A. J. ADAMS.

BRAKE DEVICE.

APPLICATION FILED MAR. 2, 1910.

1,085,573. Patented Jan. 27, 1914.

Fig. 1.

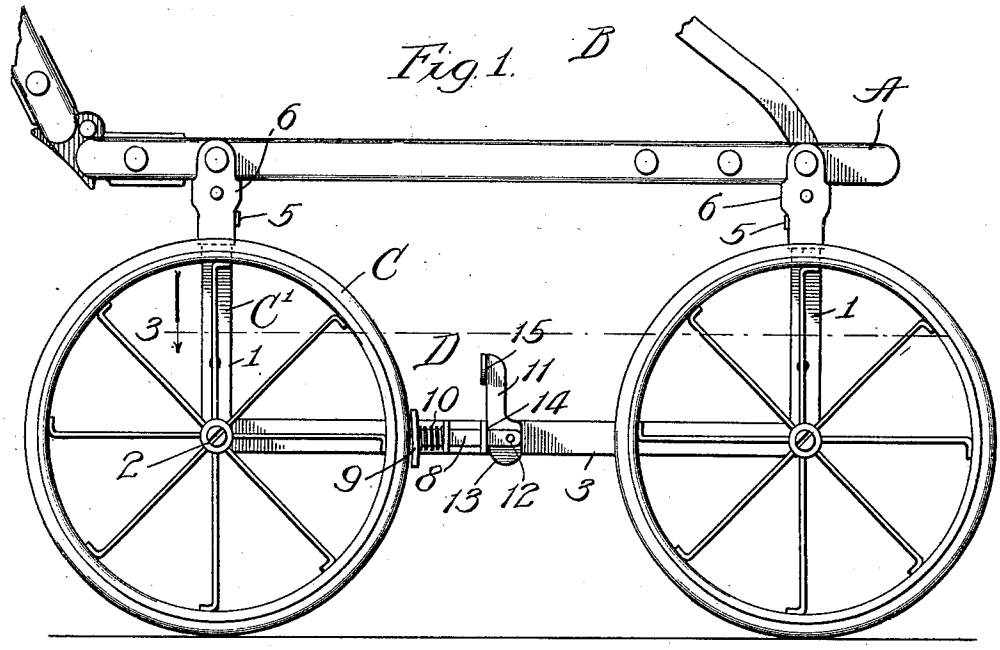


Fig. 2.

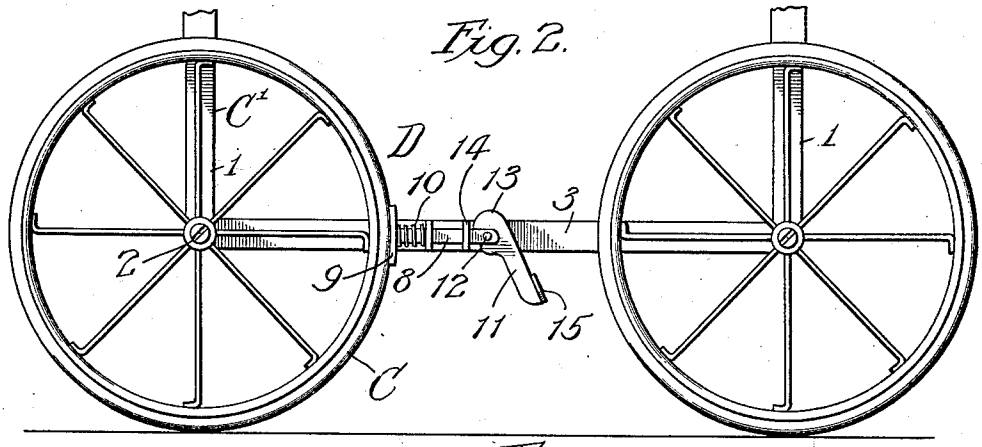
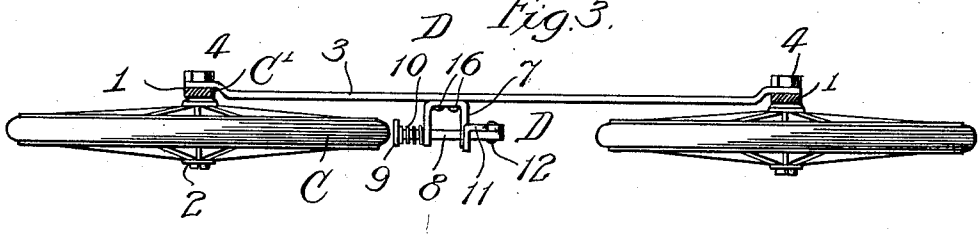


Fig. 3.



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BRAKE DEVICE.

1,085,573. Specification of Letters Patent. Patented Jan. 27, 1914.

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To all whom it may concern:

Be it known that I, ARTHUR J. ADAMS, a citizen of the United States, residing at 43–45 Fulton street, Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Brake Devices, of which the following is a specification.

My invention relates particularly to brakes for go-carts, perambulators or baby carriages of folding type, in which the wheel-forks or wheel-supports are adapted to be folded in pairs transversely beneath the running-gear frame, such, for instance, as that illustrated in my Patent No. 913,345 granted February 28th, 1909.

My primary object is to provide a brake of simple, improved and cheap construction, adapted to be carried by the wheel-forks and fold therewith beneath the running-gear frame in the operation of folding the go-cart.

The invention is illustrated in its preferred embodiment in the accompanying drawings in which:—

Figure 1, represents a broken side elevational view of a folding perambulator equipped with my improved brake-device; Fig. 2, a similar view showing the brake in the engaging position; and Fig. 3, a section taken as indicated at line 3 of Fig. 1.

