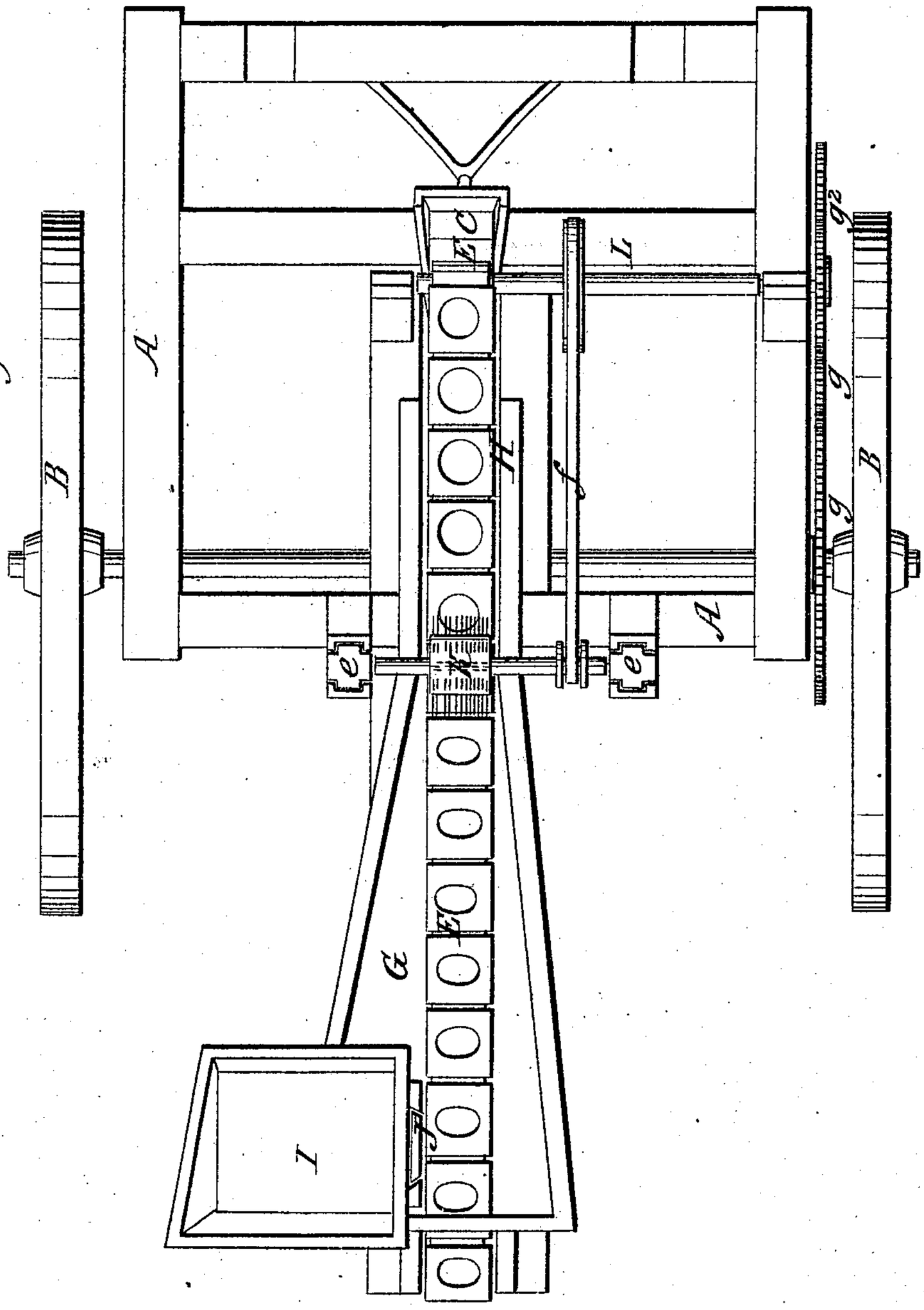
2 Sheets—Sheet 1.

F. S. McWHORTER.

Potato-Planter.

No. 20,001. Patented Apr. 20, 1858.

Fig. 1.



2 Sheets—Sheet 2

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Fig. 3.

