

(No Model.)

2 Sheets—Sheet 1.

L. L. JAMES.

WAGON BRAKE.

No. 271,855.

Patented Feb. 6, 1883.

Fig. 1.

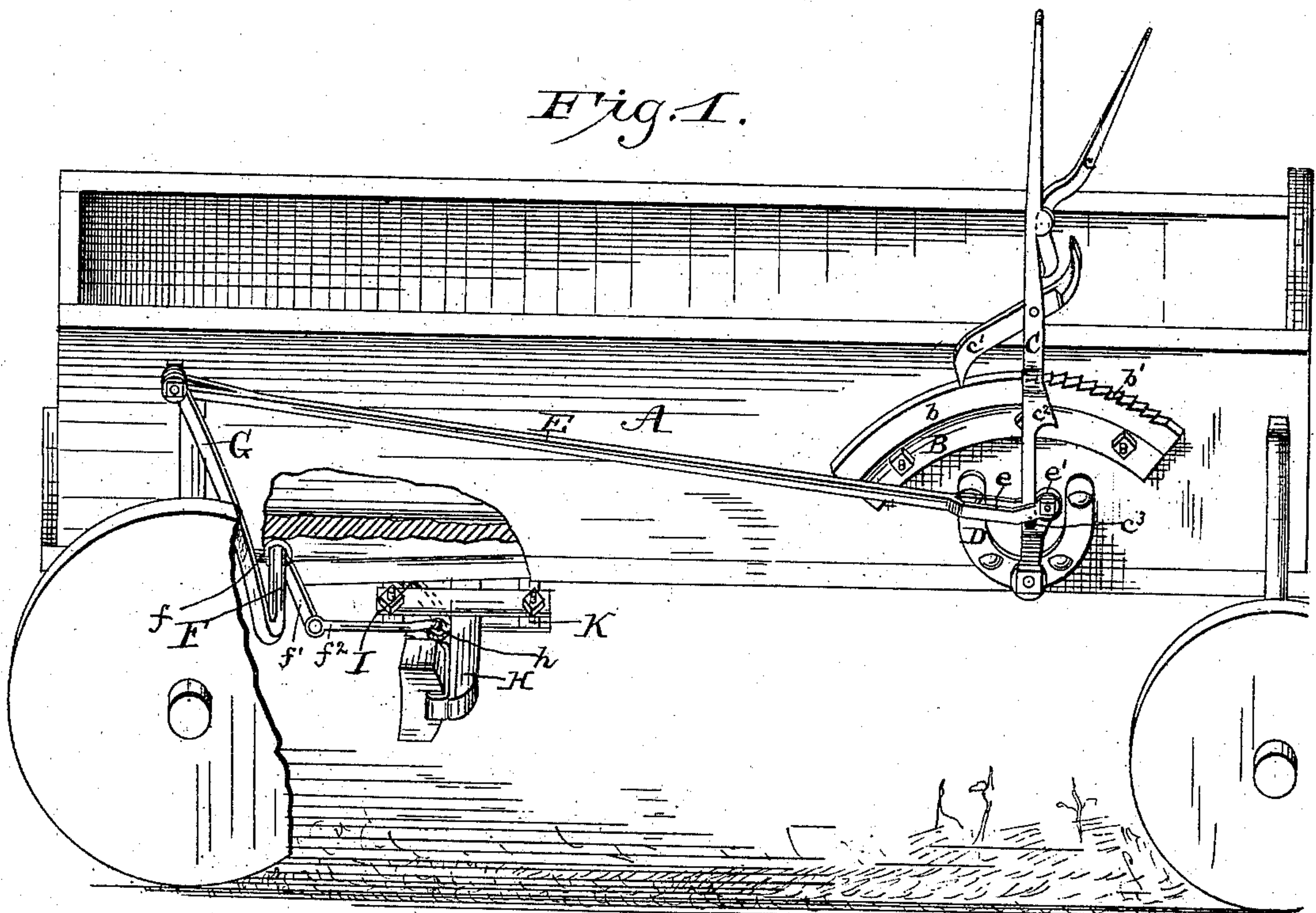
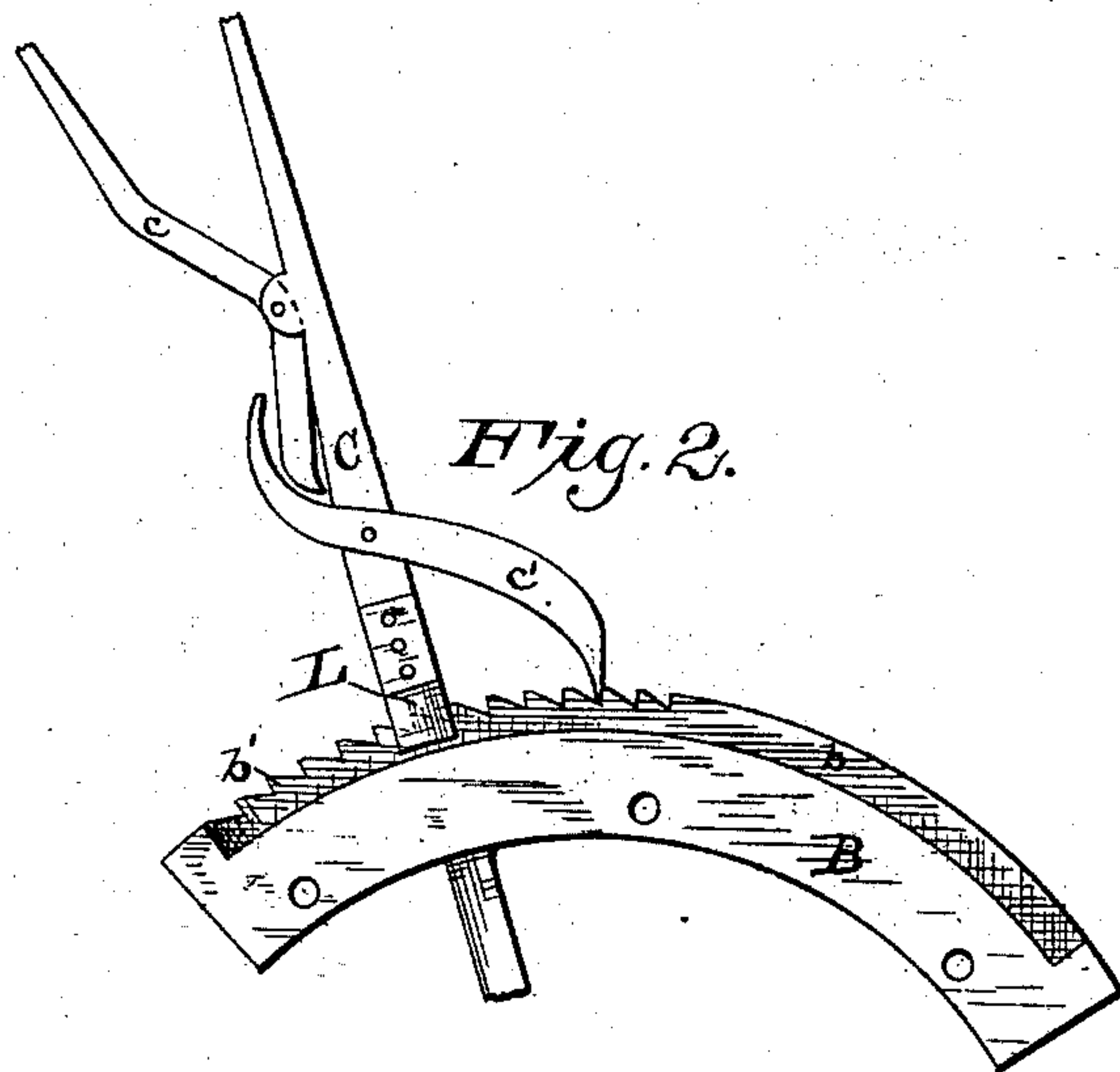


