R. H. BROWN.

CHILD'S SULKY.

APPLICATION FILED MAR. 22, 1912.

1,053,355. Patented Feb. 18, 1913.

Fig. 1.

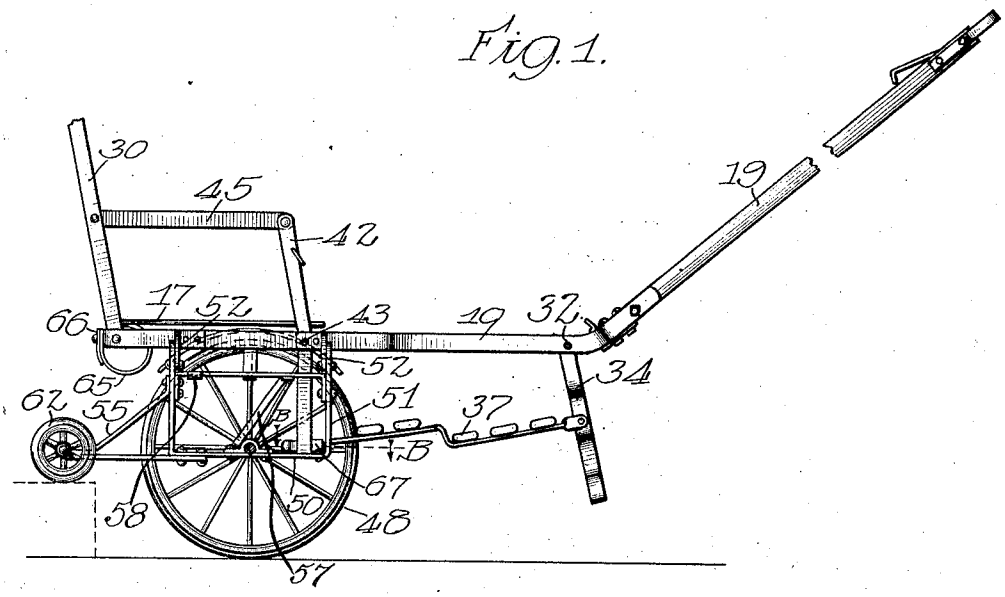


Fig. 3.

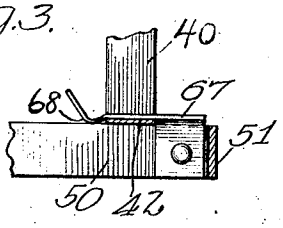


Fig. 2.

Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

RHINEHARDT H. BROWN, OF CHICAGO, ILLINOIS.

CHILD'S SULKY.

1,053,355. Specification of Letters Patent. Patented Feb. 18, 1913.

Application filed March 22, 1912. Serial No. 685,494.

To all whom it may concern:

Be it known that I, RHINEHARDT H. BROWN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Children's Sulkies, of which the following is a full, clear, and exact description.

My invention is concerned with certain improvements in collapsible sulkies for children of the type shown in my application No. 654,375, filed October 12, 1911, and is designed primarily to produce a sulky that can be drawn off of the curbstone, or some similar offset, without a serious jar. To this end, I employ small supplemental wheels located to the rear of, and preferably with their axles in the same horizontal line as the axles of, the two main wheels.

Another feature is designed to provide an improved locking mechanism to hold the parts in their extended positions.

To illustrate my invention, I annex hereto a sheet of drawings, in which the same reference characters are used to designate identical parts in all the figures, of which,—

Figure 1 is a side elevation with the adjacent wheel and fender removed, as if the same were in section on the line A—A of Fig. 2; Fig. 2 is a top plan view; Fig. 3 is an enlarged detail in section on the line B—B of Fig. 1; and Fig. 4 is an enlarged detail showing the seat spring.

