

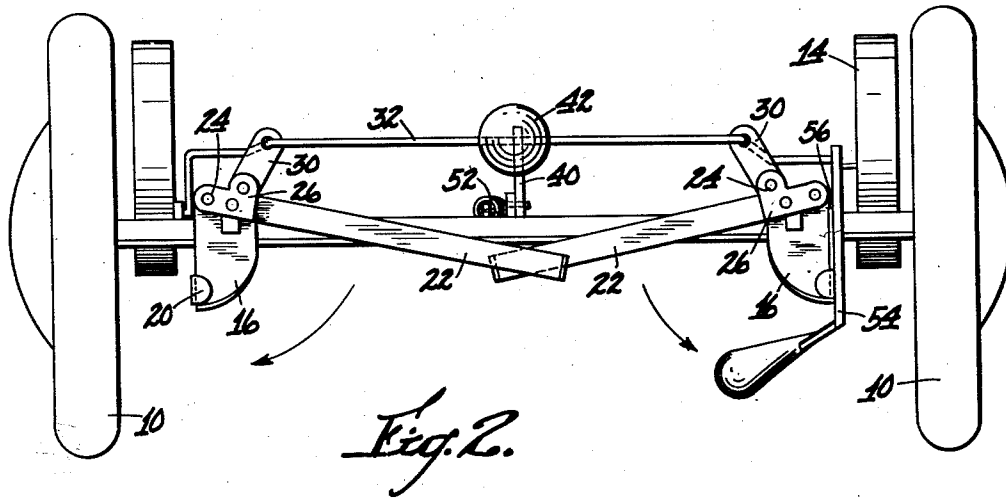
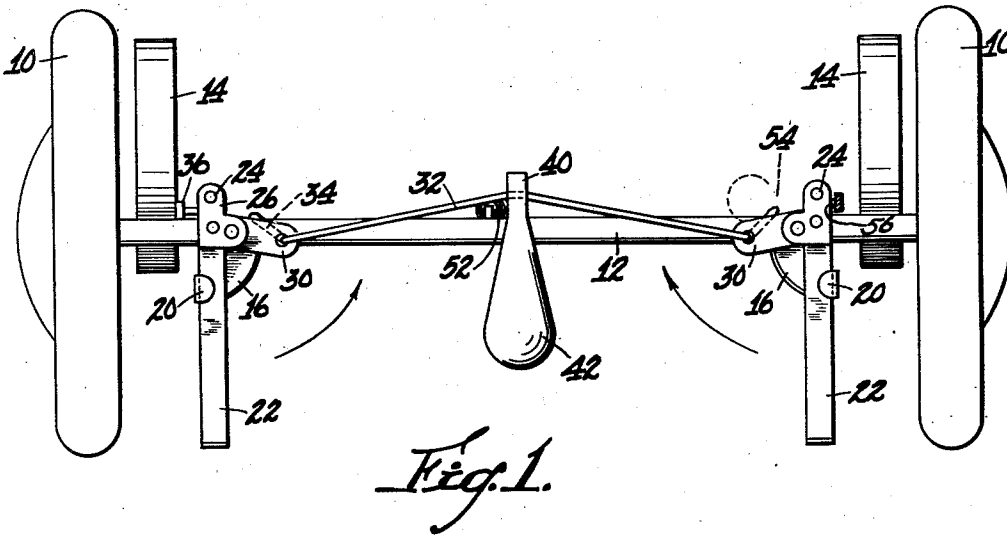
Sept. 7, 1948.

