(Model.)

G. KELLY.

NON-CONDUCTING COVERING.

No. 278,559.

Patented May 29, 1883.



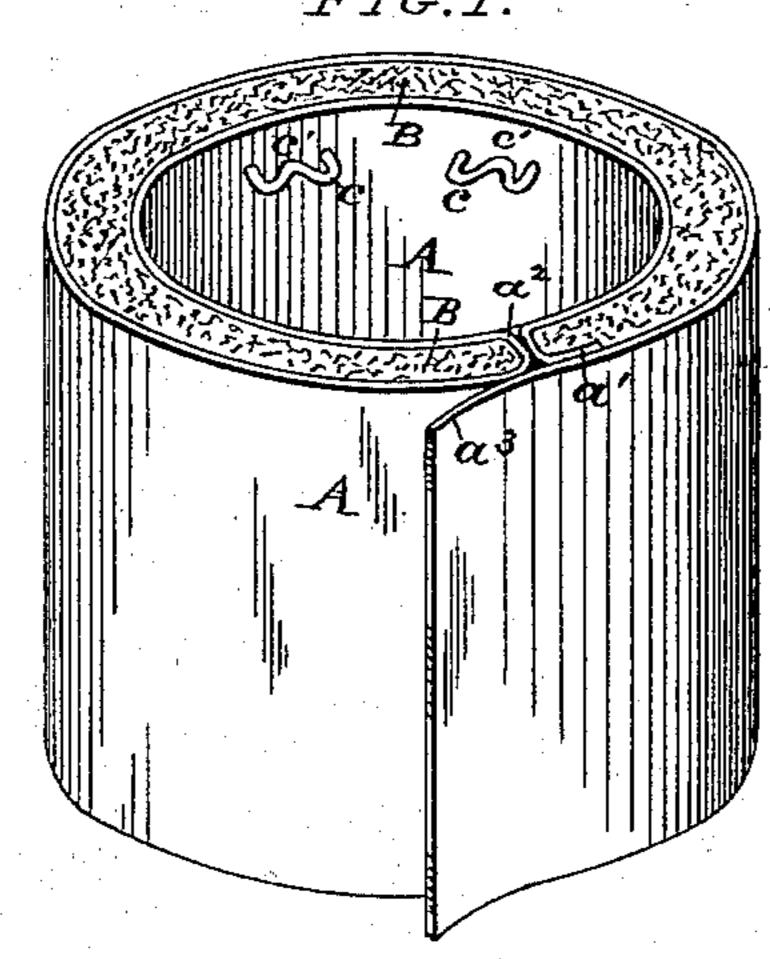


FIG. 2

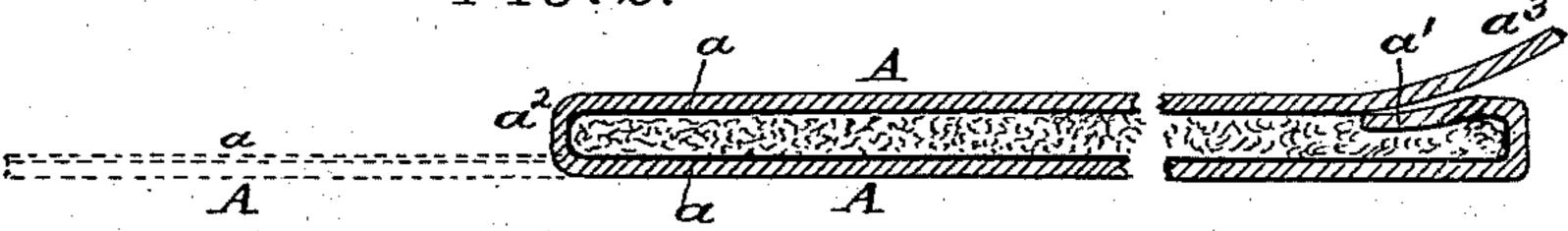


FIG.

