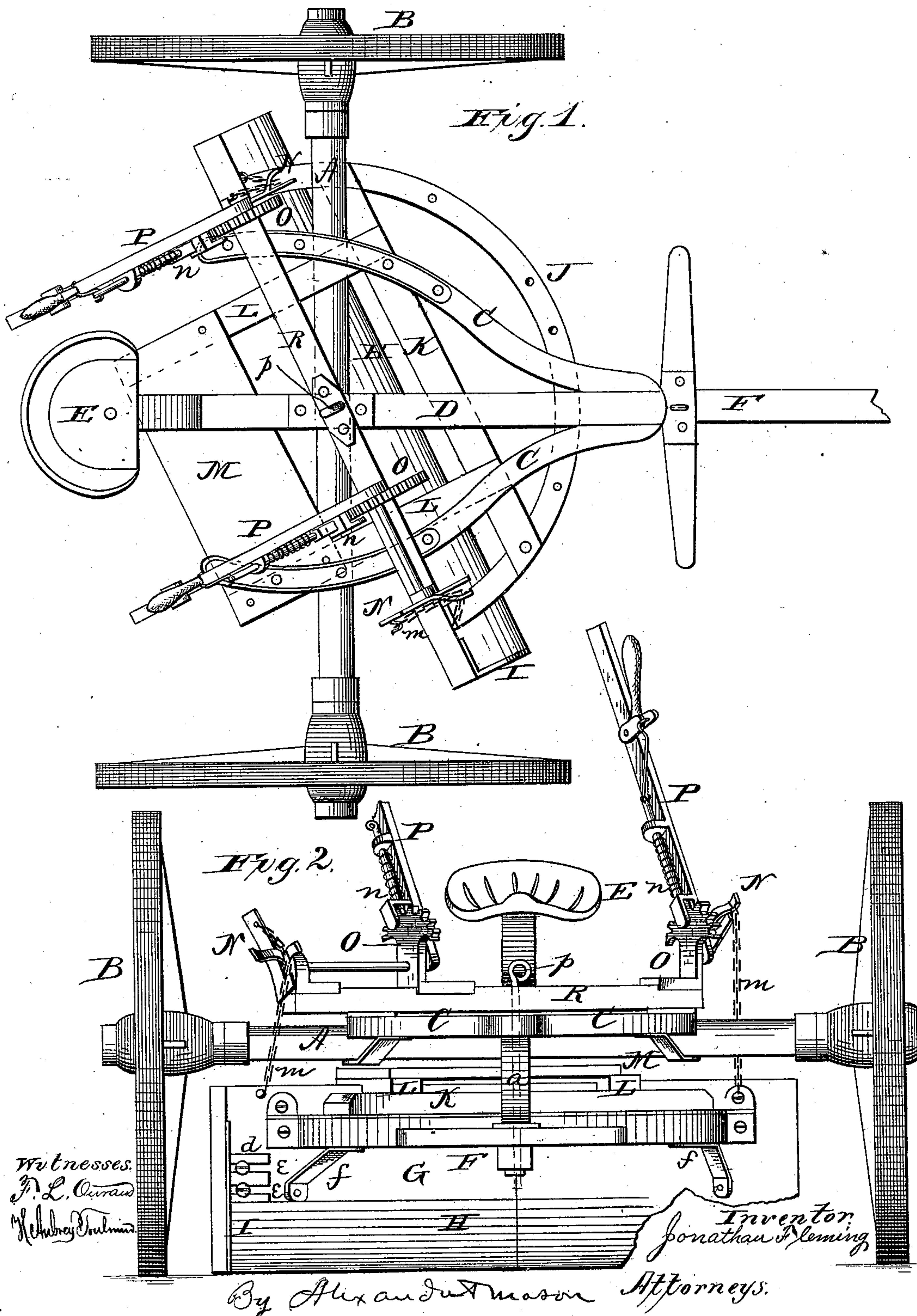


J. FLEMING.
Road-Leveler.

No. 227,232.

Patented May 4, 1880.