W. C. TROENDLE
SAFETY STAND

2,449,024

Filed Jan. 25, 1947

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

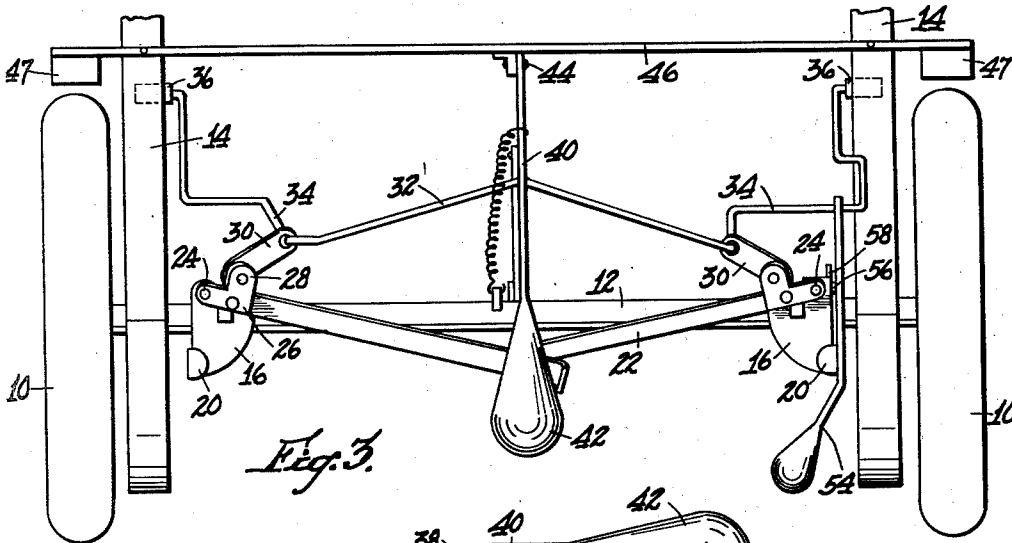


Fig. 3.

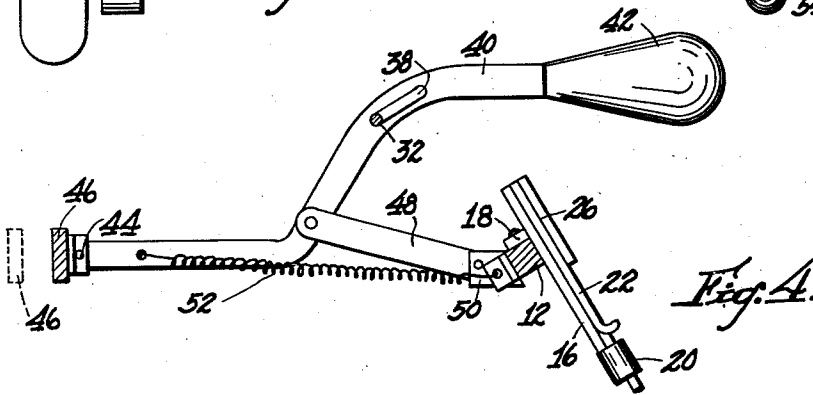


Fig. 4.

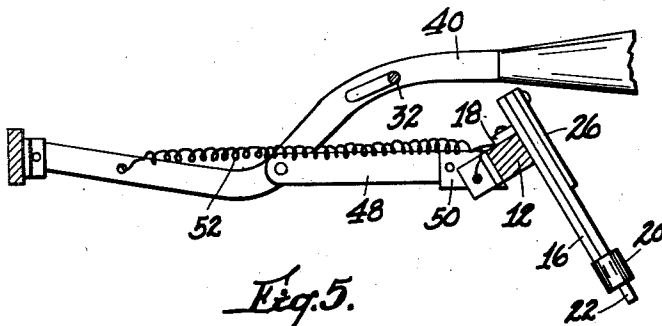


Fig. 5.

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SAFETY STAND

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10 Claims. (Cl. 188—20)

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This invention relates to new and improved safety stands for general use but particularly adapted for baby carriages.

Objects of the invention include the provision of a safety stand having a pair of foot operated treadles one of which is adapted to be depressed to swing a pair of safety leg elements down from a substantially horizontal inoperative position to a position wherein the free ends thereof may engage the ground at the rear of the carriage, the other foot operated treadle being adapted to be depressed to cause the first treadle and the leg elements to rise again to inoperative position, the safety stand leg elements in both positions being substantially latched in a manner to prevent movement thereof from the position as determined by the treadles.

