

No. 746,189.

PATENTED DEC. 8, 1903.

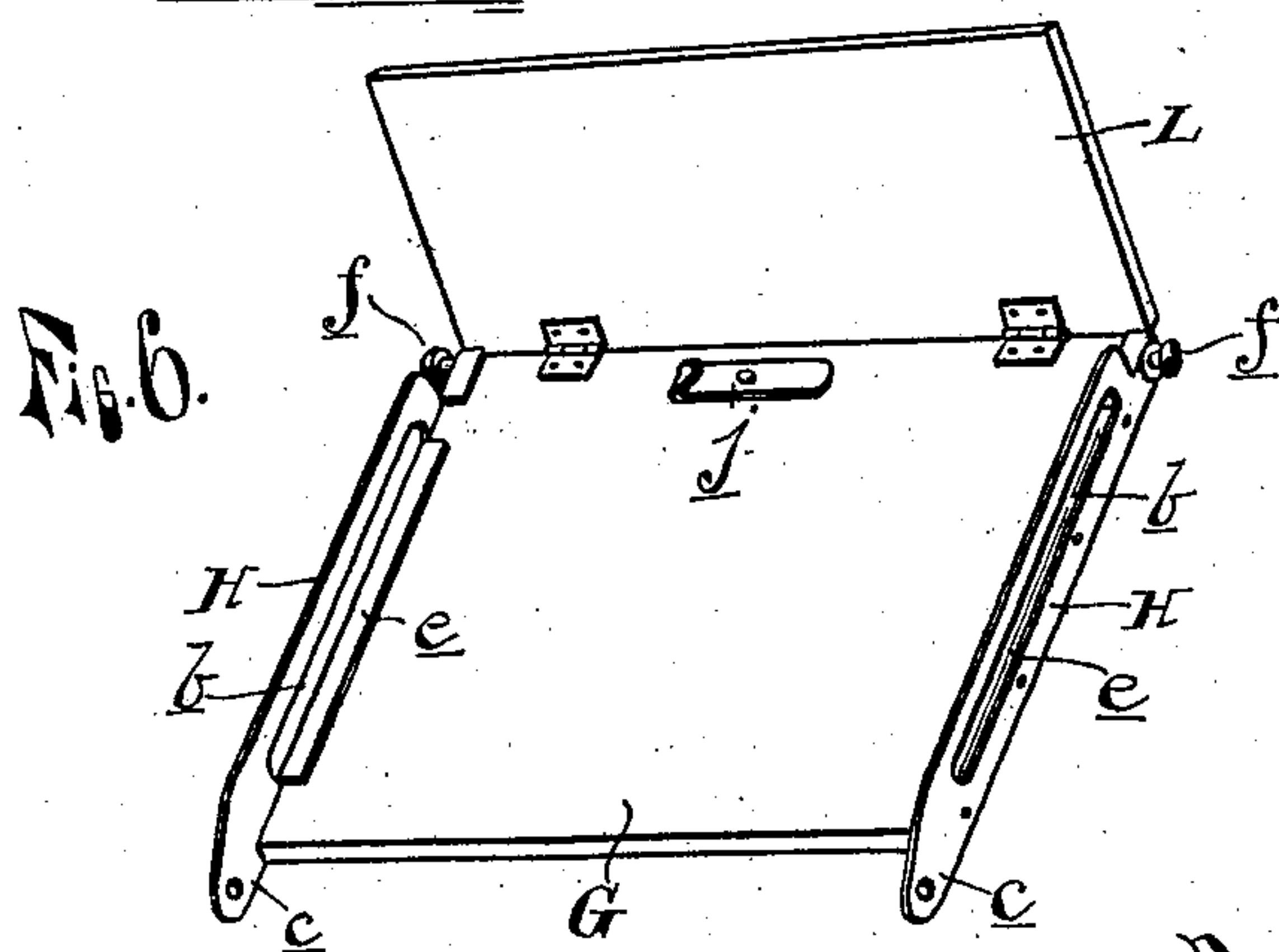
