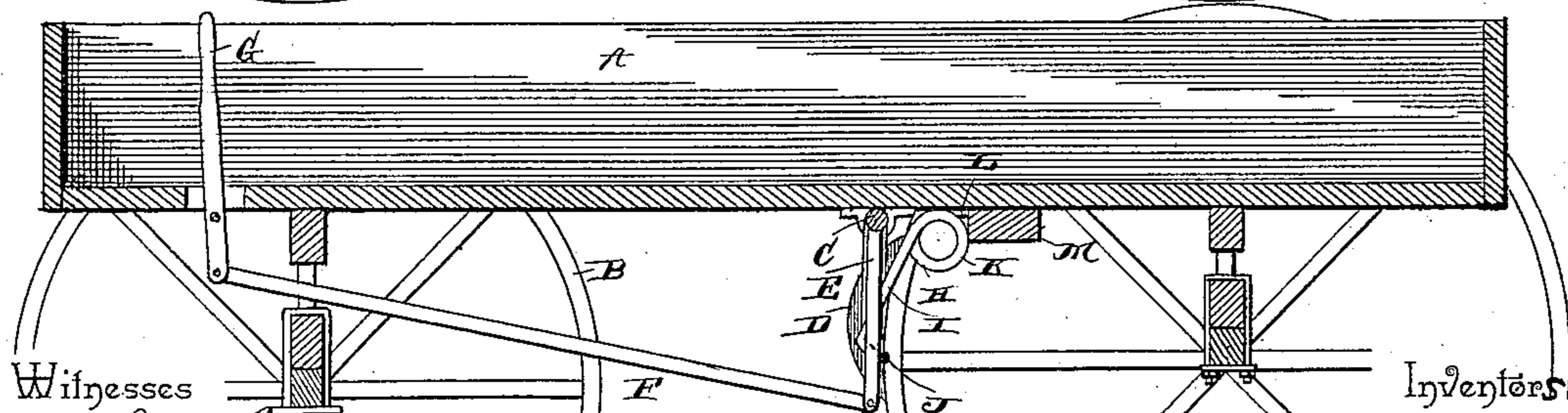
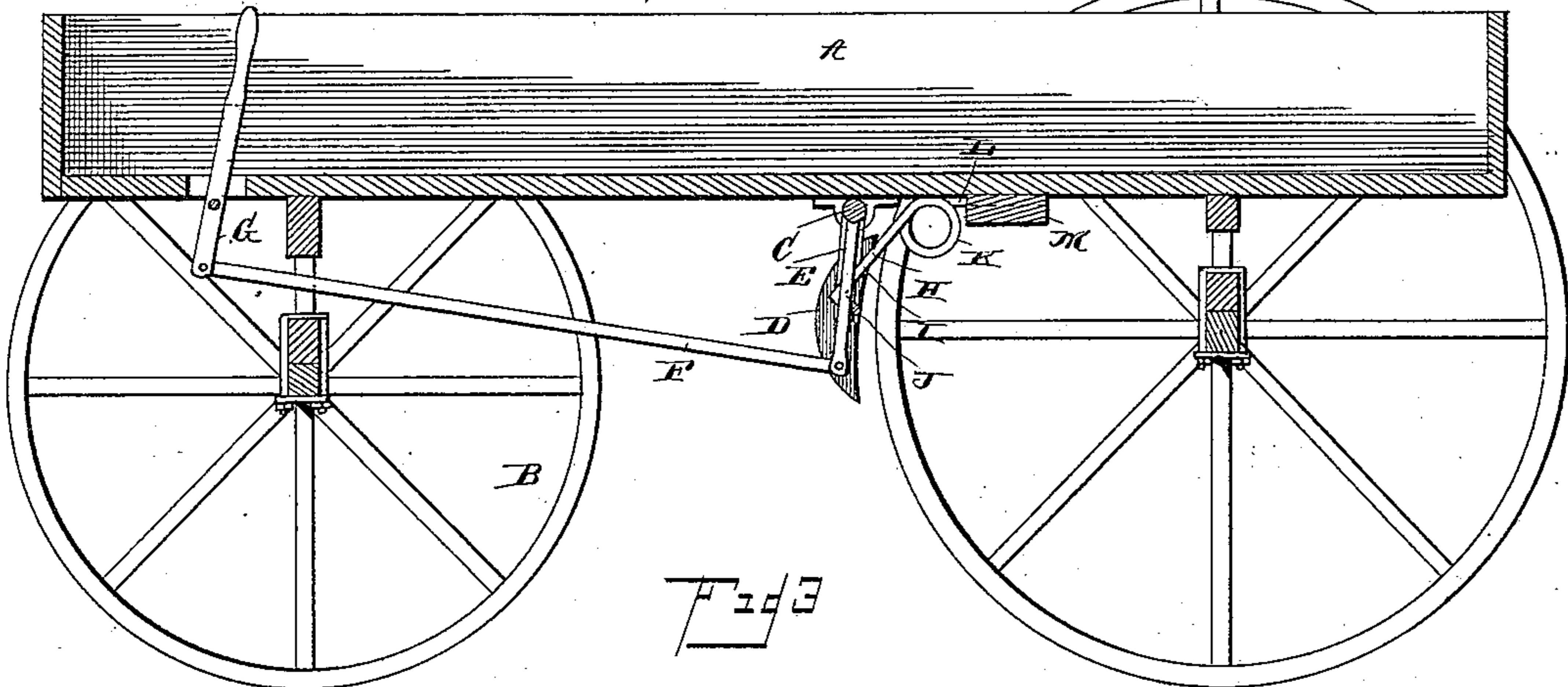
