

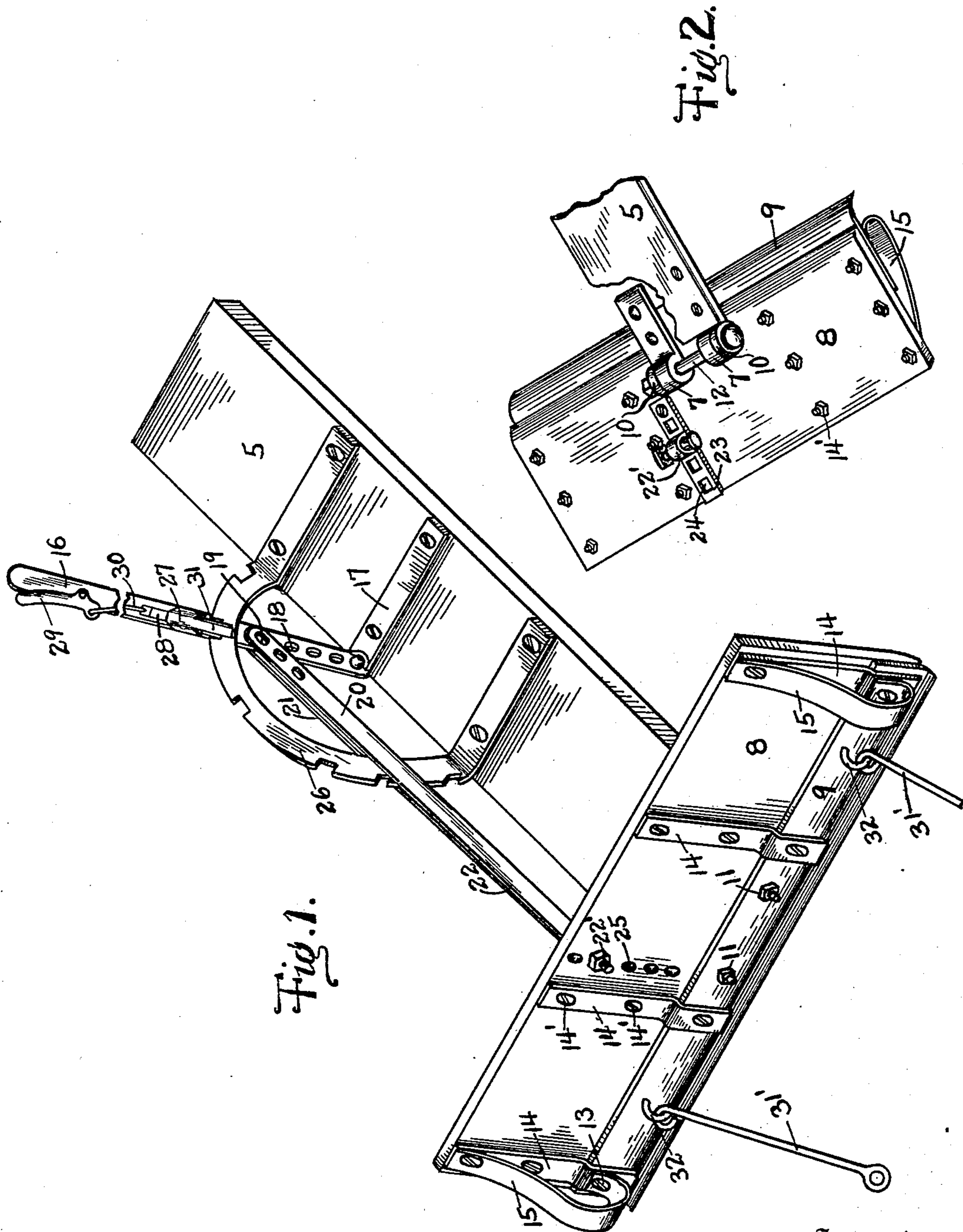
No. 751,106.

PATENTED FEB. 2, 1904.

C. E. REED.
LAND SCRAPER.

APPLICATION FILED APR. 6, 1903.

NO MODEL.



Witnesses
Charles Morgan,
Harry Churchill

Inventor
C. E. REED.
By *Charles Chandler*
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES E. REED, OF SUNNYSIDE, WASHINGTON, ASSIGNOR OF ONE-HALF TO GEORGE W. HOLLOWAY, OF BRAWLEY, CALIFORNIA.

LAND-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 751,106, dated February 2, 1904.

Application filed April 6, 1903. Serial No. 151,309. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. REED, a citizen of the United States, residing at Sunnyside, in the county of Yakima, State of Washington, have invented certain new and useful Improvements in Land-Scrapers; and I 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 appertains to make and use the same.

This invention relates to land-scrappers; and it has for its object to provide a simple and efficient construction which will be held securely in active position while in operation and which may be easily and quickly lowered to discharge its load at the proper time.

A further and important object of the invention is to provide a shifting mechanism for the scraper-board which will be strong and durable and will be held against lateral displacement on the base-board and in which, furthermore, the shifting link may be adjusted vertically or transversely of the scraper-board to satisfy different specific conditions of operation.

