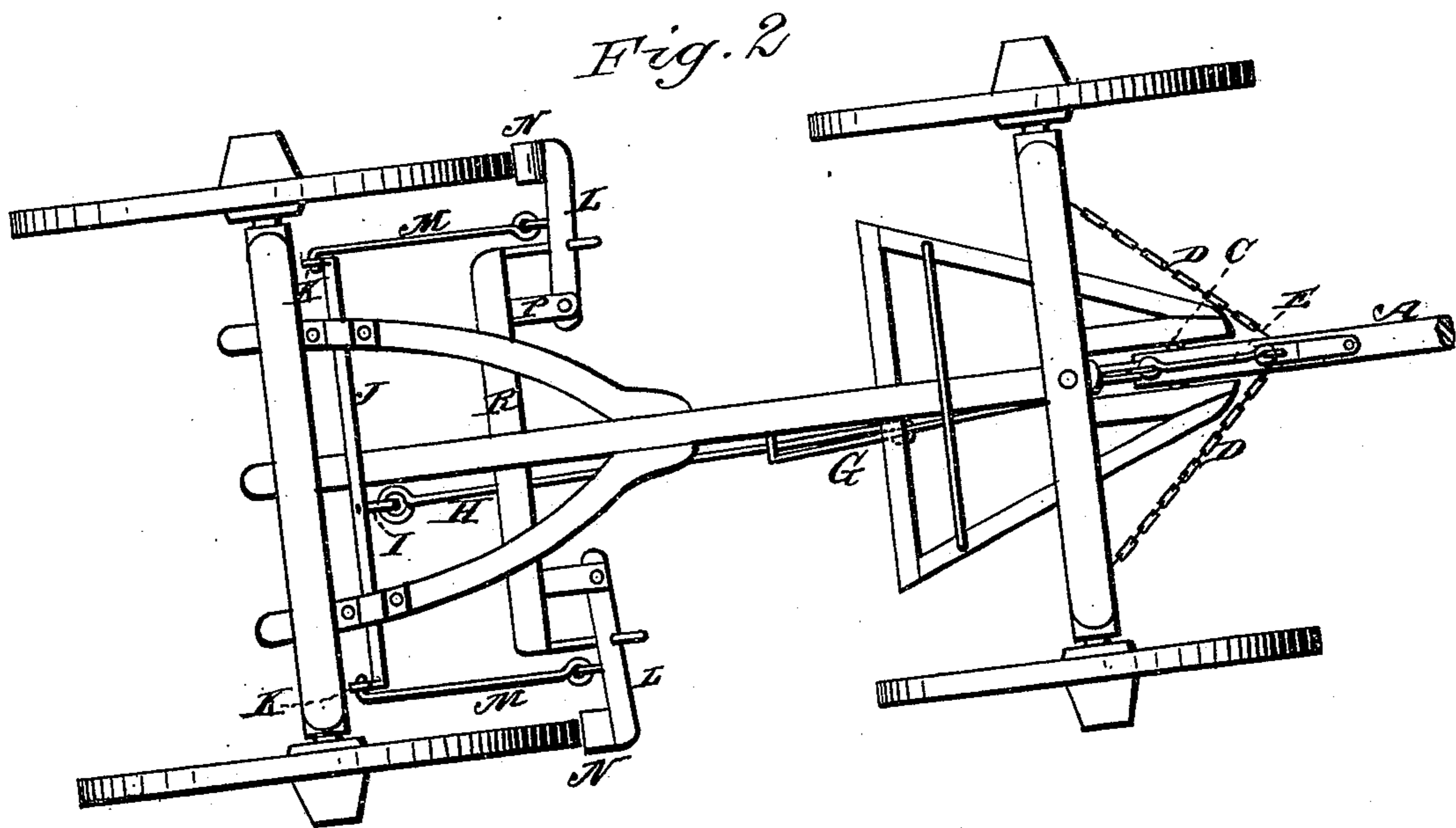
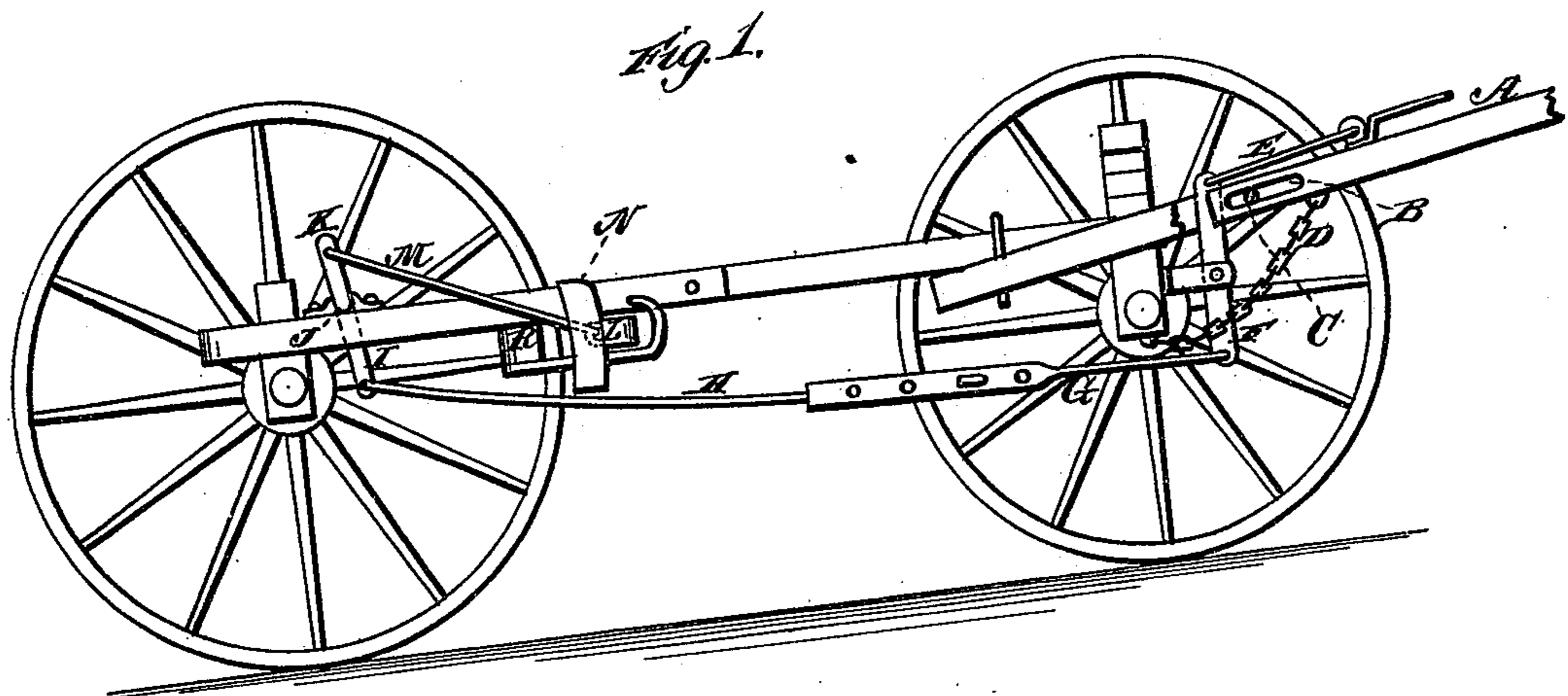


