L. IRELAND.

ROAD GRADER.

APPLICATION FILED MAR. 27, 1908.

910,384.

Patented Jan. 19, 1909.

2 SHEETS—SHEET 1.

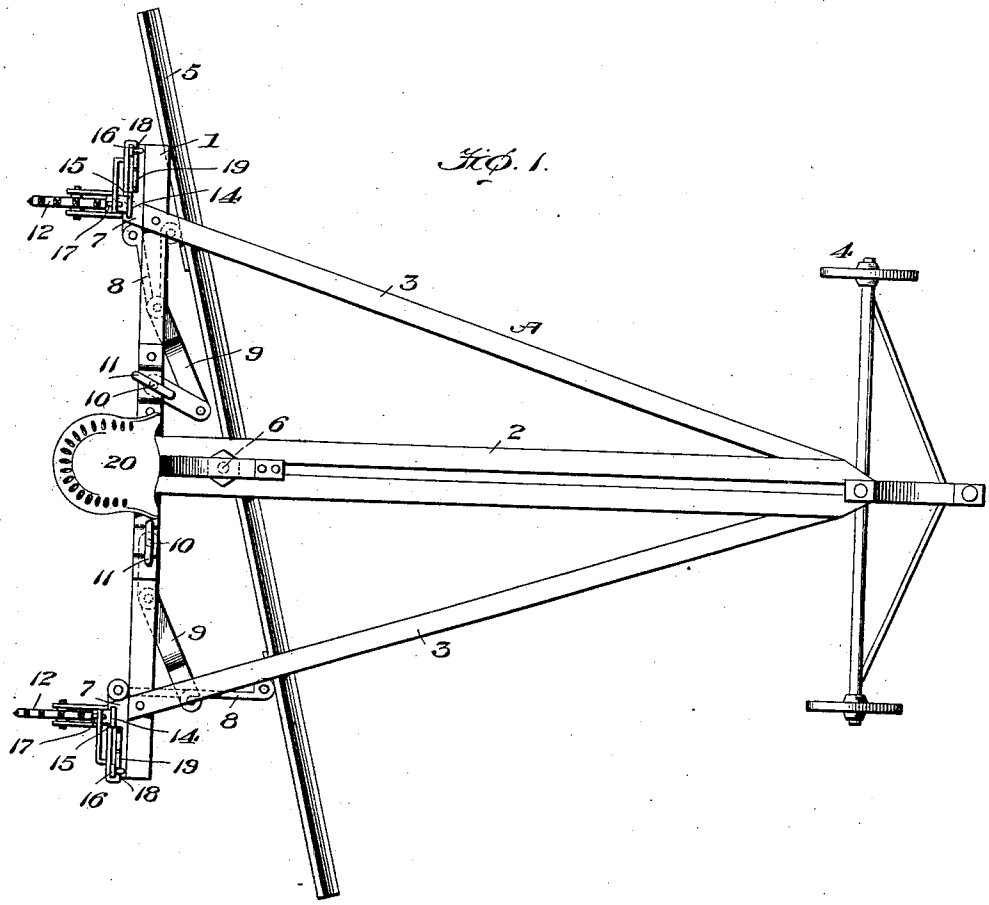


Fig. 1.

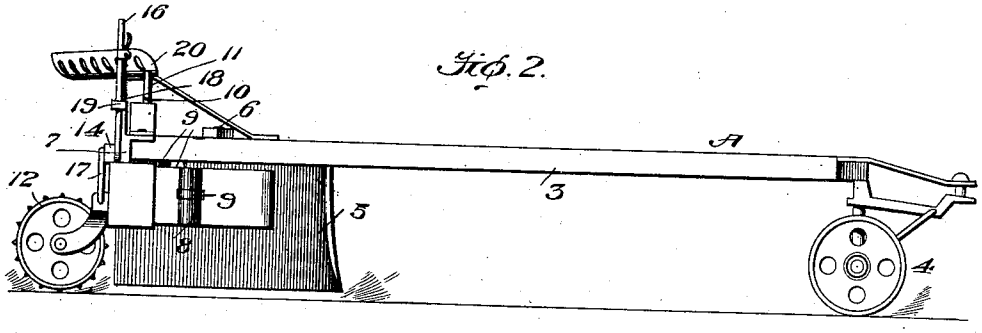


Fig. 2.

Witnesses

J. P. Campbell

Inventor

Levi Ireland

By Louis Bagger & Co.

his Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

Fig. 3.

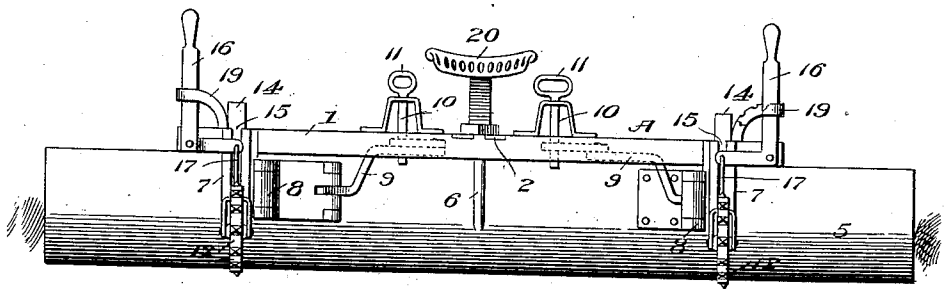


Fig. 4.

