S. W. FRIEDMAN.

COLLAPSIBLE BAGGAGE CARRIER FOR AUTOMOBILES.

APPLICATION FILED AUG. 7, 1916.

1,292,452.

Patented Jan. 28, 1919.

4 SHEETS—SHEET 1.

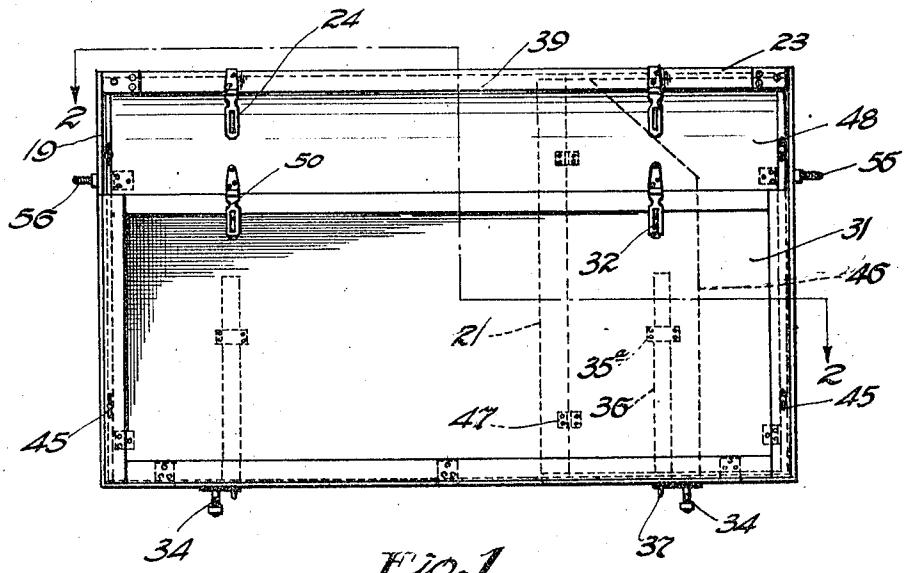


Fig. 1

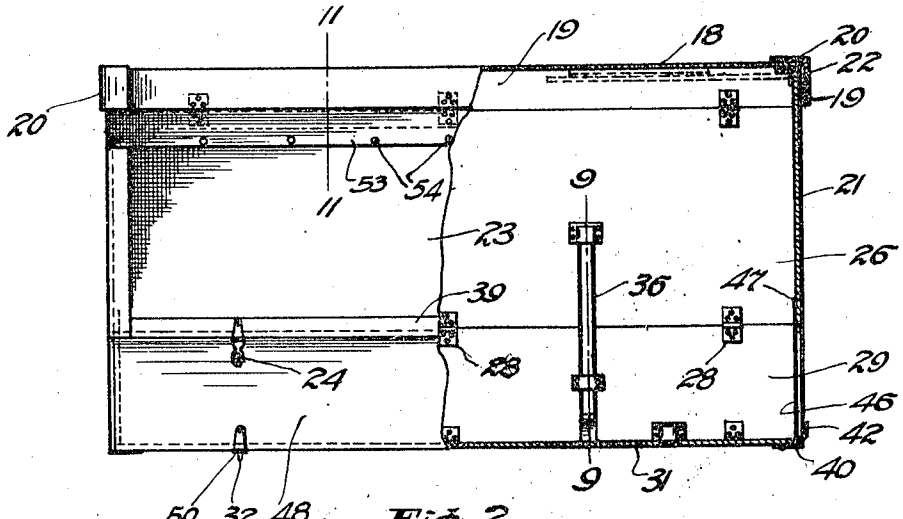


Fig. 2.

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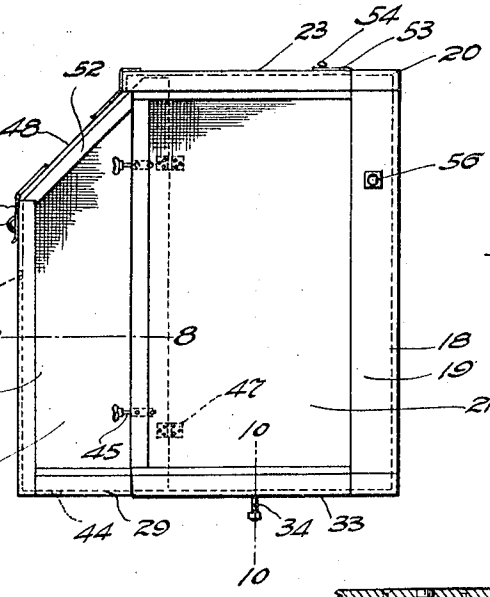
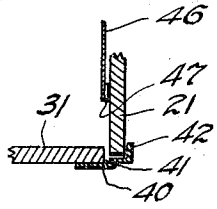


Fig. 3.

