(No Model.) 3 Sheets—Sheet 1.

F. H. JURY.

CHILD'S CARRIAGE.

No. 319,416. Patented June 2, 1885.

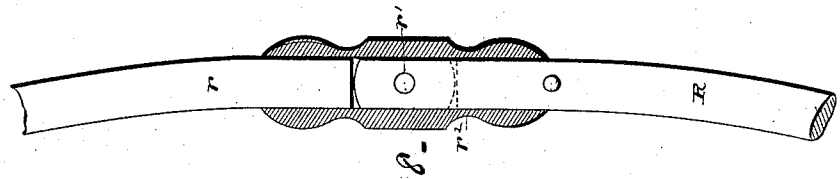


Fig. 6.

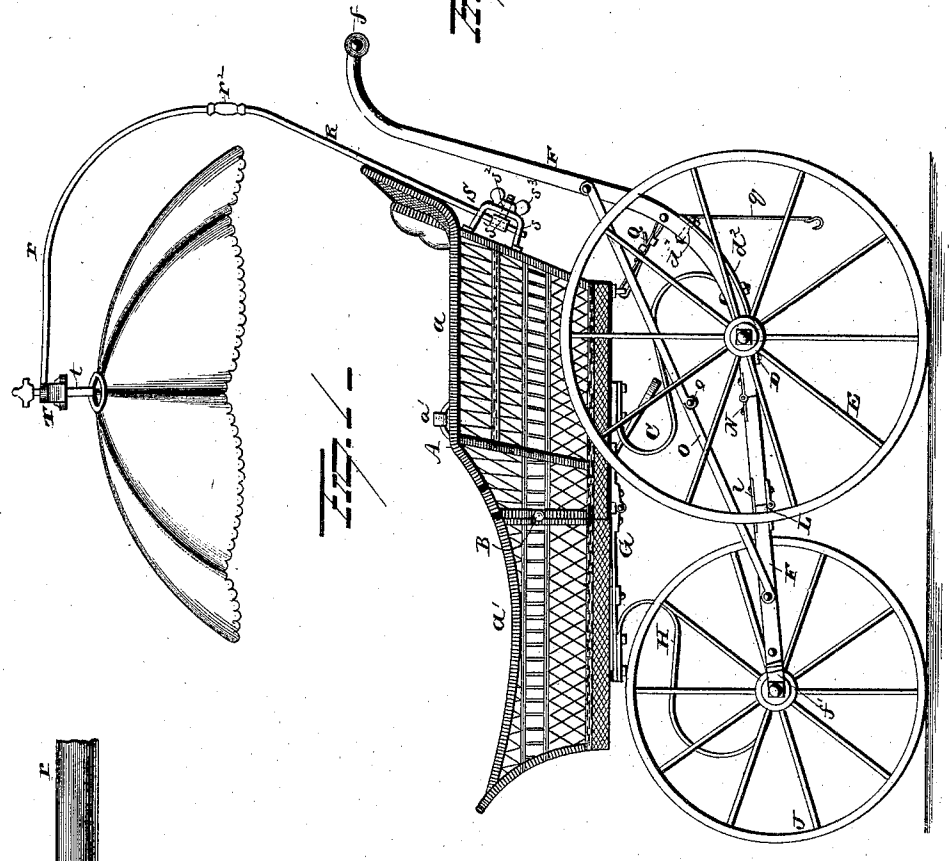


Fig. 1.

