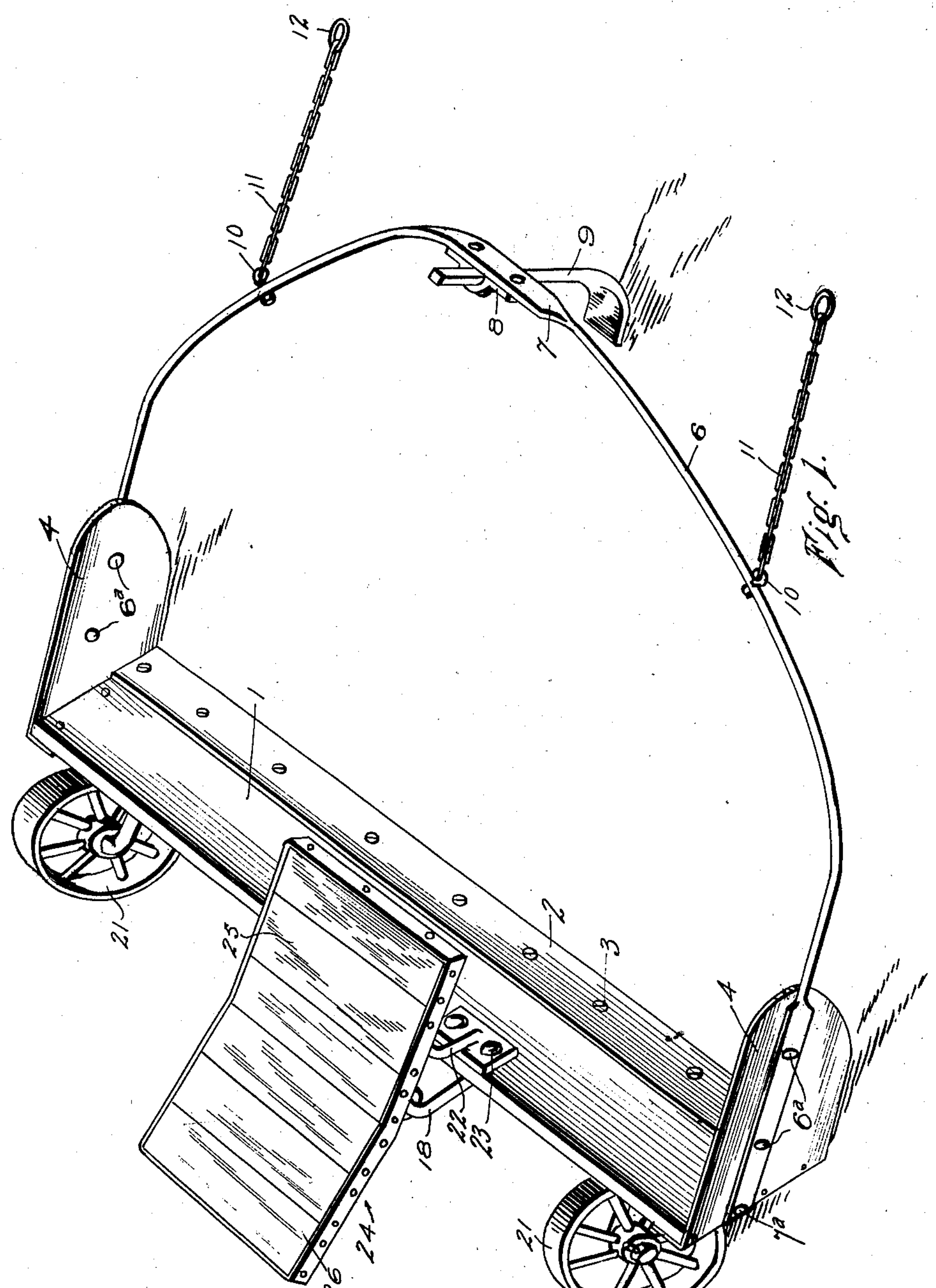
H. M. SPROUL.

LAND LEVELER.

APPLICATION FILED MAR. 18, 1910.