Further objects of its invention include the provision of a safety stand of the class described comprising a pair of legs pivoted adjacent the rear axle at spaced points thereon near the wheels on said axle, said legs being pivoted on an axis transverse to the axle so that the legs may swing from a substantially horizontal position next to the axle to a substantially vertical position at right angles to the axle and including an operating device comprising a bent wire rod having ends pivoted at each side of the carriage and having an offset center portion engaged intermediate of its length by a foot treadle for raising and lowering the bent rod on its axis, there being a link pivoted on the bent rod at points intermediate the treadle and the pivot points of the bent rod, said links being pivoted to the legs of the safety stand whereby said legs will be pivoted downwardly upon depression of the treadle and upwardly upon depression of a second treadle engaging the bent rod at a position to force the same in an upward direction when the last named treadle is in depressed condition.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which

Fig. 1 is a view in elevation showing the rear wheels and axle of a carriage to which the safety stand is applied and in which the safety stand is shown in operative position;

Fig. 2 is a view similar to Fig. 1 but showing the safety stand in an inoperative position;

Fig. 3 is a top plan view of the construction shown in Fig. 2;

Fig. 4 is an enlarged view of one of the treadles showing the same in the position wherein the leg elements are inoperative; and

Fig. 5 is a view similar to Fig. 4 showing the treadle in position with the leg elements operative, parts being broken away.

This invention is adapted to be applied to any baby carriage having a pair of rear wheels 10

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and an axle 12 rotatably mounting the wheels. The reference 14 indicates conventional spring rods which extend longitudinally of the carriage and are secured to the axle at the top side thereof in a conventional manner. The carriage body is adapted to be resiliently mounted on the spring rods. At a point spaced inwardly from the spring rods 14 there are provided a pair of brackets 16 secured to the axle in any way desired as, for instance, by a bent ear 18, see Figs. 4 and 5. These brackets 16 slant downwardly and to the rear and are provided at their lower ends with inwardly directed catches 20 for the purpose of stopping and catching the leg elements 22 in the position shown in Fig. 1.

Each bracket 16 rises above the axle 12 and provides a pivot point for the legs 22 as at 24. Each of the legs 22 is provided with a plate 26 having a lateral lug 28 providing a pivot point for a link 30, links 30 being apertured at the free ends thereof and receiving therethrough a rod 32.

Rod 32 is bent as best shown in Fig. 3 so as to be received in links 30 with a minimum of axial movement, the bends shown at 34 providing against this contingency, and the bent rod then continuing in general forwardly of the spring rods 14 and terminating in outturned ends journalled in axle brackets 36, these brackets being secured to the spring rods 14. Rod 32 may be referred to as a lever which has its fulcrum at 36, 36.

At the central portion of the rod it passes through a slot 38 in a treadle 40 having a grip portion 42 at a free end thereof, and the other end of which is pivoted as at 44 to a brake rod 46. As is well understood in the art, these brake rods are flexible and are provided with brake shoes 47 which are thrust against the wheels 10 to brake and lock the same when the brake rod 46 is moved forwardly at its center. This is illustrated in Fig. 4 wherein the dotted line showing of the brake rod illustrates the braking position thereof. The treadle 40 intermediate its ends has pivoted thereto a link 48 which in turn is pivoted to a bracket 50 secured to the axle 12, see Figs. 4 and 5. A spring 52 connects the lever 40 to the axle to tend to maintain the treadle 40 in its upward position as seen in Fig. 4 so that the brakes are not applied. However, upon depression of treadle 40, link 48 insures that the brake rod 46 will be pushed to the dotted line position shown in Fig. 4 to apply the brakes.

As thus far described it will also be seen, however, that with the safety stand legs 22 in the positions shown in Figs. 2 and 3, and foot or hand being placed upon the handle 42 and the same being depressed thereby, the bent rod 32 will also be depressed forcing the legs 22 to swing oppositely away from each other and downwardly

until stopped by ears 20, in which position the links 30 are past a dead center so that the legs are held in this position.

