Dec. 24, 1957 D. C. TEETER 2,817,344

COLLAPSIBLE GARAGE

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Fig. 1

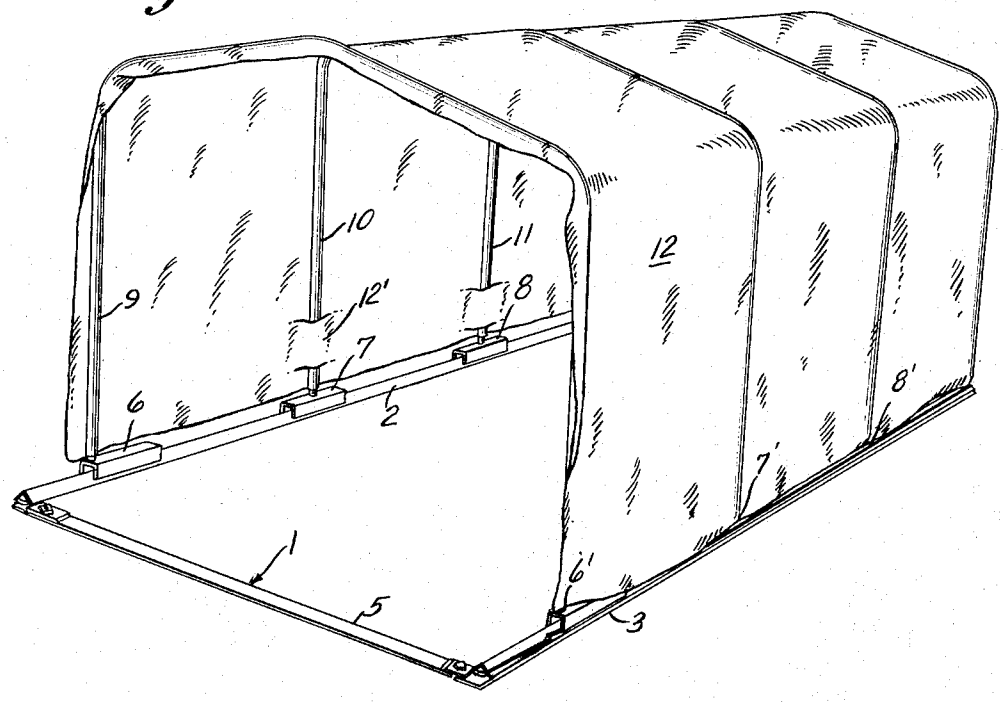
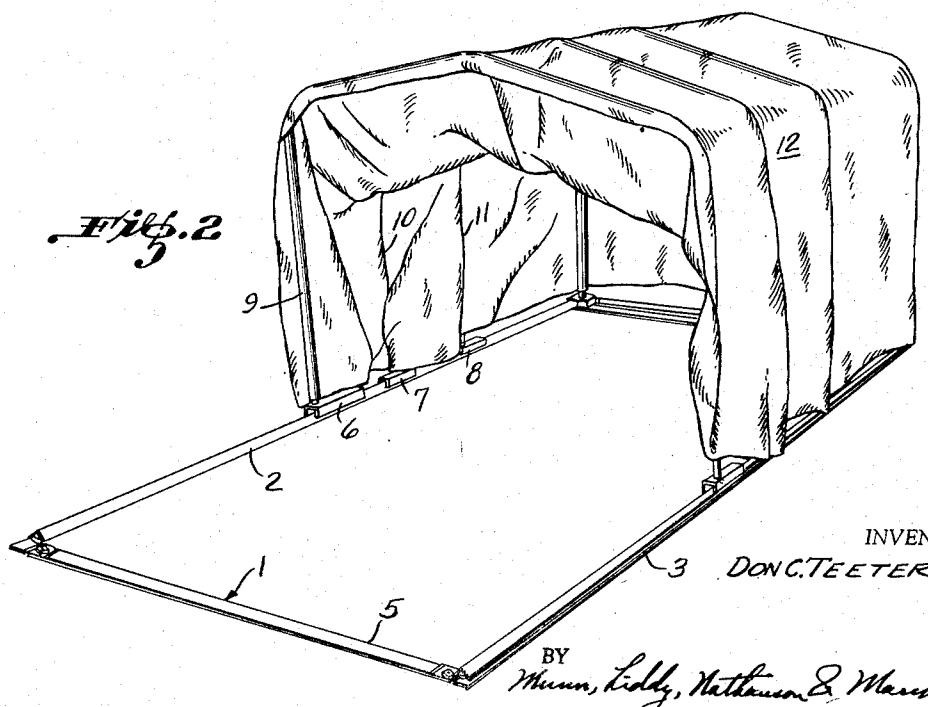


