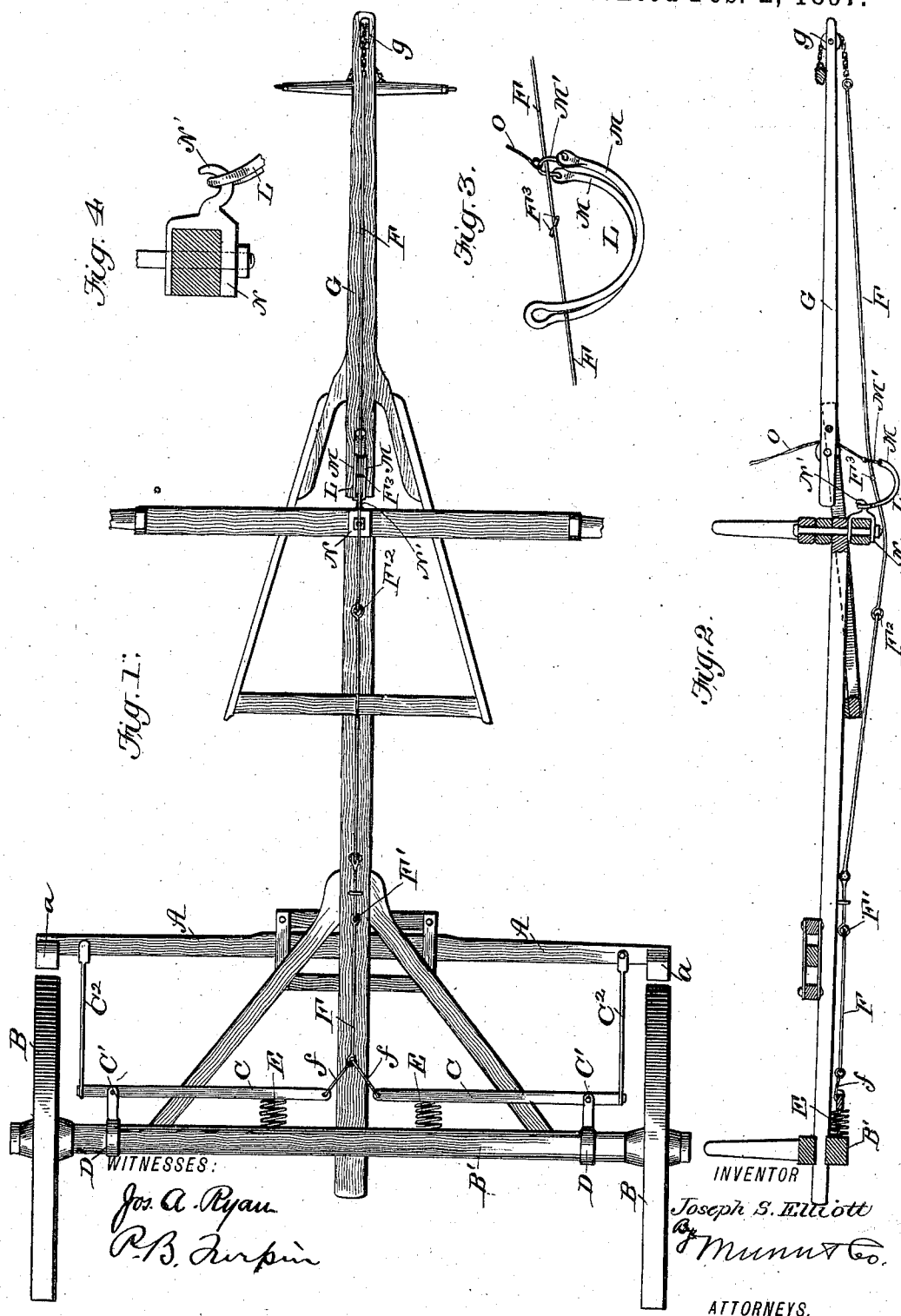


(No Model.)

J. S. ELLIOTT.
AUTOMATIC WAGON BRAKE.

No. 576,438.

Patented Feb. 2, 1897.



UNITED STATES PATENT OFFICE.

JOSEPH SAMUEL ELLIOTT, OF EDDY, TEXAS.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 576,438, dated February 2, 1897.

