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BUILDING

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Fig. 1.

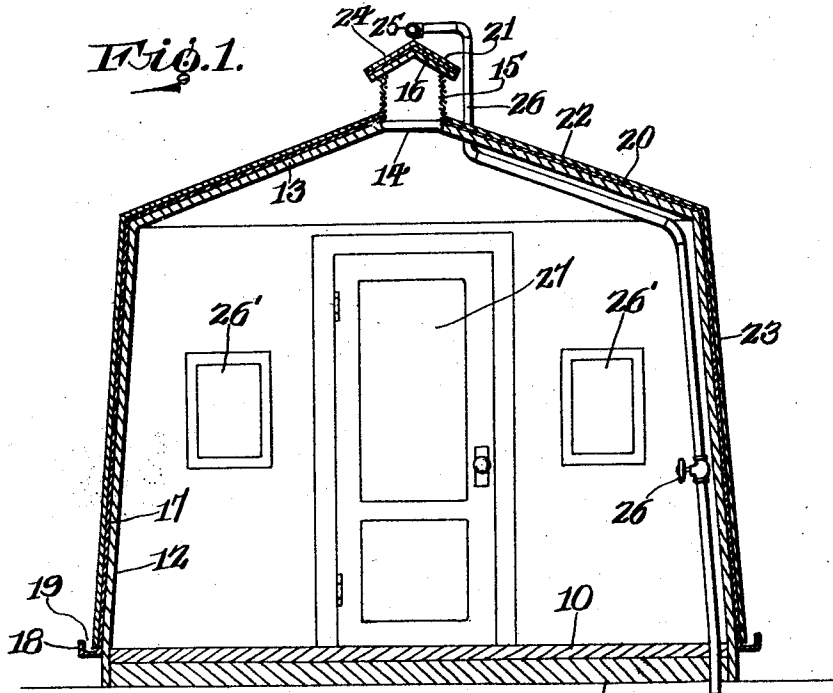


Fig. 2.

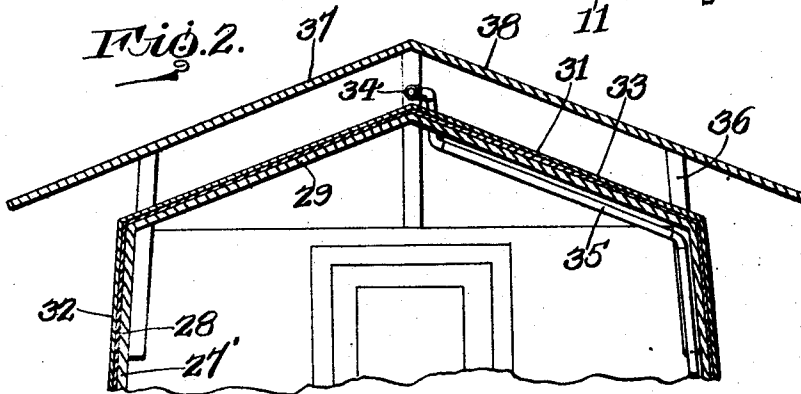
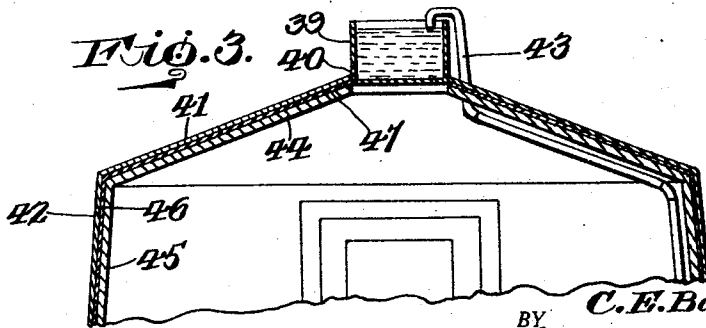


Fig. 3.



