Oct. 27, 1942. E. J. ARTIS 2,300,088

CHIMNEY EXTENSION

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Fig. 1.

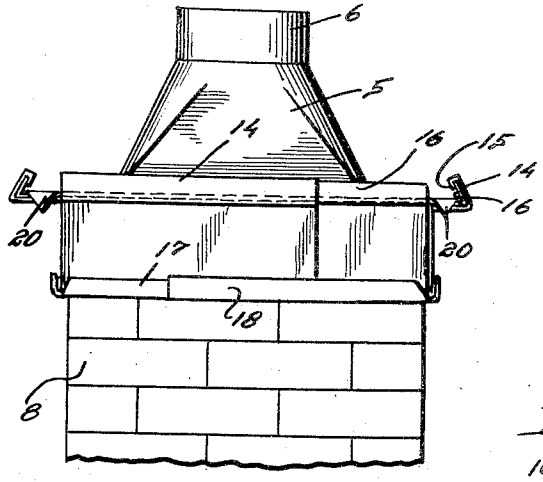


Fig. 4.

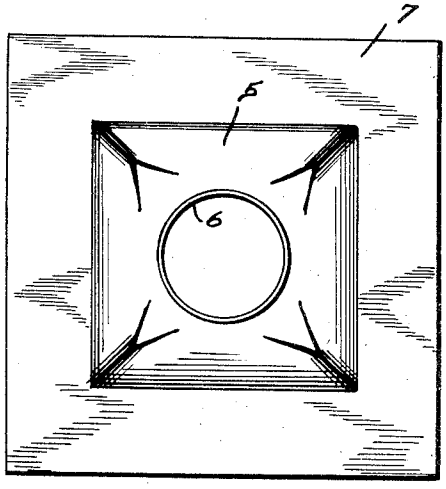


Fig. 5.

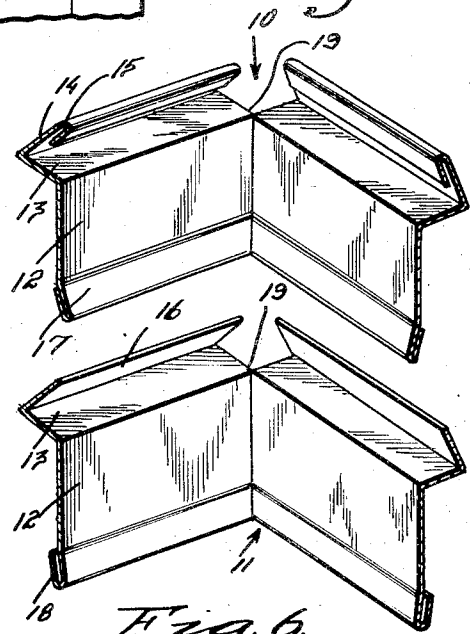


Fig. 6.

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Fig. 2.

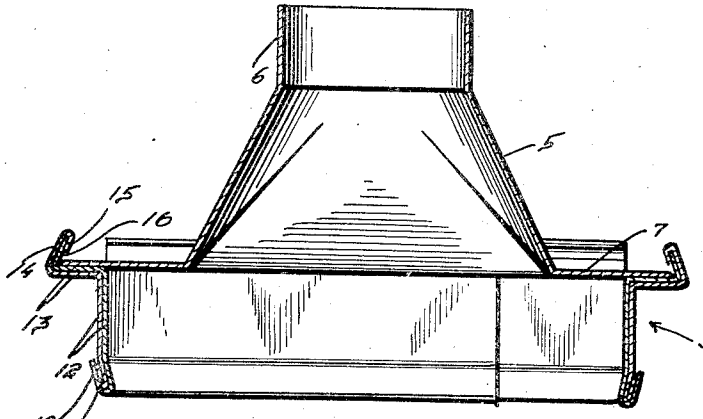
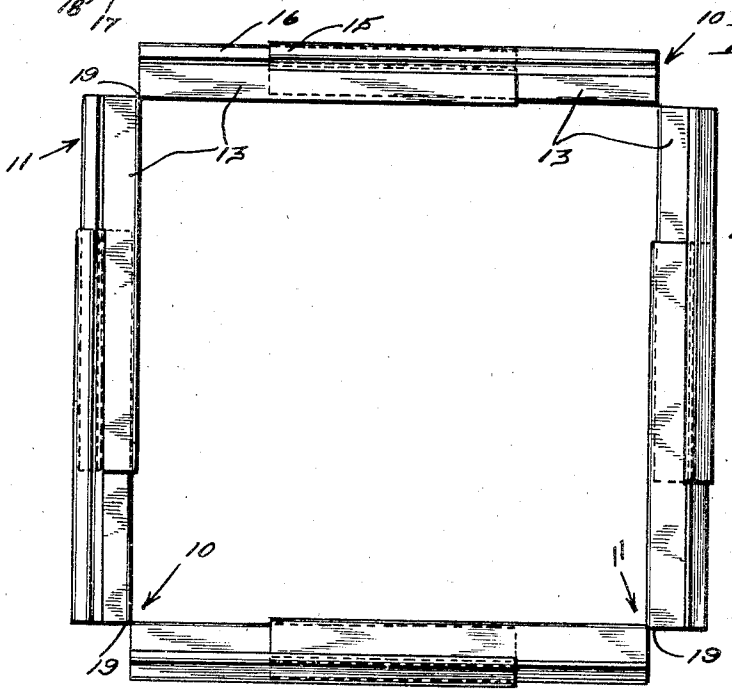


Fig. 3



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UNITED STATES PATENT OFFICE

2,300,088

CHIMNEY EXTENSION

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Application December 9, 1940, Serial No. 369,322

2 Claims. (Cl. 98—67)

This invention relates to an extension for use on chimneys, smokestacks and the like, to increase the height thereof, and an object of the invention is to provide an extension of this character which can be readily fitted to the chimney or stack regardless of the diameter of the chimney.