Witnesses:
F. L. Curran
H. Aubrey Toulmin

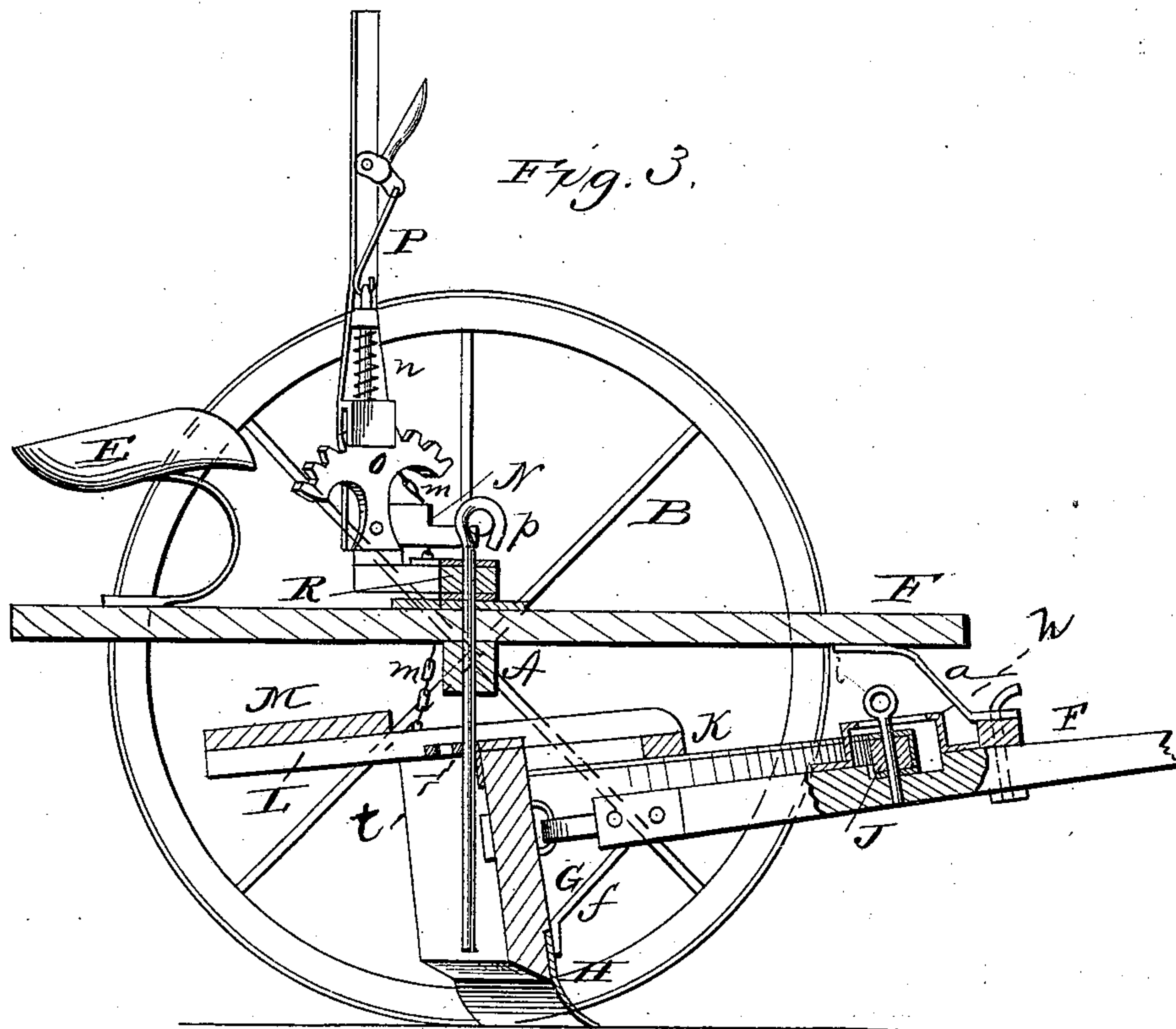
Inventor
Jonathan Fleming

By Alexander Mason Attorneys

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UNITED STATES PATENT OFFICE.

JONATHAN FLEMING, OF FORT WAYNE, INDIANA.

ROAD-LEVELER.

SPECIFICATION forming part of Letters Patent No. 227,232, dated May 4, 1880.

