Nov. 16, 1965 H. HEISE 3,217,722

TENT FORMATION ADJACENT SOLID WALL

Filed Nov. 8, 1963 3 Sheets-Sheet 1

FIG. 1

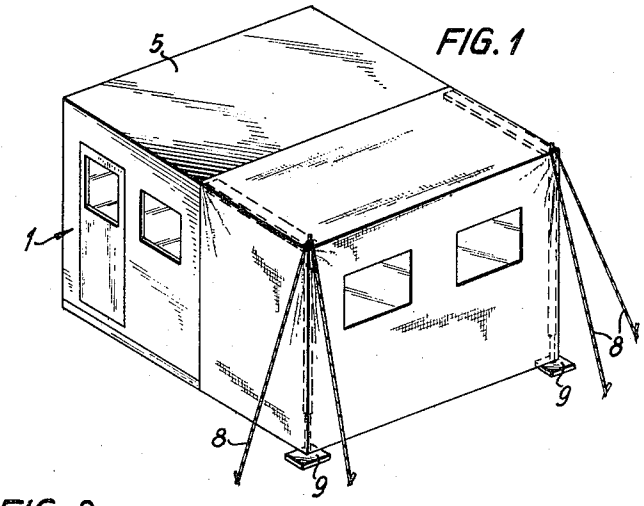


FIG. 2

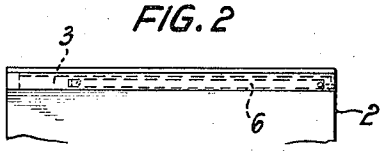


FIG. 3

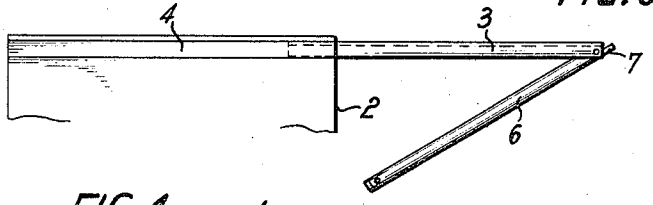


FIG. 4

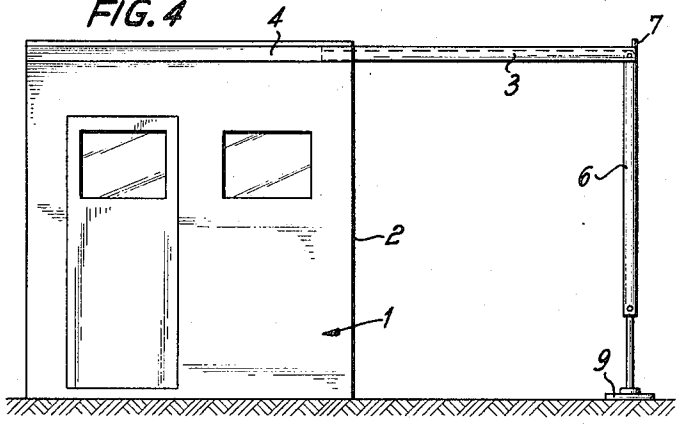
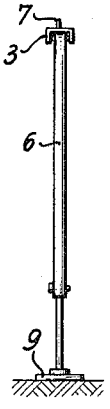


FIG. 5



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Nov. 16, 1965 H. HEISE 3,217,722

