

C. SMALL.  
POTATO-DIGGER.

No. 177,759.

Patented May 23, 1876.

Fig. 1.

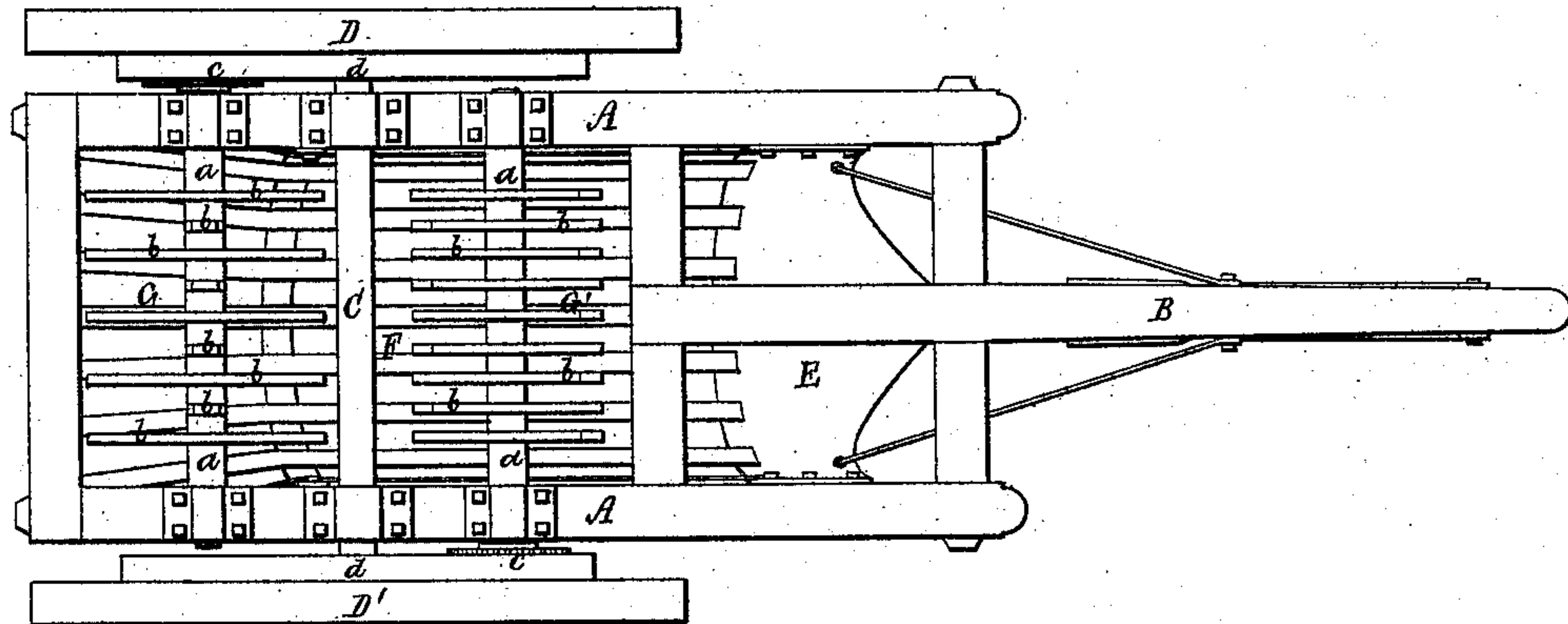


Fig. 2.