Application filed January 10, 1880.

To all whom it may concern:

Be it known that I, JONATHAN FLEMING, of Fort Wayne, in the county of Allen, and in the State of Indiana, have invented certain
5 new and useful Improvements in Sulky Road-Levelers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference
10 marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a sulky road-leveler, as will be hereinafter more fully set
15 forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the
20 annexed drawings, in which—

Figure 1 is a plan view of my improved sulky road-leveler. Fig. 2 is a front elevation of the same. Fig. 3 is a central vertical section of the machine.

25 A represents the axle, provided with the wheels B B, and having the hounds C C secured. Between the forward ends of the hounds is secured the front end of the coupling-pole D, which is also secured to the axle, and extends in rear thereof a suitable distance, and has the driver's seat E attached to its rear end.

The hounds C are, by a strap, *a*, connected with the tongue F, the rear end of which is, by an eye and staple or other flexible coupling, *b*,
35 connected with the leveler-plank G at or near its center.

The plank G is, along its lower edge, provided with the leveler-blade H, and at one end with a guard, I. This guard I has a wing, *d*,
40 provided with two slots, as shown in Fig. 2, so as to be slipped under the heads of two screws, *e e*, on the plank, which screws, being then tightened, hold the guard in place.

To the plank G is secured a semicircle, J, which is strengthened by braces *f f*, and passes through a keeper, *h*, on top of the tongue F. This semicircle is perforated with a series of holes, and a pin, *i*, passed through the keeper, one of said holes, and the tongue, to hold the
50 leveler at any angle desired.

K is a cross-bar on the semicircle, to which

are secured two arms, L L, which extend rearward and are secured to the top of the leveler-plank, and have a platform, M, fastened on their rear ends.

Near each end of the leveler-plank G is a
55 chain, *m*, attached to it, and extending up and connecting with a lifter, N, attached to the pivot of a lever, P. Each lever is pivoted to the side of a rack, O, and has an ordinary
60 spring-pawl, *n*, to take into the rack, for holding the lever more or less elevated at either or both ends, as required.

The racks O are secured on a bolster, R, which is pivoted in the center by means of a
65 king-bolt, *p*, that passes down through said bolster, coupling-pole, and axle, and then through a loop-guide, *t*, at the upper edge, in rear of the leveler-plank. This guide has two or more holes or loops for adjusting the lev-
70 eler right and left.

In building this machine the upper part of the blade H is a plane surface sufficiently wide to attach it firmly to the leveler-plank. From thence to the lower edge it is of concave form
75 and made in sections. The guard I can be placed at either end of the blade for the purpose of preventing the dirt or other substance being leveled from sliding off of the end where not desired.

By means of the platform M the operator can by his own weight increase the force desired on the blade, and this can be done by the operator rising slightly or altogether from his seat, still leaving him in as full control of the machine as when sitting still on the seat, the platform being the resting-place for his feet.

The semicircle J is iron, plated on both the front and upper sides, in order to add strength and durability.

The operator's seat being on the back end of the coupling-pole, the downward draft on the horses' necks is equalized.

The lifting mechanism connected to the movable bolster enables the operator to raise or lower either end or the whole of the blade without moving out of his seat, and it serves the same purpose at whatever angle the blade may be placed.

The king-bolt passing through the guide *t*
100 holds the leveler-plank steady and prevents side draft or interfering with either wheel.

The different holes in said guide are used as a scale by which the power and resistance can be completely adjusted and equalized to each other in any and all character of soil.

5 The entire machine is durable, flexible to the hand of the operator, and efficient in the accomplishment of the object of its construction.

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

1. The combination of the pivoted bolster R, levers P, ratchets O, lifters N, and chains *m*, attached to the leveler-plank, substantially
15 as and for the purposes herein set forth.

2. The king-bolt *p*, in combination with the guide or graduating scale *t* on the leveler-plank, for the purposes set forth.

3. The combination, in a road-leveler, of the leveler-plank G, semicircle J, cross-bar K, 20 arms L L, and platform M, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of Jan- 25 uary, 1880.

JONATHAN FLEMING.

Witnesses:

W. J. KERR,

M. V. B. SPENCER.