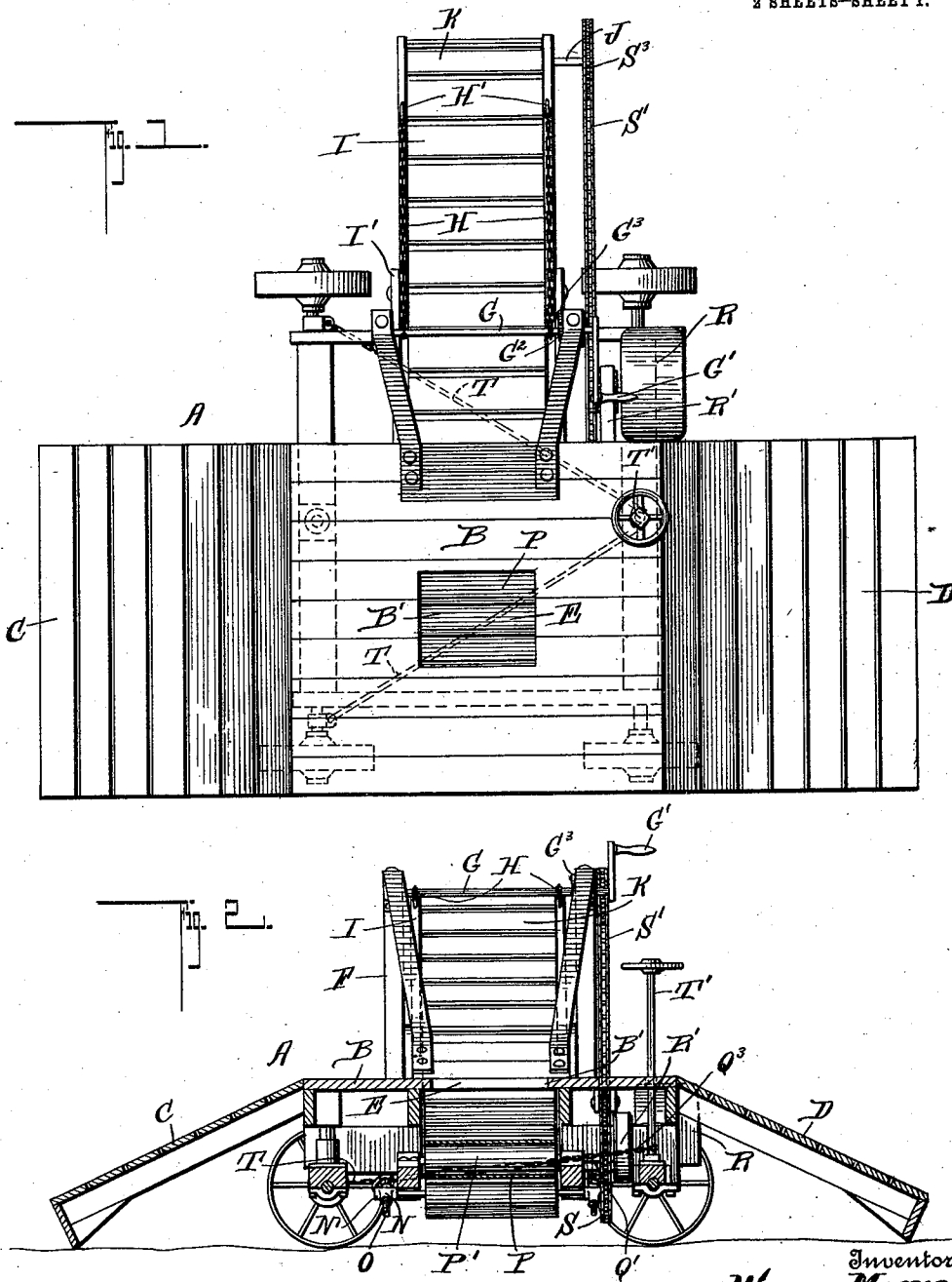


W. MOORE.
PORTABLE EARTH LOADING DEVICE.
APPLICATION FILED APR. 2, 1910.

1,001,212.

Patented Aug. 22, 1911.

2 SHEETS-SHEET 1.



Witnesses

Philip H. Burch
Chas. Albright.