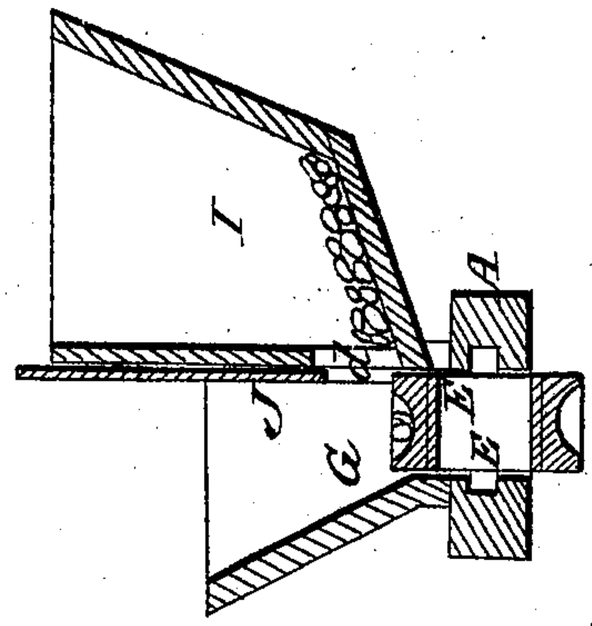
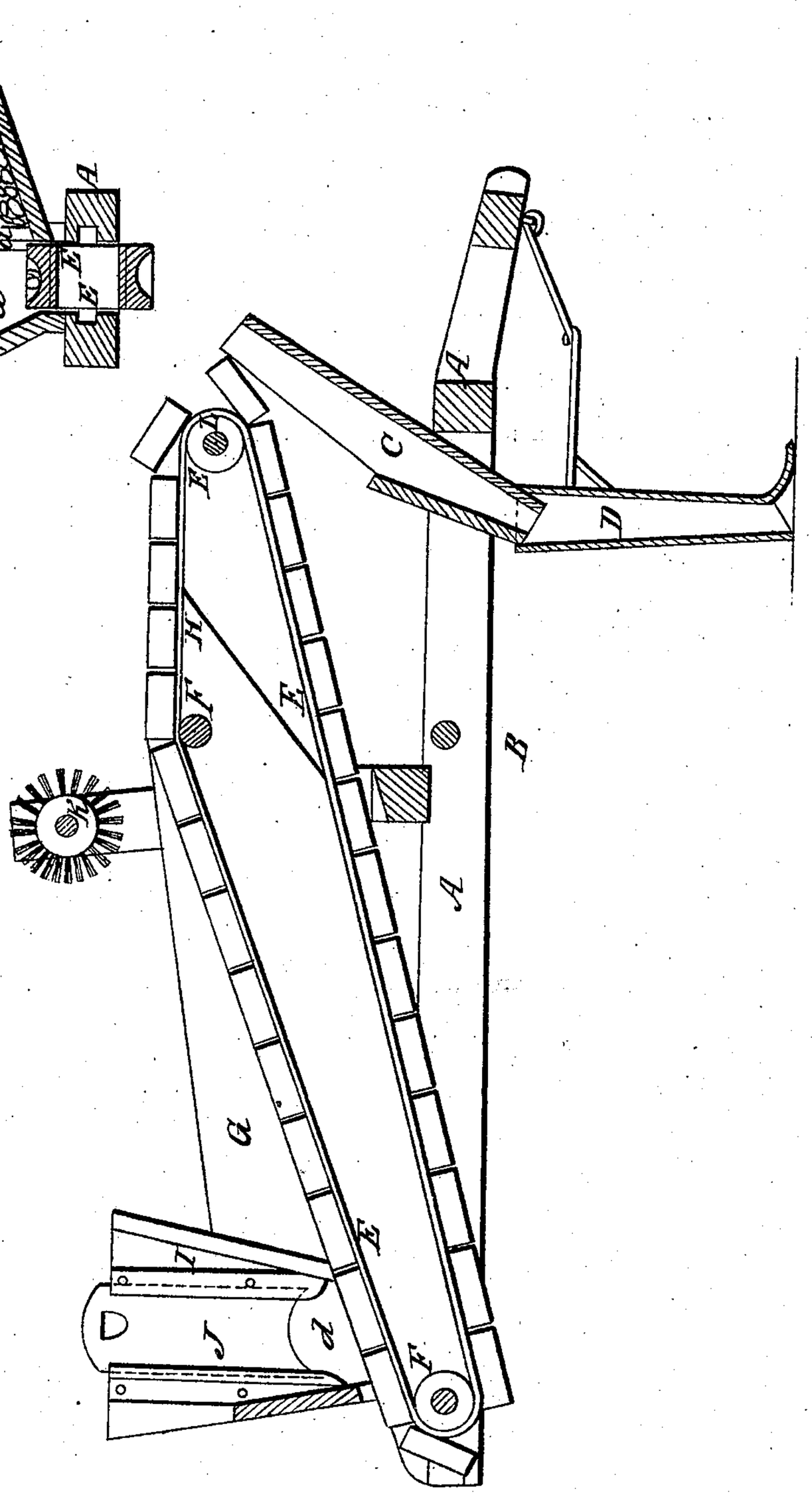