In the construction illustrated, A represents a running-gear frame; B, a foldable superstructure adapted to be folded upon the running-gear frame in a well-understood manner; C, wheels journaled on forks or supports C^1 (one pair shown) which are adapted to be folded in pairs transversely beneath the running-gear frame; and D, my improved brake-device. The running-gear frame A and superstructure B adapted to fold upon the running-gear frame may be of any suitable construction. The wheels and wheel-forks likewise may be of any suitable construction.

In the form illustrated, the wheel-forks comprise upright bars 1 provided at their lower ends with out-turned spindles 2 upon which the wheels are journaled. The lower end portions of the bars 1 are connected by a longitudinal bar 3, which is applied at the inner side of the lower ends of said bars 1, being connected therewith by bolts 4, which are formed integrally with the spindles 2. The bar 3 is offset near its ends, as shown in Fig. 3, so that the body of the bar lies substantially in the plane of the bars 1. The upper ends of the bars 1 are connected by pivots 5 with brackets 6 connected with the running-gear frame, the pivotal connection being such as to enable the bars 1 to be swung inwardly and upwardly about the pivots 5, so that the wheels may be folded in pairs beneath the running-gear frame.

The brake-device D preferably comprises a U-shaped bracket 7 applied to the intermediate portion of the bar 3 on the outer side thereof; a plunger or shank 8 extending through perforations in the arms of the bracket 7 in the plane of the wheels; a shoe 9 carried by one end of the plunger 8; a coil-spring 10 interposed between the shoe 9 and the adjacent arm of the bracket 7; and a short hand lever 11 connected by pivot 12, with the opposite end of the plunger 8. The pivotal portion of the lever 11 has an enlargement or cam surface 13, which merges with one edge of the lever 11, thus affording a shoulder 14 adapted to bear against the adjacent bracket arm when the brake is in the inoperative position shown in Fig. 1. The free-end of the lever 11 is equipped with a thumb piece 15. As is clearly shown in Fig. 3, the web portion of the bracket 7 is connected with the bar 3 by rivets 16. In the illustration given the brake-device is located near the rear wheel.

The operation of the device will be readily understood.

When it is desired to hold the brake in the inoperative position, the lever 11 is swung to the vertical standing position shown in Fig. 1, in which position the edge or shoulder 14 bears against the adjacent bracket arm. When it is desired to apply the brake the lever 11 is thrown to the position shown in Fig. 2, which withdraws the cam at the base of the lever from engagement with the adjacent bracket arm, thus leaving the spring 10 free to press the brake-shoe into engagement with the wheel as shown in Fig. 2. In the operation of folding the cart the wheels and their forks are swung upwardly and inwardly about the pivots 5, the bar 3 of the brake-device

mounted thereon being thereby carried to a horizontal plane adjacent the plane of the running-gear frame.

The brake-device is of exceedingly simple construction, is conveniently mounted, and may be readily manipulated. Moreover, its disposition on the longitudinal connecting bar 3 between the front and rear wheels is a desirable feature, inasmuch as the brake is housed in the space between the front and rear wheels, so that it will not interfere in any way with the compact folding of the cart.

The foregoing detailed description has been given for clearness of understanding only, and no undue limitation should be understood therefrom, but the appended claims should be construed as broadly as permissible in view of the prior art.

What I regard as new, and desire to secure by Letters Patent, is:—

1. In combination with the running gear frame of a perambulator, wheel-forks adapted to fold inwardly beneath the running-gear frame, and wheels carried by said wheel-forks, of a self-contained brake-device mounted to swing with said wheel-forks, comprising a supporting member, a brake-shoe having a stem extending through said member, a spring between said member and brake-shoe, and means connected with said stem and co-acting with said supporting member for locking the brake-shoe in a retracted position.

2. In combination with the running-gear frame of a folding perambulator, wheel-forks adapted to fold inwardly beneath the running-gear frame, and wheels carried by said wheel-forks, of a self-contained brake-device mounted wholly upon and swinging with said wheel-forks, comprising a supporting member, a spring and spring-pressed brake-shoe mounted on said member, and a short cam-lever co-acting with said supporting member and adapted to retract said brake-shoe and lock the same in a retracted position.

3. In combination with the running-gear frame of a folding perambulator, wheel forks connected therewith and adapted to swing inwardly and upwardly beneath the running-gear frame and a longitudinal connecting member joining the front and rear wheel-forks at a distance beneath their pivots, of a brake-device mounted upon said longitudinal connecting member and comprising a guide-member applied to said longitudinal connecting member, a brake-shoe having a stem extending through said guide-member, a coil spring interposed between the brake-shoe and guide-member, and a cam-lever pivotally connected with the opposite end of said stem and adapted to engage said guide-member, thereby to retract said shoe through the medium of said stem and lock the shoe in the retracted position.

4. In means of the character set forth, the combination with the inwardly swinging wheel forks of a folding perambulator and the longitudinal bar connecting the lower end portions of said wheel-forks, of a U-shaped bracket applied to said longitudinal connecting member and having outwardly projecting arms provided with guide perforations, a brake-shoe having a stem extending through said perforations, a spring engaging one arm of said bracket and serving to force the brake-shoe into operative position, and a cam-lever pivotally connected with the opposite end of said shank and adapted to bear against the other arm of said bracket.

5. In means of the character set forth, the combination of a running-gear frame, a pair of wheel-forks pivotally connected with each side of said frame and adapted to fold inwardly laterally beneath the running-gear frame, and a brake-device comprising a supporting member carried by the wheel-forks, a brake-shoe having a stem extending through said supporting member, a spring confined between the brake-shoe and supporting member, and a cam-lever pivotally connected with said stem and co-acting with said supporting member, said lever assuming substantially a standing position when the brake-shoe is retracted.

ARTHUR J. ADAMS.

In presence of—
A. U. THORIEN,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."