

(No Model.)

W. N. SECORD.
WAGON BRAKE.

No. 558,990.

Patented Apr. 28, 1896.

Fig 1

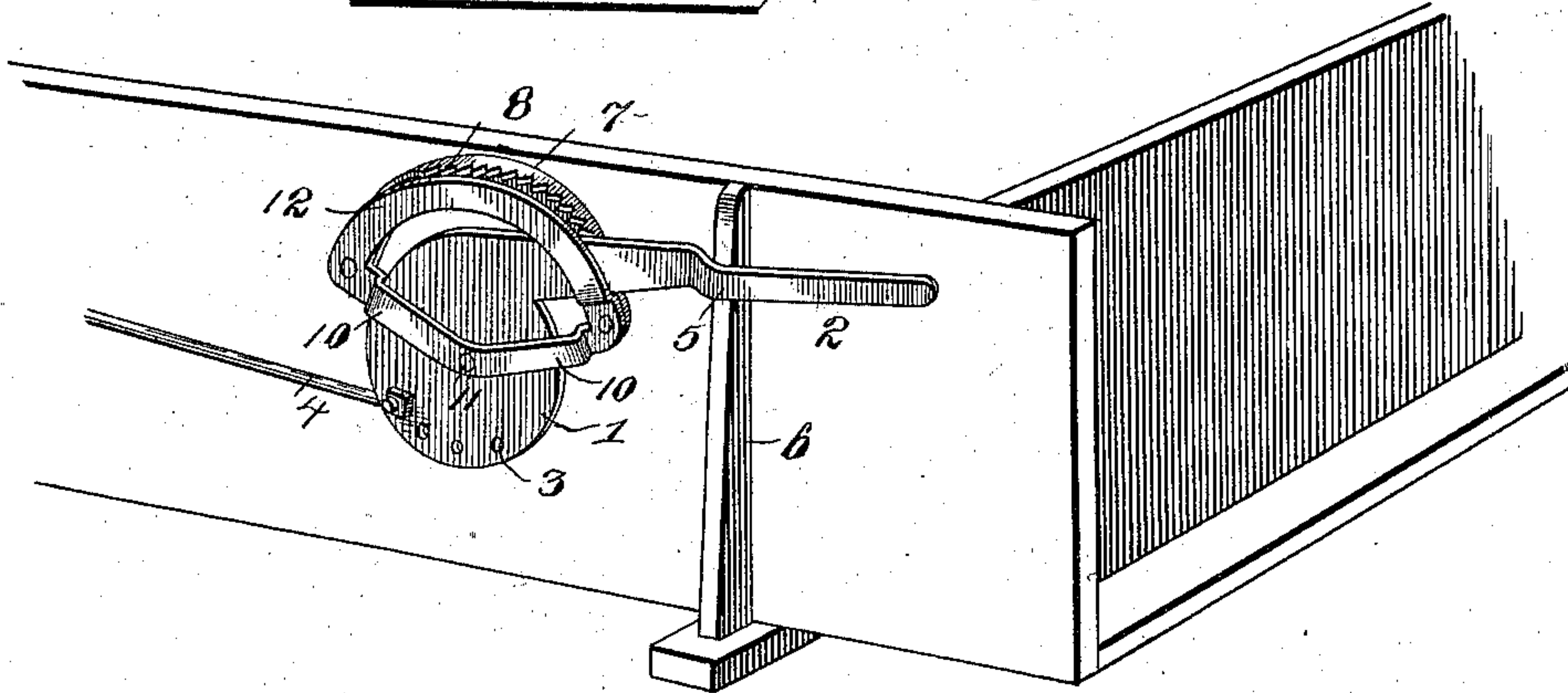


Fig 2

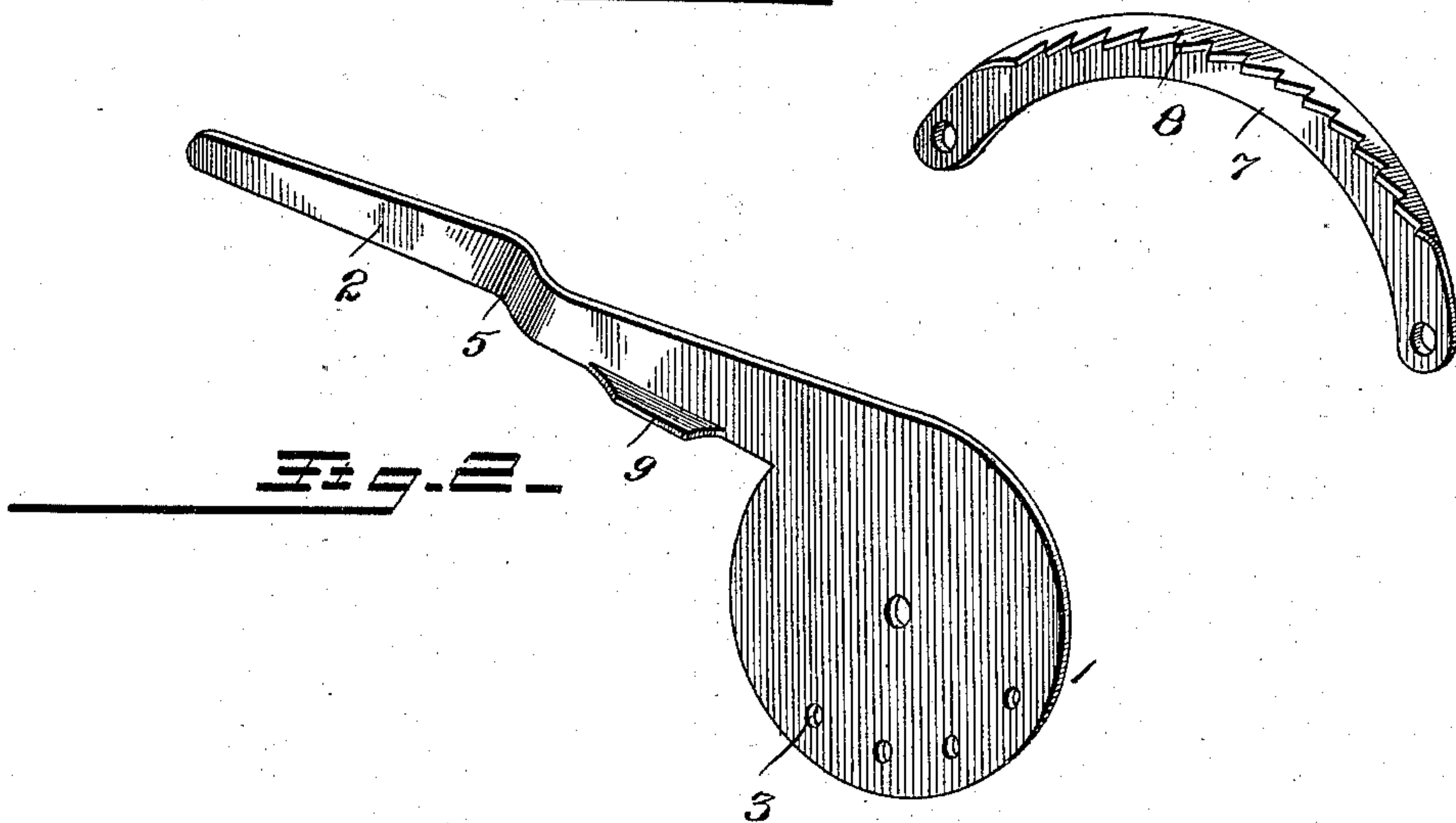


Fig 3

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM N. SECORD, OF UNIONVILLE, MISSOURI, ASSIGNOR OF ONE-HALF
TO JAMES C. WATSON, OF SAME PLACE.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 558,990, dated April 28, 1896.

Application filed September 19, 1895. Serial No. 563,022. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. SECORD, a citizen of the United States, residing at Unionville, in the county of Putnam and State of Missouri, have invented a new and useful Wagon-Brake, of which the following is a specification.

This invention relates to an improvement in brakes, being especially adapted for use on farm-wagons and vehicles of a similar nature.

The object of the present invention is to provide a simple, inexpensive, and convenient brake mechanism which may be mounted upon the side of the wagon-body and in which the operating-lever may be folded or thrown down slightly beneath and in substantially parallel relation to the top edge of the wagon-body, where it will be out of the way when not required in use.

