

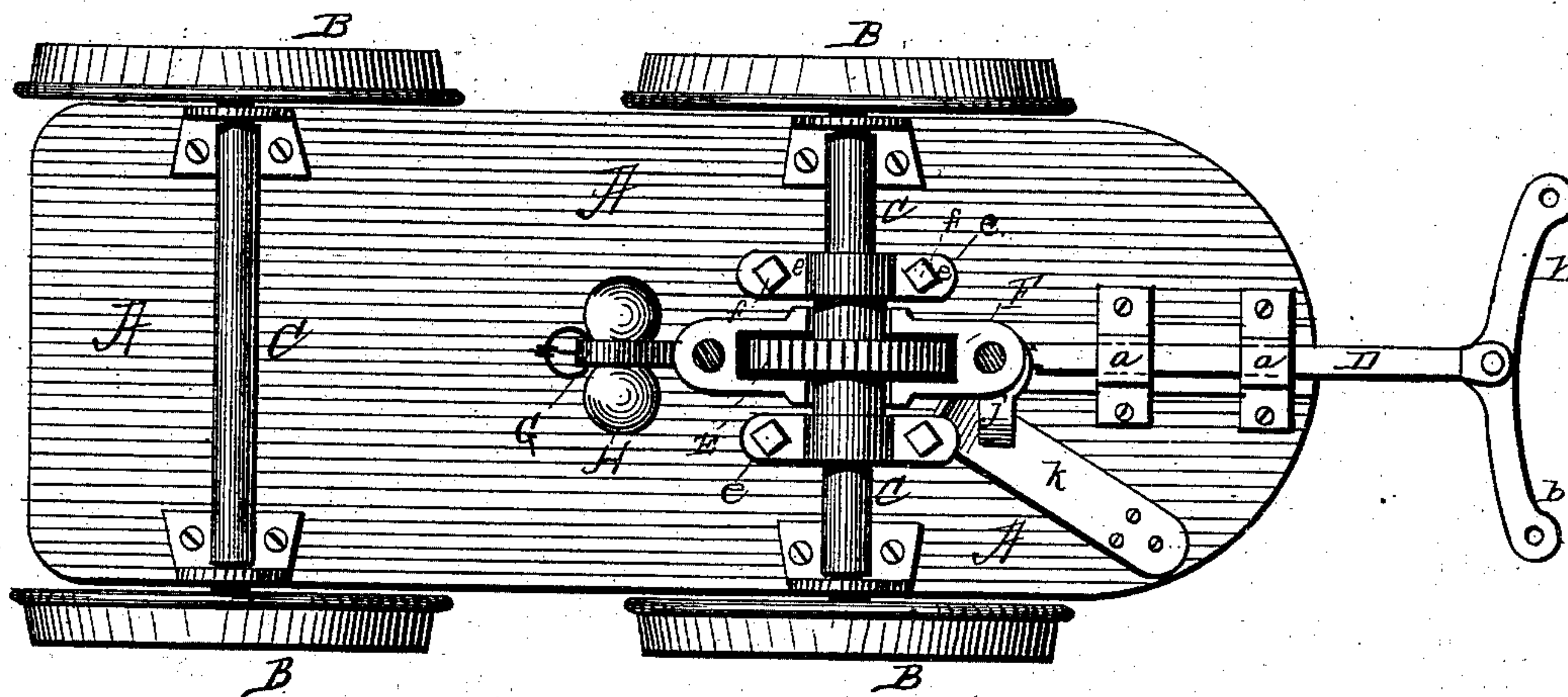
(No Model.)