Fig. 2



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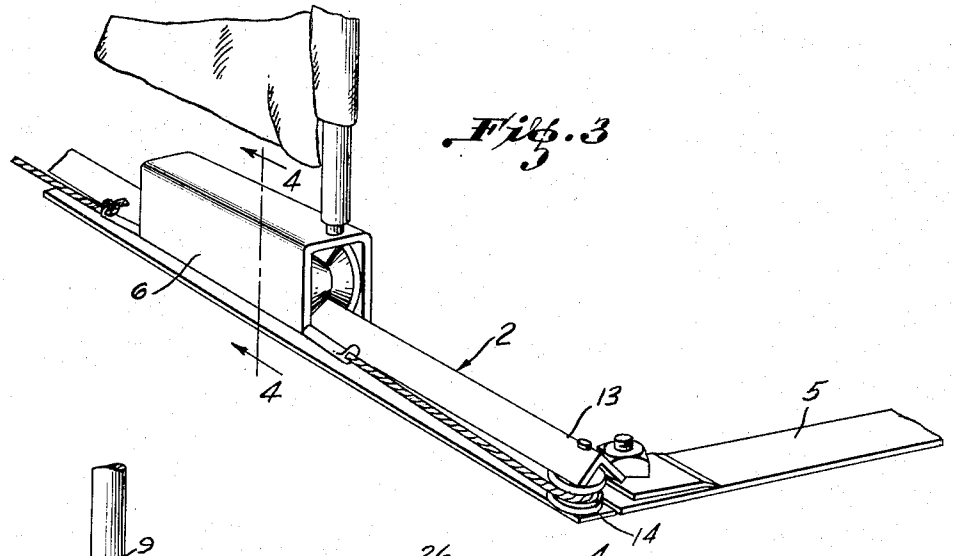


Fig. 3

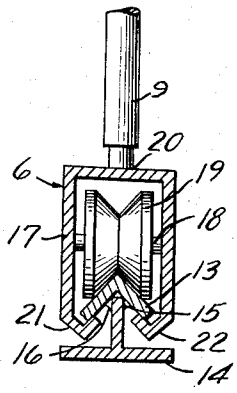


Fig. 4

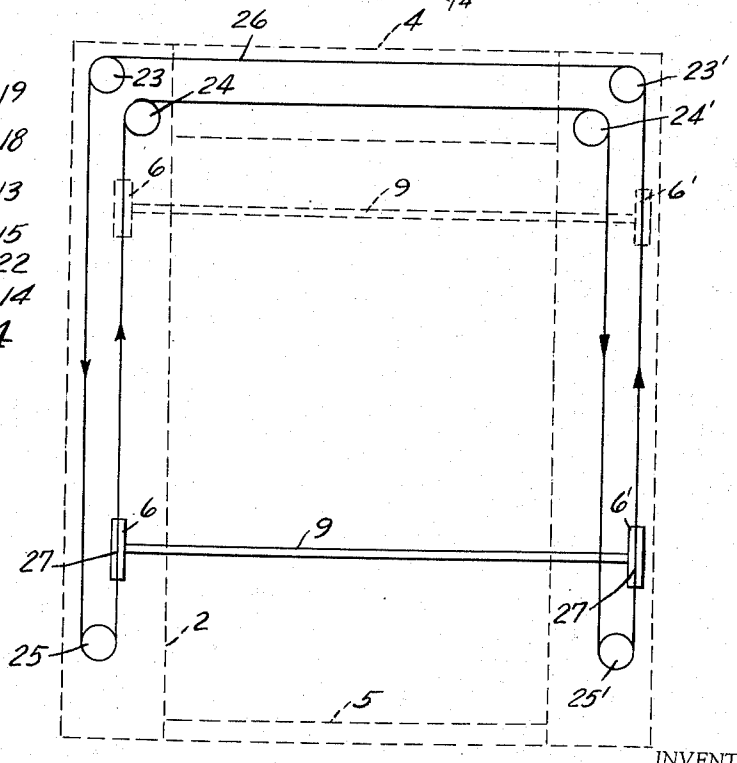


Fig. 5

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COLLAPSIBLE GARAGE

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5 Claims. (Cl. 135—4)

This invention pertains generally to portable garages, and more specifically to collapsible, portable garages of light weight construction.

