Dec. 8, 1942. J. HOESLI 2,304,500

CHIMNEY

Filed May 6, 1941

Fig. 1.

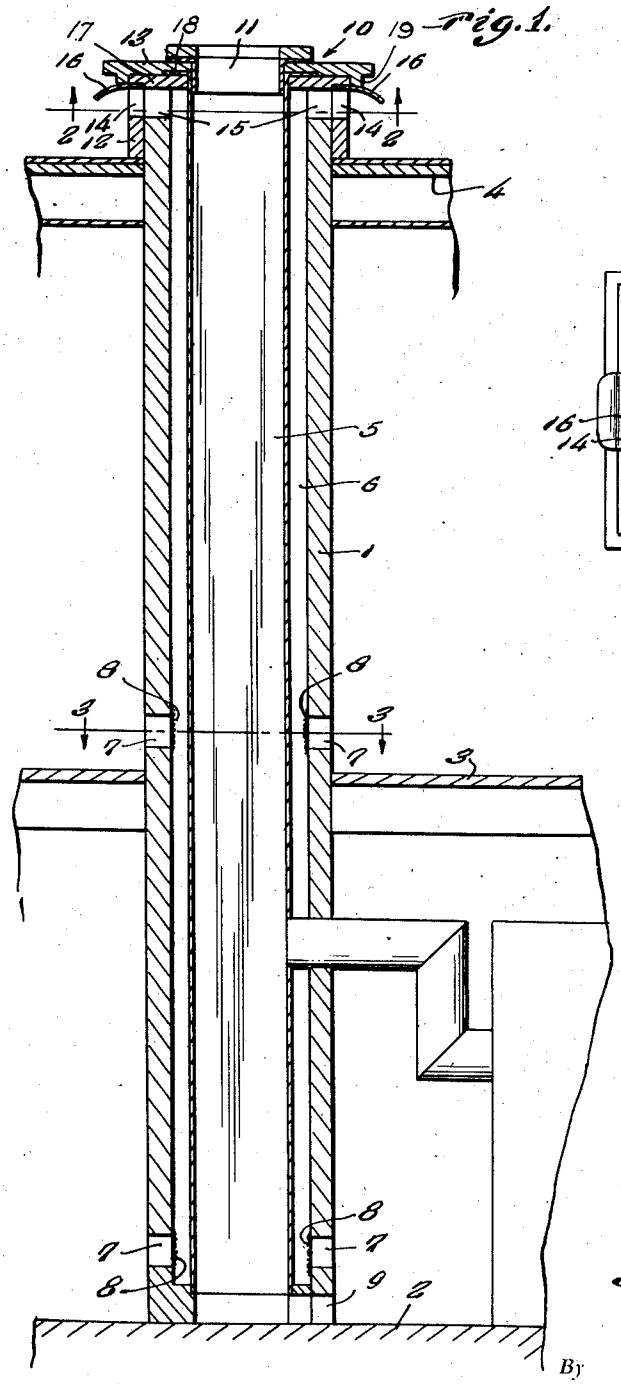


Fig. 2.

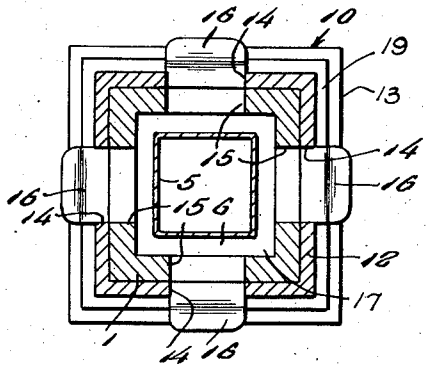
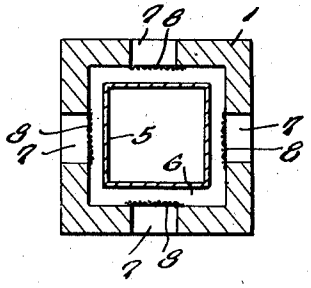


Fig. 3.