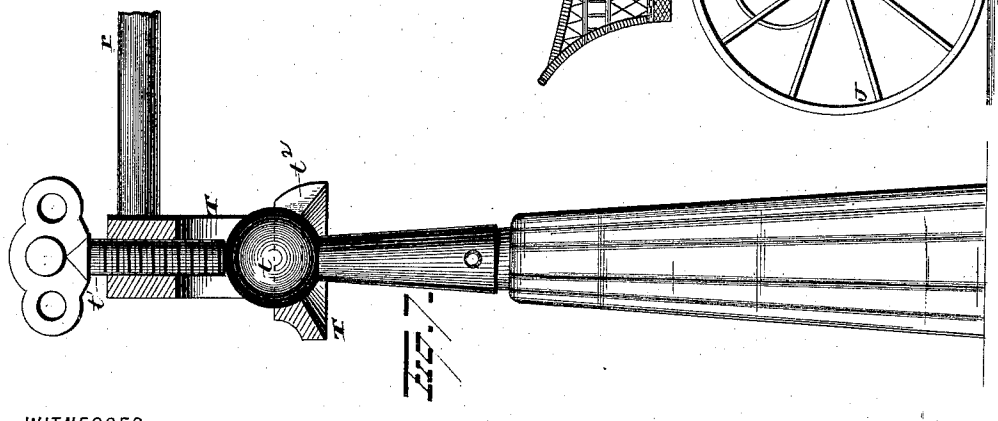


Fig. 7.

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(No Model.) 3 Sheets—Sheet 2.

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CHILD'S CARRIAGE.

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FIG. 5.

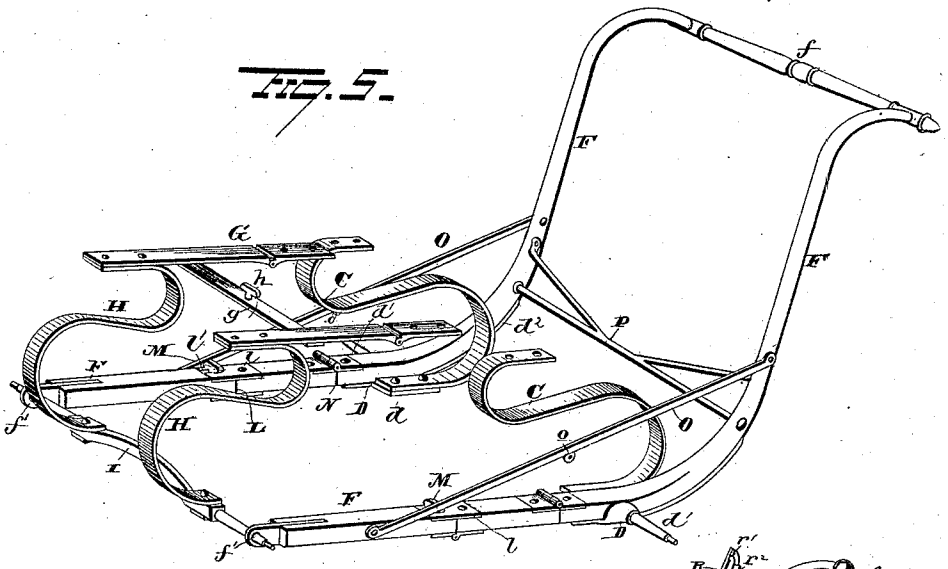


FIG. 2.

