

**No. 627,145.**

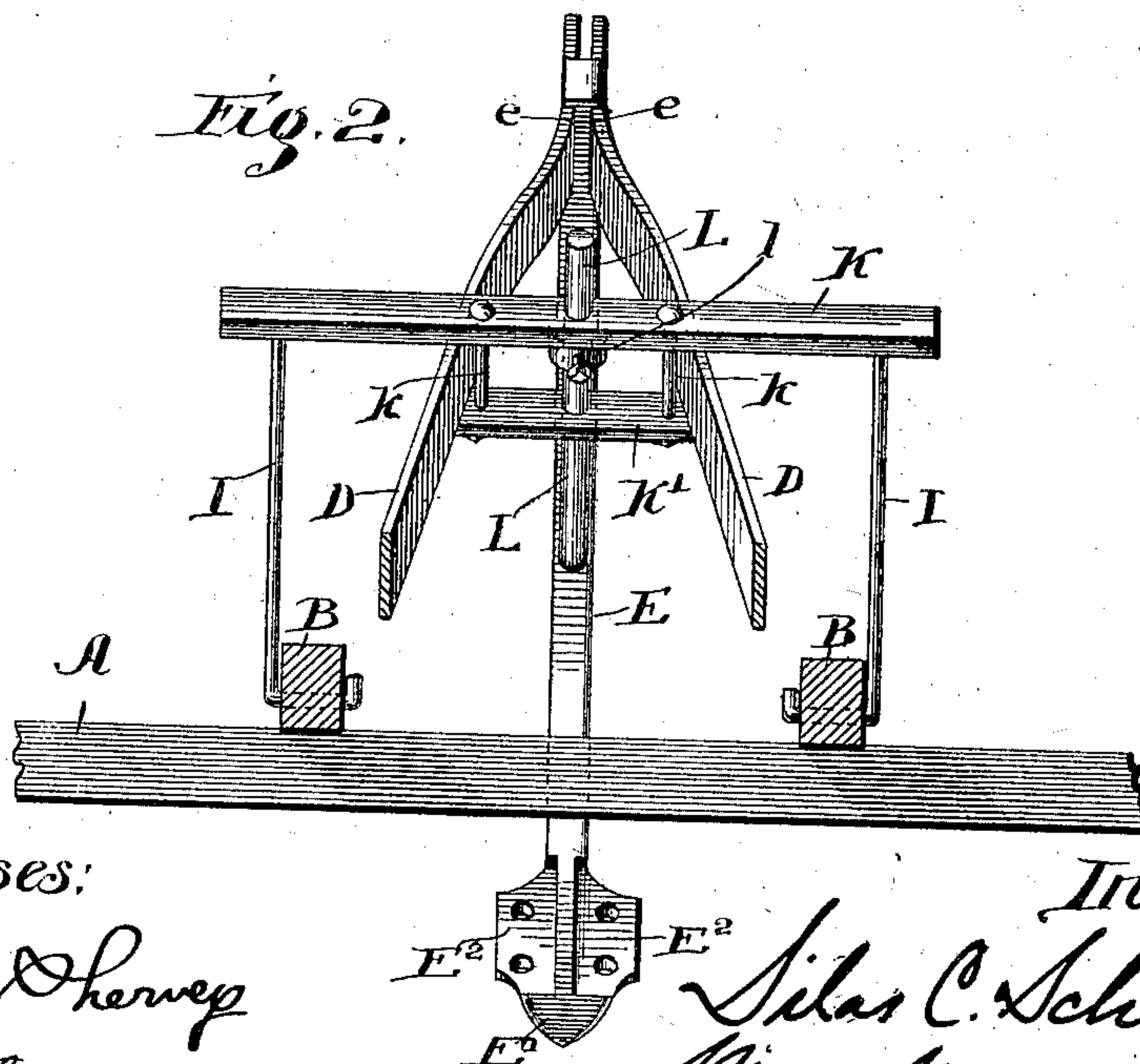
