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E. W. HAGADORN

2,759,529

STORAGE CHAIR

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2 Sheets-Sheet 1

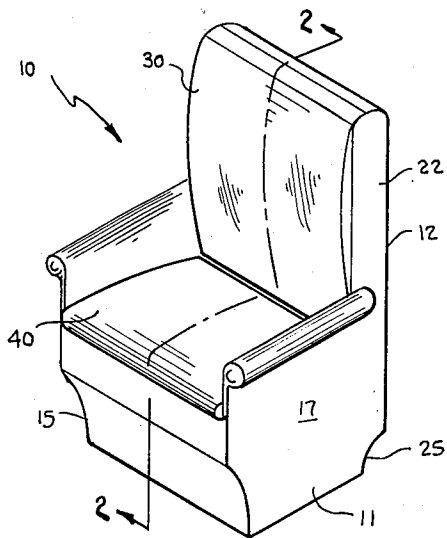


Fig-1

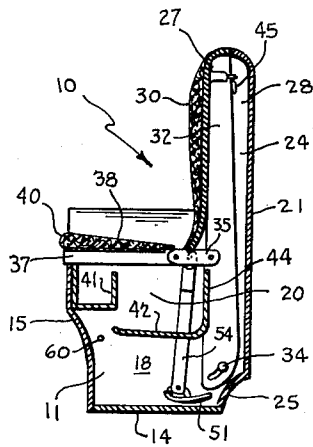


Fig-2

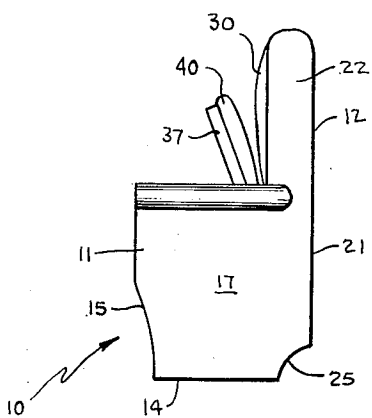


Fig-4

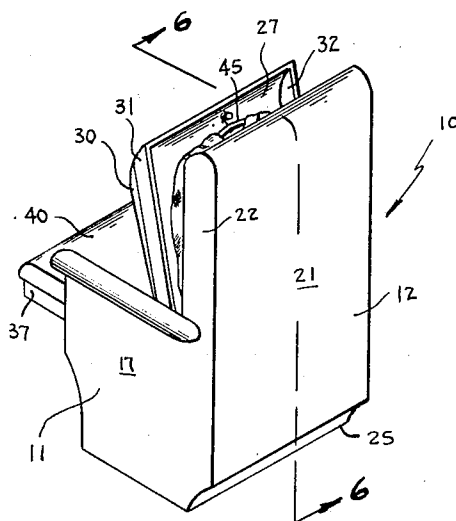


Fig. 3

INVENTOR.
ELMORE W. HAGADORN

BY

Richard von K. Brune
Attorney

Aug. 21, 1956

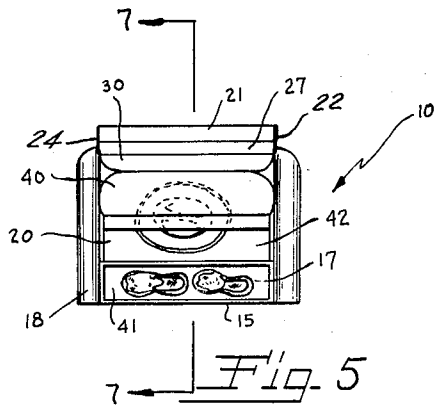
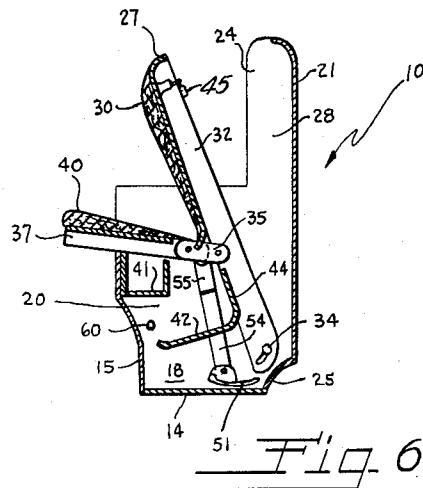
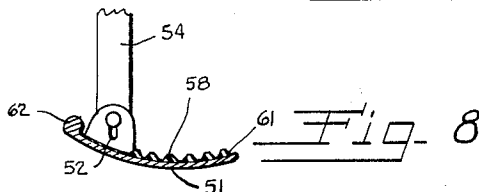
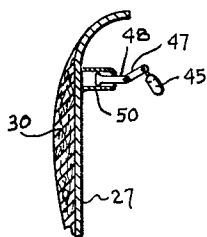
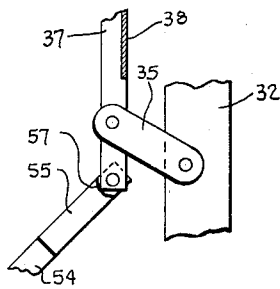
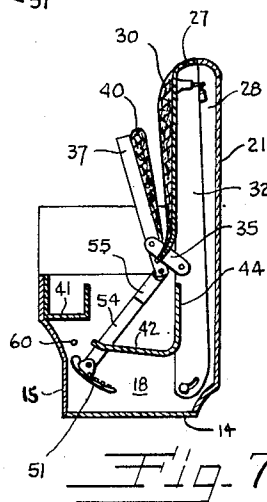
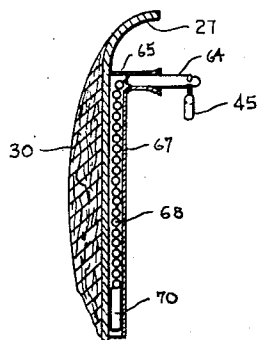
E. W. HAGADORN

