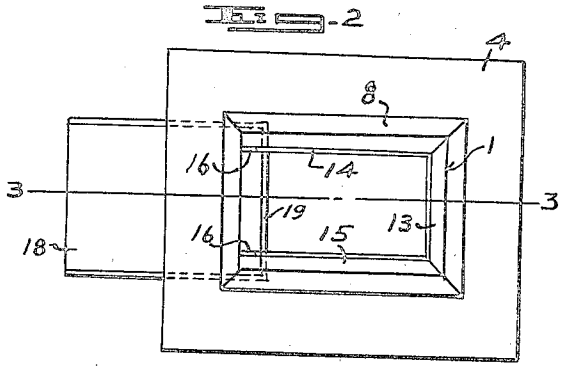
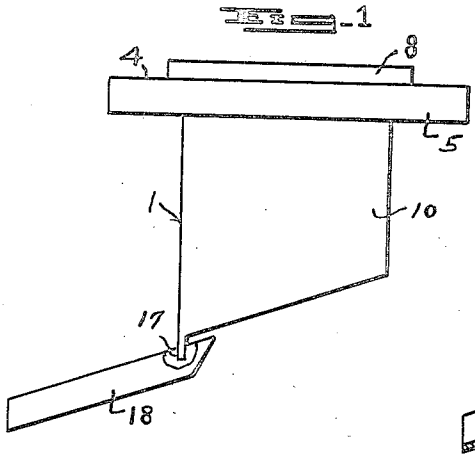
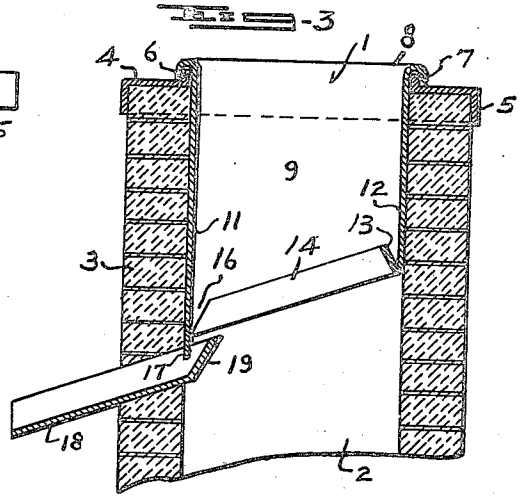
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MOISTURE GUARD FOR CHIMNEYS

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MOISTURE GUARD FOR CHIMNEYS

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1 Claim. (Cl. 98—58)

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This invention relates to a moisture guard for chimneys, and the primary object thereof is to provide a moisture guard of the character described, which will collect and dispose of all moisture, in the form of rain or moisture condensations, entering the chimney passage, to prevent the moisture from trickling down on the wall of the chimney passage in the usual manner, and thereby eliminate dampness and damage to the walls of rooms from such cause.

Further objects and advantages of the invention are to provide a device of the class stated, which may be readily installed in connection with any type of chimney top or conveniently removed from the latter when required for cleaning or repairs, which is simple in its construction and arrangement, durable and efficient in its use, compact, and comparatively economical in its manufacture, installation, operation and maintenance.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the novel construction, combination, and arrangement of parts herein specifically described and illustrated in the accompanying drawing, but it is to be understood that changes in the form, proportions and details of construction may be resorted to that come within the scope of the claim hereunto appended.

In the drawing wherein like numerals of reference designate corresponding parts throughout the several views:

Figure 1 is a side elevational view of a moisture guard for chimneys constructed in accordance with the invention.

Figure 2 is a top plan view thereof.

Figure 3 is a cross sectional view taken in line 3—3, Figure 2, and illustrating the application of the improved moisture guard to the top of a chimney.

Referring in detail to the drawing, it will be noted that the improved moisture guard is entirely constructed of any suitable kind of sheet metal, preferably copper sheet.

The moisture guard comprises a shield tube 1, which is open at both ends and which is designed and intended to be freely inserted or extended, in the vertical position, into the upper end portion of the passage 2 of a chimney 3. The shield tube is rectangularly-shaped in transverse cross section to conform to the transverse contour of the chimney passage 2 into which it is inserted.