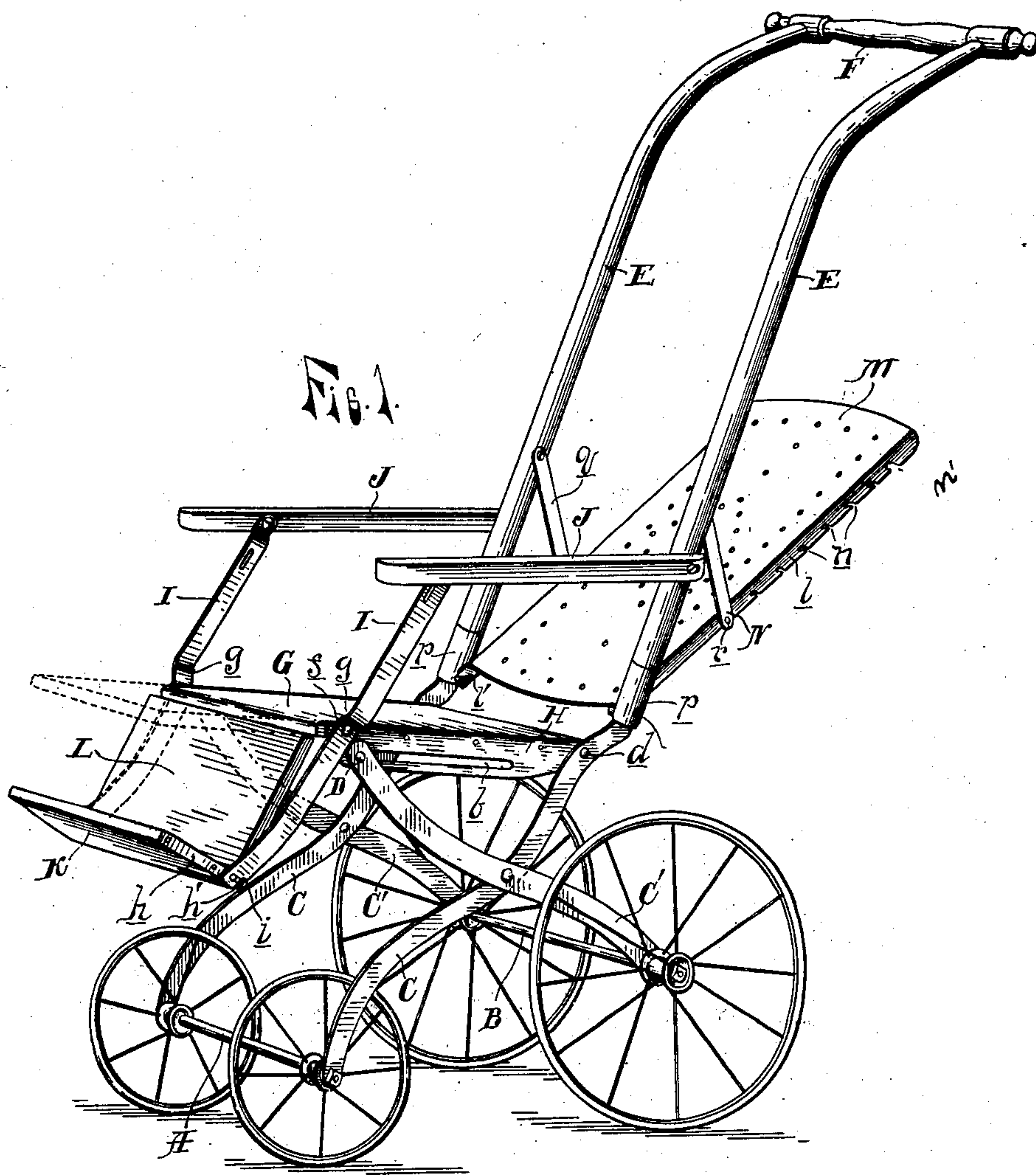
F. E. SOUTHARD.