2,759,529

STORAGE CHAIR

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2 Sheets-Sheet 2



INVENTOR.
ELMORE W. HAGADORN
BY

Richard von K. Grunz
Attorney

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STORAGE CHAIR

Elmore W. Hagadorn, Solvay, N. Y., assignor to Finishline Laboratories, Inc., Syracuse, N. Y., a corporation of New York

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7 Claims. (Cl. 155—190)

This invention relates to furniture construction, and has particular reference to a novel chair structure having storage space therein for articles of wearing apparel and the like.

In general, the invention contemplates a chair of substantially solid outer construction having storage receptacles in the back and base portions thereof adapted to receive and support protective outer garments such as an overcoat, hat, boots, or the like. The chair is particularly well suited for use in theaters but can also be used to advantage in restaurants, schools, public waiting rooms, locker rooms and the like. In addition, the chair can be adapted for use as a passenger seat for trains, busses and automobiles.

In theaters, for example, patrons have always been confronted with the problem of what to do with their outdoor apparel upon entering the building. The alternatives offered of course are for the patron to check his apparel in the theater maintained cloakroom or carry it to his seat and support it as best he can in his lap. To a great many people, neither of these alternatives is particularly desirable because cloakrooms usually involve waiting in line to check the garments in and out, and holding them on the lap can become quite uncomfortable. Furthermore, it is relatively easy to mislay or lose a garment in either case.

The primary object of the present invention therefore is to provide a storage chair or theater patron seat having means whereby each user can quickly and conveniently store all of his outdoor apparel within his own chair in such a manner that the apparel causes no discomfort to himself and can not become mislaid or lost.

Another important object of the invention is to provide a chair having storage means for a user's outdoor apparel which chair is comfortable and attractive in appearance, and occupies substantially no more space than a conventional type of theater seat.

A further object of the invention is to provide a chair having storage means for a user's outdoor apparel, which chair is strong and durable, and yet is relatively inexpensive to manufacture.

A still further object of the invention is to provide a chair having storage means therein for a user's outdoor apparel wherein an elongate garment such as an overcoat can be stored within the chair without the necessity of folding or mussing the garment.

Another object of the invention is to provide a chair having storage means therein for a user's hat, boots, gloves, handbag and the like.

A more specific object of the invention is to provide a storage chair having a novel pivotal mounting arrangement for its back rest and seat members whereby the latter may be moved relative to the remainder of the chair for easy access to the storage areas therein.

Other objects and advantages will become apparent from the following detailed description read in conjunction with the accompanying drawings wherein like reference numbers designate like parts in all the views.

In the drawings:

Figure 1 is a perspective view of the front of a storage chair embodying the invention, showing the back rest and seat member in normal or closed position;

Figure 2 is a vertical section through the chair taken along line 2—2 of Figure 1;

Figure 3 is a perspective view of the back of the storage chair of Figure 1, showing the back rest in open position;

Figure 4 is a side elevation of the storage chair of Figure 1, showing the seat member in open position;

Figure 5 is a plan view of the storage chair of Figure 1, showing the seat member in open position;

Figure 6 is a vertical section through the chair taken along line 6—6, Figure 3;

Figure 7 is a vertical section through the chair taken along line 7—7, Figure 5;

Figure 8 is a detail view of a portion of a garment guide or smoothing means;

Figure 9 is a detail view of a portion of the seat member and garment guide operating linkage;

Figure 10 is a detail view of one form of garment supporting means; and

Figure 11 is a detail view of another form of the garment supporting means.

