No. 652,896. Patented July 3, 1900.

A. R. JOHNSON & J. H. LEPSCH.

DEVICE FOR JOGGING BABY CARRIAGES.

(Application filed July 31, 1899.)

(No Model.)

Fig. 1.

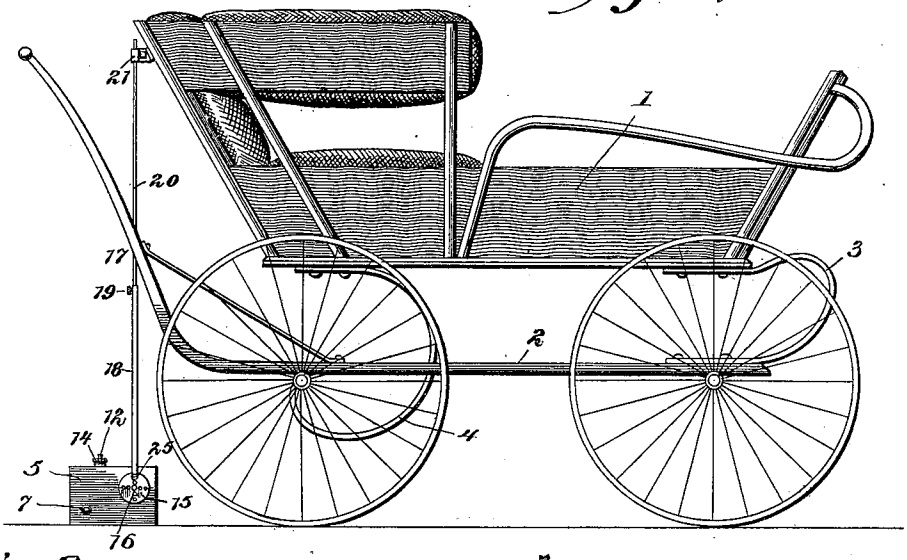


Fig. 2.

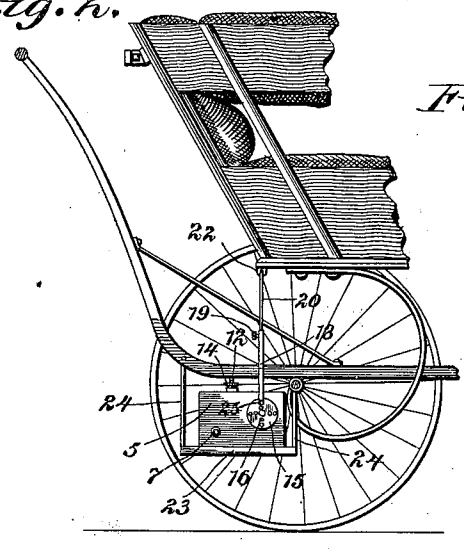


Fig. 3.

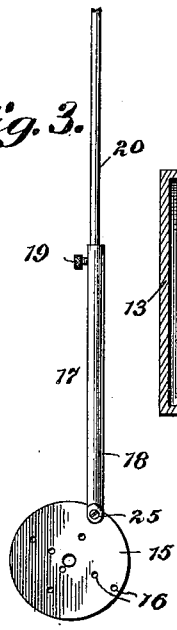
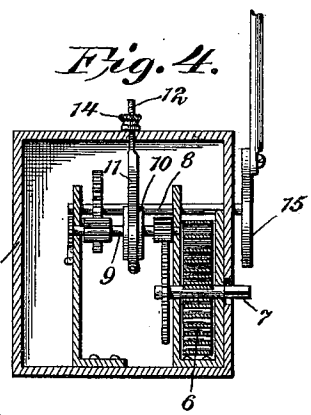


Fig. 4.



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UNITED STATES PATENT OFFICE.

ASHER R. JOHNSON AND JOSEPH H. LEPSCH, OF CARROLLTON, NEW YORK.

DEVICE FOR JOGGING BABY-CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 652,896, dated July 3, 1900.

Application filed July 31, 1899. Serial No. 725,648. (No model.)

To all whom it may concern:

Be it known that we, ASHER R. JOHNSON and JOSEPH H. LEPSCH, citizens of the United States, residing at Carrollton, in the county of Cattaraugus and State of New York, have invented a new and useful Device for Jogging Baby-Carriages, of which the following is a specification.

This invention relates to a jogging device for a baby-carriage, and the intent and purpose of the same are to impart an easy vertical reciprocating movement to the carriage-body against the resistance of the supporting-springs of the latter to produce a soothing effect on a juvenile occupant of such carriage while the latter is in a position of rest, thereby providing mechanical means for obtaining a movement of the carriage-body similar to that usually acquired by manual efforts, but without requiring the attention of any one to attain the result.

The invention consists of the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a carriage, showing the improved device applied in operative relation thereto. Fig. 2 is a sectional side elevation of a portion of a carriage, showing a slightly-modified form of the improved device. Fig. 3 is a detail view in elevation of the drive-rod or reciprocating bar and eccentric. Fig. 4 is a sectional view through the motor and showing the eccentric and a part of the drive-rod or reciprocating bar.

Similar reference characters are employed to indicate corresponding parts in the several views.

The numeral 1 designates the carriage-body, which is connected to running-gear 2 by front and rear springs 3 and 4. The said body may be of any preferred form and also the running-gear therefor, and to render the operation of such more effective it is necessary that the springs 3 and 4 or some other analogous spring connection exist between the body 1 and the running-gear 2.