A rectangularly-shaped top plate 4 is mounted

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on and covers the top of the chimney 3 and is maintained on the latter by a flange 5 depending from the periphery thereof. The top plate is provided with a rectangularly-shaped opening 6 which is disposed in registration with the chimney passage 2, and which has its wall formed to provide a short upwardly disposed attaching collar 7.

The upper end portion of the shield tube 1 projects through the top plate opening 6, and is roll turned outwardly to engage and overlap the collar 7 to secure, support, and suspend the shield tube from the top plate 4, as clearly shown in Figure 3. Such overlapping attachment of the upper end of the shield tube on the collar forms an elevated ridge 8, which is disposed above the surface plane of the top plate and thereby prevents the flow of any moisture from the top of the top plate or chimney into the chimney passage 2.

The shield tube 1 has its lower end formed to extend at an angle from the horizontal, and comprises a pair of opposed side walls, respectively indicated at 9 and 10, and a pair of opposed end walls, respectively indicated at 11 and 12.

The lower end portion of the end wall 12 and the lower end portion of each of the side walls 9 and 10 are turned inwardly to form channels, respectively indicated at 13, 14, and 15. The side channels 14 and 15 incline at an angle from the horizontal from the end wall 11 to the end wall 12. The elevated ends of the side channels are communicably joined with respective ends of the end wall channel 13.

The lowered end of each of the side channels 14 and 15 are tapered to provide a passage outlet 16 between said lowered end and the end wall 11, as clearly shown in Figure 3, to allow water flow from the lowered ends of the side channels without necessitating the overflow of the latter. The lower end portion of the end wall 11 extends below the lowered ends of the side channels 14 and 15, and forms an apron 17, which prevents the water, flowing from the side channels 14 and 15, from contacting with the adjacent end wall of the chimney passage 2.

A discharge spout 18 is secured in and projects from an end wall of the chimney 3, and has a closed inner end 19, which is disposed in the chimney passage 2. The discharge spout inclines at an angle from the horizontal, and the apron 17 depends therein adjacent to the inner elevated closed end 19 thereof. All water collected by the shield tube 1 is directed into the spout 18 and is discharged from the latter by

gravity flow onto the roof of the building structure of which the chimney forms part.

In the event of rain falling in the exact perpendicular direction, the positions of the channels 13, 14, and 15, and the position of the closed inner end 19 of the discharge spout 18, will prevent rain moisture, entering the shield tube 1, from contacting with the wall surfaces of the chimney passage 2, and in consequence such wall surfaces will remain dry and free from moisture absorption.

When rain is falling at an angle from the perpendicular, all rain entering the shield tube 1 will strike against one of the walls of the latter, and will be directed to the discharge spout 18 due to the channel and spout arrangement as set forth, whereby the chimney passage walls will remain free of any moisture under all conditions.

The present invention provides a most efficient device of its kind, which may be economically constructed and installed and successfully employed for the purposes and in the manner herein set forth.

What we claim is:

The combination with a chimney provided with a rectangularly-shaped passage and with an opening in the side wall thereof, of a top plate mounted on the top of the chimney and being provided with a rectangularly-shaped opening in registration with said passage, an upturned collar carried by said plate and forming the walls of said opening, a rectangularly-shaped shield tube extending into said passage and including a pair of side walls and a pair of end walls, the upper end portion of said tube projecting through said opening and being formed to overlap and

engage said collar to suspend said tube from said plate and to provide a ridge disposed above said plate, the lower end of said tube being disposed at an angle from the horizontal varying the lengths of said end walls, an inwardly disposed horizontally extending channel formed at the lower end of the shorter of said end walls, a pair of inclined inwardly disposed channels formed at the lower end of respective side walls of said tube and having their elevated ends communicably joined with respective ends of said horizontally disposed channel, and an inclined discharge spout extending through the opening in the side walls of the chimney and having an inner and upwardly inclined end wall disposed in said passage below the longer of said pair of end walls, the lower end portion of the longer of said pair of end walls forming an apron depending into said spout, the lower end of each of said inclined channels being provided with an inwardly directed passage outlet.

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