GO-CART.

APPLICATION FILED AUG. 10, 1903.

NO MODEL.

2 SHEETS--SHEET 1.



WITNESSES.

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Thomas S. Longstaff.

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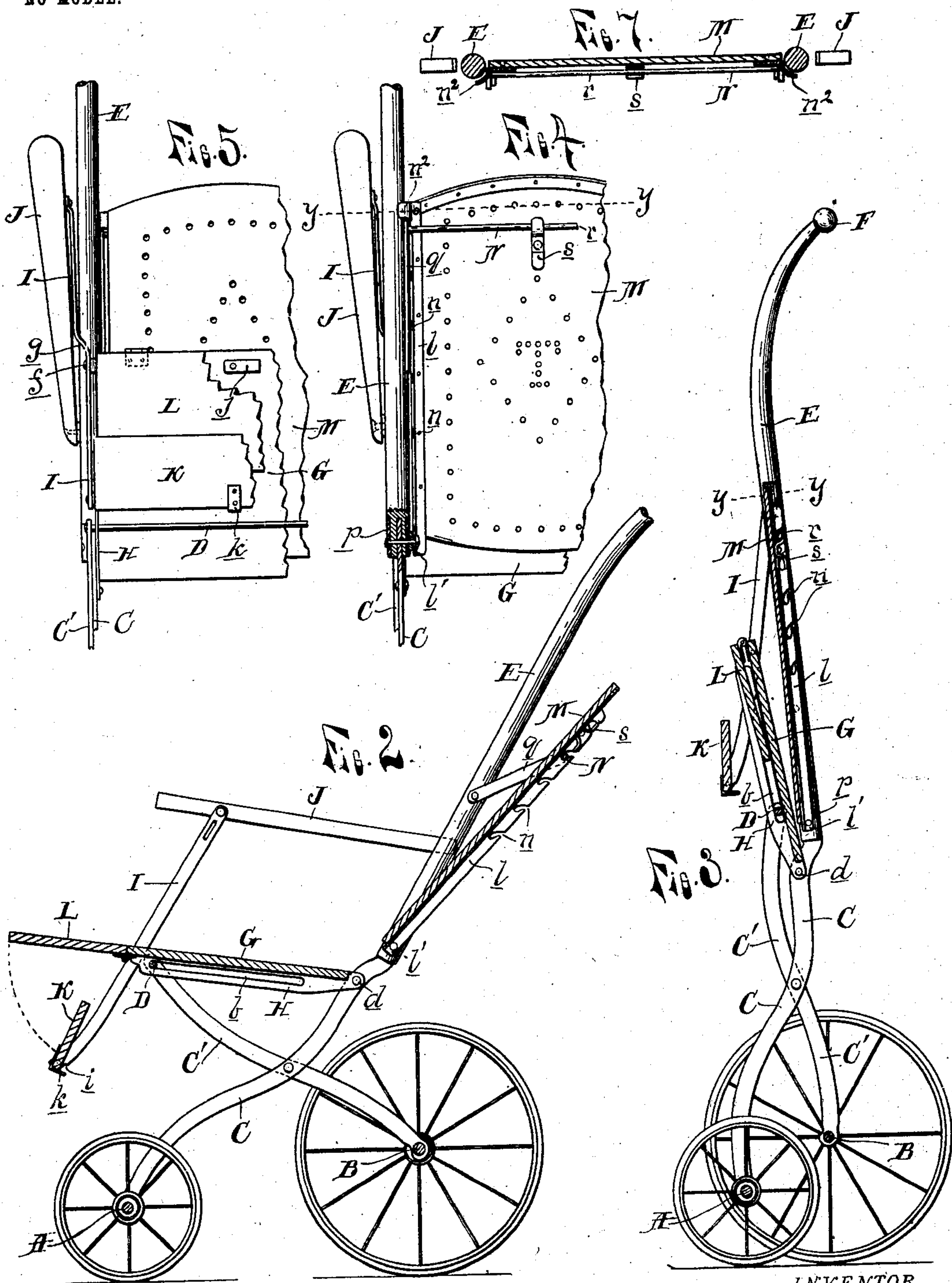
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UNITED STATES PATENT OFFICE.

FRANK E. SOUTHARD, OF TOLEDO, OHIO.

GO-CART.

SPECIFICATION forming part of Letters Patent No. 746,189, dated December 8, 1903.