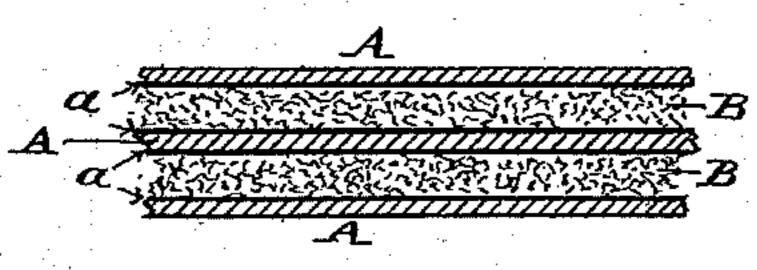
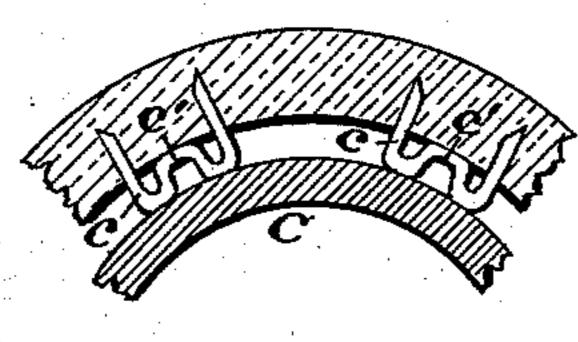


FIG. 4.



ATTEST:

INVENTOR:

Robert Burns

H. D. Smally

George Helly

United States Patent Office.

GEORGE KELLY, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE KELLY SCROLL SECTION MANUFACTURING COMPANY.

NON-CONDUCTING COVERING.

SPECIFICATION forming part of Letters Patent No. 278,559, dated May 29, 1883.

Application filed January 20, 1883. (Model.)

To all whom it may concern:

Be it known that I, GEORGE KELLY, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Non-Conducting Coverings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to certain improvements in that particular class of non-conducting coverings for heating and cooling pipes and surfaces known to the art as "mineral-woolcovering;" and my improvement has for its objects, first, to afford means for securing the two abutting ends together where the covering is used in such a manner that adjacent ends meet; and, second, to furnish means for readily and cheaply forming an air-space between the covering and the pipe or surface to which it is applied. I attain these objects by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improvement adapted for a non-conducting covering for pipes; Fig. 2, a detail section, showing my preferred mode of forming a "single-layer" sheet of my improved covering; Fig. 3, a detail section of a double layer of the same; and Fig. 4, a cross-section illustrating the means employed for forming an airspace around a pipe.

In my improvement I arrange the body B, of loose mineral wool, between one or more sheets, A, of paper, canvas, or other flexible material, having first made the inner sides of 40 said sheets adhesive by a coating, a, of suitable cement, preferably soluble glass. When the two sheets, A, of inclosing material are brought together over a layer, B, of mineral wool, the same will adhere to the adhesive 45 coating a on said sheets and be held between the same in a very perfect manner. Where a covering of unusual thickness is required two or more layers, B, of the mineral wool are used, and in such case the inner sheet, A, of 50 the material will be coated with adhesive coating a on both sides, as clearly shown in Fig. 3. In manufacturing my improved covering I

prefer to take a single sheet of paper of more

than double the length of the layer of mineral wool, and after applying the adhesive coating 55 a, I make a small fold, a', of the paper over one end of the layer of wool. I then fold at a^2 the paper over the top of the layer of wool, as clearly-indicated in Fig. 2. The end of the top layer of paper is made of sufficient length 60 to extend past the end of the finished covering and form an overlap, a^3 , for use in securing the ends of the covering together, when the same is bent into a circle and used as a pipecovering, as shown in Fig. 1, or to lap-joints 65 when the covering is used on flat or other shaped surfaces. This mode of construction is specially applicable for forming pipe-coverings, in that it leaves a longitudinal opening along the side of the covering to permit 70 of its being placed around the pipe. Heretofore in this class of coverings such opening. was formed by cutting through the coveringsection after it had been completed in a closed state.

In order to produce an air-space around the pipe C, I provide staples c, the connecting-bars of which are bent down in order to form sunken bearing-bars c'. These staples are driven into the interior surface of the covering, so as to form inward projections, which hold the covering away from the pipe or other surface covered, and thereby the desired air-space between the two is attained, the sunken bearing-bar c' acting to prevent the staples 85 from being driven too far into the body of the covering.

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

1. In a non-conducting covering, the casing A, formed with small fold a' and main fold a^2 , substantially as described, and for the purpose set forth.

2. In a non-conducting covering, the casing 95 A, formed with small fold a', main fold a^2 , and an overlap, a^3 , substantially as described, and for the purpose set forth.

3. The combination, with a non-conducting covering, of a staple or staples c, having 100 sunken bearing-bars c', as described, and for the purpose set forth.

GEORGE KELLY.

Witnesses:
ROBERT BURNS,
A. CAMPBELL.