972,279. **Patented Oct. 11, 1910.**

2 SHEETS—SHEET 1.



WITNESSES

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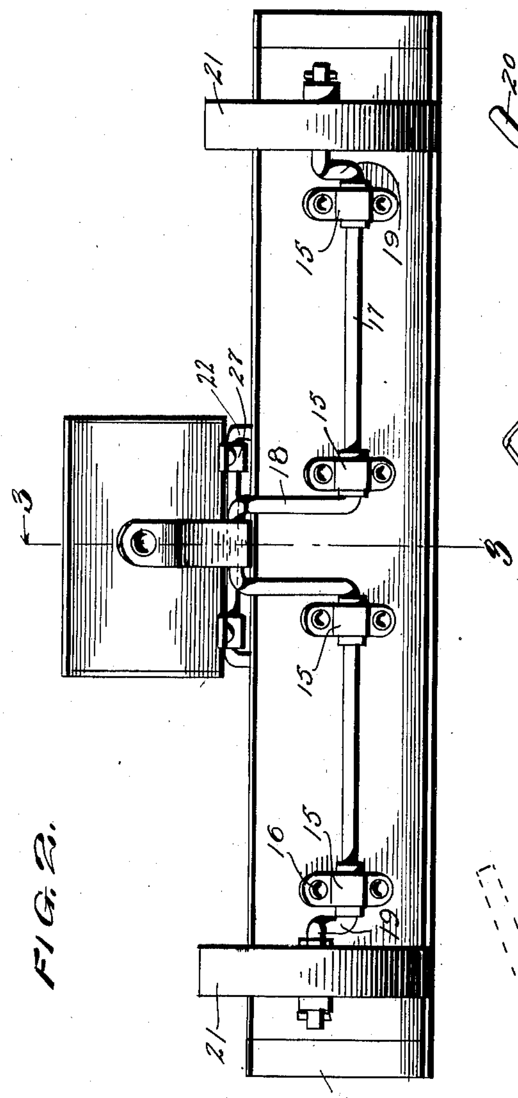

FIG. 2.

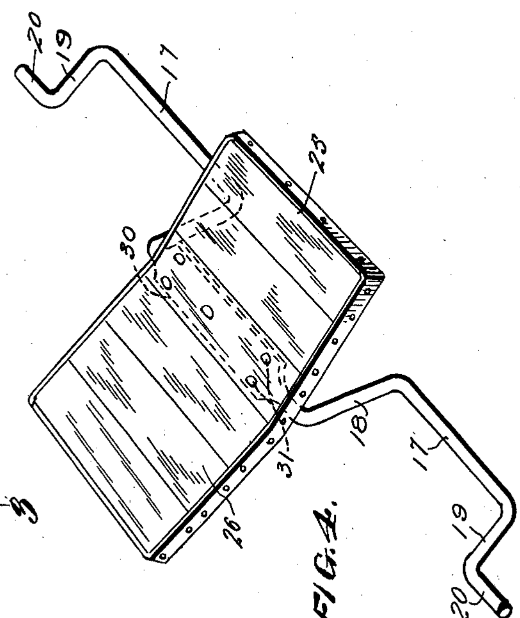

FIG. 4.

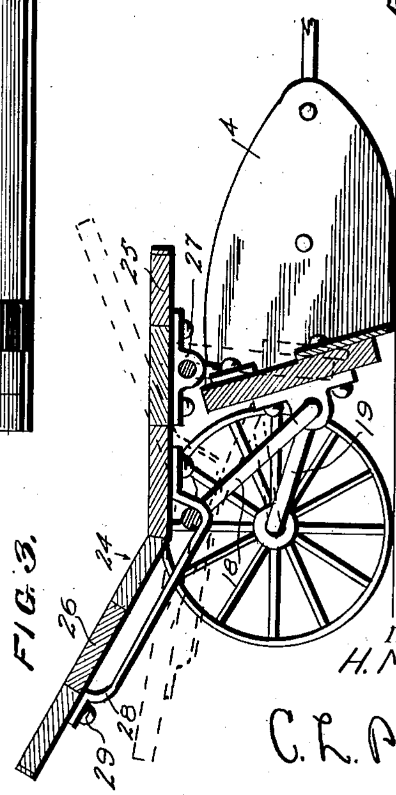

FIG. 3.

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LAND-LEVELER.

972,279. Specification of Letters Patent. Patented Oct. 11, 1910.

Application filed March 18, 1910. Serial No. 550,205.

To all whom it may concern:

Be it known that I, HORACE MAYNARD SPROUL, a citizen of the United States, residing at North Yakima, in the county of Yakima and State of Washington, have invented certain new and useful Improvements in Land-Levelers, of which the following is a specification.

My invention relates to a device for scraping and leveling land.

An important object of my invention is to provide a device of the above character so constructed that the leveling blade may be raised by the operator changing his position upon the supporting platform.

A further object of my invention is to provide a device of the above character which is simple in construction, easy to operate and not subject to derangement.

My invention consists generally in the arrangement and combination of parts hereinafter to be described.

In the accompanying drawings forming a part of this specification, and in which like numerals are used to designate like parts throughout the same, Figure 1 is a perspective view of the device. Fig. 2 is an end view of the same. Fig. 3 is a vertical sectional view through the leveling blade and associated members. Fig. 4 is a perspective view of a slightly modified form of axle which may be employed upon the device.

In the drawings illustrating a preferred embodiment of my invention, the numeral 1 designates a leveling blade which may be formed of any suitable material, such as oak planking, and which is provided upon its lower or engaging edge with a metal strip 2, which is suitably secured to the same by means of screws 3 or the like. The leveling blade 1 has rigidly secured to its ends, by any suitable means, metal side pieces 4, which extend forwardly as shown. A U-shaped rod 6 has its free end rigidly secured to the metal side pieces 4 by means of rivets 6^a as shown, and this U-shaped rod is further connected to the planking 1 by means of bolts 7^a as shown. This U-shaped rod is provided near its center with a flattened portion 7, upon one side of which is suitably secured a bracket 8, which is adapted to rigidly hold a ground engaging support 9, as shown in Fig. 1. The U-shaped rod 6 is provided as shown with eye-bolts 10, to which are secured chains 11 provided upon their free ends with rings 12 and constituting a portion of a suitable draft appliance. One function of the ground engaging support 9 is to prevent the leveler from running on the team which draws the same.

