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A. W. LAUGHLIN.

SECURING MEANS FOR STOVEPIPES.

APPLICATION FILED MAY 7, 1906.

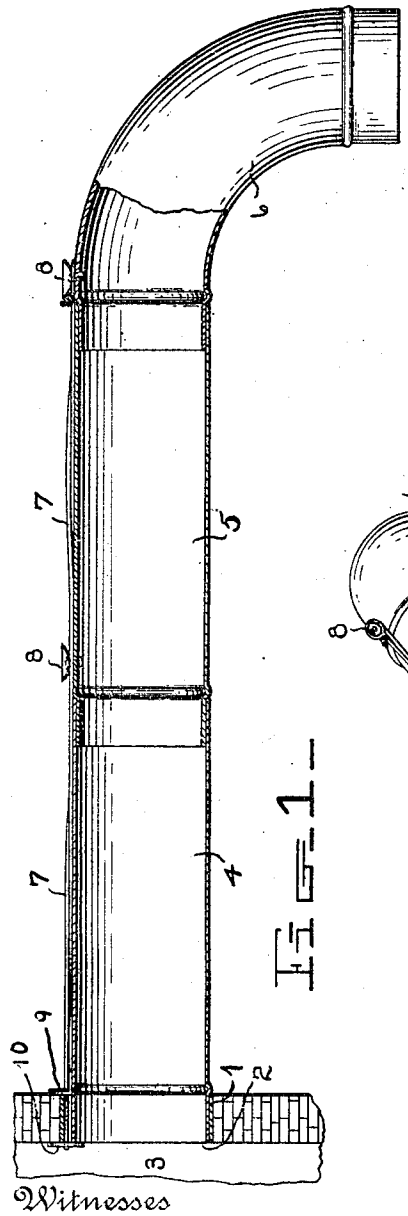

FIG. 1.

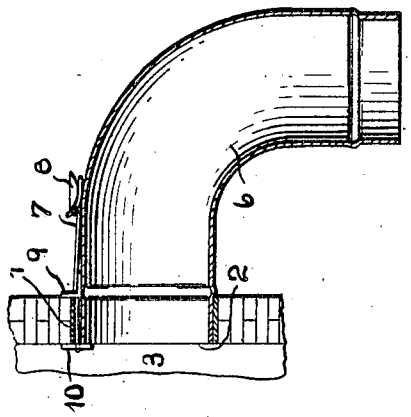

FIG. 6.

FIG. 5.

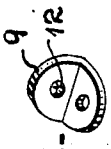

FIG. 4.

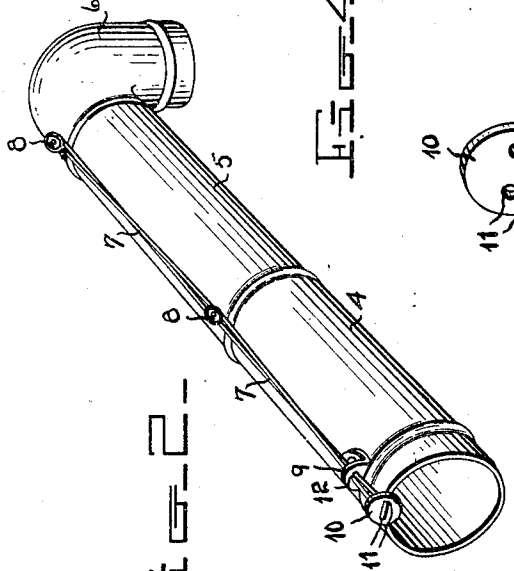

FIG. 2.

FIG. 3.

Witnesses

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SECURING MEANS FOR STOVEPIPES.

No. 837,478. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed May 7, 1906. Serial No. 315,620.

To all whom it may concern:

Be it known that I, ALEXANDER W. LAUGHLIN, a citizen of the United States, residing at Odessa, in the county of Lafayette and State of Missouri, have invented certain new and useful Improvements in Securing Means for Stovepipes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in fastening means for securing stovepipe-sections together and in a chimney or flue.