F. DAWSON.  
Car Starter.

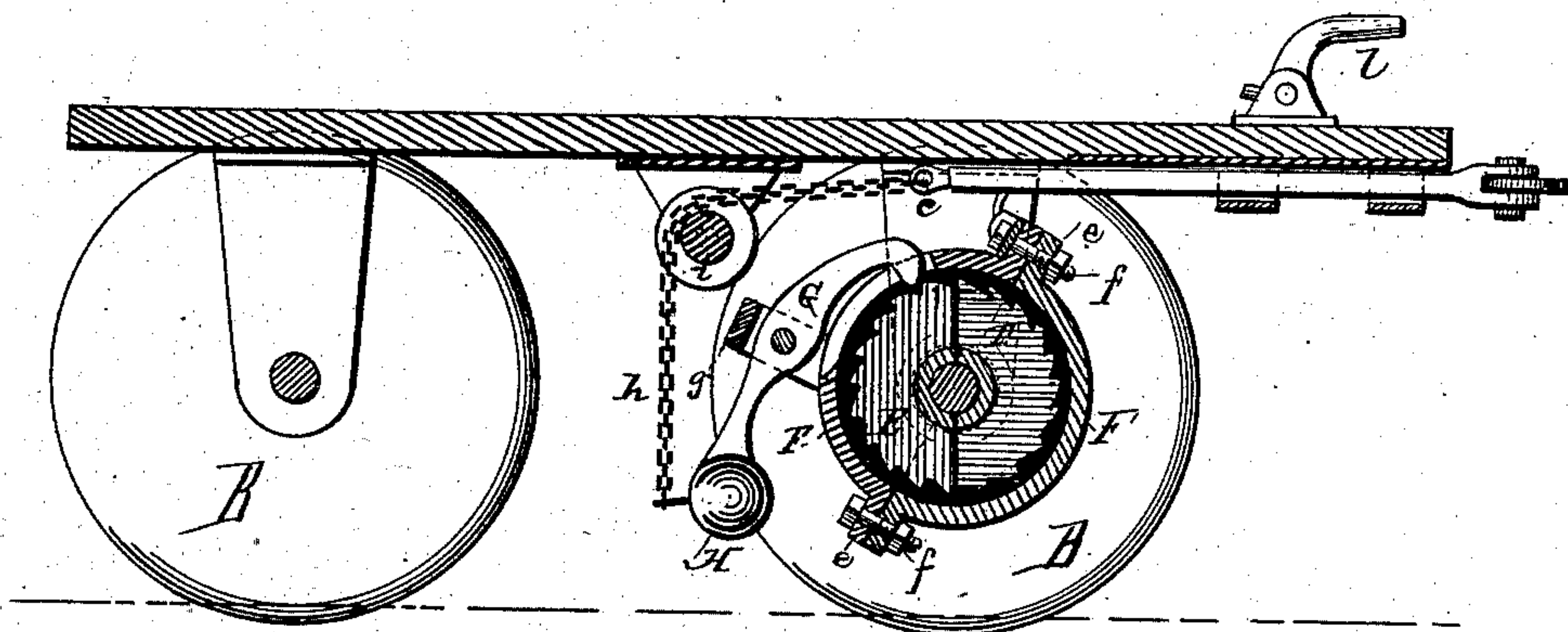
**No. 239,736.**

**Patented April 5, 1881.**

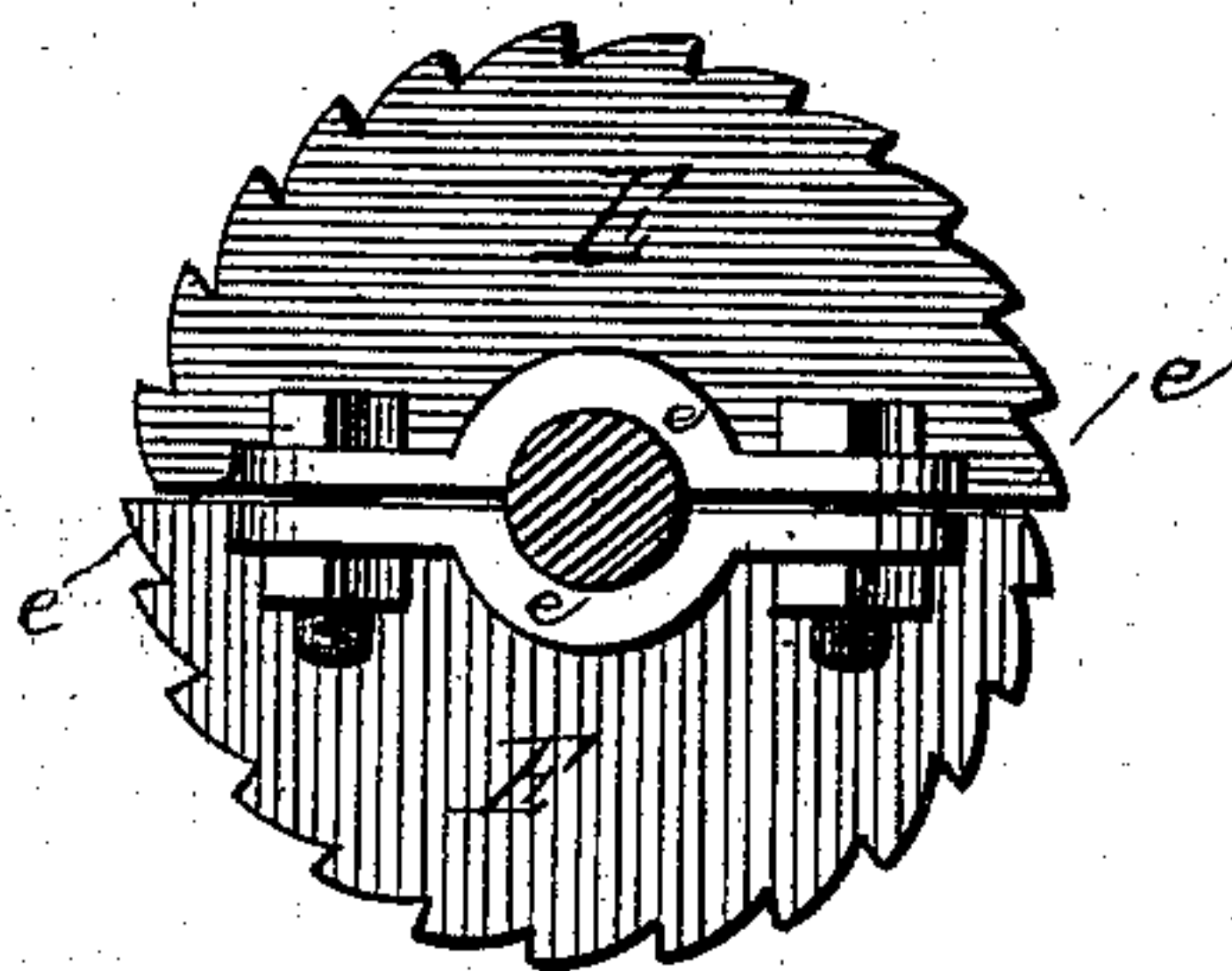
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

