No. 842,511. PATENTED JAN. 29, 1907.

J. D. ARTZ.

VEHICLE BODY.

APPLICATION FILED APR. 24, 1905.

2 SHEETS—SHEET 1.

Fig. 1

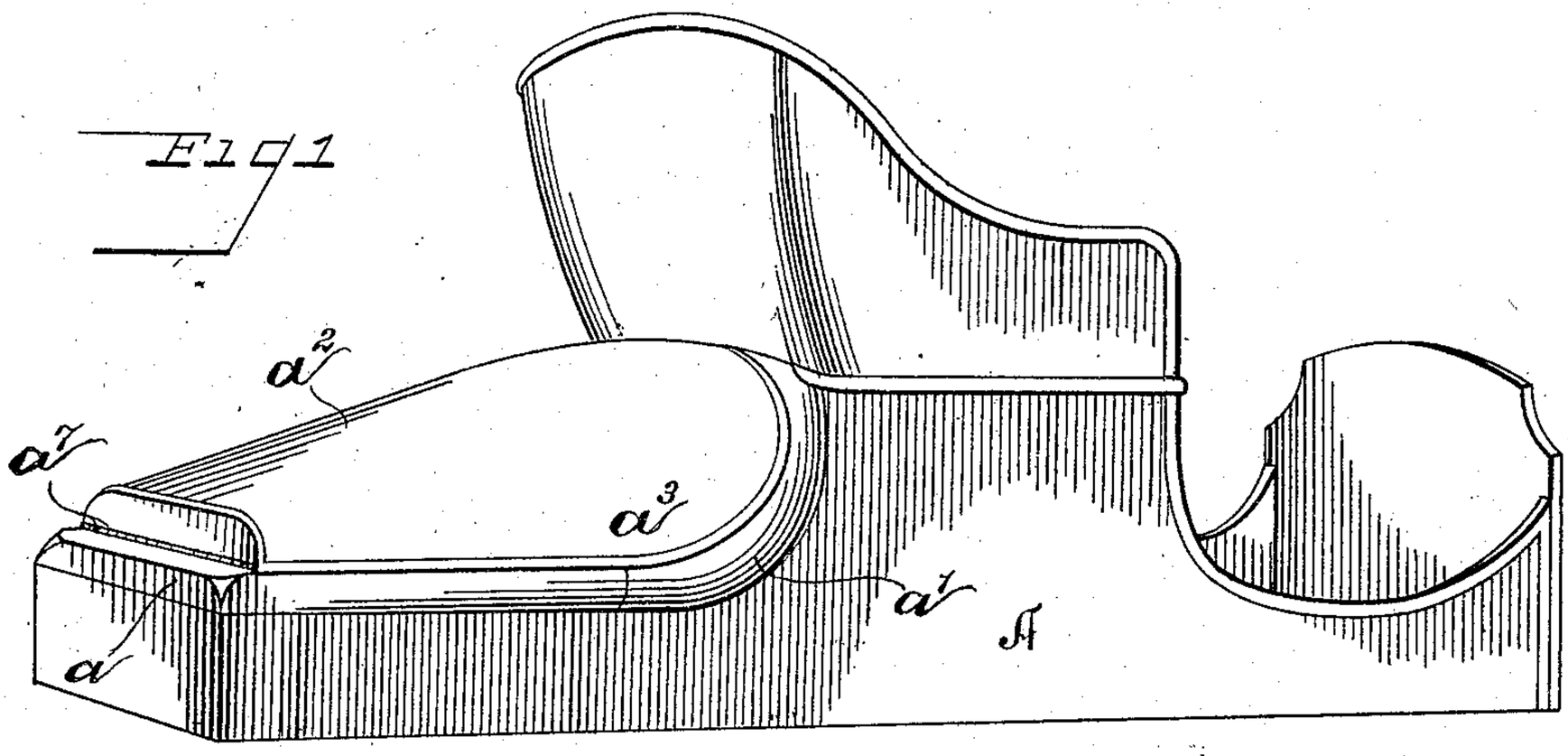


Fig. 5

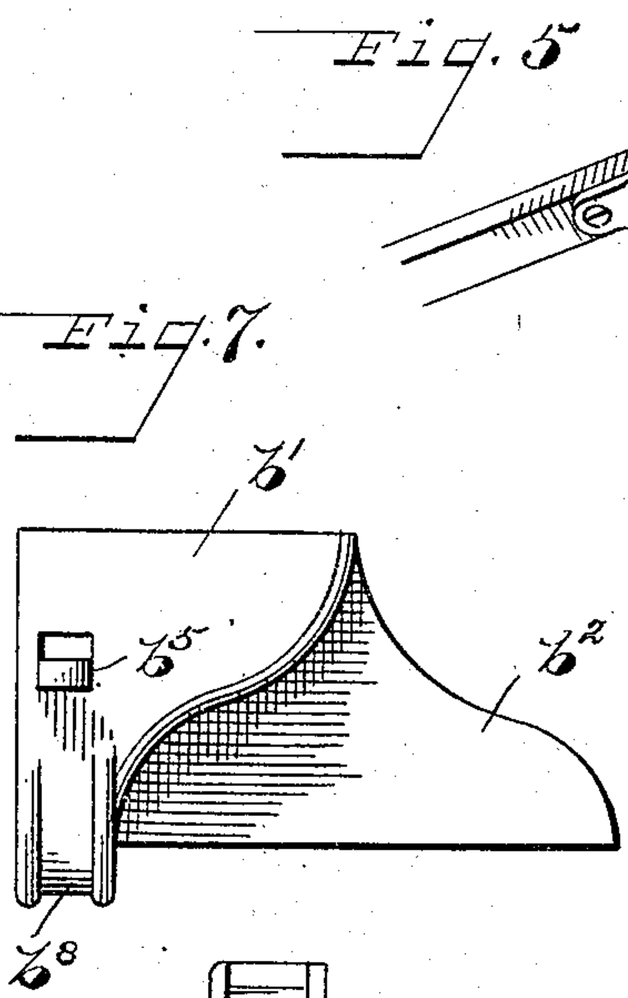


Fig. 4.

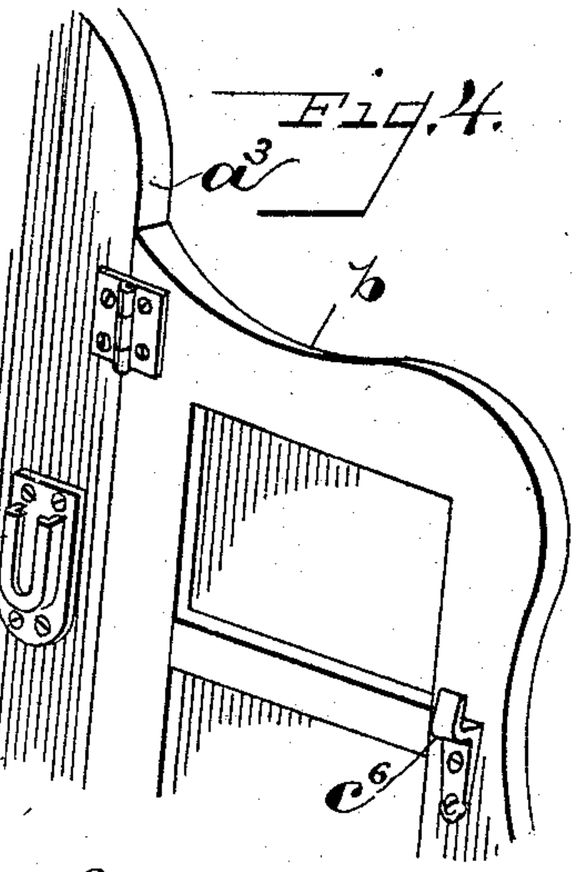


Fig. 7.

