June 25, 1940. G. N. BRUNANDER 2,205,591

FIREPLACE DAMPER

Filed March 20, 1939

FIG. 1.

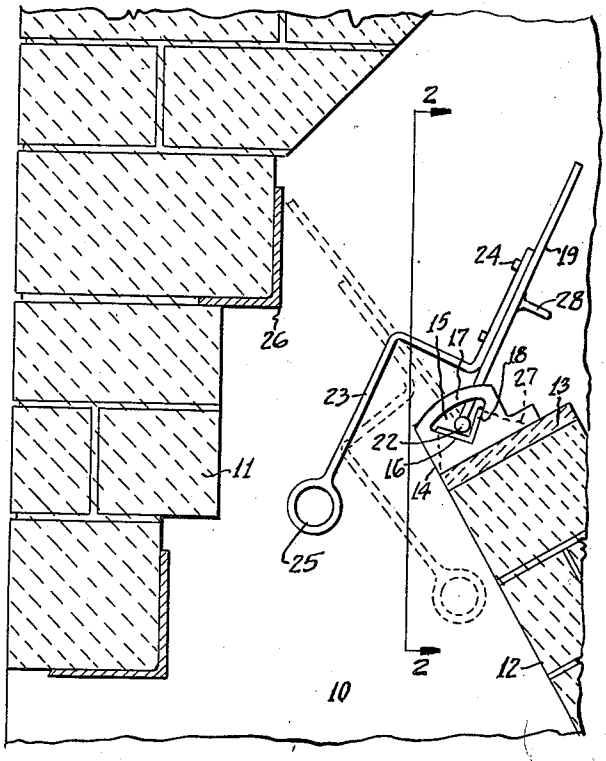


FIG. 3.

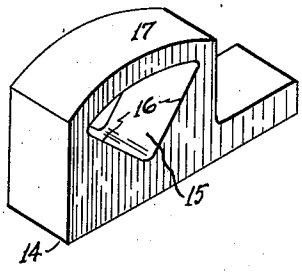


FIG. 4.

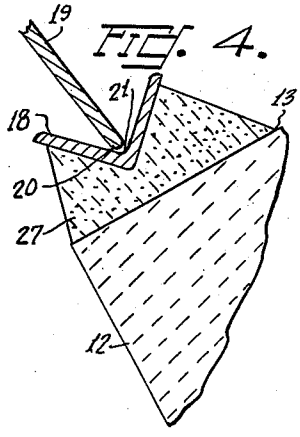
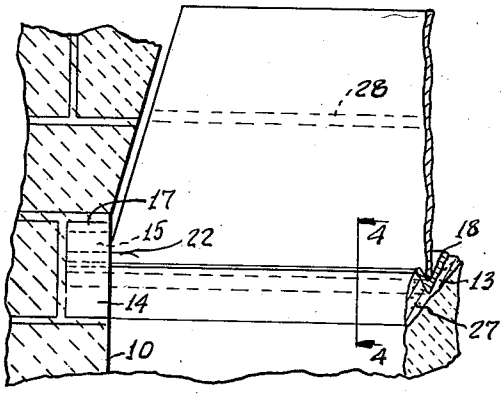
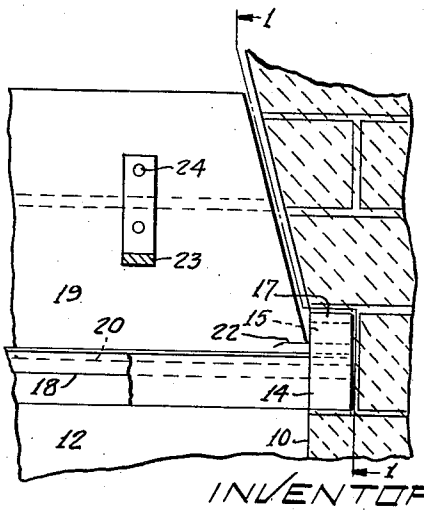


FIG. 2.





