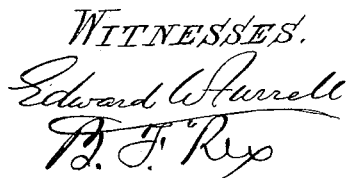


J. J. SCHAB.
PIPE THIMBLE.

Patented July 17, 1888.



INVENTOR,
John J. Schaaf.
by C. Moody, atty.

UNITED STATES PATENT OFFICE.

JOHN J. SCHAAB, OF ST. LOUIS, MISSOURI.

PIPE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 386,166, dated July 17, 1888.

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To all whom it may concern:

Be it known that I, JOHN J. SCHAAB, of St. Louis, Missouri, have made a new and useful Improvement in Pipe-Thimbles, of which the following is a full, clear, and exact description.

The present improved thimble is adapted to pipes of various sizes.

It consists, substantially, in a series of concentric thimbles arranged within each other, the outermost or largest thimble being fitted and secured in the wall-opening and receiving the largest pipe; the next smaller thimble being suited for receiving a smaller pipe, and being removably fitted in the outer thimble, and so as not only to be held in place, but so as to close the annular space between the two thimbles; the next smaller thimble being suited for receiving a still smaller pipe, and being similarly fitted in the second thimble, and so on, substantially as shown in the annexed drawings, making part of this specification, in which—

Figure 1 is a front view of the thimble; Fig. 2, a longitudinal section on the line 2 2 of Fig. 1; Fig. 3, a detail, being a section on the line 3 3 of Fig. 1. Fig. 4 is an elevation, looking toward its inner end, of the thimble in position in the flue. Fig. 5 is a section on the line 5 5 of Fig. 4, and Fig. 6 is a detail.

The same letters of reference denote the same parts.

A represents the outer or larger thimble of the series, B the next smaller thimble, and C the smallest one, the series in the present instance consisting of three.

The thimble A is tubular and is shaped to fit the flue-opening D. At its outer end it is provided with an outwardly-turned flange, *a*, which, when the thimble is in place, comes against the outer face, *d*, of the wall, *d'*, containing the flue-opening. At its inner end the thimble A is furnished with an inwardly-turned flange, *a'*, Fig. 2. This thimble is fastened in place, say, by means of the strips *a''*, Figs. 4, 5, which are at one end attached to the thimble, and, projecting thence beyond the inner end of the thimble, as indicated by the broken lines, Fig. 5, are ultimately turned, as shown in the full lines, Figs. 4, 5, back to come against the inner face, *d''*, of the wall *d'*.

The thimble B at its outer end is furnished

with an outwardly-turned flange, *b*, which, when the thimbles A B are in place, comes against the flange *a* of the thimble A. At its inner end the thimble B is provided with two flanges—an outwardly-turned one, *b'*, Fig. 2, and an inwardly-turned one, *b''*. The flange *b'* projects sufficiently to lap upon the outer side of the flange *a'* of the thimble A, and it serves two purposes—to strengthen and to hold the inner end of the thimble in place; and the flange *b''* serves for the thimble B the same purpose that the flange *a'* serves for the thimble A—namely, when the inner thimble is not used, to provide a stop to prevent the pipe E, Fig. 2, from passing too far into the flue F, and, when an inner thimble is inserted, to provide a shoulder against which its outwardly-turned flange *c'* at its inner end may come, and thereby close tightly the annular space between the two thimbles, so as to prevent the escape of sparks and smoke from the flue. The intumed flange *c''* at the inner end will operate to prevent the pipe E from passing too far into the flue F.

The smaller thimbles are secured in place in the larger thimble, and preferably in the following manner: The thimble A has studs *a''* projecting from the outer face of its flange *a*. The flange *b* of the thimble B is slotted at *b''* to enable the flange *b* to be passed onto the studs and the thimble B afterward to be turned around within the thimble A, so as to bring the head of the stud above the narrower portion of the slot.

The thimble C is similarly secured by its flange *c* to the thimbles A B. It will be noted that the outwardly-projecting flange *b* is wider than the like flange *a*, and the like flange *c* wider than the flange *b*, which is obviously necessary when the flange of the inner thimble overlaps that of the outer, as shown in Fig. 2. By beveling the outer flange, as indicated at *c''*, Fig. 3, the thimbles are drawn longitudinally together, thereby tightening the thimble-flanges together at the inner end of the thimble, and thus better preventing the escape of smoke and sparks. When the thimble-opening is not needed, it can be closed by an outer plate, G, which can be attached to the thimble in manner similar to that used for securing the inner thimbles to the outer one. This is indicated in Fig. 6, which is a sectional detail.

When it is desired to insert a larger pipe in the flue-opening, the inner thimble or thimbles, according to size of pipe being inserted, are removed from the outer thimble, and the
5 pipe is inserted, as shown in Fig. 2, and when a smaller pipe is to be inserted the inner thimble or thimbles are left within the outer thimble and the pipe inserted in the inner thimble. It is possible, but not desirable, to dispense
10 with the flanges at the inner end of the inner thimble or thimbles, provided the inner thimble or thimbles at the outer end are secured against the flange of the outer thimble, substantially in the manner described. It is also
15 possible, but not desirable, to hold the inner thimble or thimbles laterally without also holding them longitudinally in place, and for such limited purpose pieces inserted in the annular space between the thimbles may take the place
20 of the studs and slotted flanges above described.

It is further possible, but not desirable, for the inner thimble or thimbles to be arranged eccentrically one within the other, in which case the thimble-flanges should be suitably shaped to close the annular space or spaces at the end
25 or ends of the thimble.

I claim—

The pipe-thimble consisting of a series of concentric thimbles one within the other, the outer thimble flanged inwardly at the inner end and
30 outwardly at the outer end, and the remaining thimbles flanged inwardly and outwardly at the inner end and outwardly at the outer end, and all secured together by their outturned flanges at the outer end.

Witness my hand.

JOHN J. SCHAAB.

Witnesses:

C. D. MOODY,

V. S. KETCHUM.