Application filed August 10, 1903. Serial No. 168,852. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. SOUTHARD, a citizen of the United States of America, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Go-Carts, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates more specifically to that type of child's carriage known as "go-cart;" and the invention consists in the particular construction, arrangement, and operation of different parts with reference to accomplishing the following objects: first, to make the device readily adjustable to any desired position for sitting or reclining, providing at the same time suitable foot or leg rests for either position; second, to make the device fold into the most compact form for conveniently carrying it and storing it away when not in use; third, to combine lightness with strength; fourth, to permit the use of steel of standard commercial forms for all parts for which metal is available, which from the point of view of the manufacturer is a great advantage, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved go-cart as in use. Fig. 2 is a vertical section thereof with some of the parts in different positions from those shown in Fig. 1. Fig. 3 shows the device in a folded condition with the parts in vertical section. Fig. 4 is a fractional rear elevation, partly in section, of the device, taken when folded. Fig. 5 is a fractional front elevation of the device when folded. Fig. 6 is a detached perspective view of the seat and leg-rest hinged thereto looking at the underside, and Fig. 7 is a horizontal section on lines *y y*, Figs. 3 and 4.

A is the front axle, and B the rear axle, each rigidly secured on the lower ends of the legs C and C', respectively, which are made of flat steel bars and are crosswise connected by pivotal connections to form two folding frames, the one carrying the rear wheels having the upper ends of the legs rigidly connected below the seat by a cross-bar D, while the others continue a little distance above the

rear end of the seat and are joined to wooden push-bars E, the upper ends of which are united by a handle-bar F.

The front wheels are relatively much smaller than the rear wheels and are spaced closer together by being sleeved upon their axle on the inside of the legs, while the axle which carries the larger rear wheels projects beyond the legs and carries the wheels on the outside thereof, thus permitting the front wheels to fold in closely between the rear wheels.

G is the seat, pivotally secured at the rear end to the proximate legs by means of two side brackets H, secured to the edges of the seat-panel and having depending portions which are slotted to form runways *b* for the cross-bar D, the front end of said runways forming stops to prevent the spreading of the legs beyond their intended limit.

The side brackets are formed of sheet metal. They project beyond the rear edge of the panel and form ears *c*, which are pivotally connected by rivet-pins *d* to the legs in a manner to form friction-hinges. The side brackets have inwardly-projecting flanges *e*, integrally formed from the material in cutting out the runways, and these flanges form supporting-ledges for the seat-panel.

I represents supports pivotally secured, by means of rivets *f*, to the forward ends of the seat-brackets. They consist of flat bars and extend above and below these pivots and support the arm-rests J above the seat and the foot-rest K below the same.

The arm-rests, which in the drawings are suitably-shaped pieces of wood, are pivotally secured at their rear ends to the outside of the push-bars, and near their forward ends they are pivotally secured at their inner faces to the supports I, and to permit these arm-rests to fold completely into the plane of the push-bars the supports are formed with outward bends *g*.

The foot-rest K is formed of a suitable panel secured between two brackets *h*, formed of bar or sheet metal, the rear ends of which are pivotally connected by rivets to the lower ends of the supports I, so that the foot-rest may be folded between the same, and to hold it operatively extended the brackets have their

rear ends bent outwardly to form the stops h' , adapted to engage beneath shoulders i , formed on the supports.

L is the leg-support, consisting, preferably, of a suitable panel hinged to the front edge of the seat and adapted to be extended in the plane of the seat and locked therein by means of a suitable locking device, such as the turn-button j . This leg-rest is also adapted to form a complementary part of the foot-rest by being of a width to fit in between the seat and foot-rest and form a back thereto, as shown in Fig. 1, the foot-rest being provided with an upwardly-projecting stop k at the rear edge to hold the leg-rest in position thereon.

M is the back, foldably secured between the push-bars and provided with means for adjusting it to different inclines. To this end it consists of a suitable panel, which may be a perforated piece of veneer, as commonly used for chair-backs, and two metal brackets l , of sheet-steel, formed in the shape of angle-bar to one flange of which the panel is secured along the outer edges, while the other flange projects rearwardly and is provided with a series of adjusting-notches n . The flanges in which these adjusting-notches are formed project beyond the lower edge of the panel and form ears l' , by means of which the back is pivotally connected to the back frame. As shown in the drawings, at the point where the connection is to be made the wooden push-bars are joined to the upper ends of the pair of legs which form the back frame by means of a tubular socket member p , into which the parts project. A headed rivet which passes through the ears into and through the socket member secures the parts together and forms the pivotal connection of the back with the back frame, a suitable friction being given to the hinge and a washer being interposed between the ears and the socket-pieces to obtain a suitable clearance between the edges of the back and the push-bars to permit of folding the parts in between.

