S. Alderman,

Road Scraper.

No. 88,429. Patented Mar. 30. 1869.

Fig. 1.

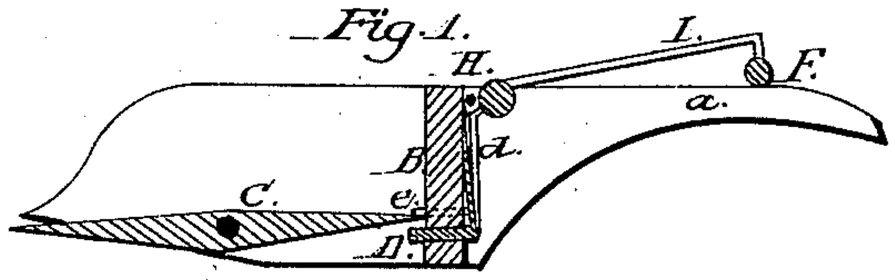
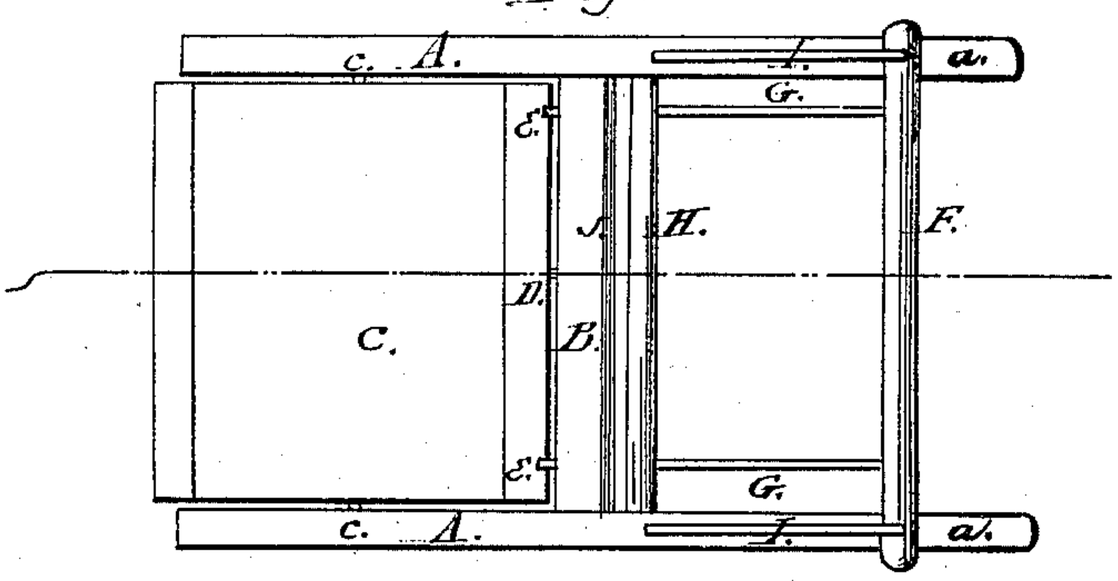


Fig. 2.



Witnesses:
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SIDNEY ALDERMAN, OF STAFFORD TOWNSHIP, INDIANA.

Letters Patent No. 88,429, *dated March* 30, 1869.

IMPROVED ROAD-SCRAPER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SIDNEY ALDERMAN, of Stafford township, in the county of De Kalb, in the State of Indiana have invented a new and useful Improvement in Road-Scrapers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a longitudinal vertical central section, through line *x x* of fig. 2, and

Figure 2 is a top view.

This invention relates to that class of road-scrapers in which a pivoted rotating bottom, or scraping-blade is employed; and consists in an improved arrangement and combination of the parts which form the locking-device, whereby the scraping-blade can be more readily and firmly fixed in position for operation, and can more easily and conveniently be unlocked and allowed to rotate on its axis, when the load is to be discharged.

To enable those skilled in the art to make and use my invention, I now proceed to describe its construction and operation.

Similar letters in the drawings refer to like parts.

A A represent the side pieces of the frame, being prolonged to the rear, so as to form handles *a a*, by which the instrument is guided, and being provided with eyes, to which the draught-chains can be hooked.

These side pieces are parallel to each other, and are connected by a strong vertical plate, B, framed into the side pieces at its ends, so that the side pieces and cross-piece B form the frame of the instrument.

C is the scraper-blade, pivoted to the side pieces upon journals *c c*, and being made in the form shown in the drawings, that is to say, with a rhombic section, as shown in fig. 1, to give strength along its centre, and sharpness at both edges. It is also provided with four lugs, so arranged that two will always be under its rear edge when in operation, to properly support it, and two will be above its front edge, at the extremities thereof, and guide the earth, to some extent, toward the centre of the blade, preventing its liability to wedge between the blade and the side pieces.

D is a tooth attached to a spring, *d*, on the rear side of the cross-piece, and projecting through the latter, so as to form a rest for the rear edge of the blade C. The under side of its projecting end is bevelled off, so that the blade, as it revolves and strikes it, will force it back, and pass it when the spring will replace the tooth under the edge of the blade.

E E are two arms, or side bolts, which extend through the cross-piece, projecting slightly from its front side, above the edge of the blade, and holding the latter down when the instrument is in operation.

Both these arms can be instantly withdrawn by throwing up a bar, F, they being connected to the bar by means of a bent rod, G, passing through or attached to a roller, H, so as to form a double lever, of which the bar F is the handle.

I I are bent rods attached to the upper side of the handles *a a*, and passing through holes in the ends of the bar F, their function being, both to steady the latter and guide it in its movement, and also to prevent its being thrown up too far, whereby the bolts E E might be accidentally withdrawn altogether from their sockets in the cross-piece B, and some inconvenience might be experienced in replacing them.

Stays, or cross-ties J J, of metal or other suitable material, may be employed to strengthen the instrument.

The whole apparatus, as thus constructed, is very simple, strong, and durable, and can be got up at very little expense. All its parts may be made of wood, except the locking-bolts and their operating-rods, the guide-rods I I, and the lugs. In case the blade C is made of wood, its edges should be sheathed with steel or iron.

In operation it is very effective and convenient. The blade is locked in position until loaded. When the instrument reaches the place where the driver desires to dump the load, he, with his hand, knee, or foot, throws up the bar F, which unlocks the blade, whereupon the latter rotates on its axis, and discharges the load. The weight of bar F throws the bolts E E into position again, and, as the blade comes round against them, the bolt, or tooth D automatically locks under it, and the instrument is ready for another load.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The bar F, in combination with the guides I I, and also in combination with the bent rod G, pivoted upon the roller H, and so constructed as to form a double lever, all arranged as and for the purpose specified.

SIDNEY ALDERMAN.

Witnesses:

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