F. J. BEIER.

FOLDING GO-CART.

APPLICATION FILED MAR. 1, 1909. RENEWED MAR. 9, 1914.

**1,094,419.** Patented Apr. 28, 1914.

Fig. 1.

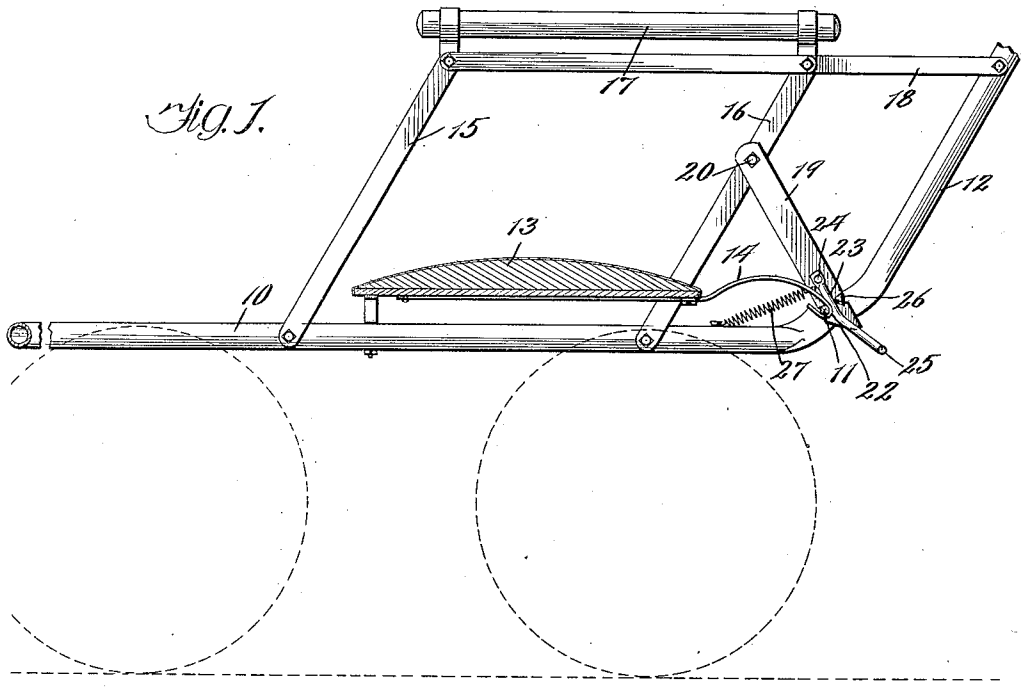



Fig. 2.

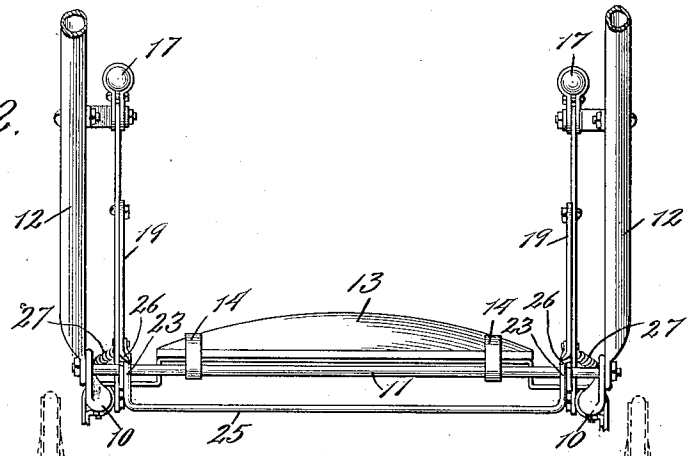
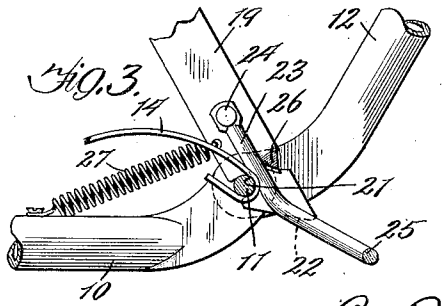



Fig. 3.




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# UNITED STATES PATENT OFFICE.

FRANK J. BEIER, OF ELKHART, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WILLIAM S. FERRIS, OF ELKHART, INDIANA, AND ALEXANDER B. LEITH, OF CHICAGO, ILLINOIS, TRUSTEES.