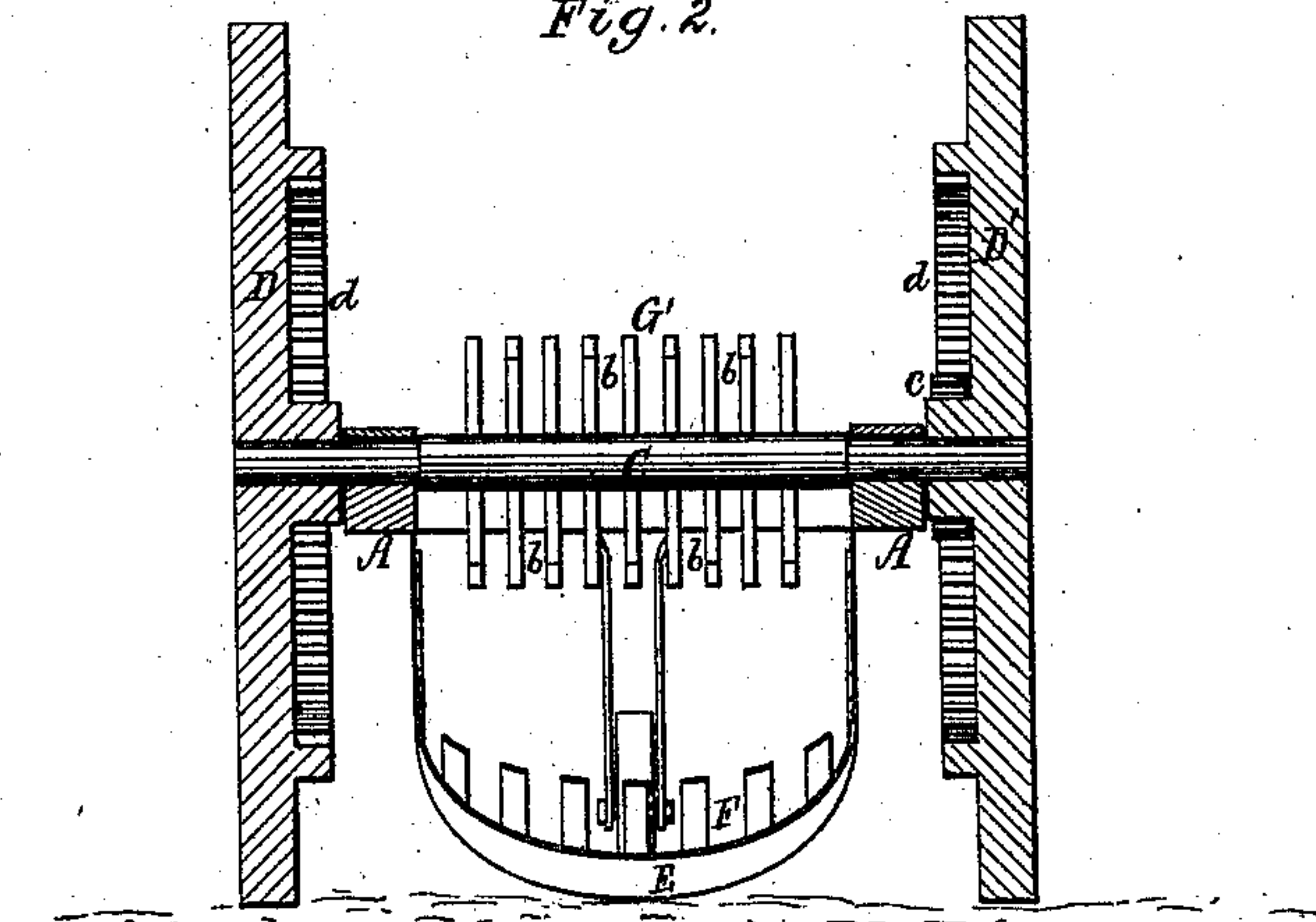
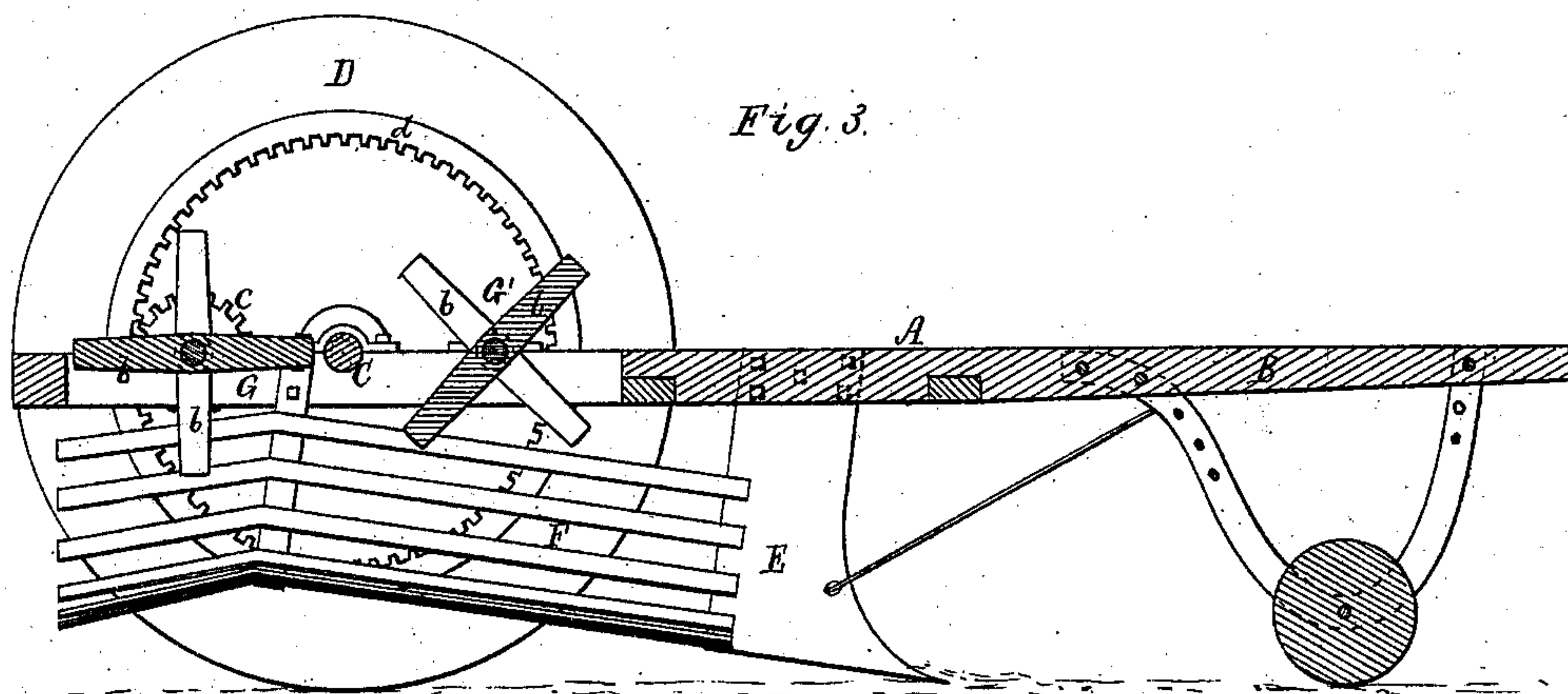


