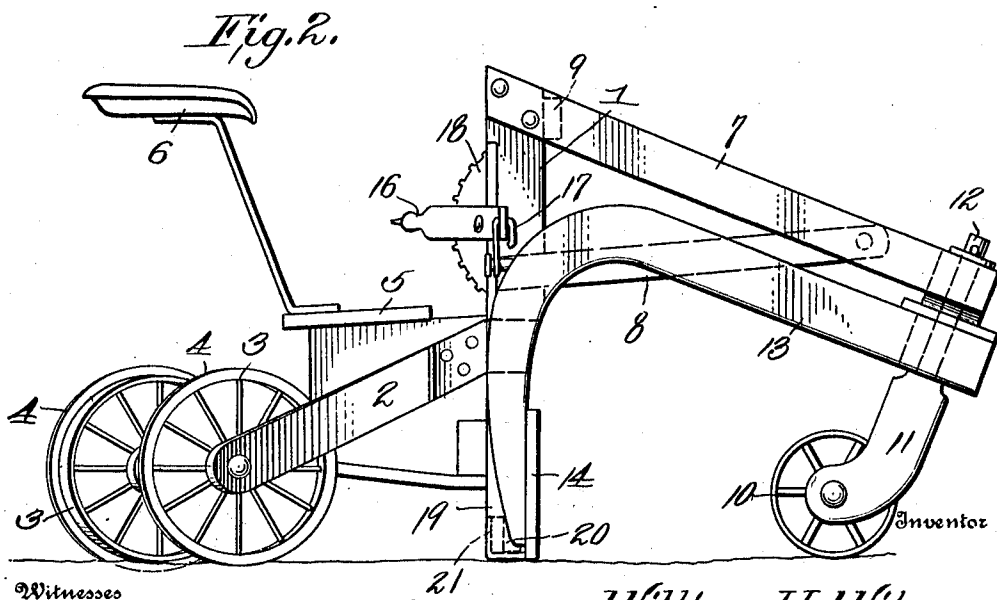
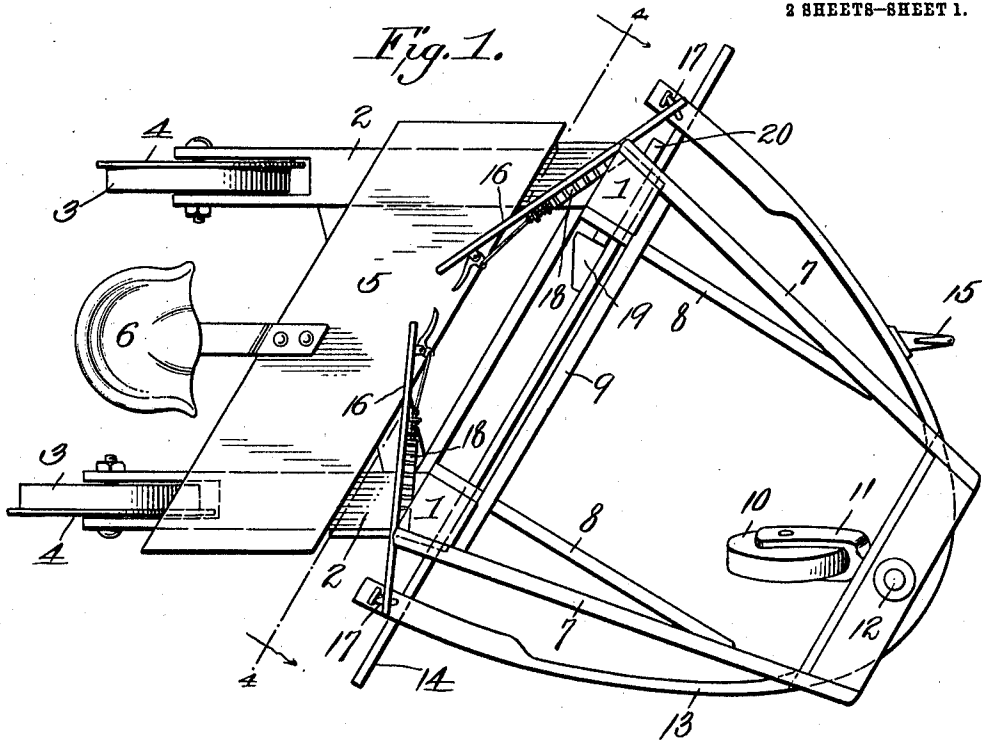


W. H. WILSON.
ROAD SMOOTHER AND GRADER.
APPLICATION FILED OCT. 11, 1909.

1,004,128.

Patented Sept. 26, 1911.
2 SHEETS—SHEET 1.