By

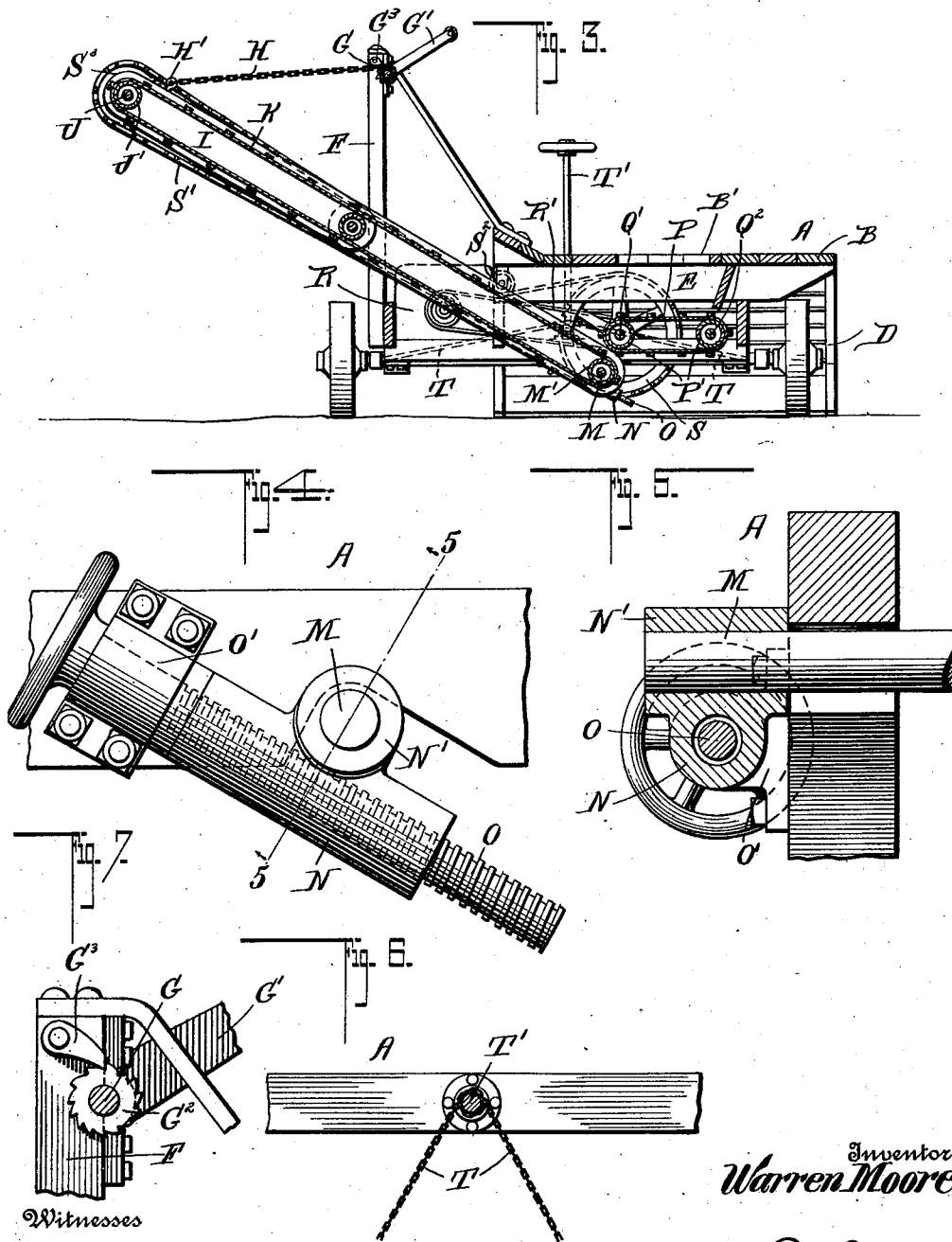
Warren Moore,
Attorney

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Philip H. Burch
Chas. H. Burch

Inventor
Warren Moore,
By Chas. E. Brock
Attorney

UNITED STATES PATENT OFFICE.

WARREN MOORE, OF LADYSMITH, WISCONSIN, ASSIGNOR OF ONE-HALF TO ALBERT DAVID DAY, OF LONG PRAIRIE, MINNESOTA.

PORTABLE EARTH-LOADING DEVICE.

1,001,212.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed April 2, 1910. Serial No. 553,009.

To all whom it may concern:

Be it known that I, WARREN MOORE, a citizen of the United States, residing at Ladysmith, in the county of Rusk and State of Wisconsin, have invented a new and useful Improvement in Portable Earth-Loading Devices, of which the following is a specification.

This invention relates to a device for loading wagons and cars with dirt from drag scrapers and scoops, whereby the earth can be readily conveyed into the wagon, thereby saving a great deal of time.

Another object of the invention is to provide a loading device which is mounted on a wheeled truck, so that the same can be readily moved from place to place.

