

(No Model.)

A. WOODWARD.
CHILD'S CARRIAGE.

No. 510,461.

Patented Dec. 12, 1893.

FIG. 1.

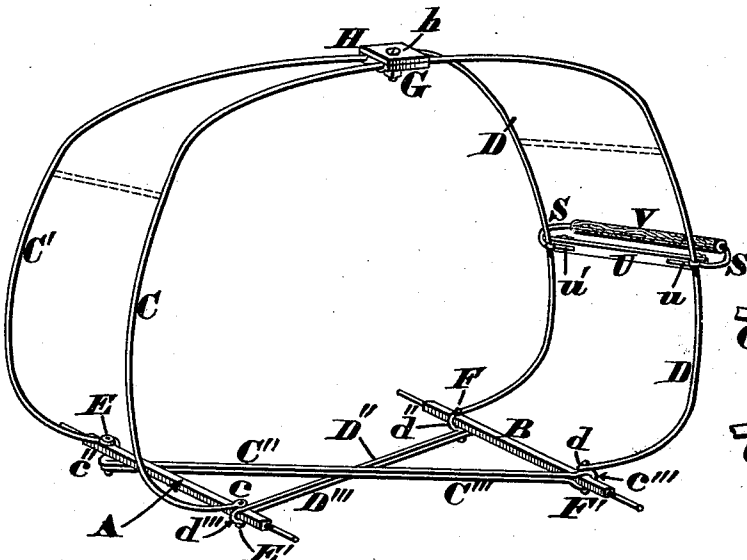


FIG. 2.

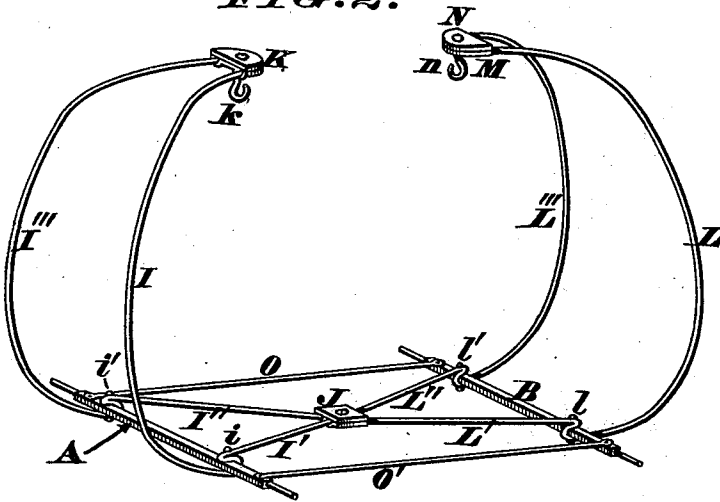


FIG. 3.

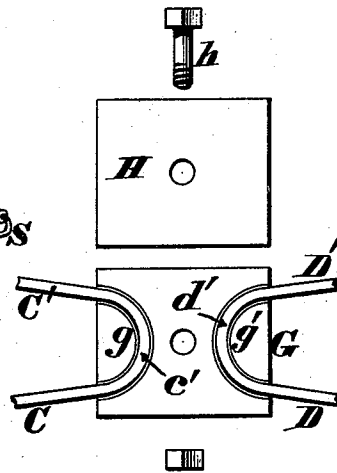


FIG. 4.

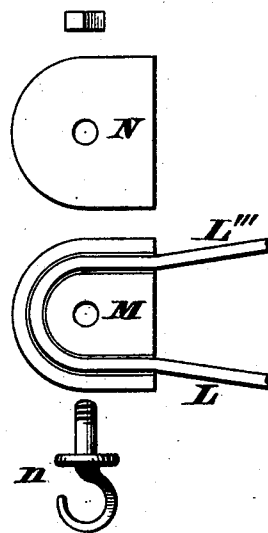


FIG. 5.

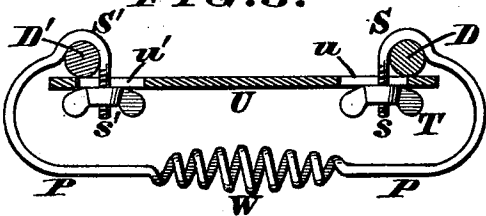
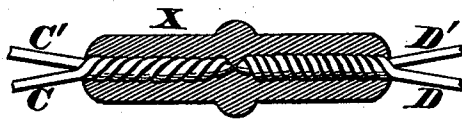


FIG. 6.



Attest.

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CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 510,461, dated December 12, 1893.

Application filed May 19, 1893. Serial No. 474,791. (No model.)

To all whom it may concern:

Be it known that I, ABNER WOODWARD, a citizen of the United States, residing at Shelburne Falls, in the county of Franklin and State of Massachusetts, 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, reference being had to the annexed drawings, which form part of this specification.

This invention relates to the peculiar form of child's carriage seen in Letters Patent No. 407,916, issued to me July 30, 1889, and the first part of the present improvement comprises a novel construction of frame that supports a swinging body, the object of the improvement being to simplify the manufacture of said frame, and to arrange it in such a manner as to serve as a very stiff brace or perch for uniting together the front and rear axles of the vehicle, as hereinafter more fully described.

The second part of my present improvements consists in providing this frame, or its equivalent support, with a vertically-adjustable transverse handle capable of being either raised or lowered, and securely fastened at such a height as will be the most convenient for the person who wheels the vehicle, as hereinafter more fully described.

On the annexed drawings, Figure 1 is a perspective view showing the preferred form of my improved supporting-frame attached to the axles of a child's carriage, the wheels and body of the same being omitted. Fig. 2 is a similar view of a modified form of said supporting frame. Fig. 3 is an enlarged view showing the various members of a coupling plate detached from each other. Fig. 4 is a similar view of a modified form of said plate. Fig. 5 shows a modified form of the adjustable handle. Fig. 6 shows a substitute for the coupling plate.