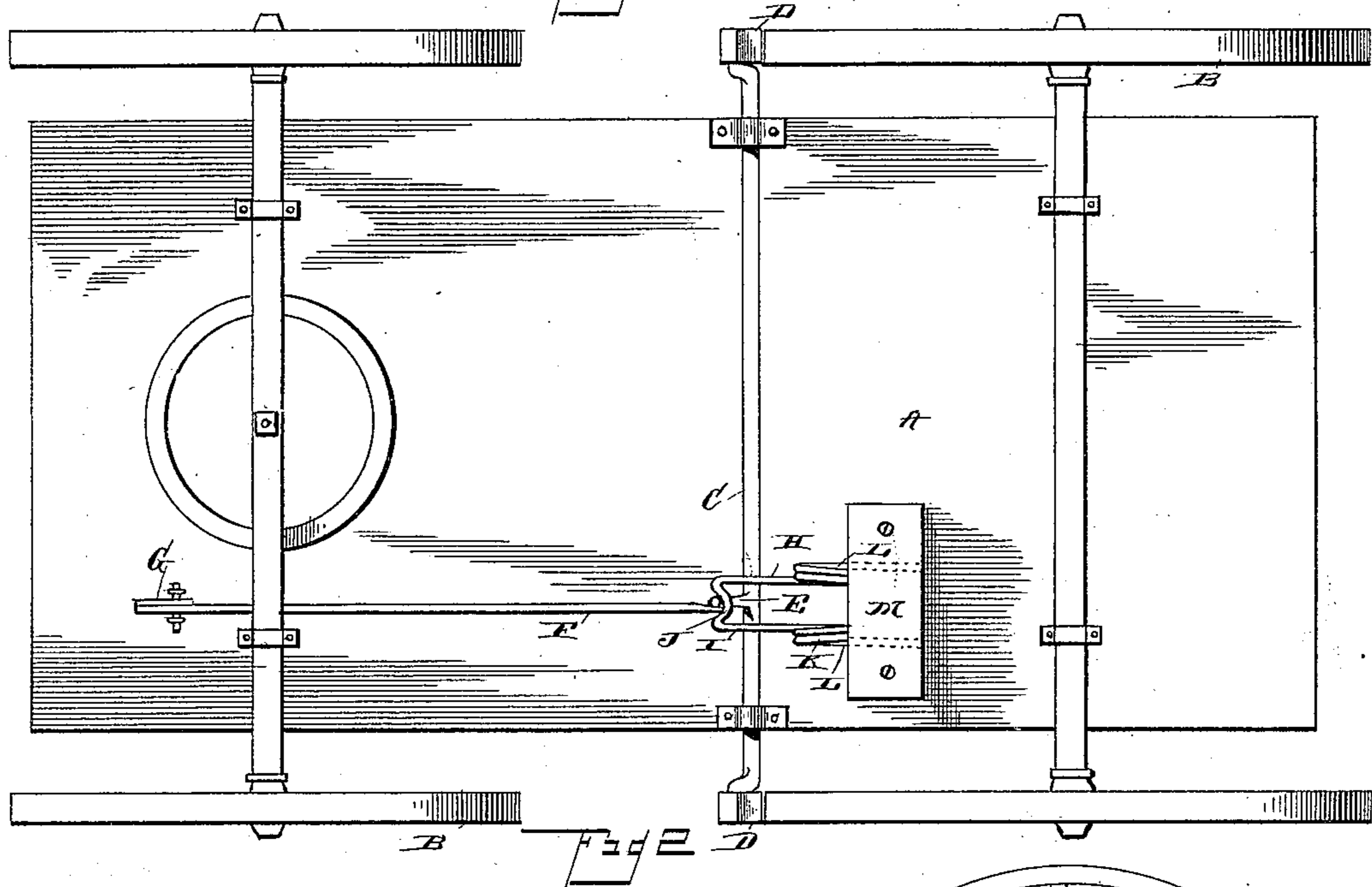


