

L. E. SHULL AND V. D. SIPES.
 SPARK ARRESTER.
 APPLICATION FILED MAY 25, 1921.

1,438,868.

Patented Dec. 12, 1922

Fig. 1.

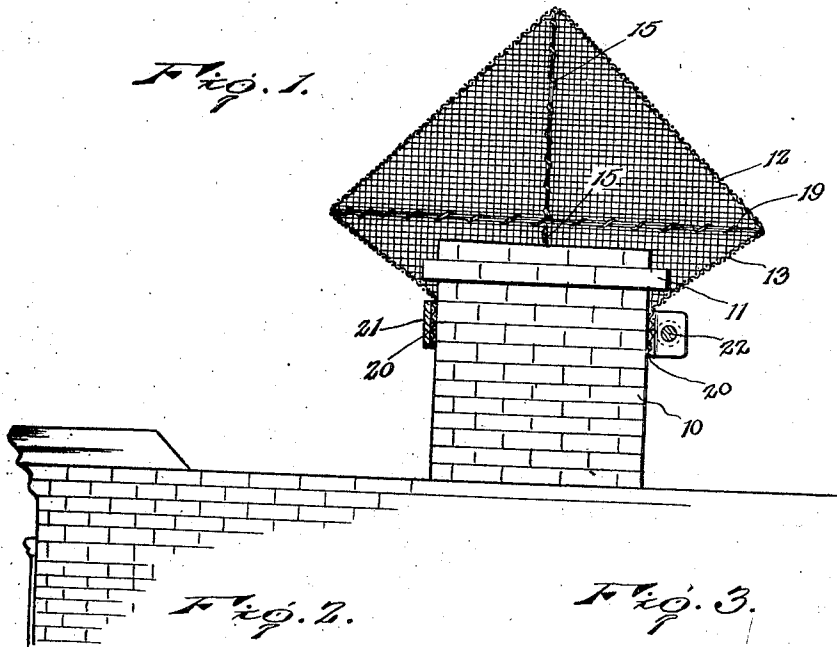


Fig. 2.

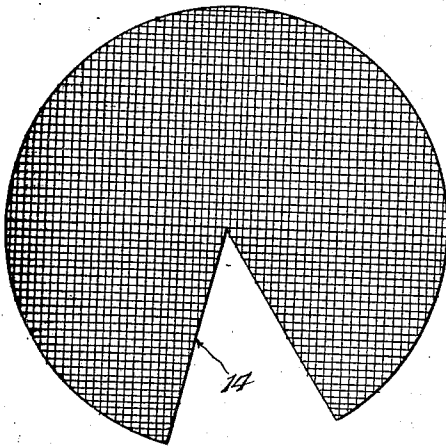


Fig. 3.

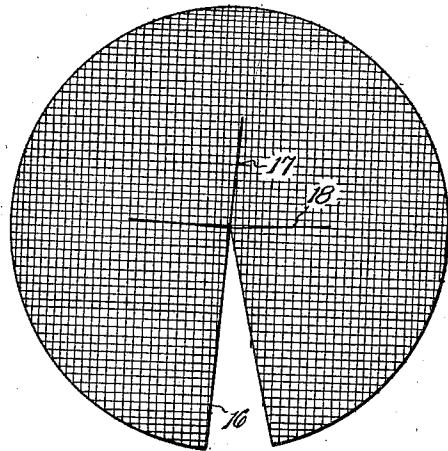
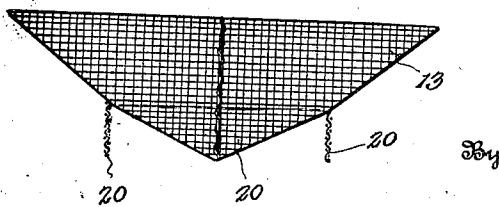


Fig. 4.



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UNITED STATES PATENT OFFICE.

LOUIS E. SHULL AND VAN D. SIPES, OF EMMETT, KANSAS.

SPARK ARRESTER.

Application filed May 25, 1921. Serial No. 472,581.