TENT FORMATION ADJACENT SOLID WALL

Filed Nov. 8, 1963 3 Sheets-Sheet 2

FIG. 6

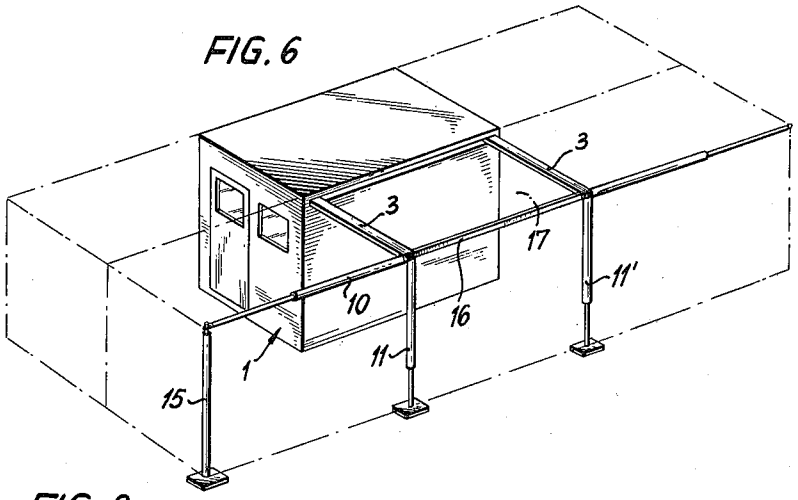


FIG. 8



FIG. 9

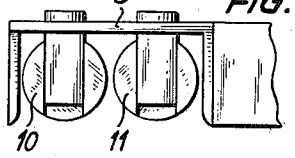


FIG. 7

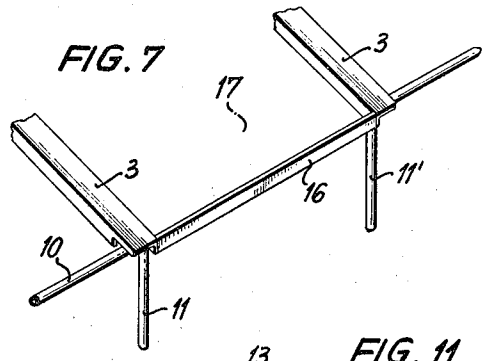


FIG. 10

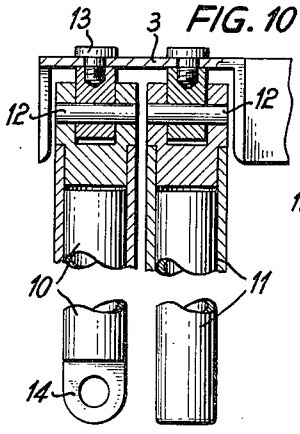
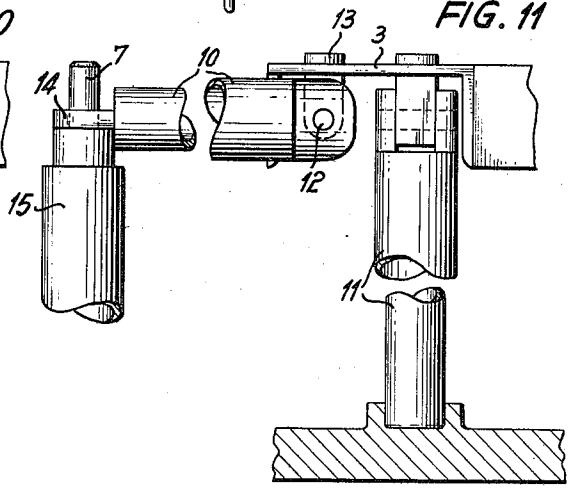


FIG. 11



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Nov. 16, 1965 H. HEISE 3,217,722

TENT FORMATION ADJACENT SOLID WALL

Filed Nov. 8, 1963 3 Sheets-Sheet 3

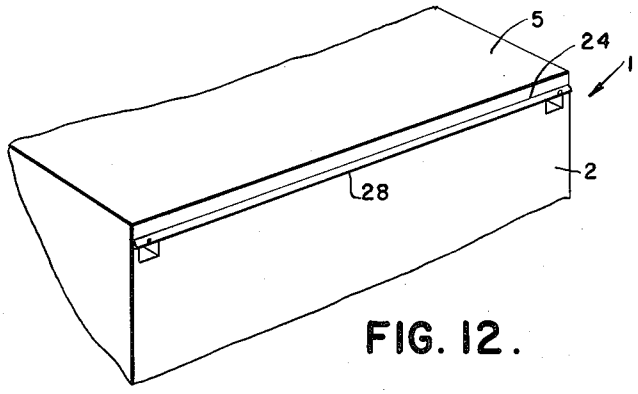


FIG. 12.

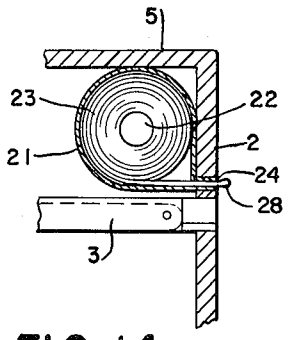


FIG. 14.

