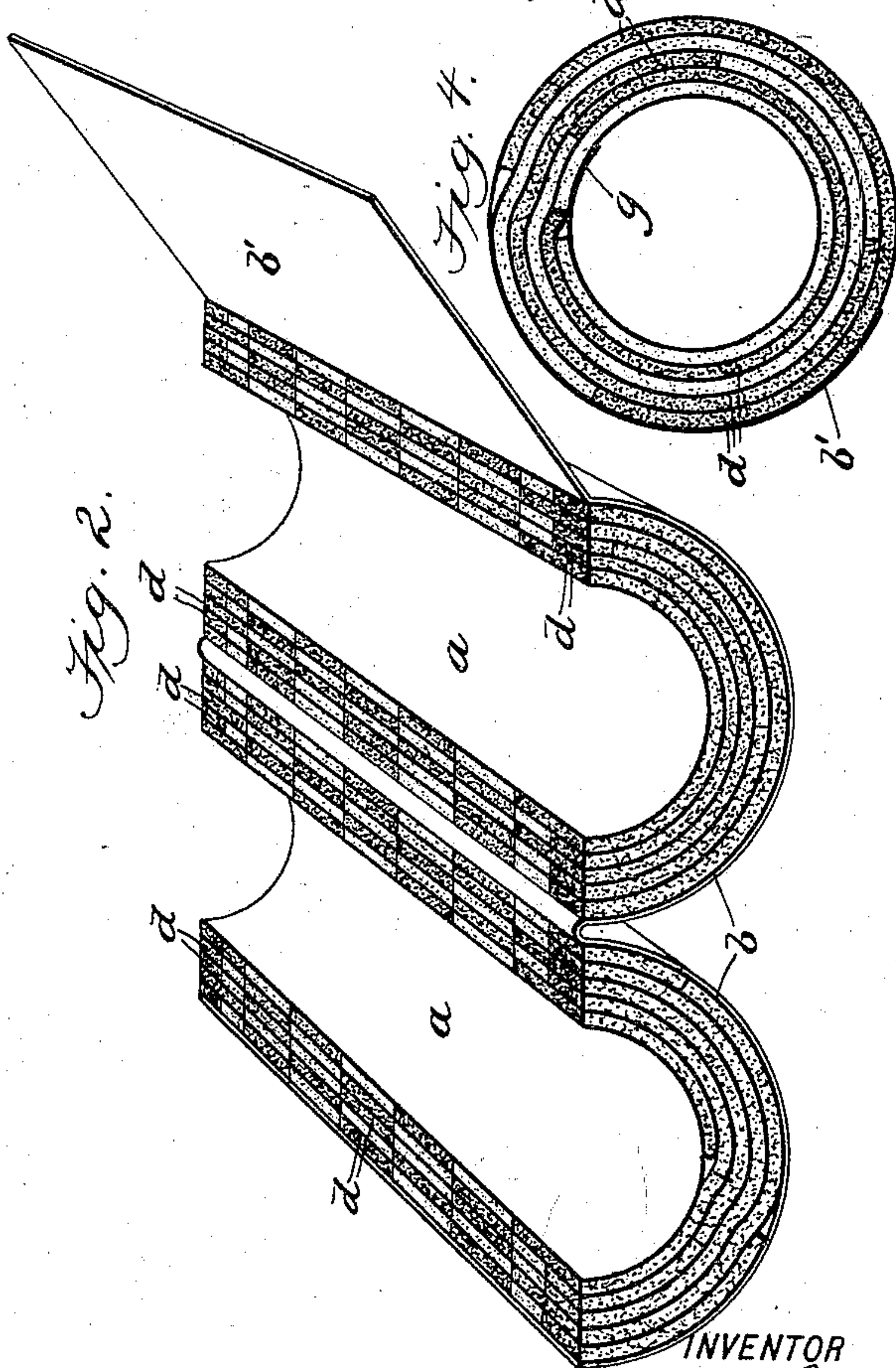
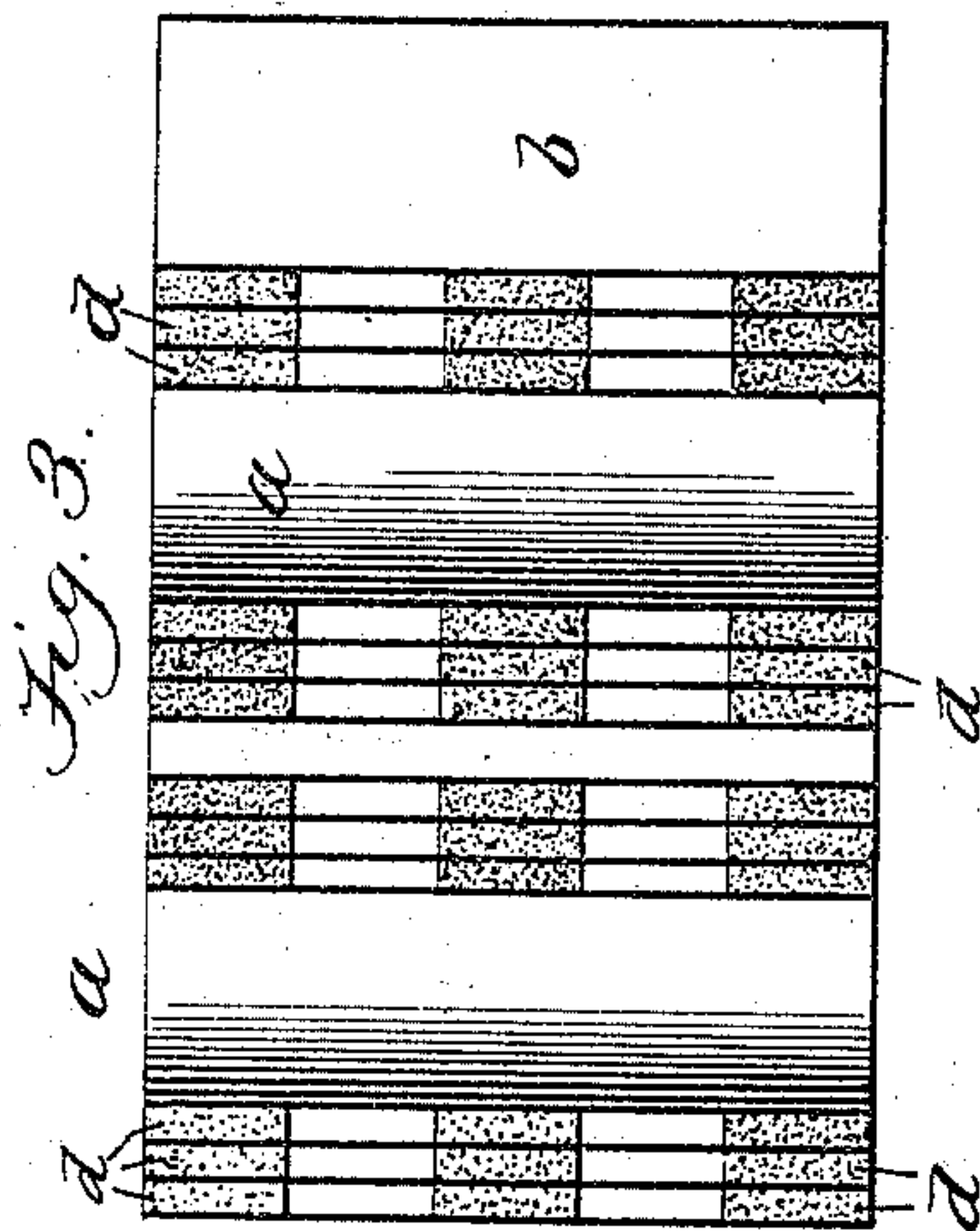