Fig. 2.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

F. S. McWHORTER, OF SMYRNA, DELAWARE.

IMPROVEMENT IN POTATO-PLANTERS.

Specification forming part of Letters Patent No. **20,001,** dated April 20, 1858.

To all whom it may concern:

Be it known that I, F. S. McWHORTER, of Smyrna, in the county of Kent and State of Delaware, have invented a new and useful Improvement in Potato-Planters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan or top view of a potato-planter with my improvements applied to it. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a vertical transverse section of the same.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists in the employment of a transverse hopper having an inclined bottom and arranged on one side of the endless-chain conveyer, in combination with a longitudinal guide and retaining box which has its front portion inclined and its rear portion horizontal, and an adjustable brush which brushes off any surplus pieces of potatoes which may collect in the cells or chambers of the endless conveyer.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the frame of a potato-planter, B B the propelling-wheels, and C the conducting-tube; and D, the share for opening the ground.

E is the endless chain of conveyers. It is arranged to run round pulleys F F.

G H is the longitudinal guide and retaining box. Its front portion, H, is inclined and its rear portion, G, is horizontal, as shown.

I is the hopper which supplies the pieces of potato to the endless chain of conveyers. This hopper has its bottom inclined, so as to supply automatically, and is situated on one side at the rear end of the inclined guide-box. This hopper communicates with the inclined guide and retaining box by means of a lateral passage, *d*, which is regulated by a slide, J.

K is the brush which brushes out the surplus pieces of potato which may collect in the cells or chambers of the conveyers. This brush is situated above the inclined conveyer, just at the highest point of the inclined portion of the guide and retaining box. This brush is adjustable higher or lower by sliding boxes *e e* of the frame, and is revolved rapidly by means of a belt, *f*, leading from the pulley-shaft L of the endless conveyer. The motion to the endless conveyer and brush is obtained from the propelling-wheel by means of intermediate gearing, $g\ g'\ g^2$, as shown.

The advantage in having the hopper on one side of the endless conveyer is this: The weight of the pieces of potato does not rest upon and interfere with the free movement of the conveyer.

The advantage of the inclined box is this: The surplus potatoes always have a tendency to run back toward the hopper, and thus the conveyer-cells are not liable to be overcharged.

The advantage of having the endless conveyer horizontal at H is this: In case any of the cells or chambers are uncharged after rising to the highest point of the inclined guide-box a chance remains of filling the same by hand, whereas if the inclination was continued to the conducting-tube no such chance would exist, and many hills might go unplanted.

The advantage of having the adjustable brush is this: In case the inclination of the guide-box and the consequent tendency of the surplus pieces of potato to run back toward the hopper should not prevent the overcharging of some of the chambers or cells of the conveyer, it will forcibly return back the surplus pieces held by the cells or chambers thus overcharged, and thereby insure a regular planting or the deposit of an equal number of pieces into each hill or spot.

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

The employment of a transverse hopper, I, having an inclined bottom, and arranged on one side of the endless-chain conveyer C, in combination with a longitudinal guide and retaining box, G H, which has its rear portion inclined and its front portion horizontal, and a brush, K, which brushes off any surplus pieces of potatoes which may collect in the cells or chambers of the endless conveyer, substantially as and for the purposes set forth.

F. S. McWHORTER.

Witnesses:

JAMES T. WALSH,
I. H. PRATT.