Nov. 13, 1956 H. E. ZERBE 2,770,020

AWNING AND CANOPY STRUCTURES

Filed Aug. 26, 1953

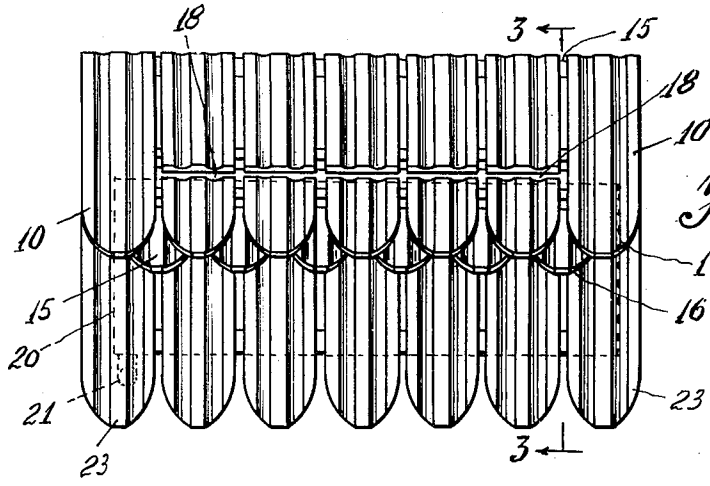


Fig. 1

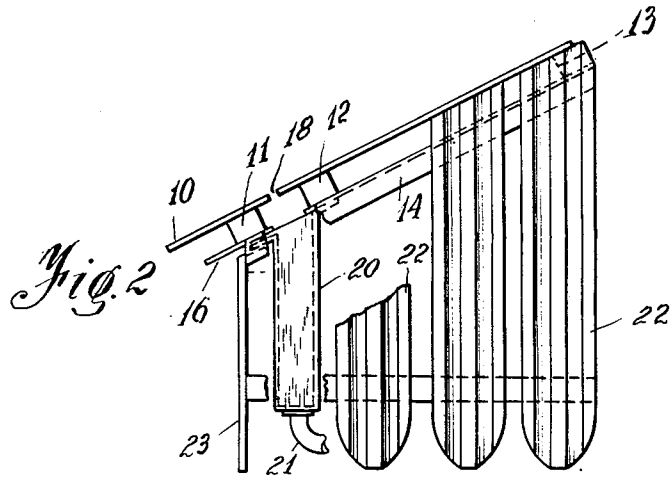


Fig. 2

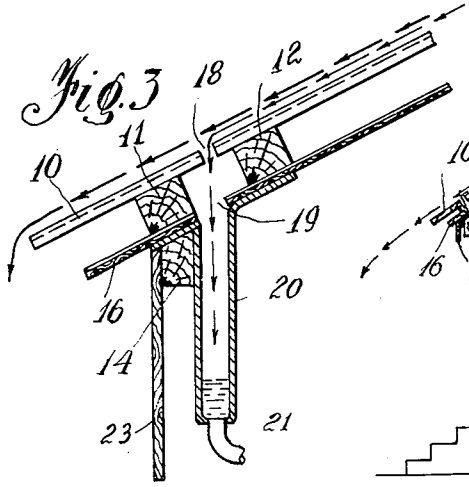


Fig. 3

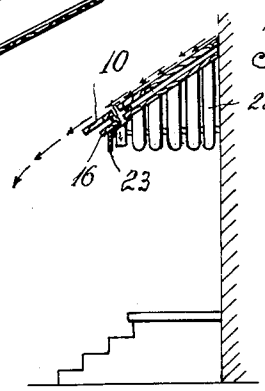


Fig. 4

Howard E. Zerbe,

INVENTOR.

BY Ralph Dowath

Attorney

United States Patent Office 2,770,020 Patented Nov. 13, 1956

2,770,020

AWNING AND CANOPY STRUCTURES

Howard E. Zerbe, Du Bois, Pa.

Application August 26, 1953, Serial No. 376,722

3 Claims. (Cl. 20—57.5)

This invention relates to awning structures and particularly to a ventilated awning structure which does not drip during light rains or when a rain has ceased as do conventional awnings.

One of the major problems in conventional ventilated, as well as other awnings, particularly when used as door canopies is the fact that they drip on the landing or on the stairs adjacent thereto during light rains or when a rain has just ceased. This makes entrance to the doorway covered by the canopy unpleasant and even dangerous, particularly during freezing.

An object of the present invention is to provide an awning structure which does not drip during light rains and the like.

Another object of this invention is to provide an awning structure having means collecting the water from the awning surface and discharging it at the side of the awning.

A further object of this invention is to provide a ventilated awning structure in which water is collected from both levels of slats and discharged at the side of the awning.

