C. F. J. BENTHIN.

WAGON-BRAKE.

No. 192,220. Patented June 19, 1877

Fig. 1

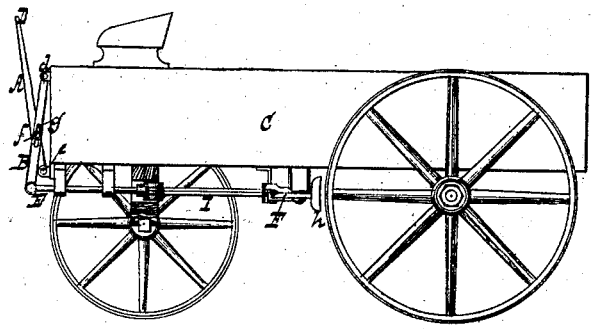


Fig. 3.

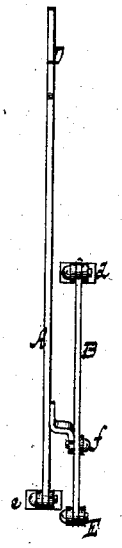


Fig. 4.

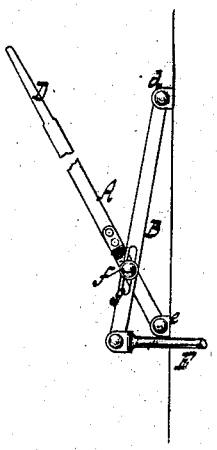
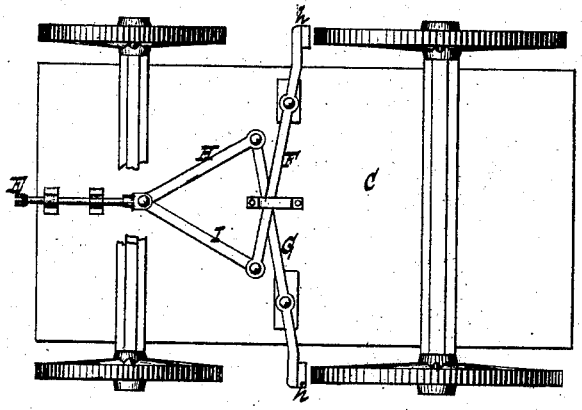


Fig. 2.



Witnesses

Otto Stupland

Robt E. Mieley.

Inventor

Carl F. J. Benthin

by

Van Santvoord & Hauff

his attorneys.

UNITED STATES PATENT OFFICE

CARL F. J. BENTHIN, OF FLUSHING, NEW YORK.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **192,220**, dated June 19, 1877; application filed May 16, 1877.

To all whom it may concern:

Be it known that I, CARL F. J. BENTHIN, of Flushing, in the county of Queens and State of New York, have invented a new and useful Improvement in Wagon-Brakes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal vertical section of a wagon containing my improvement. Fig. 2 is an inverted plan view thereof. Fig. 3 is a front view of the brake-operating mechanism detached. Fig. 4 is a side view thereof.

Similar letters indicate corresponding parts.

This invention relates to a brake mechanism for wheel-vehicles; and consists in a lever having an elongated slot, and pivoted at its upper end, and connected at its lower end to the brake-rod, in combination with a lever pivoted at its lower end, and provided at a point between such pivoted end and its free end with a lateral stud which rests and works within the elongated slot, as will be more fully hereinafter described.

In the drawing, the letters A B designate two levers, which are pivoted at their ends to any suitable part of the body C of a wagon, as at *d e*, being respectively pivoted to the upper and the lower parts of such body, and being made to cross each other so as to extend upward and downward, while they are pivoted together at their point of intersection, as at *f*. The free end of the upwardly-projecting lever A is made to form a handle or treadle, D, while the other lever B is connected at its free end to a rod, E, which is connected to the brake of the wagon. In order to permit of oscillating the levers A B, or, in other words, of moving them from a vertical to an inclined position, or vice versa, it is necessary to allow one of them to have a slight longitudinal movement, and to this end a slot, *g*, is formed in the lever B at the point where it is pivoted to the lever A.

When the lever A is moved outward by its handle or treadle D, the lever B describes a like movement, and thereby the brake-rod E is drawn forward and the brake is applied, while by reversing the said movement the brake is taken off.

In the example shown I have made use of a brake composed of two levers, F G, each carrying a brake-shoe, *h*, and which are connected with the rod E by means of links H I, as clearly shown in Fig. 2, these brake-levers being pivoted near their one end, or at any other suitable point, to the bottom of the wagon-body C, so that the brake-shoes *h* are brought in proximity to the peripheries of the wagon-wheels. The levers F G are actuated and the brake shoes *h* are applied when the rod E is drawn forward, and vice versa when it is moved backward. And by connecting said levers with the rod E by the links H I they are caused to work with great uniformity.

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

In a brake mechanism, the lever B having the elongated slot *g*, and pivoted at its upper, and connected at its lower, end to the brake-rod, in combination with the lever A, pivoted at its lower end, and provided between such pivot and its free end with a stud, *f*, resting in the slot *g* of the lever B, substantially as shown and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 8th day of May, 1877.

CARL F. JACOB BENTHIN. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.