(No Model.)

M. F. BATES.

LAND ROLLER.

No. 368,926. Patented Aug. 30, 1887.

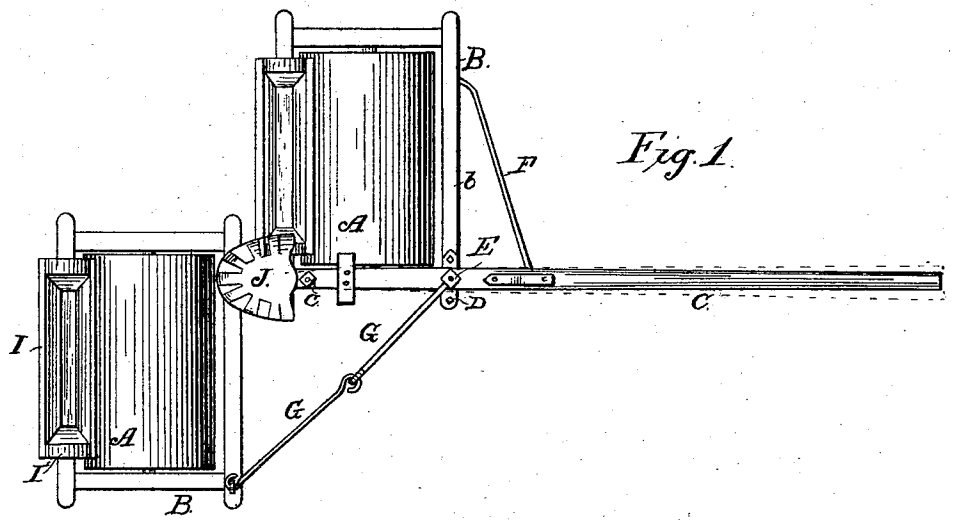

Fig. 1.

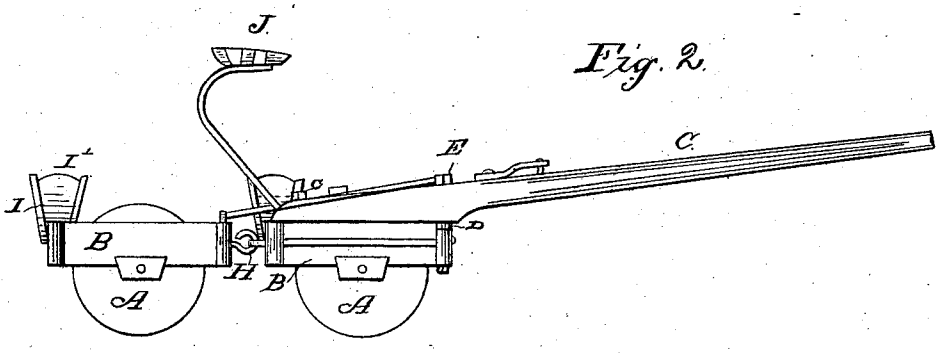

Fig. 2.

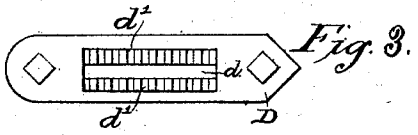

Fig. 3.

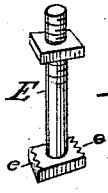

Fig. 4.

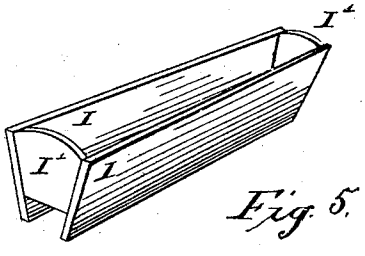

Fig. 5.

Witnesses
Susie R. Seiler.
R. W. Bishop.

Inventor
Madison F. Bates
By his Attorneys,
R.S. & N.H. Lacey

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

MADISON F. BATES, OF BUTLER, MICHIGAN.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 368,926, dated August 30, 1887.

Application filed February 21, 1887. Serial No. 228,400. (No model.)

To all whom it may concern:

Be it known that I, MADISON F. BATES, a citizen of the United States, residing at Butler, in the county of Branch and State of Michigan, have invented certain new and useful Improvements in Land-Rollers; 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.

My invention relates to land-rollers of that class in which the roller-supporting frames have additional weights superimposed thereon, and in which the rollers are placed the one in advance of the other and on each side of the vertical plane of the tongue.

It consists in details of construction and the combination of the several parts, hereinafter to be described, claimed, and shown in the annexed drawings, in which—

Figure 1 is a plan view of a machine of my construction embodying my improvements. Fig. 2 is a side elevation. Fig. 3 is an enlarged detail view of the tongue-holding plate. Fig. 4 is a perspective detail view of the tongue-holding bolt. Fig. 5 is a perspective view of the hopper for receiving the additional weights.

The rollers A are supported in frames B, which are arranged the one wholly in advance of the other and on opposite sides of the tongue C or its prolongation. The tongue is pivoted at its inner end, *c*, to the forward frame, near its rear sill. The front sill, *b*, of the said frame has a plate, D, bolted on its upper side. The plate is longitudinally slotted to permit of the passage of the bolt E, the shank of which extends through the tongue in advance of its pivotal connection *c*. The tongue has a slight lateral adjustment to take up and allow for any side draft. The dotted lines in Fig. 1 indicate one of said adjusted positions of the tongue. In order to effect a positive engagement between the plate and bolt, the under side of the former, on each side of the slot *d*, is provided with a series of notches, *d'*, which engage a corresponding series of notches, *e*, on the inner side of the head of the bolt.

The rear supporting-frame is flexibly connected with the advance one by a universal joint, H, located near the plane of that side which is nearer to the advance frame. The outer ends of the frames are braced, the one by a rod, F, the other by links G.

The rear sill of each frame is at a slight distance from the rollers. A hopper or weight-receiving receptacle is supported on said sills, which latter form the bottoms of the hoppers.

The hopper is composed of sides I and end pieces, I'. The sides extend below the lower edges of the ends, and are designed to snugly fit the sides of the sills and hold the hopper in place, while the ends are adapted to rest upon the sills and form a support therefor, as will be readily understood.

The driver's seat J is supported relatively to the roller-supporting frames, so that it comes in a plane directly intermediate the two frames, and is in line with the tongue. By such construction the weight of the driver is evenly distributed on the two rollers.

The hoppers may be readily attached and detached and be suitably weighted, as occasion may require.

It will be noticed that the rollers are free to have an independent motion in order to adjust themselves to the unevenness of the ground.

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

1. The combination of a pair of roller-supporting frames flexibly connected, the one located in advance of the other and on nearly opposite sides of a vertical plane, a tongue pivoted to the inner side of the advance frame, a slotted plate and bolt for laterally adjusting the tongue, braces connecting the outer ends of the roller-frames to the tongue, and a seat supported intermediate the two rollers and in line with the tongue, substantially as and for the purpose set forth.

2. The combination, with the roller-supporting frame, of a hopper having its sides extended on each side of a sill thereof, by which it is held in place, and having the ends resting on the top of said sill to support the hopper thereon, the sill serving to form a bottom for the hopper, substantially as shown and described.

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

MADISON F. BATES.

Witnesses:
W. E. SMITH,
R. I. SMITH.