

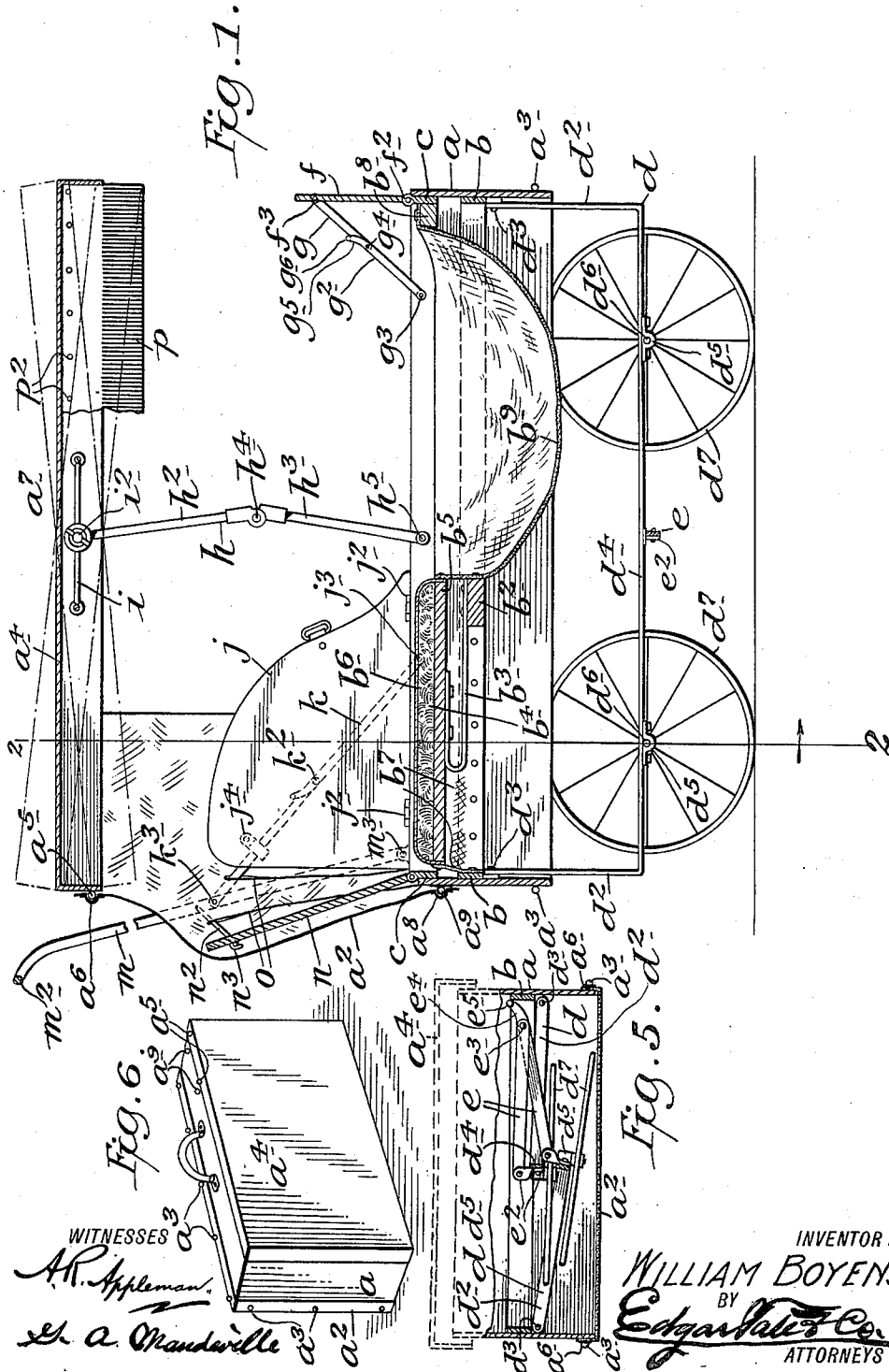
W. BOYENS.
GO-CART.

APPLICATION FILED APR. 4, 1911.

1,024,176.

Patented Apr. 23, 1912.

2 SHEETS-SHEET 1.



WITNESSES
A. R. Appleman.
E. A. Manderville.

INVENTOR.
WILLIAM BOYENS.
BY
Edgar & Co.
ATTORNEYS.

