R. C. PARVIN.

Improvement in Steam Harvesters.

No. 125,843

Patented April 16, 1872.

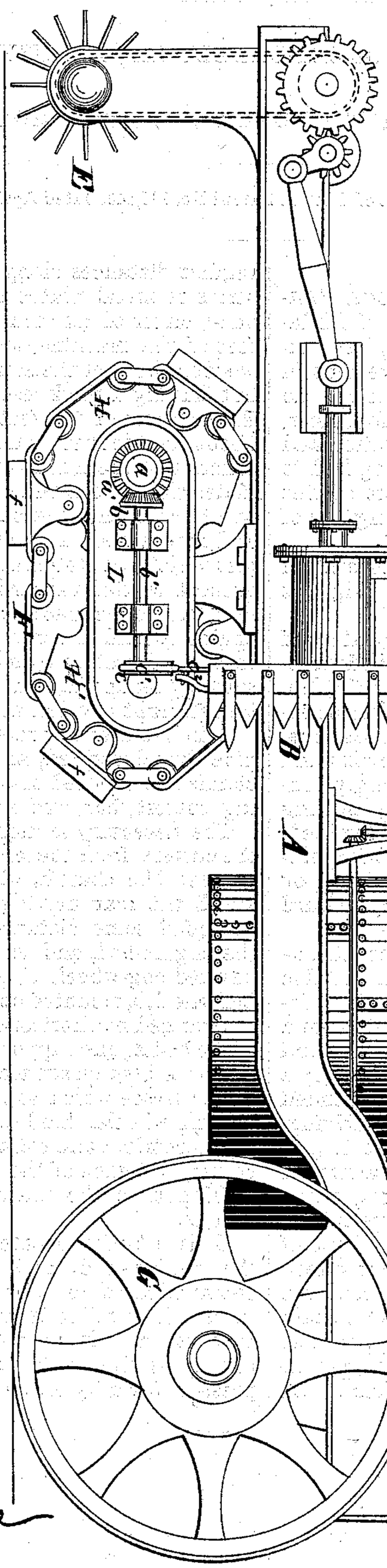

Fig. 1

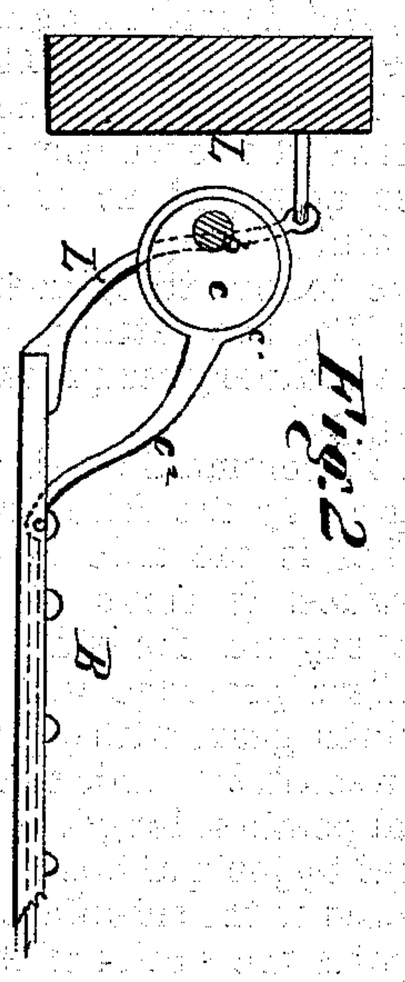

Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT C. PARVIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN STEAM-HARVESTERS.

Specification forming part of Letters Patent No. 125,843, dated April 16, 1872.

To all whom it may concern:

Be it known that I, ROBERT CROUCH PARVIN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Mowing and Reaping Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my invention. Fig. 2 is a detail view.

This invention has reference to my patent of October 10, 1871, No. 119,878, Improved Traction Engine; reissued February 13, 1872, No. 4,753. The object of this improvement is to utilize the traction-engine described in the above-named patent for the purposes of mowing and reaping; and the invention accordingly consists in the combination of suitable mowing and reaping mechanism, hereinafter described, with a traction-engine constructed with propelling feet, arranged on a traction-band or endless carrier, and provided with forward guiding-wheels.

The traction-engine referred to is constructed substantially as follows: Upon a suitable bed is mounted an upright boiler with cylinders and pistons, giving a rotary motion to a horizontal shaft located at or near the hind part of the bed. This shaft is connected by a suitable gearing to a driving-wheel suspended beneath the bed of the engine. This driving-wheel does not touch the ground, but is provided with an endless chain, F, the alternate links of which are made with ridges, which mesh into suitable recesses on the periphery of the wheel H. Some distance in front of this driving-wheel is located another wheel, H′, of like dimensions and construction, and hung in a similar manner. The endless chain referred to also gears with this wheel, so that when steam is applied the wheels are put in motion and the chain travels over them. At regular distances along this chain is placed a series of metal plates about a foot wide and one-quarter of an inch thick. These are the feet of the machine, and they are shod with wooden shoes of the same length and breadth, but having a thickness of some two inches. At each end of the feet *f* is placed a roller of about ten inches diameter, and upon these rollers rest the trucks or ways attached to the under side of the bed of the engine. Thus it will be seen that the body of the engine rests and moves upon a series of rollers attached to feet which are automatically raised from the ground, carried forward, and deposited again in front, to be passed over regularly. The engine is guided across the field and in any required direction by means of two wheels, G, suitably mounted, and so arranged as to be turned right and left at will.

A in the drawing refers to the traction-engine thus described, and B to the cutting mechanism, composed of the ordinary reciprocating cutters, bar, and fingers.

The necessary motion is communicated to the cutters from the engine by the following means: The shaft *a*, which is the axle upon which the rear driving-wheel is mounted, is extended some distance beyond the side of the engine-bed, and is there provided with a beveled cog-wheel, *a′*, which gears with a similar wheel, *b*, mounted on a shaft, *b′*. This shaft is arranged in a horizontal position lengthwise of the bed A, and supported by journal-boxes or brackets *z*, which are secured to the side plate L of the frame which supports the shafts of the driving-wheels. Said shaft *b′* is provided with an eccentric, *c*, and collar c^1, connected with the cutter by means of the rod c^2. The finger-bar is hinged to the plate L by means of the arm L′.

E is a roller, located at the rear part of the engine-bed, and has a rotary motion communicated to it by means of suitable devices. This roller is designed to be used in mowing, and its purpose is to scatter the cut grass passed over by the engine and pressed down by its feet.

I am well aware that steam-power has already been applied for the purpose of mowing and reaping, and this, therefore, I do not wish to claim; but—

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the traction-engine A, constructed as shown, with guiding-wheels G, traction-band F having feet *f*, the gearing *a' b*, shaft *b'*, pitman c^2, coupling-arm L, and cutting mechanism B, all arranged substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ROBERT C. PARVIN.

Witnesses:

ROBERT R. SMITH,

M. DANL. CONNOLLY.