To all whom it may concern:

Be it known that we, LOUIS E. SHULL and VAN D. SIPES, citizens of the United States, residing at Emmett, in the county of Pottawatomie and State of Kansas, have invented certain new and useful Improvements in Spark Arresters, of which the following is a specification.

This invention relates to an improved spark arrester particularly designed for use upon the chimneys of buildings and has as one of its principal objects to provide a device of this character which may be readily applied to practically any house chimney.

The invention has as a further object to provide a spark arrester which will be characterized by extreme simplicity but which, nevertheless, in practical use, will prove entirely efficient.

And the invention has as a still further object to provide a spark arrester which will be inexpensive as well as neat and attractive in appearance.

Other and incidental objects will appear hereinafter.

In the drawing:

Figure 1 is a fragmentary side elevation showing our improved spark arrester in connection with an ordinary house chimney, the spark arrester being illustrated in section,

Figure 2 is a plan view showing the blank from which the top section of the spark arrester is formed,

Figure 3 is a plan view showing the blank from which the bottom section of the spark arrester is formed, and

Figure 4 is an elevation showing the bottom section of the spark arrester in detail.

Referring now more particularly to the drawing, we have, for convenience, shown our improved spark arrester in connection with a house chimney 10 of conventional design, this chimney being provided near its upper end with the usual shoulder 11. In carrying the invention into effect, our improved spark arrester is preferably formed of mating conic upper and lower sections 12 and 13 respectively. The upper section is preferably formed from a circular blank of the character illustrated in Figure 2. The blank is preferably constructed of suitable wire netting and formed in the blank is a suitable segmental notch 14. In construct-

ing the section 12 from the blank, the side edges of this notch are brought together, causing the blank to bow or bend into conical shape when the side edges of the notch are laced together by an approved tie wire 15. The lower section of the device is preferably formed from a circular blank of the character shown in Figure 3. At one side, this blank is provided with a segmental notch 16, at the inner end of which is a slit 17 forming a continuation of one side edge of the notch and crossing the slit 17 at the apex of the notch is a slit 18 disposed at substantially right angles to the former slit. To provide the section 13 of the device, the side edges of the notch 16 are brought together, thus causing the blank to bend into conical shape and, as will be observed, the large end of the section 13 is formed to mate with the large end of the section 12. Thus, the tie wire 15 may be employed for lacing the side edges of the notch 16 of the section 13 together, the wire being passed back and forth through the mesh of the sections uniting the sections. Connecting the sections at their meeting ends is a tie wire 19 which, like the wire 15, is laced back and forth through the mesh of the sections and serves to firmly secure the sections together. As will be observed, the slots 17 and 18 provide a plurality of intervening tongues 20 upon the section 13 of the device and in applying the spark arrester to the chimney, these tongues are bent downwardly, as suggested in Figure 4, so that the section 13 may be fitted over the chimney, the tongues lying flat against the sides of the chimney below the shoulder 11. Securing the device in position upon the chimney is a split clamping band 21 which is arranged to extend around the chimney overlying the tongues 20 and connecting the ends of the band is a clamping bolt 22. As will be at once appreciated, this bolt may be adjusted for binding the band about the chimney and thus securely fastening the device upon the chimney, the shoulder 11 of the chimney being adapted to prevent upward displacement of the band. It will thus be seen that we provide a particularly simple device for the purpose set forth. In practice, sparks or burning soot will collect within the device around the top of the chimney and will thus be prevented from falling to the house roof. However,

since air may freely circulate through the device, the device will be prevented from clogging with ashes.

Having thus described the invention, what is claimed as new is:

5 A spark arrester including companion foraminous discs each having a segmental notch therein, a tie wire securing the side edges of the notches together whereby to
10 form the discs into mating conical cage sections, a tie wire securing the sections together at their larger ends to form a cage reinforced by said wires, the lower section

being slit and having the portions thereof between the slits bent downward to provide 15 an opening for receiving a chimney as well as to define a plurality of depending tongues to lie along the sides of the chimney, and a band surrounding the chimney overlying said tongues clamping the device in position upon 20 the chimney.

In testimony whereof we affix our signatures.

LOUIS E. SHULL. [L. S.]
VAN D. SIPES. [L. S.]