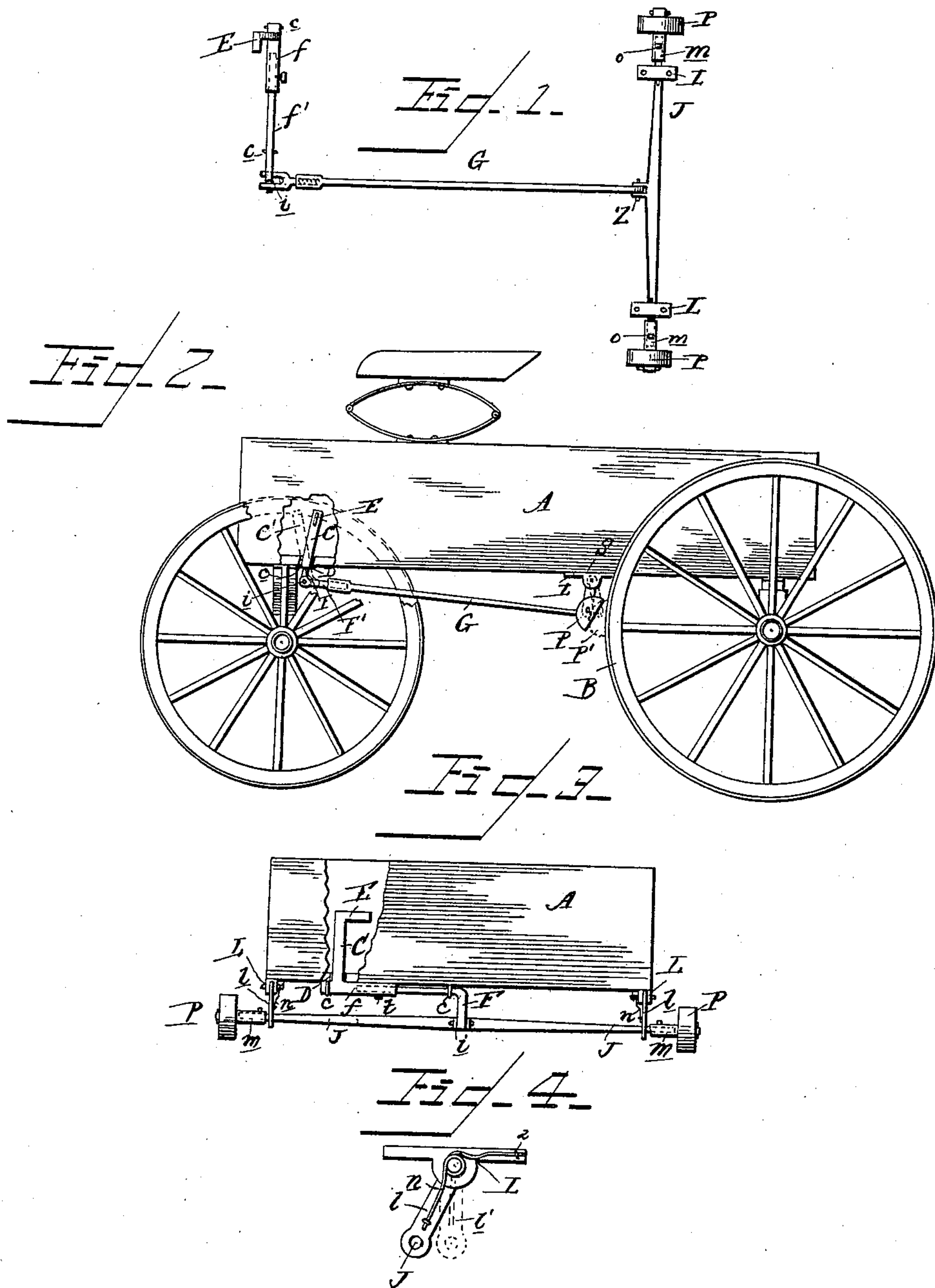


(No Model.)

M. P. PETERSON.
VEHICLE BRAKE.

No. 434,459.

