(No Model.)

T. URIE.

WAGON BRAKE LEVER.

No. 342,719. Patented May 25, 1886.

Fig. 1.

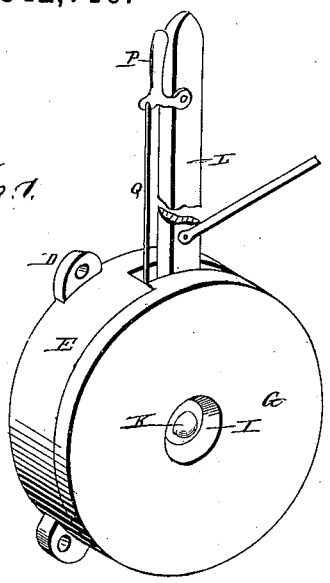

Fig. 2.

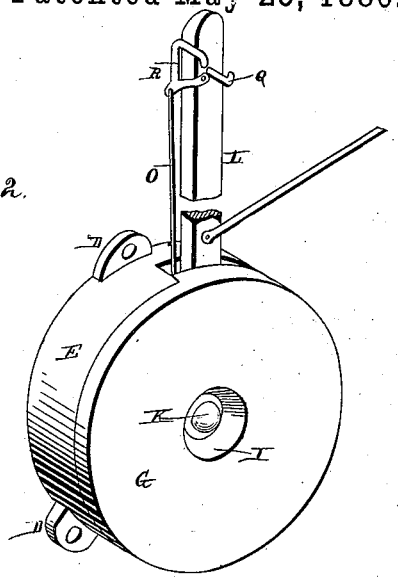

Fig. 3.

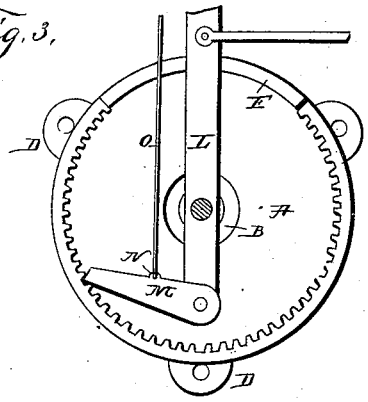

Fig. 4.

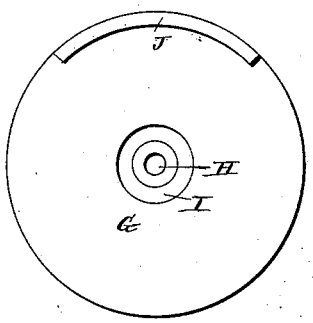

Fig 5

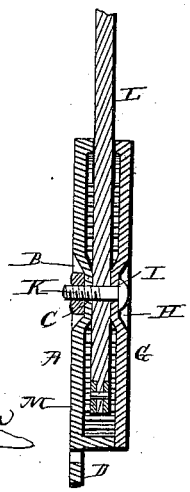

Fig. 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS URIE, OF BOULDER, COLORADO, ASSIGNOR OF ONE-HALF TO HENRY DEITZ, OF SAME PLACE.

WAGON-BRAKE LEVER.

SPECIFICATION forming part of Letters Patent No. 342,719, dated May 25, 1886.

Application filed January 30, 1886. Serial No. 190,364. (No model.)

To all whom it may concern:

