





# UNITED STATES PATENT OFFICE.

JOHN W. PATTERSON, OF MADISONVILLE, KENTUCKY.

## AUTOMATIC VEHICLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 644,453, dated February 27, 1900.

Application filed August 7, 1899. Serial No. 726,426. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. PATTERSON, a citizen of the United States, residing at Madisonville, in the county of Hopkins and State of Kentucky, have invented new and useful Improvements in Automatic Vehicle-Brakes, of which the following is a specification.

My invention relates to automatic brakes for vehicles of that class or description in which the brakes are set by the backward pull of the draft-animals in going downhill; and the object of the invention is to provide improved means for locking the brakes when it is not desired to use the same.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a central longitudinal sectional view of so much of the running-gear of an ordinary wagon as is necessary to illustrate my invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detail perspective view of a modified construction.

In the said drawings the reference-numeral 1 designates the front axle, 2 the wheels, and 3 the hounds, of a wagon of any ordinary or suitable construction.

The numeral 4 designates the tongue, connected with the front ends of the hounds, as usual. Secured to the rear ends of the hounds are U-shaped metal brackets 5, provided at the rear open ends with removable pins 6. Supported in these brackets is a longitudinally-movable brake-beam 7, provided at each end with a brake-shoe 8, adapted to engage with the periphery of the wheels. Secured to said brake-beam are two inclined arms 9, made from a single piece of metal bent over at the center, forming a loop 10, with which engages the rear hooked end 12 of a forwardly-extending rod 13, which runs underneath the tongue. At the front end this rod is pivotally connected with a lever 14, pivoted in a slot 15 near the front of the tongue, and with the upper end of which is connected a cross-bar 16, adapted to be connected with the hames or collars of the draft-animals. Pivotally connected with said loop 10 is a rearwardly-extending catch 17, consisting of a metal rod having its rear end turned upwardly and then downwardly, forming an up-

wardly-extending hook 18, adapted to engage with the rear end of the tongue. The end of said rod is then extended forwardly about midway of the length of the rod for the purpose of strengthening the same. Passing through the slot in the tongue, near the rear end thereof, is a vertically-movable pin 19, the lower end of which is provided with a plate 20, on which said catch rests and is supported. The upper end of this pin is formed with a loop 21, which serves as a finger-hold, while intermediate its ends it is formed with a bend or offset 23, which is adapted to engage with the upper side of the tongue when the pin is elevated and hold it in such position.

The operation is as follows: When it is desired that the brakes should be set automatically by the backward pull of the draft-animals in going downhill, the pin 19 is lowered, so that the catch 17 will be disengaged from the end of the tongue. As the animals now pull upon the cross-bar 16 the lever 14 will be pulled backwardly, forcing the rod 13 forwardly and setting the brake. When it is not desired to use the brake, the pin 19 is elevated and turned partly around, so that the bend or offset thereof will engage with the upper side of the tongue, raising the catch, so that its hook 18 will engage with the rear end of the tongue. The rod 13 will now be locked, so that the backward pull of the animals will not operate the brake.

The tongue is to be provided with whiffletrees and singletrees, as usual.

In the modification shown in Fig. 3 I have shown means by which the pin 19 may be elevated from the wagon. In this case the bend 23 is dispensed with, and the pin is connected at its upper end with an arm 24, which is pivoted to a rod 25, pivotally connected with the bolster of the wagon. This rod has its end bent upwardly at a right angle, forming a handle 26 within easy reach of the occupant of the wagon. By turning the said handle the rod can be rotated to raise and lower the pin 19.

Having thus fully described my invention, what I claim is—

1. The automatic vehicle-brake, comprising a brake-beam, bail-like or looped arms connected to said brake-beam, a sliding rod arranged upon the under side of the tongue



and connected to said arms, at their looped ends, a lever pivoted in said tongue and connected to said rod, a catch adapted to engage the rear edge or end of the tongue and connected to the loop of said arms, and means to hold said catch in engagement with the tongues, substantially as specified.

2. The automatic vehicle-brake, comprising a brake-beam, bail-like or looped arms connected to said brake-beam, a sliding rod arranged upon the under side of the tongue and connected to said arms, at their looped ends, a lever pivoted in said tongue and connected to said rod, a catch adapted to engage the rear edge or end of said tongue and connected to the loop of said arms, and a pin with an upper manipulating end and passing through the tongue, and having a plate fixed to its lower end to engage and hold said catch in its tongue-engaging position, substantially as set forth.

3. The automatic vehicle-brake, compris-

ing a brake-beam, bail-like or looped arms connected to said brake-beam, a sliding rod arranged upon the under side of the tongue and connected to said arms, at their looped ends, a lever pivoted in said tongue and connected to said rod, a catch adapted to engage the rear edge or end of said tongue and connected to the loop of said arms, and a pin with an upper manipulating end and passing through the tongue, said pin having a bend or offset adapted to engage the upper side of the tongue and a plate at its lower end to engage and hold said catch in its tongue-engaging position, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN W. PATTERSON.

Witnesses:

WILLIAM J. COX,

FRANCES M. NISBET.