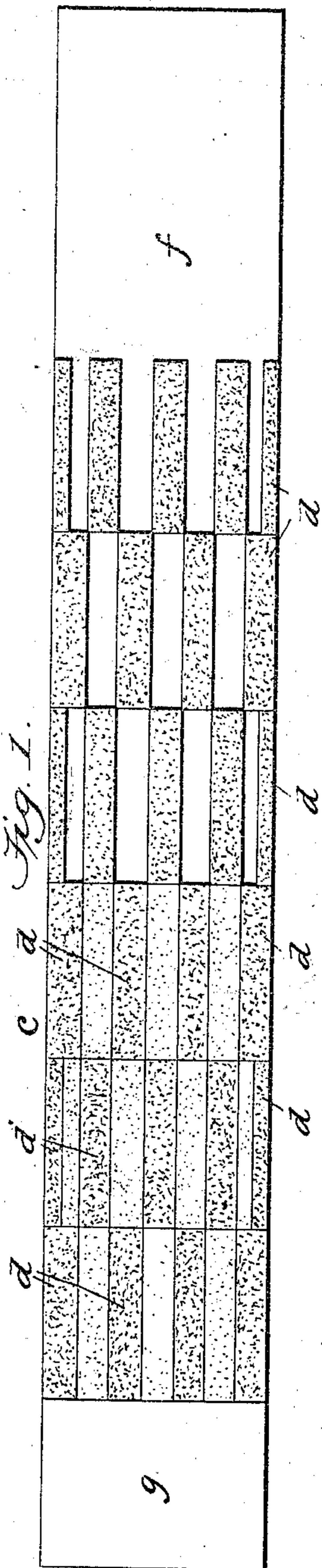


