

M. E. WARNER & S. W. KINGSLEY.

Road-Scrapers.

No. 144,935.

Patented Nov. 25, 1873.

Fig. 1

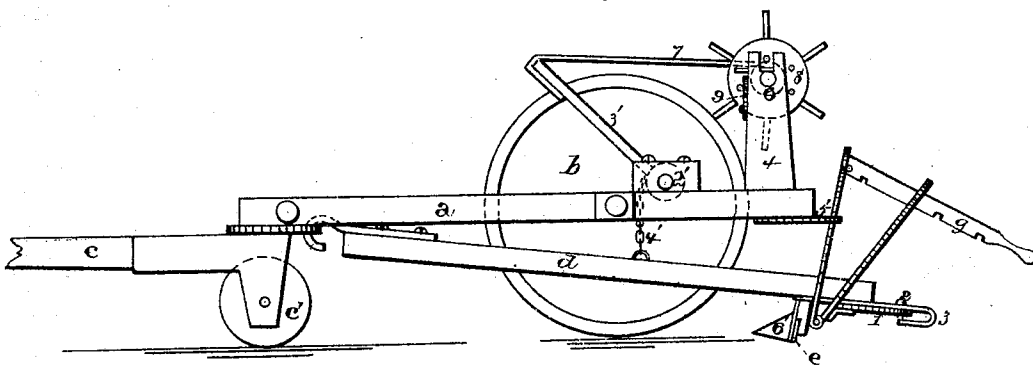
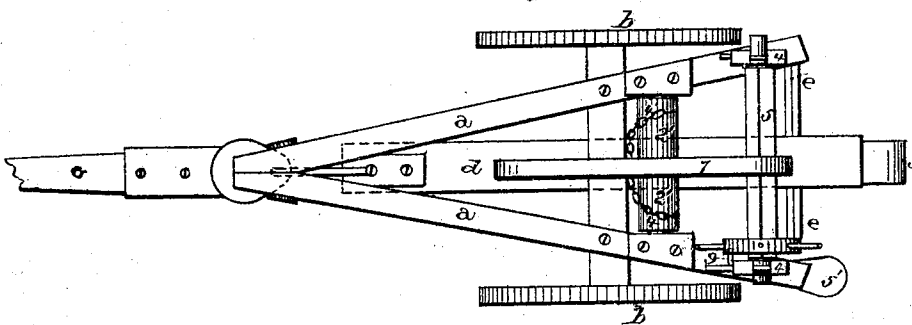


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

MOSES E. WARNER AND SETH W. KINGSLEY, OF HATFIELD, MASSACHUSETTS.

IMPROVEMENT IN ROAD-SCRAPERS.

Specification forming part of Letters Patent No. **144,935**, dated November 25, 1873; application filed October 29, 1873.

To all whom it may concern:

Be it known that we, MOSES E. WARNER and SETH W. KINGSLEY, of Hatfield, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Road-Scrapers; and we do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of our invention relates to an improvement in road-scrappers; and it consists in the arrangement and combination of devices which will be more fully described hereafter.

The accompanying drawings represent our invention.

a represents a triangular frame supported upon the two driving-wheels *b*, and which has the tongue *c* pivoted to its front end. To the under side of the tongue is secured the roller *c'*, which turns in all directions with the tongue, and supports the front end of the frame. Pivoted to the front end of the frame, so that it can move freely from side to side, is the draft-bar *d*, to which the scraper *e* is pivoted. This scraper can be dumped by the hand-lever *g*, or can be turned freely around in any direction, and secured in position by means of the circular plate 1 and pin 2, passing down through the extension 3 from the rear end of the bar *d*. Thus far there is nothing new in the construction of our machine, the same having been before used. The trouble in using it is, that the driver is unable to manage both the team and the scraper; and, consequently, two or more men are always required to operate it for the simplest work, making the machine too expensive for ordinary use. In order to obviate this, we secure a standard, 4, to each side of the rear end of the frame, upon which is journaled the shaft 5. To this shaft is secured a drum or pulley, 6, around which the cord or strap 7 winds, and a hand-

wheel, 8, for operating the shaft, the hand-wheel having holes in one side, in which a suitable catch or stop, 9, catches, so as to hold the shaft in any desired position. At a suitable distance in front of the two standards 4, on top of the frame, is journaled a drum, 2', having the lever 3' projecting upward from it; and to this lever is secured one end of the chain, cord, or strap 7, which wraps around the drum 6 on the shaft 5. Extending upward from the draft-bar is one or more chains, 4', which have their upper ends fastened to the roller or drum 2', so that when the hand-wheel 8 is revolved the power is transmitted through the strap or chain 7 to the lever and drum, and thus the draft-bar is raised upward from the earth, carrying the scraper with it. By means of these devices, the driver, standing on the plate or stand 5' extending outward from the end of the frame, can manage both team and scraper with the greatest ease, and entirely dispense with the second man always heretofore required. To one end of the scraper is attached a sharp-pointed cutter, 6', which is used to cut the shoulder on the road, something which has heretofore been done by a plow, and at a second operation. By attaching it to the scraper, the road is both scraped and the shoulder cut at the same operation at a great saving of time and expense.

Having thus described our invention, we claim—

The combination of the shaft 5, drum 6, hand-wheel 8, stop or catch 9, chain or strap 7, lever 3', and drum 2' with the chains 4' and draft-bar *d*, carrying the scraper, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 21st day of October, 1873.

MOSES E. WARNER.
SETH W. KINGSLEY.

Witnesses:

SAML. P. BILLINGS,
G. S. HUNT.