W. BOYENS.

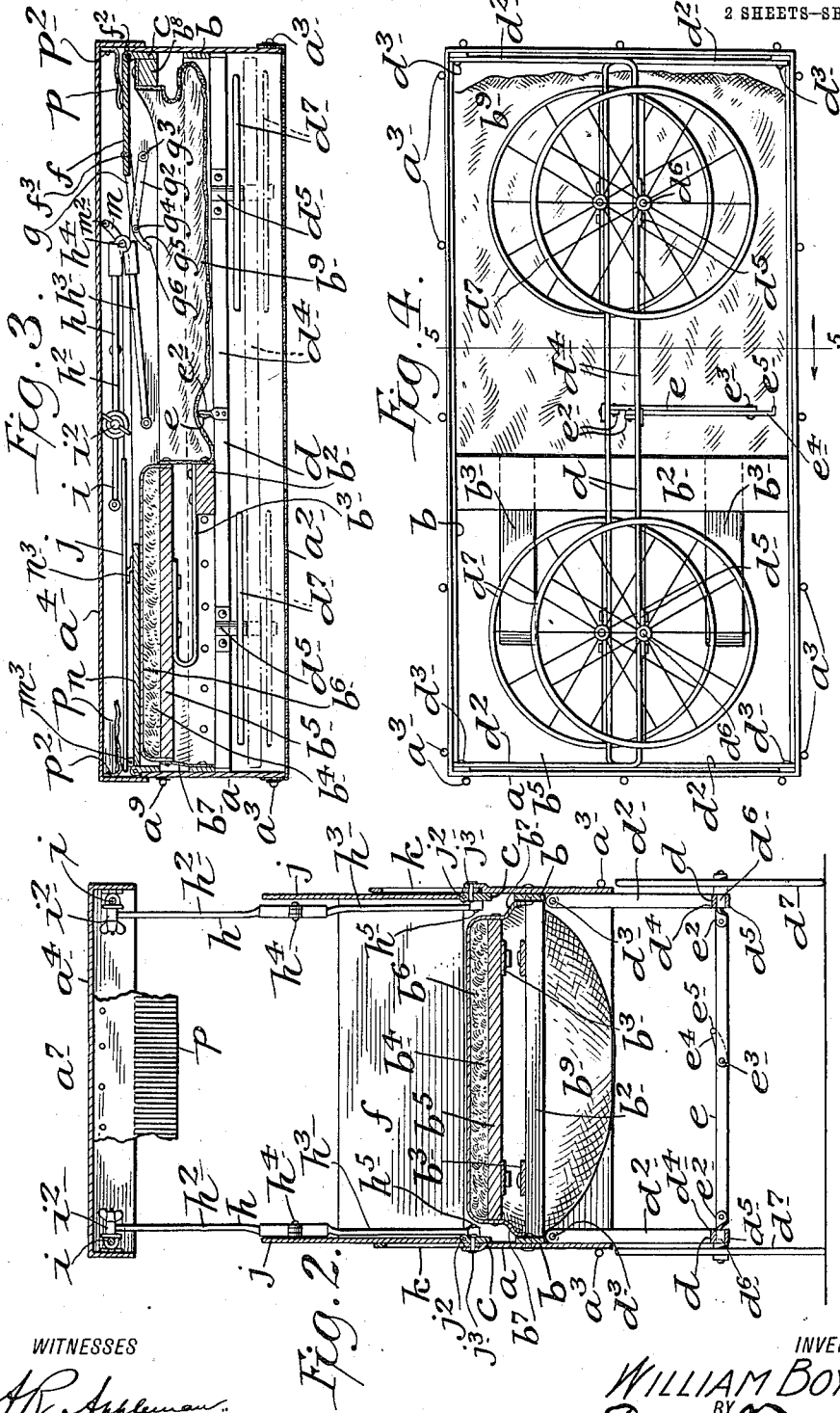
GO-CART.

APPLICATION FILED APR. 4, 1911.

Patented Apr. 23, 1912.

2 SHEETS—SHEET 2.

1,024,176.



WITNESSES

A. R. Applenau
A. A. Mauderle

INVENTOR.

WILLIAM BOYENS.
 BY
Edgar & Co.
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM BOYENS, OF BROOKLYN, NEW YORK.

GO-CART.

1,024,176.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed April 4, 1911. Serial No. 618,836.