Fig. 8

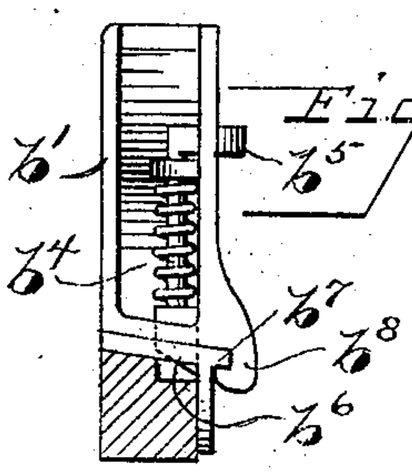
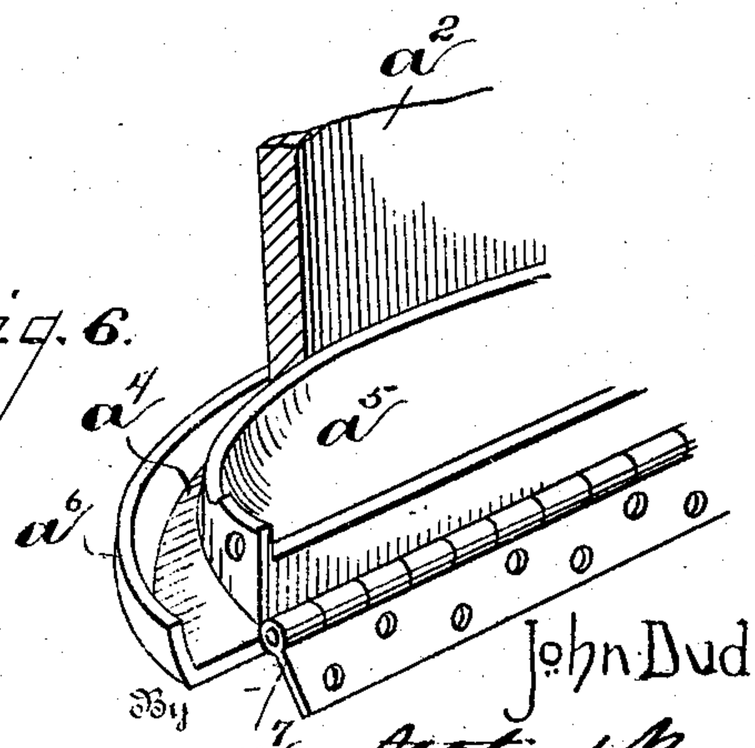


Fig. 6.



Witnesses

F. Llewellyn Walker

Chas. F. Orlich

Inventor

John Dudley Artz

By Bailey & Bowman

Attorneys

No. 842,511. PATENTED JAN. 29, 1907.

J. D. ARTZ.

VEHICLE BODY.

APPLICATION FILED APR. 24, 1905.

