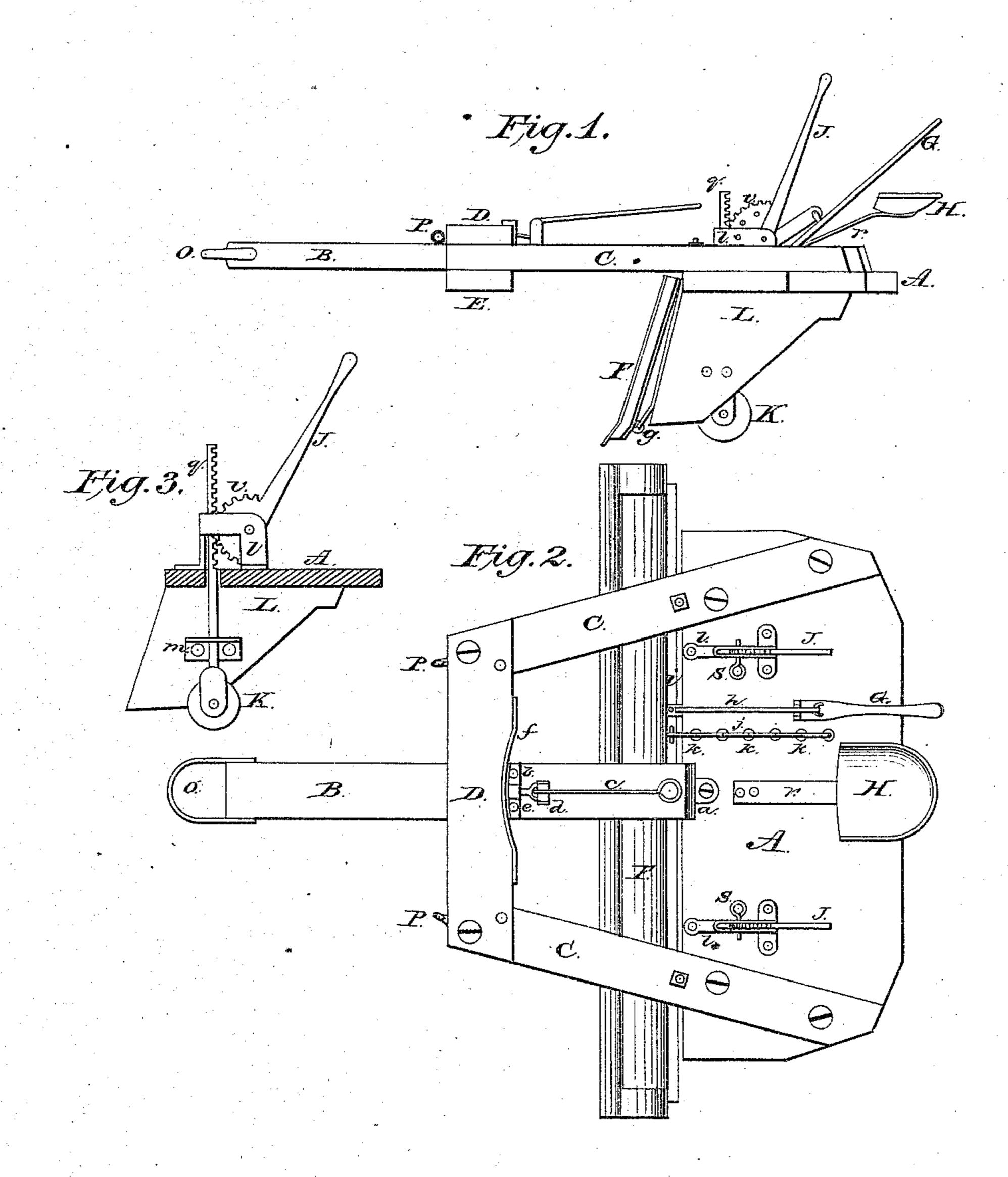
## J. L. McKEEN. Road-Scraper.

No. 162,846.

Patented May 4, 1875.



