No. 805,493. PATENTED NOV. 28, 1905.

E. L. SMITH.

BRAKE LEVER.

APPLICATION FILED MAY 17, 1905.

Fig. 1.

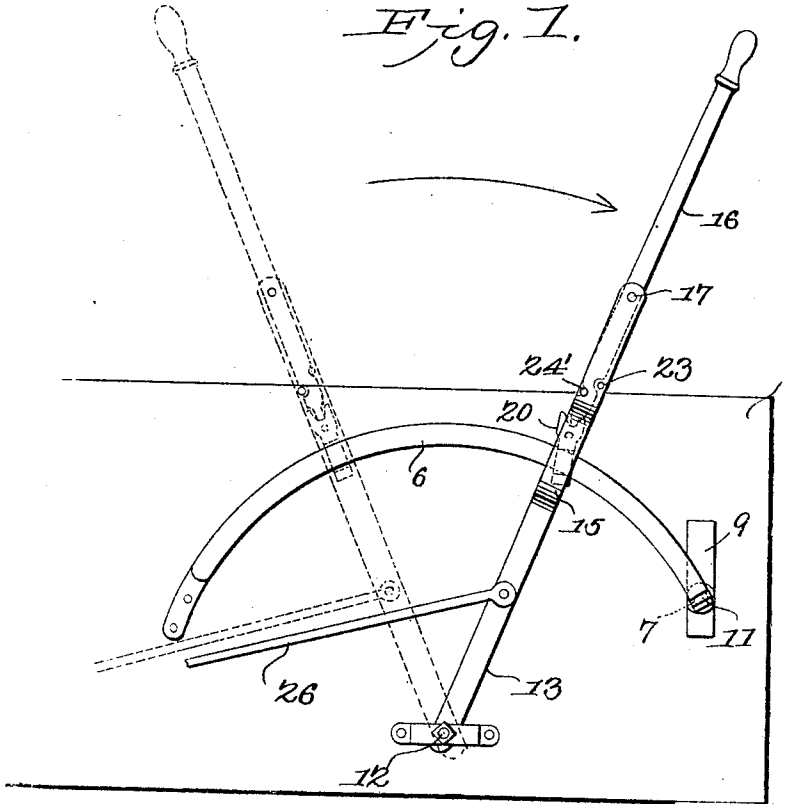


Fig. 2.

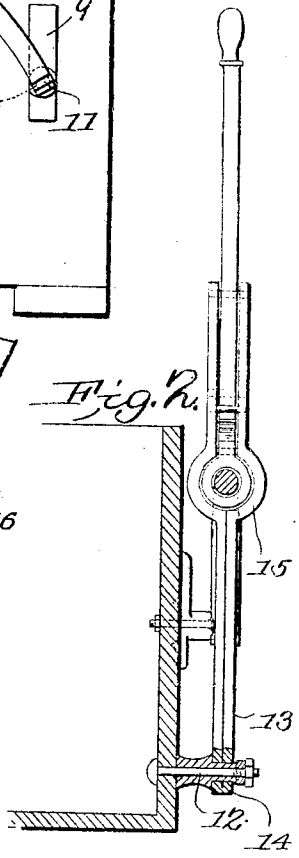


Fig. 4.

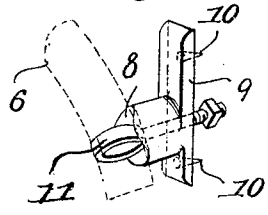


Fig. 3.

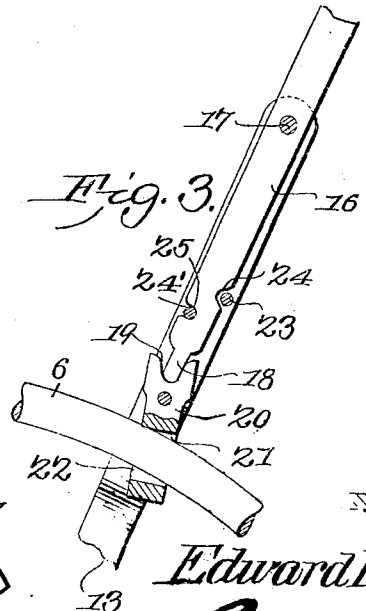
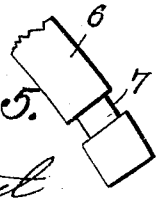


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD LOTAN SMITH, OF BURLINGAME, KANSAS.

BRAKE-LEVER.

No. 805,493. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed May 17, 1905. Serial No. 260,848.

To all whom it may concern:

Be it known that I, EDWARD LOTAN SMITH, a citizen of the United States, residing at Burlingame, in the county of Osage and State of Kansas, have invented a new and useful Brake-Lever, of which the following is a specification.

This invention relates to an improved brake-lever, and has for its object to provide a simple, inexpensive, and efficient device of this character especially designed for use on wagons and similar vehicles for applying the brakes and locking the latter in set position.

