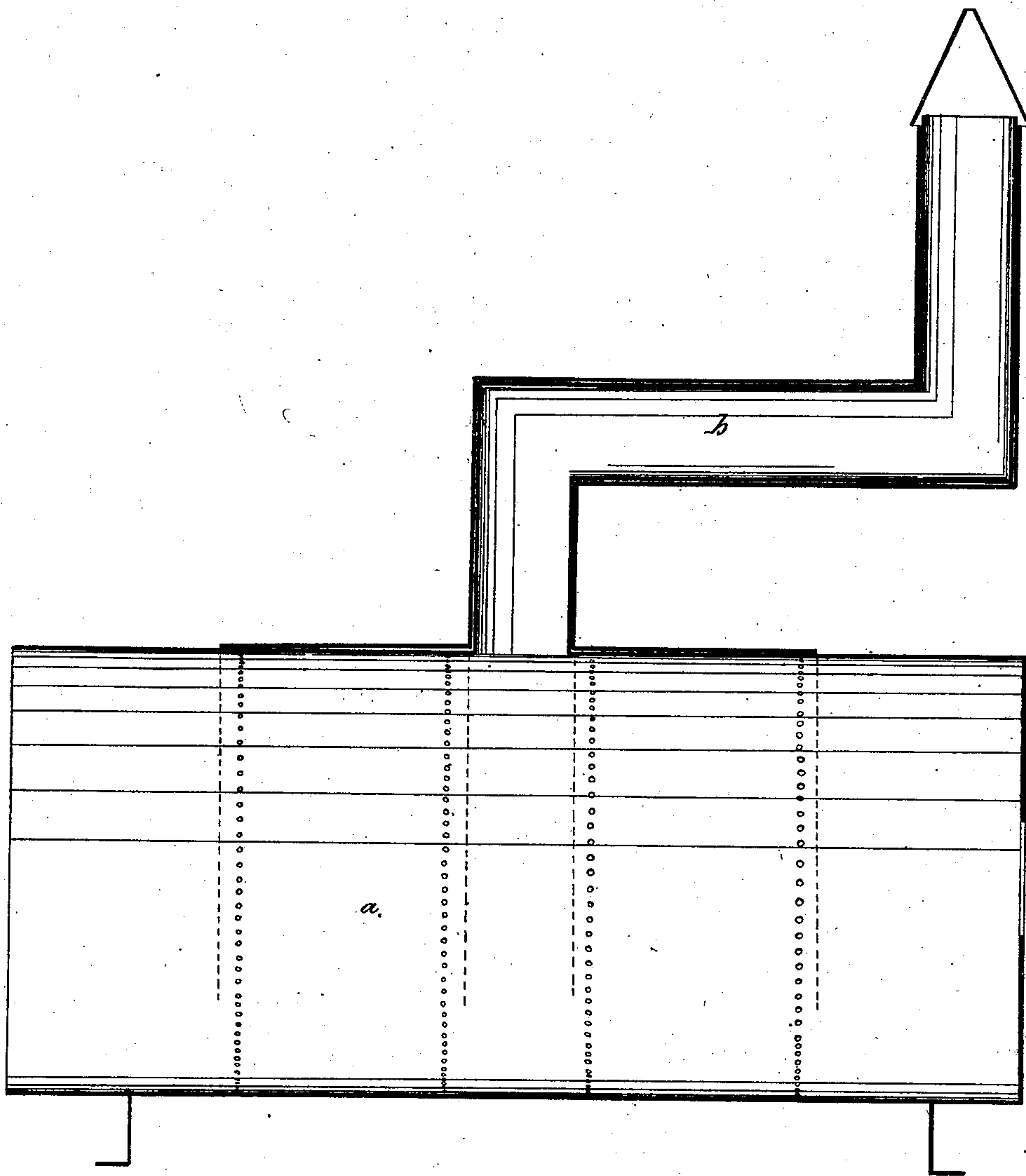


W. Peters,
Steam-Boiler Covering.
N^o 36,322. *Patented Aug. 26, 1862.*



Witnesses:

Geo. C. Lambright

J. Smith

Inventor

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by Atty Thos. D. Everett

UNITED STATES PATENT OFFICE.

WILLIAM PETERS, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF
AND ALFRED BUCK.

IMPROVEMENT IN COVERING STEAM-BOILERS.

Specification forming part of Letters Patent No. 36,322, dated August 26, 1862.

To all whom it may concern:

Be it known that I, WILLIAM PETERS, of the city of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Covering Steam-Boilers, Steam-Pipes, &c., with Non-Conducting Material; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the drawing forming a part of this specification and to the letters and marks thereon.

Covering or investing the shell of steam-boilers, steam-pipes, cylinders, &c., as practiced by Watt, Eve, and other earlier inventors, has been regarded as of considerable value, though subject to objections. When a wood casing or jacket is made use of, it is liable to become charred or fired, and thus endanger the vessel, if used on board of a steamship or boat; and when a metal jacket is used and the jacket-space is filled in with sand or earth the weight of the jacket and its filling makes the objection. One or the other of these objections exists against the use of felt, cloth, brick, clay, &c., and hence it is very desirable to have an article or substance for such covering that is not open to either of these objections. My improvement, therefore, meets the requirements and avoids the objections, it being a light and non-combustible covering and non-conducting in an eminent degree.

My invention consists in covering steam-boilers, steam-pipes, cylinders, and such other surfaces as it may be useful to invest with non-conducting substances, either to retain the heat or to protect them from heat, with sheets or slabs of a combination of asbestos and hemp, or some vegetable or animal fiber or material, or with mineral substances, a combination of asbestos with hemp; or some one or more of these substances may readily be made by subjecting the asbestos and the substances used with it to hydraulic or other pressure, the elements of the combination having been exposed to water or some other liquid or fluid, or not so exposed, as may be necessary to put the materials in a proper condition for pressure. One way of making slabs or plates or sheets of such combination is to place layers of asbestos and layers of

some animal or vegetable fiber or substance in a tub or vat, the asbestos and the other material alternating, and then to force through such layers a current of steam or water, and when the materials have become sufficiently moistened to take them out and press the mass into such form, slabs, sheets, plates, &c., as is desirable. Other ways for making this combined covering may be adopted. The character of the material used in combination with the asbestos and the special form or character of the surface to be covered will generally indicate the course of preparation to be followed.

The drawing forming part of this specification shows a boiler, *a*, and steam-pipe *b* covered in part with sheets of this composition, such sheets or covering being indicated by the blue coloring around the pipe and boiler.

The thickness of this covering may be such as may be found necessary to prevent the escape of the heat or to fully protect the surface exposed to the heat. In some instances it may be molded into the form or shape needed as a covering. This combination makes a light, non-combustible, and non-conducting coating or covering, and fulfills all the conditions and requirements of the purposes herein named. It can be placed around or upon the surfaces, and there held by bands or wires, or secured by any convenient means. In case any part or portion should be injured it can readily be detached from the other parts and its place supplied with new or other pieces. Plates, slabs, or sheets made of the asbestos and one or more of the articles herein named may be used as a sheathing for sea going or other ships and vessels.

What I claim as my invention, and desire to secure by Letters Patent, is—

Covering steam-boilers, pipes, cylinders, &c., with the sheets, plates, &c., of the composition herein named.

This specification signed this 26th day of April, 1862.

WM. PETERS.

Witnesses:

THOS. T. EVERETT,
J. W. MOHLER.