P. B. Dietrich.  
J. W. Suppeman

Inventor

Inventor  
Frank Dawson

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# UNITED STATES PATENT OFFICE.

FRANK DAWSON, OF WILLIAMSPORT, PENNSYLVANIA.

## CAR-STARTER.

SPECIFICATION forming part of Letters Patent No. 239,736, dated April 5, 1881.

Application filed August 19, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK DAWSON, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain  
5 new and useful Improvements in Car-Starters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use  
10 the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in car-starters; and it consists in the construction and arrangement of parts, as will be hereinafter more fully set forth, and pointed out by the claim.

In the annexed drawings, Figure 1 is a bottom-plan view. Fig. 2 is a central vertical section, and Fig. 3 is a detail.

A represents the platform, B the wheels, and C the axles, of the car.

To the under side of the platform A are secured the staples *a a*, which support the bar D. This bar D slides in the staples, and has at one end the whiffletree *b*, and is provided at the other with an eye, *c*.

To the forward axle is secured a ratchet-wheel, E, made in two parts, each part having an extension, *e*, through which are passed the bolts *f*, whereby the same are held in position.

F is a casing, made in two parts and bolted together around the ratchet-wheel E, for the  
35 purpose of excluding dust, dirt, &c.

G is a lever-pawl, pivoted between two ears, *g*, on the casing, one end of which engages with the ratchet-wheel E, and the free end being provided with a weight, H.

To the weighted end of the lever-pawl is attached a rope or chain, *h*, in any desired manner, said rope or chain passing from thence

over a pulley, *i*, on the under side of the platform, and secured to the draw-bar D.

Upon the casing F is secured a catch, *j*,  
45 which engages with a stop, *k*, on the platform, and prevents the casing from revolving more than a certain distance backward, said stop being operated by lever *l*. This lever *l* is pivoted between the ears and the top of the platform, its lower end extending through the platform, and provided with an eccentric, which, when the lever-arm is depressed, operates the stop *k*.  
50

The power being placed on the whiffletree  
55 *b*, the draw-bar is drawn forward, which, by means of the chain, raises the weighted end of the lever-pawl, causing the other end to engage with the ratchet-wheel E, and as the draft continues will turn the wheels before the  
60 full weight of the load is felt by the horses, and the car started without the jerking and straining of horses now attending the starting of loaded cars. When the drawing ceases the weight upon the lever-pawl will cause it to  
65 drop into its first position ready for a repetition of the operation.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—  
70

The platform A, wheels B, axles C, and ratchet-wheel E, made in two parts, secured to the forward axle, as shown, and provided with a suitable casing to exclude dust, &c., in combination with the weighted operating-  
75 pawl H, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK DAWSON.

Witnesses:

E. ANDREWS,  
JAS. M. WOOD.