A further object of the invention is to provide an extension of this character which can be fitted to the chimney without requiring a great deal of skill, and which when fitted will be substantially leakproof and will tend to keep weather stains to a minimum.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings wherein:

Figure 1 is an elevational view of the extension and illustrating an application thereof to a chimney.

Figure 2 is a vertical sectional view through the assembled extension.

Figure 3 is a plan view of the retaining skirt forming part of the extension.

Figure 4 is a plan view of the cap forming part of the extension.

Figure 5 is a fragmentary corner view of one of the sections of the skirt, and

Figure 6 is a view similar to Figure 5 of a second section of the skirt.

Referring more in detail to the drawings it will be seen that in the preferred embodiment thereof the extension comprises a chimney top 5 that is substantially frustro-conical, although it may be of any other shape in cross section and in actual practice is of a length such as, for example, five inches, as to be sufficient for cutting down the resistance of air travelling through it.

At its minor or upper end, the top 5 is formed with an integral neck 6 upon which may be sleeved one end of an extension pipe when the use of such a pipe is desired.

At its major or base end, the top 5 is formed integrally with a base flange 7.

The top 5 and associated parts are preferably formed from sheet metal, and in actual practice it is intended to have the flange 7 with an overall area that will exceed the diameter of the chimney of usual size so that the area of the flange 7 may be reduced by cutting it along its marginal edges in order to be proportioned to the area of the chimney upon which it is to be fitted.

For securing the extension of the chimney, the upper portion of which is shown fragmentarily in Figure 1 and indicated by the reference numeral 8, there is provided an expansible and contractible retaining frame or skirt 9.

The retaining frame or skirt 9 is preferably formed of four substantially L-shaped members or sections, two of which are indicated respectively by the reference numeral 10 and the other two of which are respectively indicated by the reference numeral 11.

The members or sections 10 and 11 are cut from sheet metal or other suitable material, and the members respectively are cut, shaped and dimensioned to provide for each a main body portion 12 having at its upper edge a lateral flange 13.

The flanges 13 of the members 10 are formed with integral upwardly directed and inclined lips 14 that have their edges reversely bent as shown to provide internal grooves 15 while the flanges 13 of the members 11 are provided with upstanding lips 16 that form ribs that slidably fit the grooves 15 associated with the flanges 13 of the members 10, thus permitting the members 10 and 11 to be adjusted relative to one another for increasing or decreasing the size of the skirt 9.

Also, the body portions 12 of the members 10 have the lower edges thereof reversely bent to provide reinforced edges 17 that slidably engage in channels 18 formed at the lower edges of the bodies 12 of the members 11 by reversely bending the bodies of said members 11 at the lower edges thereof and as clearly shown in Figure 6.

Thus it will be seen that a tight sliding fit between the several members or sections is provided for.

It will also be appreciated that at the corners thereof the members 10 and 11 have portions removed in order to provide notches 19.

In mounting the extension or top 5 on the chimney 8 the necessary marginal edge portion of the base flange 7 is removed and the frame or skirt 9 fitted about the chimney 8 as shown with the flange 7 resting on the flanges 13 of the members 10 and 11 of the skirt 9. After the member 9 has been adjusted to the proper extent, the groove forming parts 15 of the flanges 14 are clinched over the members 16 to secure the sections 10 and 11 against relative movement; while the corners of the flange 7 are bent downwardly to overlap the skirt 9 at the notches 19 as shown in Figure 1 and indicated at 20. Thus the top and skirt are positively secured together when

the parts are in final assembled position on the chimney 8.

It is thought that the simplicity of the device, together with its many advantages will be clear to those skilled in the art without further detailed description thereof.

It is also to be understood that while I have shown and described the preferred embodiment of the invention, I claim all such forms of the invention to which I am entitled in view of the prior art and scope of the appended claims.

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

1. In a chimney extension of the character described, including mutually separable top and bottom elements; said top embodying a tubular body having an outwardly extending base flange at its lower edge adapted to rest on the top of a chimney within the confines of the bottom element, and said bottom element including a skirt portion formed of a plurality of complemental horizontally extensible and retractible sections having interfitting slidable connection with each other and adapted to telescope over the top of the chimney, said sections having an upper edge formed with lateral flanges on which the base flange is seated, and integral upstanding lips on the outer edges of the flanges of said skirt sections inclined inwardly and adapted to overlie the marginal edge of the base flange.

2. In a chimney extension of the character described, including mutually separable top and bottom elements; said top embodying a tubular body having an outwardly extending base flange at its lower edge adapted to rest on the top of a chimney within the confines of the bottom element, and said bottom element including a skirt portion formed of a plurality of complemental horizontally extensible and retractible sections having interfitting slidable connection with each other and adapted to telescope over the top of the chimney, said sections having an upper edge formed with lateral flanges on which the base flange is seated, integral upstanding lips on the outer edges of the flanges of said skirt sections inclined inwardly and adapted to overlie the marginal edge of the base flange; each of said skirt sections being substantially L-shape in top plan and having the referred to lateral flanges thereof at the angle defined by the arms of the L separated to provide at said angle a notch, said base flange having angular edges defining corners bent downwardly in engagement with the notches of the respective skirt sections for securing the bottom element in a set position of adjustment.

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