Witnesses

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Fig. 3.

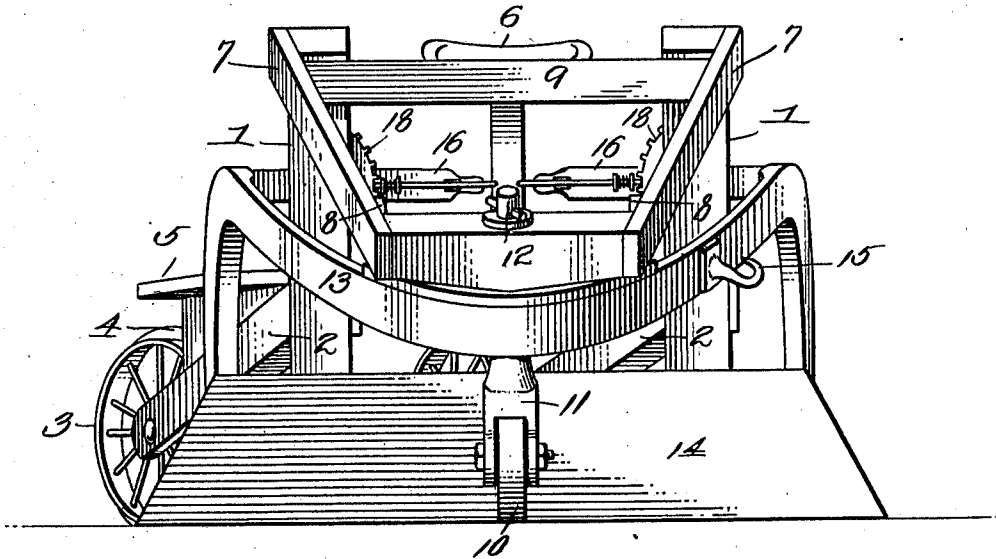
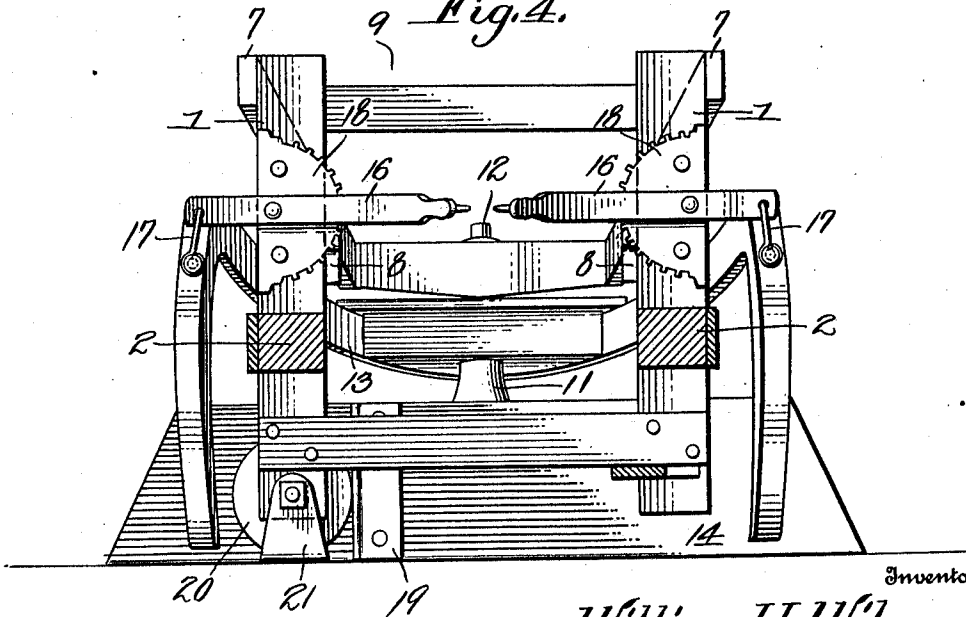


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM H. WILSON, OF MARCELINE, MISSOURI.

ROAD SMOOTHER AND GRADER.

1,004,128.

Specification of Letters Patent. Patented Sept. 26, 1911.

Application filed October 11, 1909. Serial No. 521,984.

To all whom it may concern:

Be it known that I, WILLIAM H. WILSON, a citizen of the United States, residing at Marceline, in the county of Linn and State of Missouri, have invented a new and useful Improvement in Road Smoothers and Graders, of which the following is a specification.

This invention relates to a device for grading or leveling down a road, and it can also be used for grading and leveling yards, building sites and in the construction of road beds for railroad tracks.