Fig. 7.



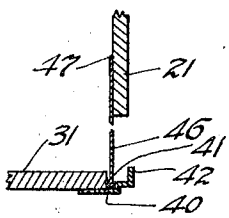


Fig. 8.

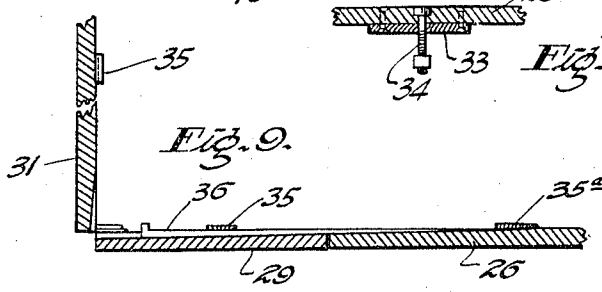


Fig. 9.

Fig. 10.

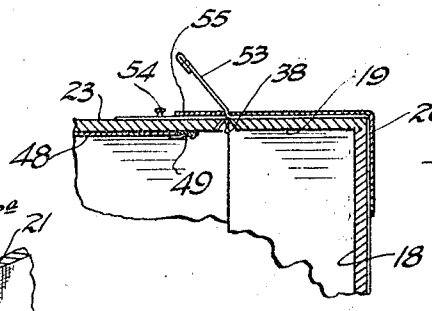


Fig. 11.

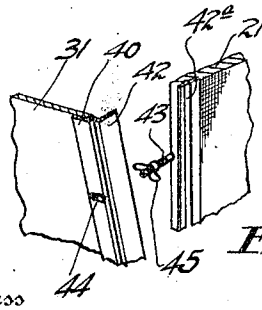


Fig. 12.

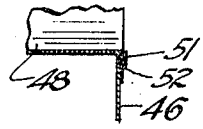


Fig. 13.

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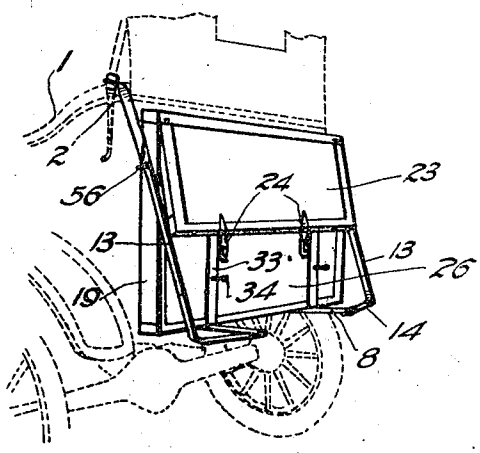


Fig. 4.

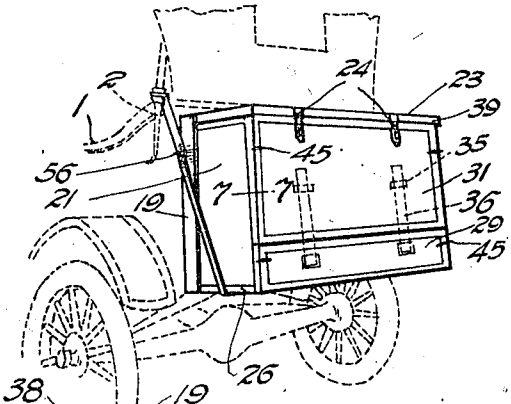


Fig. 5.

