C. A. MASSING.

STOVE DAMPER.

APPLICATION FILED JULY 3, 1914.

1,146,807. Patented July 20, 1915.

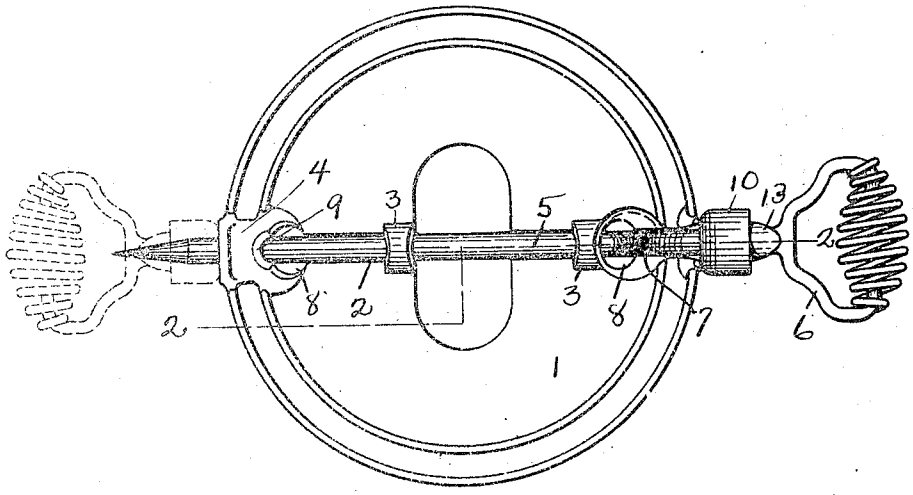


Fig. 1.

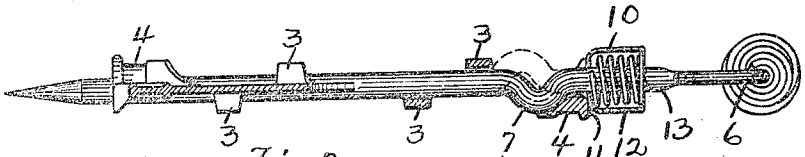


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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STOVE-DAMPER.

1,146,807. Specification of Letters Patent. Patented July 20, 1915.

Application filed July 3, 1914. Serial No. 848,751.

To all whom it may concern:

Be it known that I, CHARLES A. MASSING, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Stove-Dampers, of which the following is a specification.

This invention relates to stove dampers and consists in certain improvements in the construction thereof as will be hereinafter fully described and pointed out in the claim.

The invention is illustrated in the accompanying drawings as follows:—

Figure 1 shows a plan view of the damper. Fig. 2 a section on the line 2—2 in Fig. 1.

1 marks the damper plate. This has a rod opening 2 formed in it by a series of loops 3. These alternate on different sides of the plate so as to facilitate the casting of the plate. Loops 4 are arranged at the edges of the damper plate. A rod 5 extends through the opening 2.

It will be understood that the damper plate is placed in a pipe, holes are made in the pipe by the sharpened end of the rod 6 or by other means and the rod is passed through the opening 2 in the plate after the plate is in the pipe.

The rod is provided with a handle 6 and has a deflected portion 7. Openings 8 are formed in the plate 1 within the loops 4. In effect this opening 8 is an enlargement of the opening 2. This enlargement is of sufficient size to permit of the introduction of the rod as indicated in dotted lines in Fig. 2 and the turning of the rod in the enlargement so as to bring the deflected portion 7 toward the same side of the plate as the loop 4. A slot or seat 9 is formed in the loop 4 so that as the rod is drawn outwardly toward the edge of the plate the deflected portion is drawn into this seat so as to lock the rod against turning in the opening 2.

A thimble 10 is placed around the rod at its outer end and has a shoulder 11 on the edge of the plate, the shoulder being formed at the outer edge of the loop 4. A spring 12 is arranged in the thimble 10 and is tensioned against a shoulder 13 on the rod 5.

In putting the damper in place, the damper plate is put in the pipe, the rod 5 passed through the openings in the pipe and through the opening 2 in the damper plate. The thimble 10 contacts the side of the pipe. The rod is pressed inwardly depressing the spring 12, into position to bring the deflected portion 7 to the position shown in dotted lines in Fig. 2. The rod is then turned bringing the deflected portion opposite the seat 9 and as the rod is released the spring 12 moves the rod into the seat and holds it in the seat so that the rod remains locked with the damper plate.

By forming the loops 4 at both edges of the plate and arranging the opening 2 with its enlargement 8 so that the rod may be introduced from either side of the damper plate, the difficulty which may be experienced from introducing the rod from the wrong side of the damper plate is entirely obviated. This is of particular advantage because the damper plate is ordinarily within the pipe so that it cannot be readily observed. With this device it is immaterial which edge of the damper plate is brought next the opening through which the rod is initially passed. All that is necessary is to bring the damper plate to such position that the rod will enter the opening 2 and where this is done the proper engagement of the rod with the plate is effected regardless of the position of the plate otherwise.

What I claim as new is:—

In a stove damper, the combination of a damper plate having a damper opening formed with loops at each edge of the plate, said plate having an enlargement of the rod opening within each loop; a damper rod adapted to enter the rod opening from either side and having a shoulder adapted to turn in one or the other enlargement which may be next the end through which the rod enters and to lock with the plate with an outward movement of the rod after it is turned into the enlargement; and a spring exerting pressure on the rod to hold the shoulder in locked position.

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

CHARLES A. MASSING.

Witnesses:
B. M. HARTMAN,
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