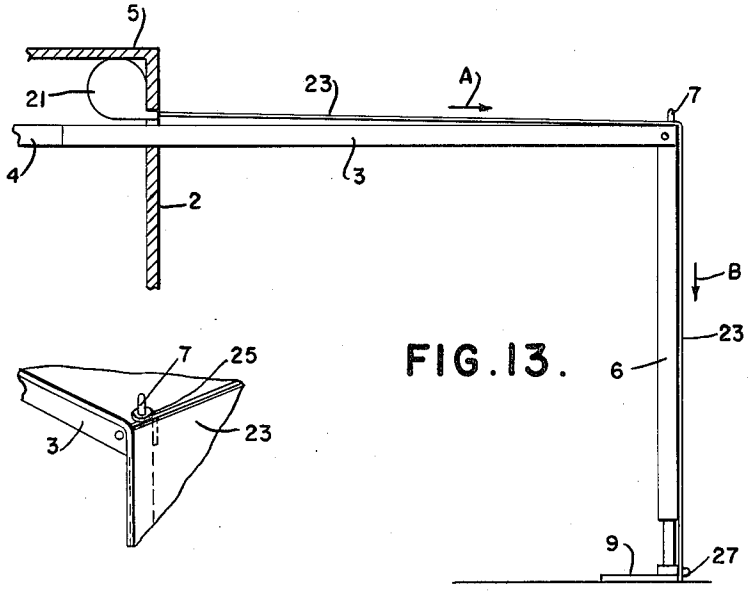


FIG. 13.

FIG. 15.

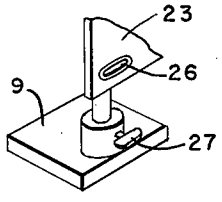


FIG. 16.

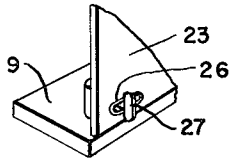


FIG. 17.

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TENT FORMATION ADJACENT SOLID WALL

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Filed Nov. 8, 1963, Ser. No. 322,395
Claims priority, application Germany, Mar. 14, 1963, C 29,377
2 Claims. (Cl. 135—5)

The present invention pertains to a combination of a solid house unit with tent structures integrally emanating from the solid walls thereof.

The primary object of the present invention is to provide a tent extension to solid house unit structures for emergency purposes such as hospitalization, operation and laboratory purposes.

Another object of the invention is to provide a structure of the type described which can be quickly and easily erected and have the characteristics of structural stability and longevity and of a protection from weather influences and noise from the outside world.

Another object of the invention is to arrange elongated profiled, deformation-resistant tent roof carriers underneath the outer roofing of the solid house unit so that they may be pulled out and pushed in for assembling purposes from the walls of the unit.

Still another object of the invention is to provide tent extensions of the type described employing extendable and telescopic tent roof carriers having profiles open at their bottoms, such as U-profiles made of light metal materials with supports preferably of a round cross-section, which are linked to the front end and retractable downwardly with means to swing the tent roof supports instantaneously downwardly when the tent roof carriers are being pulled out of the house unit. The supports comprise telescopic pipes having means to adjust their length.

It is another object of the invention to provide wide pressure plates for the tent supports in their operative position when they press against the ground. In the alternative, the tent supports may be mounted on specific elements of the floor of the tent unit whereby the members themselves are supported against the ground.

It is a further object of the invention to make the tent roof carriers of such a width and to connect them with supports which fold downwardly and unfold upwardly in such a manner that there is provided sufficient space for 2 supports adjoining each other in the U-profile of each roof carrier. The swinging bearings are shaped in such a manner that both supports individually may be swung at a right angle sidewardly and may be connected with the head end of the adjoining tent support. Horizontally running tent carriers are formed thereby on the outer longitudinal tent edges and the carriers themselves include means for adjusting their length, e.g. by pulling them out and pushing them in in a telescopic manner.

Other objects and the attending advantages of the present invention will become apparent to those skilled in the art from the attached drawings in which:

FIG. 1 is a perspective view of the combination of a solid unit building with a tent structure attached;

FIG. 2 is a sectional view showing a tent roof carrier in stored position;

FIG. 3 is a view with the tent roof carrier pulled out and with a support being swung downwardly and with the bolt-like extension provided at the upper end.

FIGS. 4 and 5 are views showing members of the unit pulled out in operating position;

FIG. 6 is a view showing a plurality of interconnected tent supports;

FIG. 7 is a view showing details of the frame structure;

FIG. 8 is an end view showing the supports in the stored position in the carrier shown in FIGURE 7.

FIG. 9 shows the pivotal arrangement of the supports in the carrier;

FIG. 10 shows the connections of the supporting framework;

FIGURE 11 illustrates details of the supporting framework.

