

W. S. MORGAN.  
Seed-Sower.

**No. 226,413.**

Patented April 13, 1880.

*Fig. 1.*

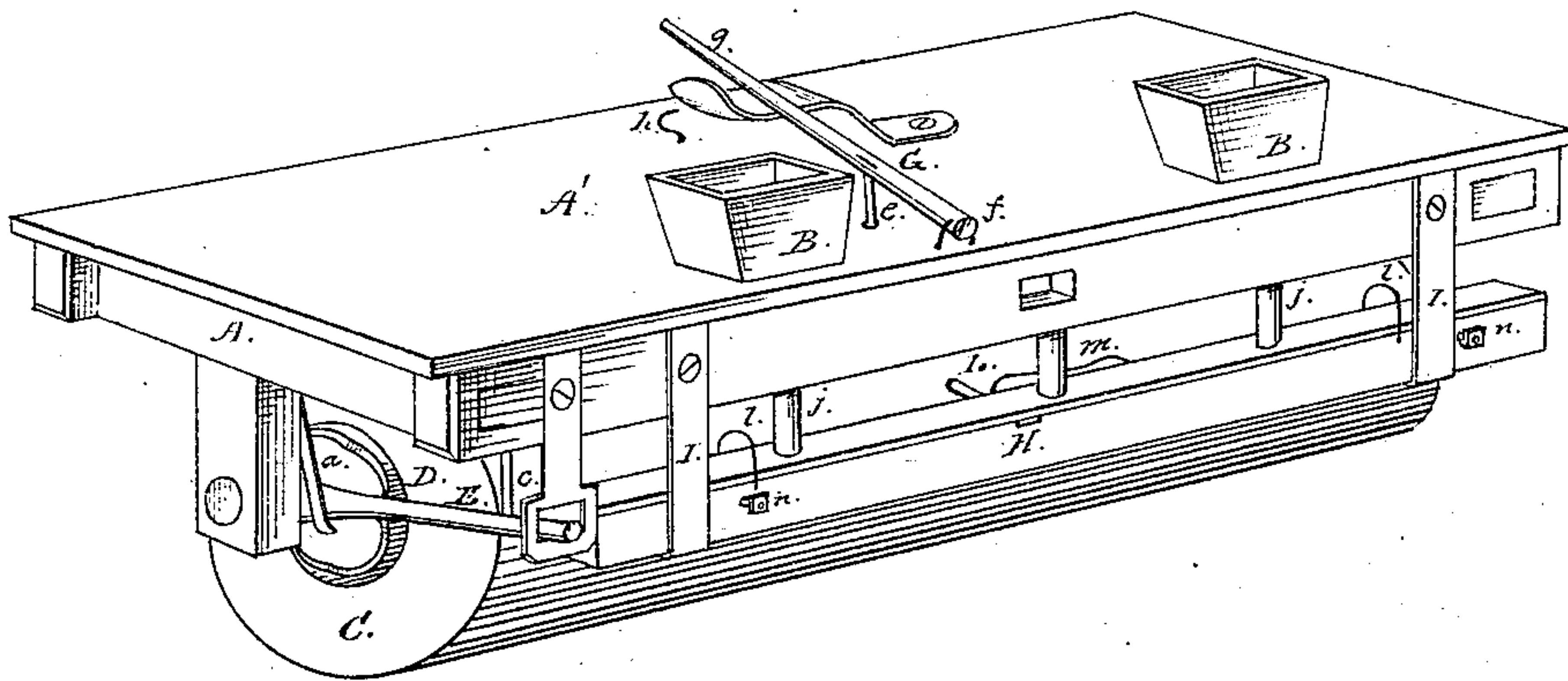


Fig. 2.

