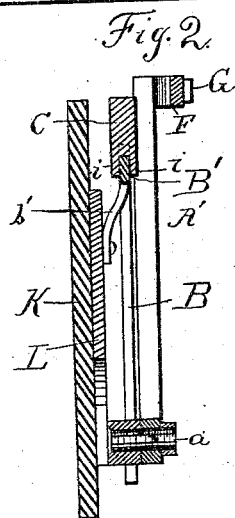
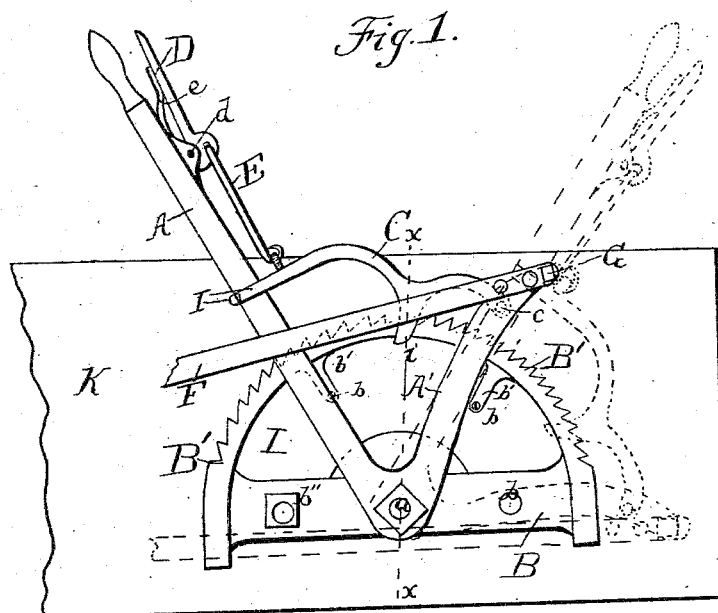


(No Model.)

A. DOUGHERTY.  
WAGON BRAKE LEVER.

No. 301,697.

Patented July 8, 1884.



Witnesses.

*B. W. H. Brown.*

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# UNITED STATES PATENT OFFICE.

ALEXANDER DOUGHERTY, OF VALLONIA, INDIANA.

## WAGON-BRAKE LEVER.

SPECIFICATION forming part of Letters Patent No. 301,697, dated July 8, 1884.

Application filed May 13, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER DOUGHERTY, a citizen of Vallonia, residing at Vallonia, in the county of Jackson and State of Indiana, have invented certain new and useful Improvements in Wagon-Brake Locks; 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 and figures of reference marked thereon, which form a part of this specification.

My invention relates to lever vehicle-brakes, its object being to increase the power of the brake, while it reduces its cost and simplifies its construction.

The nature of my invention in its various parts is fully illustrated in the drawings which accompany and form a part of this specification.

Reference is made to the drawings by letters, similar letters indicating corresponding parts in the different views.

Figure 1 in the drawings represents a portion of the side of a wagon-bed and my invention applied thereto. The solid lines show the brake in normal position, and the dotted lines show it in operative position. Fig. 2 is an enlarged section of the brake, taken on the line *x x* of Fig. 1.

The letter A indicates a hand-lever secured by the fulcrum-pivot screw bolt and nut *a* to the plate B. The lever A is bent at *a*, as shown in drawings, the bent portion A' being pivoted to the rod F, which works the brake-bar. The brake bar and shoes are not shown in the drawings, as I employ any ordinary construction of those parts. On the plate B, and forming a part of it, is the ratchet-arc B'. The screw or bolt holes *b b* in the base-plate B and in the braces *b' b'* on the arc B' are provided for attaching and holding the mechanism to the wagon-bed K. I also use a thin washer-plate, L, properly perforated with screw-holes between the plate and arc B B' and the wagon-bed K, to protect the wooden bed from abrasion, and to furnish a more substantial hold upon the same. I use screws or bolts and nuts *b''* to fasten the brake to the wagon-bed.

Pivoted to the lever A' at *c* is a catch or pawl, C, which is adapted to engage the notches of the arc B'. Forked extensions I I *i i* are furnished the pawl C, which reach beyond the sides, respectively, of the lever A and the arc B', and act as guides to keep the pawl in proper position. A link, E, connects the pawl with the elbow-lever D, pivoted to lever A at *d*, and a spring, *e*, causes the pawl to engage the ratchet B' when in normal position. Additional holes, *g g*, are made in the rod F, for the pivot-bolt G to admit of longitudinal adjustment of the said rod.

To apply the brake, the lever A is pushed forward until the desired tension is obtained, that point being indicated in the drawings by the dotted lines. Here the lever is held by the pawl C until the short lever D is drawn back toward it, which lifts the pawl from the notches B. This is done by grasping both levers A and D in one hand and forcing them together.

The advantages of my brake over others consist in the additional power secured by the construction of the lever A A', and in the fact that the rod F is kept in nearly a horizontal position when in operation. In point of simplicity of construction and cheapness it is more desirable than others having less power. I preferably use iron or steel in constructing my brake. I am aware that the use of levers and ratchets is common in wagon-brakes; but I do not know of any constructed and combined as mine are.

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

In a wagon-brake, the combination of a bent lever, A A', plate B, notched arc B', having the braces *b' b'*, pawl C, having extensions I I *i i*, link E, lever D, spring *e*, rod F, plate L, and pivot bolts and nuts *a, G, b, b''*, and *d*, adapted to enter holes, *b, d*, and G, all constructed and connected substantially as herein set forth.

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

ALEXANDER DOUGHERTY.

Witnesses:

CHAS. A. SALTMARSH,  
JOHN E. HUNSUCKER.