Coöperating with the notches n in the brackets l there is a swinging bail N , secured between the push-bars, which consists of the links q , which are pivotally secured to the inner sides of the push-bars, and of a cross-bar r , secured in the ends of the links and adapted to be engaged with any of the series of notches n for the purpose of holding the back in any desired position.

All the notches except the top notch lead inwardly and downwardly, so as to interlock with the bail and prevent accidental disengagement. The top notch n' forms a straight shoulder and is adapted to receive the cross-bar of the bail when the back is completely folded in between the push-bars, in which position the upper ends n^2 of the standing flanges of the edge strips, which are bent outwardly, form stops against the push-bars, as

seen in Fig. 7. In this position the bail is prevented from disengagement with the back by the use of a turn-button s , secured to the rear side of the back, and the parts in this folded position are thus interlocked.

The manner of folding and unfolding will readily appear from the above description, the relative position of the parts when folded and unfolded being also shown in the drawings. However, for the sake of clearness in distinguishing the different parts, Fig. 3 does not show the parts folded as compactly as they actually can be made to fold, as is apparent from the drawing.

It will be seen that all the principal pivotal connections are made between metal and metal by means of rivets, which gives them a desirable degree of friction and prevents any accidental collapsing under all contingencies of use or unfolding accidentally in handling it or carrying it about. The height of the device when in its folded condition is such that a person of ordinary height may carry it readily about without its touching the ground by engaging the arm under the push-handle. At the same time the two wheels form a level base upon which it will stand upright when set down, the center of gravity when folded being within the wheel-base.

The arrangement of the leg-rest adds to the comfort of the child. By extending it and suitably adjusting the back the child may be given an easy recumbent position, and, if desired, the button j , which upholds it in this position, may be suitably turned to uphold it either on a level with the seat or in a position slightly inclined therefrom. When it is dropped against the foot-rest, it forms a protection against the air and prevents the child from getting possibly entangled with the foot-rest or other parts.

Having thus fully described my invention, what I claim is—

1. In a folding go-cart, the combination with cross-pivoted front and back legs rigidly united in pairs at their lower ends by wheel-axes and a cross-bar rigidly uniting the upper ends of the front legs together, of a seat composed of a panel and two sheet-metal brackets secured to the side edges of the panel and extending downwardly and rearwardly thereof, rivets pivotally connecting the rear ends of said brackets to the inner faces of the back legs, and runways formed in the brackets into which the cross-bar engages, the parts of the brackets forming the runways being turned inwardly below the panel and forming supporting-ledges therefor.

2. The combination with the pusher-bars of a go-cart, of a hinged back and a swinging bail carried by said pusher-bars and adapted to fold between the same, said back having on each side edge a series of adjusting-notches into which the swinging bail is adapted to

engage and hold said back adjustably in position at different inclines from its normal position between the push-bars.

3. The combination with the pusher-bars 5 of a folding go-cart, of a hinged back and a swinging bail carried by said pusher-bars, a series of notches provided along each side edge of said back into which said bail is adapted to engage and support the same at different 10 inclines from its normal position between the push-bars, and means for locking the bail and back together in the normal position of the back.

4. The combination with the pusher-bars 15 of a folding go-cart, of a back composed of a panel and brackets secured to the side edges of the panel and each provided with a series of inclined adjusting-notches, means pivotally connecting the lower ends of said brackets to the inner faces of the push-bars, a 20 swinging bail pivotally secured to the inner faces of the push-bars and adapted to adjustably engage into the notches to support said back at different positions from its normal 25 position between the push-bars and locking means on the back to lock said bail into engagement with suitable notches in the brackets in the normal position of the back.