Other objects and advantages will be set forth in the subjoined description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view showing the improved brake mechanism applied to a wagon-body. Fig. 2 is a detail perspective view of the perforated disk and its tangential lever-arm. Fig. 3 is a similar view of the segmental rack.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates a metal disk which is pivotally secured to one side of a wagon-body, adjacent to the front end thereof, and 2 represents a lever-arm disposed tangentially to said disk and extending normally forward and located beneath the plane of the upper edge of the wagon-body, as shown in Fig. 1. This lever-arm 2 may either be formed integrally with the disk 1 or be made separately and united thereto in any usual manner, and affords means for revolving said disk with a power which may be regulated by increasing or diminishing said lever-arm.

The rotary disk 1 is provided adjacent to its periphery with a series of holes 3, into any

one of which may be inserted the bent end of a rod 4, which extends rearwardly and connects pivotally with one of the brake-shoes or brake-beams of the wagon. The forward end of this brake-rod 4 may be secured within one of the perforations in the disk by a nut or other suitable fastening, and by adjusting said end to the proper perforation in the disk slack may be taken up in the brake connections and the shoes held in the desired relation to the wheels. From the foregoing description it will be seen that as the lever-arm 2 is vibrated upward the disk is rotated and the connecting brake-rod 4 drawn forward, thus applying the brakes in a manner that will be readily understood by those familiar with the art to which this invention appertains. The lever-arm 2 is deflected outwardly at point 5 in order to dodge or escape the standard 6 of the wagon-bolster, as shown in Fig. 1.

7 designates a segmental rack, which is secured to the wagon-body at a point above the disk 1 and in concentric relation thereto. This segmental rack is preferably formed from cheap metal and has its outer or upper edge bent or turned outward substantially at right angles and formed with inclined notches or teeth 8, which are adapted to engage with the inwardly-deflected edge 9 of the lever-arm 2.

10 indicates a pair of divergent braces, which at their angle or elbow form a bearing for the pivot 11 of the disk 1. The opposite ends of said braces 10 are perforated to receive bolts or other fastening devices, which also pass through the opposite ends of the rack 7 and secure said parts in fixed relation to the wagon-body.

12 represents a spring-guard, which corresponds in shape and position to the segmental rack 7, extending in horizontal alinement therewith and connecting the opposite end of the divergent braces 10. This spring-guard may be formed either integrally with the braces 10 or separately therefrom and tends to press the lever 2 inward, so as to cause the proper engagement between the deflected edge of said lever and the teeth of the rack 7, while at the same time permitting the disengagement thereof when said lever is forced

outward or pressed away from the wagon-body, thus providing for holding the brakes set against the wheels.

The brake mechanism above described is extremely simple and economical in construction, may be applied to various kinds of wagons and vehicles, affords means for adjusting and taking up slack in the brake connections, and by reason of the tangential disposition of the lever-arm the latter may be thrown downward, so as to occupy a position beneath the plane of the upper edge of the wagon-body, where it will be out of the way when not required in use.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The herein-described brake mechanism, the same comprising a disk rotatably journaled upon a wagon-body or other vehicle, and provided with a circumferential series of perforations adapted to receive and permit the adjustment of one end of a brake-rod, and a lever for vibrating said disk, substantially as set forth.

2. In a brake mechanism, the combination with the brake-lever, and the brake connections, of a toothed segmental rack adapted to engage said lever and hold the same at the desired adjustment, and a combined segmental spring and guard extending in horizontal alinement with said rack and serving by its own resiliency to preserve the engagement between said lever and rack, substantially as described.

3. In a brake mechanism, a revoluble disk having the brake-rod pivotally attached thereto and provided with an operating-lever, in combination with a segmental rack, and a segmental frame comprising a spring-guard arranged in horizontal alinement with said rack, and a pair of integral braces, the said frame being secured to the wagon-body or other point of support and forming a bearing or hanger for the pivot of the disk, substantially as and for the purpose specified.

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

WILLIAM N. SECORD.

Witnesses:

LEE T. ROBISON,
LORENZO JONES.