To all whom it may concern:

Be it known that I, WILLIAM BOYENS, a subject of the Emperor of Germany, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Go-Carts, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to go-carts and the object thereof is to provide an improved device of this class which may be folded compactly together in the form of a dress-suit-case so as to facilitate the packing thereof in a small space, and the carrying or shipping thereof from one point to another; a further object being to provide a device of the class specified which may be quickly and easily set up for use and which when in use is provided with a canopy which may be adjusted into different positions and which also forms a part of the dress-suit-case.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a sectional side view of my improved go-cart and showing the parts thereof set up for use; Fig. 2 a vertical transverse section on the line 2—2 of Fig. 1; Fig. 3 a central longitudinal section showing the parts of the go-cart folded together in the form of a dress-suit case; Fig. 4 a bottom plan view of the go-cart as shown in Fig. 3 with the bottom of the dress-suit case removed; Fig. 5 a transverse sectional view on the line 5—5 of Fig. 4 with parts omitted and parts indicated in dotted lines, and; Fig. 6 a perspective view on a reduced scale showing the dress-suit case form of my improved go-cart.

In the practice of my invention, I provide an oblong rectangular box or casing a , one side, the bottom side as shown in the drawing, is closed by a fabric or other flexible sheet or apron a^2 detachably connected with said box or casing a by means of button or ball knobs a^3 connected with the box or casing, and button holes or socket members formed in or connected with the sheet a^2 and adapted to receive said button or ball knobs. The other or top side of the box or

casing is closed by a cover a^4 , and the cover a^4 is provided at one end thereof, and on the opposite sides thereof, adjacent to said end, with button or ball knobs a^5 similar to those at a^3 , and also adapted as hereinafter described to engage corresponding button holes or socket members a^6 formed in or connected with the sheet a^2 .

Within the box or casing a is an angular frame b which is secured therein in any desired manner and which closely fits the inner side walls of said box or casing, and said frame is closer to the top of said box or casing than to the bottom thereof, and a similar angular frame c is also secured in the top of said box or casing and these parts, with others as hereinafter set out, constitute the body of the go-cart.

The running gear of the go-cart is so constructed as to be folded in the bottom part of the box or casing a , as shown in Figs. 3 and 5, or to be extended or unfolded for use whenever desired, as shown in Figs. 1 and 2, and said running gear involves two oblong yoke-shaped frames d placed longitudinally of and in the bottom of the box or casing a , and the side arms d^2 of which are pivoted to the ends of said box or casing as shown at d^3 , and the body portions d^4 of said yoke-shaped frames are provided with keepers d^5 arranged transversely and in pairs, at suitable intervals, and in which are secured stub spindles d^6 on which the wheels d^7 are mounted.

The parts d^4 of the yoke-shaped frames d are connected centrally and transversely by means of link members e the outer ends of which are pivoted to ears e^2 secured to the parts d^4 , said ears consisting of short plates given a quarter turn, and the inner ends of the link members e are pivoted together at e^3 , and one of said link members is provided with a curved projecting finger e^4 having a stop pin e^5 adapted to rest on the other link member when said parts are in the position shown in Figs. 1 and 2, and this construction permits of the folding of the running gear into the bottom of the bed or body or into the bottom of the box or casing a as shown in Figs. 3, 4 and 5.

The frame part b in the box or case a is provided rearwardly of the middle thereof with a transverse bar b^2 to the top of which are secured backwardly directed yoke-shaped springs b^3 having shorter and longer arms, and the longer arm being se-

cured to the bar b^2 , and secured to the shorter arms of said springs is a seat b^4 comprising a bottom seat plate b^5 and a top cushion b^6 , and the bottom of the seat b^4 is inclosed at the sides and back by a flexible sheet b^7 which is secured to the rear end portion of the frame b . Secured to the front of the seat b^4 and to the transverse bar b^2 , and to a transverse bar b^3 at the front of the frame c , is a flexible sheet b^8 which is designed to form a bag or receptacle forwardly of the seat b^4 , and which is intended to receive the feet of a child sitting on said seat, and in which various articles may be placed when desired.

The front end of the go-cart or vehicle or the body thereof is also provided with a dashboard f which is hinged thereto at f^2 and to the opposite ends of which are pivoted as shown at f^3 , link members g which are pivoted to other link members g^2 which latter link members are pivoted in the top of the box or casing a at g^3 and the link members g and g^2 are pivotally connected at g^4 and one of said link members is provided with a projecting finger g^5 having a transverse stop pin g^6 adapted to rest on the other link member, this construction being similar to that of the link members e which form a part of the running gear, and by means of this construction the dashboard f may be folded into the box or casing a as shown at Fig. 3 or may be raised into an upright position as shown at Fig. 1.

