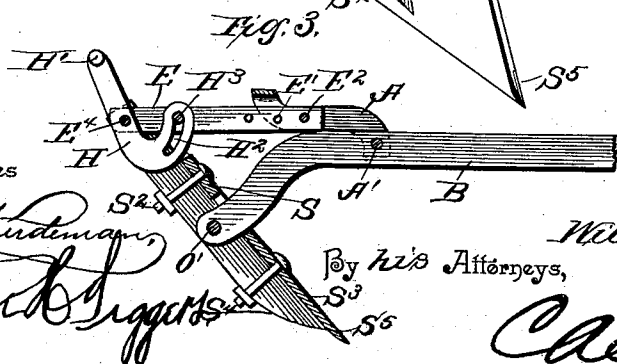
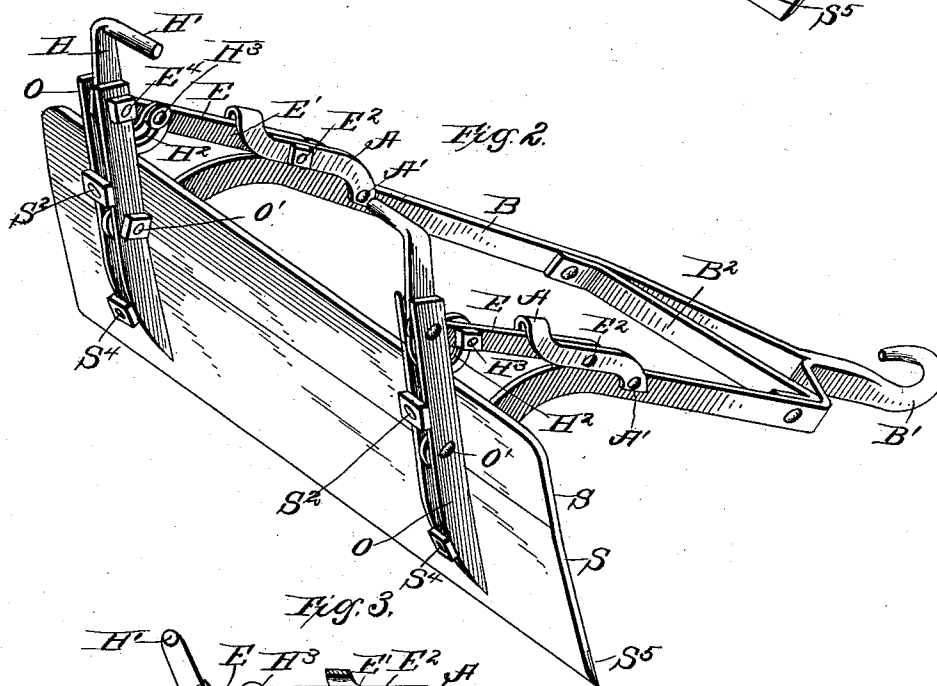
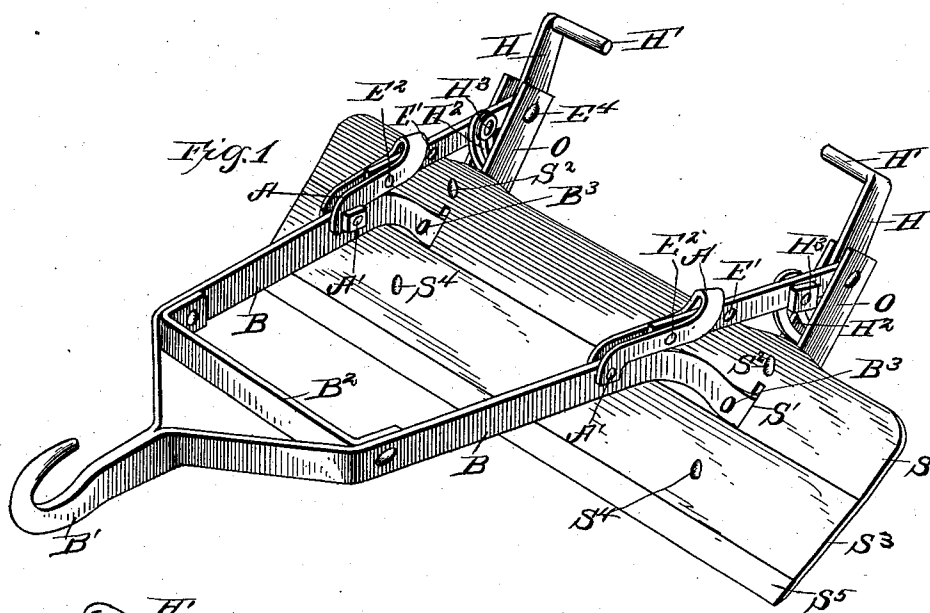