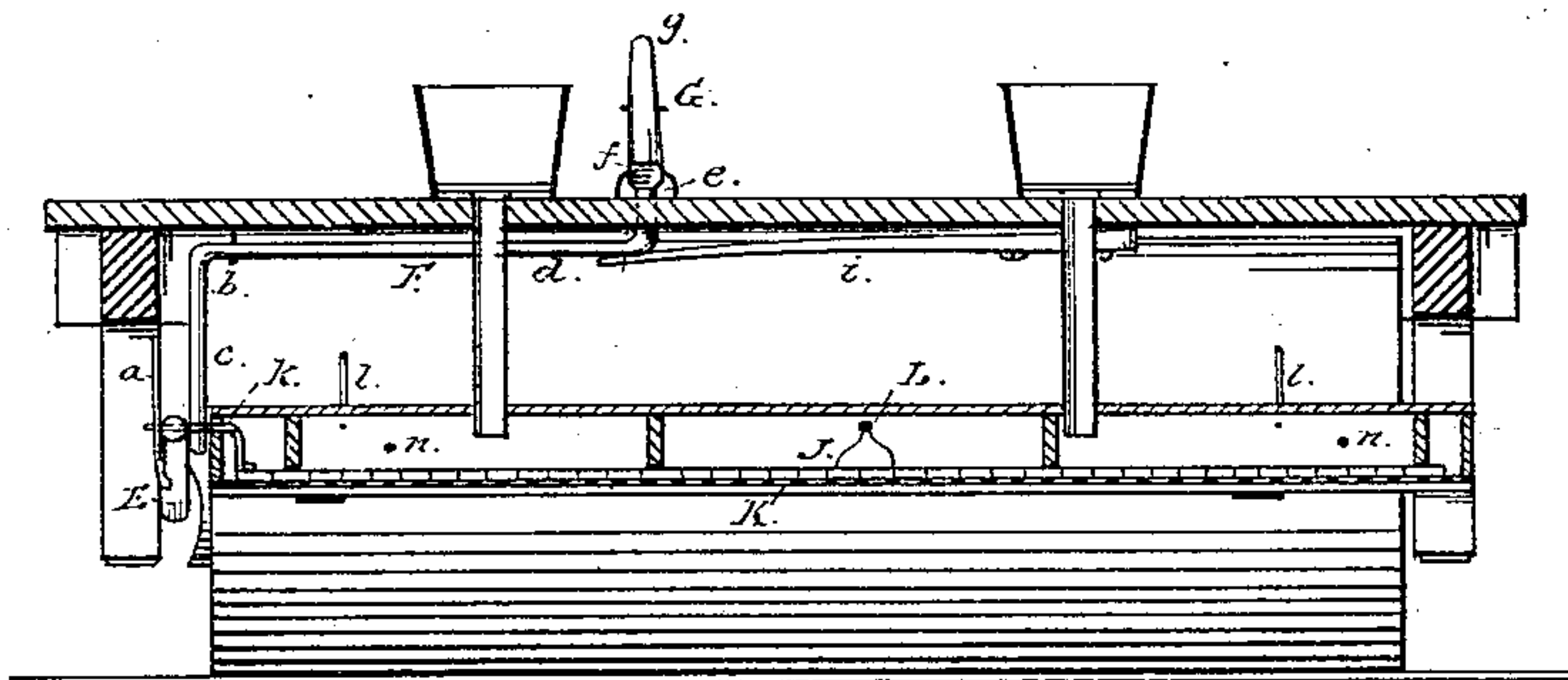