The object of the invention is to provide a simple and inexpensive fastening device of this character which will be strong and durable in use and very easy to apply and remove.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view through a portion of a chimney or flue and a series of stovepipe-sections connected by the improved fastening means. Fig. 2 is a perspective view of the stovepipe-sections removed from the chimney or flue. Figs. 3, 4, and 5 are detail views of the fastening-buttons, and Fig. 6 is a sectional view showing another way in which the fastening devices may be used on an elbow.

Referring to the drawings by numeral, 1 denotes the usual thimble in a stovepipe-opening 2 of a chimney or flue 3.

4 5 denote two straight stovepipe-sections, and 6 denotes an elbow-section, said sections having their ends fitted into each other in the usual manner.

My improved fastening means consists of lacing-wire or the like 7 and a plurality of metal buttons or plates 8 9 10, which are arranged upon the pipe-sections adjacent to their ends and connected by the lacing-wire. The number and arrangement of the buttons or plates employed varies according to the number and kind of stovepipe-sections to be connected together; but, as shown in Figs. 1 and 2 of the drawings, one of the buttons 8 is riveted or otherwise secured to the inner end of each of the pipe-sections 5 6. One of the buttons 9 is similarly secured adjacent to the inner end of the pipe-section 4, which latter enters the thimble 1, and one of the buttons 10 is loosely mounted upon the lacing-wire at the inner end of the section 4 and thimble 1. This button 10 is in the form of a circular disk formed with two apertures 11 to receive the lacing 1. The button 9 is also in the form of a circular plate, but is bent at right angles, and one of its portions is riveted upon the pipe-section 4, and its other angularly-projecting portion is formed with an aperture 12 to receive the lacing-wire. The buttons 8 are in the form of concave circular disks or plates which have their concave sides uppermost, as shown.

In fastening the parts together, as shown in Figs. 1 and 2, the lacing-wire is bent upon itself at its center and its two branches passed through the apertures 11 in the button 10 and then between the thimble and the inner end of the pipe-section 4. These ends are then passed through the aperture 12 in the button 9 and then upon opposite sides of the button 8 on the pipe-section 5. They are then wound one or more times around the button 8 on the elbow-section 6 and twisted together, as will be readily understood upon reference to the drawings. Between the buttons 8 9 and 8 8 the strands or ends of the wire may be crossed or twisted, as shown. It will be seen that the button 10 will prevent the stovepipe-section 4 from being pulled out of the chimney or flue and that the button 9 will prevent it from being pushed too far into the same.

This fastening device may be used for connecting a cap or cover to the end of a pipe or two or more pipe-sections of any shape and form together, and in Fig. 6 of the drawings I have shown it adapted for securing an elbow-section in the end of a straight flue-section. As here shown, two of the buttons 8 are secured upon the two pipe-sections to be connected, and one of the buttons 9 is secured upon the elbow-section, the lacing-wire being passed through the aperture in the button 9 and engaged with and twisted around the two buttons 8, as will be readily understood.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the prin-

ciple or sacrificing any of the advantages of the invention as defined by the appended claims.

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

1. The combination with a chimney or flue having a stovepipe-opening and a stovepipe projecting into said opening, of a button upon the inner portion of said pipe adapted to engage the outer face of the chimney or flue, a button upon the outer portion of said pipe, a button adapted to engage the inner face of said chimney or flue, and a lacing-wire or the like connecting said buttons, substantially as shown and described.

2. The combination with a chimney or flue having a stovepipe-opening and a stovepipe therein consisting of a plurality of sections, an apertured button upon the inner portion of said pipe adapted to engage the outer face of said chimney or flue, buttons upon the different sections of said pipe, an apertured button engaged with the inner face of said chimney or flue, and a lacing-wire or the like passed through the apertures in said apertured buttons and engaged with the other of said buttons, substantially as shown and described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALEXANDER W. LAUGHLIN.

Witnesses:

A. M. REX,

NELLIE M. HUGHES.