A second treadle 54 is pivoted at 56, see particularly Fig. 3, to a rearwardly extending ear 58 on bracket 16 to the right in this figure. Treadle 54 extends beyond the pivot point 56, however, and is provided with a slot through which projects a portion of the bent rod 32. It will be seen that when treadle 40 is depressed and the bent rod 32 depressed with it, the treadle 54 is swung upwardly from the Fig. 2 position to the position shown in dotted lines in Fig. 1; and conversely when treadle 54 is up and the legs are down, it is merely necessary to depress treadle 54 to cause the reverse action to take place, i. e., to swing the bent rod 32 upwardly and thereby raise treadle 40 and legs 20 to the position of Figs. 2 and 3.

It will be seen that this invention provides an easily operable device in which the operator need only press downwardly on two separate treadsles to accomplish both the lowering and the raising of the safety stand legs. It is also clear that the two operating treadsles are widely spaced from each other and that there never need be any confusion as to which of these treadsles should be operated in order to cause the action desired. Also by having these treadsles widely spaced the operator need not look to see which treadle to operate and also will not operate one in mistake for the other, which would be the case were the treadsles closely associated. This construction also completely avoids possible interference of the treadsles as in prior art cases where treadsles are positioned close to each other.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed otherwise than as set forth in the claims but what I claim is:

1. In a device of the class described, an axle, a pair of wheels on the axle, a safety stand element pivotally mounted on an axis transverse of the axle, a treadle, a lever operatively connected with the treadle and element to pivot the latter in one direction upon depression of the treadle, and a second treadle connected to said lever to pivot the latter and said element in the opposite direction, said treadsles being relatively widely spaced and the lever extending between the treadsles.

2. In a device of the class described, a wheeled axle, a bent rod lever having its ends spaced and pivoted on an axis and an offset center portion so that the offset portion of the lever may rock on said axis, a treadle connected to the lever to raise the latter as the treadle is depressed and a second treadle spaced from the first treadle and connected to the lever to depress the latter upon depression of said second treadle, and safety stand elements pivotally mounted on the axle and connected to the lever for pivotal movement thereby.

3. The device of claim 2 wherein one treadle is a lever of the first class and the other treadle is a lever of the second class.

4. A safety stand for a vehicle having a wheeled axle comprising a rod pivoted at its ends and centrally offset, a pair of elongated stand elements pivoted adjacent their ends at spaced

points, connections between the rod offset portion and said pivoted elements to pivot the latter simultaneously between operative and inoperative positions, and a pair of pivoted spaced treadle levers connected to the rod offset portion, said treadle levers being effective to pivot the rod in different directions upon pivoting of the treadle levers in the same direction.

5. A safety stand for a vehicle having a wheeled axle comprising a rod having an offset center portion and pivoted at its ends at fixed points on the vehicle, a safety stand element pivoted adjacent one end thereof to the vehicle, the safety stand element being pivoted to the rod at the offset portion of the latter at a point on the safety stand element spaced from the pivot point thereof so that the safety stand element is swung in two directions as the rod is pivoted in corresponding directions, and a plurality of treadsles to pivot the rod, said treadsles being spaced sufficiently to completely avoid each other during operation thereof.

6. A safety stand for a vehicle having a wheeled axle comprising a rod having an offset center portion and pivoted at its ends so that the offset portion is swingable, a treadle connected to the rod to swing the same in one direction and a separate treadle to swing the rod in the opposite direction, a safety stand element pivoted to the vehicle for swinging from a raised inoperative position to a lowered operative position, the rod offset portion being connected to the safety stand element so that the latter is swingable therewith, and means tending to maintain the rod and safety stand element in either position.

7. The safety stand of claim 6 including a brake rod for the wheels, one treadle being pivoted at one end to the brake rod and receiving the center portion of the pivoted rod centrally thereof.

8. The safety stand of claim 6 wherein one treadle is centrally pivoted at a fixed point on the vehicle and receives the central portion of the pivoted rod at one end.

9. A safety stand for a vehicle having a wheeled axle comprising a stand element pivotally mounted to swing on an axis transverse of the axle, a lever to swing the stand element in a plane substantially parallel to the axle between operative and inoperative positions, and two widely spaced treadsles connected to the lever at spaced points to swing the lever in opposite directions.

10. The safety stand of claim 9 wherein said treadsles are in the form of pivoted levers, one treadle being of the first class and the other being of the second class.

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