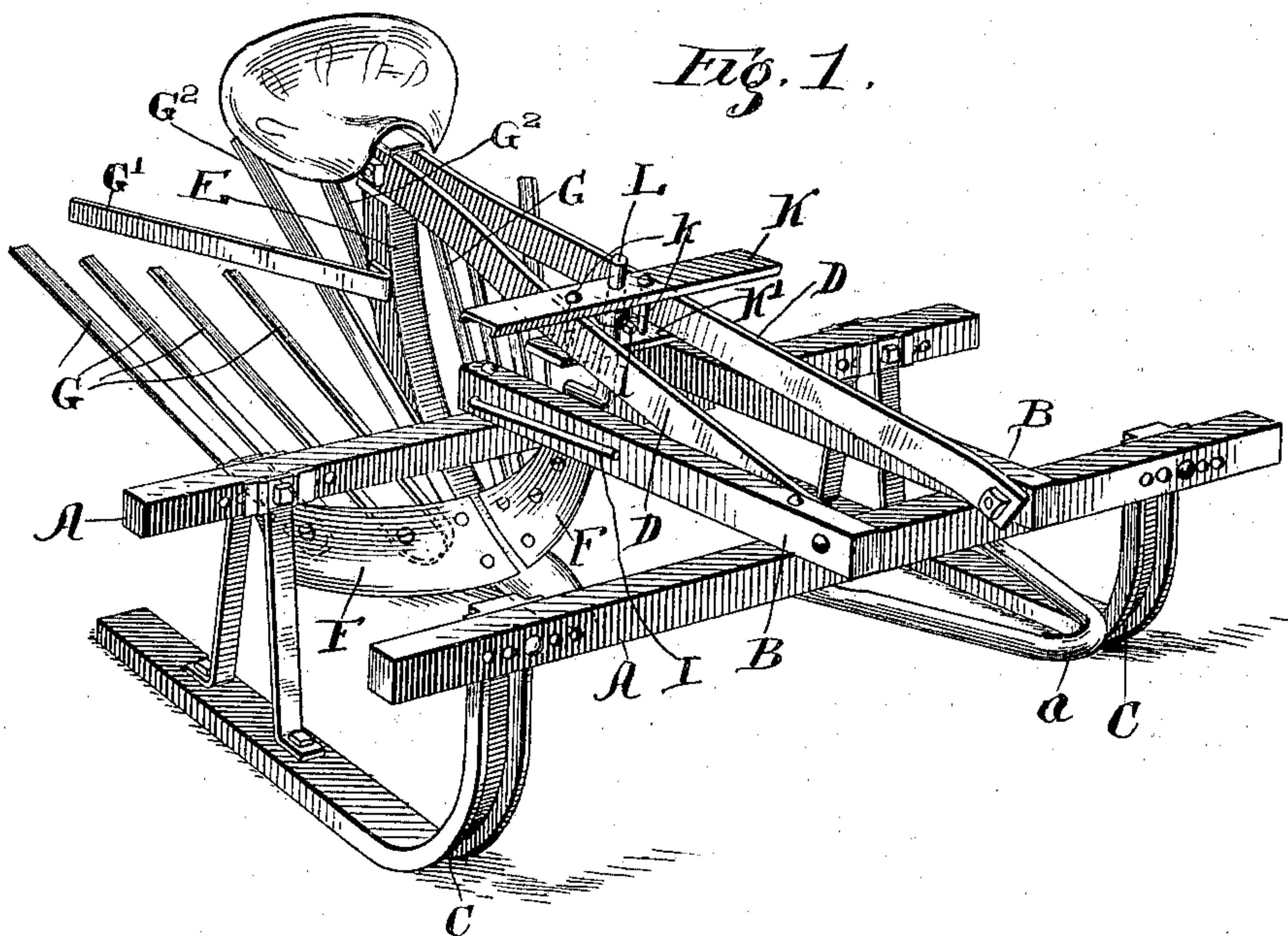
**S. C. SCHOFIELD.**  
**POTATO DIGGER.**

