

(No Model.)

A. H. COMP & G. E. MARSH.

LAND ROLLER.

No. 264,514.

Patented Sept. 19, 1882.

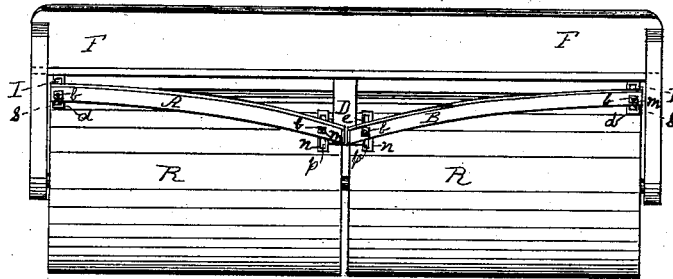


Fig. 1 -
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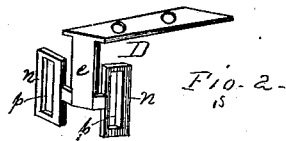


Fig. 2 -
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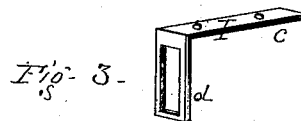


Fig. 3 -
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Fig. 4 -
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Fig. 5 -
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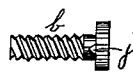


Fig. 6 -
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Fig. 7 -
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Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED H. COMP AND GEORGE E. MARSH, OF MOUNT JOY, PENNSYLVANIA.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 264,514, dated September 19, 1882.

Application filed July 25, 1882. (No model.)

To all whom it may concern:

Be it known that we, ALFRED H. COMP and GEORGE E. MARSH, citizens of the United States, residing at Mount Joy, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Land-Rollers, of which the following is a specification.

Our invention relates to land-rollers having a scraper attached to them to free them from earth or mud; and the objects of our improvements are, first, to attach the scraper in such a way as to prevent it from catching in the joints of the staves forming the roller; second, to regulate the distance between the lower edge of the scraper and the roller; and, third, to so construct the irons securing the scrapers to the roller-frame as to prevent the scraper being forced out of place. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a rear view of the roller having our scraper attached; Fig. 2, a perspective view of the center iron securing the scraper to the roller; Fig. 3, a similar view of the iron securing the outer ends of the scraper to the roller; Fig. 4, a view of the inner face of the supporting-arms of the irons; Fig. 5, a side view of the same supporting-arm; Fig. 6, a side view of the bolt, and Fig. 7 a top view of the bolt.

Similar letters refer to similar parts throughout the several views.

Our scraper is formed of two sections, A and B. The outer ends of the sections are fastened to the frame of the roller, so that they engage the rollers R R at points higher than those at which the inner ends engage it. The effect of this is to run the edge of the sections diagonally across the surface of the roller.

Rollers have more or less play in their bearings, and when the scraper is horizontal and fitted close to the roller it is liable to catch in the joints of the staves and increase the wear and tear of the whole machine, as well as make it more difficult to work. Our device overcomes this difficulty.

The sections of the scraper are attached to the frame F of the roller by means of angle-irons, those, I, at the outer ends having two

arms, *c d*, the former being horizontal and secured to the bottom of the roller-frame, and the latter projecting downward and having a vertical slot, *s*, through which the scraper is attached to it by means of a bolt and nut. The iron D, securing the inner ends, is similar, excepting that the arm *e*, projecting downward, is without a slot, but has an arm, *n*, projecting on each side, each of which has a vertical slot, *p*, similar to *s*, by which the sections of the scraper are attached. The faces of the arms *d*, *n*, and *n* are placed in such a direction as to coincide with the direction of the faces of sections of the scraper. Securing the scrapers by means of vertical slots permits them to be held close to the roller or to be raised entirely clear of it, as may be rendered necessary by the amount of moisture in or stickiness of the soil. When the scrapers are set down to the roller to free it from earth the tendency of the action of the roller is to force them upward. To prevent the bolts *b* from giving to this pressure and sliding upward in the slots *s* and *p* the inner face of each of the arms *d* and *n* has a rack, *r*, which extends horizontally across it. On the inside of the head of each of the bolts *b* there is a projection, *j*, corresponding to the indentations in the rack. When the bolt is screwed up by its nut *m* the projection *j* engages in the rack and prevents any vertical movement of the scraper. This rack, with the projection on the inside of the head of the bolt, permits the bolts carrying the scrapers to be raised or lowered at pleasure, and at the same time to be always held firmly in place.

We know that prior to our invention scrapers have been used in combination with land-rollers. We therefore do not claim such a combination, broadly; but

What we do claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the rollers R R, the scraper divided into sections A B, which cross the surface of the roller diagonally, the frame F of the roller, and the angle-irons I D, having vertical slots, whereby the scrapers are connected with the frame F, and the height of which scrapers above the rollers R R can be

regulated, substantially as and for the purpose set forth.

2. The combination of the rollers R R, the scrapers A B, the frame F, the angle-irons I
5 D, the perpendicular arms of which have racks on their inner face, and the bolts *b*, having on the inner face of the head a projection corresponding with the indentations in the said rack,

all substantially as and for the purpose specified.

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Witnesses:

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