(No Model.)

E. G. WEST.

STOVE PIPE THIMBLE.

No. 449,060. Patented Mar. 24, 1891.

Fig. 1.

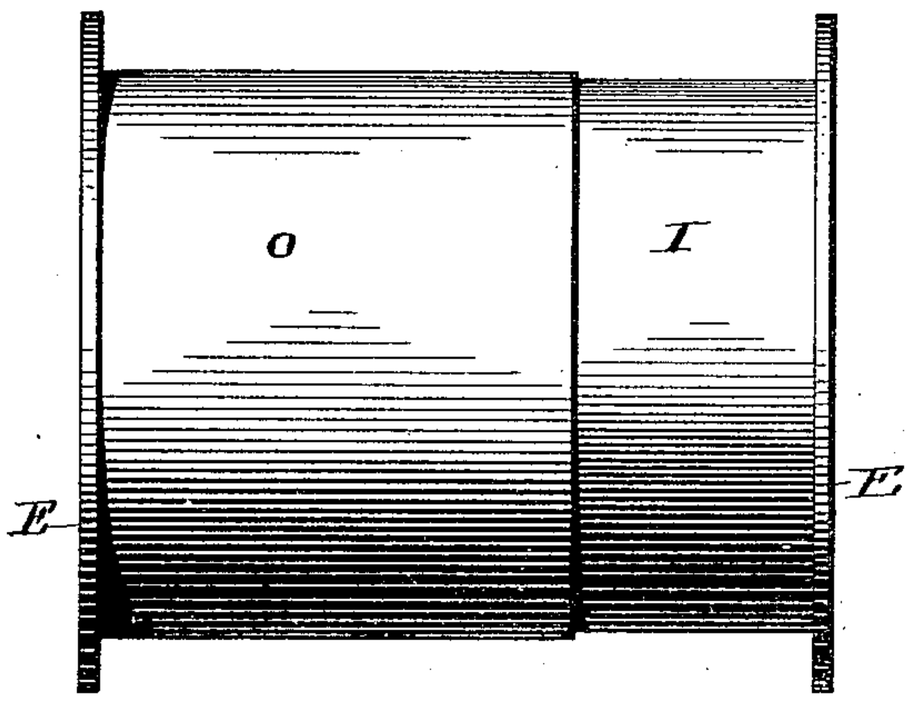


Fig. 2.

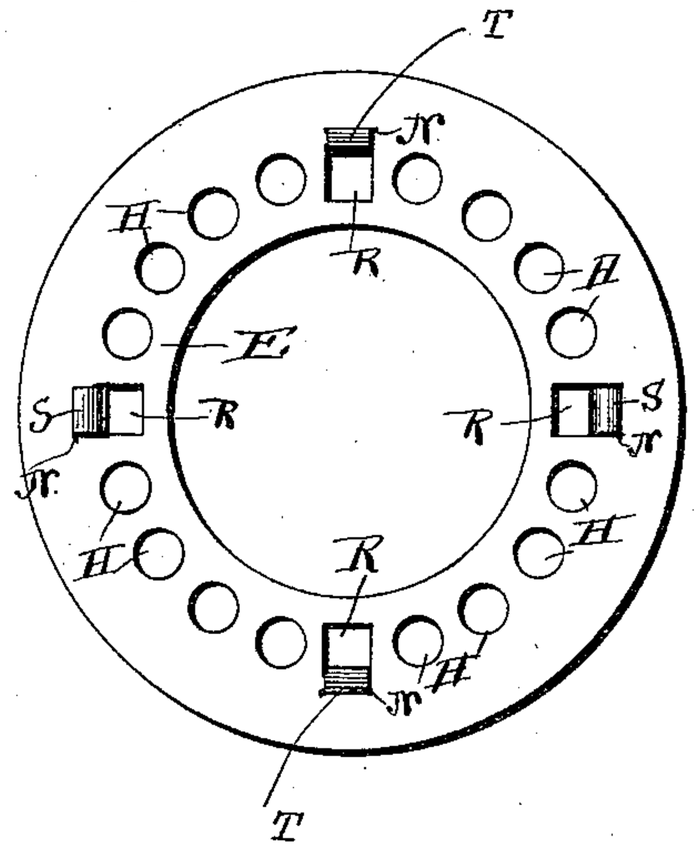


Fig. 3.