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2,304,500

CHIMNEY

Jost Hoesli, Blue Mounds, Wis.

Application May 6, 1941, Serial No. 392,172

1 Claim. (Cl. 98—46)

The present invention relates to new and useful improvements in chimneys and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character which will be substantially fireproof.

Another very important object of the invention is to provide a chimney of the aforementioned character wherein the masonry walls will be kept comparatively cool at all times.

Still another very important object of the invention is to provide a chimney of the character described which comprises novel ventilating means.

Other objects of the invention are to provide a fireproof, ventilating chimney which will be comparatively simple in construction, strong, durable, compact and which may be produced at reasonable cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in vertical section through a chimney constructed in accordance with the present invention.

Figure 2 is a view in horizontal section, taken substantially on the line 2—2 of Figure 1.

Figure 3 is a view in horizontal section through the chimney, taken substantially on the line 3—3 of Figure 1.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a stack or flue 1 of suitable masonry construction, which flue may be of any desired dimensions. In the embodiment illustrated, the flue 1 is shown extending from the floor 2 of the basement of a building up through the first floor 3 and the roof 4 of said building. Of course, the lower end of the flue 1 may rest on a suitable base.

Mounted in the flue 1 is a lining 5 of suitable metal. The lining 5 is spaced from the walls of the flue 1, thus providing an air space or passage 6 therebetween.

Ventilating openings 7 are provided in the flue 1, which openings communicate with the air space or passage 6. The ventilating openings 7 are screened, as at 8. The lower end portion of the chimney is provided with a suitable clean-out 9.

Mounted on the upper end portion of the flue 1 is a cap 10 to which the lining 5 is connected. The cap 10 is formed to provide a centrally located opening 11 which communicates with the interior of the lining 5.

The cap 10 comprises a plate 17 which rests on the upper end of the flue 1. Depending from the plate 17 is an integral skirt 12 which encloses the upper end portion of the flue 1. The skirt 12 has formed therein air outlet openings 14 which register with openings 15 in the upper end portion of the flue 1 for communication with the passage 6. It will be observed that the plate 17 constitutes the upper walls of the openings 15. Curved shields 16 are embedded in the plate 17 above the openings 14 and project outwardly and downwardly from said plate. The cap 10 further comprises a top 13 which rests on the plate 17. An integral retaining skirt 19 depends from the top 13 and receives within its confines the plate 17. An outturned flange 18 on the upper end of the lining 5 is engaged between the members or portions 13 and 17 for positively connecting said flue to the cap 10.

It is thought that the manner in which the chimney functions will be readily apparent from a consideration of the foregoing. Briefly, smoke, hot air, etc., pass upwardly through the lining 5 and are discharged to the atmosphere through the opening 11 in the cap 10. The flue 1, being spaced from the lining 5, will remain comparatively cool at all times. Air is drawn into the space 6 through the openings 7 and flows upwardly around the lining 5 and is discharged to the atmosphere through the openings 15 and 14. In this manner the building is ventilated. This upward flow of the air in the passage 6 also greatly assists in preventing the transmission of excessive heat to the walls of the masonry flue 1.

It is believed that the many advantages of a chimney constructed in accordance with the present invention will be readily understood and although a preferred embodiment is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

A chimney including a masonry flue having air outlet openings in its upper end portion, a cap on the upper end of the flue, said cap including a plate engaged on the flue and constituting the upper walls of the openings, an integral skirt depending from the plate around the flue and having openings therein communicating with the first-named openings, curved shields embedded

in the plate and projecting outwardly and downwardly therefrom above the second-named openings, a top mounted on the plate, an integral retaining skirt depending from said top and enclosing the plate, a lining in the flue spaced from the walls thereof for providing an air passage therebetween communicating with the openings, said flue further having air intake openings therein communicating with the passage, and an external flange on the upper end of the lining engaged between the plate and the top for connecting said lining to the cap, said cap having a centrally located opening therein communicating with the lining.

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