

(No Model.)

J. M. GARDNER.
STEAM PLOW RUNNING GEAR.

No. 265,956.

Patented Oct. 17, 1882.

Fig. 1,

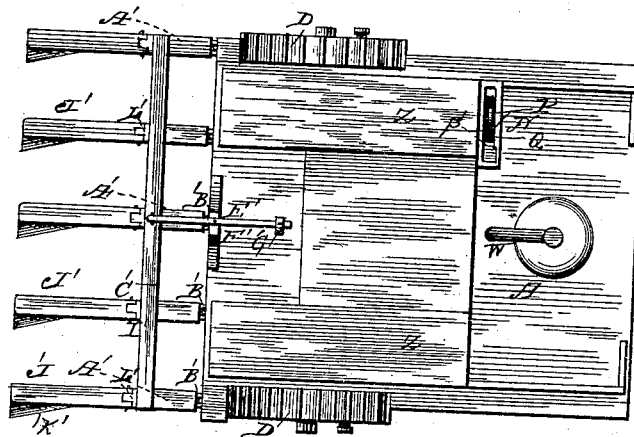


Fig. 2,

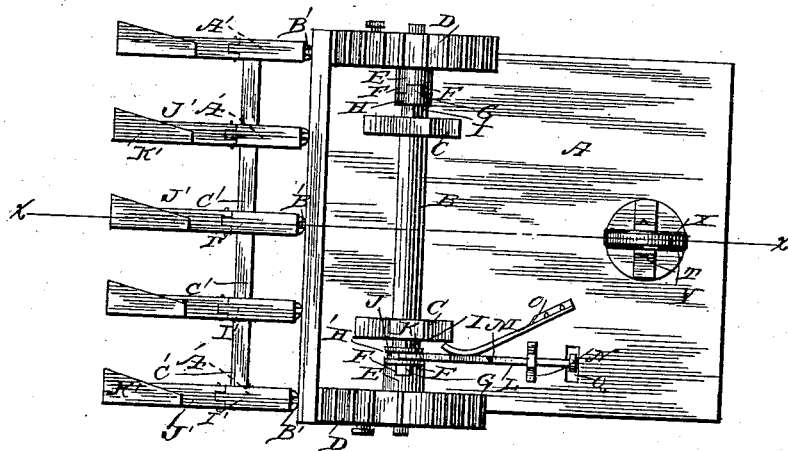


Fig. 3,

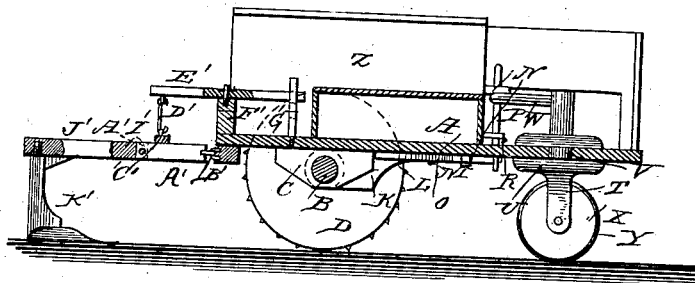
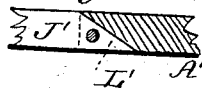


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES M. GARDNER, OF RAMSEY, ILLINOIS.

STEAM-PLOW RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 265,956, dated October 17, 1882.

Application filed June 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. GARDNER, of Ramsey, in the county of Fayette and State of Illinois, have invented certain new and useful Improvements in Steam-Plow Running-Gear; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to steam plowing apparatus; and it consists in certain improvements in the construction and operation of the same.

In the drawings, Figure 1 is a top view; Fig. 2, a bottom view; Fig. 3, a vertical longitudinal sectional view on the line *x x*, Fig. 2; and Fig. 4 is a detail sectional view.

Referring by letter to the drawings, A designates the platform of the machine, which is mounted on a rotary main axle, B, journaled in brackets C C on the under side of the platform, and carrying drive-wheels D D, each having a hub or flange, E, projecting inside, which is provided with notches F F. The notches F are adapted to be engaged by corresponding lugs, G G, on sliding collars H H', arranged on the square portions I I of axle B. The latter collar, H', is provided with a circumferential groove, J, engaged by the bifurcated end K of a lever, L, pivoted by a pin or bolt, M, to the under side of platform A, its movement being limited by a bracket, N. A flat spring, O, is arranged to bear on lever L to force the collar H' into engagement with the flange on the wheel; but by operating said lever the collar is thrown out of engagement, and the axle B revolves with only the other wheel, thus causing the machine to turn around very short.

To actuate lever L, a lever, P, is secured to its power end, which lever P extends up through an opening, Q, in platform A, and is pivoted in a bracket, R, thereon, its top end being arranged in a rack, S, as shown.

To facilitate turning and to guide the machine, a bracket, T, has its shank U passed up

through a central opening, V, in the floor A at the front, and provided with an operating-rod, W. The bracket T carries a roller, X, having a circumferential rib or flange, Y, to prevent slipping.

Z Z are suitable water or fuel boxes, between which the steam-boiler is adapted to be secured.

A' designates a desired number of rearwardly-extending beams or pieces, which are hinged or pivoted at their front ends, B', to platform A, and connected at their outer ends by a transverse strip, C', to which is pivoted by a link, D', a lifting-lever, E', having its fulcrum on a standard, F', and its power end adapted to engage a rack or serrated standard, G', on the platform. To the rear ends, I', of pieces A' are hinged or pivoted independently the beams J', carrying plows K'. Thus the plows will independently pass over any obstructions, and the depth of the whole gang may be regulated by operating lifting-lever E'. The tongues L' of beams A' are adapted, as shown, to support the plow-beams.

The operation and advantages of my invention will be readily understood. The drive-wheels are propelled by a suitable crank rod or shaft extending from an engine which is mounted on platform A between boxes Z Z. The drive-wheels thus carry the machine forward, dragging the plows after to open the soil. It is simple, easily operated, and efficient.

I claim and desire to secure by Letters Patent—

The combination of the platform A, having boxes Z Z, opening Q, and rack or bracket R, axle B in bearings C C, carrying drive-wheels D D, provided with notched flanges E E, independent collar H at one end, operating-collar H' at the other, lever L, limiting-bracket N, spring O, and lever P, as set forth.

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

JAMES M. GARDNER.

Witnesses:

JOHN C. MARTIN,
FRANCIS M. BOLT.