

Wagon Brake.

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Letters Patent No. 85,151, dated December 22, 1868.

IMPROVED WAGON-BRAKE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that we, GEORGE WESLEY WELSH and GEORGE WYLIE, of Arlington, in the county of Columbia, and State of Wisconsin, have invented a new and improved Wagon-Brake; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to a new and improved automatic brake for wheel-vehicles; and

It consists in the arrangement of the parts of the brake with relation to the wheels, the hounds, and the bolt for attaching the pole to the hounds, as will be hereinafter more fully described.

In the accompanying sheet of drawings—

Figure 1 is an inverted plan of our invention.

Figure 2, a side sectional view of the same, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

A represents an axle, having a wheel, B, fitted loosely on each end.

C C are hounds, between the front ends of which the draught-pole D is secured by a bolt, E, as usual.

These parts being of ordinary construction, do not require an extended description.

The bolt E, of the draught-pole, has secured upon it a rod, G, which is bent in such a form as to have a central pendent projection, *a*, extending below the draught-pole, the rod G being fitted on the bolt E in such a manner that it may turn freely thereon.

To the lower end of the projection *a*, a rod, H, is attached, which extends along, underneath the draught-pole, to nearly the front end of the same, where it is formed or provided with a loop or ring, *b*, which is fitted and allowed to move freely back and forth on the draught-pole.

To the ends of the rod G there are attached arms, I I, which extend back through suitable guides, *c*, to a shaft, J, the latter having a shoe, K, at each end of it, said shoes being at the rear of the wheels B B, and in line with the same.

The shaft J has spiral springs, *d d*, upon it, which springs have a tendency to keep the shoes pressed towards the wheels, the shaft J being allowed to turn in the rear ends of the arms I I.

The holdback straps of the team are attached to the front end of the rod H; and it will be seen from the above description, that when the vehicle is descending an eminence, and the team checked, forward movement of the vehicle will apply the brakes, and the shoes K are below the centres of the wheels, so that the latter will have a tendency, as they rotate, to bind the shoes against them.

In case of backing, however, the shoes will not press against the wheels, the retrograde movement of the latter having a tendency to throw the shoes out from the wheels, as indicated in red.

This very simple arrangement of parts, constituting a self-acting brake, may be applied to almost any of the known forms of wheel-vehicles in use, and at a very moderate expense.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

The arrangement of the bent rod G, having the pendent portion *a*, the arms I I, shaft J, shoes K, spiral springs *d* and rod D, with relation to the bolt E, the hounds and the wheels B, all operating as described, for the purpose specified.

GEORGE WESLEY WELSH.
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Witnesses:

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