Fig. 2.



Witnesses:

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Chas F. Benjamin.

Inventor:

L. L. James.

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2 Sheets—Sheet 2.

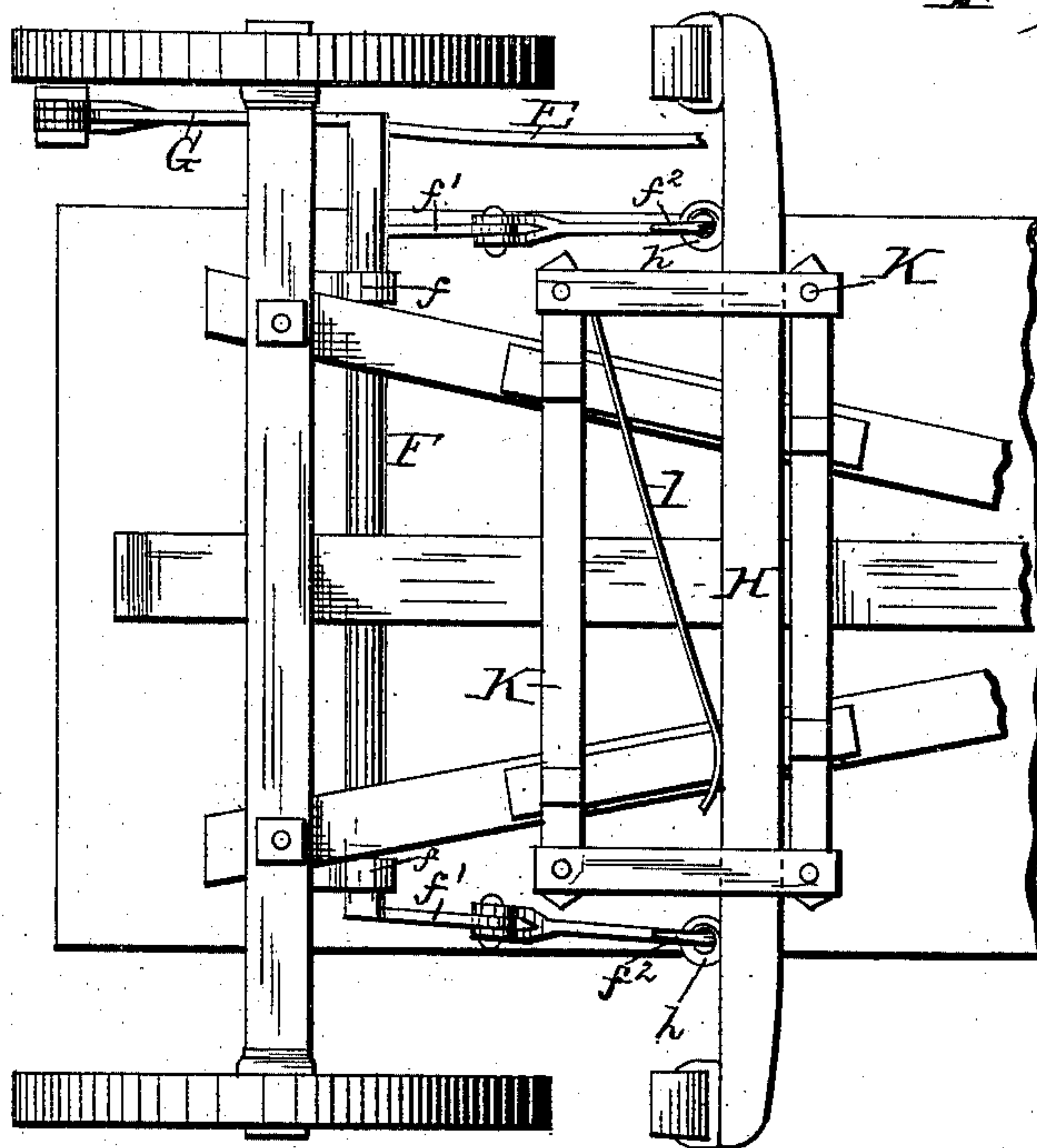
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Fig. 3.



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J. M. Burnham.

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Inventor:

Lycurgus L. James,

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UNITED STATES PATENT OFFICE.

LYCURGUS L. JAMES, OF MEDORA, INDIANA.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 271,855, dated February 6, 1883.

Application filed September 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, LYCURGUS L. JAMES, a citizen of the United States, residing at Medora, in the county of Jackson and State of Indiana, have invented certain new and useful Improvements in Wagon-Brakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to brakes for farm-wagons with or without wagon-beds, liable to be worked in roads and fields obstructed by mud or stubble; and its objects are to furnish a simple and efficient rublock, cheaply made and repaired, and with a quick and wide "throw-off" from the wheels when released. These objects are attained chiefly by means of sundry levers and a flat spring, for the purposes of applying and removing the brakes.