FIG. 12 is a partial perspective view of the solid building unit of FIGURE 1;

FIG. 13 is a view partly in section of the member of flexible material, forming the roof and the side wall of the tent;

FIGURE 14 is an enlarged fragmentary view of the spring biased roller mounted in the house;

FIG. 15 is a fragmentary perspective view of the roof portion of the flexible material held in position;

FIG. 16 is a partial perspective view of the lower edge of the flexible material mounted on a base;

FIG. 17 is a partial perspective view showing the side wall of the tent locked in place.

In the drawings in which like reference numerals represent like parts, a unit structure **1** is shown having side walls **2**, a roof **5**, and a floor. Tent roof carriers in the form of channel members **3** are arranged within the upper portion of the main roof section and are provided with means to pull them out and push them in. The lower sides of the tent roof carriers **3** are open. The carriers **3** are mounted moveably in guide members **4**, such as box girders which serve the purpose of carrying the roof **5**. The tent supports **6** which consist of telescoping parts and which are of adjustable length, carry at their upper ends a bolt-like extension **7** which serves to lock transversely extending tent poles and/or to mount tension cables **8**. The lower ends of the vertical tent rods **6** are inserted into pressure plates **9** which are made of sheet metal.

In FIG. 6 a plurality of adjacent identical tent additions is shown. Each U-shaped tent roof carrier is provided with means to pull it out. Two telescopic supports **10** and **11** having preferably a circular cross-section and provided with means to adjust their length are shown pivotally connected with the protruding ends of the roof supports **3**.

In FIGS. 8, 9, 10 details of the swinging bearings are shown as developed in such a manner that at least one of the two supports **10** or **11** is capable of swinging about a pin **12** which is horizontal in the operative position, as well as about a vertical pin **13**.

The free end of a support **10** is provided with a flat eye **14**. With the aid of this eye, the support **10** is mounted in horizontal position with the eye receiving the pin or bolt-like extension **7** of the adjacent vertical tent support. In connection therewith, the eye of a tension cable is mounted to the same pin **7** so that after this cable has been made taut, there will result a rigid rod connection.

The shanks of the U-profile are recessed within the range of the pins **12** and **13** at least at one side. A corner pole **15** of a tent structure is firmly locked on the ground, after the corners of the rods for the tent roof are connected.

In order to secure a tent roof, support **16** is mounted horizontally in front of the broad side of the housing unit. The housing unit is provided with a spring biased winding roll for the canopy. With the aid of pole **16** the guide of tent roof member **17** is pulled out through a slot in the house wall.

The tent roof supports which can be pulled out from the side walls of the house unit at an angle to each other, are arranged in the corners of the unit in such a manner that they cross in two planes relative to each other spaced

at a distance equal to their thickness. The roof carriers which are mounted opposite each other and parallel to each other in the same plane may be pulled out in various directions from the house unit and are separated relative to each other at a distance equivalent to their width.

This does not affect the system of superimposing the tent covers and of the tent supports.

As shown in FIGURE 8 the solid building unit **1** is provided with an opening **24** and a handle **28** to pull out the flexible sheet material. The sheet material **23** is wound around a spring biased roller **22**, in container **21** mounted in the house. The roller is equivalent in structure to that of a conventional window shade. The sheet material **23** is pulled laterally to the right as indicated by the arrow *a* and subsequently horizontally downward as indicated by arrow *b*. Thereafter the sheet is fastened by locking pin **27**, as shown in detail in FIGURE 17. In FIGURE 15, the flexible material is shown held in position by a pin **7**. The opening **25** is provided to prevent wear and tear on the sheet. In FIGURE 16, the flexible sheet **23** is provided with a reinforced opening **26** which fits over locking pin **27** in base **9**. Thus the sheet may be pulled out to form a roof and a wall. The securing means for the sheet, the reinforced opening **26**, and the locking pin **27** are shown in operative connection in FIGURE 17.

What is claimed is:

1. In combination, a house, spaced parallel guides mounted in the house, a U shaped channel member slidably mounted in each guide with the opening of the U facing the ground, a pair of support members pivotally mounted in parallel relation between the legs of each U, and means mounting at least one of said support members for pivotal mounting about an axis normal to the pivot mounting and to the bight portion of the U, the end of the U-shaped channel member adjacent the said second pivotal mounting being cut away whereby to allow said pivotally supported member to be pivoted to a position perpendicular to a plane containing the channel and other support member.

2. A device as in claim **1** further including a member of flexible sheet material wound around a spring biased roller mounted in the house, an opening in the house whereby the sheet may be pulled out to form a roof and a wall, and means for securing the sheet in the pulled-out position.

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