A further object of the invention is to provide a brake-lever having an auxiliary lever pivoted thereto and operatively connected with a locking pawl or clutch, the latter being adapted to travel over the face of a segmental bar, so that when the brake-lever is moved to set position the auxiliary lever will cause the pawl or clutch to engage the segmental bar and automatically lock said lever in adjusted position.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a portion of a wagon-body, showing my improved brake-lever applied thereto. Fig. 2 is a transverse sectional view. Fig. 3 is a detail sectional view showing the manner of mounting the pivoted clutch and auxiliary lever. Fig. 4 is a perspective view of the supporting-bracket detached. Fig. 5 is a side elevation of a portion of one end of the segmental bar.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The improved device, which may be used in connection with a wagon, or other vehicle, is shown in the present instance applied to a wagon-body 5 and consists of a segmental bar 6, preferably circular in cross-section, as shown, and having one end thereof bolted or otherwise rigidly secured to the wagon-body and its opposite end grooved, as indicated at 7, and seated in the concave face 8 of a supporting-bracket 9. The bracket 9 is formed with one or more inwardly-extending spurs or lugs 10 for engagement with the wagon-body and is detachably secured to the latter by means of an eyebolt 11, which passes through said bracket and engages the groove in the bar 6, whereby the adjacent end of said bar may be released when desired for the purpose hereinafter explained. Pivotally mounted on a bolt 12 in spaced relation to the side of the wagon-body is the brake-lever 13, the latter being preferably formed of a single piece of metal, an intermediate portion of which is bent on itself, as indicated at 14, to form a pair of arms, the ends of which are bent or curved laterally in opposite directions, as at 15, to embrace the segmental bar 6 and have their terminal portions spaced apart for the reception of an auxiliary brake-lever 16. The auxiliary lever is pivotally supported between the spaced arms of the lever 13, as shown at 17, and the lower end thereof is reduced to form a terminal tongue 18, which engages a socket 19 in the adjacent end of a reversible locking pawl or clutch 20. The pawl or clutch 20 is pivoted between the spaced arms of the lever 13 at a point above the general plane of the bar 6 and is provided with an enlarged head having an opening 21 formed therein for the reception of said bar, the opening in the pawl in practice being slightly greater in diameter than the diameter of the bar, so as to permit said pawl to freely travel over the bar under normal conditions, but to engage and clutch said bar when tilted by engagement with the end of the auxiliary lever.

The locking pawl or clutch is normally maintained in vertical position and the active face 22 thereof out of engagement with the segmental bar by means of a stop-pin 23, which engages a recess 24 in the adjacent longitudinal edge of the auxiliary lever, while the tilting or pivotal movement of said lever, and consequently the tilting movement of the clutch, is regulated by a similar stop-pin 24′, which engages a corresponding recess 25, formed in the opposite longitudinal edge of said lever. It will thus be seen that when the auxiliary lever is grasped in the hand and moved in the direction of the arrow shown in Fig. 1 of the drawings to set the brake the initial pressure exerted on said lever will cause the latter to tilt the clutch, in which position it will ride freely over the surface of the segmental bar until the pressure on said

lever is released, when the backward pull exerted by the brake-rod 26 will cause the active face of the clutch to firmly grip the bar and hold the lever in adjusted position. In releasing the brake the initial backward movement of the auxiliary lever will tilt the same until it engages the stop-pin 23, thereby causing the clutch to assume a vertical position and travel freely over the segmental bar to the released position. (Shown in dotted lines in Fig. 1.)

By having one end of the segmental bar detachably secured to the wagon-box in the manner described the brake-lever and clutch may readily be removed and reversed when worn from constant use or from other causes, while the general construction and arrangement of parts are such that the use of springs, ratchets, and similar devices is entirely dispensed with.

From the foregoing it will be seen that there is provided an extremely simple and efficient device admirably adapted for the attainment of the ends in view.

Having thus described the invention, what is claimed is—

1. In a device of the class described, a segment, a brake-lever coacting therewith, a clutch member pivoted to said lever and embracing the segment, a pivoted auxiliary lever adapted to actuate said clutch and having its longitudinal edges provided with oppositely-disposed recesses, and stop-pins secured to the brake-lever and adapted to engage the recesses for limiting the pivotal movement of said auxiliary lever.

2. In a device of the class described, a segment, a brake-lever coacting therewith, a clutch member pivoted to said lever and having one end thereof provided with a terminal socket and its opposite end formed with an opening adapted to receive the segment, an auxiliary lever pivoted to the brake-lever and provided with a terminal tongue adapted to engage the socket in the clutch member for actuating the latter when the auxiliary lever is tilted, and stop-pins carried by the brake-lever and adapted to engage the auxiliary lever for limiting the pivoted movement of the latter.

3. The combination with a wagon-body, of a supporting-bracket detachably secured thereto and provided with a concaved face, a segment having one end thereof secured to the wagon-body and its opposite end seated in the concave face of the bracket and provided with an annular groove, a brake-lever pivoted to the wagon-body and coacting with the segment, a pivoted clutch member carried by the lever and adapted to engage the segment, an auxiliary lever pivoted to the brake-lever for actuating said clutch member, and an eyebolt passing through the wagon-body and bracket and engaging the annular groove in the segment.

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

EDWARD LOTAN SMITH.

Witnesses:
G. W. PRATT,
A. J. HATTER.