The need for temporary or portable garages has greatly increased in recent times. The sudden increase in the vehicle population has outstripped the number of permanent garages by far. Many families, for example, now have more automobiles than garage space and would like to protect their extra or second cars from the elements. Similarly the occupants of trailer camps, motels and the like and summer camps have use for a temporary or portable structure to protect their equipment and vehicles from the weather. A satisfactory temporary or portable structure must however, be of light weight, comprise relatively few elements, be truly portable, be of low cost, rugged, long lasting and satisfactory in appearance as well as otherwise satisfactory for the intended purpose. Temporary shelters have been devised heretofore but so far as is known to me they are objectionable for failure to meet the above or similar qualifications. For this reason they have not been used extensively. It is, therefore, one object of my invention to provide a garage which will meet the above requirements and otherwise be acceptable for general use. Another important consideration is the space occupied by the garage structure.

According to my invention there is provided an inexpensive garage designed to occupy no more space than usually required for a parked vehicle. Thus the structure can even be used where a permanent garage cannot be erected.

Another factor of importance is the appearance of the garage structure. One of the objects of the invention is to provide a garage which will not be ugly and unacceptable for aesthetic reasons.

Another object of this invention is to provide a collapsible garage consisting of a frame with a plurality of metal bows slidably mounted thereon whereby relative movement of the bows with respect to the frame will extend or collapse the garage.

A more specific object of the invention is to provide a cable-pulley equalizing system in my collapsible garage so that the opening and collapsing operations are facilitated.

A further object of my invention is to provide sturdy relatively movable connecting means between the garage bows and the frame whereby the garage structure is substantially rigid in both the extended and collapsed positions.

With the foregoing and other objects in view, the invention resides in the following specification and appended claims, certain embodiments and details of construction of which are shown in the accompanying drawings in which:

Figure 1 is a perspective elevational view of the garage in the extended position.

Figure 2 is a perspective elevational view of the garage in the collapsed position.

Figure 3 is a side perspective view of the roller means for connecting the bows to the frame.

Figure 4 is a sectional view taken along the line 4—4 in Fig. 3, and

Figure 5 is a schematic diagram of the cable-pulley equalizing system.

Referring now particularly to Figures 1 and 2, the embodiment of the invention illustrated in the drawings comprises a rectangular metal frame shown generally at **1**. The latter consists of track members **2** and **3**, rear member **4**, and front member **5**. The frame may be of unitary rigid construction, or it may be capable of quick disassembly, if desired. Slide members **6**, **7**, **8** and **6'**, **7'** and **8'** are slidably mounted upon the track members **2** and **3** of the frame. Bows **9**, **10** and **11** are secured to the slide members to form units consisting of two slide members and a bow. A flexible water proof cover **12** which may be of canvas, plastic, or other suitable material is secured to the bows by loops such as **12'**.

Referring to Figures 3 and 4 the track member **2** consists of an angle iron **13** welded or otherwise connected to a T iron **14** at points **15** and **16**. Slide members **6** et. seq. each consist of a housing **17** in which is secured shaft **18**. At least one roller **19** is rotatably mounted on shaft **18**. Any number of rollers may be provided for each slide member as desired. Bow member **9** is rigidly secured to the slide member **6** at **20**. Flanges **21** and **22** are provided on housing **17**. Thus, the slide member may freely move longitudinally with respect to the track, but the flanges will prevent it from coming off the track.

