(No Model.)

T. DILGER.

BRAKE LEVER.

No. 384,027. Patented June 5, 1888.

Fig. 1.

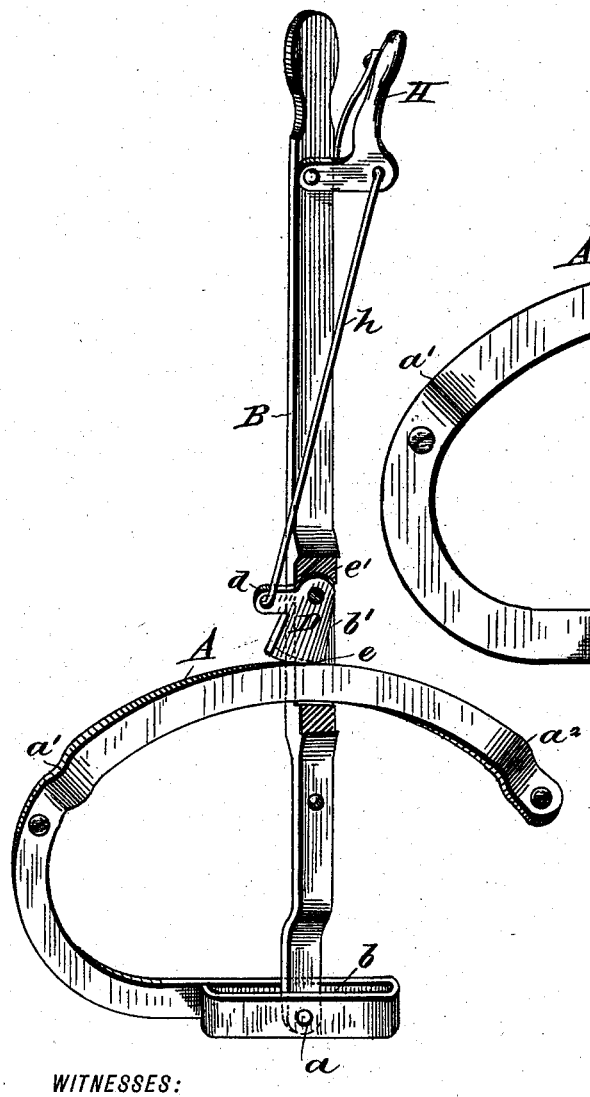
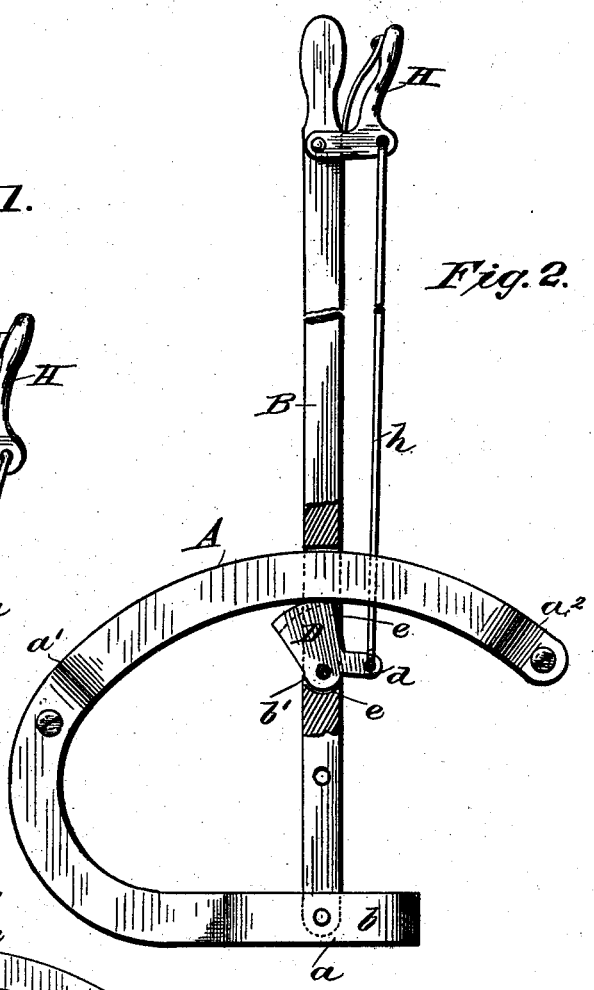


Fig. 2.