The improved attachment comprises a motor 5, which may be of any preferred form of construction, but preferably of a spring character, as clearly illustrated by Fig. 4, and wherein is embodied a driving-spring 6 on an arbor 7, having a projecting end adapted to be engaged by a suitable key or winding device. From the arbor 7 and by means of suitable meshing gearing a drive-shaft 8 is rotated, and in connection with one of the transmitting-shafts 9 a disk 10 is employed and keyed thereon. The said disk is surrounded by a break-strap 11, having a screw-threaded terminal 12 projecting outwardly through the top of the surrounding box or casing 13 of the motor, and on said terminal is a suitable adjusting or thumb nut 14, adapted to be turned to control the pressure of the strap 11 on the disk 10, and thereby govern the movement of the motor either to produce a slower motion thereof or entirely stop the same when not desired for use. This is a very simple form of motor and is preferred because it can be operated at points where an actuating medium, such as electricity, is not accessible, and is also beneficial for the reason that the cost of running the same is considerably less than in devices requiring a prime motive agent for actuating purposes other than the spring.

On the projecting end of the shaft 8 an eccentric 15 is fixed to rotate with the said shaft and in the present instance is of disk form having a series of openings 16, radially arranged therein and each series varying in distance from the center of the disk or at similar distances at various points on the said eccentric. To the said eccentric the lower end of the drive-rod or reciprocating bar 17 is movably attached to any one of the series of openings 16 that may be desired, and this particular device may be of solid or continuous form, or, as shown in its preferred form, comprises a lower socket member 18, having a set-screw 19 extending transversely into the same near the upper end and adapted to adjustably receive the rod 20, which is telescopically fitted into the lower tubular member 18 to accommodate carriages having elevations of portions of their bodies above ground or supporting surfaces at different distances. The telescopic form of drive-rod or reciprocating bar is also exceptionally convenient in that it can be reduced to compact form for storage when not in use. As shown in Fig. 1, the upper end of the drive-rod or

reciprocating bar is connected to the clamp 21 on the upper portion of the back of the carriage which is used for holding the support of a sunshade, and which serves as an exceptionally convenient means of connecting the said rod or bar with the carriage-body.

As shown by Fig. 2, the rod or bar is attached to an eye or other analogous device 22, secured to the central under portion of the bed of the body 1, and the motor 5 is held on a shelf 23, suspended by means of rods 24 from the frame of the running-gear of the carriage. In this instance the weight of the motor will hold it in place on the shelf 23, and this form of the device provides for transporting the entire attachment with the carriage for use at any place desired. In Fig. 1 the motor is rested on the surface of the ground or floor; but in either arrangement the operation and result desired to be obtained are the same.

In operation the motor is released and rotates the shaft 8, which in turn actuates the eccentric 15, and the latter draws downwardly on the drive-shaft or reciprocating bar and pulls the body 1 of the carriage in the same direction against the resistance or repulsion of the springs 3 and 4, or particularly against such resistance of the springs 4. This downward movement of the carriage-body 1 continues until the lower end of the drive-rod or reciprocating bar passes a vertical line drawn through the shaft 8 below the latter. After passing this point the pull on the drive-rod or reciprocating bar is slackened and the springs 3 and 4 are free to exert an effort to return to their normal position. Consequently the upstroke of the said rod or bar is automatically facilitated to a great degree by the resilient operation of the springs, and the expenditure of power of the motor is economical. This auxiliary action of the springs of the carriage will cause the motor to run a greater length of time under comparative conditions and also make the motion of the body 1 more regular and without jerk or jar that might arise or ensue if carried on exclusively by the attachments. The stroke of the drive-rod or reciprocating bar may be changed to a faster or slower degree or a longer or shorter stroke in accordance with the adjustment of its lower end to a point nearer the center of the eccentric 15 or adjacent the periphery of the latter, the openings 16 being screw-threaded to receive a removable screw 25, adapted to be passed through the lower end of the said rod or bar and provide means for securely connecting the several parts in a conveniently-adjustable manner.

The advantages accruing from the improved attachment are manifold, and particularly in respect to obviating personal attention to a carriage containing a child or infant to keep the same in motion and produce a pacifying influence on the occupant. The several parts are of such simple nature that the purchasing price will be reduced to a minimum within the obtainment of any one. The mode of connecting up the attachment to the carriage-body is also within the understanding of any person, whether a mechanic or not, and to suit different applications it may be necessary at times to change the proportions, size, and minor details of construction. Such changes will be made as fully fall within the purview of the invention and without sacrificing any advantages incident thereto.

Having thus described the invention, what is claimed is—

The combination with a carriage-body having a yielding or resilient support, of a drive-rod or reciprocating bar composed of a lower tubular member and an upper rod telescopically adjustable in the said tubular member, a motor and an exteriorly-exposed disk with a plain surface having radially-arranged pairs of openings therein, a portion of said openings being in planes at an angle to the others and occupying different distances from the center of the disk, the lower tubular member of the drive-rod or reciprocating bar being removably attached to the disk and adjustable in relation to either one of the pairs of the radial openings.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ASHER R. JOHNSON.
JOSEPH H. LEPSCH.

Witnesses:
WM. E. GOOD,
R. J. FREANEY.