Still another object of the invention is to provide a device of this character with an invisible gutter arrangement in order to carry off dripping rain water.

Other objects and advantages of this invention will become apparent from a consideration of the following description and the accompanying drawings in which—

Figure 1 is a front elevation of an awning structure according to this invention.

Figure 2 is a side elevation partly cut away of the awning of Figure 1.

Figure 3 is a section on the line 3—3 of Figure 1.

Figure 4 is a side elevation of an awning of this invention installed over a door to act as a door canopy.

Referring to the drawings there is illustrated a ventilated awning having substantially parallel, spaced apart upper slats **10** fixed to spacer members **11**, **12** and **13** attached to frame members **14**. Each of the upper slats **10** is spaced from the next slat by a ventilating slot **15**. Lower spaced apart slats **16** are provided beneath the ventilating slats **16** and are fixed to the spacer members **11**, **12** and **13**. Each of the lower slats is spaced from each next adjacent slat by a ventilating slat corresponding in width to that of slats **15** between the upper slats. Each of the upper slats **10** and lower slats **16** is provided with U-shaped channels **17** in the surface thereof to prevent water from running to the edges and to direct it longitudinally of the slat. A slot or gap **18** is cut in each of the upper slats **10** excepting the two outside ones as shown in Figures 1–3. A similar slot or gap **19** is cut in the bottom slats **16**. A gutter **20** is fixed to the bottom sides of the lower slats **16** and to the front frame member **14** directly beneath the gaps **18** and **19** in the two layers of slats. The gutter **20** is closed at the ends and provided with a drain outlet **21** at one or both ends to carry the water from the gutter **20**.

Side slats **22** are provided on the sides of the frame **14** to form the canopy or awning side. Valance slots **23** are fixed to the front of the frame to complete the awning and hide the gutter **20**.

When installed on a building as for example as the door canopy shown in Figure 4 the structure operates

as follows: When a light rain falls on the surfaces of the upper slats **10** and lower slats **16** the water collects and runs down the slats and particularly in the channels **17**. When the rain water reaches the gaps **18** and **19** it falls into the gutter **20** from which it is carried by the drain pipt **21** thus preventing dripping from the end of the canopy onto the steps or landing directly below. When a heavy rainfall occurs the large amount of water falling on the slats **10** causes a sufficient flow of water such that it jumps the gap **18** and passes on to the end of the slat **10** and is discharged in an arc of substantial radius, well away from the stairs or landing. Any water which does not have sufficient momentum to jump the gap **18** is collected and carried away by gutter **20**.

While a preferred embodiment of this invention has been illustrated and described above and in the accompanying drawings ti will be understood that it may be otherwise embodied within the scope of the following claims.

I claim:

1. An awning structure comprising a pair of spaced apart sloping water shedding surfaces one above the other, each of said surfaces made up of a plurality of spaced apart substantially parallel members having parallel openings therebetween, the members of one level lying in vertical alignment with the openings of the other level, a transverse slot in each said surface adjacent the lowermost edge extending from a point adjacent one side to a point adjacent the other side and formed by removing a narrow portion from each member in the same vertical plane, and gutter means connected to said surfaces beneath the slots receiving water therefrom and discharging said water to one side of the structure.

2. An awning structure comprising a frame adapted to be mounted on a building above an opening therein, a pair of vertically spaced apart water shedding surfaces one above the other on said frame, each of said surfaces made up of a plurality of spaced apart substantially parallel elongated member having parallel openings therebetween, the members of one level lying in vertical alignment with the openings of the other level, a transverse slot in each said surface adjacent the lowermost edge extending from a point adjacent one side to a point adjacent the other side and formed by removing a narrow portion from each member in the same vertical plane and gutter means on the frame vertically beneath the transverse slots receiving water therefrom and discharging said water to one side of the structure.

3. An awning structure comprising frame means adapted to be mounted on a building above an opening therein, spaced transverse members on said frame, the top and bottom edges of said transverse members lying in sloping spaced apart parallel planes, a plurality of spaced apart substantially parallel slot members fixed transversely to each of said top and bottom edges forming parallel openings between the members, the members of one plane lying in vertical alignment with the openings between the members in the other plane, a transverse slot extending through each member of each plane excepting the outside member on each side of said plane, said slots lying in the same vertical plane one above the other and adjacent the lowermost ends of the members and gutter means on the frame vertically beneath the transverse slots receiving water therefrom to discharge at one side of said structure.

References Cited in the file of this patent

UNITED STATES PATENTS

2,557,775	Yancho	June 19, 1951
2,619,692	Langley et al.	Dec. 2, 1952
2,666,236	Odom	Jan. 19, 1954