**Patented June 20, 1899.**

(Application filed Apr. 4, 1898.)

(No Model.)


2 Sheets—Sheet 1.



*Witnesses:*

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*Inventor:*

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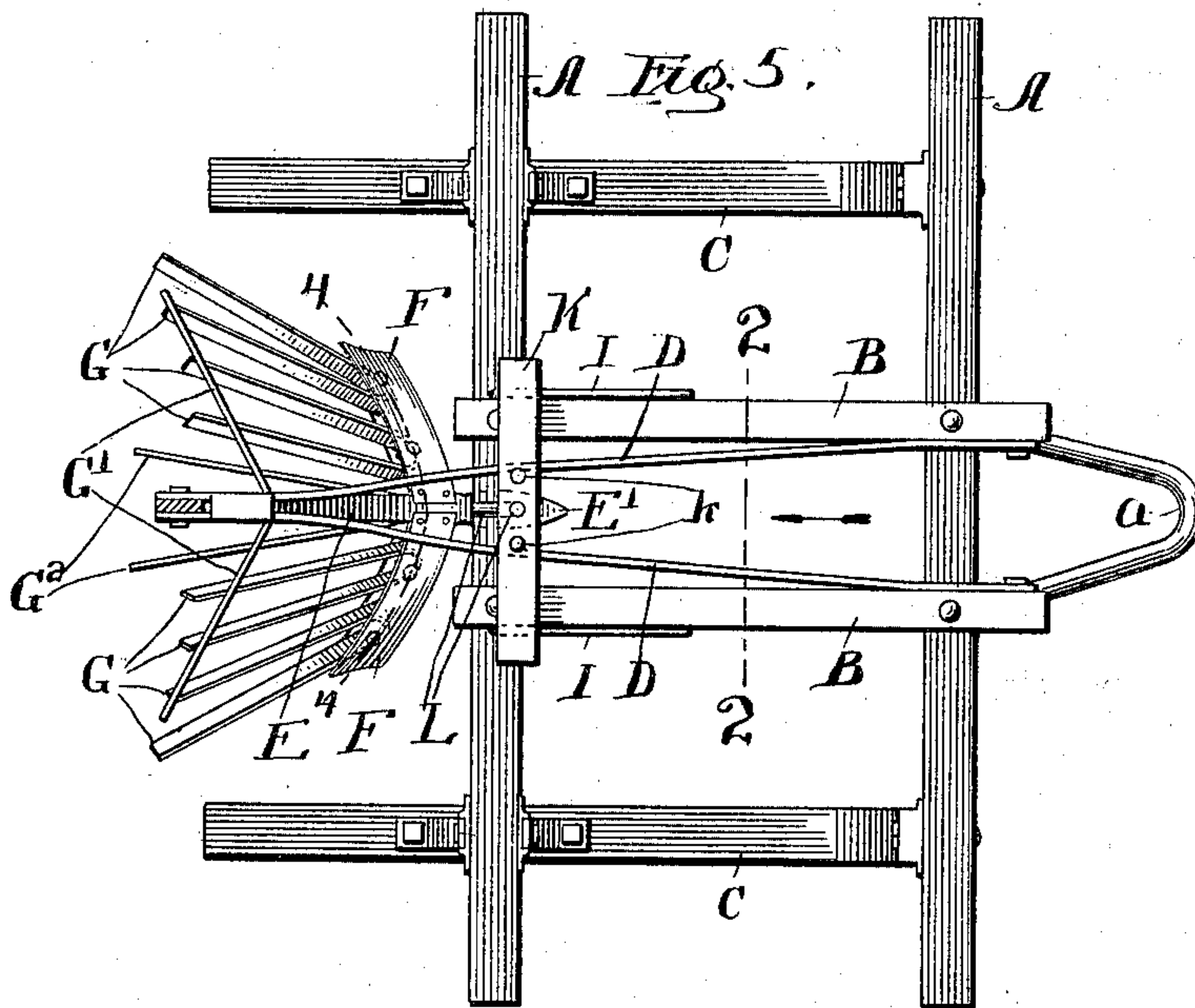
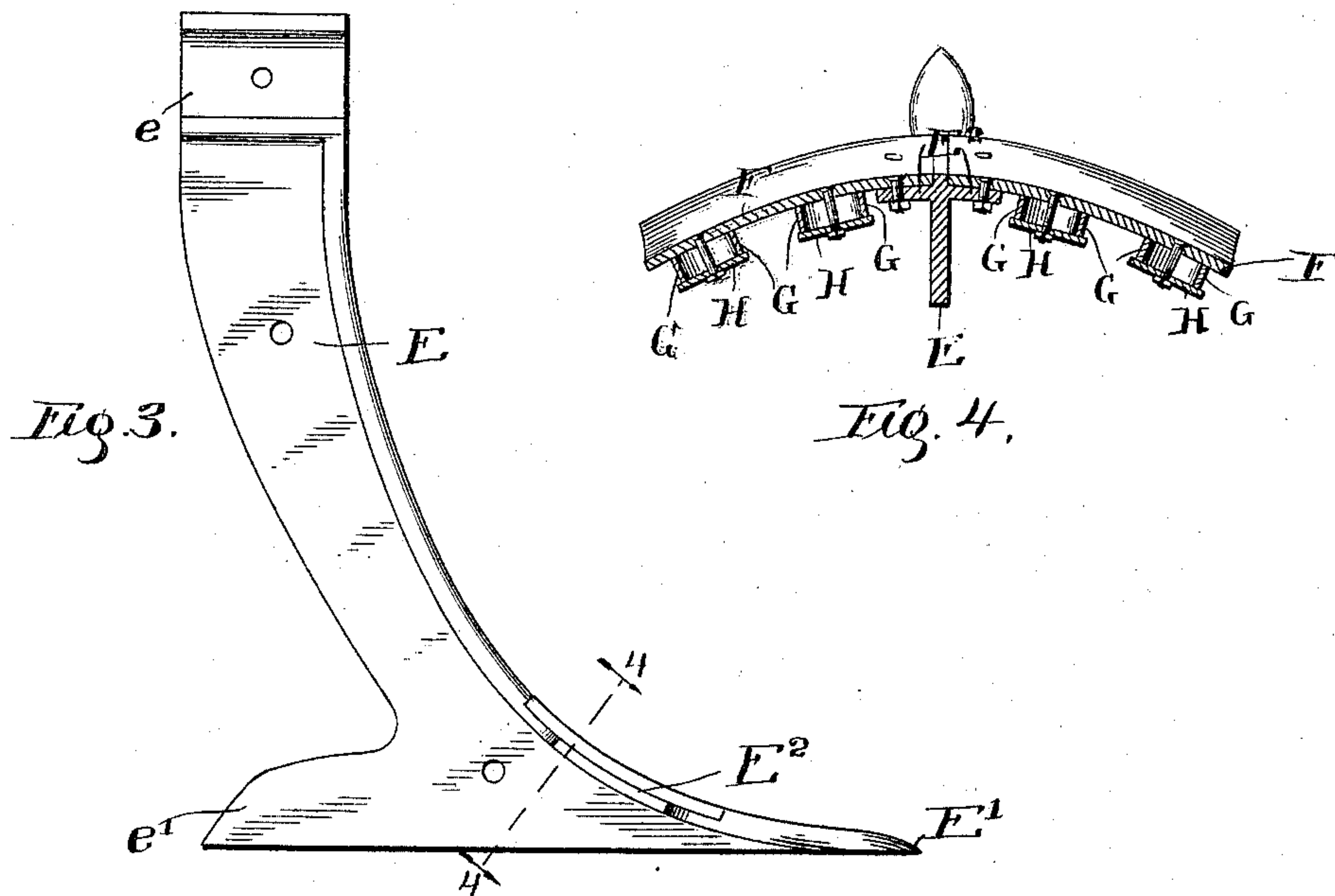
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(No Model.)