The side a^4 of the dress-suit case or the top of the box or casing a as shown in Fig. 1 is adapted to serve as a canopy as shown at a^7 in Figs. 1 and 2, and said canopy is supported by toggle arm members h composed of separate parts h^2 and h^3 hinged together at h^4 , and these toggle arm members are hinged at the opposite sides of the box or casing a and centrally thereof, and the lower ends thereof are pivoted to the sides of said box or casing at h^5 , and the upper ends thereof are connected with horizontal rods i secured to the inner sides of the side flanges or walls of the canopy by means of clamping devices i^2 of well known construction, and by means of which the upper end portions of the toggle arms h may be adjusted longitudinally of the rods i if desired, and also by means of which the said canopy may be tilted or adjusted into different positions as shown by dotted lines in Fig. 1, and the hinge connection at h^4 of the parts h^2 and h^3 of the toggle arms h is what is known as an ordinary rule joint, and the friction thereof and also the friction of the pivotal connection at h^5 is such as to hold the canopy in position as shown in Fig. 1, while also permitting the parts to be folded into the box or casing a as shown in Figs. 3 and 5. The body of the vehicle, or the box or casing a , is also provided with sideboards j which

are hinged thereto at j^2 and adapted to be folded inwardly, and pivoted to the sides of the box or casing a outside of the sideboards j as shown at j^3 are rods k composed of two parts pivoted together at k^2 and these rods are pivoted at k^3 to the sides m of the yoke-shaped handle device m^2 , said sides m being pivoted to the rear end portion of the body or the box or casing a as shown at m^3 .

The connection of the separate parts of the rods k at k^2 is made in the same manner as the link members g^2 of the dashboard f at g^4 , and in the same manner as the link members e of the running gear at e^3 , and the sideboards j are provided with hook devices j^4 which are adapted to engage the rods k when the parts are in position for use or in the position shown in Figs. 1 and 2.

Hinged to the top of the rear end of the body, or the box or casing a thereof, is a back plate n and this back plate is adapted to fold inwardly, and connected with the sides m of the yoke-shaped handle m^2 is a yoke-shaped member n^2 which engages the plate n which passes therethrough and which is provided with a hook n^3 adapted to engage said yoke-shaped member, and this method of constructing, connecting and operating the sideboards j , the handle m^2 and the back plate n enables said parts to be held in position for use as shown in Figs. 1 and 2 and also permits of their folding into the casing a as shown in Figs. 3 and 5.

The side a^4 of the suit case which forms the canopy a^7 is made box-shaped in form and when the parts are folded together as shown in Figs. 3 and 5 said part or canopy does not rest on the box or casing a , though the side and end flanges thereof inclose the top of said box or casing and while the folding of the parts k is not indicated in Figs. 3 and 5, it will be understood that these parts fold flat on the top of the sides of the box or casing and are inclosed by the canopy or part a^4 .

When the parts of the vehicle are set up for use as shown in Figs. 1 and 2, the flexible fabric or other bottom a^2 which also forms one side of the dress-suit case is detached from the box or casing a , and folded around the back plate n , and the sideboards j as shown in Fig. 1, and connected with the canopy as shown at a^6 and with the box or casing a as shown at a^8 by means of button knobs or similar devices a^9 connected with the box or casing a , and button holes or female members connected with the flexible member a^2 , this connection being similar to that shown at a^6 . The flexible sheet or member a^2 is provided with slots o which extend to the bottom edge thereof and through which the parts k and side members of the parts n^2 pass in the above described operation, and in this way the rear end portion of the body of the vehicle or the

top part thereof, together with the sideboards j and parts of the rod members k and yoke-shaped members n^2 , will all be inclosed when the vehicle is in use, by a curtain formed by the sheet a^2 . The canopy a^7 or the side a^4 , of the dress-suit case when used as a canopy, is preferably provided at its sides and ends with a fringe p , and this fringe is secured within said sides and ends at p^2 , and when said part is not used as a canopy, but used to form one side of the dress-suit case, the said fringe is folded inwardly as shown in Fig. 3.

In the accompanying drawing I have not shown any means for connecting the top a^4 with the dress-suit case or with the box or casing a when the parts are folded to represent a dress-suit case, but it will be understood that this connection can be made in the usual or any desired manner. It will also be understood that the vehicle or go-cart is propelled or manipulated by the handle m^2 in the usual manner, and by means of my improvements I provide a go-cart or vehicle of the class specified which may be quickly set up for use whenever desired, as shown in Figs. 1 and 2, and which also may be quickly and easily folded together in the form of a dress-suit case as shown in Fig. 6 for convenience in carrying, packing or shipping.