(No Model.)

R. T. BROOKS.
NON-CONDUCTING PIPE COVERING.

No. 544,954.

Patented Aug. 20, 1895.



WITNESSES:

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ROBERT T. BROOKS, OF NEWARK, NEW JERSEY.

NON-CONDUCTING PIPE-COVERING.

SPECIFICATION forming part of Letters Patent No. 544,954, dated August 20, 1895.

Application filed June 4, 1895. Serial No. 551,618. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. BROOKS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Non-Conducting Pipe-Coverings, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of non-conducting coverings used to protect steam and water pipes and similar articles from atmospheric influences tending to change the temperature of their contents; and its special object is to provide a cheap and simple sectional covering in which the inclosed insulating material will be prevented from settling into the lower ends of the sections when secured in place, thereby overcoming a serious fault inherent in the old style of coverings in which the filler is loose in the sections.

The invention will be best understood by reference to the following detail description of the preferred form of device, when taken in connection with the accompanying drawings, in which—

Figure 1 is a detail plan of a sheet of fabric from which two adjoining sections are adapted to be constructed; Fig. 2, a perspective view of two adjoining sections ready to be applied to the piping; Fig. 3, a plan view of the same, showing the spaces between the spacing-strips used simply as air-spaces; and Fig. 4, a detail transverse section of a tube from which two of the adjacent sections are to be constructed by cutting the same longitudinally in halves.

Referring to the drawings by letters, *a* designates two semicircular sections of non-conducting material, said sections being adapted to embrace the piping in the usual manner and have their straight longitudinal edges abutting against each other on opposite sides of the piping. These sections are pasted or glued to a sheet of fabric *b*, of canvas or other material, which entirely envelops their exterior surfaces and is extended at one edge of one of the sections to form a flap *b'*. When the sections are placed around the piping the flap *b'* is pasted down over the adjacent surface of the opposite section, thereby securing the sections firmly in place, but permitting

their ready removal, should occasion require, without injury. It will be observed that the fabric *b* forms a hinge-like connection between the two sections.

The two sections are made in the following manner: Upon a strip or sheet of asbestos or other paper *c* is pasted a series of stiffening-strips *d*, which run longitudinally of the strip or sheet and which have suitable spaces between them. The strips are preferably arranged in several series, as shown in Fig. 1, the strips of one series coming opposite to and in line with the spaces of the adjacent series. The spaces between the stiffening-strips are preferably filled with loose non-conducting material, such as ground asbestos or cork or magnesia or mineral wool; but if desired these spaces may be left empty, so as to form air-spaces when the sections are formed, as shown at the right hand of Fig. 1 and in Fig. 3. It will be observed that the spaces between the strips are isolated from each other. The strips *d* are formed of suitable stiff non-conducting material, such as asbestos felt or felt of any other kind. When the strips are pasted upon the sheet in the manner set forth and the spaces therebetween filled with the loose material, (if such a material is to be employed,) the sheet is then rolled up spirally to form a tube, as shown in Fig. 4, the outer end of the sheet being left free of strips to form a flap *f*, that may be pasted down on the exterior of the tube to hold the same in shape. The inner end of the sheet is also left blank for a short distance to form an unbroken interior surface for the tube. Of course the adjacent faces of the spirally-wound sheet are provided with sufficient adhesive substance to bind the parts together. When the tube is thus formed it is sawed or cut in half longitudinally, thereby forming the two adjacent sections, which are ready for application to the piping as soon as the exterior covering *b* is pasted thereon. It will be observed that the stiffening and spacing strips *d* run annularly or spirally around the sections, thereby stiffening and bracing the same and preventing unsightly indentations.

I have shown the form adapted for application to piping; but it will be understood that my invention is capable of application to sur-

faces having other forms—as steam-boilers, tanks, reservoirs, &c.

5 This covering can be made in sections of any desired length and can be readily applied by unskilled labor. It secures a smooth and uniform outer surface devoid of the irregularities occurring when a flexible covering or one capable of being bent or indented is used, whereby the appearance of the work is greatly improved. The sections, being rigid, will not be bent or indented under any ordinary circumstances, and when the sections are applied vertically one over the other the lower sections will firmly support them without crushing, bending, or bulging, as flexible sections do. This covering also has the advantage that if it is necessary to remove it temporarily or permanently that can be done by simply detaching the flap *b'*. It will also be observed that the arrangement of isolated spaces will prevent the settling of the loose material into the lower parts of the sections, thereby avoiding a serious defect in the sections in which the material is filled in loosely. Having thus fully described my invention, what I claim is—

1. A sheet of fabric for non-conducting pipe covering having pasted on one of its surfaces a series of rows of non-conducting strips *d*, the strips of each row being separated by spaces and the strips of one row lying opposite the spaces of the adjacent row, thereby forming a series of isolated spaces adapted to receive the loose non-conducting material, substantially as described. 30 35

2. A non-conducting section for pipes &c., consisting of a series of layers of fabric and a series of stiffening strips interposed and pasted between said layers, said strips running transversely of the section and being separated by spaces and being arranged in a series of rows, the strips of one row coming opposite the spaces of the adjacent row, substantially as and for the purposes shown and described. 40 45

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT T. BROOKS.

Witnesses:

GEO. MILLER,
DENIS BOLAND.