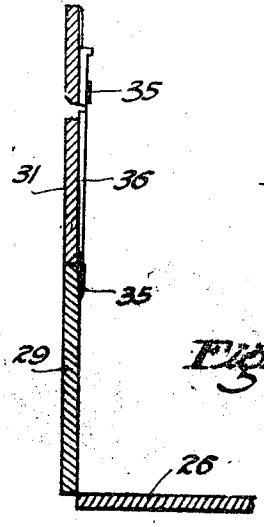
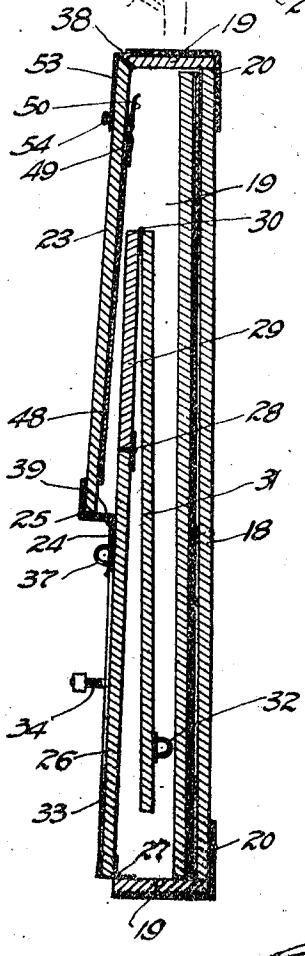


Fig. 6.

Fig. 20.



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4 SHEETS—SHEET 4.

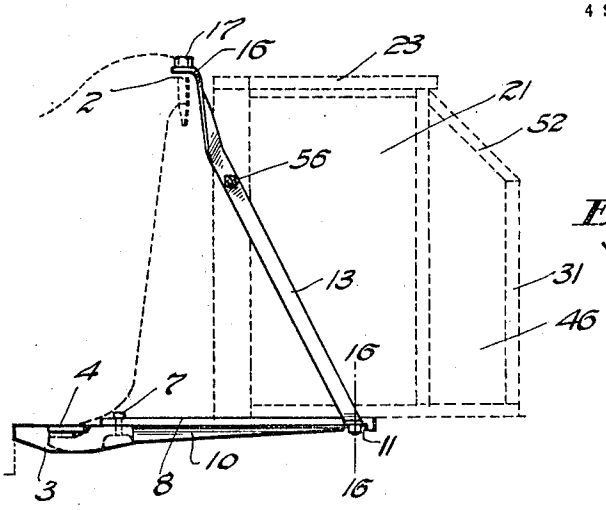


Fig. 13.

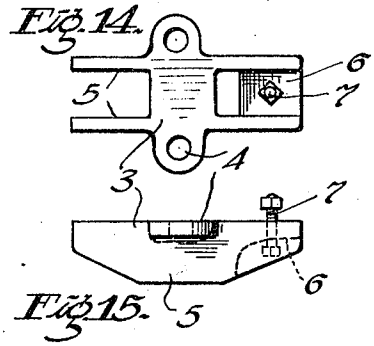


Fig. 14.

Fig. 15.

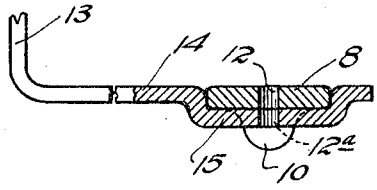


Fig. 16.

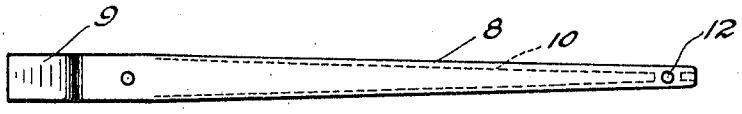


Fig. 17.

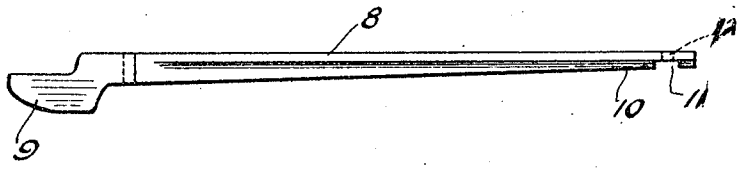


Fig. 18.

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UNITED STATES PATENT OFFICE.

SAMUEL W. FRIEDMAN, OF TUSCALOOSA, ALABAMA.

COLLAPSIBLE BAGGAGE-CARRIER FOR AUTOMOBILES.

1,292,452. Specification of Letters Patent. Patented Jan. 28, 1919.

Application filed August 7, 1916. Serial No. 113,587.