The leveling blade 1 is provided upon its rear face with spaced alined brackets 15, which are rigidly secured to said leveling blade 1 by means of suitable bolts 16 or the like. Pivotally mounted through the brackets 15 is a shaft or axle 17, which has its center bent to form a crank portion 18. The ends of the shaft 17 are bent to form angular portions 19, which are provided with horizontal projections 20, upon which are rotatably mounted wheels 21. By reference to Fig. 3, it will be seen that the angular portions 19 are inclined when the leveling blade 1 is arranged to engage the ground, and the crank portion 18 is disposed at an angle of approximately 35 degrees to said portions 19.

The leveling blade 1 has rigidly secured at its center adjacent its forward upper edge, a bracket 22, by means of bolts 23, which pass through portions of said bracket 22 and said leveling blade 1. I further provide a supporting platform 24, which is formed of a normally horizontally arranged forward portion 25, and an angularly arranged rear portion 26. The forward horizontal portion 25 of platform 24 is provided with brackets 27, which are rigidly secured to the same and pivotally mounted upon the bracket 22, as shown.

The platform 24 is further provided with a longitudinally arranged U-shaped bracket 28, which is rigidly secured to platform 24 by means of bolts 29, and within which is slidably mounted the crank portion 18 of the shaft 17, as clearly shown in Figs. 2 and 3.

In Fig. 4 I have illustrated a slightly modified form of the shaft 17. In this modified form the crank portion 18 is flattened as at 30, and this flattened portion is rigidly connected to the platform 24 by means of bolts 31 or the like. The forward portion 25 of the platform 24 is not connected to the leveling blade 1, the brackets 22 and 27 being dispensed with.

In the operation of the device, when the leveling blade 1 is arranged in its operative position as shown in Figs. 1 and 3, the operator stands upon the forward portion 25 of the supporting platform, and his weight is employed to force the leveling blade in engagement with the ground. When it is desired to dump the earth scraped up by the

leveling blade 1, the operator stands upon the rear portion 26 of platform 24, whereby the platform 24 is oscillated downwardly about the bracket 22 as an axis. The crank portion 18 is engaged by the portion 26 of the platform and accordingly forced downwardly, which forces the bracket 22 upwardly and accordingly raises the leveling blade 1, as clearly illustrated by the dotted lines in Fig. 3. The operation of the modified form of my invention as shown in Fig. 4, is as follows: The operator stands upon the forward portion 25 of platform 24 and his weight holds the leveling blade in engagement with the ground. When it is desired to elevate the leveling blade, the operator stands upon the rear portion 26 of the platform, and since the shaft 17 is rigidly secured to the platform 24, the same will be oscillated rearwardly, whereby the leveling blade will be raised.

Having fully described my invention, what I claim is:—

1. In a device of the character described, a leveling blade, wheels pivotally connected to the same, a supporting platform pivotally connected to said leveling blade, and connecting means between said supporting platform and said wheels.

2. In a device of the character described, a leveling blade, a shaft provided with a crank portion pivotally connected to said leveling blade, wheels carried by said shaft, and a supporting platform connected to said crank portion.

3. In a device of the character described, a leveling blade, a shaft provided with a crank portion and angular ends pivotally connected to said blade, wheels carried by said angular ends, and a supporting platform connected to said crank portion for oscillating the same.

4. In a device of the character described, a leveling blade, a shaft provided with a crank portion and angular ends pivotally connected to said leveling blade, a supporting platform pivotally connected to said leveling blade and disposed to engage said crank portion, and wheels carried by said angular ends.

5. In a device of the character described, a leveling blade, a shaft provided with a crank portion and angular ends pivotally connected to said leveling blade, wheels carried by said angular ends, a supporting platform pivotally connected to said leveling blade, said supporting platform being disposed to engage said crank portion, and a bracket carried by said supporting platform within which said crank portion operates.

6. In a device of the character described, a leveling blade, a shaft provided with angular ends pivotally connected to said leveling blade, wheels carried by said shaft, and a supporting platform associated with said shaft, for oscillating the same.

7. In a device of the character described, a leveling blade, a shaft provided with angular ends pivotally connected to said leveling blade, wheels carried by said angular ends, a supporting platform pivotally connected to said leveling blade, and connecting means between said supporting platform and said shaft.

8. In a device of the character described, a leveling blade, a shaft provided with angular ends pivotally connected to said leveling blade, wheels carried by said angular ends, a supporting platform pivotally connected to said leveling blade, connecting means between said shaft and said supporting platform, and a draft device connected to said leveling blade.

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

HORACE MAYNARD SPROUL.

Witnesses:
HUGO F. LUHMAN,
W. B. CLARK.