

UNITED STATES PATENT OFFICE.

DANIEL L. HARRIS AND ELEAZER D. CARTER, OF TERRE HAUTE, INDIANA.

RAILROAD SCRAPER AND LEVELER.

SPECIFICATION forming part of Letters Patent No. 266,621, dated October 31, 1882.

Application filed July 1, 1882. (No model.)

To all whom it may concern:

Be it known that we, DANIEL L. HARRIS and ELEAZER D. CARTER, of the city of Terre Haute, county of Vigo, and State of Indiana, have invented certain new and useful Improvements in Railroad Scrapers and Levelers, of which the following is a specification.

The object of our said invention is to produce a scraper or grader for railroad purposes by which the dirt or gravel, after being dumped from a train of cars, may be leveled off without resorting to the tedious and expensive process of hand-shoveling. This object is accomplished by constructing a suitable car, mounting suitable scrapers or mold-boards thereon, and providing appropriate mechanism where- by they can be operated.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a top or plan view of a car carrying our improved scrapers, some portions of the flooring being broken away to show the construction beneath, the scrapers being in position for use; Fig. 2, an under side plan of a portion of the same; Fig. 3, a side elevation thereof; Fig. 4, a view similar to Fig. 3, except that the scrapers are raised up; and Fig. 5, a transverse vertical section on the dotted line *z z* in Fig. 4.

In said drawings, the portions marked A represent the floor-timbers or frame-work of the car-body; B' B², &c., a supplemental frame-work, to which the scrapers are attached; C, the scrapers; D, a winch mounted on the car for the purpose of raising the scrapers, and E chains connecting the drum of said winch to the scrapers.

The car, of which the beams A are the floor-timbers, is simply a flat car of any suitable construction, except that it preferably has its sides cut out in the center, as shown most plainly in Fig. 1, to allow the scrapers to be folded up when not in use, so as to not project beyond the line of the car-platform.

The scraper-supporting frame-work consists of downwardly-projecting posts B' B², cross-beams B³ B⁴, and brace-beams B⁵, and its purposes and uses will be readily understood from an examination of the drawings.

The scrapers C are heavy blades formed

somewhat like a plowshare, and are hinged to the beams B³ B⁴ by the hinges *c*³ *c*⁴. They are also provided with eyes *c* or other suitable means for attaching the chains E. When in use these scrapers are let down in the position shown by Figs. 1 and 3, and when not in use should be drawn up in the position shown by Figs. 4 and 5. The position when in use can be easily regulated to the grade required by means of the winch D and chains E. These scrapers are preferably armed at their lower or cutting edges with a sharp steel bar.

The winch D is an ordinary winch such as is used in many places. Its drum is of sufficient length to accommodate both the chains E, one of which winds under and the other over it, as shown. It is provided with winding mechanism and pawls, as shown.

In addition to its ordinary use as a grader or leveler, our improved scraper can be used to mow down weeds alongside the track. For this purpose the scraper-blades are lowered very near to or in contact with the top of the ground, so as to cut the weeds near their roots.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a car, scrapers C, hinged at *c*³ and *c*⁴ to the frame-work beneath the car to swing upward, as shown, a winch mounted on said car, and chains or ropes connecting said scrapers and said winch, substantially as set forth.

2. The combination, with a car having its sides cut away to receive the scrapers when raised up, of said scrapers and mechanism for raising and lowering them, substantially as set forth.

3. The combination of the car, the frame-work B' B² B³ B⁴ B⁵, the scrapers C, the winch D, and the chains E, substantially as shown and specified.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, the said CARTER the 24th and the said HARRIS the 28th day of June, A. D. 1882.

DANIEL L. HARRIS. [L. S.]
ELEAZER D. CARTER. [L. S.]

In presence of—
C. BRADFORD,
E. W. BRADFORD,