2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

SILAS C. SCHOFIELD, OF FREEPORT, ILLINOIS.

## POTATO-DIGGER.

SPECIFICATION forming part of Letters Patent No. 627,145, dated June 20, 1899.

Application filed April 4, 1898. Serial No. 676,368. (No model.)

*To all whom it may concern:*

Be it known that I, SILAS C. SCHOFIELD, a citizen of the United States of America, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Potato-Diggers, of which the following is a specification.

My invention relates to improvements in potato-diggers, its object being to provide a simple and practical digger, economical in construction, and adapted for actual use under varying conditions of soil.

The invention is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a complete digger embodying my improvements. Fig. 2 is a transverse vertical section of the machine through the line 2 2, Fig. 5. Fig. 3 is a side elevation of the central main casting or forging of the plow of the digger. Fig. 4 is a section in the plane 4 4 of Figs. 3 and 5, and Fig. 5 is a top plan of the complete digger.

In the views, A A are two parallel transverse timbers of the main frame of the machine, and B B are longitudinal parallel bars fastened to the bars A A and forming with them the complete main frame. The timbers A A rest upon and are supported by parallel runners C C or other suitable supports, whereby the frame may be held at a fixed distance above the ground and may move forward freely in the operation of the machine, a loop a being fastened to the front timber A for the attachment of a horse or team of horses.

Between the front ends of the longitudinal timbers B B of the frame are pivoted the front ends of two bars D D, extending backward and converging toward their rear ends, where they are rigidly fastened in transverse grooves e at the upper end of the shank E of the central casting or forging of a suitable digging-plow, the grooves e e being formed in both side faces of the shank and only one of them being shown in the drawings. The shank is formed with a suitable point E' and with wings E<sup>2</sup> E<sup>2</sup> just above the point, these wings being adapted to support the moldboards F of the plow, and the inner ends of the moldboards being set in suitable recesses, so as to

be flush with the upper surface of the shank at their point of junction therewith. On the lower or rear faces of the moldboards are fastened separating-fingers G G, each pair of fingers being formed from a single bar of steel bent into U shape at its middle, and the U-shaped bend being clamped to the lower or rear face of the moldboard by means of a bar H, crossing one or more pairs of the fingers and held in place by suitable bolts. Other separating-fingers G' G<sup>2</sup> are fastened to the shank of the plow itself and are clearly shown in the drawings, but need not be described particularly, as they form no part of the novelty claimed for the machine. The length of the vertically-swinging frame is such that the rear end e' of the plowshare is in substantially the same transverse line as the rear ends of the runners C C, and the plow is therefore fully supported by the runners and lies within their base area. It may therefore evidently be raised temporarily and supported upon the frame of the machine for convenience of movement when the digger is not in operation, or its height with relation to the frame of the machine may be permanently adjusted in order to fix the depth below the surface of the ground at which the plow shall run when in operation.

For the temporary support of the plow for convenience of transportation swinging rods I I are pivoted in the timbers B B near their rear ends and may be swung upward in vertical planes until their free ends are brought under a transverse bar K, overlying and fastened to the bars D D by means of connecting-bolts k, which connect it with a second bar K' beneath the bars D D.

For the purpose of adjusting the height of the plow with reference to the frame a bent rod L passes through and extends below the bars K K' and is provided with a clamping set-screw l, whereby its vertical position with reference to the bars K K' may be changed and whereby it may be secured in any desired position of adjustment. The lower part of the rod L is bent backward in an approximately horizontal line and is adapted to rest upon the rear timber A of the frame of the machine, as illustrated in Fig. 1. By means of this arrangement the plow may evidently



be set at any depth below the lower faces of the runners and the depth at which it runs in the ground may thereby be fixed. This is evidently a necessary adjustment, since it is  
5 essential to have the plow run below the potatoes to be dug and at the same time it is objectionable to have it run any deeper than is necessary to reach all the potatoes, since  
10 any greater depth requires the unnecessary lifting of earth.

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

1. The combination with the main frame  
15 and its supports, of the swinging frame, the digging-plow fastened to and supported by the main frame, and the rods, I, I, pivoted to the main frame and adapted to be swung upward and to form supports for the swing-  
20 ing frame, whereby the plow may be held

above the ground in the movement of the machine from place to place.

2. The combination with the main frame, the swinging frame, and the plow supported by the swinging frame, of a vertically-ad- 25 justable rod, L, fastened to the swinging frame and adapted to rest upon the main frame and support the swinging frame, whereby the normal height of the swinging frame with relation to the main frame may be ad- 30 justed to regulate the depth of the plow.

In witness whereof I have hereunto set my hand, at Freeport, in the county of Stephenson and State of Illinois, this 24th day of March, A. D. 1898.

SILAS C. SCHOFIELD.

Witnesses:

JAMES H. STEARNS,  
E. A. SHANNON.