

(No Model.)

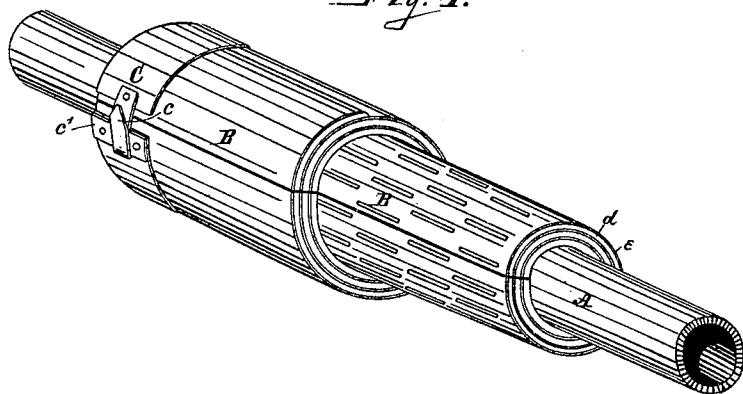
G. KELLY.

COVERING FOR STEAM BOILERS, &c.

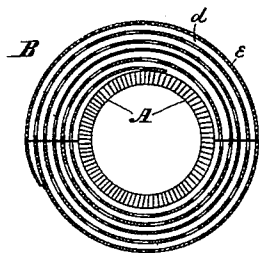
No. 273,689.

Patented Mar. 6, 1883.

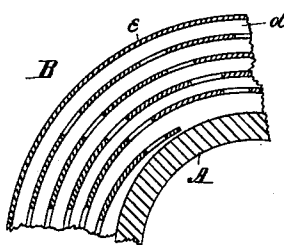
*Fig. 1.*



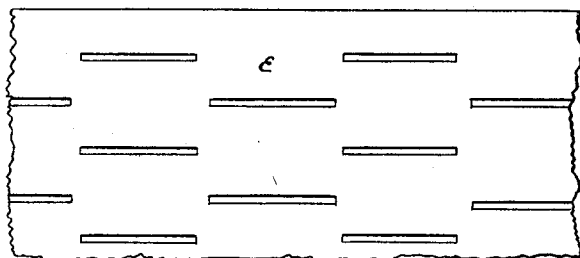
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

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

## COVERING FOR STEAM-BOILERS, &c.

SPECIFICATION forming part of Letters Patent No. 273,689, dated March 6, 1883.

Application filed February 3, 1881. Renewed January 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE KELLY, of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful  
5 Improvements in Coverings for Steam-Boilers, Steam-Pipes, and Similar Articles, of which the following is a specification.

The principal object of my invention is to produce a covering for steam-pipes, &c., which  
10 shall combine the advantages of both paper and plaster when separately used for that purpose. This object is accomplished by spreading a plaster composition thinly on suitable paper and rolling the same into a tube, as will  
15 hereinafter be more specifically set forth.

Referring to the accompanying drawings, Figure 1 is a perspective view of a piece of pipe having my improved covering, on a portion of which the covering is in completed  
20 form and on a portion not completed, while a portion is left uncovered; Fig. 2, a transverse section of that portion where the covering is completed. Fig. 3 is a sectional view of piece of my improved covering on a larger scale,  
25 and Fig. 4 a view of the paper in the form which I prefer to employ.

In said drawings the portions marked A represent the pipe; B, my improved covering, (in which the lighter portions, *d*, represent the plaster part and the dark portions *e* the paper part;) and C, the clasps or other fastenings which secure the covering to the pipe.

Plaster covering as heretofore made has been liable to crack and fall off from the pipes  
35 on which it was placed. Paper, when used alone, shrinks and swells with the changes of temperature, and soon deteriorates and falls to pieces. Paper, when applied to the outside of a plaster covering, is still exposed to the atmosphere, and is in but little, if any, better  
40 condition than when applied to the pipe direct.

My compound covering, having alternately thin layers of paper and plaster, possesses practically both the toughness of the one and the  
45 hardness and durability of the other, while it avoids the disadvantages of both. The paper, being embedded in the plaster, is pro-

50 tected thereby from atmospheric action, and the plaster is prevented from cracking and falling off by the paper.

I prefer to cut openings in the paper, as shown most plainly by Fig. 4, so that the plaster will pass through and clinch in place, after the manner of plaster on lath-work, so as to insure that there shall be no coming apart of  
55 the covering after it is constructed. The covering is preferably divided in halves, after the manner shown in the drawings, and afterward placed upon the pipes and secured by the clasps C or wires. It may, however, if applied before drying, be rolled directly upon the pipes. The clasps C are specially designed for holding covering on pipes. They are preferably constructed of common hoop-iron, and are cheap and convenient. A tongue, *e*, on one  
65 end, enters a loop, *e'*, on the other, and is turned back upon itself, as shown. The tongue can be bent equally well at any point, and is thus adapted to hold the covering tight at all points, notwithstanding irregularities that may  
70 exist in its surface or variations in its size.

I do not intend to claim any covering the elements of which are not those named herein or their substantial equivalents, so that the covering, when finished, shall be a substantially-solid hard substance, as I am aware that  
75 paper alone and other soft and spongy substances have been rolled together for this purpose.

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

A covering composed of alternate layers of plaster and paper, as specified, the paper portion being provided with orifices through which  
85 the plaster may pass and clinch, substantially as shown and set forth.

In witness whereof I have hereunto set my hand and seal, at Chicago, Illinois, this 29th day of January, A. D. 1881.

GEORGE KELLY. [L. s.]

In presence of—

BION A. DODGE,  
LEWIS L. WOOD.