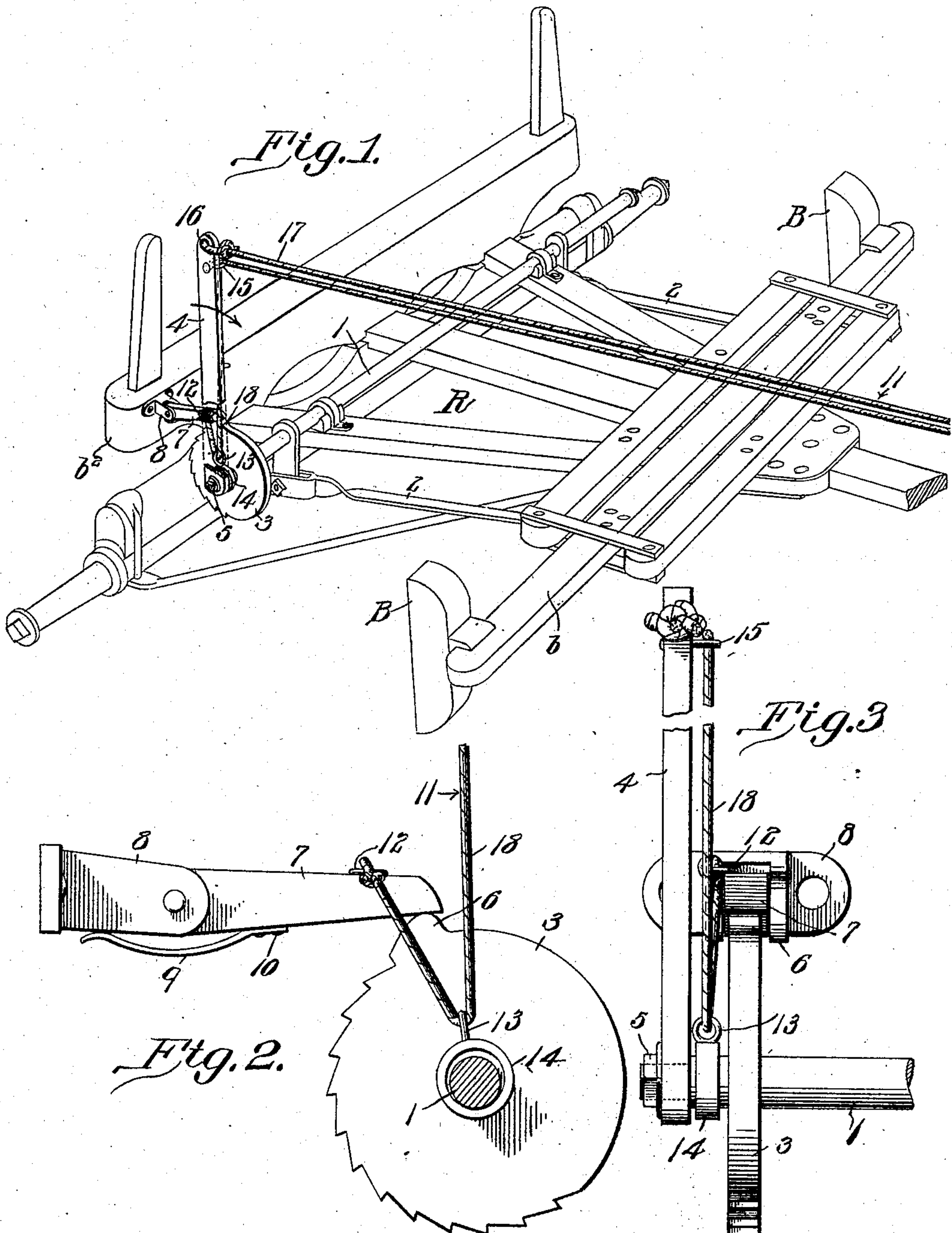


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PATENTED MAR. 27, 1906.

W. F. JENNINGS.
WAGON BRAKE.

APPLICATION FILED SEPT. 9, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM F. JENNINGS, OF HOT SPRINGS, ARKANSAS.

WAGON-BRAKE.

No. 816,099.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed September 9, 1905. Serial No. 277,738.

To all whom it may concern:

Be it known that I, WILLIAM F. JENNINGS, a citizen of the United States, residing at Hot Springs, in the county of Garland and State of Arkansas, have invented a new and useful Wagon-Brake, of which the following is a specification.

This invention relates to wagon-brakes, and more particularly to that class employed upon farm-wagons.

As is well known, the rack-plate that holds the brake-lever in adjusted position is secured to the body of the wagon and when the body is removed from the running-gear, as when the latter is employed in hauling lumber, logs, and the like, there is no means provided whereby the brake-shoes may be locked against the wheels, so that when the driver is holding the brakes applied by hand should the horses become fractious it will necessitate him releasing his hold upon the lever, and thereby free the brake-shoes from the wheels. Moreover, under the arrangement just described the driver is compelled to exert considerable power to hold the shoes against the wheels with sufficient pressure to secure the requisite braking action.