Referring now to Figure 5, the cable-pulley equalizing system comprises pulleys **23**, **24**, **25** and **23'**, **24'**, **25'** secured to track members **2** and **3** (the frame being shown in dotted lines). Cable **26** is mounted upon the plurality of pulleys. The cable is preferably of the strong flexible, wire-strand type. Slide members **6** and **6'** of the first unit are secured to cable **26** at points **27** and **27'**. The cable is reeved over the pulleys to form opposing runs along each side track member. The opposing runs on each side must move in opposite directions during any movement of the cable. The slide members are connected to runs which move in the same direction. As seen from the schematic diagram if the slide member **6** should be moved in the collapsing direction toward the rear member **4**, to the position shown in the dotted lines, the cable will move in the direction shown by the arrows so that the other slide member **6'** will move a corresponding distance. Thus, it will be seen that when roller **6** is caused to move longitudinally along track **2**, whether manually or by motive means, the cable-pulley equalizing system will move the other roller member **6'** a corresponding distance, thus keeping bow member **9** perpendicular to the tracks at all times. The other bows and their corresponding slide members are not connected to the cable pulley equalizing system and are free to move longitudinally along the track. Cover **12** controls the travel of these other bows.

Thus it may be seen that movement of the bow **9** toward the rear member **4** will cause collapsing of the garage. The garage is extended over a vehicle or other item by a moving bow **9** toward front member **5**. The canvas cover will pull the other bow members into their extended position. Thus it is obvious that the cable-pulley equalizing system in combination with the sturdy light weight construction, will allow one person to easily facilitate the extending and collapsing of the garage.

The track assembly is strong enough so that the motor vehicle may be driven over it when the garage is in the collapsed position. One modification which is contemplated is the provision of a zippered or buttoned door to be secured to the front bow member **9**. As mentioned above, the frame members may be connected by bolt or other suitable means which will enable easy disassembly.

If desired, handle means may be attached to the front bow **9** to facilitate manual extending and collapsing of

the garage. Similarly, motive means may be devised in connection with the cable-pulley equalizing mean for mechanically operating the extending or collapsing of the garage.

While I have shown and described a preferred form of my invention, it will be understood that variations in details of form may be made without departure from the invention as defined in the appended claims.

I claim:

1. A collapsible garage comprising a frame, said frame consisting of front and rear members and two side track members, a plurality of metal bow members, means for slidably connecting said bow members to the track members of said frame, a flexible cover, said cover being secured to said bow members, equalizing means for maintaining at least one of said bows perpendicular to said track members during its longitudinal movement upon said tracks, said equalizing means comprising a plurality of pulleys secured to said frame, an endless cable supported by said pulleys, means connecting said bow members to said cable whereby movement of one of said bow members upon said track will cause a corresponding movement of the other bow members in the same direction.

2. A collapsible garage comprising a frame, said frame consisting of front and rear members and two side track members, a plurality of metal bow members, means for slidably connecting said bow members to the track members of said frame, a flexible cover secured to said bow members, and equalizing means for maintaining at least one of said bow members perpendicular to said track members during its movement upon said track members, said equalizing means comprising a plurality of pulleys secured to said side track members, an endless cable connected to said pulleys to form opposing cable runs adjacent each track member, said runs comprising a first run which moves in one direction and a second run which moves in the opposite direction parallel to the track member during movement of said cable over said pulleys, said one of said bows being connected to said first runs adjacent both track members.

3. A collapsible garage comprising a frame, a plurality

of bow-like members, said members extending laterally with respect to said frame, means movably connecting said bow-like members to said frame for movement longitudinally of said frame, a flexible cover connected to said bow-like members, said cover being supported on said bow-like members, equalizing means for insuring parallel movement of said bow-like members comprising a plurality of pulleys connected to said frame, a cable supported by said pulleys, said cable being continuous and having a pair of first runs and a pair of second runs extending longitudinally of said frame, and being supported on said pulleys so that the cable in the corresponding first runs and second runs respectively move in the same direction, at least one of said bow-like members being connected to both of said first runs.

4. The apparatus of claim 3 including a fixed bow-like member fixedly connected to said track, said cover also being connected to said fixed bow-like member, the said plurality of bow-like members being movable toward or away from said fixed bow-like member, said means for movably connecting said plurality of members to said frame comprising for each of the latter members a roller rotatably connected adjacent each end of the member, the said frame comprising a pair of parallel tracks, each roller being engaged with one of said tracks, and means maintaining said member in lateral relationship with said frame.

5. The apparatus of claim 4 in which the last named means comprises flanges on said tracks, said rollers engaging said tracks above the flanges, each of said plurality of members having flanges rigidly connected thereto and in opposed relationship with the flanges of the tracks beneath the latter flanges and beneath said rollers.

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