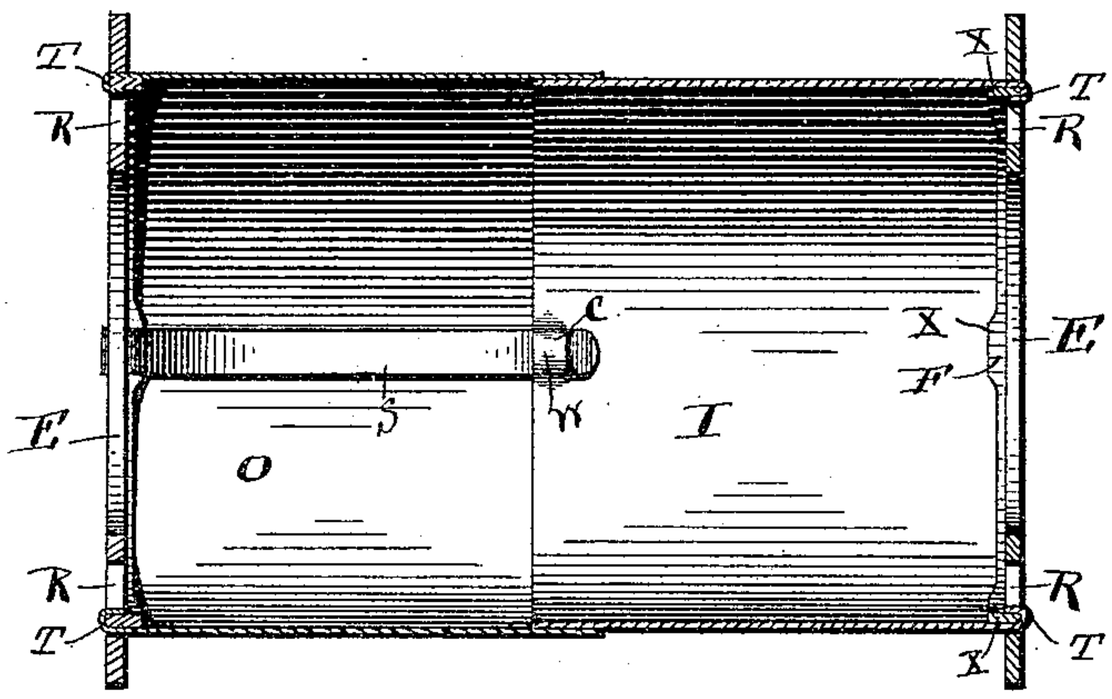
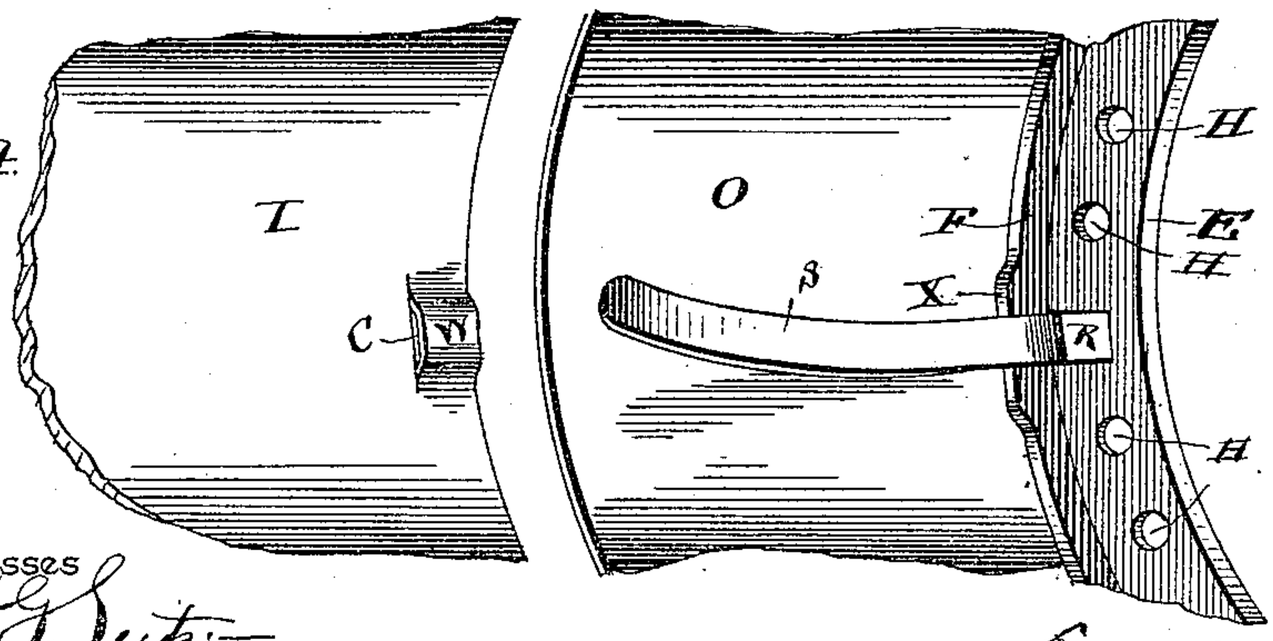


Fig. 4.



Witnesses
H. G. Deitz
N. L. Collamer

Inventor
Elbridge G. West,
By his Attorneys,
A. Shorb & Co.

UNITED STATES PATENT OFFICE.

ELBRIDGE G. WEST, OF CANANDAIGUA, NEW YORK, ASSIGNOR OF ONE-HALF TO ALASCO C. ROBISON, OF SAME PLACE.

STOVE-PIPE THIMBLE.

SPECIFICATION forming part of Letters Patent No. 449,060, dated March 24, 1891.