## FOLDING GO-CART.

1,094,419. Specification of Letters Patent. **Patented Apr. 28, 1914.**

Application filed March 1, 1909, Serial No. 480,729. Renewed March 9, 1914. Serial No. 823,636.

*To all whom it may concern:*

Be it known that I, FRANK J. BEIER, a citizen of the United States, residing at Elkhart, in the county of Elkhart and the State of Indiana, have invented certain new and useful Improvements in Folding Go-Carts, of which the following is a specification.

This invention relates to improvements in folding go-carts of the type in which the seat structure or a portion thereof is adapted to be folded flat upon the running gear frame, and more particularly to the catch or fastening means for holding the structure in position for use and improved means for releasing the catch.

A further object is to provide an improved device of this character which will be simple, durable and cheap in construction and effective and efficient in operation.

To the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construction, combination and arrangement of the several parts hereinafter more fully described and claimed and shown in the accompanying drawing, illustrating an exemplification of the invention, and in which—

Figure 1 is a longitudinal sectional view of a folding go-cart having an improved catch applied thereto constructed in accordance with the principles of this invention. Fig. 2 is a right hand end elevation of Fig. 1. Fig. 3 is an enlarged detail view of the catch.

Referring more particularly to the drawing and in the present exemplification of the invention, the running gear frame preferably comprises spaced side bars or members 10 which may be connected at their front ends in any suitable manner and at their rear ends by means of a cross bar 11 to which cross bar the side bars 12 of the handle are pivoted.

Mounted upon the running gear frame is a seat 13 and extending from the rear of the seat are members 14, preferably two in number, which may be constructed of spring metal with one extremity of each secured to the seat and the other extremities engage and are connected to the cross bar 11.

The body structure embodies uprights or braces 15, 16, which are pivotally or foldably supported by the side bars 10 to extend above the running gear frame and to which are pivotally connected the side bars 17 of the seat structure.

In order to cause the body structure to fold downwardly and flat upon the running gear frame when the handle is folded forwardly and downwardly, suitable links 18 may be provided which are pivotally connected to the handle and to one of the uprights, preferably upright 16.

In order to lock the structure in an unfolded position or position for use, suitable catches 19 are provided which are pivotally connected at one extremity as at 20, preferably to one of the uprights 16. These catches are each provided with a downwardly opening notch 21 and an inclined extremity 22 adjacent the notch. The catches 19 are connected for operation in unison by means of a cross member, preferably in the form of a bail, the arms 23 of which are pivotally connected as at 24 to the catches 19, so that the cross bar 25 will project for some distance beyond the extremity of the catches to extend across the frame. A portion of each of the catches 19 is offset or deflected as at 26 to extend over the arms 23 of the bail so that when the notches 21 of the catches engage over the cross bar 11, the arms of the bail will stand between the cross bar and the respective deflected portion 26. When the catches are in engagement with the cross bar 11 they may be released to permit the structure to be folded, by pressing upon the cross bar 25 at any point intermediate the side bars 10 of the running gear frame, so that the arms 23 of the bail will engage cross bar 11 as a fulcrum to rock the catches 19 about their pivots 20 so as to move the notches 21 out of engagement with the cross bar, after which the handle may be folded forwardly to fold the seat structure. As the handle moves forwardly, the uprights 15 and 16 will move forwardly, as well as the catches 19. The forward movement of the catches 19 will cause the connecting bar 25 of the bail to engage and ride over the members 14. When the handle is unfolded to unfold the structure, the bail will ride over the members 14 to direct the catches into engagement with the cross bar 11. During the folding and unfolding movement the offset portions 26 will prevent the bail from becoming dis-

placed. In order to cause the catches to engage the cross bar 11, during the unfolding movement, elastic members 27, such as springs, may be provided, one extremity of which may be secured to the running gear frame and the other extremity to each of the catches.

In order that the invention might be fully understood the details of the foregoing embodiment thereof have been thus specifically described but what is claimed as new is—

1. In a folding go-cart, the combination of a running gear frame, a seat supported thereby, a folding body structure embodying sides for the seat including uprights pivoted to the frame and adapted to fold onto the frame, a catch pivotally connected to the folding body structure, a guide extending from the seat and upon which guide the catch moves, said catch engaging over a portion of the frame, and means supported by the catch and adapted to engage the frame to unfasten the catch.

