

Sept. 2, 1924.

1,507,528

W. SUOMINEN

CARRIAGE RUNNER

Filed Jan. 15, 1923

2 Sheets-Sheet 1

Fig. 1.

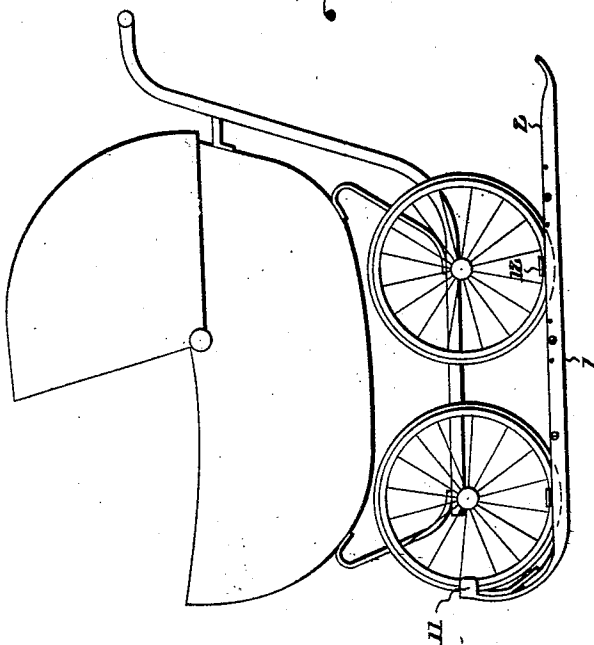
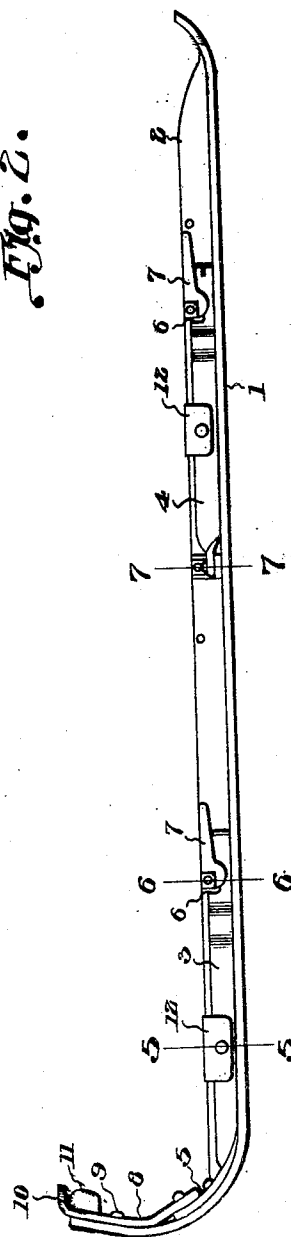


Fig. 2.



WITNESS:  
*Edw. Markward*  
*Joseph A. Kolau*

*Waldemar Suominen*  
INVENTOR  
BY *Victor J. Evans*  
ATTORNEY

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Fig. 3.

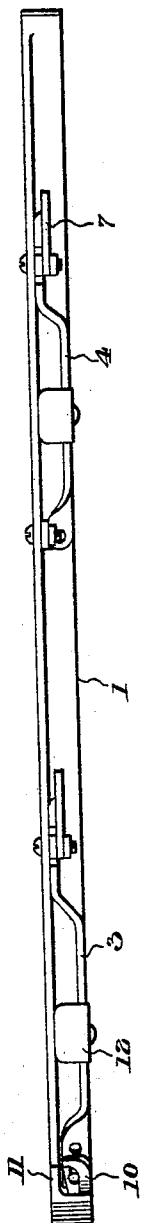


Fig. 4.

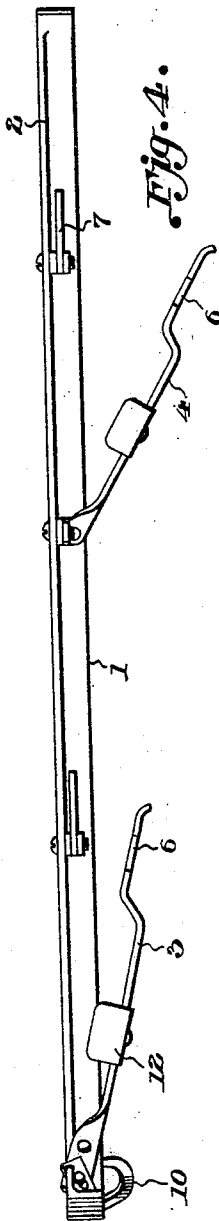


Fig. 7.

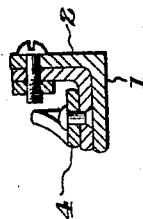


Fig. 6.