5. The combination with the pusher-bars 30 of a folding go-cart, of a back composed of a panel and brackets consisting of strips of sheet metal secured to the marginal side edges of the panel and formed with rearwardly-projecting flanges provided with inwardly 35 and downwardly inclined adjusting-notches, rivets pivotally connecting the same at their lower ends to the inner faces of the push-bars, a swinging bail pivotally connected to the inner faces of the pusher-bars and adapted 40 to engage with the adjusting-notches and hold the back at different positions from its normal position between the pusher-bars, notches with which said swinging bail is adapted to engage with in the normal position 45 of the back, and means for locking the bail into said notches.

6. In a folding go-cart, the combination with cross-pivoted front and back legs rigidly 50 united at their lower ends by wheel-axles and a seat carried by said legs, of pusher-bars carried by the back legs, a back composed of a panel and brackets secured to the side edges of the panel, rivets pivotally connecting said brackets at their lower ends to the 55 inner faces of the pusher-bars, a series of adjusting-notches in said brackets, and a bail pivotally connected to the pusher-bars and adapted to adjustably engage with the notches in the brackets.

60 7. In a folding go-cart, the combination with cross-pivoted front and back legs formed of metal bars and rigidly united in pairs at their lower ends by wheel-axles and a hinged seat carried by said legs, of wooden pusher- 65 bars at the upper ends of the back legs, socket-

pieces into which the proximate ends of the back legs and pusher-bars extend and forming the junction between the same above the level of the seat, a back composed of a panel, and 70 side brackets secured to the side edges of said panel and rivets passing through the lower ends of said brackets, the socket-pieces and the proximate ends of the back legs and pusher-bars and forming the pivotal connection for the back. 75

8. The combination with the hinged seat and foot-rest of a folding go-cart, of a leg-rest hinged to the front edge of the seat and adapted to fold toward the under side of the seat in folding the go-cart, means for holding 80 said leg-rest operatively extended in front of the seat, and means for holding the front edge of said leg-rest in engagement with the rear end of the foot-rest in the operative position of said foot-rest, said leg-rest being of a 85 width to fit into the space between the seat and foot-rest.

9. In a folding go-cart, the combination with cross-pivoted front and back legs rigidly united at their lower ends by wheel-axles 90 and a hinged seat carried by said legs, of supports pivotally connected to the sides of the seat at the front end thereof, a foot-rest pivotally supported between the lower ends of said supports, a leg-rest hinged to the front 95 end of the seat, means for holding the same in alinement with the seat and means for holding the same in alinement with the rear edge of the foot-rest.

10. In a folding go-cart, the combination 100 of cross-pivoted front and back legs rigidly united in pairs at their lower ends by wheel-axles, a hinged seat carried by the legs, pusher-bars carried by the back legs, supports pivotally secured at the front end of the 105 seat, arm-rests pivotally secured at their forward ends to said supports and at their rear ends to the pusher-bars, a foot-rest below the seat, pivotal connection between the lower ends of said supports and the rear end of the 110 foot-rest adapted to hold said foot-rest in its operative position, a leg-rest hinged to the front end of the seat, and adapted to be folded against the under side of the seat, means 115 for operatively holding said leg-rest in extended position in alinement with the seat, a back hinged at its lower end to the pusher-bars, a swinging bail hinged to the pusher-bars, means for adjustably engaging said swinging bail with the back to adjust the 120 same at different inclines from its normal position between the pusher-bars, and means for locking the chair back in its normal position.

11. In a folding go-cart, the combination 125 with the folding seat and its supporting-frame comprising cross-pivoted back and front legs, pusher-bars secured to the back legs and wheel-axles rigidly uniting the front and back legs and carrying the wheels, of a leg-rest 130

pivotally connected to the front edge of the
seat and provided with means for supporting
the same in alinement with the seat, a hinged
back and a swinging bail carried by the
5 pusher-bars and adapted to fold in parallel-
ism therewith, said back provided with ad-
justing notches into which said bail is adapt-
ed to engage and hold the same adjustably

in position at different inclines in relation to
the seat.

In testimony whereof I affix my signature
in presence of two witnesses.

FRANK E. SOUTHARD.

Witnesses:

MARTIN V. BOYER,
BOYD L. BOYER.