A. HAUSAM.

FLAME AND SPARK CHECKING DEVICE.

APPLICATION FILED DEC. 10, 1914.

1,130,593. Patented Mar. 2, 1915.

FIG. 1.

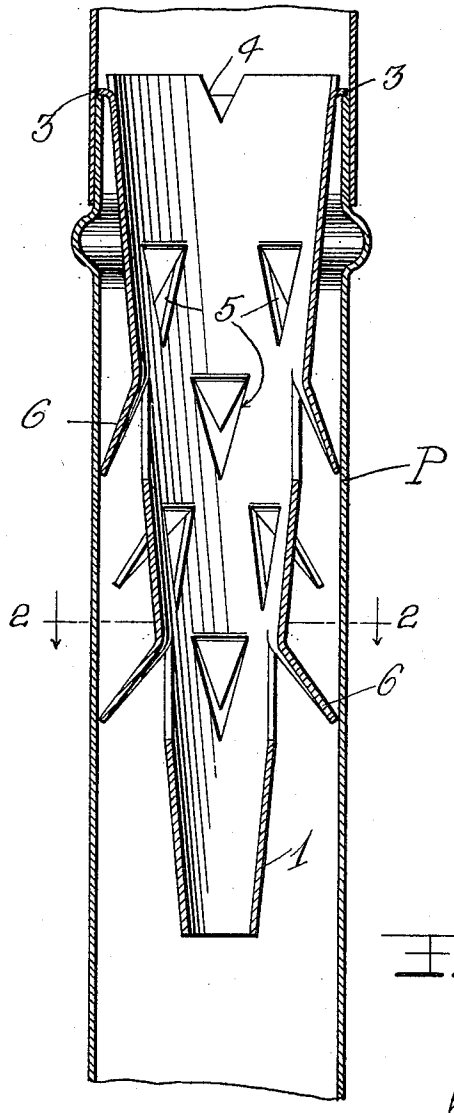


FIG. 3.

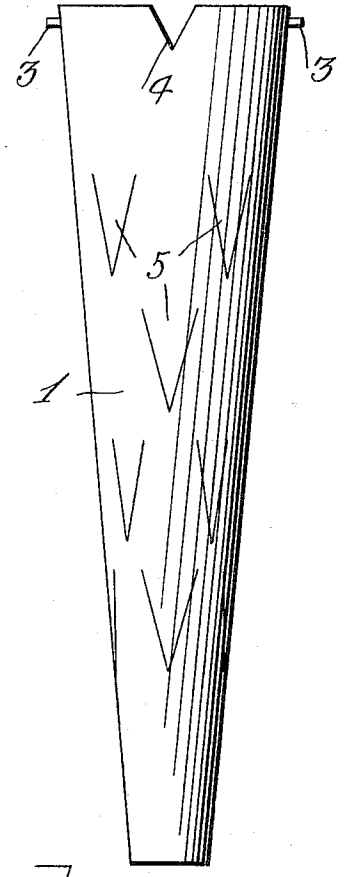
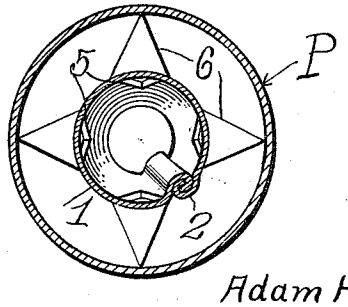


FIG. 2.



Witnesses

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FLAME AND SPARK CHECKING DEVICE.

1,130,593. Specification of Letters Patent. Patented Mar. 2, 1915.

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To all whom it may concern:

Be it known that I, ADAM HAUSAM, a citizen of the United States, residing at Visalia, in the county of Tulare and State of California, have invented certain new and useful Improvements in Flame and Spark Checking Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for checking the upward course of flames and sparks in various types of flues, thereby retaining more heat within the stove or furnace, than could be obtained without such a device.

The object of the invention is to provide such an article which will readily perform the functions for which it is designed, and which may be constructed of a single sheet of metal, so formed as to provide a cone-shaped flame checking device, and a plurality of flame and spark deflecting tongues projecting outwardly from said device, said tongues being normally in retracted position, but being capable of being bent outwardly into contact with a flue in which the device is employed, whereby they act not only as deflecting tongues, but as means for retaining the article in the flue.

With the above and minor objects in view, the invention resides in certain novel features of construction and combination, hereinafter described and claimed and shown in the drawings wherein:

Figure 1 is a vertical section of a portion of a stove pipe showing the application of my invention thereto; Fig. 2 is a horizontal section as seen on the line 2—2 of Fig. 1, and Fig. 3 is a side view of the device showing the position of parts before it is inserted into the stove pipe.

In these drawings, constituting a part of this application, the numeral 1 designates a hollow inverted cone-shaped member which is preferably formed of a single sheet of metal whose edges are connected by a seam 2. Struck laterally outward from the base of the cone, is a plurality of ears 3 which overlie the upper edge of the stove pipe P, when the device is positioned therein, these ears thereby preventing dislocation of the member 1. The base is also provided with a plurality of draft notches 4.

Before bending the metal plate into the form of the cone 1, it is provided with a plurality of V-shaped slits 5 as most clearly seen in Fig. 3, the material in the angles of these slits being allowed to remain as seen in this figure, before the device is applied to use, but being then bent outwardly as seen in Figs. 1 and 2 to provide a plurality of tongues 6 whose outer ends contact with the pipe P. By this construction, a number of draft openings are provided through the member 1, and the tongues 6 constitute not only means for directing smoke and exhaust gases from the furnace or stove into said openings, but serve as positive means for retaining the member 1 in proper position in respect to the pipe P.

I have described the invention as equipped with a number of V-shaped tongues and as applied to an upright stove pipe, but it will be readily understood that these tongues might well be of any proper formation for accomplishing the results desired, and that the device could well be positioned within the horizontal flue or stove pipe, since the tongues will retain it centered within the same at all times.

From the foregoing, taken in connection with the accompanying drawings, it will be seen that a very simple device has been provided for carrying out the object of the invention, yet that the efficiency of the device is not impaired by such simplicity.

I claim:

1. The combination with a flue, of a hollow inverted cone-shaped member therein and having a plurality of openings in its circular wall, and a plurality of laterally extending smoke deflecting plates integrally joined at their inner ends to said wall adjacent the openings therein, the outer ends of said plates being in contact with the flue whereby to retain the cone-shaped member therein.

2. The combination with an upright cylindrical flue, of a hollow inverted cone-shaped member therein and having a plurality of openings in its circular wall, and a plurality of laterally extending smoke de-

flecting plates having their inner ends joined integrally with said wall directly above the openings therein, said plates being inclined downwardly and outwardly and having their outer ends disposed in contact with the flue, to retain said member therein.

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

ADAM HAUSAM.

Witnesses:
CLARENCE E. DAVIS,
F. M. MATTOCKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."