

UNITED STATES PATENT OFFICE.

EDWARD BLOUNT WINTERS, OF COFFEYVILLE, KANSAS, ASSIGNOR TO THE COFFEYVILLE IMPLEMENT AND MANUFACTURING CO., OF COFFEYVILLE, KANSAS.

ROAD-WORKING MACHINE.

946,187.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD B. WINTERS, a citizen of the United States, and a resident of Coffeyville, in the county of Montgomery and State of Kansas, have invented a new and Improved Road-Working Machine, of which the following is a full, clear, and exact description.

This invention relates to road working machines, and more particularly such as are used for the grading of roads, and which include substantially parallel beams carrying scraper blades adapted to engage the road surface, and means whereby the pitch of the blades may be adjusted to alter the depth to which they shall sink into the road surface.

The object of the invention is to provide a device of the class described, simple and efficient in construction and inexpensive to manufacture, which is provided with means whereby the pitch of the blades may be altered to suit the road conditions, and which has further means whereby the blades can be drawn at any desired angle over the road surface.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a plan view of an embodiment of the invention; and Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1, and shows part of the adjustable construction of the device in different positions in dotted outline.

In the specific form shown in the drawings, I provide substantially parallel beams 1 of wood or the like, which carry blades 2 adapted to engage the surface of a road. Connecting these two beams are links 3 having their ends 4 pivotally arranged in brackets 5 on the rear beam. Located on the back of the forward beam by means of bolts or screws 7 are two upright posts 6 having their upper and lower ends 8 and 9 respectively, bifurcated. The ends 10 of the links 3 are pivotally connected at the lower bifurcated ends 9 of the posts by means of pivot pins. The upper ends 8 of the posts extend above the front beam, as shown most clearly in Fig. 2. I further provide on the back of the rear beam, and secured thereto by means

of bolts or screws 12, a plate 13 having a portion 14 laterally and rearwardly disposed. Rigidly secured to the extension 14 of the plate by means of rivets, bolts or the like, is a lever 17 having a manual grip 18 at the upper end thereof. The lever extends rearwardly and upwardly, as shown in the drawings. Slidably located on the lever 17 is a detent 19. A handle 20 is pivotally secured to the upper portion of the lever and carries a link 21, which serves to secure it to the detent 19 so that as the handle is moved toward the lever the detent is raised, and as it is moved away from the lever, the detent is lowered. I also provide controlling bars 22 which have their forward ends 23 bent and pivotally located in the upper bifurcated portions 8 of the posts 6. These controlling bars further have their rear ends 24 suitably bent so that they are substantially parallel to one another and serve to carry a notched sector 25, the latter being rigidly and removably secured between these ends 24 of the bars 22 by means of bolts or screws 26. The detent 19 serves to engage the notches 11 of the sector 25 so that the pitch of the bars and their respective blades can be adjusted as desired. The controlling bars, as will be seen from the drawings, diverge from near the center of the rear beam to the outer ends of the forward beam, thus strengthening the structure against lateral strain.

On the forward end of the front beam are two eyes 27 secured thereto by means of bolts or screws 28. Carried by the eyes are two links 29 which have their outer ends connected by means of a suitable flexible member 30, such as chain or the like. Movably mounted on the flexible member is a loop 31 having a constricted end 32 twisted at right angles to the body 33, as shown most clearly in Fig. 1. The body of the loop is adapted to be connected to the means employed in drawing the machine over the road, while the constricted end 32 is adapted to engage any desired link of the flexible member 30, so that the angle of the beams may be adjusted with respect to the longitudinal axis of the road. It will be understood that the constricted portion grips a link and attaches to the same as long as the pull is exerted by the horses or other draft means.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent:—

1. In a road working machine, a forward and a rear beam provided with scraping blades adapted to engage the surface of a road, means for pivotally connecting the said beams, controlling bars pivotally connected at their forward ends with the forward beam, a notched sector rigidly secured to the rear ends of said controlling bars, a projection at the back of the rear beam, a lever rigidly secured to said projection, and means carried by said lever for engaging the notches of said sector.

2. In a road working machine, substantially parallel beams having scraping blades adapted to engage the surface of a road, posts secured on the forward beam, links pivotally connected with the lower ends of said posts and with the rear beam, controlling bars pivotally connected at their forward ends with the upper ends of said posts, a notched sector rigidly secured to the rear ends of said bars, a lever secured to the rear beam, and means carried by the lever for engaging the notches of said sector.

3. In a road working machine, two elongated members having blades adapted to engage a road surface, posts secured to the forward one of said members, brackets carried by the rear member, links pivotally connecting said posts and said brackets, controlling bars, each having an end pivotally connected to one of said posts, a notched sector rigidly secured between the free ends of said bars, a plate having a lateral extension and

located on the rear member, a lever rigidly secured to said extension, and means on said lever for removably engaging the notches of said sector, whereby the pitch of said blades can be altered.

4. In a road working machine, substantially parallel beams provided with scraping blades adapted to engage the surface of a road, brackets on the front of the rear beam, posts secured on the rear face of the forward beam and projecting at their upper ends above said beam, links pivotally connected with said brackets and with the lower ends of said posts, a plate secured on the back of the rear beam and having a rearward extension, a lever secured to the said extension, controlling bars having their forward ends bent and pivotally connected with the upper ends of said posts, the said bars converging rearwardly and extending at their rear ends above the rear beam near the center thereof, the rear ends of said bars being bent and arranged substantially parallel with each other, a notched sector secured between the rear ends of said bars, and a detent carried by said lever and adapted to engage the notches of the sector to adjust the pitch of the beams and their respective blades.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD BLOUNT WINTERS.

Witnesses:

LILLIE HOLMAN,
GRACE FISHER.