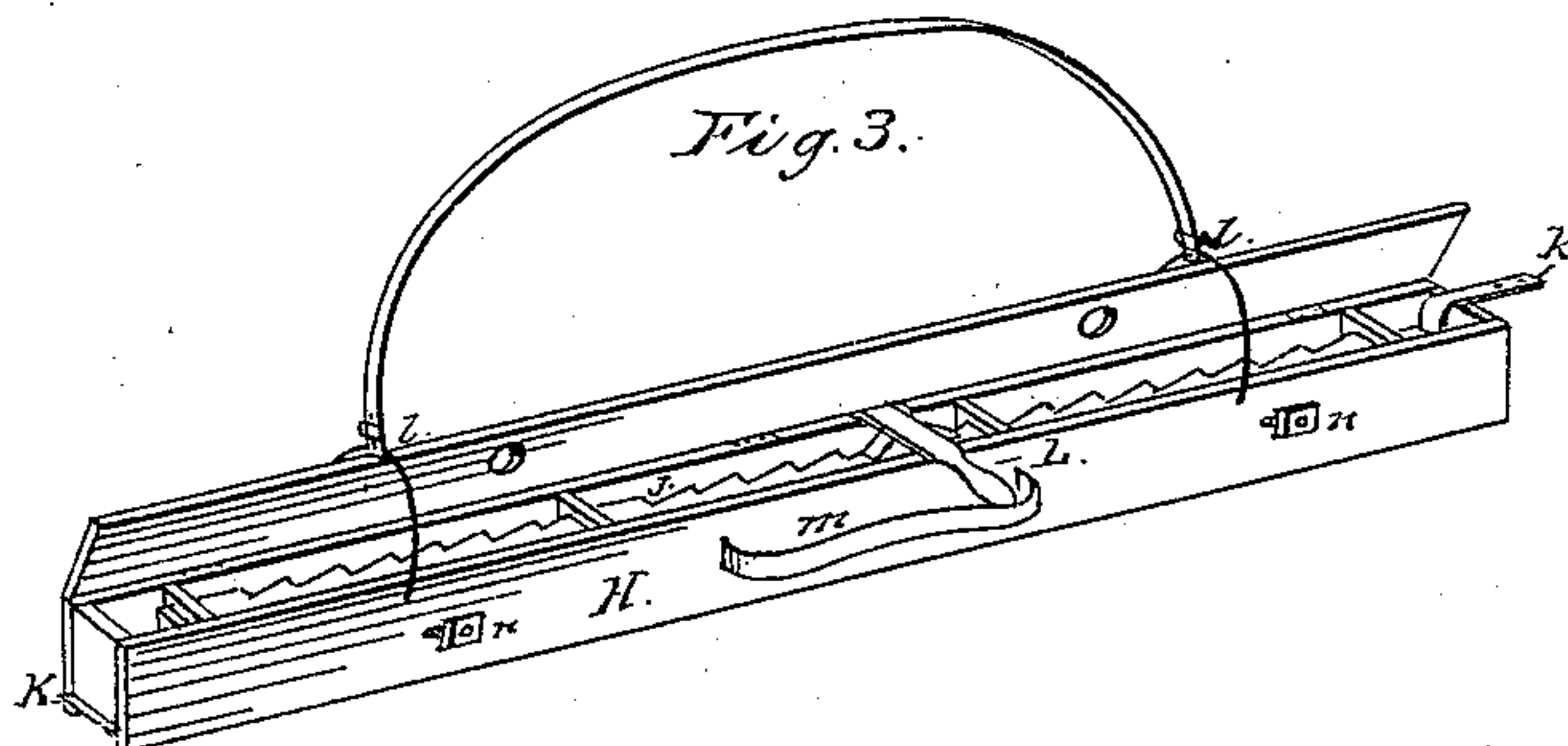