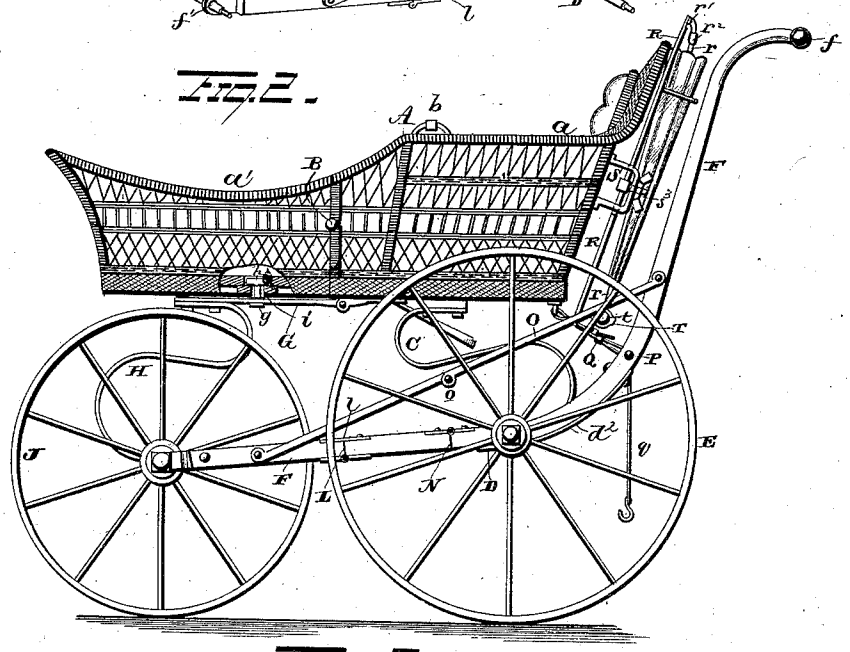
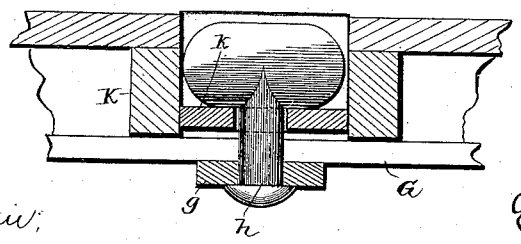


FIG. 6.



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CHILD'S CARRIAGE.

No. 319,416. Patented June 2, 1885.

FIG. 3.

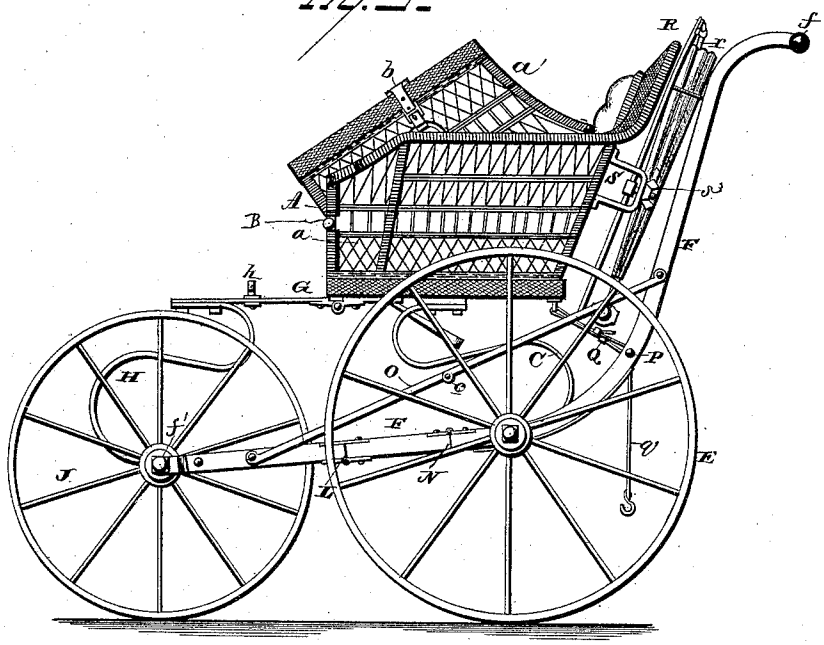
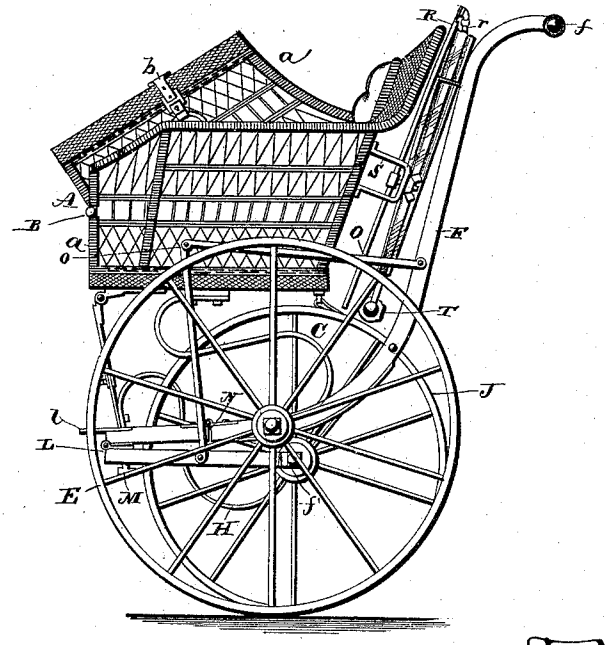


FIG. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

FREDRIK HERMAN JURY, OF NEW YORK, N. Y.

CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 319,416, dated June 2, 1885.

Application filed November 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, FREDRIK HERMAN JURY, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Children's Carriages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in children's carriages, particularly to folding carriages.

Hitherto it has been customary to provide carriages of this character with flexible bodies or bodies composed of many jointed pieces, and to attach the handles to the rear portion of the carriage or axle. This construction has been found objectionable in many respects, particularly in its instability and the number of different parts having their own peculiar shape different from the corresponding parts in non-folding carriages.

The object of my present invention is to overcome the objectionable features of those hitherto constructed and to provide a folding carriage which shall have the stability of a non-folding one, a further object being to provide a folding carriage in which the several more important parts shall in their general construction correspond more nearly to the like parts in a non-folding carriage, thereby lessening the cost of construction, a further object being to provide a folding carriage which is capable of being easily and quickly adjusted, and which shall have a neat, trim appearance, and which shall be durable.

With these ends in view, my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of the carriage adjusted for use. Fig. 2 is a view of the same after the first step has been taken in folding it; Fig. 3, the same at the end of the second step; Fig. 4, the same folded. Fig. 5 represents the frame, the body and wheels being removed. Fig. 6 is a detached view of the devices for attaching the frame to the front section, and Figs. 7 and 8 views in detail of the canopy standard and fastenings.

A represents the body of the carriage.

In the accompanying illustration the body is constructed of cane; but I do not wish to limit myself to the use of any particular material or any particular design, as one of the main objects of my invention is to provide means for folding which will admit of the use of bodies of a great variety of shapes and constructed of any desired material.

The body A consists of a rear section, *a*, and a front section, *a'*. The latter is hinged to the former at the sides, preferably by means of pivotal bolts B, in such a manner that it will fold over onto and within the sides of the rear section, as shown in Fig. 3. A strap, *b*, is secured to one side of the section *a* in a position convenient for passing in front of a child when sitting in the carriage, the strap, as is usual, being provided with a buckle or other suitable fastening device on each end for adjusting it. The strap *b* also serves the additional purpose of passing over the section *a'* when the latter is folded onto the section *a*, and thereby binding the said *a'* snugly to *a*. The rear section, *a*, is supported upon springs C, the upper ends of which are rigidly secured to the bottom of the section, and their lower ends are riveted or otherwise rigidly secured to the flanges *d*, formed on the stub-axles D. The springs C are preferably S-shaped, as shown; but they may be C-shaped, or any other particular shape which is found desirable for ornament, comfort, or use. The stub-axles D are provided with spindles *d'*, on which the rear wheels, E, rotate, and with the oppositely-extending branches or straps d^2 formed integral therewith or rigidly secured thereto by means of rivets or other suitable fastenings, which straps are shaped to conform to the under side of the handles F, and provided with perforations d^3, by means of which they are bolted to the handles. The flanges *d* above referred to extend inwardly from the straps d^2 a sufficient distance to form substantial bearings for the lower ends of the springs C. A frame consisting of two side bars, G, connected by a cross-bar, *g*, is hinged to the forward portion of the bottom of the rear section,