2 SHEETS—SHEET 2.

Fig 2

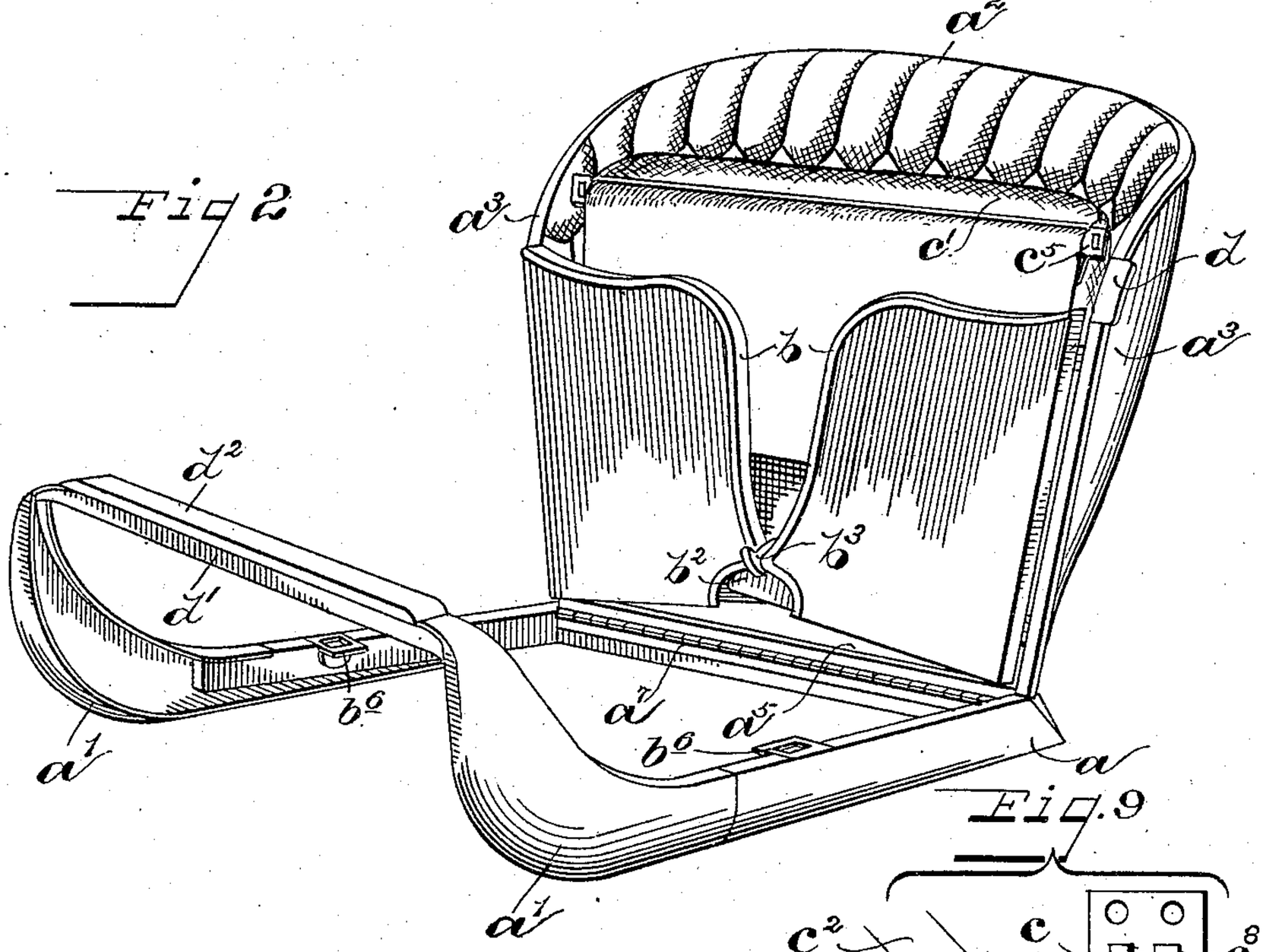


Fig. 9

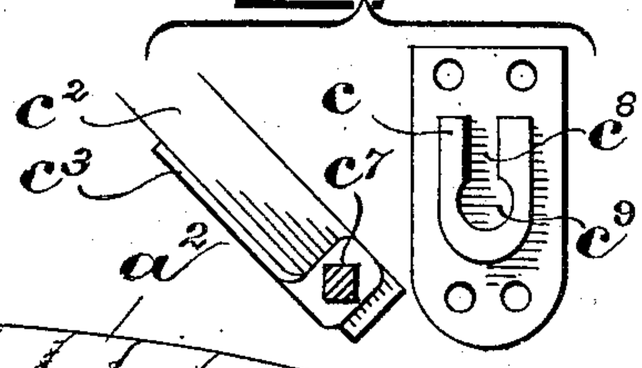
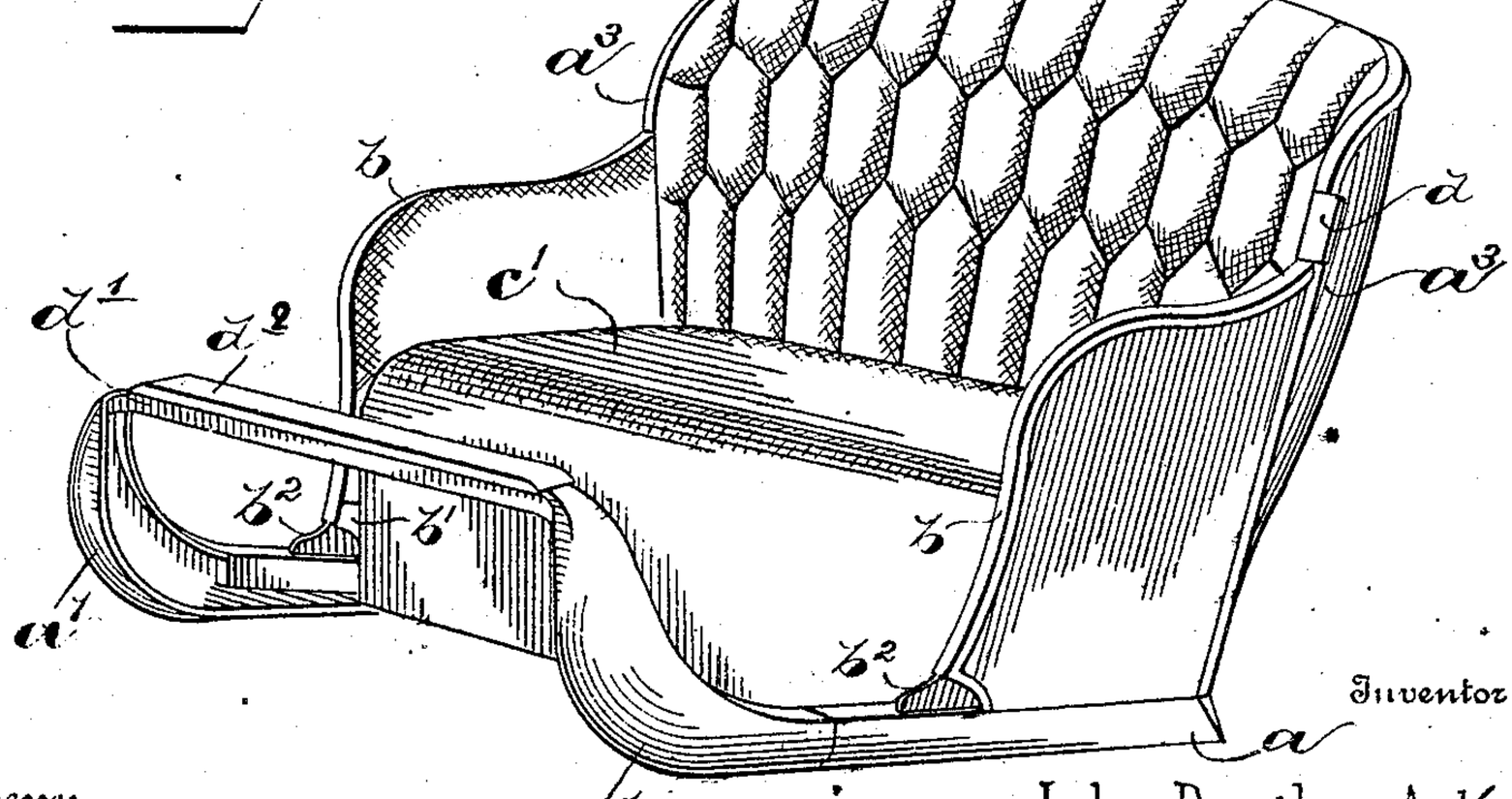


Fig. 3



Witnesses

L. Llewellyn Walker

Chas. D. Miller

Inventor

John Dudley Artz

By Staley & Brennan

Attorneys

UNITED STATES PATENT OFFICE.

JOHN DUDLEY ARTZ, OF DAYTON, OHIO.

VEHICLE-BODY.

No. 842,511. Specification of Letters Patent. Patented Jan. 29, 1907.

Application filed April 24, 1905. Serial No. 257,156.

To all whom it may concern:

Be it known that I, JOHN DUDLEY ARTZ, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Vehicle-Bodies, of which the following is a specification.

My invention relates to vehicle-bodies, and particularly to folding tonneaux therefor.

