

(No Model.)

F. S. LANG.
DAMPER FOR FURNACE PIPES.

No. 493,363.

Patented Mar. 14, 1893.

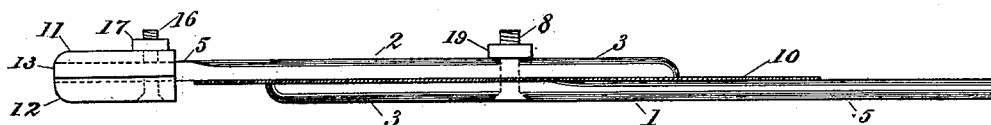


Fig. 1.

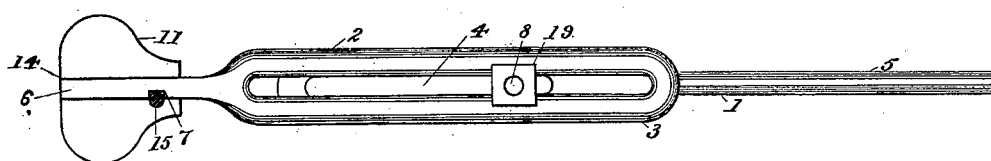


Fig. 2.

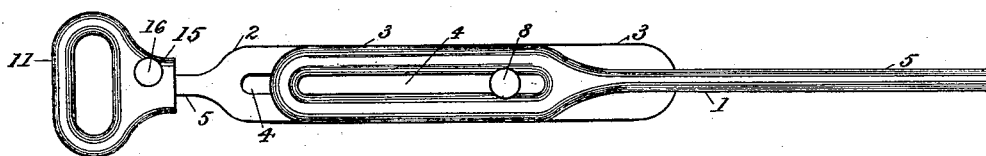


Fig. 3.

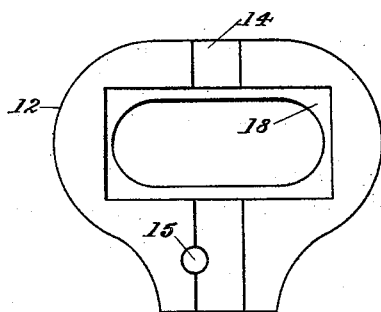


Fig. 4.

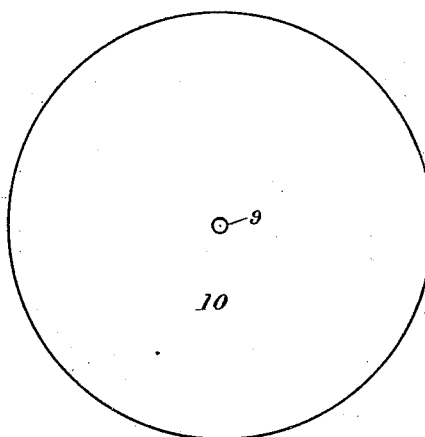


Fig. 5.

Witnesses.

C. S. Hein.
Chas. E. Sackitt

Frank S. Lang, Inventor

per Edward J. Russell
Attorney.

UNITED STATES PATENT OFFICE.

FRANK. SALLES LANG, OF HELENA, MONTANA.

DAMPER FOR FURNACE-PIPES.

SPECIFICATION forming part of Letters Patent No. 493,363, dated March 14, 1893.

Application filed June 22, 1892. Serial No. 437,554. (No model.)

To all whom it may concern:

Be it known that I, FRANK. SALLES LANG, a citizen of the United States, and a resident of the city of Helena, county of Lewis and Clarke, State of Montana, have invented a new and useful Improvement in Dampers for Furnace-Pipes, of which the following is a specification.

The necessity for a damper, combining strength, durability and convenience, and for some simple method of distinguishing the different pipes running from a hot air furnace, is well known.

My invention is intended to supply these needs by a strong, convenient damper, having an adjustable damper rod, that can be adapted to any size of pipe, and which carries in the handle a recess, for a card, designating the room to which the pipe leads.

It consists of a sheet iron damper plate, a damper rod, constructed in two sections, having their inner ends widened and slotted, and overlapping, secured together by a bolt, and one end having attached thereto a handle, in two sections, one of which is open, between which is fitted a card.

Figure 1. shows an edge elevation of the rod with damper and handle. Fig. 2. shows one side elevation of damper-rod and handle. Fig. 3. shows the other side elevation of rod and handle. Fig. 4. shows an inside elevation of one section of handle. Fig. 5. shows the damper plate.

Similar figures refer to like parts in all the drawings.

The damper rod is made in two sections, 1, and 2. Each of these has its inner end, 3, widened and has a slot, 4, in this wide part. The slot in section 1 need be only one half the length of the slot in section 2. The section 1, has its smaller end, 5, rounded to play freely in a hole in the pipe; the section, 2, has a like round bearing, 5, where it rests in the pipe, and its end, 6, squared, with a notch or groove, 7. The two sections are fastened together by the bolt, 8, which passes through the slots, 4, in each, and through the hole, 9, in the center of the damper, 10, and is secured by the nut, 19.

The handle, 11, is made in two sections, 12, and 13. Both sections have a groove, 14,

across them, from the inner to outer edge, to receive the squared end of the rod, 2, this groove being much deeper in section, 13, than in 12. Each also has a hole, 15, which corresponds, upon their respective sides, with the notch, 7, in the rod, 2. The two sections are fastened together and to the rod, 2, by the bolt, 16, which passes through the holes, 15, and the notch, 7, and is secured by the nut, 17.

On the inner surface of the handle section, 12, is a rectangular recess, 18, enough deeper than the groove, 14, to receive a glass plate and a card.

The method of adjustment is as follows:— The damper plate of the requisite size being cut, and perforated in the center with a hole, 9, corresponding to the size of the bolt, 8; the rod section, 1, is placed in the pipe with its end, 5, in the hole prepared for it. The damper plate, 10, is put in place, and then the rod section, 2, the handle being detached, is put in position in the hole in the pipe prepared for it, and the two sections, 1, and 2, being adjusted in line, upon opposite sides of the damper plate, the bolt, 8, is inserted through the slots, 4, and the hole, 9, and secured. Before attaching the handle sections to the rod section, 2, a card, giving designation of the room, as "Dining room" or "Parlor," to which the pipe leads, is inserted in the recess in the handle-section, 12, with or without a glass front. It is readily seen that the same rod may be adjusted to any size of pipe, from one having a diameter equal to the length of the slotted portion of section, 2, to one having a diameter about double that length. The minimum desirable diameter is eight inches, and a rod suitable for an eight inch pipe may be adjusted to any size up to fifteen and one-half inches. If found desirable, in large pipes, an additional bolt may be passed through the slot in section, 2, near the handle, and through the damper, and secured.

The damper rod may be of cast or wrought iron or any suitable material.

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

A furnace damper, consisting of a damper

plate, in combination with a damper rod in
two sections joined by a pin or bolt, each
section having a slotted end and being ad-
justable lengthwise, substantially as shown
5 and described.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres-

ence of two witnesses, this 17th day of June,
1892.

FRANK. SALLES LANG.

Witnesses:

CHAS. E. SACKETT,
EDWARD C. RUSSEL.