(No Model.)

R. M. McMEEN.

STUMP EXTRACTOR.

No. 300,786. Patented June 24, 1884.

Fig. 1.

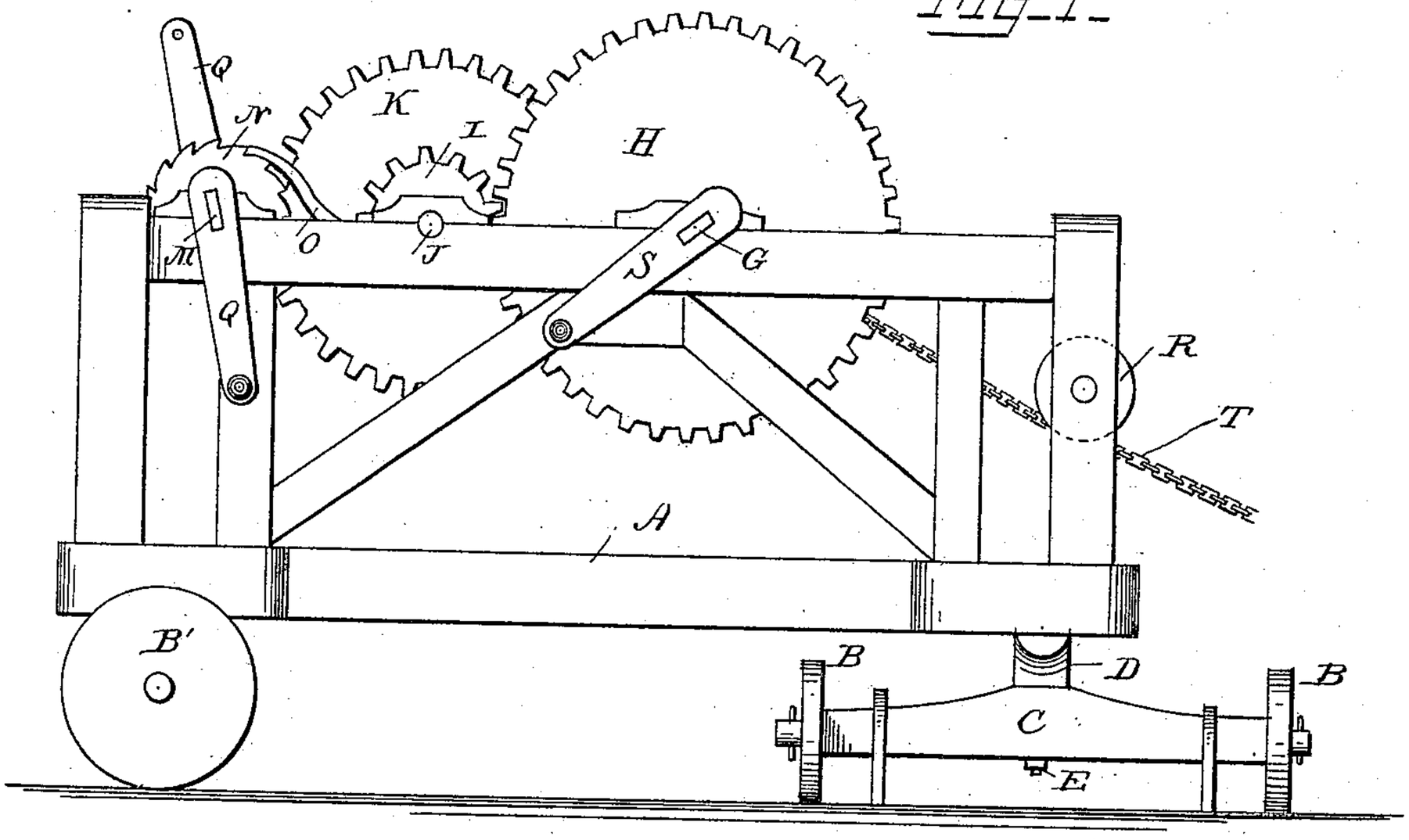
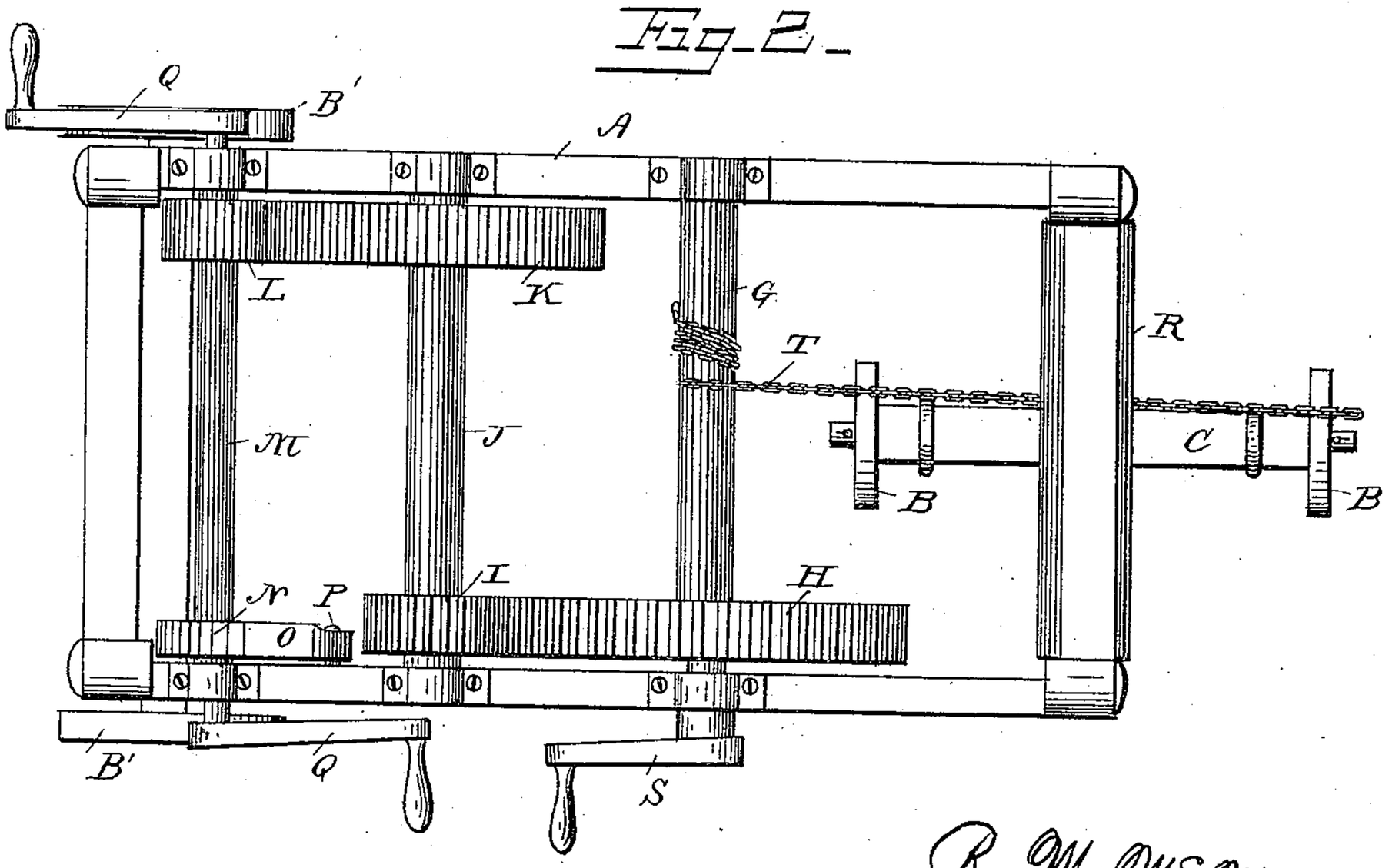