A and B represent the front and rear axles of a child's carriage, or other similar vehicle.

c represents one end of a wire or light rod C, which is carried forward, thence up, and then back about over the center of the running gear, at which point said rod makes a very short bend c', as represented in Fig. 3. The rod is now carried forward, thence down, and then

back to the front axle, as shown at C', these two members C C' of the frame being counterparts of each other.

c'' is a bend that enables the rod to be snugly fitted around the axle A, and then said rod is carried diagonally back at C'', and bent closely around the rear axle at c'''. The rod is now carried diagonally forward at C''', so as to be parallel with the part C'', and is finally secured to the front axle.

d represents one end of another distinct rod D, which is carried rearward, thence up, and then forward to the center of the running gear, at which point said rod makes a very short bend d', as represented in Fig. 3. The rod is now carried rearward, thence down, and then forward to the rear axle, as shown at D', these two members D, D', of the frame being counterparts of each other.

d'' is a bend that enables the rod to be snugly fitted around the axle B, and then said rod is carried diagonally forward at D'', and bent closely around the front axle at d'''. The rod is now carried diagonally rearward at D''', so as to be parallel with the part D'', and is finally secured to the rear axle.

E, E', F, F', are bolts or clips or other suitable devices wherewith the aforesaid rods are fastened to the axles.

G, in Fig. 3, represents a casting having a pair of practically semi-circular grooves g, g', in it, which grooves receive the bends c', d', of the rods C, C', and D, D', a cap-plate H, serving to retain said bends in their proper place.

h, is a bolt or screw wherewith said cap is secured to the grooved part G, and these two members G, H, constitute what I call the coupling plate.

It is evident that the above-described arrangement of rods and coupling-plate affords a light but very secure supporting-frame, from which a cradle or carriage body can be readily suspended by any of the expedients seen in my patent previously alluded to, the dotted lines in Fig. 1, indicating cross bars to which the suspenders may be attached. It is also apparent that the arrangement of duplex, diagonal-rods C'', C''', D'', D''', serve as stiff-braces or perches that unite the axles A, B, firmly together, and thus obviate the use of special side bars for this purpose. Further-

more, as the front and rear sections of the frame are exact counterparts of each other, they can be readily bent to the desired shape on a suitable "former," thus facilitating the manufacture of said frame, and cheapening its construction.

In the modified form of the frame, seen in Fig. 2, the front section is composed of a rod I of practically the same shape as rod C, but not quite so long, a bend *i* being made to enable this rod I to be attached to the front axle A. This rod is then carried diagonally back at I', secured within a coupling plate J, similar to the device G H *h*, and thence diagonally forward at I'', where it is again attached to the front axle at *i'*. Said rod is finally bent at I''', so as to be a counterpart of the portion I, these two members I, I''', being engaged with another coupling plate K, having a hook *k*, from which one end of a cradle or crib may be suspended. This rod I, I', I'', I''', is a continuous piece of metal without any break or end to it. The rear section of this modification of my invention is composed of members L, L', L'', L''', *l*, *l'*, which are reversed fac-similes of the parts of the front section.

M, in Fig. 4, represents the grooved coupling-plate within which is seated the bend that unites the portions L, L'', of the rear frame, a cap N being applied to said plate and secured thereto by a screw-hook *n*.

As the above described modification permits a certain flexibility of motion at the central plate J, the front and rear axles must be rigidly united to each other by side bars O, O'. The adjustable handle consists of a bar P, having bends S S', to fit around a pair of frame rods, as seen in Fig. 5, the extreme ends of this bar being screw threaded at *s*, *s'*, to engage with thumb nuts T, T'. Furthermore, these screw-threaded shanks *s*, *s'*, traverse longitudinal slots *u*, *u'*, of a bar U, by which arrangement the handle is securely clamped to the frame at any convenient height, while at the same time, said slots compensate for

different widths of the frame. The bar U may be provided with a wooden handle, as seen at V, in Fig. 1, or this enlarged portion of the handle may be formed by coiling said rod in the manner shown at W, in Fig. 5.

Another modification is seen in Fig. 6, where the rods C, C', are twisted together, so as to form a right-hand thread, and the other rods D, D', are similarly united to form a left-hand thread. The ends of these threads are then brought in contact, and a soft metal nut X is cast around them, which nut can be readily unscrewed, when occasion requires. This nut can be substituted for the coupling plate G, H, seen in Fig. 1.

I claim as my invention—

1. The combination, in a child's carriage, of a frame composed of light rods that connect the axles of the vehicle, and adapted to support the body thereof, and a grooved and capped coupling-plate that unites the bends of said rods, in the manner described.

2. The combination, in a child's carriage, of a frame composed of a front section C, C', C'', bent and fastened, as shown at *c*, *c'*, *c''*, a rear section D D', D'', D''', bent and fastened, as shown at *d*, *d'*, *d''*, a coupling-plate G having grooves *g*, *g'*, that admit the bends *c'*, *d'*, a cap H that rests upon said plate, and a fastener *h*, that secures said cap in place, all as herein described.

3. A child's carriage provided with a supporting frame to which an adjustable handle is applied, for the purpose described.

4. A child's carriage provided with a supporting frame, a handle P, provided with bends S S', and screw-threaded shanks *s*, *s'*, a bar U having slots *u*, *u'*, traversed by said shanks, and nuts T, T', engaged with the latter, for the purpose described.

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

ABNER WOODWARD.

Witnesses:

N. R. CLARKE,

T. M. GORDON.