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## UNITED STATES PATENT OFFICE.

JONATHAN L. McKEEN, OF ACWORTH, NEW HAMPSHIRE.

## IMPROVEMENT IN ROAD-SCRAPERS.

Specification forming part of Letters Patent No. 162,846, dated May 4, 1875; application filed January 8, 1875.

To all whom it may concern:

Be it known that I, Jonathan L. McKeen, of Acworth, in the county of Sullivan and State of New Hampshire, have invented certain Improvements in Road-Scrapers, of which

the following is a specification:

The nature of my invention consists in arranging and constructing a road-scraper in such a manner that the operator is enabled, by means of a series of levers, to control the machine, and so adjust, it without stopping the team, as to excavate and remove earth from either side of the machine, and discharge it on the other, for the purpose of crowning a road in the center, and reducing it to a uniform surface, as will be hereinafter more fully set forth.

Figure 1 is a side view of a machine embodying my invention. Fig. 2 is a plan of the same. Fig. 3 is a side view of the section

containing the lifting device.

A is the platform, to which the draft-pole B is pivoted by the bolt a, and supported by the cross-pieces D and E, which are firmly secured to the platform A and standards L L, forming a substantial frame for the support of the scraper F. The machine may be set at any desired angle to the right or left, and retained by means of the guide b, which is connected with and operated by the lever c, which is hung on the bearings a.

On the back side of the cross-piece D is attached a curved plate, f, provided with a series of holes so arranged as to receive the

guide b at any desired point.

The scraper F is provided with a steel cutting edge upon the under side and ends, and hinges g g on the back and side near the bottom, by which it is connected to the standards L L, in such a manner as to admit of adjustment by means of the lever G, which is attached to the platform A by hinge n, and connected with the scraper F by the connection rod h, and retained in position by the latch j being hooked into one of the series of holes k in the platform A.

To the standards L L are attached bearings m m for the support of the racks q q, to which are attached trucks K K, for the pur-

pose of elevating and controlling the machine, and also moving it from place to place. J J are levers with segment-pinions v v, having their bearings in the stands l l, and connected with the racks q q, which are also supported by the stands l l, admitting of the elevation and depression of the racks q q by means of levers J J, and are retained in position by pins S S, passed through holes properly arranged in the stands l l and pinions J J. H is the seat for the operator, and is supported by the

spring-standard r.

The operation of the machine is as follows, viz: The draw-iron o, being attached to the middle of a cart-axle with a staple or chain, the machine is drawn forward with the operator on the seat, who adjusts the scraper F to its proper position by means of the lever G and latch j. He then draws the lever J backward, thereby elevating the truck K above the bottom of the scraper F on the side which he desires to discharge the earth. Simultaneously he lifts the lever c, which permits the machine to swing around into the desired position. The lever c is then depressed, which throws the guide b back into the plate f, holding it in working position. The position of the trucks is then reversed, the one on the cutting side being elevated, so as to admit the scraper to excavate earth to a proper depth, and the machine will discharge it on the opposite side, the other truck being depressed a little below the edge of the cutter.

When the operator desires to reverse the work of the machine, it is performed in a

manner similar as herein set forth.

When used for leveling and finishing a road, or any other surface, the scraper is set at right angles with the draft-pole, and elevated to a proper height above the bottom of the trucks, so as to scrape the tops of the high places down and fill the hollows as the machine is drawn forward, thereby leveling the surface with great facility.

I make no claim to the mode in which the scraper is hinged to the standards, nor to the adjustable draft-pole, which permits the adjustment of the scraper to any angle required, for I am aware that these are not new; but

I do claim as my invention—
The combination, with the racks q q, pinions v v, stands l l, pins S S, and levers J J, of the trucks K K, scraper F, lever G, and connection-rod h, draft-pole B, latch j, guide b, and lever c, substantially as and for the purpose hereinbefore set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JONATHAN L. McKEEN.

Witnesses:

EPHRAIM CUMMINGS, JOSEPH M. CHATTERTON.