Fig. 2.



WITNESSES

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ROBERT M. McMEEN, OF MOUNT VERNON, ILLINOIS.

STUMP-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 300,786, dated June 24, 1884,

Application filed October 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT M. McMEEN, a citizen of the United States, residing at Mount Vernon, in the county of Jefferson and State of Illinois, have invented a new and useful Stump-Extractor, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to stump-extractors; and it has for its object to provide a device which will be simple and durable in its construction, and have considerable lifting power; and a further object of the invention is to provide means whereby the extractor may be readily transported from place to place, as desired.

To attain these ends, the said invention consists in certain details of construction and combination of parts, all as hereinafter set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a side view of my improved stump-extractor, and Fig. 2 is a plan view.

Like letters refer to corresponding parts in the several figures.

Referring to the drawings, A designates a suitable rectangular frame mounted on wheels B B′, the axle C of the front wheels, B, being attached to the cross-bar D by means of a king-bolt, E, while the rear axle, F, is rigid with the frame. The object of this construction is to allow the rear end of the machine to be held to the ground by means of stakes, which brace the rear axle, the front axle being adapted to be turned at right angles to the rear axle, and held to the ground in any suitable manner, the machine being held thereby in both a longitudinal and lateral direction, so that when in operation the strain of extracting the stump will not detract from the steadiness of the machine, but the latter will be held in a secure and safe manner.

In the upper end of the frame A, near its center, is journaled a shaft, G, which extends transversely across the frame, and is provided at one end with a spur-wheel, H, engaging with a pinion, I, mounted at one end of a shaft, J, the latter being arranged to extend across the machine behind the shaft G. Said shaft J is provided at the other end with a spur-wheel, K, engaging with a pinion, L, mounted on a shaft, M, the latter being provided at its end opposite to the pinion L with a ratchet-wheel, N, having pawl O engaging therewith, said pawl being pivoted by means of a pin or bolt, P, to the inner face of the frame. The shaft M is provided at each end with cranks Q, by means of which the machine is operated. A cord, rope, or chain, T, is connected to the shaft G, and passes around a friction-wheel, R, mounted in the front end of the machine, and thus the friction caused by drawing the chain will be lessened, and a crank, S, is attached to the outer end of the shaft G, in order to unwind the chain upon the shaft preparatory to extracting the stump.

The operation of my invention is obvious: Power is applied to the cranks Q, which impart motion to the shaft M. and by means of the pinion L, spur-wheel K, and pinion I this motion is transmitted to the spur-wheel H, causing the revolution of the shaft G, and the consequent winding of the chain around the said shaft, the stump being extracted by this continual drawing of the chain. By means of the pawl and ratchet N O the shaft M will be held from turning back as it is wound, and thus there will be no loss in the power of the machine.

The construction of the machine is simple, durable, and inexpensive, and its operation is efficient both in working and in its attainment of considerable power.

It will be apparent that various modifications may be resorted to without departing from the spirit or scope of my invention.

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

In a stump-extractor, the combination of the frame A, mounted upon wheels, the front axle being adapted to be swung at right angles to the frame, and the rear axle being rigid therewith, with the shafts G J M, mounted in said frame, spur-wheels H K, secured on shafts G J, respectively, pinion I, mounted upon shaft J and engaging with wheel H, and pinion L, mounted upon shaft M and engaging with spur-wheel K, a ratchet-wheel, N, secured to said shaft M, a pawl, O, engaging with said ratchet-wheel, a friction roller or wheel journaled in the frame, a chain, T, and cranks S Q, as set forth.

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

ROBERT M. McMEEN.

Witnesses:
WM. M. LOGAN,
H. A. CARR.