The use of the part a^2 to form a curtain as shown in Fig. 1 is not an essential feature and any other suitable construction of this kind may be employed to inclose the back part of the vehicle, but it will be understood that the folding backplate n and sideboards j may be cushioned or otherwise finished if desired, and may be connected or supported when in their upright position in any desired manner.

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

1. A go-cart comprising an oblong box or casing open at the top and bottom and provided with a flexible detachable bottom and a top adapted to be raised to form a canopy, and said box or casing being provided with an internal frame which extends entirely around the same and which divides the said box or casing into top and bottom parts, a running gear construction pivoted in the bottom part of said box or casing and adapted to be folded thereinto and to be extended for use, a seat supported above said frame in the rear end of said box or casing and forwardly of which is a flexible bag construction, folding sideboards connected with the rear end part of said box or casing, a folding back plate connected with the rear end of the box or casing, a yoke-shaped folding handle pivoted to the sides of the rear end portion of said box or casing, folding brace rods pivoted to the sides of said handle

and to the sides of the box or casing forwardly of the rear end thereof, a pivoted yoke-shaped device connected with said handle and adapted to engage the back plate, and folding devices connected with the box or casing and with the canopy for holding the latter in an elevated position.

2. A go-cart comprising a box or casing having a movable top and a movable bottom, said box or casing being provided with an internal frame which divides it into top and bottom parts, a running gear construction mounted in the bottom part of said box or casing and adapted to be folded thereinto and to be extended for use, a stationary spring supported seat arranged in the rear end portion of the top part of said box or casing and forwardly of which is a flexible bag construction, folding sideboards connected with the rear end part of said box or casing, a folding back plate connected with the rear end of said box or casing, and means for holding said sideboards and back plate in an upright position, said top being adapted to be raised to form a canopy.

3. A go-cart comprising a box or casing having a movable top adapted to be raised to form a canopy and a movable bottom, said box or casing being provided with an internal frame which divides it into top and bottom parts, a running gear construction mounted in the bottom part of said box or casing and adapted to be folded thereinto and to be extended for use, a spring supported seat arranged in the rear end portion of the top part of said box or casing and forwardly of which is a flexible bag construction, folding sideboards connected with the rear end part of said box or casing, a folding back plate connected with the rear end of said box or casing, and means for holding said sideboards and back plate in an upright position, said box or casing being also provided at the front end thereof with a folding dashboard, and at the rear end thereof with a folding handle.

4. A go-cart comprising a box or casing having a movable top and a movable bottom, said box or casing being provided with an internal frame which divides it into top and bottom parts, a running gear construction mounted in the bottom part of said box or casing and adapted to be folded thereinto and to be extended for use, a spring supported seat arranged in the rear end portion of the top part of said box or casing and forwardly of which is a flexible bag construction, folding sideboards connected with the rear end part of said box or casing, a folding back plate connected with the rear end of said box or casing, and means for holding said sideboards and back plate in an upright position, the movable top being also adapted to be raised above the box or casing and to serve as a canopy.

5. A go-cart, comprising a box or casing having a movable top adapted to be raised to form a canopy and a movable bottom, said box or casing being provided with an internal frame which divides it into top and bottom parts, a running gear construction mounted in the bottom part of said box or casing and adapted to be folded thereto and to be extended for use, a stationary spring supported seat arranged in the rear end portion of the top of said box or casing and forwardly of which is a flexible bag construction, folding side boards connected with the rear end part of said box or casing, a folding back plate connected with the rear end of said box or casing, and means for holding said side boards and back plate in an upright position, the movable top being also adapted to be raised above the box or casing and to serve as a canopy, and a detachable apron adapted to be connected with said canopy and with the rear end por-

tion of the box or casing and to inclose the folding side boards and the folding back plate.

6. In a go-cart, a box or casing, the rear end portion of which is provided with folding side boards and a folding back plate, a detachable cover for said box or casing adapted to be raised into an elevated position and to serve as a canopy, and a detachable apron adapted to be connected with said canopy when in a raised position and with the rear end portion of the box or casing and to inclose the folding side boards and the folding back plate.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 3d day of April, 1911.

WILLIAM BOYENS.

Witnesses:

C. E. MULREANY,
G. A. MANDEVILLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."