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BUILDING

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This invention relates to buildings and has for its object to provide, in a manner as hereinafter set forth, a building having means arranged exteriorly thereof, connected there-
5 with and controlled from the interior thereof for cooling the interior.

A further object of the invention is to provide, in a manner as hereinafter set forth, a building including sloping walls and a
10 top sloping from its center towards the walls and with the top and two or more walls of the building provided with means arranged exteriorly of the building and controlled from the interior of the latter for cooling such in-
15 terior.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a building including cooling means arranged exteriorly thereof and acting to cool the in-
20 terior of the building and with the latter being simple in its construction and arrangement, strong, durable, compact, readily assembled, having a thoroughly efficient cooling means for the interior thereof and com-
25 paratively inexpensive to set up.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically de-
30 scribed, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifica-
35 tions can be resorted to which fall within the scope of the claim hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a vertical sectional view of a
40 building constructed in accordance with this invention.

Figure 2 is a fragmentary view in vertical section of a modified form of building con-
45 structed in accordance with this invention.

Figure 3 is a fragmentary view in vertical section of still another modified form of building constructed in accordance with this
50 invention.

Referring to Figure 1 of the drawings, a building in accordance with this invention

includes a floor 10, a sub-floor 11, sloping wall frames 12 which have their lower ends connected with the sub-floor 11, sloping top frames 13 which are connected to the upper
55 ends of the wall frames 12 and said top frames 13 have their upper ends connected together and spaced from each other to provide an opening 14, a vertically disposed, foraminous ventilator 15 corresponding in
60 contour to the shape of the opening 14 and disposed centrally of the roof of the building, and an oppositely inclined frame 16 secured upon the top of the ventilator and projecting laterally from the latter.

The building further includes wall form-
65 ing means 17 and in this connection there is secured to the outer face of two or more wall frames 12 and extending from the floor 10 to two or more top frames 13 are wall
70 forming means 17 preferably constructed from sheet metal of the desired gauge and having an outwardly directed, angle-shaped portion 18 at the lower end thereof to provide a trough 19. The purpose of the trough
75 19 will be presently referred to.

The building further includes closure means 20 for the top frames 13 and in this connection there is connected to two or more top frames 13 two or more closure means 20, preferably constructed of sheet metal of the
80 desired gauge and which extends from the ventilator 15 to the wall forming means 17. Preferably the means 17 and 20 are constructed of the same material and the latter forms a continuation of the former. The
85 several wall forming means 17 are secured together in any suitable manner. The several closure means 20 are secured together in any suitable manner. The wall forming means 17 are secured to the closure means 20.
90 Each wall forming means 17 is co-extensive with a wall frame to which it is secured. Each closure means 20 is coextensive with the top frame 13 to which it is secured. Preferably each of the wall frames 12 has secured
95 to the outer face thereof a wall forming means 17 and preferably each top frame 13 has secured to the outer face thereof a closure means 20.

Secured upon the upper face of the frame 100

16 and coextensive therewith is a closure means 21 provided of metallic material. The wall forming means 17, closure means 20 and closure means 21 are formed from impervious material.

Secured upon the outer face of each closure means 20 and co-extensive therewith is a facing 22 formed from absorbent material such as burlap, canvas or other material possessing an absorbent characteristic. The facing 22 extends from the ventilator 15 to a similar facing 23 secured to the outer face of the wall forming means 17. The facing 23 is co-extensive with the means 17 from a point in proximity to the bottom of the trough 19 to the top of the means 17. The facings 22 merge into the facings 23. The facings 22 and 23 are provided for conducting water or other cooling medium exteriorly of the building from a point in proximity to the ventilator 15 to the lower edges of the facings 23 and the water discharging from the bottom edges of the facings 23 falls into the trough 19 which provides a water collector. The travel of the water through the facings 22 and 23 provides for the cooling of the interior of the building.

Secured upon the closure means 21 and co-extensive therewith is a facing 24 constructed of the same material as the facings 22 and 23 and upon the facing 24 is discharged a cooling medium, such as water, and from said facing 24 the water is discharged upon the facings 22 in proximity to the ventilator 15.