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THEODORE DILGER, OF LIBERAL, INDIANA.

BRAKE-LEVER.

SPECIFICATION forming part of Letters Patent No. 384,027, dated June 5, 1888.

Application filed March 21, 1888. Serial No. 267,937. (No model.)

To all whom it may concern:

Be it known that I, THEODORE DILGER, of Liberal, in the county of Spencer and State of Indiana, have invented a new and Improved Clutch for Wagon-Brakes, of which the following is a full, clear, and exact description.

My invention relates to an improved clutch for wagon-brakes, and has for its object to provide a simple and inexpensive device whereby the tension-lever of a brake may be effectively held at any point in the arc of a circle without the use of a ratchet.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the device, partly in section; and Fig. 2 is an elevation of the same, illustrating a slight modification in the arrangement of the parts.

In carrying out the invention I will first describe the construction illustrated in Fig. 1, in which A represents a flat iron bar of segmental shape, the point *a* being the center. The bar A is laterally bent from *a'* to a^2, in order to set outward a distance from the wagon body or box, to which it is adapted for attachment.

From the outwardly-curved point *a'* the rack-bar A is curved downwardly and inwardly in direction of the point *a*, and bent upon itself at the extremity to form a loop, *b*, incircling the aforesaid center point, *a*. At the central point *a*, and within the loop *b*, the lower end of a tension or brake lever, B, is pivoted, which lever at or near the center is provided with a slot, *b'*, through which the upper member of the segmental bar A is made to pass. The lower end of this slot works closely to the under side of the bar A to prevent lateral movement of the latter.

Within the slot *b'* a pawl, D, is loosely pivoted, provided with an arm, *d*, extending at right angles from one side, the object of which will be hereinafter set forth.

The bearing-surface of the pawl is convex and eccentric with the pivotal point, the dotted lines illustrating the arc of a true circle when scribed from the said pivot. The bearing-surface of the pawl is preferably adapted for engagement with the upper or convex edge of the rack-bar, acting as a brace for the lever, engaging the rack first at the point *e*. Thus the pawl will clamp the bar firmly, and may be made to obtain a still firmer bearing the farther the opposite edge is brought in direction of the bar. The eccentric bearing-surface of the pawl also serves another purpose, that of adapting itself to wear and tear, as under such circumstances the bearing-point of the pawl will be shifted nearer the longer end. The end of the pawl, near the pivotal point, is made round, as shown at *e'*, to fit in the end of the slot *b'*, which is of like contour, whereby strain is taken off the pivot-pin when the latter wears or becomes weak.

The lever B may be constructed in various ways to produce the slot or mortise through which the rack-bar passes without departing from the spirit of the invention.

A short spring-actuated angle grip-lever, H, is pivoted to the upper end of the main lever B, which lever is connected with the arm *d* of the pawl by a rod, *h*. If found desirable, as shown in Fig. 2—and in many cases such arrangement is preferable—the pawl may be made to engage the under surface of the rack-bar.

In operation it is only necessary to press the tension-lever forward, whereupon, when the lever is released, the pawl engages the rack-bar automatically. To release the lever, it is only necessary to press the lever forward slightly manipulating the grip-lever at the same time, when the lever can be drawn back.

It is to be understood that the bearing-surface of the pawls may be either milled or smooth.

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

The combination, with the slotted tension or brake having one end wall, *e'*, rounded, and a segmental bar extending through the slot in the lever, of a pawl provided with a round end and an eccentric face, pivoted in the slot of the lever, and a grip-lever and connecting-rod, substantially as shown and described.

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