April 2, 1929. F. B. LICHTENBERG 1,707,270

TENT ACCESSORY FOR AUTOMOBILES

Filed Oct. 23, 1926

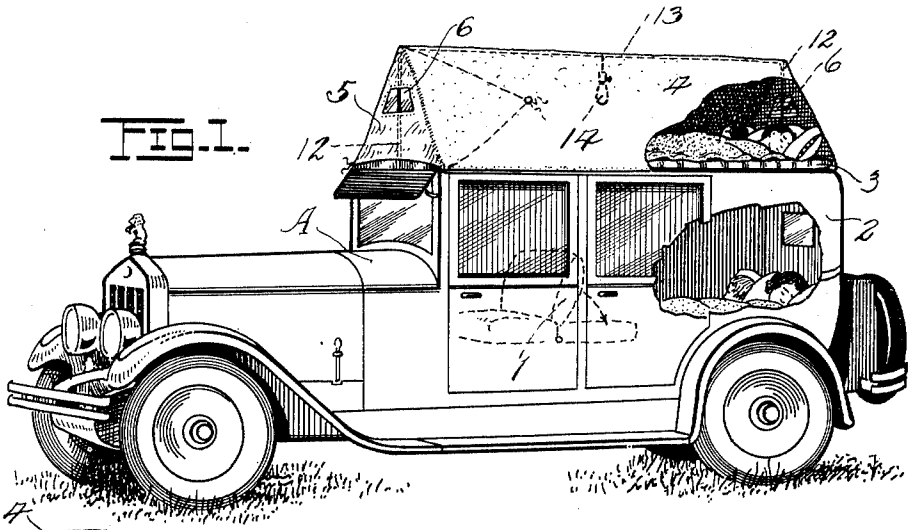


FIG. 1.

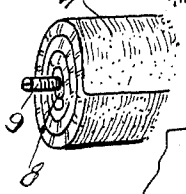


FIG. 5A.

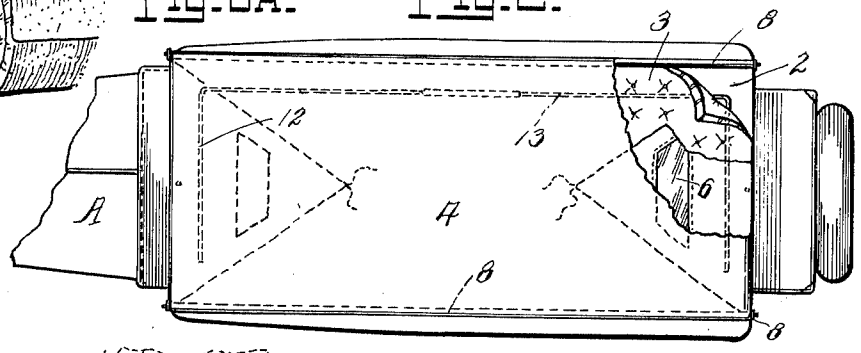


FIG. 2.

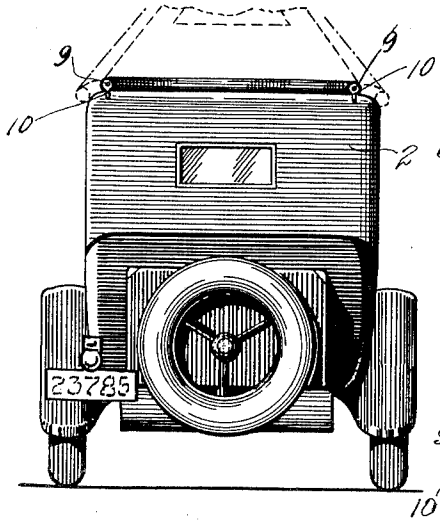


FIG. 3.

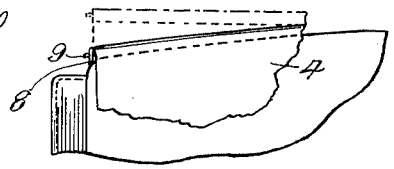


FIG. 6.



FIG. 7.

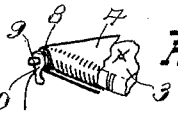


FIG. 4.

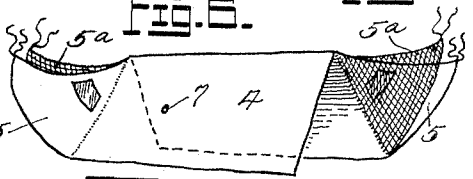


FIG. 5.

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UNITED STATES PATENT OFFICE.