Arranged over and spaced from the facing 24, as well as disposed centrally with respect thereto is a perforated water spray pipe 25, to which leads a supply pipe 26, the latter having its major portion positioned within the building and provided with a controlling valve 26 for regulating the supply of water discharged from the pipe 25 or for closing the supply when desired.

The interior of the building can be finished in any suitable manner and the front wall will be provided with openings and a door as indicated at 26, 27 respectively. The other walls of the building can also be provided with doors or windows and which are not shown, or in other words, the other walls can be constructed in any manner desired other than that as stated.

The form shown in Figure 2 is of the same construction as that shown in Figure 1, with this exception that the top of the building is constructed differently from the top of the building as shown in Figure 1. The form of building shown in Figure 2 includes wall frames 27, wall forming means 28 secured against the outer faces of the wall frames 27 in a manner as referred to in connection with the form of building shown in Figure 1. The building shown in Figure 2 includes oppositely disposed top frames 29 which are connected

at their inner ends and at their outer ends to the upper ends of the wall frames 27.

A closure means 31 is secured upon the top frames 29 and is co-extensive therewith and forms a continuation of the closure means 28. Secured against the closure means 28 is a facing 32 which is of the same character as the facing 23 and said facing 32 merges into a facing 33 which is co-extensive with the top frames 29 and the said facing 33 is of the same character as the facing 32. The top frames 29 are inclined in opposite directions with respect to each other and the closure means 31 and facing 33 correspond in contour to the arrangement of top frames 29.

Disposed centrally with respect to the top of the building and in close proximity to the facing 33 is a perforated water spray pipe 34 which is extended from a supply or feed line 35.

Secured to the body of the building, Figure 2, are uprights 36 arranged in spaced relation and supporting a pair of oppositely inclined protecting members 37, 38 arranged in spaced relation with respect to the facing 33. Otherwise than that as stated the form shown by Figure 2 is constructed in the same manner as the form shown in Figure 1.

The form shown in Figure 3 is the same as the form shown in Figure 1, with this exception that the ventilator 15 is not employed and in lieu thereof a water tank 39 is used and is positioned centrally of the roof of the building. The tank 39 has openings 40 for the discharge of water upon the top facings 41 and these latter merge into the side facings 42. A water supply pipe 43 opens into the tank 39. In the form shown in Figure 3 the top frames are indicated at 44, the side frames at 45, the wall forming means attached to the side frames 45 at 46, and the closure means attached to the top frames 44 is indicated at 47. Otherwise than that as stated the form shown in Figure 3 is constructed similar to the form shown in Figure 1.

The travel of the water through the facings provides for the cooling of the interior of the building and the impervious wall forming means which are secured to the side frames and the impervious closure means which are secured to the top frames prevent the entrance of water into the building. The water as it drips from the side facings is collected in the trough 19 and from there it can be discharged to any desired point.

It is thought the many advantages of a building, constructed in accordance with this invention can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which will fall within the scope of the invention as claimed.

What I claim is:

A building comprising a floor, oppositely sloping roof frames, an impervious sloping closure coextensive with and secured upon the upper face of each frame, a water conducting element possessing an absorbent characteristic coextensive with and secured upon the outer face of said closure, oppositely sloping outer wall frames connected at their upper ends to the outer ends of said roof frames and extending to said floor, an impervious, sloping outer wall forming member secured against the outer face of each wall frame and extending from the top of the latter to a point opposing said flooring, each of said members having an outwardly directed angle-shaped portion at its lower end to provide a water collecting trough, a water conducting element possessing an absorbent characteristic secured to the outer face of each of said members and extending from the top of the latter to within said trough, a water supply pipe arranged within the building adjacent a wall and a roof frame, extending up through the latter and positioned to discharge water upon said conducting elements on the said closures upon the roof frames, and said pipe including means positioned in the building for controlling the water discharge.

In testimony whereof, I affix my signature hereto.

CECIL E. BARNES.