To illustrate my invention, I have shown a collapsible sulky of substantially the same construction as that shown in my aforesaid application No. 654,375, where the horizontal seat-frame 10 has the handle 19 connected thereto, so that it can be held rigid with the frame in use, or folded back upon it for collapsing the sulky. The back-rest frame 30 is pivoted to the rear of the seat-frame, and the U-shaped vertical arm-frame 42 pivoted to the seat-frame at 43 coöperates with lugs 58 secured to and projecting inward from the under side of the horizontal braces 56 of the wheel frames 51, which are pivoted to the lugs 52 extending down from the sides of the seat-frame 10, so that the wheel frames can be collapsed and folded up underneath the seat frame by the closing movement of the back-rest frame 30 and the arm-frame 42, these frames being connected by the horizontal links or arm rests 45. The stop-frame 34 is pivoted to the horizontal seat-frame at 32, and the foot-rest frame 37 is pivotally connected at its forward end to the stop-frame or standard 34 and at its rear end to the bottom bar 40 of the U-shaped arm-frame, so that a lazy-tong construction is formed which permits of the cart being collapsed. In the ordinary construction of these sulkies, when it is necessary to run off of a curb, it is practically impossible to prevent a jar without picking up the sulky bodily and lifting it down. To remedy this difficulty, I provide an extension 55 having journaled on the rear end thereof the small wheel 62, and preferably I provide a pair of these extensions 55 and wheels 62, and secure one on the rear side of each of the wheel-frames 51. This extension may be constructed of metal bars, as shown, and is preferably of such a shape and location as to bring the hubs of the wheels 62 in the same horizontal plane as the hubs of the main wheels 48 when the seat-frame stands horizontally. These wheels 62 serve to prevent the jar that otherwise occurs in passing over a curb, as when the main wheels pass off of the curb and the body of the sulky is held level, the wheels 62 catch on the curb as the main wheels leave the curb, and prevent the jar which would otherwise occur. The sulky can be run upon a curb by backing up to it and tilting the handle down until the standard 34 strikes the ground, in which position the auxiliary wheels 62 will be raised high enough so that they will extend over the top of the curb, after which the sulky can be lifted higher at its front end by the handle and the main wheels 48 rolled onto the curb without any substantial jar.

In connection with my invention I may employ a novel mounting for the seat proper 17, and this seat is preferably constructed of a sheet of metal rigidly secured at the forward side to the arm-frame 42, preferably by being riveted to a cross-bar 63, which has turned-down ends riveted to the vertical bars of the arm-frame 42. The rear corners of the seat, which rear is preferably braced and strengthened by the bar 64 riveted to the under side thereof, have riveted to the under side of the bar the curved springs 65, the other ends of which are riveted to the end bar 14 of the horizontal seat-frame 10, and are preferably strengthened by the short auxiliary pieces 66, between which and the bar 14 the ends

of the springs 65 are riveted. By the construction shown, it will be seen that I have produced a very light seat that is spring-supported at its rear end, so that it can yield under the weight of the occupant sufficiently to take up some of the jars met with in the use of the sulky.

The last feature which may be used with my invention consists of the novel locking mechanism employed to hold the parts in their extended position. As best shown in Fig. 3, the bottom bars 50 of the wheel frames have riveted on the forward corners thereof the catches 67, which have the vertical blade portions terminating in the curved ends 68, which are adapted to be struck by the lower parts of the vertical bars of the arm-rest frame 42 as the parts are swung to their extended position and to spring the clips until the curved ends 68 are passed, after which they spring back of the bar and lock the parts yieldingly in their extended position. It will be understood that the lower ends of the vertical bars of the arm-rest frame 42 strike the inner faces of the brace bars 57 (of which there is one on each wheel frame) in swinging the wheel frames to their extended position before engaging the catches 67 and being secured thereby.

While I have shown and described my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of modifications, and that I do not desire to be limited in the interpretation of the following claim except as may be necessitated by the state of the prior art.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

In a collapsible vehicle, the combination with a horizontal seat frame, of wheel frames pivoted to the sides thereof and having rearward extensions, the rear ends of which extend beyond the seat frame, means for moving said wheel frames into and out of and securing them in operative position, a main wheel for each of said wheel frames journaled thereon below the seat frame, and a small wheel for the purpose described journaled on the rear end of each of the extensions.

In witness whereof, I have hereunto set my hand and affixed my seal this 20th day of March, A. D. 1912.

RHINEHARDT H. BROWN. [L. S.]

Witnesses:

JOHN HOWARD MCELROY,

MILDRED ELSNER.