To all whom it may concern:

Be it known that I, SAMUEL W. FRIEDMAN, a citizen of the United States of America, residing at Tuscaloosa, in the county of Tuscaloosa and State of Alabama, have invented certain new and useful Improvements in Collapsible Baggage-Carriers for Automobiles, of which the following is a specification.

My invention has for its object to provide a collapsible trunk or baggage carrier which can be conveniently attached at the back of automobiles and which can be opened out so as to contain a large amount of baggage.

One feature of my invention relates to the construction of the trunk itself which is designed to be opened out partway for an average load and to be further extended and enlarged to carry loads of maximum capacity, and to this end its adjustable top and sides are provided with extension members which, when not in use, may be conveniently folded in and stored so as not to noticeably reduce the storage capacity of the trunk or carrier and which when extended can be easily and quickly connected up to the front so as to enable the trunk to be closed and to carry its load without rattling or objectionable noise.

Another feature of my invention relates to the convenient manner in which the trunk can be folded into very compact form when carried empty.

My invention also comprises the various novel details of construction and arrangements of parts, which in their preferred embodiments only are hereinafter more particularly described by reference to the accompanying drawings which form a part of this specification, and in which:—

Figure 1 is a front elevation detached of the trunk or carrier in fully extended position.

Fig. 2 is a top plan view of Fig. 1 with the cover parts broken away to show the extended bottom in plan.

Fig. 3 is an end elevation of Fig. 1.

Fig. 4 shows the trunk collapsed and its hanger in perspective.

Fig. 5 is a similar view showing the trunk partly opened out to what may be termed its normal size.

Fig. 6 is a vertical sectional view through the center of the collapsed trunk.

Figs. 7 and 8 are detail views showing the corner joints as taken on the line 7—7 of Fig. 5, and 8—8 of Fig. 3, respectively.

Fig. 9 is a sectional view taken on the line 9—9 of Fig. 2.

Fig. 10 is a detail view taken on the line 10—10 of Fig. 3.

Fig. 11 is a sectional view on the line 11—11 of Fig. 2, and showing the protecting canvas strip for the top joint.

Fig. 12 is a detail view of the fastening means for the side and end members.

Fig. 13 illustrates the hanger parts in side elevation.

Figs. 14 and 15 are plan and side elevations of the bottom hanger attachment.

Fig. 16 is a sectional view taken on the line 16—16 of Fig. 13.

Figs. 17 and 18 are plan and elevation views of the bottom hanger member.

Fig. 19 illustrates the joint between the extension side and top members.

Fig. 20 illustrates the wedge as applied to holding the extension bottom member in position to form part of the front.

Similar reference numerals refer to similar parts throughout the drawings.

I have illustrated my invention as applied to any standard type of automobile 1, having on each side near the top of its back brackets 2 forming the rear supports for the top. I attach to the bottom of the car a pair of brackets 3 having perforated lugs 4 to receive screws or bolts by which the bracket is attached to the car and having spaced underhanging ribs 5 between which at their outer end is a cross web 6 carrying an upstanding threaded bolt 7. The bottom hanger members 8 have each an angled head 9 at one end which is adapted to be inserted between the webs 5 and to engage under their respective brackets while the body portions of the members 8 rest on the webs 6 and are perforated to permit the bolts 7 to pass up therethrough and receive a nut to secure the members 8 to the hangers. These members 8 are provided with a reinforcing bottom rib 10 which is interrupted near its outer end to form a notch 11 opposite a bolt hole 12. The upper or supporting members 13 of the hanger are formed by metal straps having their lower ends inturned at 14 to form a bottom horizontal end, each of which has a U-shaped seat 15 formed therein and adapted to receive the member 8 opposite the notch 11 and to be made fast thereto with

the top edge of the ends 14 standing flush with the top of the members 8. In each seat 15 is provided a hole 12ª registering with the hole 12 in the member 8. The main body portions of the straps 13 incline upwardly and toward the brackets 2, and at their upper ends are given a quarter twist and bent over at 16 to form an apertured lug adapted to be passed over the threaded shanks of the brackets 2 and to be secured thereto by bolts 17. When the hanger members are assembled, as seen in Fig. 4, the members 8 and 14 form the bottom supports while the upright members 13 form side retaining members for the trunk. The detail construction of the hanger by reason of divisional requirements forms no part of my present invention and all claims relating thereto have been withdrawn in view of divisional requirements.