and is supported at its forward end by springs H, S-shaped, or any other convenient or desirable shape. The upper ends of the springs H are rigidly secured to the front ends of the bars G by rivets, bolts, or other suitable means; the lower ends of said springs are rigidly secured to the front axle, I. The cross-bar *g* is provided with a T-bolt, *h*, loosely secured therein in an upright position, and the bottom of the folding section *a'* is provided with an oblong closed slot, *i*, adapted to receive the head of the bolt *h* when the same is turned lengthwise thereof. The stem of the bolt *h* is just the thickness of the bottom of *a'* at the point where the slot *i* is formed. Thus when the section *a'* is pressed downwardly onto the frame G the head of the bolt *h* will pass through the slot *i*, and by turning the bolt at right angles to the length of the slot the section *a'* will be securely locked in open adjustment. My preferred mode of constructing the slot *i* is to form it in a thick cross-piece, K, forming a portion of the floor-frame of the section *a'*, and to provide a metal plate, *k*, with a corresponding slot, and then let the plate *k* into the upper side of the piece K to a depth about equal to the thickness of the head of the bolt *h*, thereby forming a bearing for the head of *h* which will not be subject to wear, and also leaving the upper surface of the floor of *a'* smooth to receive a carpet. The handles F are united at their rear ends, in the usual manner, by a cross-bar, *f*, and curve downwardly to their points of attachment to the stub-axles D, as hereinbefore observed, and from thence extend forwardly and terminate in bearings *f'*, in which the extreme ends of the front axle, I, are journaled. The handles F are broken and hinged together at points L beneath or nearly beneath the joint of the body-sections in such a manner that the forward portions of the handles, together with the axle I, wheels J, and frame G, may be folded downwardly and backwardly, the wheels J passing between the stub-axles D. The upper sides of the handles are provided at the points L with plates *l* firmly secured to the ends of the rear sections and provided with open slots *l'* in their forward ends, which extend over the ends of the front sections. Thumb-bolts M are secured in the ends of the front sections, the heads of which are adapted to pass through the slots *l'*, and when turned at right angles thereto to lock the front sections of the handles rigidly to the rear sections, for use. The handles F are also broken a second time in corresponding positions N, a short distance forward of the axles D, and the sections thus formed are hinged together on the upper sides. This break at N is necessary, while the frame G remains hinged to the section *a* to allow the folding of the forward sections of the handles into contact with the rear sections, as the joints at L must be allowed to approach the hinges connecting *a* and *a'* during the folding process.

In order to stiffen the handles and at the same time prevent the joints at N from opening when the carriage is adjusted for use, and allow the said joints to open when the folding takes place, I provide the jointed side braces, O, which are pivotally secured to the front and rear sections of the handles, as shown. The knee joints *o*, with which the rods O are provided, admit of the rods bending upwardly during the folding process, but hold the rods stiff when the carriage is adjusted for use. The handles are further braced by the double cross-brace P, located in the rear of and a little below the body-section *a*. The particular form of this brace here shown is well adapted to the purpose; but I do not wish to limit myself to this, as a great variety of other forms might be used with good effect. A short strap, Q, connects the rear of the carriage with the brace P and serves to hold the body from any tendency it might have to swing away from the handles when the carriage is in its folded adjustment, while the tension of the strap is such that it does not interfere with the motions of the springs when the carriage is in use. A second strap, *q*, is also secured at one end to the brace P, its free end being provided with a hook adapted to engage the front axle, I, when the same is in folded adjustment, thereby binding the sections together.

For the purpose of folding the canopy and its supporting-rod into a compact form in the rear of the section *a*, where it will not be liable to injury when the carriage is folded for transportation or other purposes, I form the rod in two sections, R and *r*, hinged together at *r'* in such a manner that the upper section, *r*, will fold over into a position alongside of the section R. A sliding clasp, r^2, is adapted to lock and release the sections at *r'*, as may be desired. The lower end of the rod-section R passes through vertical perforations *s* in a two-armed bracket, S, secured to the rear of the body-section *a*, and is held in the desired vertical or rotary adjustment therein by means of a threaded eyebolt, *s'*, extending rearwardly through a perforation, s^2, in the bracket S, and provided with a thumb-nut, s^3. The rod R passes through the eye of the bolt *s'*, and when the nut s^3 is turned on the rod is cramped, and thereby locked in the position desired. The upper or forward end of the section *r* is provided with an arch-shaped support, T, adapted to receive a bolt, *t*, on the upper end of the canopy-standard, forming a universal joint, by means of which the canopy is adjusted at any desired angle. A set-screw, *t'*, inserted in the top of T, is adapted to impinge against the ball *t* and lock the canopy in the different positions desired. The rearward lower portion of T is cut away, as shown at t^2, to admit of the canopy-standard being folded snugly beneath the section *r*.