(No Model.)  
 F. D. LADENBERGER & W. V. HAZELTON.  
 Wagon Brake.  
 Patented July 13. 1880.  
 No. 230,027.



WITNESSES  
*Robert Everett*  
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INVENTORS  
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# UNITED STATES PATENT OFFICE.

FREDERICK D. LADENBERGER AND WILLIAM V. HAZELTON, OF GLEN-  
BEULAH, WISCONSIN.

## WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 230,027, dated July 13, 1880.

Application filed May 5, 1880. (No model.)

*To all whom it may concern :*

Be it known that we, FREDERICK D. LADENBERGER and WILLIAM V. HAZELTON, of Glenbeulah, in the county of Sheboygan and State of Wisconsin, have invented certain new and useful Improvements in Wagon-Brakes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of a wagon, showing our brake applied; and Fig. 2 is a plan view of the same.

The nature of our invention relates to an automatic wagon-brake, the distinguishing features of which will be set forth in the following description, and particularly pointed out in the claim.

The tongue A is formed with a slot, B, and the hound-bolt C is passed through this slot, so that the tongue will be adapted to have a forward and back movement. The forward movement of the tongue is limited by the chains D D, which are secured to the tongue and to the front axle. The tongue is connected by a rod, E, with the upper end of a lever, F, which is pivoted in suitable bearings secured to the front axle.

The lower end of the lever F connects with a rod, G, which extends rearwardly beneath the reach, and is adjustably connected with a rod, H, running back to a centrally-located crank, I, of a rock-shaft, J. This rock-shaft is held by straps upon the rear hounds in front of the rear bolster, as herein illustrated.

The end cranks, K K, of the rock-shaft are connected with the brake-arms L L by rods M M, which afford the required support for the brakes N N.

The brake-arms are pivoted at their inner ends in clevises P P, which are swiveled to a bar, R, bolted to the rear hounds. This admits of the brake-arms being moved either in a horizontal or a vertical plane, as may be required in backing the wagon. In backing the wagon the brakes, which will be thrown back upon the rear wheels, will be automatically raised away from the wheels by frictional contact, thus allowing the wagon to back readily.

The adjustable connection between the rods G and H allows the wagon to be shortened or lengthened for different kinds of work, as is frequently done in wagons.

What we claim, and desire to secure by Letters Patent, is—

In a wagon-brake, the tongue A, slotted at B to slide upon the hound-bolt C, and provided with the rod E, in combination with the pivoted lever F, rods G and H, and the rock-shaft J, having cranks I and K, the latter being connected with the pivoted brake-arms L by rods M, and the swiveled clevises P, working in the bar R, bolted to the rear hounds, substantially as and for the purposes set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

FREDERICK D. LADENBERGER.  
WILLIAM V. HAZELTON.

Witnesses:

M. METZGER,  
G. BAUERNFEIND.