

(No Model.)

C. OLMSTEAD.

WAGON BRAKE.

No. 278,589.

Patented May 29, 1883.

Fig. 1

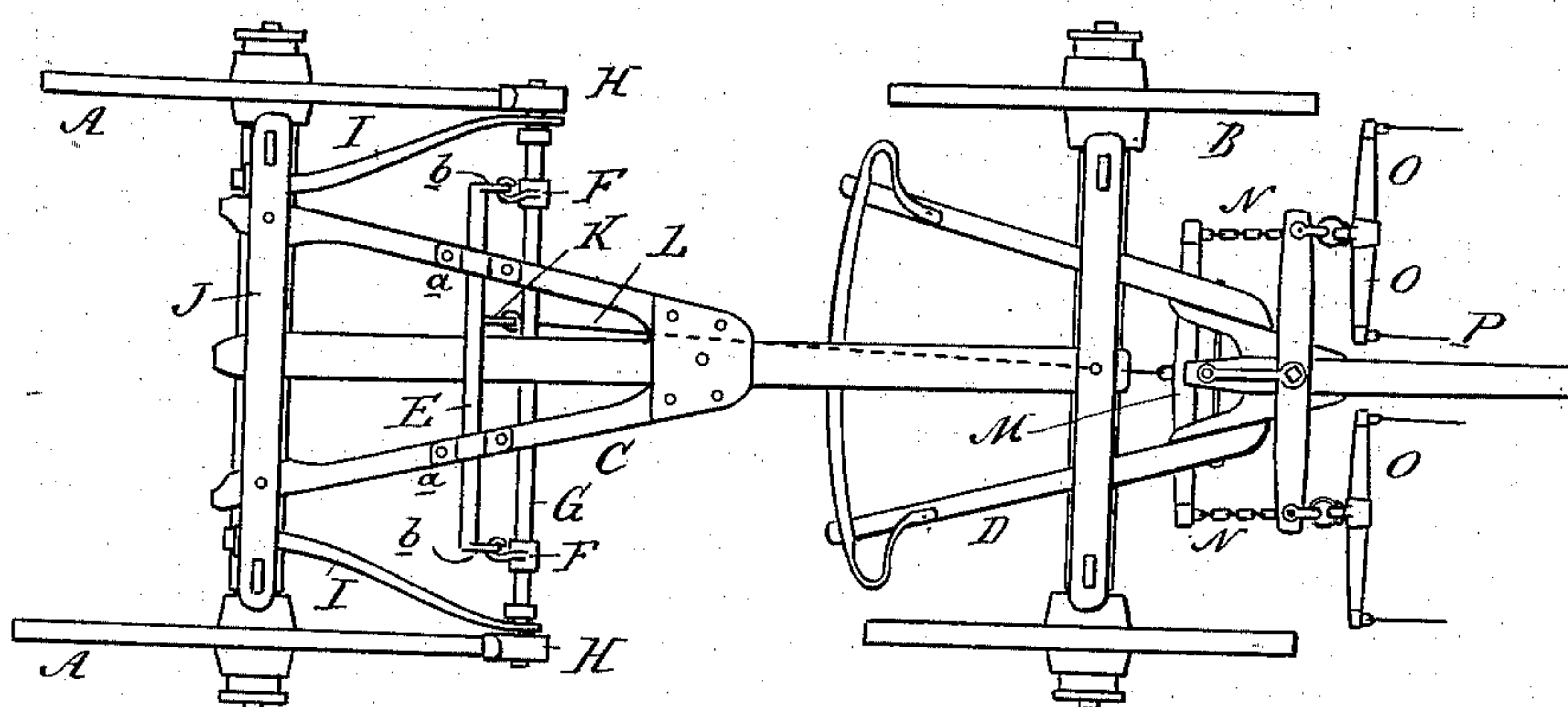
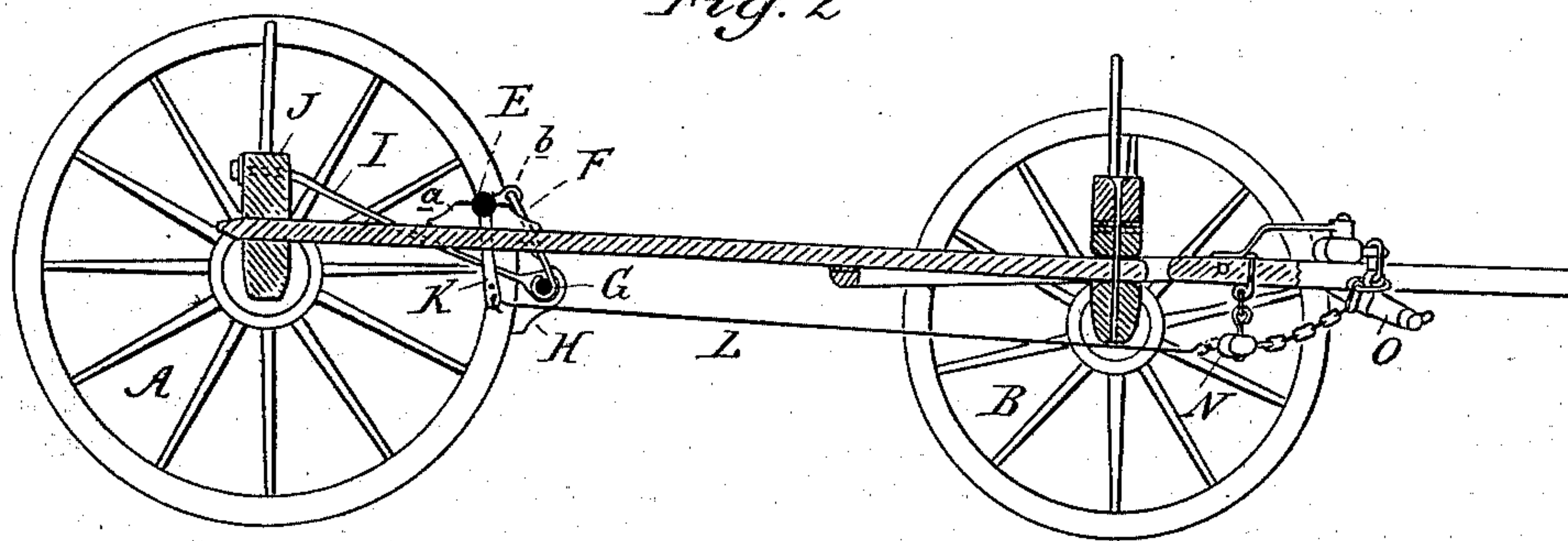