It is the object of the present invention in a novel, simple, and practical manner to effect application of the brakes and to hold them applied without any strain or labor on the part of the driver until such time as it is desired to release them and to effect the release in a manner that will at once be positive and easy.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a wagon-brake as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of the rear portion of the running-gear of a wagon, showing the brake mechanism of the present invention applied thereto. Fig. 2 is a view in side elevation, on an enlarged scale, of a portion of the brake-applying mechanism. Fig. 3 is a view in front elevation.

Referring to the drawings, R designates generally the rear portion of the running-gear of a farm-wagon, and B the brake-shoes, which, as usual, are carried by a beam *b*, that is actuated from the brake-lever rod 1 by

connecting-links 2 in the ordinary manner. Keyed or otherwise rigidly secured to one end of the rod 1 is a ratchet plate or wheel 3, and secured to the terminal of the rod adjacent to the wheel is a lever 4, which is held combined with the rod by squaring the terminal of the latter, providing the lever with a squared opening to engage the parts, and then holding the lever and rod assembled by a nut 5. The ratchet-wheel has only a portion of its periphery toothed and in addition to the teeth is provided with a pawl-rest 6, the perimeter of which is curved, as clearly shown in Fig. 2, for a purpose that will be hereinafter described. Coacting with the ratchet-wheel is a pawl 7, which is pivotally connected with a yoke 8, rigidly secured in a downwardly-inclined position upon the rear bolster *b*².

In order to hold the pawl normally out of the path of the ratchet-teeth, a leaf-spring 9 is provided, one end of which is secured at 10 to the pawl and the other end of which bears against the under side of the yoke, and thereby performs the function designed. As there will always be more or less strain upon the spring when the pawl is not in engagement with the ratchet-teeth, the pawl-rest 6 is provided to obviate this, it being seen that when the ratchet-wheel is in inoperative position, as shown in Figs. 1 and 2, the pawl will bear upon the crest of the pawl-rest, and thus keep the spring practically free from contact with the yoke.

The means for bringing the pawl into engagement with the ratchet-wheel when the brake is applied consists of a rope or other flexible lever-operating member 11, one end of which is secured to a screw-eye or staple 12, carried by the upper side of the pawl, thence passed through an eye 13, carried by a collar 14, loosely mounted on the shaft between the ratchet-wheel 3 and lever 4, and through an eye or keeper 15, carried by the inner side of the upper extremity of the lever, while the other end of the member is secured at 16 to the upper extremity of the lever, the bend of the member 11 being disposed at the front of the wagon and adjacent to the driver.

In the operation of the device when the brakes are to be applied the lead 17 of the member 11 is drawn upon, thereby moving the lever 4 in the direction of the arrow shown in Fig. 1, causing the pawl to leave the pawl-rest and to be supported by the spring 9 over the ratchet-wheel, but out of contact there-

with. Upon further draft being applied to the lead 17 the lead 18 is placed under tension, thereby drawing the pawl down into engagement with the ratchet-teeth and causing it to interlock therewith and retain the ratchet-wheel in its adjusted position when the lead 18 is released. To release the brakes, the lead 17 is drawn upon, thereby leaving the lead 18 loose, whereupon the spring 9 will exert its function and throw the pawl upward out of engagement with the ratchet-wheel. It will then be free to return to its normal position.

It will be seen from the arrangement described that by the employment of the improvements herein defined the brake-shoes can be held positively applied when the body of the wagon is removed, thereby relieving the driver from the labor of holding the brakes applied, which, as pointed out, is necessary with the arrangements now in common use.

Having thus described the invention, what is claimed is—

1. The combination with a brake-beam-operating rod, of a ratchet member rigid therewith, a pawl normally out of engagement with the member, a lever for operating the rod, and means connecting with the pawl and the lever to effect movement of the latter to actuate the ratchet member and independently thereof to bring the pawl into engagement therewith.

2. The combination with a brake-beam-operating rod, of a ratchet member including a pawl-rest, a pawl normally in engagement with the rest, a lever for operating the ratchet member, and means connecting with the pawl and the lever to effect movement of the latter to actuate the ratchet member and

independently thereof to bring the pawl into engagement with the member.

3. The combination with a brake-beam-operating rod, of a ratchet member rigid therewith, a pawl normally out of engagement with the ratchet member, and a flexible operating member, one terminal of which is connected with the pawl and the other terminal with the lever.

4. The combination with a brake-beam-operating rod, of a ratchet member and lever rigid therewith, a yieldingly-supported pawl normally out of engagement with the ratchet member, a collar loosely mounted upon the rod and provided with an eye, and a flexible operating member having one terminal passed through the eye and secured to the pawl and the other terminal secured to the free end of the lever.

5. The combination with a brake-beam-operating rod, of a ratchet member and lever rigid therewith, a yoke supported adjacent to the ratchet member, a pawl pivotally connected with the yoke and carrying a spring to engage the under side thereof to hold the pawl normally out of engagement with the ratchet member, a collar loosely mounted upon the rod and provided with an eye, and a flexible operating member having one terminal passed through the eye and operatively connected with the free end of the pawl and its other terminal secured to the free end of the lever.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM F. JENNINGS.

Witnesses:

CURRY SUDDETH,
PETER NELSON.