(No Model.)

G. W. PARDEE & G. & R. H. LEAMAN.  
WAGON BRAKE.

No. 419,548.

Patented Jan. 14, 1890.



Witnesses  
*John Muir*

By their Attorneys,

Inventors  
*George W. Pardee*  
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*R. H. Leaman*

*A. W. Bishop,*

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

GEORGE W. PARDEE, GEORGE LEAMAN, AND ROBERT H. LEAMAN, OF  
LOWER LAKE, CALIFORNIA.

## WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 419,548, dated January 14, 1890.

Application filed July 30, 1889. Serial No. 319,218. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE W. PARDEE, GEORGE LEAMAN, and ROBERT H. LEAMAN, citizens of the United States, residing at Lower Lake, in the county of Lake and State of California, have invented a new and useful Wagon-Brake, of which the following is a specification.

Our invention relates to improvements in wagon-brakes, and has for its object the provision of means whereby the brake-shoes will be automatically thrown off the wheels when it is desired to release the brakes.

The invention consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a bottom plan view of a wagon, showing our improvement in position thereon. Fig. 2 is a vertical longitudinal section showing the brake released. Fig. 3 is a similar view showing the brake applied.

The wagon-body A is of the usual or any preferred construction, and the wheels B are mounted thereon in any desired manner. In advance of the rear wheels we mount on the body the rotary shaft C, to the ends of which the brake-shoes D are secured, and at an intermediate point of the length of this shaft we provide the depending crank-arm E, as shown. This crank-arm is connected by a link F with the brake-lever G, which is mounted on the wagon-body within convenient reach of the driver.

In rear of the shaft C and adjacent thereto we secure the spring H, which consists of the central U-shaped portion I, having the shoulder J at its end bearing on the crank-arm E, the coiled portions K at the ends of the arms of the U-shaped portion, and the securing-arms L, extending from said coiled portions and inserted between the bottom of the wagon-body and the clamping-plate M, which is bolted to the said body. The spring is thus remova-

bly secured to the wagon-body, so that in case it should be broken a new one can be substituted therefor very easily and rapidly.

In practice the brake-lever is operated in the usual manner to apply the brake-shoes to the wheel, and the depending U-shaped portion of the spring will thereby be thrown backward against the tension of the coiled portion, as shown most clearly in Fig. 2. Upon releasing the pressure upon the brake-lever the U-shaped portion of the spring will at once be thrown forward, as shown in Fig. 3, thereby removing the brake-shoes from the wheels.

Our device is very simple and efficient, and its advantages are thought to be obvious from the foregoing description, taken in connection with the accompanying drawings. It will be readily understood, of course, that the spring is not confined in its application to the form of brake shown and described, but can be applied to any well-known brake without involving a departure from the principles of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination, with the wagon-body and the rock-shaft carrying the brake-shoes, of the spring acting on the said rock-shaft to throw the brake-shoes from the wheels, and consisting of the central U-shaped portion I, the coiled portions K, and the securing-arms L, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

G. W. PARDEE.  
GEO. LEAMAN.  
R. H. LEAMAN.

Witnesses:

A. PETIT,  
J. A. PETIT.