Having reference now to the drawings which disclose a typical embodiment of the invention for the purpose of the disclosure, 10 generally indicates the storage chair as a whole, the chair being essentially comprised of a base portion 11 and upstanding back portion 12. The base portion 11 includes a bottom 14, front wall 15 and side walls 17, 18, which together define a storage space or receptacle 20 open at its top and rear side. Back portion 12 includes a rear wall 21 and a pair of forwardly extending side walls 22, 24, the lower portions of which adjoin or are formed integral with the side walls 17, 18, of the base portion. The rear wall 21 is inwardly curved as indicated at 25 to provide added foot room for the aisle extending in back of the chair.

The upper ends of the back portion of side walls 22, 24, are rounded, and the rear wall 21 is curved adjacent its upper end to partially conform thereto as shown in Figure 2. A panel 27 forms a closure for the space defined by rear wall 21 and the upper portions of side walls 22, 24, and together with said walls encloses a storage space or receptacle 28 in communication with the base portion storage space 20. Panel 27 is curved in reverse directions adjacent its upper and lower ends, its upper curved portion terminating in edgewise abutment with the upper curved portion of rear wall 21 and forming therewith a top for the back portion storage space 28. Panel 27 also serves as the back rest for the chair and to this end may be upholstered with suitable padding material 30.

The panel or back rest 27 is supported by a pair of arms 31, 32, which extend downwardly adjacent the inner sides of walls 22, 24, and are pivotally secured to the walls adjacent the bottoms thereof as by pin and slot connections 34. The pivotal mounting of the back rest support arms 31, 32, permits the back rest 27 to be tilted forwardly out of the plane of the remainder of the back portion to gain access to the storage space 28 therein, as will be explained in more detail as the description proceeds.

Pivotally secured to each arm 31, 32, is one end of a forwardly extending link 35, the other end of each such link being pivotally connected with an angle iron or inverted L-shaped bar 37. The outer, free ends of the bars 37 are normally supported in a substantially horizontal position by the upper edge of the base portion front wall 15, the vertical legs of the bars being received in vertical guide slots (not shown) in the wall, and the bars themselves support a panel 38 which forms the top closure for the base storage space 20. Panel 38 also

serves as the seat member for the chair and to this end may be upholstered with suitable padding material 40. Due to the pivotal mounting of the bars 37, the panel or seat member 38 can be swung upwardly to provide access to the storage space 20 as will be explained more fully hereinafter.

Extending transversely across the upper forward portion of the base storage space or receptacle 20 is a smaller receptacle 41 adapted to support rubbers, boots, or the like, within the storage space. Receptacle 41 is substantially U-shaped in cross section, as is best shown in Figures 2, 6 and 7, and is secured by some suitable means as welding to the front wall 15 of the base portion. A shelf member 42 adapted to support head covering, gloves, packages, or the like, also extends transversely across the storage space 20 in back of and slightly below the receptacle 41. Shelf 42 is provided with a substantially solid back member 44 which extends transversely between, and is supported by, arms 31, 32, as is also shown in Figures 2, 6 and 7.

The back portion storage space 28 is adapted to receive and support heavier and more cumbersome garments such as an overcoat or top coat and to this end is provided with a coat hanger type of support mounted on the inside of the back rest panel 27, Figures 2, 6, 7 and 10. This support preferably comprises a hanger 45 secured to a link 47 pivotally connected with a rod 48. The rod is slidable telescope fashion within a tube 50 secured to the panel 27, the inner end of the rod being enlarged and the outer end of the tube being reduced or crimped inwardly to prevent complete disengagement of the parts.

The hanger support is located near the top of storage space 28 to facilitate access thereto and also to permit an elongate garment such as an overcoat to hang as straight as possible. However, with a chair back of conventional height, the height of the storage space 28 will normally be less than the length of the average overcoat or top coat which means that the lower portion of the coat will be bunched up in the bottom of the space unless some provision is made to overcome this problem. In the present invention, the problem is overcome by means of a movable guide or conveyor member 51 which operates upon upward swinging movement of the seat member 38 to guide the bottom portion of the coat into the communicating base storage space 20 so that it will lie extended along the bottom thereof in smooth, unbunched condition.

