

No. 677,507.

Patented July 2, 1901.

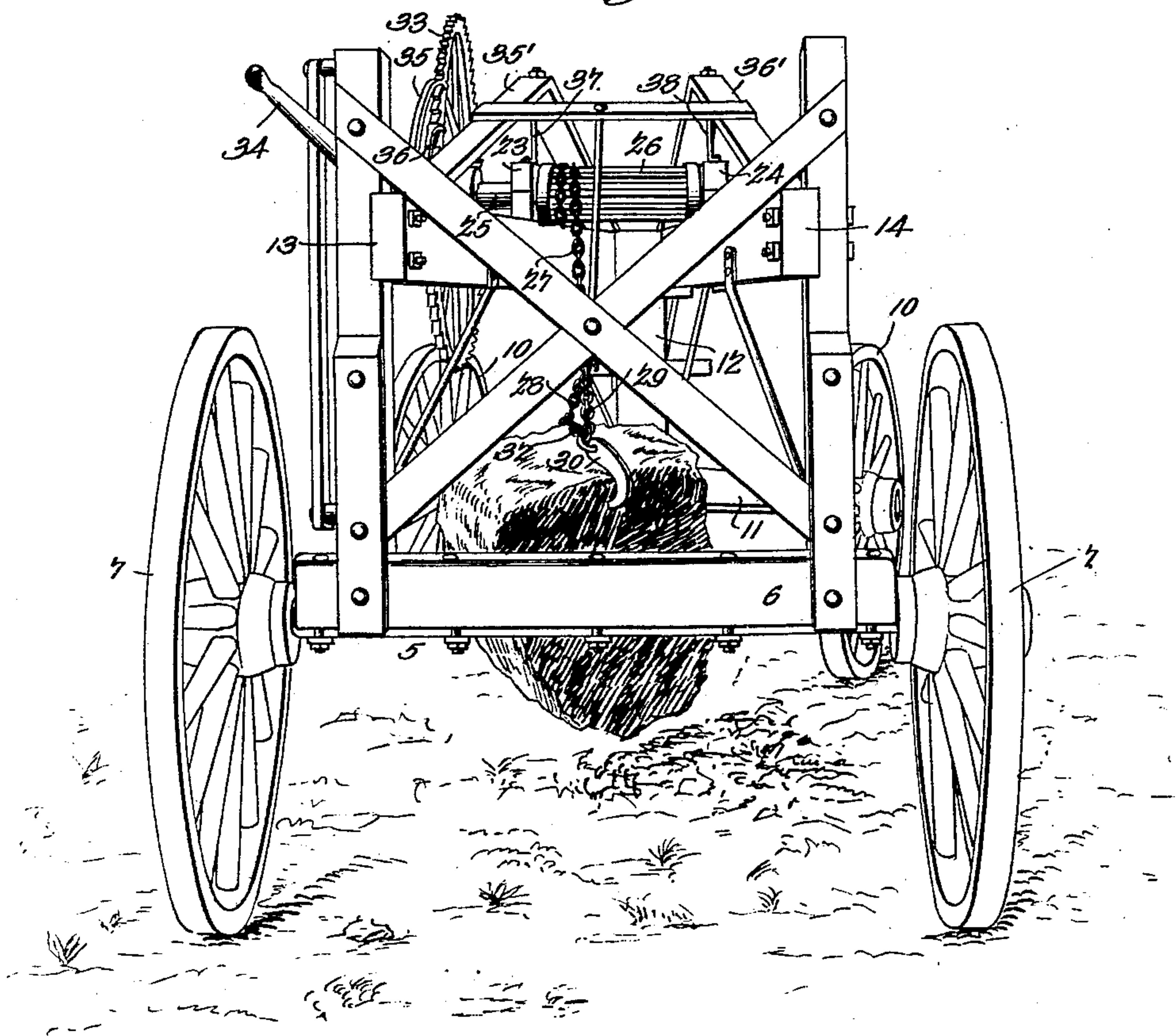
F. GOTHIER.
STONE LIFTER.