In the accompanying drawings, Figure 1 is a side view, in perspective, of a farm-wagon, showing various parts of the invention; Fig. 2, a detached rear view of parts of the ratchet-bar and hand-lever, showing how the latter is held in place upon the former; and Fig. 3 a bottom view of the hinder part of a wagon, showing the mechanism more immediately connected with the application and removal of the brakes.

A is the right-hand side of a wagon-bed.

B is a curved metal bar, strongly bolted to the bed, with flat projecting guide formed thereon, *b*, provided with teeth *b'* along the forward part of the upper edge.

C is a hand lever, pivoted at bottom to the horseshoe-bar D, which is also strongly bolted to the wagon-bed. To the front and upper part of this lever is pivoted the latch *c*, and lower down, and to the inner side of the lever, is pivoted the pawl *c'*. As the lever is pushed forward for the purpose of applying the brakes, the pawl falls by its own weight upon the edge of the guide *b*, and is ready to engage with the teeth as soon as they are reached.

These teeth, having a forward set, hold the pawl firmly until it is raised clear of them by closing the latch upon the lever by a grasp of

the hand. The connecting-rod E is formed at its forward end into two arms, *e*, between which is the roller *e'*, held in place by a bolt passing through arms and roller. The object of this roller is to increase the throw-off of the brakes from the wheels by moving from the lower to the upper of the projections, *e''*, formed upon the hand-lever, and so, in effect, lengthening the connecting-rod; but where so much throw-off is not necessary the roller may be omitted and the connecting-rod bolted directly to the hand-lever through the eye *c''*.

F is the brake-lever, attached to the frame beneath the wagon-bed by eyebolts *f*, so as to turn to and fro in the eyes thereof. This lever is attached to the connecting-rod by the long arm G, which is pivoted to the end of the rod. Short arms *f'* are formed upon the brake-lever in line with the arm G. Pivoted to these are lever-hooks *f''*, which operate the brake-bar H by means of the eyebolts *h*. The flat or strap spring I, which is bolted to the brake-bar frame K at one end and loose at the other, gives a quick throw-off to the brake-bar when the pawl is released from the ratchet. A claw, L, is riveted to the inner face of the hand-lever C to hold the latter close to the face of the guide *b* as the lever traverses the arc of the ratchet-bar.

When the wagon is to be used without its bed the connecting-rod E will be disconnected from the arm G and, with the wagon-bed and ratchet-bar and attachments, laid aside. A long wooden lever can then be attached to the arm G, the other end extending beyond the front of the wagon, so that the driver, mounted on one of the draft-horses, can operate the brake by pulling the wooden lever and leaving the flat spring to throw off the brakes when the pole is released.

I am aware that curved ratchet-bars, hand-levers, latches, and gravity-pawls, as also reciprocating bars, arms, and brake-bars operating beneath the wagon-bed, have heretofore been variously used for applying, releasing, and securing rublocks to the wheels of wagons, and hence I do not claim them, broadly.

What I claim in my invention as new and useful, and desire to secure by Letters Patent, is—

1. In brake-levers for wagons, the roller *e'*, pivoted to the forward end of the connecting-

rod E, and moving up or down the forward edge of the lever C, between the upper and lower projections c^2 , as the lever is thrown backward or pushed forward, for the purpose
5 of hastening the application and increasing the throw-off of the brake-shoes, substantially as described.

2. In hand-brakes for wagons, a combination consisting of curved ratchet-bar, horse-
10 shoe-bar, hand-lever, with claw, latch, pawl, and roller, and connecting-rod, all substantially as and for the purposes hereinbefore described.

3. In brakes for jolt-wagons with detach-

ble beds, the combination consisting of the 15
brake-lever F, long arm G, short arms f' , in line with said long arm, brake-bar H, operating in the frame K, lever-hooks f^2 , and flat spring I, each and every part of said combination being detached from the wagon-bed, sub- 20
stantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

LYCURGUS L. JAMES.

Witnesses:

NOAH S. WEDDLE,
WILLIAM HAMPREN.