The guide member 51 comprises an arcuate plate which is normally positioned at the bottom of the back portion storage space 28 and extends transversely thereacross. Each end of the plate is formed with an upwardly turned flange having a slot 52 therein, Figure 8, which engages a pin at the end of an actuating arm 54. Each arm 54 is pivotally secured at its upper end to the rear end of one of the seat member support bars 37. As best shown in the detail view in Figure 9, the forward ends of the links 35 are secured to the bars 37 somewhat forwardly of the rear ends thereof, and are positioned inwardly of the bars. The arms 54, on the other hand, are positioned outwardly of the bars 37 and are secured close to the ends thereof.

Secured to each arm 54, just below the end of bar 37, is a plate 55 having a concave upper edge 57 forming a depression into which the lower rear corner of the bar 37 moves at the start of an upward swinging movement of the seat member 38. As this movement continues, the corners of the bars 37 become wedged against the concave surfaces of the plates 55 and thereafter cause the arms 54 and guide member 51 supported thereby to be swung in a clockwise direction as viewed in Figure 7. Since the guide member is normally positioned at the bottom of back portion storage space 28, the lower part of a coat supported by the hanger 45 will rest upon it and will therefore be conveyed or extended into the base

storage space 20 when the guide member is moved as above described. The lower part of the coat is thus spread evenly and smoothly along the bottom of the storage space as the guide member makes its arc. The upper side of the guide member is covered with a piece of rubber 58 or similar material having a corrugated or roughened surface to aid it in spreading out the coat as described.

When the guide member passes beyond the end of the coat, it will continue to swing upwardly until actuating arms 54 engage the stops 60. On the return movement of the guide member, when the seat member is swung down into closed position, the guide 51 will ride over the top of the extended coat and leave it evenly spread out due to the fact that the member tends to rotate in a counter-clockwise direction about its pivotal connections with arms 54 thereby elevating its rear edge 61 so that it clears the coat. This last described rotation is due to a counterweight 62 secured to the forward edge of the guide member. The member will also be aided in riding over the coat by its pin and slot connections with the arms 54 which permit it to slide up on the arms so that it is slightly higher with respect to the bottom 14 of the base portion on its return stroke than it is on its upward stroke.

Figure 11 illustrates a modified form of hanger support wherein the hanger 45 is secured to a rod 64 which is normally supported by a tube 65 mounted on the back rest panel 27. Tube 65 communicates at its inner end with a vertically disposed channel 67 secured to the panel with its open side in confronting relation thereto. A chain or cable 68 is attached to the inner end of rod 64, and this chain extends down into the channel 67 and terminates in a weight 70. With this form of hanger arrangement, the hanger 45 can be withdrawn from its supporting tube 65 as far as necessary to facilitate placing a coat upon the hanger, and when this has been done the rod 64 is simply returned to its position in tube 65 and the weight 70 retracts the excess chain and maintains the rod in position.

In operation, the user first tilts the back rest 27 forwardly into the position shown in Figures 3 and 6 and places his overcoat or top coat on the hanger 45, pulling the rod 48 as far out of the tube as possible and tilting the hanger upwardly to facilitate placing the coat thereon. Thereafter, the rod 48 is pushed back into the tube 50, and the lower portion of the coat is allowed to drop down into the storage space, the bottom part thereof coming to rest on the guide member 51. The back rest is then tilted back into closed position. It will be noted that during the forward tilting movement of the back rest, the seat member 38 slides forwardly relative to the remainder of the chair base portion due to its connection with the support arms 31, 32. This arrangement enables the arms 31, 32, to be pivoted adjacent the bottom of the chair and therefore permits a greater exposure of the storage space 28 than would be possible if the seat member were secured to a fixed portion of the back or base so that the back rest had to be pivoted from a point thereabove.

After the back rest has been moved into closed position, the seat member 38 is swung upwardly to expose the base portion storage space 20, and during the upward swinging movement thereof the guide member 51 is actuated to convey the bottom part of the coat into the space in a smoothly extended manner as previously described. The raised seat member exposes the receptacle 41 and shelf 42 enabling the user to deposit his rubbers, head covering, gloves, or the like, therein. Thereafter, the seat member is swung downwardly into closed position, and the user can comfortably occupy the seat unburdened by articles of apparel in his lap and with the knowledge that they are safe and quickly retrievable when he wishes to leave.