The invention consists of a vertically adjustable scraper traveling at an angle to the line of draft, together with means whereby vertical adjustment of the scraper can be made by the driver from his seat, the seat platform having also a vertical movement relative to the scraper, so that by moving certain levers in a direction tending to lift the platform the scraper will be forced downwardly into closer engagement with the ground. By moving said levers in the opposite direction the scraper is lifted from the ground allowing loose dirt to pass beneath it, instead of piling the dirt up in advance of it.

In the accompanying drawings: Figure 1 is a plan view. Fig. 2 is a side elevation looking along a line parallel with the scraper. Fig. 3 is a front elevation. Fig. 4 is a section on the line 4—4 of Fig. 1.

In constructing the device, I employ a frame which consists of two uprights 1 from which extend rearwardly and at an angle two downwardly inclined supporting members 2, bifurcated at their rear ends and provided with supporting rear wheels 3, said wheels being flanged as shown at 4 for the purpose of holding them in the line of draft, thereby preventing a sliding side movement of the rear portion of the device. Upon the members 2 is mounted a platform 5 from which is supported a seat 6. A forwardly and downwardly extending frame 7 strengthened by braces 8 and 9 is carried in advance of the first mentioned frame, the frame 7 being connected at its upper rear end to the uprights 1 and this frame makes an obtuse angle to the supporting members 2 and its front end portion is supported by a wheel 10, said wheel being journaled in a bearing 11 similar in construction to bearings employed for rollers or casters, the said

bearing 11 having a pivot pin 12 which works loosely through the front apex portion of the frame 7. A curved frame 13 has its forward portion also pivotally mounted upon the pivot pin 12 and below the frame 7. This curved frame 13 is entirely separate from the two frames previously mentioned and is also of greater width. It curves rearwardly to a point adjacent the uprights 1 and its side members then curve downwardly upon opposite sides of the frame of which said uprights constitute a part. To this downwardly curved portion of the frame 13 is attached a scraper or blade 14, formed preferably of metal. This blade sets normally at an incline to the line of draft, the motive power being connected or hinged to a suitable hook 15 carried by the frame 13 upon one side of the pivotal point 12 and substantially in alinement with the seat 6.

In order to adjust the scraper, levers 16 are pivoted upon the uprights 1, the free ends of the levers being in the form of handles which may be grasped from the seat 6, and their outer ends engaging hooks 17 carried by the rear portions of the frame 13, the said levers working upon rack bars 18. To guide the scraper or blade a vertical guide bar 19 is arranged upon its rear face and said guide bar is in engagement with a roller 20 carried by one of the uprights 1, a suitable shield 21 preventing the said roller from coming in contact with the ground. Movement of the levers upwardly will tend to lift the uprights, and platform, and will correspondingly exert downward pressure upon the scraper forcing the same into contact with the road bed. Downward movement of the inner ends of the levers will lift the scraper slightly above the normal surface of the ground, thus allowing it to pass over a small obstruction or permitting it to pass over loose earth or stones, and facilitates removal of the grader from one point of operation to another. It will be noted from Fig. 1 that the wheels 3 and the wheel 10 travel upon a line parallel to the draft.

What I claim is:

1. A road scraper comprising front and rear frames arranged at an angle to each other, a curved frame pivotally connected at the front of the device and below the front frame, a scraper carried by said curved frame, and means for connecting said curved

frame to the rear frame and for adjusting the curved frame with respect to the other frames.

2. A road scraper comprising front and rear frames arranged at an obtuse angle to each other, wheels supporting said frames, a frame pivotally connected below the front frame, a scraper carried by the pivoted frame arranged obliquely with respect to the line of draft, and means operable from the rear portion of the device for vertically moving said scraper.

3. A device of the kind described consisting of a rear frame, said frame comprising uprights and rearwardly extending portions mounted upon wheels, a forwardly and downwardly extending frame connected at its rear end to the uprights, a supporting wheel pivotally connected to the front portion of the second mentioned frame, a curved frame also pivotally supported by said wheel and arranged below the second mentioned frame, a scraper carried by said curved frame, said scraper working ob-

liquely with respect to the path of travel of the machine, levers pivoted upon the uprights, and hooks connecting said levers to the curved frame for the purpose of vertically adjusting the scraper.

4. A machine of the kind described comprising rear and front portions arranged at an angle to each other, wheels supporting the rear portion, a pivoted wheel supporting the front portion, a platform carried by the rear portion, a seat thereon, levers working in vertical planes, said levers being carried by the rear portion, a curved frame mounted pivotally upon the front supporting wheel, said frame curving rearwardly and downwardly, a scraper carried by the downwardly curved portions of the curved frame, and means connecting the outer ends of the levers to the downwardly curved portions of the frame last mentioned.

WILLIAM H. WILSON.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."