(Application filed Feb. 18, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



Witnesses:

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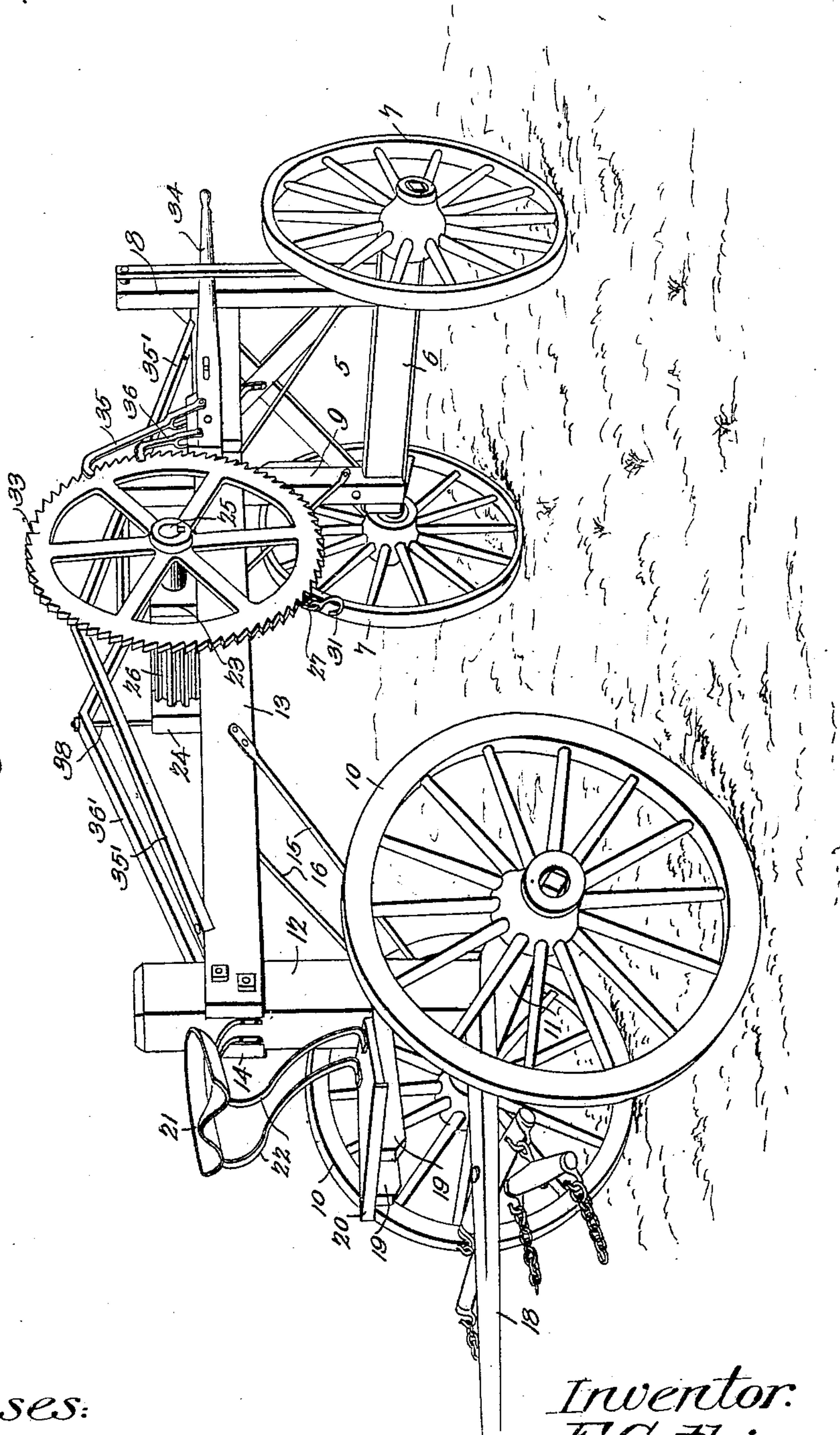
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2 Sheets—Sheet 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK GOTHIER, OF LANCASTER, NEW HAMPSHIRE.

STONE-LIFTER.

SPECIFICATION forming part of Letters Patent No. 677,507, dated July 2, 1901.

Application filed February 18, 1901. Serial No. 47,830. (No model.)