5

It will be understood that in certain applications of the storage chair of the invention it may be desirable to provide it with locking means so that unauthorized access to the storage spaces can be prevented. This can be most simply carried out by latching either seat member support bar 37 in the position shown in Figure 2 which would prevent raising the seat member or tilting the back rest. The lock (not shown) can be key operated, a combination lock, or any other suitable type.

This invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The embodiments disclosed are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims.

What I claim is:

1. A chair comprising a base portion having a storage space therein, and a back portion having a storage space therein in communication with said base portion storage space, said back portion including a pair of pivotally mounted arm members and a back rest supported by said arm members whereby said back rest can be tilted out of the plane of the remainder of the back portion to expose the storage space therein, and said base portion including a seat member pivotally secured to said arm members and slidable in a substantially horizontal plane relative to the remainder of the base portion when said back rest is tilted, said seat member being swingable upwardly independently of said back rest tilting movement to expose said base portion storage space.

2. A storage chair comprising a base in the form of a receptacle having an open top, a back in the form of a receptacle having an open side, said base and back receptacles being in communication with one another, an upholstered closure member for said back receptacle, a pair of support arms for said closure member pivotally secured to said back adjacent the bottom thereof to permit the closure member to be tilted away from said back receptacle for access thereto, an upholstered closure member for said base receptacle pivotally secured to said support arms and swingable upwardly for access to the receptacle, said last-named closure member being slidable in a substantially horizontal plane relative to the base when said back closure member is tilted, and means associated with said back closure and support arms to support wearing apparel in said back and base receptacles.

3. A storage chair comprising a base portion having a storage space therein, an upstanding back portion connected to said base portion and having a storage space therein the lower portion of which is in communication with said base storage space to permit elongate garments supported from the upper portion of the back storage space to extend unfolded into the base storage space, said back portion including an upholstered back rest and support arms for said back rest pivotally secured to said back portion adjacent the bottom thereof whereby said back rest can be tilted out of the plane of the remainder of the back portion for access to the storage space therein, an extensible hanger adjacent the upper edge of said back rest adapted to support a garment in said back storage space, a transverse shelf secured to said support arms and extending into said base storage space to support an article of wearing apparel thereon, said base portion including an upholstered seat member pivotally secured to said support arms and slidable in a substantially horizontal plane relative to the remainder of the

6

base portion when said back rest is tilted, said seat member being swingable upwardly independently of said back rest tilting movement for access to said base portion storage space and shelf extending therein.

4. A chair as defined in claim 3 together with a separate receptacle mounted in said base portion storage space adapted to receive articles of footwear.

5. A chair as defined in claim 3 together with means associated with said seat member and operable when the latter is swung upwardly to guide into said base storage space the lower portion of an elongate garment supported from the upper portion of said back storage space.

6. A wearing apparel storage chair comprising a base having a bottom, front and two side walls defining a storage receptacle; an upstanding back having a rear wall confronting the open rear side of said base and a pair of forwardly extending side walls the lower portions of which adjoin the base side walls; an upholstered back rest associated with the upper portion of said back and forming therewith an enclosed storage receptacle in communication with said base storage receptacle; a pair of arm members supporting said back rest and pivotally secured to the side walls of said back adjacent the bottom thereof to permit the back rest to be tilted forwardly for access to said back receptacle; means on said back rest adjacent the upper edge thereof to support a garment in said back receptacle; a shelf member secured to said arm members and extending into said base receptacle to support head covering therein; an additional receptacle mounted in said base receptacle to support foot covering; an upholstered seat member forming a top closure for said base receptacle, said member being pivotally secured to said arm members to permit it to be swung upwardly for access to said base receptacle; and means associated with said seat member and operable when it is swung upwardly to convey the lower portion of a garment supported from said back rest into said base receptacle.

7. A wearing apparel storage chair comprising a base having a bottom, front and two side walls defining a storage receptacle; an upstanding back having a rear wall confronting the open rear side of said base and a pair of forwardly extending side walls the lower portions of which adjoin the base side walls; an upholstered back rest associated with the upper portion of said back and forming therewith an enclosed storage receptacle in communication with said base storage receptacle; a pair of arm members supporting said back rest and pivotally secured to the side walls of said back adjacent the bottom thereof to permit the back rest to be tilted forwardly for access to said back receptacle; and an upholstered seat member forming a top closure for said base receptacle, said member being pivotally secured to said arm members to permit it to be swung upwardly for access to said base receptacle.

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