Application filed September 9, 1890. Serial No. 364,483. (No model.)

To all whom it may concern:

Be it known that I, ELBRIDGE G. WEST, a citizen of the United States, residing at Canandaigua, in the county of Ontario and State of New York, have invented a new and useful Stove-Pipe Thimble, of which the following is a specification.

This invention relates to stove-pipes, and more especially to the thimbles thereof; and the object of the same is to provide a thimble of this character capable of being readily increased or decreased in length, which thimble shall possess certain improved details of construction constituting the present invention, all as hereinafter more fully described and claimed, and as illustrated in the drawings, in which—

Figure 1 is a side and Fig. 2 an end view of this improved thimble. Fig. 3 is a central longitudinal section through the two parts of this thimble when it is considerably distended. Fig. 4 is an enlarged perspective detail of a portion of one end ring and of both sleeves and connecting devices and fastening-tongue, the parts being shown as slightly separated.

Referring to the said drawings, the letter O designates an outer and I and inner cylindrical sleeve fitting snugly but loosely upon each other, and E are end pieces, preferably of cast-iron and duplicates of each other. Each end piece has an inwardly-projecting flange F at about the center of its breadth, which fits closely within the interior of the sleeve, and inside of this flange the body of the end piece is provided with a number of holes H, as shown in Fig. 2. Adjacent certain of the holes which are rectangular, as shown at R, a narrow slit N is cut through the body of the end piece outside the line of the sleeve. Each sleeve is provided with four integral tongues T, extending beyond its outer end, and these tongues are passed in the slits N, bent over, and their tips passed through the rectangular holes R, whereby the sleeve is held tightly against the inner face of the end piece and in contact with the outer face of the integral flange F thereon. The sleeves being thus connected to their end pieces and sliding one within the other, it becomes desirable to provide some means for guiding the sleeves and for holding them separated. In order to accomplish this, I provide the flanges F with extensions X opposite each of the rectangular holes R. Strips S are provided, which are of resilient metal, and the outer ends of these strips are bent over the tongues T and into the slits N, while their bodies pass through the rectangular holes R, rest against the inner faces of the extensions X, and extend within and parallel to the axis of the outer sleeve O. I preferably employ two of these strips at diametrically-opposite points, as in the present case. Two cuts C are made in the body of the inner sleeve I near its inner end, and the metal inside said cuts is stretched inwardly, as shown at W. When the two sleeves are brought together, the free ends of the spring-strips S (which ends have a tendency to incline considerably toward the axis) are bent outwardly and pass behind the inwardly-stretched portions W of the inner sleeve. The sleeves being then shoved together the strips slide through the cuts C and a certain amount of frictional resistance is thereby set up which holds the sleeves in the position to which they are distended.

The use of thimbles of this character is so well known as to hardly need an illustration. They are inserted in stove-pipe holes through walls or partitions, which may be of variable thicknesses; hence the necessity for the adjustability of the thimble in length. It will be understood that the stove-pipe passes through the central hole in each end piece, and the small holes H and R are for the purpose of permitting a free passage of air through the thimble and around the stove-pipe, thereby preventing the heating of the air therebetween and the radiation of sufficient heat from the pipe to the thimble to set fire to or even to char any part of the wall around the thimble.

What is claimed as new is—

1. In a stove-pipe thimble, the combination, with the annular end pieces E, each having an inwardly-projecting flange F, with extensions X on its inner edge, and each being provided with narrow slits N outside and rectangular holes R inside said extensions, of inner and outer sleeves I and O, each fitting around said flange and having integral

tongues T passing outwardly through said slits and returning through said holes, flexible strips S upon certain of said tongues resting upon the inner faces of said extensions and extending nearly the length of the outer sleeve, their free ends inclining toward the axis, and guides in the inner sleeve loosely embracing said free ends, as and for the purpose set forth.

2. In a stove-pipe thimble, the combination, with the annular end pieces E, each having an inwardly-projecting flange F, with extensions X on its inner edge, and each being provided with slits N outside and holes R inside said extensions, of inner and outer sleeves I and O, each fitting around one of said flanges and secured to the end piece, flexible strips S passing inwardly from certain of said slits, bending over, returning through the holes, resting upon the inner faces of said extensions and extending nearly the length of the outer sleeves with their free ends inclining toward the axis, and guides in the inner sleeve loosely embracing said free ends, as and for the purpose set forth.

3. In a stove-pipe thimble, the combination, with the two annular end pieces E and the inner sleeve I, secured to one end piece, said sleeve having cuts C through its body near its inner end, with the metal of the sleeve inside said cuts bent inwardly, of the outer sleeve O, secured to and projecting inwardly from the other end piece, and flexible strips S, secured to the latter end piece and extending within and nearly the length of the outer sleeve, with their free ends inclining toward its axis and frictionally engaging said cuts C in the inner sleeve, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ELBRIDGE G. WEST.

Witnesses:

CHARLES M. CLARK,

J. H. BLODGETT.