FREDERIK B. LICHTENBERG, OF MILWAUKEE, WISCONSIN.

TENT ACCESSORY FOR AUTOMOBILES.

Application filed October 23, 1926. Serial No. 143,566.

As a result of a considerable amount of traveling in automobiles, I have devised certain novel tent or shelter accessory means for motor vehicles, the same being designed having in view especially that the coach or sedan type of automobile is coming into almost universal use.

My invention of course aims to provide a handy shelter or tent that may be used as a sleeping compartment, auxiliary to the compartment which may be provided by the interior of the coach or sedan type car with which it may be employed. So far as I am advised, practically all shelter means forming accessories of automobiles for camping or traveling purposes are adjuncts required to be set up at one side of or in rear of the car and utilizing the ground as a support therefor in conjunction with the car itself. The users of the shelter must necessarily under these conditions sleep on the ground or upon cots or cushion means carried directly by the ground, something which is disadvantageous for obvious reasons especially when the earth is wet.

Now in the carrying out of my invention, I have availed of the top of the car as a support for the shelter means disposed above and wholly within the confines of the top area. Coach and sedan type cars have tops which are relatively rigid and will sustain very considerable weight, being made in some instances with steel supporting frame structures. The top is therefore well suited to be used as the equivalent of a bed, so to speak, and this is the characteristic feature of my invention as combined with the shelter accessory means that are provided on the top. Such shelter means are devised especially with a view to quickly setting them up at night and collapsing them when not in use so as to be inconspicuous and in the best shape for travel or movement of the car.

With the foregoing explanation of the objects of my invention, an understanding of the detailed features thereof will be had upon reference to the accompanying drawings in which:

Figure 1 is a perspective view of a conventional type of automobile equipped with my invention, a side of the tent or shelter attachment being broken away to show the cushion and other interior features.

Figure 2 is a top plan view of the same, similarly broken away.

Figure 3 is a rear elevation of the automobile equipped with the invention, full lines showing the shelter accessory as when collapsed for travel of the machine and dotted lines showing the accessory upraised.

Figure 4 is a detail showing the manner of mounting the roller means at the corner portion of the top of the car and arrangement of the tent and cushion features.

Figure 5 is a perspective view showing the tent feature of the invention somewhat in the arrangement thereof as when set up but more particularly illustrating its general shape.

Figure 5A is a fragmentary view of the end of one of the rollers having the tent fabric rolled thereon.

Figure 6 is a fragmentary side elevation of the machine showing a flexible roller construction conforming with the curvature of the top of the car.

Figure 7 is a perspective view showing a modified form of the roller and manner of connection with the cushion with the pintle portion thereof.

Passing now to the presentation of the invention as illustrated in the drawings, it is noted that the car A shown is a well known type of closed sedan or coach construction and preferably the back 1 of the front seat, shown in dotted lines in Figure 1, will be adapted to fold down so as to enable the seats within the car to be availed of as a main bed enabling the car users to sleep therein as graphically shown in Figure 1.

On the upper side of the top 2 of the car is disposed the auxiliary shelter means of my invention. This shelter means comprises primarily a cushion 3 which may or may not be used and which after a manner performs the function of a mattress. This may be an air cushion or one of the stuffed type as desired, and upon it the persons who will use the auxiliary shelter means will sleep.

The shelter means disposed on the top 2 of the car is comprised primarily of a tent feature designated 4 and this will be made of water proofed silk or other fabric material of any desired and suitable kind. Silk is preferably used because it is susceptible of folding into compact space and is an accepted type of shelter means now commonly on the market. The tent 4 preferably consists of inclined side walls and the end flaps 5, the latter being adapted to be tied in closed

adjustment by tie strings of any suitable kind. Window means 6 may be provided in the end flaps as shown.

The end flaps will be located at both ends of the tent or canopy 4 and in order to facilitate proper ventilation, the tent or canopy 4 will be supplied with auxiliary flaps 5ª made of mosquito netting. In this way, if desired, the cloth flaps 5 may be folded back into the dotted line position of Figure 1 and buttoned in such position by a snap fastening means 7, the mosquito netting flaps 5 being then used to keep insects out of the canopy while the sleepers occupy the same.