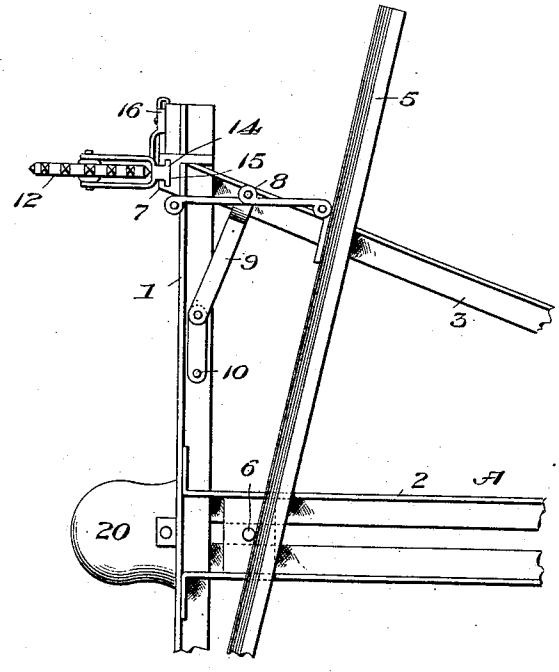


Fig. 5.

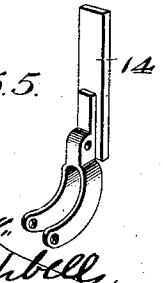
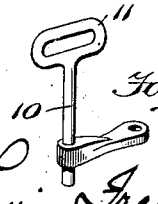


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

LEVI IRELAND, OF FREDERICKTOWN, OHIO.

ROAD-GRADER.

No. 910,384. Specification of Letters Patent. Patented Jan. 19, 1909.

Application filed March 27, 1908. Serial No. 423,754.

To all whom it may concern:

Be it known that I, LEVI IRELAND, a citizen of the United States, residing at Fredericktown, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in Road-Graders, of which the following is a specification.

My invention relates to an improvement in road graders, and the object is to provide a blade which can be reversed or shifted from one position to another.

Another object is to provide means for reversing the position of the blade and for holding the same in its reversed position.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings Figure 1 is a top plan view; Fig. 2 is a view in side elevation; Fig. 3 is a rear view; Fig. 4 is a bottom plan and Figs. 5 and 6 are details.

A represents the frame and 1 is the crossbeam. A beam 2 extends from the crossbeam 1, and extending from the ends of the crossbeam are braces 3, 3, which are connected to the outer end of the beam 2. A truck 4 is pivotally connected to the end of the beam 2 and to the truck 4 a draft appliance is connected whereby horses or draft animals can be attached. A blade 5, which extends beneath the frame, is pivotally connected to the beam 2 by a bolt 6. This blade is connected to standards 7, 7, which extend downwardly from the crossbeam 1 by hinges 8, 8. Connected to the hinges at their central pivotal connection is a link connection 9. A stem 10 passing through the beam 1 is connected to the link connection and a handle 11 on the stem is adapted to be turned for operating the hinge to draw one end of the blade 5 inward or to throw it outward. The end of the blade being operated will cause the other end to be thrown in the opposite direction from the movement of the end which is being operated. The crossbeam 1 is preferably made of angle iron and the link connection is adapted to bear against the beam when the hinge is thrown to its extended position.

Wheels 12, 12 are journaled in bifurcated ends of shanks 14. These shanks 14 are adapted to slide in guideways 15, 15 in the standards 7.

Levers 16 are pivotally connected to the crossbeam and are connected to the shanks 14 by links 17. The levers 16 are adapted to raise and lower the wheels to the position desired and are held in such position by the dogs 18 on the levers engaging the rack-teeth in the segments 19. A seat 20 is secured in any suitable manner to the central beam 2 for the driver or operator.

The blade is capable of being shifted from one side to the other or capable of a reverse movement to accommodate the direction of travel of the grader for throwing the dirt in the direction desired. Again the rear wheels 12 can be so adjusted as to cause one end of the blade to cut into the earth for digging a trench or ditch along a roadway.

It is evident that more or less slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth, but:—

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a road grader the combination with a frame, of a blade connected thereto, hinges connected to the blade and means for operating the hinges whereby the position of the blade can be reversed.

2. In a road grader the combination with a frame, of a blade, hinges connected to the frame and blade and means for operating the hinges whereby the position of the blade can be reversed.

3. In a road grader, the combination with a frame, of a blade connected thereto, hinges connected to the frame and blade, and handles connected to the hinges whereby one end of the blade is thrown in one direction, and the other end in the opposite direction upon the operation of one of the handles.

4. In a road grader the combination with a frame, of a blade pivotally connected thereto, means for adjusting the position of the blade, wheels mounted on the frame and means connected to the wheels for raising and lowering either end of the blade.

5. In a road grader the combination with a frame, of a blade pivotally connected thereto, means for adjusting the position of the blade, wheels mounted on the frame and levers connected to the wheels whereby an end of the blade may be raised or lowered by operating one of the levers.

6. In a road grader the combination with

a frame, of a blade pivotally connected thereto, means for adjusting the position of the blade, wheels slidably connected to the frame, and levers connected to the wheels for raising and lowering the blade.

7. In a road grader the combination with a frame, of a blade pivotally connected to the frame, hinges connected to the frame and blade, links connected to the hinges, and means connected to the links for operating the hinges for adjusting the position of the blade.

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

LEVI IRELAND.

Witnesses:
W. N. FOOT,
JOHN KANAGA.