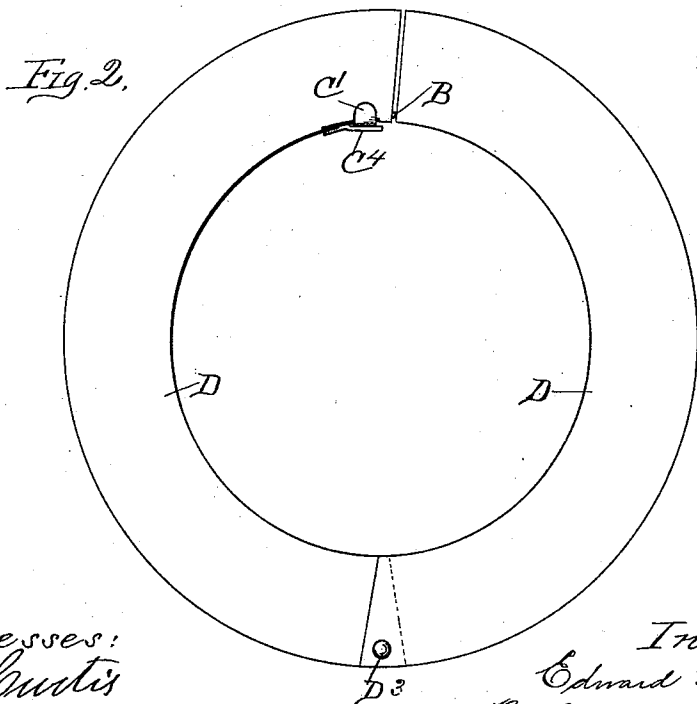
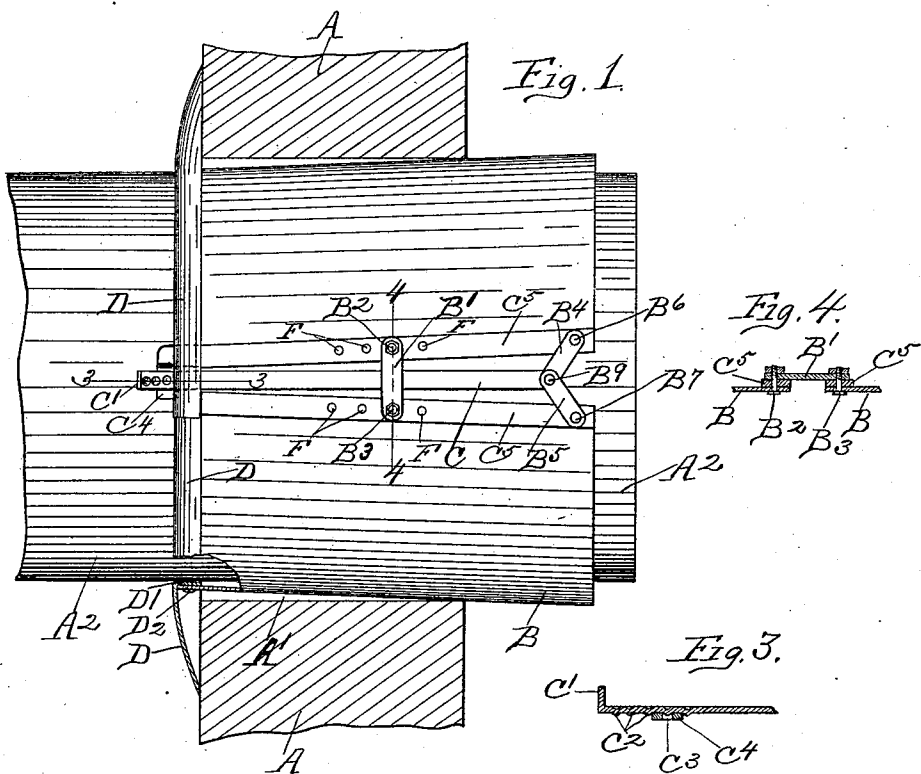


(No Model.)

E. L. KEHN.
STOVEPIPE THIMBLE.

No. 549,199.

Patented Nov. 5, 1895.



Witnesses:
C. A. Curtis
Willie Lenno.

Inventor:
Edward L. Kehn
By Mosher & Curtis Attys

UNITED STATES PATENT OFFICE.

EDWARD L. KEHN, OF TROY, NEW YORK, ASSIGNOR OF ONE-HALF TO
WADSWORTH MENEELY, OF SAME PLACE.