A still further object of the invention is to provide a loading device which is driven by a gasolene engine in such a manner that the earth dumped out of the scoop will drop into a hopper onto an endless conveyer driven at a slow rate of speed from which it passes onto an endless conveyer which is so arranged that the dirt will be carried upwardly and can be dropped into a wagon or car.

Another object of my invention is to provide a sectional inclined conveyer with means for adjusting the pivoted outer section, so as to suit the height of wagon or car, into which the dirt is to be deposited.

Another object of my invention is to provide means for adjusting the tension of the inclined conveyer so that when the outer section is swung out of alinement with the inner section the endless conveyer can be loosened or tightened.

With these and other various objects in view, the invention consists in the novel features of combination, arrangement of parts, hereinafter fully described and pointed out in the claim.

In the drawings forming a part of this specification: Figure 1 is a top plan view of my improved loading device. Fig. 2 is a longitudinal vertical section through the same. Fig. 3 is a transverse vertical section. Fig. 4 is an enlarged side elevation of the adjusting screw for regulating the tension of the elevator. Fig. 5 is a section taken on line 5—5 of Fig. 4. Fig. 6 is a detail section showing the manner of connecting the steering chain to the shaft. Fig. 7 is a detail section through the shaft showing the ar-

range ment of the pawl and ratchet for locking the same.

In carrying out my improved invention I employ a wheeled truck A having a platform B mounted thereon carrying gang-planks C and D and provided with a central opening B' which communicates with a bottomless hopper E, into which the dirt is adapted to pass when dumped from a scoop which is driven up one gang plank, and down the other, the horses of the team passing over the platform to each side of the central opening.

Mounted on the truck is a pair of standards F provided with bearings, in which is mounted a shaft G carrying a crank G' and a ratchet wheel G² adapted to be engaged by a pawl G³ mounted on the adjacent standard for locking said shaft against rotation. Connected to the shaft G are a pair of chains H which have their free ends connected to eye-bolts H' secured in the side bars of the pivoted outer frame section I, of an elevating frame I', the lower section of which extends down under the platform, and it will be seen that by this construction the pivoted outer section can be raised and lowered by operating the crank, in order to adjust the same to the height of wagon into which the dirt is to be deposited, as will be hereinafter fully described. A shaft J is mounted in the outer section I carrying a roller J' over which passes an endless conveyer K, the lower end of which passes over a roller M', fixed on a shaft M which is journaled in bearings N', of sleeves N which are provided with internal threads in which work hand screws O, which are revolvably mounted in bearings O' carried by the truck, so that by operating the hand screws, the shaft can be moved, in order to tighten or loosen the endless conveyer.

The uprights F are connected to an inclined side portion of the platform B which prevents the dirt from dropping off of the side of the platform, and said braces hold the standards firmly, so as to prevent the same working loose.

Arranged transversely of the truck under the hopper is an endless conveyer P, mounted on rollers P', carried by shafts Q', Q², the shaft Q' being provided with a pulley Q³ over which passes a belt R', leading from a drive pulley of a gasolene engine R mounted on the truck, to one side of the

platform; and it will be seen by this construction that the endless conveyer arranged under the hopper will be driven in such a manner that it will deposit therefrom on to
5 the lower end of the endless elevator.

For driving the endless elevator, I have provided the shaft Q' with a sprocket wheel S¹, over which passes a sprocket chain S' which passes over an idle wheel S² and then
10 upwardly over a sprocket wheel S³ mounted on the shaft J at the end of the outer section of the elevator. It will be seen that the sprocket wheel S is of such a size in respect to the pulley, that the endless elevator
15 will be driven much faster than the endless conveyer arranged under the hopper, so as to prevent the earth from overloading the endless elevator, and by this construction the earth from the hopper will be fed on to the
20 endless elevator in such a manner that it will be carried upwardly by the same and discharged at its upper end into a wagon or car arranged under the same.

When it is desired to move the loader
25 quite a distance, a pole is attached for steering the same but when it is only desired to

move the same a slight distance, I provide means for steering the same which comprises a pair of chains T which are connected to the outer ends of the front axle
30 and converge rearwardly, and are connected to a hand-wheel operated shaft T', which is so mounted that the upper portion of the same can be removed, in order to be out of the way when the loader is in operation.
35

What I claim is:

A portable earth loading device comprising a wheeled truck, an elevating frame carried by said truck formed of a pivoted and a fixed section, a roller carried by the end
40 of the pivoted section, bearings arranged at the lower end of the fixed section of said frame, hand screws revolubly mounted in said bearings, internally threaded sleeves mounted on said hand screws provided with
45 bearings, a shaft mounted in said bearings carrying a roller, and an endless elevator passing through said rollers.

WARREN MOORE.

Witnesses:

EFNER NELSON,
W. H. JUDD.