

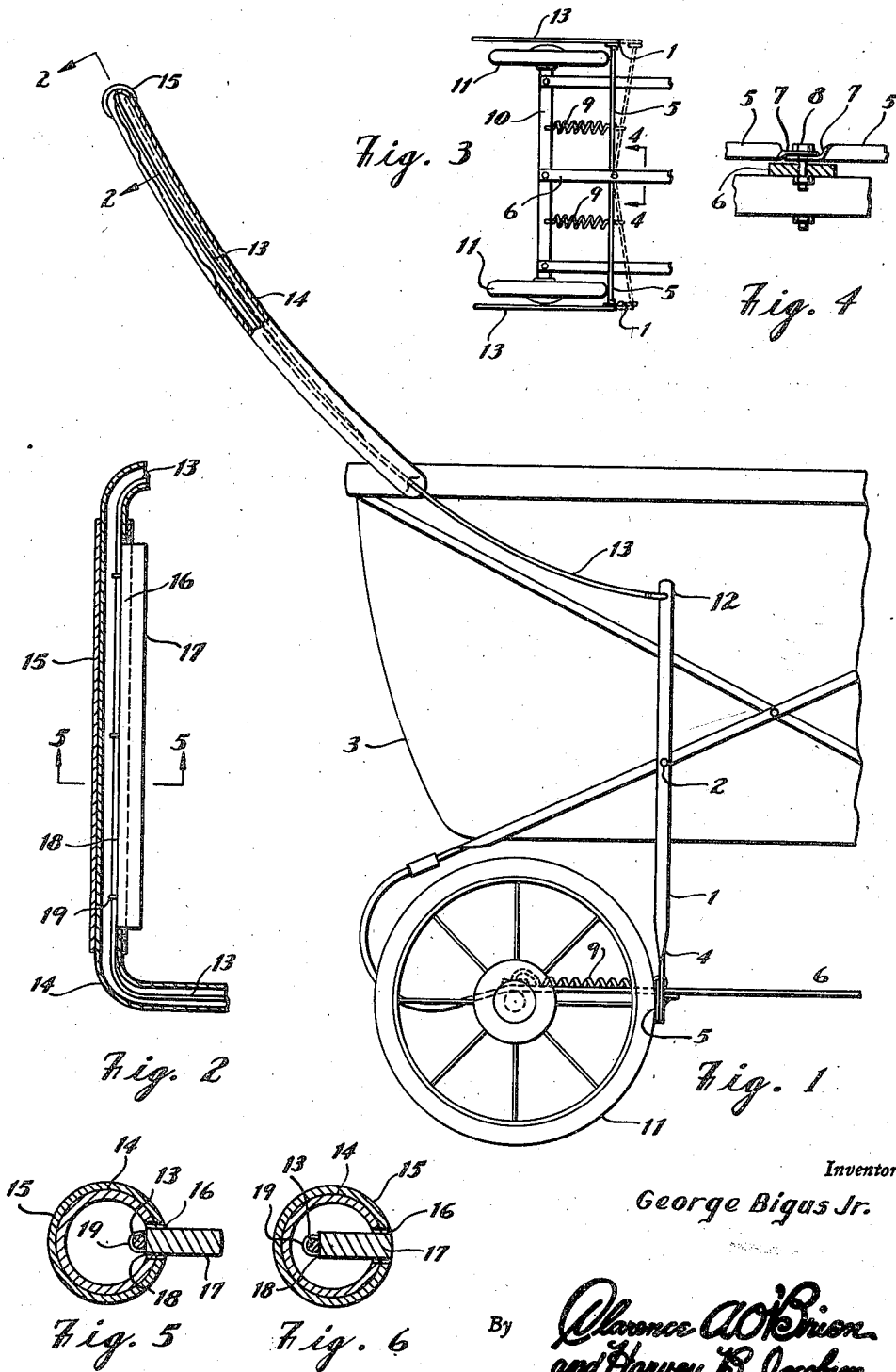
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AUTOMATIC BRAKE FOR BABY CARRIAGES

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AUTOMATIC BRAKE FOR BABY CARRIAGES

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5 Claims. (Cl. 188—20)

1

This invention relates to new and useful improvements and structural refinements in automatic brakes for baby carriages, and the principal object of the invention is to provide a brake of the character herein described, which will automatically hold the carriage at rest as soon as the attendant removes her hands from the push-handle.

A further object of the invention is to provide a brake which is positive in action and in which the braking force is equalized on both sides of the carriage.

Another object of the invention is to provide a brake which is of simple construction and which will not easily become damaged.

With the above more important objects in view, and such other objects as may become apparent as this specification proceeds, my invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the invention, showing the same in situ on a baby carriage.

Figure 2 is a cross-section taken on the plane of the line 2—2 in Figure 1, illustrating the construction of the hand grip.

Figure 3 is a top plan view showing the arrangement of the brake shoe arms.

Figure 4 is a fragmentary detail viewed in the plane of the line 4—4 in Figure 3, and showing the manner in which the brake shoe arms are pivoted.