Be it known that I, THOMAS URIE, a citizen of the United States, and a resident of Boulder, in the county of Boulder and State of Colorado, have invented certain new and useful Improvements in Wagon-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of as much of a wagon-brake as embodies my invention. Fig. 2 is a similar view of the same, showing the brake adapted to be operated by the foot. Fig. 3 is a side view showing the outer cap removed. Fig. 4 is a view of the outer cap, seen from the inner side. Fig. 5 is a vertical axial section; and Fig. 6 is a perspective detail view of the lower portion of the brake-lever and its pawl.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to wagon-brakes; and it consists in the improved construction and combination of parts of the handle and the means for locking the same, of a wagon-brake, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a circular plate having a central inwardly-bulged portion, B, having a perforation, C, and having a number of lips, D, through which fastening screws or bolts may be inserted into the side of the vehicle-body. The edge of the disk or plate is formed with an outwardly-projecting flange, E, having cogs or ratchet-teeth upon its inner side, and this flange extends around about three-fourths of the periphery of the disk, the upper fourth of the periphery having a narrow flange, F. A circular plate or disk, G, has a central perforation, H, and a central bulge, I, and fits with its edge against the edge of the flange around the other disk, and the upper fourth of the edge of the outer disk or cap is provided with a narrow inwardly-projecting flange, J, which corresponds to the flange at the upper portion of the inner disk, and leaving a narrow slot in the circular casing formed by the two disks.

The disks are secured together by means of a nutted bolt, K, which passes through the central perforations of the disks, and the brake-lever or handle L is pivoted upon this bolt near its lower end. The lower end of this brake-lever has the inner bifurcated end of a pawl, M, pivoted upon it, and the upper side of this pawl is provided with an eye, N, near its center, into which eye the lower hooked end of a thinner rod, O, is inserted, the said rod extending up along the brake-lever and being pivoted at its upper end upon a handle, P, pivoted upon the upper end of the brake-lever, near the handle of the same. The pawl is pivoted to the lower end of the brake-lever in such a manner that the pawl will project upward with its free end and engage the ratchet-teeth or cogs upon the inner side of the flange of the inner disk by its own weight, and by raising the outer end of the pawl by means of the rod attached to it the pawl may be disengaged from the ratchet-teeth, allowing the brake-handle to be turned in either direction.

By reason of the ratchet-teeth extending around over three-fourths of the flange, the brake-lever may be reversed upon the bolt, when the brake may be secured upon the other side of the vehicle, the brake being reversible and adaptable for both sides of the vehicle.

The handle for operating the pawl consists, generally, of an elbow-lever pivoted at the end of its shorter arm to the side of the brake-handle and having the thin pawl-operating rod attached at its bend, so that by drawing the upwardly-projecting handle of the elbow-lever and the handle of the brake-lever together, the rod and the pawl will be raised.

When the brake is to be operated by the foot, the brake lever or handle is formed with an outwardly-projecting foot-rest, Q, and the upper end of the elbow-lever is formed with an outwardly-projecting arm, R, and the foot is rested upon the foot-rest under the projecting arm of the pawl-raising lever. When it is now desired to raise the pawl, the toe of the foot is raised, which will tilt the bent lever and raise the pawl, and the brake-lever may be pushed either way by the foot.

I thus construct a brake which may be applied to either side of a vehicle, and in which the locking device is covered, so that it cannot be obstructed by dirt and rendered inoperative, and the pawl will engage the ratchet teeth in such a manner, being forced to engage them by its own weight, that the pawl is not liable to slip by the shaking and rattling of the vehicle over a rough road.

The brake-lever is held and guided by the faces of the central bulges of the circular disks and by the narrow flanges bordering the slot formed in the upper fourth of the periphery of the casing formed by the disks, so that the brake-lever will not be liable to be bent or to become loosened, as it is guided at its pivotal point or fulcrum and at its upper portion by the flanges.

I am aware that it is not new to construct brake-levers with a pawl at the bottom engaging with a toothed segment, and I do not claim such construction, broadly; but

I claim and desire to secure by Letters Patent of the United States—

The combination of two circular plates, one of which has a flange around its periphery and the other one has a flange around only part of its periphery, said complete flange having teeth around part of its interior and having a recess in the part which is not supplied with teeth, said plates having an inwardly-projecting bulged portion at their centers, and an aperture through said bulged portions, a lever pivotally secured at the center of said plates and projecting through said recess, said lever having a pawl at its bottom and a thumb-lever at its top, and a rod connecting said pawl and said thumb-lever, as shown and described.

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

THOMAS URIE.

Witnesses:
LYMAN E. BALDWIN,
PAT GREEN.