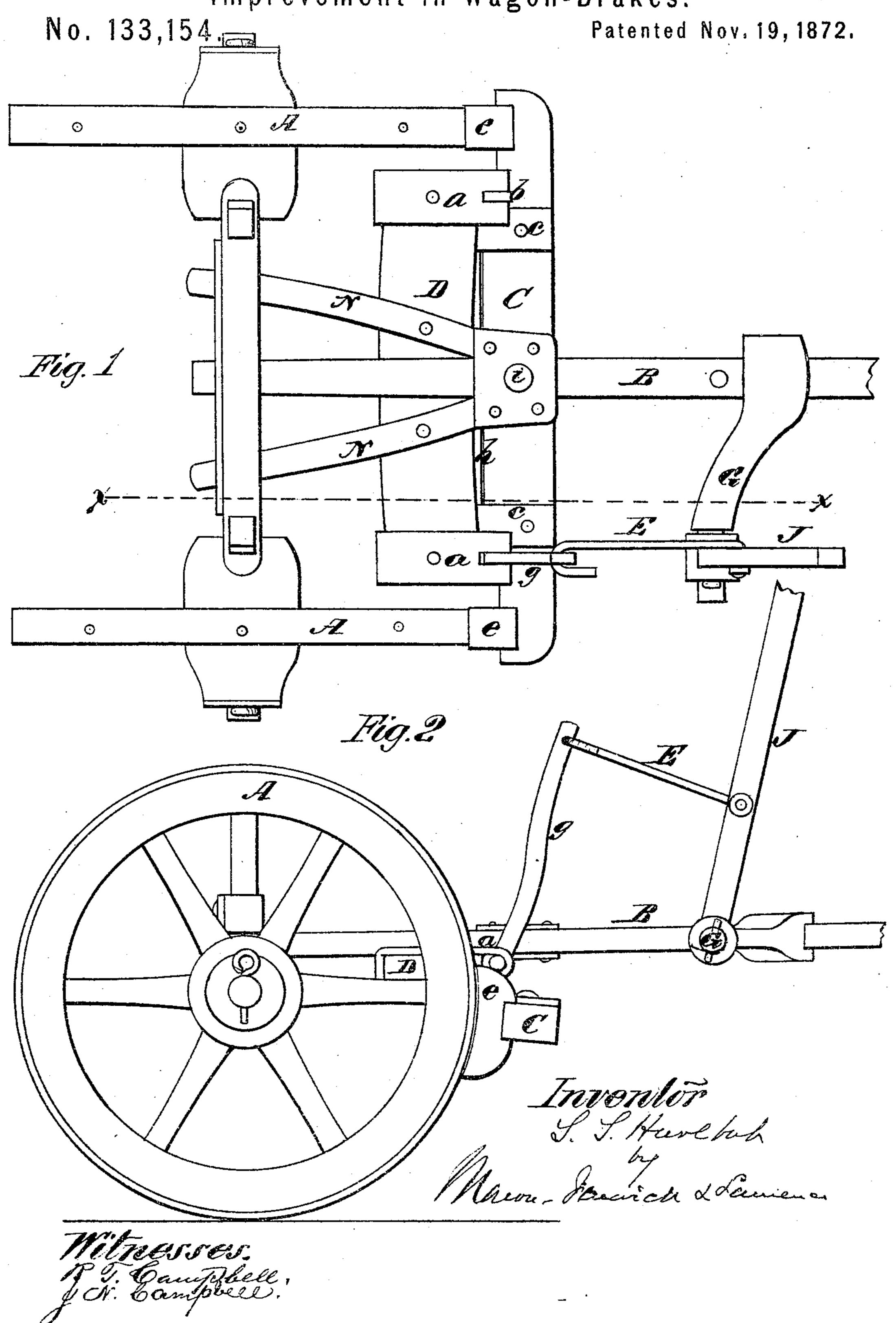
S. S. HURLBUT.

Improvement in Wagon-Brakes.