Fig. 3.



Witnesses  
S. W. Piper.  
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Cyrus Small  
by his attorney.  
R. H. Eddy

# UNITED STATES PATENT OFFICE.

CYRUS SMALL, OF LYNDON, MAINE.

## IMPROVEMENT IN POTATO-DIGGERS.

Specification forming part of Letters Patent No. **177,759**, dated May 23, 1876; application filed April 5, 1876.

*To all whom it may concern:*

Be it known that I, CYRUS SMALL, of Lyndon, of the county of Aroostook and State of Maine, have invented a new and useful or Improved Potato-Digger; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a transverse section, and Fig. 3 a longitudinal section, of a machine embodying my invention.

In said drawings, A denotes a frame, provided with a tongue, B, and supported on an axle, C, having two wheels, D D', all being arranged as represented. There projects down from the frame A a trough-shaped and pointed shoe, E, arranged at the front end of a trough-shaped grid, F, which is also fastened to and disposed underneath the frame, as shown. Over the grid, and on opposite sides of the axle, are two rotary beaters, G G', each being composed of a shaft, *a*, and several series of arms, *b b b*, extended radially from it. These rotary beaters are arranged within the frame A, and each has fixed upon its shaft a spur-gear or pinion, *c*, to engage with an internal gear, *d*, fixed to the inner side of one of the wheels. Each of the wheels has such

a gear, *d*. Consequently each wheel actuates one of the beaters, and the axle becomes relieved of the torsion it would have were both of the pinions *c* to gear into one of the wheels. Furthermore, the danger of clogging of the gears is much lessened by having a driving-gear to each wheel.

In using the machine, it is to be drawn forward over a field, so as to cause the shoe to pass into the soil to a depth below the potatoes therein. As the machine may be advanced, the earth, with the potatoes in it, will be forced along the grid, and will be beaten and broken up by the beaters, it being discharged between the bars of the grid. The potatoes will be thrown off to the rear of the grid.

I claim—

In combination with the frame A, its shoe E, grid F, beaters G G', axle C, and wheels D D', arranged as described, the two internal gears *d d*, and the two pinions *c c*, applied to the said wheels and beaters, as specified.

CYRUS SMALL.

Witnesses:

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