The trunk or carrier itself may be formed of any suitable material which is light and possesses great strength. It may be of aluminum or of various materials used in making trunks. As shown the carrier is formed of wood with suitable metal reinforcements at its corner joints and along its edges. The trunk comprises an upright back portion 18 having connected to its four marginal edges narrow strips 19 which form with the back a shallow box-like member which opens to the rear. The corner joints of these box-like members are all protected by bent metal plates 20 which strongly reinforce the same. The main sides 21 of the trunk are preferably rectangular in shape and are connected by hinges 22 to the side edges of the back 18 in position to swing outwardly against and be braced by the side strips 19 (see Fig. 2). These sides 21 are adapted to fold between the top and bottom strips 19, see Fig. 5. To the outer edge of the top strip 19 I hinge the main top 23 which carries at its free end a hasp 24 pivoted to an angled metal bracket 25 which projects below the underface of the top. To the outer edge of the bottom strip 19 I pivot the main bottom member 26, using hinges 27 so placed that when the bottom assumes horizontal position it will abut against the outer edge of the bottom strip 19 and be partly supported thereby. The bottom 26 is rectangular and is of the same size as the top member 23. At the outer edge of the bottom member 26 are hinges 28 which connect thereto an extension member 29 which is, in turn, connected by hinges 30 to the main front member 31 having at its upper outer end staples 32. When member 29 forms an extension of the front 31, as in Fig. 5, the extended front has the same height as the back 18. The bottom 26 on each side carries reinforcing straps 33 through which project depending screw bolts 34 adapted to be passed through the holes 12, 12ª in the hanger and connect the hanger members and the bottom securely together. On the inside of the extension member 29 and the front 31 are mounted loops or straps 35, arranged in alining pairs and adapted to receive in each pair a strong steel wedge bar 36 which crosses the hinge joint between the parts and holds them rigidly in the same plane to form the extended front. The box as thus described is adapted to form the normal or half capacity carrier and is operated as follows: The hasps 24 (Fig. 4) are unlatched from the staples 37 on the bottom 26, see Fig. 6, and the top and bottom members are opened out on their hinges 27 and 38, respectively, after which the sides 21 are swung out to position at right angles to the back. The bottom bolts 34 are made fast to the hanger irons and the extended front formed by the parts 29, and 31 is then ready to be swung up and secured by its staples 32 to the hasps 24, see Fig. 5, thus closing the box. In order to prevent the rain or water getting into the box, the side and front edges of its top 23 are reinforced by metal flanged strips 39 which extend far enough below to substantially overlap the edges of the sides and front of the trunk. In like manner the side edges of the members 29, 31 are provided with reinforcing flanged strips 40, see Fig. 7, which are provided with an offset shoulder to form with the side edges of the front 31 a notch 41. At the outer edge of the shoulder is an inturned flange 42, the shoulder and flange forming an angular seat to receive and overlap the edges of the sides 21. To make this latter joint more secure against leakage a rubber strip 42ª, see Fig. 12, may be mounted along the front edges of the sides 21 and adapted to engage under the flanges 42. The front edge of each side 21 carries two screws 43 which are adapted to pass through openings 44 in the members 29, 31 and receive wing nuts 45 which serve the purpose of strongly and effectively securing the front and side members of the box together.

Under certain conditions it is desirable to increase the capacity of the trunk or carrier and to this end I connect to each side a metal extension side member 46 by means of hinges 47, which members when swung outwardly in line with the sides 21 will increase the width of the trunk so that on removing the wedge bars 36 and letting the extension member 29 drop to horizontal position, the front edges of the extension sides 46 will be received in the sockets 41 at the side edges of the front 31 and make a secure joint therewith. Under these conditions the wedge bars 36 are shifted and inserted through the straps 35 on the extension member 29 and under straps 35ª on the bottom 26, see Fig. 9, thus forming an extension bottom and serving to coöperate with the

hinges 28 in supporting the member 29 from the bottom 26. A top extension member 48 is hinged near the outer end of the top 23 and adapted to fold up under the top and be held by catches 49 when not in service. This extension top carries hasps 50 and when swung down, as shown in Fig. 3, these hasps engage the staples 32 and secure the front 31 to the extension top and sides. In order to make a secure joint along the meeting edges of the extension sides 46 and the extension top 48, I provide the latter, as shown in Fig. 19, with a narrow downturned flange 51 at each side and along the top edge of each extension side 46 I attach a strap 52 which at its upper end is offset to receive a flange 51 between it and the side 46. This arrangement braces the sides to the top and gives a water-proof joint. To protect the joint at the hinge 38 between the top strip 19 and the top 23, I provide a strip of canvas 53 which extends for a short distance down the back 18 and over the top member 19 and under the reinforcing strip 20 for the latter with its free end projecting from under the strap and provided with eyelets adapted to fasten over the buttons 54 at each end of the top 23, which as shown in Fig. 11 has an edge reinforcing strap 55. It will be noted that the hinge 38 is attached to beveled faces which permit the top to swing down only to vertical position.