Fig. 3.



*Attest:*

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William S. Morgan  
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# UNITED STATES PATENT OFFICE.

WILLIAM S. MORGAN, OF EVANSVILLE, WISCONSIN.

## SEED-SOWER.

SPECIFICATION forming part of Letters Patent No. 226,413, dated April 13, 1880.

Application filed January 13, 1880.

*To all whom it may concern:*

Be it known that I, WILLIAM S. MORGAN, of Evansville, in the county of Rock and State of Wisconsin, have invented a new and useful  
5 Improvement in Seed-Sowers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 The object I have in view in the construction of my roller seed-sower is to adapt the seed-box so that it may be conveniently detached from the machine proper and used by hand in seed-sowing, and also to render the  
15 entire machine more convenient and certain in its operations.

The invention consists, principally, in the construction and arrangement of the seed-box and in the various operative combinations of  
20 the principal parts of the machine.

In order that those skilled in the art may know how to construct and use my device, I proceed to describe the same, having reference to the drawings, in which—

25 Figure 1 is an elevation, a little in perspective, of the entire machine; Fig. 2, a vertical longitudinal section through the seed-hoppers and seed-box. Fig. 3 is a view of the seed-box detached and ready for use by hand.

30 Like letters denote corresponding parts in each of the figures.

In the drawings, A represents the frame, having a platform, A', upon the rear part of which is arranged the driver's seat, and upon  
35 the front seed-hoppers B B. A roller, C, is suitably journaled between hangers connected with the frame, one end of the roller having secured centrally to it a metallic cam-ring, D, with inclines upon its outer surface. Between  
40 this cam-ring and the hanger, to which the roller is pivoted, is placed the cam-lever E, the free end of which extends out far enough to be connected with one end of the seed-box slide, which will presently be described. It is evident, then, that in the rotation of the roller the  
45 inclines upon the cam-ring D will impart to the lever E an oscillating movement, which, in turn, will communicate the same movement to the seed-box slide. To keep this lever E in  
50 proper contact with the inclines of the cam-ring D, a leaf-spring, a, is employed. To throw

this lever E out of engagement with the cam-ring D, I employ a bell-crank lever, F, the lower bend of which, b, is pivoted to the under side of the platform, and its lower dependent  
55 arm, c, presses against the outer end of the lever E and moves it out of engagement with the cam-ring D. The body d of this lever F extends along the under side of the platform to a point near the center thereof, and then  
60 turning at right angles an upper arm, e, passes through the platform and is secured to a hand-lever, G, the front end, f, of which is pivoted near the front of the platform, and the rear  
65 end, g, extends to the side of the driver's seat in a position convenient to be grasped by the hand of the driver. When, therefore, the driver presses down upon the free end of this lever  
G, the upper arm, e, and the body d of the lever F are depressed and the lower arm, c, is  
70 moved outwardly, pressing against the lever E and moving it out of engagement with the cam-ring D. When thus moved out of engagement, a hook, h, or other convenient device holds down the free end of the lever G,  
75 and when it is released from that hook a spring, i, on the under side of the platform presses the body d of the lever F up against the under side of the platform and removes the lever-arm c from contact with the lever E. 80

H is the seed-box, which is supported upon removable hangers I, conveniently attached to the front of the frame by a screw or screw-bolt, or some contrivance by which it may be  
85 easily detached.

Spouts j j lead from the seed-hoppers down into the top of the seed-box. This seed-box is a light box, extending nearly the width of the machine, having in it a notched slide, J, traversing in the seed-box, and having at the  
90 end of said slide a pitman, k, adapted to be connected with the free end of the lever E at various points, for the purpose of effecting the desired adjustment of the slide for the better discharge of the seed. On the under side of  
95 the seed-box, below the slide, is a perforated metallic plate, K, which slides in grooves, so as to be conveniently removed and replaced with other slides having coarser or finer holes, or holes more or less numerous, as may be  
100 desired with the various kinds of seed employed. This seed-box H, being intentionally



made very light and conveniently removable from the machine, is provided with bails or hooks or other equivalents, *l*, to which a strap may be attached to pass over the shoulders of the operator when the seed-box is used by hand, as is often convenient where portions of the ground are wet, or stumpy, or stony.

To make this seed-box more convenient in this way there is secured to the center of one side of it a guard, *m*, adapted to rest against the body and hold the seed-box at a little distance from it, and a hand-lever, *L*, to operate the seed-box slide.

For the better security in position of the removable seed-plate *K*, I employ two or more screw-bolts, *n*, with nuts, which pass through the seed-box from side to side above the slide, so that by tightening up upon these nuts the plate *K* can be held more securely, or by loosening they can be more easily removed.

The advantages of my construction and arrangement of parts will be apparent to the

skilled without particular enumeration, but may be briefly stated as resulting in a greater convenience for a great variety of lands and soils, particularly in stony countries or where stumps have not been wholly removed.

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

A portable removable seed-box wherein are combined the box *H*, notched slide *J*, perforated and removable metallic plate *K*, and screw-bolts *n*, and adapted to be operated by either pitman *k* or hand-lever *L*, whereby the seed-box may be converted either for hand or machine sowing, substantially as described.

This specification signed and witnessed this 29th day of December, 1879.

WILLIAM S. MORGAN.

Witnesses:

I. M. BENNETT,  
FRANK H. WINSTON.