2. In a folding go-cart, the combination of a running gear frame, a seat supported thereby, a folding body structure embodying sides for the seat including uprights pivoted to the frame and adapted to fold onto the frame, a catch pivotally connected to the folding body structure, a guide extending from the seat and upon which guide the catch moves, said catch engaging over a portion of the frame, and a member pivotally supported by the catch and projecting therebeyond, said member engaging a portion of the frame as a fulcrum for unfastening the catch.

3. In a folding go-cart, the combination of a running gear frame, a seat supported thereby, a folding body structure embodying sides for the seat including uprights pivoted to the frame and adapted to fold onto the frame, a catch pivotally connected to the folding body structure, a guide extending from the seat upon which the catch moves, said catch engaging over a portion of the frame, a member pivotally supported by the catch and projecting therebeyond, said member engaging a portion of the frame as a fulcrum for unfastening the catch, and means for preventing accidental movement of said member.

4. In a folding go-cart, the combination of a running gear frame, a seat supported by the frame, a folding body structure embodying sides for the seat including uprights foldable upon the frame, a catch pivotally connected to the folding body structure and adapted to engage over a portion of the frame, and a member pivotally connected to the catch and extending therebeyond, said member engaging the frame adjacent the catch and extending beyond the frame, whereby the member may rock upon the frame as a fulcrum and about its pivot to disengage the catch from the frame, there being a projection on the catch extending over the said member to hold the latter against accidental movement.

5. In a folding go-cart, the combination of a running gear frame, a seat supported by the frame, sides for the seat including uprights foldable upon the frame, a catch pivotally connected to one of the uprights and adapted to engage over a portion of the frame, a member pivotally connected to the catch and extending therebeyond, said member engaging the frame adjacent the catch and extending beyond the frame, whereby the member may rock upon the frame as a fulcrum and about its pivot to disengage the catch from the frame, there being a projection on the catch extending over the said member to hold the latter against accidental movement, and a guide on the frame for supporting and directing the catch into engagement with the frame.

6. In a folding go-cart, the combination of a running gear frame, a folding body structure supported thereby, a catch pivotally supported by the structure and adapted to engage over a portion of the frame to lock the structure in position for use, a guide for supporting the catch during its movement into and out of engagement with the frame, and a releasing member pivotally supported by the catch and adapted to engage the frame and to be rocked about its point of engagement with the frame to move the catch out of engagement with the frame.

7. In a folding go-cart, the combination of a running gear frame, a folding body structure supported thereby, a catch pivotally supported by the structure and adapted to engage over a portion of the frame to lock the structure in position for use, a guide for supporting the catch during its movement into and out of engagement with the frame, an elastic member for holding the catch in engagement with the frame, and a releasing member pivotally supported by the catch and adapted to engage the frame and to be rocked about its point of engagement with the frame to move the catch out of engagement with the frame against the tension of the said elastic member.

8. In a folding go-cart, the combination of a running gear frame, a body structure supported thereby, said structure including side arms adjacent each side of the frame and foldable upon the frame, a catch pivotally connected to each of the arms and movable therewith during their folding and unfolding movement, and means connecting said catches for movement in unison about their pivots, the last said means having engagement with portions of the frame and movable about the frame as a fulcrum to disengage the catches from the frame.

9. In a folding go-cart, the combination of

a running gear frame, a body structure supported thereby, said structure including side arms adjacent each side of the frame and foldable upon the frame, a catch pivotally connected to each of the arms and movable therewith during their folding and unfolding movement, a member connecting the catches for movement about their pivots in unison, said member having engagement with the frame and movable about the frame as a fulcrum to move the catches out of engagement with the frame, and a guide for said member during its movement with the catches for directing the catches into and out of engagement with the frame, a portion of the catches being deflected over the said member to prevent accidental movement of said member.

10. In a folding go-cart, the combination of a running gear frame, a body structure thereon foldable onto the frame, a catch pivotally connected with the body structure and adapted to engage over a fixed portion of the frame, and means connected with the catch and adapted to engage the frame to unfasten the catch.

11. The combination of two members to be fastened, one of said members being movable with respect to the other, a catch carried by one of the members and adapted to engage over a portion of the other member to lock the parts, and means carried by the catch and adapted to engage the last recited member to unfasten the catch.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 17th day of February A. D. 1909.

FRANK J. BEIER.

Witnesses:
J. H. JOCHUM, Jr.,
C. H. SEEM.

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