An additional object of the invention is to provide a more secure manner of attaching or hinging the scraper-board to the base-board, so as to prevent pulling of the hinges from the scraper-board, and, further, to provide spring-shoes at the ends of the scraper-board and on which said board will travel when it is shifted to dumping position.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is a front perspective view of the scraper with the scraper-board in raised position. Fig. 2 is a rear perspective view of the scraper-board and a part of the base-board.

Referring now to the drawings, the present scraper comprises a base-board 5, at the end of which are secured the transversely-alining ears 7, forming part of the hinge connection between the base-board and the scraper-board 8. The scraper-board is disposed transversely

of the base-board and slightly beyond its end, and upon the front face of the scraper-board is secured a metal scraping-blade 9, which is curved downwardly and forwardly beyond the lower edge of the scraper-board. Coöperating with the perforated ears 7 are eyebolts 10, which are engaged through the scraper-board 8 and through the scraper-blade on the front face of the latter, said eyebolts being drawn snugly into place with their heads against the rear face of the scraper-board through the medium of nuts 11, which are engaged with their front ends and impinge against the front face of the scraper-blade. The heads of the eyebolts lie at the outer sides of the ears 7, and through the ears and eyebolts is engaged a pintle-bolt 12, whereby a hinged connection is formed between the two boards. By engaging the eyebolts through the scraper-blade the drawing of the eyebolts from the scraper-board and consequent loosening of the hinge connection is absolutely prevented.

The scraper-blade is held to the scraper-board not only by means of the eyebolts, but further by means of bolts 13, which are engaged through the scraper-board, the scraper-blade, and the metal straps 14, which are disposed vertically on the front face of the scraper-board and have their lower ends displaced forwardly and overlapped upon the front face of the scraper-blade. The metal straps or braces are further held in place by means of additional bolts 14', which are engaged through them and through the scraper-board at points above the scraper-blade.

It will be noted that the straps 14 are disposed at the ends of the scraper-board and also at points between the ends thereof, and upon the end portions of the endmost straps are secured the intumed ends of arc-shaped spring-metal plates 15, which are held to the straps by the end-retaining bolts or securing-bolts of the straps. These spring-metal plates project forwardly at right angles to the scraper-board and form shoes or runners, which support the board free from the ground when the board is shifted to dump its load, as hereinafter described. By forming the shoes or runners of spring metal the board is not sub-

jected to sudden shocks in such degree as to injure the board or its hinge connection with the base-board.

When the scraper-board is in active position, it is erect, and to dump the materials scraped, so that the board may ride over it, the upper edge of the scraper-board is shifted forwardly. After the material scraped has been dumped the scraper-board is returned to its upright position.

To shift the scraper-board, a lever 16 is provided, and is pivoted at its lower end upon the end of a fulcrum-plate 17, which is secured transversely upon the base-plate 5 and projects laterally therebeyond. In the lever is a longitudinal series of transverse perforations 18, which are designed to receive interchangeably the pin 19, which is engaged through the arms 20 and 21 of a bifurcated link 22, said arms having also lines of perforation therein, so that the pin or bolt may be shifted longitudinally thereof to vary the effective length of the link. The forward end of the link is bifurcated to receive an eyebolt 22', which is removably engaged through the metal plate 23, secured vertically against the rear face of the scraper-board, said plate having a longitudinal series of perforations 24, which aline with corresponding perforations 25 in the scraper-board and which permit of engagement of the eyebolt with the scraper-board at different points of the height of the latter. As the lever is shifted upon its fulcrum the link is operated to swing the scraper-board on its hinge to lie at different angles to the base-board, and to hold the lever at different points of its adjustment a notched segment 26 is provided, having its end portions bent laterally and secured upon the top face of the base-board. On the side of the shifting-lever is mounted a casing 27, in which is disposed a slidable spring-pressed bolt 28, which is held by its spring in normal engagement with the notched segment, there being provided an angular latch-lever 29, which is pivoted at the upper end of the shifting-lever and is connected by the link 30 with the latch-bolt, so that when the angular lever is operated in one direction the latch-bolt will be withdrawn

from the notched segment, and when the angular lever is released the latch-bolt will engage the notched segment. To prevent lateral displacement of the shifting-lever from the notched segment, a finger 31, formed upon the casing 27, projects longitudinally from the casing and lies against the opposite face of the notched segment from the shifting-lever.

When it is desired to adjust the shifting mechanism of the scraper-board to satisfy different specific conditions, the shifting link may be connected to the board at different points vertically thereof. It may be connected to the shifting-lever at different points vertically thereof, and the effective length of the shifting link may be changed.

Drag-bars 31' are pivotally connected with eyebolts 32, which are engaged through the scraper-plate and scraper-board and are adapted at their forward ends for attachment of draft appliances.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

In a land-scraper, the combination of a base-board, a scraper-board hinged transversely to the base-board, a scraper-blade at the lower edge of the scraper-board, transverse brace-plates disposed upon the front faces of the scraper-board and the scraper-blade, spring-shoes disposed with their ends upon the brace-plates, attaching-bolts passed through each shoe at one end and through a brace-plate and the scraper-board and at the opposite end through the shoe, the brace-plate, the scraper-blade and scraper-board, and means mounted upon the base-board and connected with the scraper-board for shifting the latter.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. REED.

Witnesses:

GEO. VETTER,
HENRY H. WENDE.