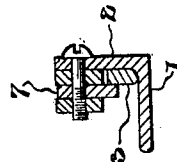
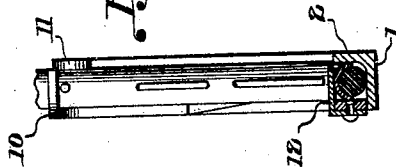


Fig. 5.



WITNESS:  
*Edw. Markward*  
*Joseph A. Holau*

Waldemar Suominen  
INVENTOR

BY *Victor J. Evans*  
ATTORNEY

## UNITED STATES PATENT OFFICE.

WALDEMAR SUOMINEN, OF WORCESTER, MASSACHUSETTS.

## CARRIAGE RUNNER.

Application filed January 15, 1923. Serial No. 612,717.

*To all whom it may concern:*

Be it known that I, WALDEMAR SUOMINEN, a citizen of Finland, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Carriage Runners, of which the following is a specification.

This invention relates to improvements in detachable runners for baby carriages and the principal object of the invention is to produce an improved detachable runner which can be detached or removed without the use of tools and which is very secure when attached.

Another object of the invention is to produce a detachable runner for carriages which may be readily adjusted to carriages of different sizes so that great accuracy in manufacturing is not required.

A further object of the invention is to produce a runner for carriages which is adapted to accommodate the front and rear wheels of the carriage and hold the same clamped to the runner so that the carriage may be easily pushed over a snow covered surface.

A still further object of the invention is to produce a runner for carriages which has clamping members pivotally secured thereto and locking dogs pivotally secured on the upstanding side flange provided on the runner for holding the front and rear wheels of the carriage clamped on the runner.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote like or corresponding parts throughout the several views and in which:—

Figure 1 is a side elevation of the invention as applied to a carriage.

Figure 2 is an enlarged side elevation of the invention detached.

Figure 3 is a top plan view with the parts in operative position.

Figure 4 is a similar view with the parts in inoperative position.

Figure 5 is a sectional view taken on line 5—5 of Figure 2.

Figure 6 is a sectional view taken on line 6—6 of Figure 2.

Figure 7 is a sectional view taken on line 7—7 of Figure 2.

In these views 1 indicates a runner formed of a single strip of metal and having an upstanding flange 2 provided on one side thereof which extends the full length of the runner, said runner has its front and rear ends rounded upwardly so as to glide along a snow covered surface. Pivotally secured upon the runners are front and rear clamping members 3 and 4 respectively which have their front portions twisted a quarter of a revolution as at 5 and which may be moved toward and away from the runners.

These clamping means are grooved at the rear portions thereof as at 6 to accommodate locking dogs 7 which are pivotally secured to the upstanding side flange and the latter when depressed backward will hold the clamping members in locking engagement with the runner. The clamping members are adapted to be swung toward or away from the runner as desired.

The front clamping member has one end of a short strip of metal 8 pivotally secured as at 9 to the forward end thereof and extended upwardly, said strip having its upper end rounded as at 10 to coengage with a prong 11 formed on the opposite side of the runner for holding the front wheel of the carriage thereon and thereby preventing the wheel from rotation. Angle shaped flanges 12 are secured on one side of said clamping members extending inwardly over said members for holding the wheels in locking engagement between the flanged portion of the runner and the clamping members.

When it is desired to attach a runner of the character described to a carriage the user releases the locking dogs or in other words swings the dog upwardly so that he may swing the clamping members outwardly and place the front and rear wheels upon the runner between the flanged portion of the runner and the clamping members and the locking dog is then swung on its pivot backward for clamping the bottom of the wheels between the clamping members and the upstanding flange provided on the runner.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. The combination with the front and rear wheels of a carriage, flanged metallic runners for the wheels and having their front and rear ends curved upwardly, front and rear clamping members having their forward ends twisted and pivotally secured to said runner and their rear ends grooved, locking dogs pivotally secured to the flanged portion of the runners and adapted to be seated in the grooves of the locking members, and means provided on the forward end of the front clamping member for preventing rotation of the front wheel.
2. The combination with the front and rear wheels of a carriage, a flanged metallic runner having its front and rear ends curved upwardly, front and rear clamping members having their forward ends pivotally secured to said runner and their rear ends grooved, locking dogs pivotally secured to the flanged portion of said runner and

adapted to be seated within said grooved portion of the clamping members, a short metal strip pivotally secured to the forward end of the front clamping member and having its upper portion rounded to coengage with the flanged portion of the runner, flanges provided intermediate said clamping members for engaging said wheels and preventing the rotation of the wheels.

3. The combination with the front and rear wheels of a carriage, flanged runners for supporting the wheels, front and rear clamping members pivotally secured to said runners and having their rear ends longitudinally grooved, locking dogs pivotally secured to the runners and being arranged thereon for engagement with the grooves for clamping said members to the runners, said clamping members being off set intermediate their ends and an angle shaped flange secured to each clamping member intermediate the ends of said off set portion and extending inwardly toward the runner for engaging the wheels as and for the purpose specified.

In testimony whereof I affix my signature.

WALDEMAR SUOMINEN.