My hanger attachments can be readily applied to and removed from the car and the trunk or carrier can be quickly and conveniently set in place and secured in the hangers and opened out to give its half or full capacity storage, in which positions it can be quickly secured by the hasps or the thumb nuts 45 and bolts 34, it being noted that I secure the back of the trunk to the hanger straps 13 by bolts 56. These bolts 56 remain permanently attached as long as the carrier is on the hanger. It follows therefore that to open out my trunk or carrier it is only necessary to make fast the two bolts 34, the four thumb nuts 45 and to attach the hasps 50 or 24 to the staples 32 as the case may be.

It will be understood that I have described in detail only what I regard as the preferred embodiment of my invention and that the same may be modified in its detailed construction without departing from my invention.

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

1. The combination with an automobile having top brackets and brackets connected to its bottom, of horizontal members detachably mounted in the bottom brackets, hanger members detachably suspended from the top brackets and having their lower ends bent inwardly and connected to the outer end of the horizontal members, a collapsible trunk having a bottom which folds down and carries bolts adapted to engage and tie the ends of the hanger irons and the trunk to the horizontal members, and a back which is bolted between the upper portions of said hanger members, substantially as described.

2. A folding trunk comprising a back; top, side and bottom members hinged to the back; the bottom member having an extension member hinged thereto, a front hinged to the outer end of said extension member, an extension side hinged to each side member and an extension top hinged to said top member, said bottom extension member forming part of the front when the extension side and top members are not used, and means to connect the foldable members in expanded position, substantially as described.

3. A trunk comprising a back; sides, top and bottom members hinged to the back and adapted to collapse, a front, an interposed member hinged to the bottom and front, means to engage and hold said member in a plane with either the bottom or the front, and members adapted to extend beyond the sides and top to engage the front when said member is held rigidly in a plane with and forms an extension of the bottom.

4. A collapsible trunk comprising a back; side and bottom members hingedly connected to said back; a front member; hinged means to connect said front and bottom members; an extension member forming part of the hinged means connecting the bottom and front members and adapted to form an extension part of either; staples connected to the front and to said bottom member; a top hinged to the back and having an end extension member hinged thereto; hasps carried by the top and its extension member and adapted to engage either set of staples; and extension members on the sides adapted to be used when the first mentioned extension member forms a part of the bottom, substantially as described.

5. In a collapsible trunk; a back, side members hinged to the back, a top, a metal extension member hinged to the outer edge of the top and adapted to fold outwardly, downturned flanges at the side edges of said top extension member, a bottom, an extension bottom member hinged thereto, said top and bottom being hingedly connected to said back, a front hinged to the extension bottom member, an extension side member connected to each main side member, means to connect the extension bottom member and the front to the ends of the main side members when the trunk is partway expanded, end flanges on the front to interlock with the extension sides when the extension bottom member lies horizontal, and top straps along the outer edge of said extension sides and forming therewith a pocket to receive

the downturned side flanges of the extension top.

6. In a collapsible trunk, a back, a bottom and a top and sides all hingedly connected to the back and adapted to collapse, a front hingedly connected to the bottom, metal extension members hinged to the inner walls of the top and sides and adapted to swing outwardly, the front comprising a main section and a bottom section hinged thereto and adapted to fold down and form a bottom extension member, said top extension member being downwardly inclined to engage the main front section when its bottom section lies horizontal, the top edges of the extension sides being sloped to correspond to the inclination of the extension top, angled extension plates along the side edges of the main front section and offset therefrom to form a seat for the extension sides and a main seat for the trunk sides, and means to secure the trunk members in expanded position.

In testimony whereof I affix my signature.

SAMUEL W. FRIEDMAN.

Witness:
JOSEPH SAMS.