(No Model.)

W. F. MENTLEY.
ROAD SCRAPER.

No. 486,566.

Patented Nov. 22, 1892.



Witnesses

S. C. Hurdman,
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Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM F. MENTLEY, OF DEFIANCE, OHIO.

ROAD-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 486,566, dated November 22, 1892.

Application filed June 23, 1892. Serial No. 437,774. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. MENTLEY, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented a new and useful Scraping-Machine, of which the following is a specification.

This invention relates to improvements in scraping-machines, the objects in view being to provide a machine of this class that is of cheap and simple construction, readily adjustable, is light and therefore of easy draft, and is adapted to conveniently and expeditiously scrape roads, form gutters, clean out ditches, &c.

Various other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a machine of this class constructed in accordance with my invention. Fig. 2 is a rear perspective view. Fig. 3 is a longitudinal section through one of the scraper-standards.

Like letters of reference indicate like parts in all the figures of the drawings.

In practicing my invention I employ opposite side beams B, which beams are gradually converged toward their front ends, where they meet, are welded together, and bent to form a hook B'. In rear of the point at which they meet the beams are braced apart by means of a transverse brace B², the ends of which are bolted to the beams. The rear ends of the beams are upwardly bent and provided with a series of adjusting-holes B³.

O designates a pair of standards, which are slotted from their upper ends to points near their lower ends and near their middles are provided with transverse bolt-holes. Between the bifurcations of these standards are introduced the rear ends of the beams B, and bolts O' pass through the perforations in the standards and through any one of the bolt-holes in the said beams, whereby the said standards may be adjusted transversely opposite each other or one in advance of the other to a desired extent. The scraper-blade comprises two longitudinal sections, the upper section S being located above the beams B and having its lower edge slotted at S' for the passage

therethrough of said beams. Heel-bolts S² pass through the upper section and through the two standards O. The lower section S³ is located below the beams in front of the two standards and is secured to the same through the medium of heel-bolts S⁴. These two sections are preferably formed of wood, and the lower edge of the lower section is provided with a longitudinally-disposed steel scraping-blade S⁵.

A pair of inverted-U-shaped links A have their terminals embracing the beams B near their centers and by means of bolts A' are pivotally connected at their lower ends to the beams.

E designates a connecting-bar, a pair of which are employed, and these bars have their front ends provided with a series of bolt-openings E'. The front ends of the bars pass through the inverted-U-shaped links A and are pivotally connected to the same by means of removable bolts E². The rear ends of the links are pivotally connected to the upper ends of the standards by bolts E⁴.

H represents a pair of handles, which are of bell-crank shape and above their angles are mounted pivotally upon the bolts E⁴. The upper ends of the bell-crank handles are upwardly bent to form hand-grips H', and their lower ends are longitudinally slotted concentric with the bolts, as indicated at H², and loosely engage headed bolts H³, which extend inwardly from the connecting-bars E.

