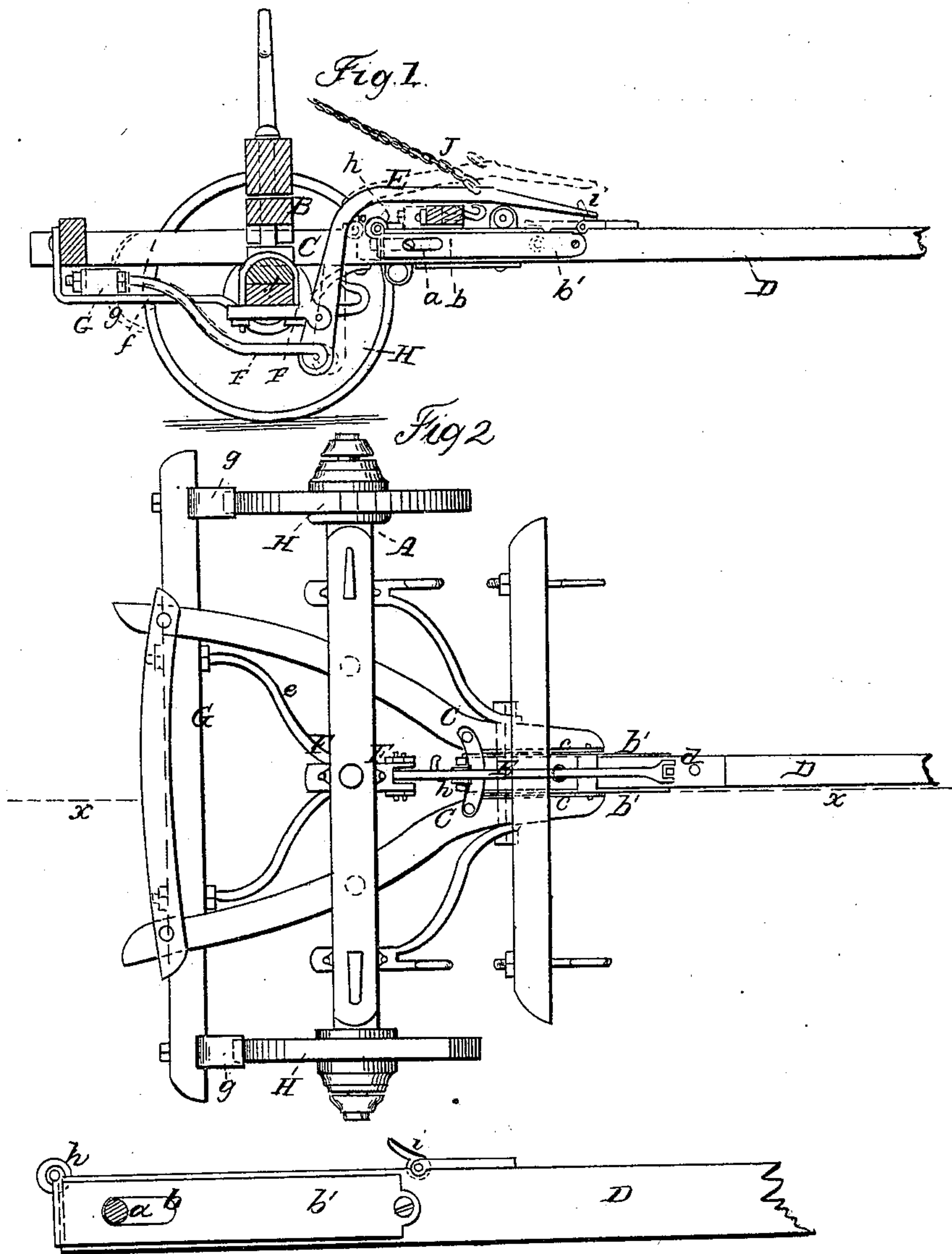


H. W. NORVILLE.

Wagon-Brake.

No. 29,299.

Patented July 24, 1860.



Witnesses

J. W. Coombs  
R. S. Spencer

Inventor

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Attys

# UNITED STATES PATENT OFFICE.

H. W. NORVILLE, OF LIVINGSTON, ALABAMA.

## WAGON-BRAKE.

Specification of Letters Patent No. 29,299, dated July 24, 1860.

*To all whom it may concern:*

Be it known that I, H. W. NORVILLE, of Livingston, in the county of Sumter and State of Alabama, have invented a new and Improved Brake for Wheel-Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional view of the front part of the running gear of a vehicle, with my invention applied to it taken in the line *x, x*, Fig. 2. Fig. 2, a plan or top view of the same. Fig. 3, a detached side view of the draft pole.

This invention relates to an improvement in that class of brakes which are termed self-acting being connected with the draft-pole in such a way as to be acted upon by the momentum or gravity of the vehicle, or the backing of the team.

The object of the within described invention, is to obtain a simple brake of the above class and at the same time one that will be under the complete control of the driver, so that it may be rendered operative or inoperative when desired, and also rendered capable of being actuated manually by the driver, when necessary, and at such times when it cannot operate automatically.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents the front axle of a vehicle, B, its bolster, C, hounds and D, the draft pole fitted between them, and allowed a certain degree of longitudinal play in consequence of the bolt *a*, which passes through the hounds passing through an oblong slot *b*, in the draft pole, as shown clearly in Fig. 1. Each side of the draft pole at its back part is provided with a metal plate *b'*, and the inner sides of the hounds C, is also provided with metal plates *c*. The metal plates prevent abrasion and insure an easy movement of the draft pole between the hounds.

E, is a bent lever which has its fulcrum in a metal bar F, secured centrally to the bottom of the axle A. This lever projects upward between the back parts of the hounds C, and extends forward over the draft pole and is provided with a small fork or notch *d*, shown clearly in Fig. 2. To the lower

end of the lever E, there is attached a forked rod F, the prongs or branches *e, e*, of which are attached to a brake bar G, which is allowed to slide between horizontal bars *f, f*, attached to axle A, and the back parts of the hounds C. To each end of the brake bar G, there is attached a shoe *g*, said shoes being directly opposite the wheels H, H, of the axle A.

To the back end of the draft pole D, a friction roller *h*, is attached and to the draft pole D, at a short distance in front of the double tree I, there is a projection *i*, the use of which will be presently shown. To the lever E near its front end a cord or chain J is attached.

The operation is as follows: As the implement is drawn along the brake is applied by suddenly checking the team, the momentum of the vehicle on a level road causing the lever E, above its fulcrum in F, to strike the back end of the draft pole D, and thereby actuate the brake. In descending hills the gravity of the vehicle effects the same result. In case it is necessary at any time to back the vehicle the front end of lever E is allowed to catch behind the projection *i*. This of course renders the brake inoperative, and in case of the horses taking fright and running away so as to preclude the automatic operation of the brake the driver by pulling cord J, will actuate the brake. Thus it will be seen that a simple and efficient self-acting brake is obtained and one that may at any time when necessary be actuated manually.

I am aware that many brakes have been devised in connection with a movable draft-pole so as to become self operating, but so far as I am aware none have been so arranged as to admit of being operated manually when necessary. I do not claim therefore the employment or use of a self-operating brake irrespective of the arrangement herein shown and described; but

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

The combination of the draft pole D, and the lever E, the latter being connected with the brake bar G, and all arranged to operate as and for the purpose set forth.

H. W. NORVILLE.

Witnesses:

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