O. A. KENYON.
Wagon-Brake.

No. 217,385. Patented July 8, 1879.

Fig. 1.

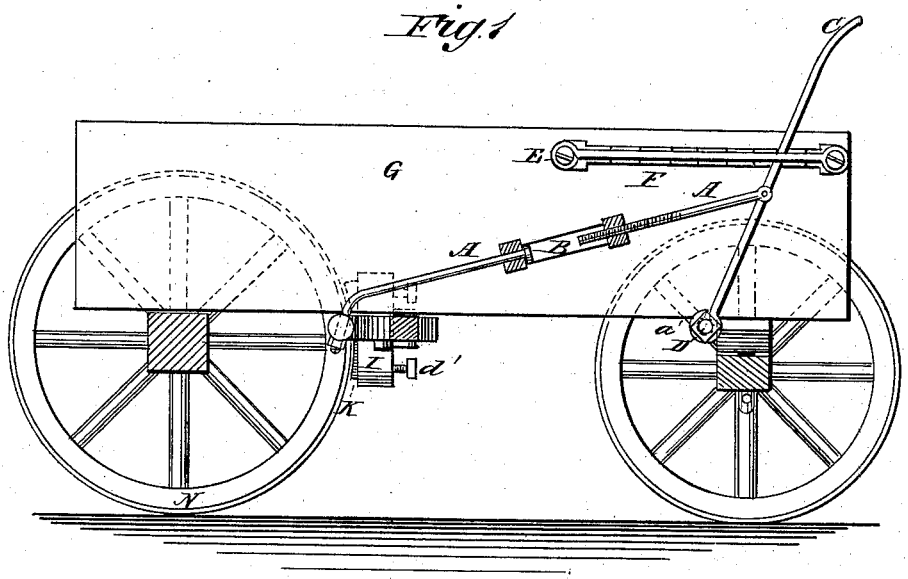


Fig. 2.

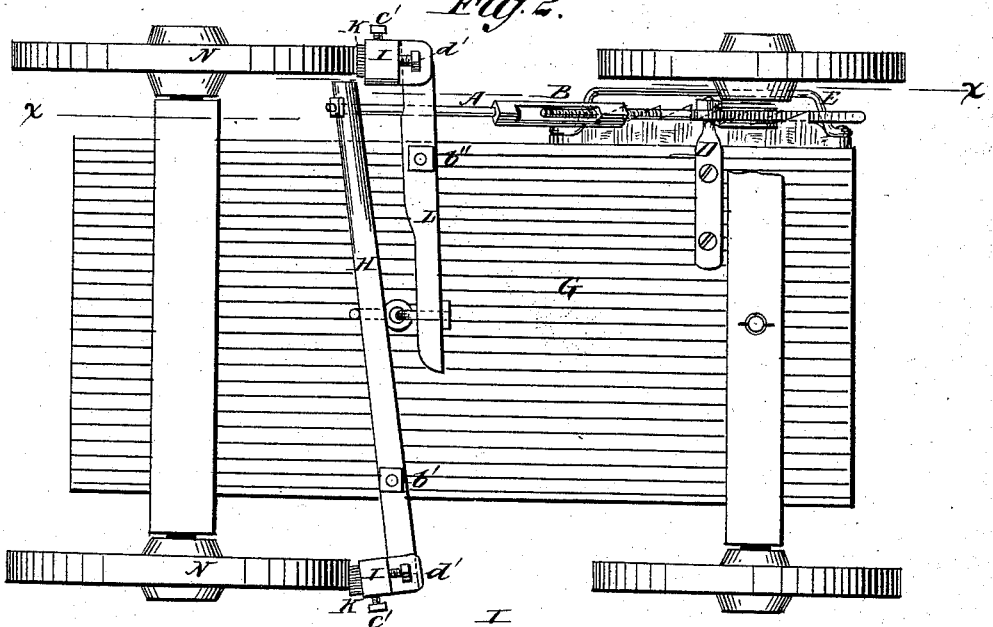
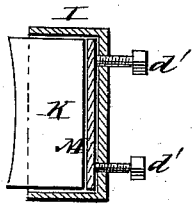


Fig. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

OSCAR A. KENYON, OF McGREGOR, IOWA.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **217,385**, dated July 8, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, OSCAR A. KENYON, of McGregor, in the county of Clayton and State of Iowa, have invented a new and Improved Wagon-Brake, of which the following is a specification.

Figure 1 is a sectional side elevation on line *x x*, Fig. 2, showing brake attached to a wagon. Fig. 2 is a plan of the under side of a wagon, showing brake attachment. Fig. 3 is a sectional view of the brake-shoe.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a more adjustable and efficient brake for wagons and other vehicles than any now in use.

The invention consists of the connecting-rod A, constructed in two parts, which are united by the swivel B. One end of this rod is pivoted to about the center of the arm of the lever C, which is itself pivoted upon a pin, D, that projects laterally from the bottom of the wagon, and is held on the pin by the nut *a'*.

The upper end or handle of the lever extends above the top of the wagon, and is movable within the guide-rod E along the face of the ratchet F, which is secured near the upper edge of a side of the wagon G. This connecting-rod is secured at its lower end to the long arm of the lever H, that is pivoted on pin *b'* in the bottom of the wagon, and that carries on its free end a metallic shoe-box, I, containing a shoe, K, projecting an inch or two beyond the box, that is secured and adjustable within the box by means of the screws *c'* and *d'*, respectively. Linked to this lever H is the long arm of the lever L, that is pivoted at a corresponding point, *b''*, on the wagon-bottom, and that carries on its outer end a similar shoe-box and adjustable shoe. In the bottom of each shoe-box, back of the wooden shoe, is a metallic plate, M, against which the adjusting-screws press.

When the free arm of the lever C is moved forward, the motion transmitted through the connecting-rod to the levers H and L moves their free ends backward, and brings the brake-shoes in contact with the rims of the hind wheels, N N, so as to check their motion.

As brakes are usually made, the shoes soon become so worn and the levers carrying them so much sprung or bent that new shoes frequently have to be furnished, and the connecting-rod cut and shortened, in order to make the brake efficient, and this involves considerable expense and loss of time. To remedy this matter the swivel B is made part of the connecting-rod, by which it may be shortened or lengthened at will.

It is an every-day experience with wagoners and others using brakes that the brake presses more upon one wheel than upon the other, and consequently that there is more wear and strain upon one shoe and its immediate connections than upon the other. This difficulty is obviated by the use of the adjustable shoes, so arranged that the wagoner may at any time and place easily and quickly adjust them so as to secure an equal pressure on both wheels, loosening the screws *c' c'*, and turning the screws *d' d'* against the iron plate M until the shoe is forced out the required distance, when it may be again secured in place by the tightening of the screws *c' c'*.

By these devices the brake is made easily adjustable at several points, and without trouble or expense can always be kept in an effective condition.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The within-described brake, consisting of the connecting-rod A, swivel B, levers C, H, and L, guide-rod E, ratchet F, pin D, shoe-boxes I I, shoes K K, iron plates M M, and screws *c' c'* and *d' d'*, constructed substantially as herein shown and described.

OSCAR ALPHONSE KENYON.

Witnesses:
W. R. KINNARD,
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