The object of the invention is to improve and simplify the structure, as well as the means and mode of operation of such devices, whereby they will be easily operated and more staunch and safe when in their erect position and unlikely to get out of repair.

A further object it to provide means whereby a vehicle may be easily and readily converted from a one-seated to a two-seated rig, or vice versa, and which will present a neat and pleasing appearance in either position.

A further object is to provide a foldable seat which will be flaring and otherwise conform to the accepted lines of vehicle-body construction which when folded will preserve the symmetry and outline and not radically depart from the customary lines of a one-seated rig.

A further object is to provide improved locking devices for the various parts to prevent the collapsing or rearward tipping of the device.

A further object is to provide improved connecting devices for the seat portion.

A further object is to provide a folding tonneau which may be readily fitted to vehicle-bodies of various constructions and designs not only during the process of construction, but also to bodies which have been previously completed.

With the above primary and other incidental objects in view the invention consists of the construction, parts, and combinations thereof or their equivalents hereinafter described, and set forth in the claims.

In the drawings, Figure 1 is a perspective view of a vehicle-body having fitted thereto the improved tonneau in its folded position. Fig. 2 is a perspective view of the tonneau independent of the vehicle-body and in a partially-folded position. Fig. 3 is a perspective view of the tonneau independent of the vehicle-body and in its erect position. Fig. 4 is a perspective view of a portion of the back and side sections, showing the connections thereon for the seat-section. Fig. 5 is a perspective view of a portion of the frame of the seat-section. Fig. 6 is a perspective detail view of the construction of the back section, showing the channeled base. Figs. 7 and 8 are detail views of the metal shoe, showing the engaging means between the side sections and the body portion. Fig. 9 shows a modified form of connection for the seat.

Like parts are represented by similar characters of reference throughout the several views.

In Fig. 1 there is shown a rectangular vehicle-body A, having approximately vertical sides and of common design, to which has been attached the improved tonneau. The sill a of the tonneau is securely fitted to the vehicle-body and forms a part thereof. At its rear the outline of the sill is coincident with that of the vehicle-body, but gradually widens toward the forward part of the tonneau into swells a', which converge below by graceful curves to the side of the body A. The upper edge of the sill a' is shaped to conform to the outline of the back section a^2 of the seat, which when folded forms the deck of the one-seated rig. The back a^2 is formed flaring and is of greater width at its upper end (when in erect position) than at the lower or attached end. The back a^2 merges by easy curves into side portions a^3, which, together with the back, form a recess for the seat-section, as hereinafter described.

The radii of the curves by which the back a^2 merges into the side portions a^3 are such that the resultant curves, when the seat is in its folded position, as in Fig. 1, will be substantially a continuation of the curvature of the swells a', thus presenting a symmetrical and graceful appearance in its folded position. The swells a' for strength and the ease with which they may be given the proper shape are preferably formed of metal.

The lower edge of the back a^2 (when erect) is preferably, although not necessarily, inclosed within the channel a^4 of a metallic base a^5, the outer side a^6 of the channel forming a bead about the lower edge of the back a^2. The base a^5 is so hinged to the sill a by a hinge a^7 that it will securely rest on said sill when the seat is in its erect position, and so limit the rearward movement of the back section a^2. The hinge a^7 may be formed separate and have one leaf attached to the base a^5, or the base a^5 may itself be so formed as to constitute one leaf of the hinge, as illustrated in Fig. 6.

Hinged to the side portions a^3 of the back

section a^2 are side sections b, adapted to fold inward, as in Fig. 2. Being hinged to the flaring back, the side sections incline slightly outward. They may be of any approved outline to conform with the design of the body, and particularly that of the stationary seat. Such portions as may necessarily overlap when in folded position, as in Fig. 2, are reduced in thickness, as hereinafter described, in order that the side sections may fold into substantially the same plane. Secured to the lower forward corners of the side sections b are metallic shoes b', having projecting forward therefrom a leaf b^2, which preserves the outline of the section and forms portions of reduced thickness, which overlap when the sections are folded. The metallic leaves b^2 are further adapted to be engaged by a hook or catch b^3, (in Fig. 2,) preferably spring-actuated, when the sections are folded, whereby they will be held in their folded position.