Patented Aug. 19, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

MATS P. PETERSON, OF OSHKOSH, WISCONSIN.

VEHICLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 434,459, dated August 19, 1890.

Application filed October 14, 1889. Serial No. 326,916. (No model.)

To all whom it may concern:

Be it known that I, MATS P. PETERSON, a citizen of the United States, residing at the city of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Vehicle-Brakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in vehicle-brakes; and the objects of my invention are, first, to simplify and cheapen the construction; second, to save power, and, third, to prevent rattling. I attain these objects by the construction and mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view; Fig. 2, a side view as applied to the vehicle, and Fig. 3 a front view of the same. Fig. 4 is a detail view showing the returning spring-hinge.

Similar letters refer to similar parts throughout the several views.

A is the wagon or vehicle box, and B the wheel to which the brake is applied on each side. The foot lever or treadle E is located at the right side within the box. The arm C passes through an opening in the bottom of the box at D, being integral with the socket or sleeve *f*. The opposite arm of the lever F is bent at right angles, extending into the socket *f* and connecting therewith, and being secured at the desired position by the set-screw *t*. This feature of my invention enables me to adapt it to boxes of different widths and adjust the treadle so that it will connect at *i* with the connecting-rod G, running rearward beneath the center of the box, and to attach the treadle or lever to the beams of the box by means of the staples *c c* at the desired position; and by this means I also cheapen and simplify the construction, as the arm C and socket *f* may be cast from malleable iron and the construction rendered less difficult. The connecting-rod G is pivoted to a clip in the center of the brake-rod J, at *z*, Fig. 1. The brake-rod J is attached to the box by

the link *l*, which is pivoted to the clip L, to operate as a hinge in a longitudinal direction. The brake-shoes P P are attached directly to the ends of the rod J, the sleeve or socket *m* upon each shoe inclosing the end of the rod tightly and being held in position by the set-screw *o*. This also furnishes a means of turning the shoe upon the rod so as to adjust it properly to the wheel, and to adjust laterally.

In this manner of connecting the shoes I do away with any crank or intermediate connecting-rod between the brake-rod and the shoe and save loss of power from the springing of the crank or intermediate rod. I also do away with an unsightly feature of brakes heretofore constructed. In my invention the whole mechanism is practically concealed except the shoes and hinges, as the rod G is above the reach close to the box.

When the brake is not applied, the lever is in the position C, and the shoe at P, Fig. 2.

To apply the brake, I push forward on the treadle at E until the lever-arm C is at the dotted position C', the lever turning within the staples *c c*. The opposite arm F is thereby forced to the position F' and the shoe P to the position P' against the wheel. After removing the foot from the treadle the brake is returned to its former position by means of the springs *n n*. These springs are attached one on the inside of each hinge *l*, which hinge is provided with a guard-plate, as shown in Fig. 4, so as to protect the spring from mud and water thrown off by the wheels, at 1, Fig. 4, and extend upward and around the pivot-head *p* and attach to the box at 2. When the brake is applied, the hinge *l* is forced to the position *l'*, thereby compressing the spring, which returns to its former position when the power is removed. These springs are placed on the inside of the hinge and are practically out of sight. Springs as heretofore constructed for this purpose have been situated where they were plainly visible and liable to become coated with mud, not easy to keep clean, and were unsightly in the extreme. These springs, as they provide a constant tension, prevent any rattling at the pivot *p*, where most of the wear is likely to be. Therefore,

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a vehicle-brake, a hinge connecting

the brake-rod with the box, capable of normally holding the brake-shoes off the wheels, and provided with a guard-plate, and a spring upon its inner face for the purposes specified,
5 substantially as shown.

2. In a vehicle-brake, the combination of a brake-rod carrying the brake-shoes, spring *n* and its guard-plate, the connecting-rod extending to the front of the vehicle, a crank-

arm for operating the latter, and laterally- 10 adjustable foot-lever E, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MATS P. PETERSON.

Witnesses:

JAMES H. MERRILL,
ALICE E. JONES.