To all whom it may concern:

Be it known that I, FRANK GOTHIER, a citizen of the United States, residing at Lancaster, in the county of Coos and State of New Hampshire, have invented a new and useful Stone-Lifter, of which the following is a specification.

This invention relates to devices for lifting stones and other heavy bodies and for transporting them from place to place; and it has for its object to provide a construction that will be strong and durable and which will include means for engagement with the stone to be lifted and means for raising and suspending the stone during its transportation, and which may be reversely operated to lower the stone.

Further objects and advantages of the invention will be apparent from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a rear perspective view showing the complete mechanism with a stone suspended therefrom. Fig. 2 is a front perspective of the machine.

Referring now to the drawings, the present apparatus comprises a running-gear, including a rear axletree 5, having an axle 6 attached thereto and provided with supporting-wheels 7, and at the ends of this axletree are uprights 8 and 9. Front wheels 10 are also provided and are supported from an axletree 11, upon which is erected a post 12, with respect to which the axletree is pivoted, and connecting the side faces of the upper portion of this post with the inner faces of the uprights 8 and 9 are rearwardly-diverging beams 13 and 14, lying in a common horizontal plane and which support the lifting mechanism.

Brace-rods 15 and 16 are attached to the rear face of the post 12, adjacent to the lower end thereof, and to the outer side faces of the beams 13 and 14, and additional brace-rods are attached to the inner faces of the beam, adjacent to their rear ends, and to the inner faces of the uprights 8 and 9, adjacent to the lower ends of the latter.

A tongue 18 is attached to the forward axletree, and to the side faces of the post 12 are

secured sills 19, which project forwardly from the post and have a platform 20 secured thereon. Above the platform is a seat 21, supported by irons 22, attached to the front face of post 12 and resting upon the platform.

On the beams 13 and 14 are secured pillow-blocks 23 and 24, in which is journaled a shaft 25, having a drum 26 fixed thereon, and which drum is corrugated longitudinally, as shown, so that it has the form of a gear, and upon this drum is adapted to be wound the lifting-chain 27 of the apparatus, one end of which is fixed to the apparatus. The lower portion of the lifting-chain comprises the two branches 28 and 29, provided with hooks 30 and 31, and these hooks are connected by a cross-chain 32, so that when the hooks are engaged with the opposite rugged faces of a stone, as shown, they will be caused to grip the stone securely when strain is put upon the lifting-chain.

To rotate the lifting-drum, its shaft is provided with a ratchet-wheel 33, and in the plane of this ratchet-wheel and against the face of the adjacent beam there is pivoted a lever 34, and on this lever and at opposite sides of its pivot are pivoted two pawls 35 and 36 for engagement with the ratchet-wheel. When the lever is rocked, first one pawl and then the other is engaged with a tooth of the ratchet-wheel to rotate the latter a step, the unengaged pawl sliding freely over the ratchet. When the drum is rotated sufficiently to raise the stone to the proper height from the ground, both pawls are engaged with the ratchet-wheel and act to prevent back movement of the ratchet, as also pivotal movement of the lever. To further hold the lever against movement, however, a pin may be passed through alining openings in the lever and the adjacent beam of the frame.

When the stone is to be lowered, it is only necessary to operate the lever, raising the pawls from the ratchet alternately to permit the ratchet to rotate reversely.

To further strengthen the structure, trusses 35' and 36' are disposed with their ends upon the end portions of their respective means and are provided with tie-rods 37 and 38, connected with the pillow-blocks to support

or suspend them, thus taking a large part of the strain from the central portions of the beams.

It will be understood that in practice various modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

10 What is claimed is—

15 A device of the class described comprising a supporting-frame including front and rear axletrees, uprights upon the rear tree, a post upon the front tree, beams connected with the post and uprights and disposed to diverge rearwardly, wheels connected with the axle-

trees, pillow-blocks upon the beams, a longitudinally-corrugated winding-drum having a shaft journaled in the blocks, a ratchet-wheel upon the shaft, and a lever having pawls disposed for alternate engagement with the ratchet to rotate the latter when the lever is rocked.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK ^{his} X GOTHIER.
mark

Witnesses:

M. A. HASTINGS,
JOSEPH W. FLANDERS.