Mounted in suitable guides within each shoe b' is a bolt b^4, having an operating-lug b^5, extending inward beyond the shoe. The bolt b^4 is adapted to engage a suitable lock-keeper or bolt-socket b^6, secured to the sill a. The keeper b^6 is provided with a projecting ledge b^7, which is engaged by a downward-projecting recessed finger b^8 on the shoe b', as shown in Fig. 8. By the engagement of the bolt b^4 with the keeper b^6 the side sections b are held in their open position and in registry with the sill a. The engagement of the finger b^8 with the ledge b^7 assists in preventing the vertical movement of the side sections or the rearward tipping of the seat, thus holding the seat in position and preventing the undue straining of the parts.

Secured to the inner sides of the side portions a^3 are recessed slotted castings c, forming bearings for the seat c', to the rear corners of the frame c^2 of which are attached castings c^3, carrying studs c^4, preferably provided with heads which engage the recessed slots of the castings c, and thus form a removable pivotal engagement between the seat c' and the side portions a^3. Secured to the forward corners of the seat-frame c^2 are castings c^5, having openings therein adapted to engage in the manner of a hasp the upward-projecting fingers c^6, secured to the inner sides of the side sections b. The engagement of the castings c^5 with the fingers c^6 not only serves to support the seat-section c' when in its erected position, but also assists in holding the side sections b in their adjusted positions. Secured to and projecting beyond one or both the side portions a^3 is a flare or handle d, by which the back section a^2 may be readily raised from the folded position.

When the tonneau is in its folded or collapsed position, the seat-section c' is turned upward about its pivotal connections formed by the engagement of the studs c^4 with the slotted castings c, until it occupies a position within the recess formed by the back a^2 and side portions a^3. The side sections b are released by raising the bolts b^4 and folded inward against the seat-section c' until the overlapping portions b^2 are engaged by the catch b^3, after which the whole is lowered about the hinge a^7 until the edges of the side portions a^3 register with the edges of the sill a, as in Fig. 1.

Attached to the cross-bar d' of the sill portion a is a strip d^2, adapted to be cut to conform to the curvature of the stationary seat in order that a neat joint may be made when fitting the tonneau to the vehicle-body.

Referring to Fig. 9, there is shown a modified form of connection between the seat c' and the side portion a^3. The stud c^4 is formed rectangular in cross-section, as shown at c^7, and is located angularly in its relation to the seat-frame c^2. The width of the slot c^8 of the casting c is substantially equal to the width of the face of the rectangular stud. At the bottom of the slot c^8 is an enlarged opening of a diameter substantially equal to the diagonal dimension of the stud. By this arrangement the stud may be passed through the slot c^8 only when the seat is held at a predetermined angle, and when in position with the stud in the opening c^9 the seat may be freely moved about its pivotal connection, but is securely locked against removal until moved to the aforementioned angle.

It will be seen that there is thus provided a tonneau capable of being fitted to a vehicle-body of ordinary construction and design, by which the vehicle may be readily converted from a one to a two seated rig, or vice versa, which will conform to the approved lines of design when in either position, and which will be strong, simple durable, and easily manipulated.

Having thus described my invention, I claim—

1. In a structure as described, a back hinged to the body portion, said back being of greater width at the top than at the bottom, side portions hinged to said back, swell portions on the body portion registering with and forming a continuation of the back when the structure is in its folded position and a seat, substantially as specified.

2. In a structure as described, a seat, a hinged back recessed to contain the seat when folded, side sections hinged to said back, swells on the body portion, registering with the back when in its folded position, substantially as and for the purpose specified.

3. In a structure as described, a flaring back section hinged to the rear portion of the vehicle-body and merging by curves into side portions, side sections hinged to said side portions, a base for said back section, resting on the rear portion of the vehicle-body when in erect position and limiting the rearward

movement of the back section, and a seat, substantially as specified.