Figure 5 is a cross-section taken on the plane of the line 5—5 in Figure 2, illustrating the hand grip in braking position, and

Figure 6 shows the subject matter of Figure 5, but with the hand grip depressed to release the brake.

Like characters of reference are used to designate like parts in the specification and throughout the several views.

Referring now to the drawings in detail, the invention consists of a pair of levers 1, each of which is pivoted medially of its length by means of bolts 2 to the opposite sides of the baby carriage 3.

The lower end 4 of each lever is angulated as shown, to lie flat against the outer end of a brake shoe arm 5. Two of these arms are provided, each extending inwardly to the center line of the carriage underframe 6, where their ends are angulated as shown at 7 in the accompanying Figure 4. The angulated ends 7 of the arms 5 are connected together by means of a pivot bolt 8,

2

which in turn, is secured to the underframe 6, essentially on the center line thereof.

A pair of tension springs 9, extending between the axle 10 and the mid-portion of the arms 5, are used to constantly urge each of said arms against the periphery of the wheels 11 mounted on the axle 10.

The upper ends 12 of the levers 1 are connected to the ends of a flexible control cable 13, which passes through the tubular push-handle 14 of the carriage 3. The upper, transverse portion 15 of the handle 14 is provided with a longitudinal slot 16, in which is positioned a hand grip 17. The latter assumes the form of an elongated bar, to the inner face 18 of which is secured the cable 13 by means of a plurality of suitable clips 19.

When the invention is placed in operation, the springs 9 will normally urge the brake shoe arms 5 against the periphery of the wheels 11, whereby the carriage will be held at rest. In this position, the hand grip 17 will project outwardly from the push handle 14 as shown in Figure 5.

When the attendant wishes to push the carriage, she will apply her hands to the push handle and depress the hand grip 17 into the portion 15 as illustrated in Figure 6. This movement will be transmitted through the cable 13 to the levers 1, and the associated brake shoe arms 5 will be drawn against the resiliency of the springs 9, from the wheels 11. As soon as the attendant removes her hands from the push-handle 14, the springs 9 will again automatically apply the brake as already explained, and the hand grip 17 will be withdrawn to its normal position by the cable 13.

It will be noted that the pivoted arrangement of the arms 5 combined with the provision of the independent springs 9, will result in equalized braking pressure on both sides of the carriage.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What I claim as my invention is:

1. In association with a baby carriage including a push handle, an automatic brake comprising, in combination, a pair of vertically disposed levers, a control cable, and a pair of brake shoes, said levers being pivoted medially of their length to the sides of said carriage, said cable passing through said push-handle and being connected to the upper ends of said levers, the lower ends

3

of said levers being attached to said brake shoes, resilient means for urging said shoes against the wheels of said carriage, and a hand grip on said push handle for actuating said control cable.

2. In association with a baby carriage including a push handle, an automatic brake comprising, in combination, a pair of vertically disposed levers, a control cable, and a pair of brake shoe arms, each of said levers being pivotally connected medially of its length to one side of said carriage, said cable passing through said push-handle and being connected to the upper end of each of said levers, the lower end of each of said levers being attached to one end of one of said brake shoe arms, said arms extending inwardly to the center of the carriage underframe, a pivot bolt mounted on the center line of said underframe and connecting the inner ends of said arms, a tension spring attached to each of said arms and urging the same against a wheel of said carriage, and a hand grip on said push-handle for actuating said control cable.

3. In association with a baby carriage, including a push handle, an automatic brake comprising, in combination, a pair of brake shoe arms, a pivot bolt and a pair of tension springs, said bolt being secured on the center line of the underframe of said carriage and passing through one end of each of said arms, said arms extending outwardly to the wheels on one axle of said carriage, said springs extending between said axle and the mid-portions of said arms and urging said arms against the periphery of said wheels, a pair of vertically disposed levers pivoted medially of their length to the sides of said carriage, the lower end of each of said levers being connected to the outer end of one of said arms, a control cable passing through said push-handle and connected at each end thereof to the upper extremity of one of said levers, and a hand grip

4

associated with said cable for disengaging said arms from the periphery of said wheels.

4. The device as defined in claim 3, in which said hand grip comprises, in combination, an elongated bar positioned in a longitudinal slot formed in the upper, transverse portion of said push-handle, said cable being secured to the inner face of said bar, and said bar being depressible into said handle.

5. In association with a baby carriage including a tubular U-shaped push-handle having an upper transverse portion and downwardly inclined ends, an automatic brake comprising, in combination, an elongated bar positioned in a longitudinal slot formed in the upper, transverse portion of said handle, a control cable extending through said handle, a plurality of clips securing said cable to the inner face of said bar, said cable protruding out of the lower ends of said handle, a pair of vertically disposed levers pivoted medially of their length to the sides of said carriage, and a pair of brake shoes, the protruding ends of said cable being attached to the upper ends of said levers, the lower ends of said levers being connected to said brake shoes, and resilient means for urging said shoes against the wheels of said carriage.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
406,167	Hawkins	July 2, 1889
476,325	Stevens	June 7, 1892
2,254,632	Teska	Sept. 2, 1941
781,512	Gaines	Jan. 31, 1905