March 16, 1937. L. WHITE ET AL 2,074,291

VACUUM CHIMNEY TOP

Filed May 26, 1934

Fig. 1.

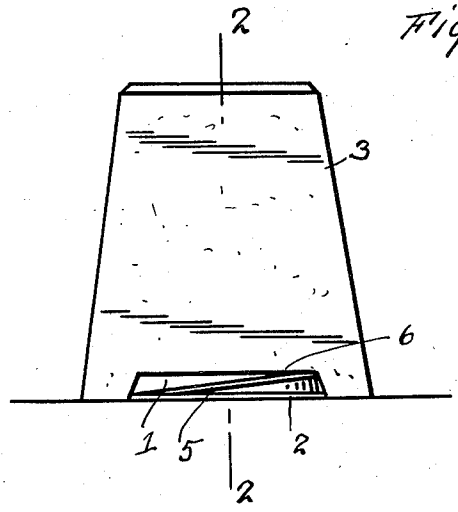


Fig. 3.

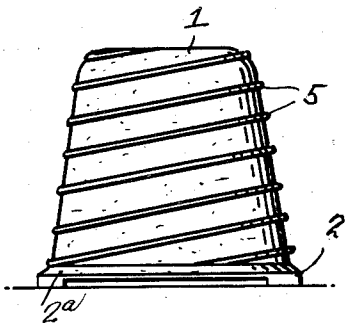
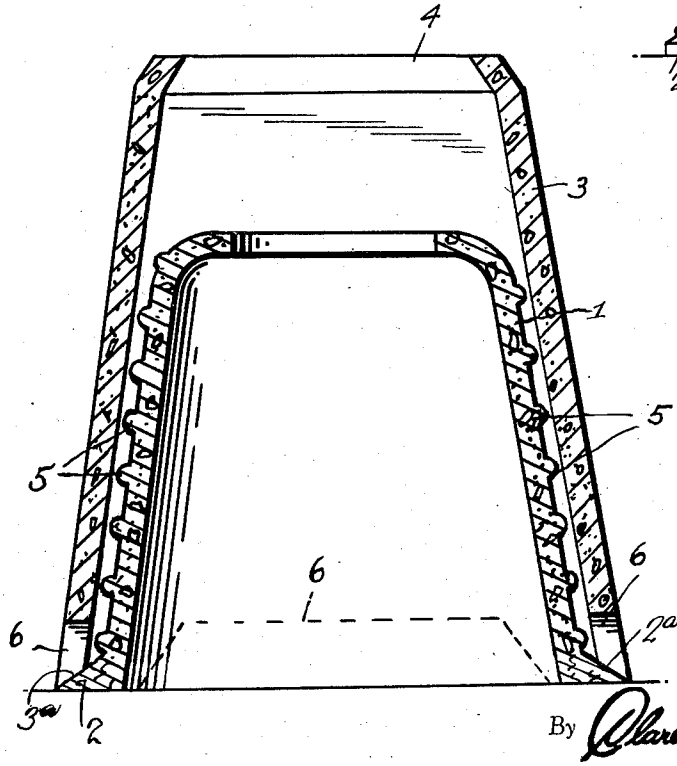


Fig. 2.



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Patented Mar. 16, 1937

2,074,291

UNITED STATES PATENT OFFICE

2,074,291

VACUUM CHIMNEY TOP

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Application May 26, 1934, Serial No. 727,813

1 Claim. (Cl. 98—67)

This invention relates to a chimney top, the general object of the invention being to so form the top that air currents will be produced, which will act to draw the products of combustion from the chimney by creating a vacuum therein, thus eliminating back draft or descending currents of air in the chimney, the invention also acting to increase the velocity of the draft in the chimney and prevent moisture from settling in the smoke channels.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is an elevation of the invention.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is an elevation of the inner member.

In this drawing, the numeral 1 indicates a substantially frusto-conical inner member which is formed with a base or outwardly extending flange 2 and the numeral 3 indicates an outer member which is substantially square-shaped in cross section and tapered from its lower end to its upper end, with the upper end provided with an inwardly and upwardly sloping part or lip 4 which forms a restricted discharge opening at the upper end of the member. The upper face 2a of the flange 2 declines outwardly. The inner member is formed with an external spiral rib 5 and as will be seen, the member 3 is seated on the flange 2, which in turn is seated on the upper end of the chimney and is suitably secured thereto and the lower edge of the member 3 is provided with the inlet cavities or openings 6. The lower edge 3A of the outer member 3 inclines inwardly and rests on the outwardly declining face 2A. The inclined abutting surfaces 2A and 3A aid to center the outer member with respect to the inner member. The inner and outer members are hollow and the interior surfaces of the walls incline inwardly and upwardly from the bottom to the top of each member on a uniform pitch so there will be no impediments restricting the flow of smoke and air.

Thus it will be seen that air will enter the openings 6 and pass upwardly between the two members so that these air currents produce a vacuum in the member 1 and in the chimney so that the products of combustion are drawn from the chimney and these products of combustion will mix with the air in the upper part of the member 3, which insures complete combustion, thus reducing the smoke leaving the device. The device creates an efficient draft in the chimney and eliminates back draft or descending currents of air due to obstructions or low chimneys or stacks. The device increases the velocity of the draft in the chimney and prevents rain and dampness from settling in the smoke channels.

The spiral rib 5 imparts a swirling motion to the air, though, if desired, this rib can be omitted.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What is claimed is:—

A chimney top comprising an upright hollow inner member adapted for receiving the products of combustion from a chimney, and an outset flange on the lower end of said inner member constituting a base for mounting on the chimney, the upper face of said flange declining outwardly, an upright hollow outer member telescoping the inner member and the former being of greater length than the latter, the interior surfaces of the walls of the outer member being inclined inwardly and upwardly on a uniform pitch from the bottom to the top thereof, the lower edge of the outer member inclining inwardly and resting on the declining face of the flange whereby the outer member is centered with respect to the inner member, said outer member spaced from the inner member to provide an air channel between the two members, said outer member formed with concavities at its lower edge registering with the air channel, and the walls of the outer member formed with an inset lip at the upper edge to provide a restricted opening at the top.

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