4. In a structure as described, a back section hinged to the rear part of the vehicle-body, flaring side portions formed integral therewith, side sections hinged to said side portions, a seat, portions projecting laterally from the vehicle-body with which said flaring side portions will register when the structure is in its folded position, substantially as specified.

5. In a structure as described, a hinged back, having a flat base portion, a sill to which said back is hinged, and on which said base portion will rest when the back is in its erect position to limit the rearward movement of said back, hinged side sections, and a seat, substantially as and for the purpose specified.

6. In a structure as described, a body portion, a back, side sections hinged to said back, a seat, a base for said back formed with a channel to inclose the lower edge of said back, a hinged connection between said base and body portion, substantially as specified.

7. In a structure as described, a recessed back hinged to a rearward portion of the vehicle-body, side sections hinged to said back, a seat pivotally connected to said back, overlapping portions of said side sections of reduced thickness, substantially as and for the purpose specified.

8. In a structure as described, a body portion, a back hinged to said body portion, a seat pivotally connected to said back, side sections hinged to said back, a shoe fitted to the lower forward extremity of each side section, a lock-keeper on the body portion, a downward-projecting recessed finger on said shoe engaging said lock-keeper, and a bolt engaging said lock-keeper, substantially as and for the purpose specified.

9. In a folding seat for vehicles, a recessed back hinged to the body portion of the vehicle, and merging by curves into side panels, a seat, foldable against said back, and within the recess thereof, side sections hinged to said back, overlapping portions of said side sections of reduced thickness, means to prevent the upward movement of said side sections when the seat is in its erect position, means for preventing the lateral movement of said side sections when the seat is in its erect position, and swells on the body portion registering with the back when the seat is in its folded position, substantially as specified.

10. In a folding seat for vehicles, the combination of a back hinged to the vehicle-body, side sections hinged to said back, sockets secured to said back on opposite sides of the vehicle, a seat, projecting studs on opposite sides of said seat removably engaging said sockets, projecting fingers secured to said side sections, hasps on said seat engaging said projecting fingers, substantially as specified.

11. In an article of manufacture, a folding tonneau adapted to be fitted to vehicle-bodies, comprising a sill portion, a recessed back so hinged to said sill portion that it will be limited in its rearward movement, said back being formed flaring, and merging by curves into the side portions, a seat pivotally connected to said back and foldable within the recess of said back, side sections hinged to said back, swells on the forward part of said sill portion with which the hinged back will register when in its foldable position, substantially as and for the purpose specified.

12. In a structure as described, a hinged back, a flat base for said back, a sill to which said back is hinged, and on which said base will rest when in the erect position to limit the rearward movement of the seat, side sections hinged to said back, and a seat, substantially as specified.

13. In a folding seat for vehicles, a back, folding side sections having their overlapping side portions reduced in thickness, and a seat, substantially as described.

14. In a structure as described, a vehicle-body adapted to carry a flaring folding seat, swells on the side of said body to coincide with the shape of the back portion of said vehicle-seat, substantially as specified.

15. In a folding seat for vehicles, the combination of a back hinged to the vehicle-body, side sections hinged to said back, sockets secured to said back on opposite sides of the vehicle, a seat, projecting studs on opposite sides of said seat removably engaging said sockets, substantially as specified.

16. In a folding seat for vehicles, a folding portion hinged to the vehicle-body, a seat, rectangular projecting studs on opposite sides thereof, sockets on the folding portion each comprising a slot of a width substantially equal to the face of the rectangular stud, and an enlarged opening at the bottom of said slot of a diameter substantially equal to the diagonal of the stud, substantially as and for the purpose specified.

17. In a structure as described, a recessed back hinged to the rearward portion of the vehicle-body, a seat hinged to said back and adapted to turn on its hinged connection into the recess of said back, side sections hinged to said back and adapted to turn inward and rest against the seat when the structure is in its folded position, and a hook projecting from the back and engaging said side sections to hold the parts in their folded position, substantially as specified.

In testimony whereof I have hereunto set my hand this 20th day of April, A. D. 1905.

JOHN DUDLEY ARTZ.

Witnesses:
CHAS. I. WELCH,
F. LLEWELLYN WALKER.