M. P. KAY

FOLDING BED FOR AUTOMOBILES.

APPLICATION FILED OCT. 31, 1917.

1,333,924. Patented Mar. 16, 1920.

Fig. 1.

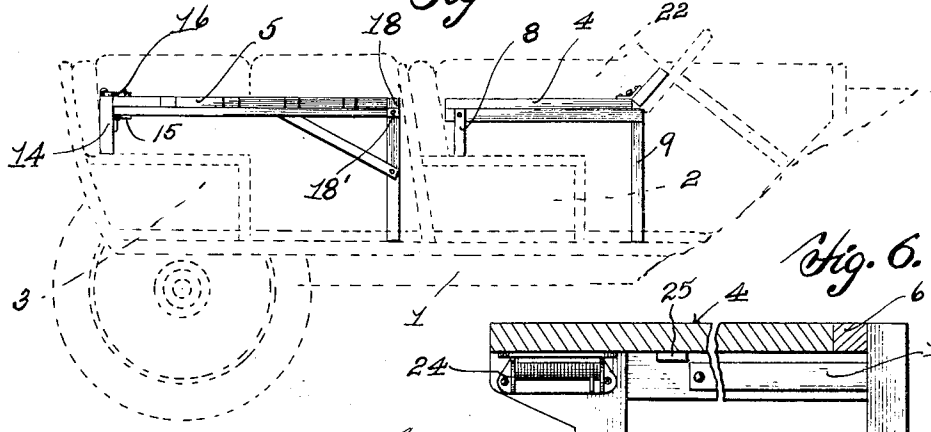


Fig. 6.

Fig. 2.

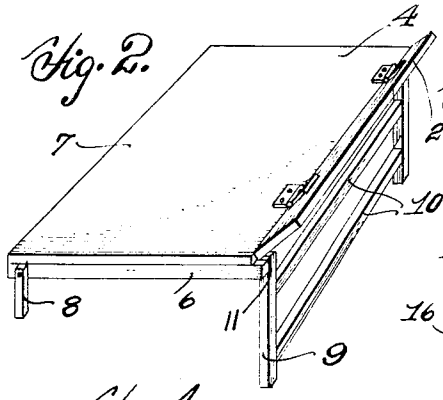


Fig. 3.

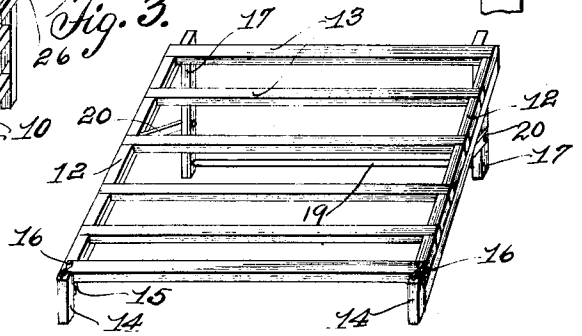


Fig. 4.

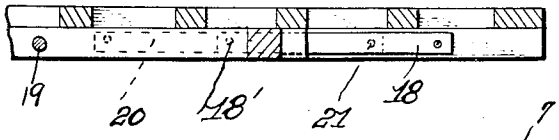
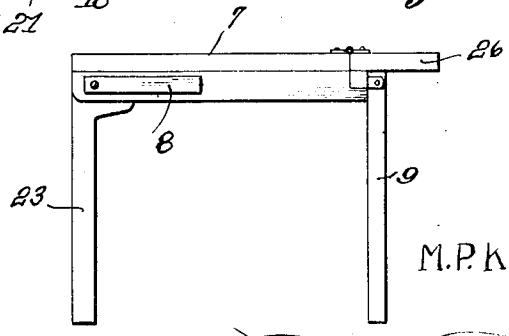


Fig. 5.



Witnesses

Inventor

M. P. Kay.

By

Attorney

UNITED STATES PATENT OFFICE.

MARO P. KAY, OF CLE ELUM, WASHINGTON.

FOLDING BED FOR AUTOMOBILES.

1,333,924. Specification of Letters Patent. Patented Mar. 16, 1920.

Application filed October 31, 1917. Serial No. 199,520.

To all whom it may concern:

Be it known that I, MARO P. KAY, a citizen of the United States, residing at Cle Elum, in the county of Kittitas, State of Washington, have invented certain new and useful Improvements in Folding Beds for Automobiles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to folding or knock-down furniture.

The object of the invention is to provide a combination bedstead and table for particular use in automobiles, so that parties may be enabled to make up a spring bed in a car for use upon camping trips, the same folding structure being capable of use at other times as a table. In pursuance of this object, it is furthermore the intention to provide such a folding bedstead and table which may be inconspicuously stored when the car is on the road, so that the comfort of the occupants of the car will not be interfered with.

With the above objects in view, and such others relating to the details of construction, as may hereinafter appear, my invention will now be fully set forth and described, reference being had to the accompanying drawings.

In the drawings:—

Figure 1 is a side elevation of the invention in position for use as a bed, the automobile being shown in dotted lines.

Fig. 2 is a perspective view of the front bed section.

Fig. 3 is a perspective view of the rear bed section.

Fig. 4 is a detail sectional view taken vertically and longitudinally through the front bed section, showing the longer leg in folded position.

Fig. 5 is an end elevation of the front bed section in position for use as a table.