By the above construction I am enabled to produce a carriage which is similar in general appearance to the finest grade of non-folding carriages in use. Indeed, the very parts employed in constructing my carriage, with one or two exceptions, are those at present in the

market for constructing non-folding carriages. This feature is a great advantage, as it requires no extensive outlay of money in providing special machinery for manufacturing, and consequently enables the manufacturer to produce the folding carriage at a slight advance on the non-folding.

My improved carriage also has the front and rear springs, which may be made as delicate as desired, and the means for folding and adjusting are so simple that they offer no difficulty even to an inexperienced hand.

It is evident that slight changes may be made in the form and arrangement of the several parts above described without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

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

1. The combination, with the rear and front axles of a carriage, and a pair of jointed handles connecting the axles, of a body-section secured to the rear axle, and a body-supporting frame secured to the front axle and hinged to the said body-sections, whereby the front axle, supporting-frame, and front sections of the handles may be folded beneath the body, substantially as set forth.

2. The combination, with the rear and front axles of a carriage and jointed handles connecting the axles, of a stationary body-section secured to the rear axle, and a body-supporting frame hinged to the said body-section and rigidly secured to the front axle, the frame and handles being so constructed that they may be simultaneously folded beneath the body without being detached from their supports, substantially as set forth.

3. The combination, with the rear and front axles of a carriage and jointed handles connecting the axles, of a stationary body-section secured to the rear axle by springs, and a body-supporting frame hinged to the said body-section and secured to the front axle by springs, the frame and front sections of the handles being adapted to be folded beneath the body, substantially as set forth.

4. The combination, with a pair of stub-axles and a front axle provided with wheels, of a pair of handles connecting the rear and front axles, and provided with joints, whereby the front wheels, together with the front sections of the handles, may be folded beneath the body, the front wheels passing between the stub-axles, substantially as set forth.

5. The combination, with a stationary body-section secured to the rear axles, and a body-supporting frame secured to the front axle and hinged to the stationary body-section, of a pair of handles connecting the rear and front axles, provided with a double joint between the axles, whereby the frame and handle-sections may be simultaneously folded beneath the stationary body-sections without detaching either, substantially as set forth.

6. The combination, with a pair of double-jointed handles connecting the rear and front axles of a carriage, of jointed braces adapted to lock the handles in adjustment for use, substantially as set forth.

7. The combination, with a pair of double-jointed handles connecting the front and rear axles of a carriage, of jointed braces adapted to lock one pair of joints in adjustment for use, and thumb-bolts adapted to lock the other pair of joints in adjustment for use, substantially as set forth.

8. The combination, with a folding body-section hinged to a stationary body-section, of a spring-supported frame hinged to the stationary body-section, and devices for locking the folding section to the frame, substantially as set forth.

9. The combination, with a pair of jointed handles connecting the front and rear axles of a carriage, and a stationary body-section secured to the rear axle by springs, of a flexible strap connecting the stationary section, and a cross-brace on the handles, for the purpose substantially as set forth.

10. The combination, with a stationary body-section and a pair of handles, of a pair of stub-axles provided with bearings for the handles and for the lower ends of springs which support the stationary body-section, substantially as set forth.

11. The combination, with a stationary body-section and a pair of jointed handles having a pair of wheels journaled in their forward ends, of a pair of rear stub-axles provided with straps for fastening the handles thereto, and with bearings for the springs which support the stationary body-section, the whole constructed in the manner and for the purpose substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FREDRIK HERMAN JURY.

Witnesses:
JAMES WARD,
WILLIAM HIGHET.