As my invention is designed to be an attachment to an automobile preferably susceptible of being taken off when the machine is not used for traveling longer distances, I employ spring or window shade type rollers 8 having end pintles 9 journaled in brackets 10 that may be permanently or detachably secured to the top 2 of the car according to the whim of the user. By reason of the provision of these rollers 8 at the opposite sides of the top of car, it will be obvious that after an evening of use, the occupants of the shelter or canopy 4 may remove themselves therefrom and by operation of the rollers 8, the body of the canopy 4 may be rolled around the rollers until the shelter means is flat down upon the cushion 3. If desired, blankets may be left on top of the cushions properly flatly folded or blankets may be removed and placed within the body of the car as may be most preferable. Before the tent or canopy 4 is rolled upon the rollers 8, however, the flaps 5 and 6 will be folded under the same in an obvious manner and largely as illustrated in the top plan view Figure 2. If desired, the corners of the cushion 3 may have hooks 11 to engage over the pintles 9 at the ends of the rollers 8.

When the shelter means is set up as shown in Figure 1, the tent or canopy 4 is held in its extended or usable position by means of small vertical posts 12 at the ends thereof and a ridge pole member 13, the ends of which may be interlocked or otherwise attached to the vertical posts. The ridge pole 13 may be made in telescopic sections and the end posts 12 may be designed of much smaller diameter so as to telescope within such sections if desired. It is notable that an electric light may be attached to any suitable connection fixture within the machine and suspended from the ridge pole 13, as shown at 14. Of course where an automobile is designed to carry the invention a suitable socket fixture might be provided on top of the car itself. The ridge pole 13 and posts 12 when collapsed may be disposed beneath the cushion 3 or in any suitable place desired.

Under some conditions, where the top of a car is curved, it will be desirable to employ resilient rollers which may be constructed of hickory or resilient wood, in flexibly connected sections of solid or rigid material.

It is obvious from the foregoing that when my shelter, tent or canopy 4 is folded down upon the top, it will in no way detract materially from the nice appearance of the car upon which it is used and this is of course of importance.

Moreover, because of its disposition upon the top, the said tent may be very nicely set up as it is always in place where it is going to be used and requires only to be raised for such purpose.

Additionally, access may be readily had to the tent by the persons who are to sleep therein by climbing up on the spare tire holder or trunk receptacle that may be located at the rear of the car.

Where sedan type automobiles are provided with curved sides, it may be desirable at times to mount the rollers about which the flexible canopy 4 rolls at the sides of the top or roof of the car. Under these conditions, the rollers may be detached from the members 10 as seen in Figure 4, and unrolled or rolled in relation to the flexible canopy, being thereafter bent and engaged with the said members 10. The bending of the rollers would be permitted because they may be made of some resilient wood, like hickory, as previously suggested. The curvature of the top or roof of the car under the conditions referred to would make it difficult to turn the rollers while they were supported by their journal members 10. The exact mounting of the rollers whether above the top or at the side edges is something susceptible of modification within the purview of the invention and dependent upon the particular construction of the top of a certain car. Moreover, it is especially notable that the spring wound rollers used are wholly unwound when the tent is up so that they establish excellent anchorage means after the ridge pole member is raised to hold the canopy or tent in shape for use.

With the use of the present invention, a sedan car will afford comfortable sleeping accommodations for four persons wholly in or upon the machine itself and comfortable beds may thus be provided wholly contained in or upon the car, an advantage of practical importance for obvious reasons.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A shelter tent accessory for automobiles adapted to be placed on the top of sedan or coach cars, comprising a canopy body, ridge pole means for supporting the canopy and roller means about which said canopy body may roll and tension the canopy over the ridge pole.

2. A shelter tent accessory for automobiles, comprising a pair of roller devices having attaching means to enable them to be se-

cured to opposite side portions of the top of an automobile, a unitary canopy shelter of flexible material adapted to wind about both of the roller devices when collapsed and thus lie flat on top of the automobile to which the tent accessory is applied, and members adapted to be mounted on the top of an automobile to hold the shelter upraised or spaced from the top.

3. In combination with a sedan type automobile, an auto tent accessory therefor, comprising a canopy shelter made from fabric material adapted to be collapsed so as to lie relatively close to the top, when not in use to form a compartment for persons to sleep in, and means to hold the shelter in the last mentioned position detachably mounted on the top so as to be removed when the shelter is collapsed.

4. In combination with a vehicle top, a canopy therefor arranged upon the top and adapted to be raised and lowered with respect to the same, tensioning rollers at the side of the vehicle top to tension the canopy in either its extended or collapsed positions, and means to connect said rollers to the top.

5. The combination with an automobile, of a tent structure, tensioning rollers at opposite sides of the top of said automobile about which the tent may be rolled, bracket means for supporting the rollers, and a ridge pole for holding the tent extended, said tensioning rollers being operable to hold the tent stretched over the ridge pole when extended and taut across the top of the automobile when collapsed to form an auxiliary top therefor.

In testimony whereof I affix my signature.

FREDERIK B. LICHTENBERG.