STOVEPIPE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 549,199, dated November 5, 1895.

Application filed July 13, 1895. Serial No. 555,839. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. KEHN, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Stovepipe-Thimbles, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a horizontal section of an apertured chimney-wall, showing my improved thimble in the aperture. Fig. 2 is a front elevation of the collar and thimble-sleeve removed from the aperture. Fig. 3 is a vertical section taken on the broken line 3 3 in Fig. 1. Fig. 4 is a similar section on the broken line 4 4 in Fig. 1.

A is the chimney, shown in part only, and A' the pipe-aperture therein, made a little larger than the stovepipe A².

B is a thimble inserted in the pipe-aperture and inclosing the pipe.

The thimble-wall is slitted longitudinally its entire length on one side, forming a split sleeve. When the slit is opened wider at one end than at the other, the sleeve becomes a frusto-conical thimble. After the thimble is inserted in the pipe-aperture in the chimney and the pipe is inserted in the thimble, as seen in Fig. 1, to fasten the thimble in the chimney it is only necessary to expand one end of the thimble until it engages the chimney-wall surrounding the pipe-aperture and secure it in its expanded condition, and by contracting the other end of the thimble until it engages the inclosed pipe and securing it in the contracted position the pipe is fastened in the thimble.

As a means for expanding and contracting the respective ends of the thimble, I connect the opposite edges of the split wall by a link B', pivoted at its ends to the respective edges, approximately at the middle portion of such

edges, as by the pivots B² and B³. I also connect such edges at the inner end of the thimble by the toggle-links B⁴ and B⁵, pivoted to the thimble at B⁶ and B⁷, respectively, and to each other, as well as rod C at B⁸. By imparting to the rod longitudinal reciprocating movements I can operate the toggle to either expand or contract the inner end of the thimble. By reason of the pivotal connecting-link B' an expansive movement of the slit walls at their inner ends causes a corresponding contractile movement of the slit walls at the outer end of the thimble, whereby the outer end of the thimble is drawn together when the inner end is expanded.

The operation of the apparatus is as follows: The thimble with its slit walls approximately parallel with each other is inserted through the pipe-aperture in the chimney or partition-wall and the pipe is inserted in the thimble. The rod C is pushed inward, thereby operating the toggle to expand the inner end of the thimble sufficiently to prevent its withdrawal from the pipe-aperture and to contract the outer end of the thimble sufficiently to cause it to grip and securely hold the inserted pipe, as shown in Fig. 1. The outer end of the rod is provided with an operating-pull C' and with a series of spurs or lugs C², adapted to enter a corresponding aperture C³ in the fixed supporting-arm C⁴. The slit walls may be provided with stiffening-bars C⁵, secured to their edges, one of which is extended and offset to form the arm C⁴. The thimble may also be provided with a sectional collar D, secured to the outer edge of the thimble, as by the introverted flange D' and rivets D². The arm and rod are projected outwardly through an opening in the collar, as shown in Figs. 1 and 2, or between the collar and thimble.

The collar is preferably composed of two semicircular parts, pivoted together at one end, as by pivot D³, and free to move toward and from each other at their other ends as the outer end of the thimble is contracted and expanded.

By providing the slit walls with a series of pivot-holes F, adapted to receive the pivots B² and B³, which I have shown in the form of screw-threaded bolts provided with a head on

one end, I am able to vary the position of the middle-link connection lengthwise of the sleeve, thereby varying the relative expansive and contractile movements of the opposite
5 ends of the sleeve and adapt the same thimble for use with pipes and pipe-apertures of different sizes. The pivots are held in place by nuts on their screw-threaded ends.

What I claim as new, and desire to secure
10 by Letters Patent, is—

1. In a stove-pipe thimble, the combination with a split sleeve, of a link connection between the middle portions of the split walls, a toggle connection between the split walls
15 near one end of the sleeve, and means for operating the toggle connection whereby the

sleeve is contracted at one end and expanded at the other end, substantially as described.

2. In a stove-pipe thimble, the combination with a split sleeve, of a middle link connection between the slit walls, means for securing the link connection in varying positions along the middle portion of the slit walls, and means for contracting and expanding one end of the sleeve, substantially as described. 25

In testimony whereof I have hereunto set my hand this 6th day of July, 1895.

EDWARD L. KEHN.

Witnesses:

FRANK C. CURTIS,
WADSWORTH MENEELY.