Fig. 6 is a detail sectional view of the bed section 4 showing the manner of mounting the leg 23.

Referring more particularly to the drawings, 1 represents an automobile body which has the usual arrangements of front seat 2 and rear seat 3. By the structures which are hereinafter described, a continuous sleeping surface is provided from the rear to the front of the machine. Thus, the folding structure 4 is placed over the front seat after the cushions have been removed, and fills the space over the seat and that in front of the seat as far forward as the steering wheel will permit. The folding structure 5 is adapted to be placed over the rear seat, after the cushions have been removed, and fills the entire horizontal area between the backs of the seats.

The folding structure 4 consists of a top frame 6 of rectangular form covered by a top board 7. Upon the sides of the top frame 6, near one end, are pivotally connected the legs 8, which may be swung in folded position against the corresponding ends of the opposite side members of the frame. The opposite ends of the side members of the frame 6 are slightly extended beyond the sides of the frame so as to receive therebetween the upper ends of the front legs 9, which are connected at the top and bottom by means of rungs 10 so that the legs will swing together. The legs 9 are pivoted to the extended portions of straps or links 11 whose opposite ends are pivotally connected to the inner faces of the opposite side members of the frame 6 so that said legs and links may be swung under the table top and wholly within the side members. When the legs 9 are extended, their upper ends fit in front of the transverse member 6′ of the frame 6, to brace said legs. The legs 9 are of such greater length than the legs 8, that when the latter are placed upon the top of the front seat, after the cushions have been removed, the legs 9 will rest upon the floor to support the top 7 in horizontal position.

The structure 5 consists of a pair of side bars 12 which are transversely connected by spaced cross bars 13 set into the top edges of the side bars. Hinged to the lower faces of the front ends of the side bars 12 are the legs 14, said legs 14 swinging independently of one another and having their upper ends extending upwardly beyond the hinges 15 so that when the legs stand in unfolded position, the projected portions will butt against the end surfaces of the side bars 12, and hooks 16 carried by the latter may be engaged with eyelets entered into the upper ends of the legs 14. Mounted upon the opposite ends of the side bars 12 are the legs 17, which are pivoted to the inner sides of brackets 18 which continue beyond the end of the top frame to receive the legs and have

their forward ends pivotally engaged to the inner faces of the side bars upon pins or bolts 18′, the pivotal and swinging action thus permitted carrying the upper ends of the legs in locking engagement in front of the upper edge of the frame. Also, the brackets or bars 18 are bowed to frictionally and resiliently engage the inner sides of the side bars. The legs 17 have their lower ends connected by means of a transverse rung 19 so that the legs may be simultaneously swung below the top between its side members. In order to further lock the legs 17 in their extended positions, I provide a pair of brace rods 20 which are hinged to the outer sides of the legs 17, and are pivoted at their upper ends to studs 21 provided therefor upon the inner faces of the side bars 12. When the legs 17 are folded between the side bars, the brace bars are extended substantially parallel to the brackets 18 between the legs and side bars, as shown in Fig. 4. It will be noted that in this case, also the legs 14 are shorter than the legs 17, so that when the latter rest upon the floor of the car, the former stand upon the bottom of the rear seat after the cushions have been removed in order to hold the top bars 13 in horizontal position. When the structures 4 and 5 have been placed in their proper positions in the car, the cushions from the front and rear seats are arranged upon the structure 5 between the two seats of the car so as to cover the top surfaces of the structures. Then, a mattress or cushion section 22 which is specially constructed to cover the front structure 4 is placed thereon, and a continuous sleeping surface is provided so that parties on the road may use the body of the machine for camping purposes.

In order to convert the structure 4 into a table, I hinge to the inner faces of the end members 6, adjacent the legs 8, a pair of swinging legs 23 which are mounted on spring hinges 24 in position to swing against the bottom of the table and to be locked in such position by means of a turn-button 25. The legs 23 are of the same length as the legs 9, so that when placed upon the ground the table top will be horizontally disposed. Also, an extension piece 26 is hinged across the back of the structure, which will rest on the extensions of the side bars to give a greater table area, or which will rest against the steering wheel when the device is mounted as a bed, to provide a foot board.

When the apparatus is to be folded, the section 4 is removed from the car and its legs 8 and 9 folded upon the side members of the frame 6, upon the outside and inside thereof respectively. Then, the section 5 is removed, and the legs 14 unlocked and swung against the lower edges of the side members 12, and the legs 17 folded against the inner faces of the side members 12. Then, the sections 4 and 5 may be strapped together and fastened to the rear of the vehicle, or in any other suitable locality.

It will be apparent from the foregoing description that I have provided a very simple bed structure for use in automobiles upon camping and like trips, the utility of the device being further enhanced by the convertibility of one of the bed sections into a table. The device can be adapted to any car, merely by the variation in the dimensions.

What I claim as my invention is:—

A combined bed bottom and table for an automobile including a table top member, a frame secured to the lower side of the top, long legs foldably carried by one side of the top and adjacent one of its longer edges, short legs foldably carried by the longer side of the top opposite to the longer legs, spring hinges carried by the frame adjacent the short legs, legs equal in length to the longer legs connected to the said hinges and normally folded beneath the top, and means for holding the last-named legs in folded position.

In testimony whereof I affix my signature in the presence of two witnesses.

MARO P. KAY.

Witnesses:
FRANK CARPENTER,
B. W. WINDEN.