INVENTOR

G. N. BRUNANDER

BY

ATTORNEY

Patented June 25, 1940 2,205,591

UNITED STATES PATENT OFFICE

2,205,591

FIREPLACE DAMPER

Gustav N. Brunander, Portland, Oreg.

Application March 20, 1939, Serial No. 262,861

3 Claims. (Cl. 126—288)

This invention relates generally to fireplaces, and particularly to a fireplace damper.

The main object of this invention is to construct an efficient form of fireplace damper which will not cause a cracking of the masonry due to expansion and contraction of the parts in the damper.

The second object is to construct a positive acting damper which will be airtight when closed.

The third object is to construct a damper which will be easy to manufacture and install and low in cost.

The fourth object is to construct a damper which will not require the usual rectangular frame for supporting the parts of the damper.

The fifth object is to construct a damper which is light in weight and unaffected by the moisture and gases commonly associated with fireplaces.

The sixth object is to construct a special form of support for the ends of the angular damper pivot.

I accomplish these and other objects in the manner set forth in the following specification as illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary section through the throat of the fireplace showing the damper in end elevation taken along the line 1—1 in Fig. 2.

Fig. 2 is a fragmentary broken section taken along the line 2—2 in Fig. 1.

Fig. 3 is a perspective view of a support for the angular damper pivot.

Fig. 4 is a fragmentary transverse section taken along the line 4—4 in Fig. 2.

Similar numerals refer to similar parts throughout the several views.

Referring in detail to the drawing, there is shown a common form of fireplace comprising the side walls 10, the arch 11 and the fire wall 12 on the opposite ends of whose top side 13 are disposed the supports 14 having the openings 15 formed therein. The openings 15 have the sloping sides 16 and the rounded top 17. The supports 14 are imbedded in the masonry of the side walls 10.

Within the openings 15 is mounted the ends of the angular bar 18. In the angular bar 18 is mounted the tiltable damper 19 whose lower edge 20 barely clears the inner corner 21 of the angular bar 18.

It will be understood that the angular bar 18 is slidable within the openings 15 to permit the expansion and contraction thereof without injuring the masonry.

It is desirable to provide the trunnions 22 at each end of the damper 19 and it is upon these trunnions that the damper pivots. The trunnions 22 project into the openings 15 and prevent the accidental displacement of the damper.

A lever 23 is attached to the damper 19 by means of the bolts 24. The lever 23 has formed on its lowermost end an eye 25 into which may be inserted an operating iron such as a poker.

In constructing the fireplace it is desirable to provide an angle bar 26 along the inner side of the arch and it is against this bar 26 that the damper 19 rests when in a closed position as shown in dotted lines in Fig. 1.

It is desirable to close the space between the angular bar 18 and the top 13 with a suitable plastic material 27. There is also provided a rib 28 along the back of the damper 19 for stiffening purposes.

It can be seen that by this construction there is provided an extremely efficient, inexpensive and durable damper which is positive in its opening and closing operations and which does not require the use of the unsightly chain pull commonly employed for this purpose.

Attention is drawn to my former Patent No. 1,605,704, dated November 2, 1926, over which this damper is an improvement.

I claim:

1. A support for angular damper pivots consisting of a body of metal adapted to be imbedded in the fire walls of a fireplace, said body having an opening therein, the lower portion of which is substantially square and an angle bar adapted to slidably rest in the square portion of said opening, said angle bar being directly above the fire wall of the fireplace.

2. A fireplace damper consisting of an angle iron adapted to be mounted over the fire wall of a fireplace and having the ends thereof slidably mounted in the end walls of the fireplace, a damper adapted to have its lower edge pivot in said angle bar and having a lever attached thereto by means of which said damper may be moved to an open or a closed position.

3. A fireplace damper consisting of an elongated angular bar mounted above the fire wall of a furnace in a manner to form a trough thereon, a trough-shaped support for each end of said bar adapted to slidably support same, the damper having one edge thereof pivotally mounted in said trough and means for retaining said damper in said trough.

GUSTAV N. BRUNANDER.