In operation the team is hitched to the hook at the front end of the bail, which is formed by the braces B, and the scraper is dragged along in the usual way. It will be seen that the blade may be adjusted by the advancement of either of the standards, so as to be disposed diagonally to the line of draft, or by locating said standards directly opposite each other, each in transverse alignment, the blade is at a right angle to the line of draft. By adjusting the connecting-bars E with relation to the links A it will be seen that the connections between the upper ends of the standards and the draft-beams may vary in length, and hence the standards incline more or less, and they, carrying the scraper-blade, will communicate to the latter a corresponding or similar inclination. By pressing down upon the handles it will be obvious that the

latter will be oscillated, so that the lower ends of their slots will be brought against the headed bolts of the connecting-bars E and act as fulcrums for the handles. The latter, pressing upon the upper ends of the standards, will force said upper ends down to a proper inclination for scraping. When the scraping has been accomplished and it is desired to dump the load, the same may be accomplished by a raising of said handles, which, acting in a manner contrary to that just described, will serve to elevate or push forward the upper ends of the standards and withdraw or push rearward the rear ends of said standards, so that the scraper-blade will be inclined from top to bottom, and hence will pass readily over the load in front of it.

The scraper is adapted to efficiently operate upon roads or for the formation of gutters or ditches and is especially successful in the latter operation and in cleaning the same, inasmuch as by drawing the scraper transverse to the ditch or at a right angle thereto the sides or edges of the same are smoothed and made regular, and by operating the scraper to dump at proper points the edges of the ditch are built up or, in other words, deepened.

Having described my invention, what I claim is—

1. In a scraping-machine, the combination, with opposite beams and the standards pivotally connected intermediate their ends to the rear ends of the beams; of a scraping-blade secured to the standards, inverted-U-shaped links pivoted to each of the beams; connecting-bars between the upper ends of the standards and links, said connecting-bars being provided with a series of adjusting-holes, and bolts connecting the links and bars and standards and bars, substantially as specified.

2. In a scraping-machine, the combination, with a pair of opposite beams provided near their rear ends with a series of perforations, of standards loosely receiving the rear ends of the beams, bolts for adjustably connecting the standards with the beams, and adjustable connecting devices between the upper ends of the standards and the beams, substantially as specified.

3. In a scraping-machine, the combination, with the opposite beams terminating at their front ends in a draft-hook, of the opposite

standards adjustably mounted on the beams and extending above and below the same, the scraper-blade secured to the front faces of the standards, the inverted-U-shaped links pivotally connected to the beams in front of the blade, and the connecting-bars adjustably connected to the links and pivotally connected to the upper ends of the standards, substantially as specified.

4. The combination, with the opposite beams, a pair of standards pivotally connected to the rear ends thereof, and the blade connected to the front faces of the standards, of opposite handle-levers of bell-crank shape pivoted to the upper ends of the standards and provided in their front branches with slots and studs extending through the bars and through the slots and connecting-bars between the upper ends of the standards and beams; said bars having studs engaging the slots of the levers and pivotally connected at their ends to the beams and standards, substantially as specified.

5. In a scraping-machine, the combination, with the opposite beams, the bifurcated standards, and bolts pivotally connecting the standards between their ends with the rear ends of the beams, the upper and lower scraper-blade sections, heel-bolts passing through the same and through the standards, the upper section being slotted for the passage of the beams, of the inverted-U-shaped links embracing and pivoted at their lower ends to intermediate points of the beams, the perforated connecting-bars, bolts pivotally connecting the rear ends thereof between the upper ends of the standards and the front ends thereof adjustably to the links; studs extending through the bars, and bell-crank levers fulcrumed above their angles upon the bolts with connecting-bars and standards, said levers having their upper ends inwardly bent to form handles and their front branches slotted concentric with their pivot-point and loosely receiving the headed studs of the connecting-bars, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM F. MENTLEY.

Witnesses:

J. B. WOODS,
S. M. CAMERON.