Fig. 2



Attest:

A. Barthel
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Inventor:

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by his Atty Wm. S. Sprague

UNITED STATES PATENT OFFICE.

CALVIN OLMSTEAD, OF ELBA, MICHIGAN.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 278,589, dated May 29, 1883.

Application filed March 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, CALVIN OLMSTEAD, of Elba, in the county of Lapeer and State of Michigan, have invented new and useful Improvements in Wagon-Brakes; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction and application of wagon-brakes, and the invention consists in the peculiar construction, arrangement, and combinations of the parts, all as more fully hereinafter set forth.

Figure 1 is a plan view of a wagon with my improved brake apparatus. Fig. 2 is a longitudinal vertical central section.

In the accompanying drawings, which form a part of this specification, A represents the rear and B the forward wheels of a wagon, which are mounted upon axles and provided with hounds C D, respectively.

E represents a rock-shaft, which is secured in proper bearings, *a*, upon the top of the hounds. The ends of this rock-shaft E are provided with the forwardly-extending arms *b*, in the ends of which are hooked or otherwise properly secured the links F, in the lower ends of the latter of which is properly secured the brake-rod G, the ends of which are provided with a proper brake-shoe, H, which comes in contact with the periphery of the wheels A, as hereinafter described.

I represents leaf-springs, the rear ends of which are preferably rigidly secured to the bolster J, while their forward ends are sleeved or otherwise properly secured upon the brake-rod in such a manner as to compel the brake-shoes to rest against the wheels when the wagon is at rest.

The rock-shaft E is provided with a rocker-arm, K, which projects downwardly between the hounds, and to its lower end is secured a pull-rod, L, the forward end of which latter is secured to a single whiffletree, M, which is properly hung below the hounds of the for-

ward axle, the two ends of this whiffletree being connected by means of chains N to the whiffletrees O.

In practice the team is hitched to the wagon by means of the traces P, as in the ordinary manner. When the team begins to pull upon the wagon and its load a draft, through the connections herein named, is exerted upon the pull-rod L, which causes a partial rotation of the rock-shaft E, compelling the brake-rod to raise and free the brake-shoes from contact with the wheels, and the parts will remain in this position so long as the team is pulling upon the whiffletrees. In going down a hill, or upon stopping, the traces slack, allowing the parts to drop back into their original position, they being assisted in this operation by the exertion of the springs I, which compel the brake-shoes to come in contact with the wheel and "brake" the same. It will be seen that by this arrangement, if the horses should break away, the brakes would be automatically applied, whereas in those brakes which depend upon the backing of the team to produce the pressure on the brakes, should the horses break away the brakes would not be applied, and if the connection between the brakes and the draft devices should give way there would be no means of applying the brakes; but in my construction the breaking of the connections between the whiffletrees and the brake-rod would immediately allow the brakes to come automatically into use.

What I claim as my invention is—

In a wagon-brake, the combination of the rock-shaft E, links F, brake-rod G, brake-shoes H, and springs I, with the pull-rod L, whiffletrees M O, and chains N, when constructed, arranged, and operating substantially as and for the purposes specified.

In witness that I claim the above invention I hereby affix my signature on this 8th day of September, A. D. 1882.

CALVIN OLMSTEAD.

In presence of—

CHARLES J. HUNT,
H. S. SPRAGUE.