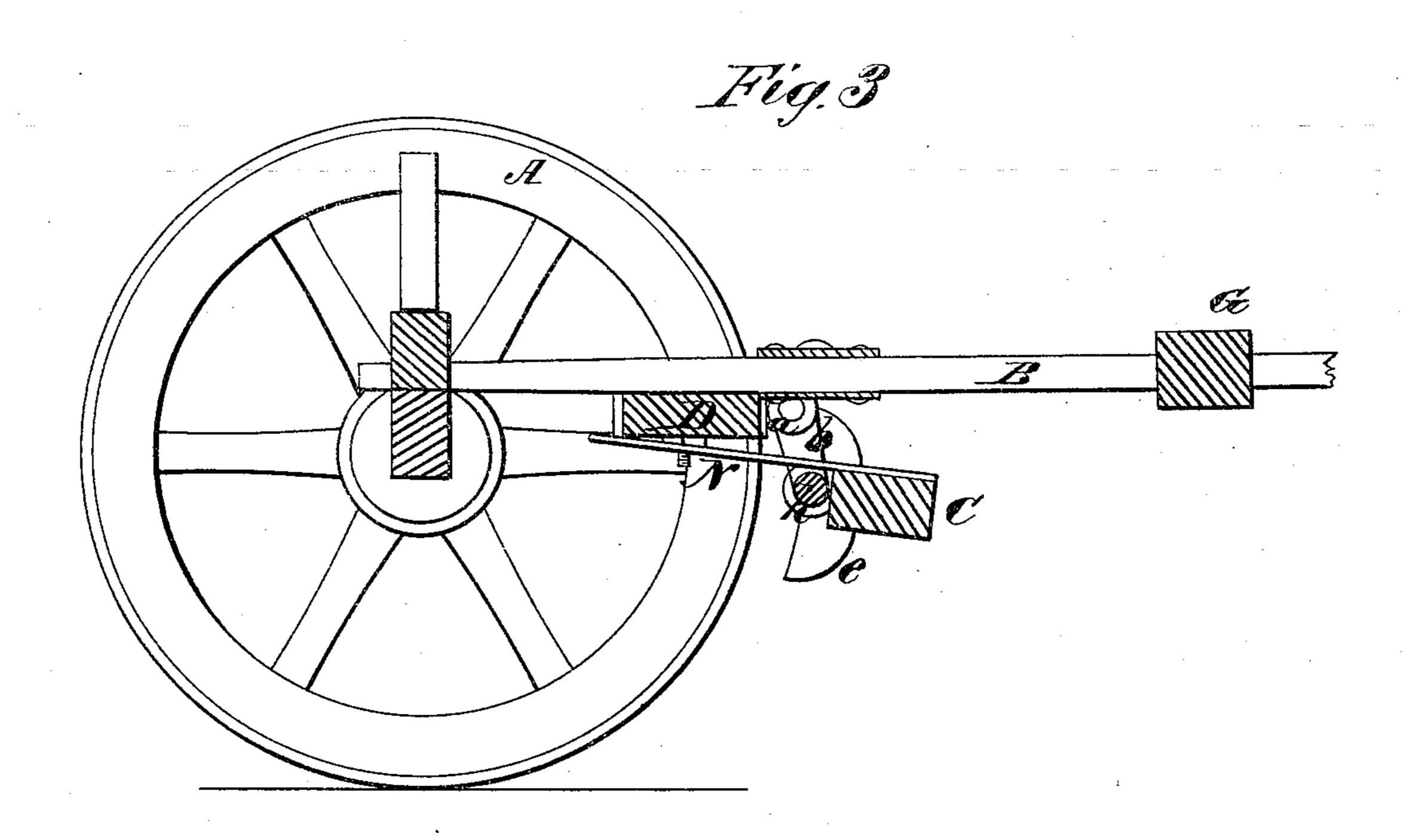


## S. S. HURLBUT.

Improvement in Wagon-Brakes.

No. 133,154.

Patented Nov. 19, 1872.



Wittenson. De Campbell. J. S. Husbout Man. Seevick Damena.

## UNITED STATES PATENT OFFICE.

SIDNEY S. HURLBUT, OF RACINE, WISCONSIN.

## IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 133,154, dated November 19, 1872.

To all whom it may concern:

Be it known that I, SIDNEY S. HURLBUT, of Racine, in the county of Racine and State of Wisconsin, have invented a new and Improved Wagon-Brake; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, Plate 1, is a top view of the rear wheels and part of the reach of a wagon having my improved brake applied. Fig. 2, Plate 1, is a side elevation of the same. Fig. 3, Plate 2, is a section taken longitudinally and vertically through the brake and axle in the plane indicated by dotted line x x, Fig. 1.

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

This invention relates to an improved wagonbrake which is designed for heavy wagons, especially such as are used on the Pacific coast.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawing,  $\Lambda$  A represent the rear wheels of a wagon, and B is the reach, which is connected by a pin, i, to the hounds in the usual well-known manner. D represents a horizontal transverse beam, which is secured at the middle of its length to the hounds, and which has eye-pieces a a secured to it at its extremities, to which cranks, which are formed on the extremities of a rod, h, are pivoted by means of horizontal transverse pins. One of the crank-arms, b, is short, but the other extends above the pivot and forms a lever, g, which is connected by means of a rod, E,

to a hand-lever, J, shown in Figs. 1 and 2. This hand-lever, as shown in the drawing, has its fulcrum on the end of a lateral extension of the reach B, but in practice the rod E will be connected to the lock-lever in a convenient position to the driver while sitting on the wagon, the usual ratchet and pawl being used for locking the brake. The crank-rod h is pivoted to the rear edge of a brake-bar, C, by means of metal straps cc, so that this bar will swing freely forward and backward when moved by the hand-lever J. To the extremities of this bar the brake-shoes ee are rigidly secured. As the brake-bar is pivoted so as to swing freely it is necessary to employ some means for preventing this bar from dropping down, so that the brake-shoes would not act on the wheels. For this purpose I secure to the top of the brake-bar C, at the middle of its length, an arm, N, which bears upward against the cross-bar D, and thus prevents the bar C from tilting.

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

1. The brake-bar C, suspended from a crossbar, D, which is secured to the hounds by means of a cranked rod, h, one of the cranks of which is prolonged to form a lever, g, substantially as described.

2. The arm N, combined with the swinging brake-bar C, substantially in the manner and for the purpose described.

SIDNEY S. HURLBUT.

Witnesses:

SAMUEL G. KNIGHT, JOHN W. TROWBRIDGE.