Application filed October 16, 1896. Serial No. 609,079. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SAMUEL ELLIOTT, of Eddy, in the county of McLellan and State of Texas, have invented a new and useful Improvement in Automatic Wagon-Brakes, of which the following is a specification.

My invention is an improvement in wagon-brakes, and particularly in that class of such brakes wherein the brake is automatically set by the movement of the wagon forward upon the team as the wagon descends a grade; and the invention relates to the devices by which the brake may be suspended while backing the team; and the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a bottom plan view of a part of a vehicle provided with my improvement. Fig. 2 is a longitudinal section thereof, and Fig. 3 is a detail view.

The brake-beam A is provided at its ends with the shoes *a* and is movable back and forth to set such shoes into and out of contact with the wheels B. In rear of the brake-beam I provide the levers C, pivoted at C' to brackets or supports projecting from cuffs D on the axle B'. The pivots C' are arranged near the outer ends of the levers C, the short arms of such levers projecting beyond the pivots C' and being connected by rods C² with the brake-beam near the outer ends of the latter, while the long arms of said levers extend inwardly toward the center of the wagon and are connected with the devices for automatically setting the brake. These inner long arms of the levers are actuated by the springs E, which operate to suspend the brake and act in opposition to the draft upon the brake-setting rod F. This rod F is connected with the inner ends of the levers C by the branch rods *f*, and the rod F is jointed at F' for purposes of adjustment and at F² to prevent any interference with the turning of the vehicle as desired. This rod or connection F is movable longitudinally, extends forward under the tongue G, thence up over a pulley *g* at the front end of said tongue, and is connected with the neck-yoke of the team, a suitable chain forming the front end of the connection and running upon the pulley *g*, as shown.

By the described construction it will be seen that as the team backs in descending a grade a forward draft will be exerted upon the rod or connection F in such manner as to set the brake.

When it is desired to back the team without setting the brake, I provide a swinging hook-like stop L, which is movable adjacent to the rod or connection F and is engaged by a projection or device on said rod in such manner as to prevent the forward movement of the said brake-setting rod. This stop, in the construction shown, is formed with the side arms M M, united at their rear ends by a cross-bar, which is pivoted to or in the hook N' of a bracket N, secured to the vehicle, while the forward ends of said side arms M are bent or curved upwardly in advance of a bolt or projection F³ on the brake-rod and are connected at such end with an operating-cord O, preferably through the medium of a front cross-rod M', connecting the front ends of the side arms M. The cord O extends up in convenient reach of the driver. In operation the bolt or projection F³ is, when the brake is suspended, in rear of the upturned hook ends of the side arms M, which normally rest below and out of the path of said bolt. If, however, it is desired to suspend the brake, the operator will by drawing on the cord O move the hook-arms M of the stop up into position to engage or be engaged by the bolt F³ as the rod F moves forward and prevent the movement of such rod to the extent necessary to set the brake. This hook-like stop forms a convenient means for suspending the brake from the top of the load or at other times when desired.

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

1. A vehicle-brake comprising the brake-beam, the brake-setting rod having a bolt or projection, connections between said rod and the brake-beam, a stop consisting of the side arms united at their rear ends, pivotally supported at such end and curved upwardly at their forward ends in advance of the normal position of the bolt or projection of the brake-setting rod, and movable at such end upward into position for engagement by the said bolt whereby to limit the forward movement of the

brake-setting rod, substantially as shown and described.

2. The combination of the vehicle-frame, the brake-beam, the brake-setting rod having
5 a bolt or projection, a hook bracket or support secured to the vehicle, and a stop looped at its rear end and suspended on said hook and having side arms extended alongside the brake-setting rod, bent upwardly at their forward
10 ends and movable at such ends into position for engagement by the bolt or projection on the rod all substantially as and for the purpose set forth.

3. In a brake substantially as described the
15 combination of the brake devices, the brake-setting rod, or connection having lateral bolts or projections and movable longitudinally

and the stop having side arms movable alongside the brake-setting rod in position to engage the pins or projections thereof substantially as shown and described. 20

4. In a brake substantially as described the combination of the brake devices, the brake-setting rod or connection movable forward in setting the brake and provided with a bolt or
25 projection and a stop movable into position to engage said bolt or projection and limit the forward movement of said rod or connection substantially as shown and described.

JOSEPH SAMUEL ELLIOTT.

Witnesses:

LEWIS T. WARRINER,
CHAS. T. SULLIVAN.