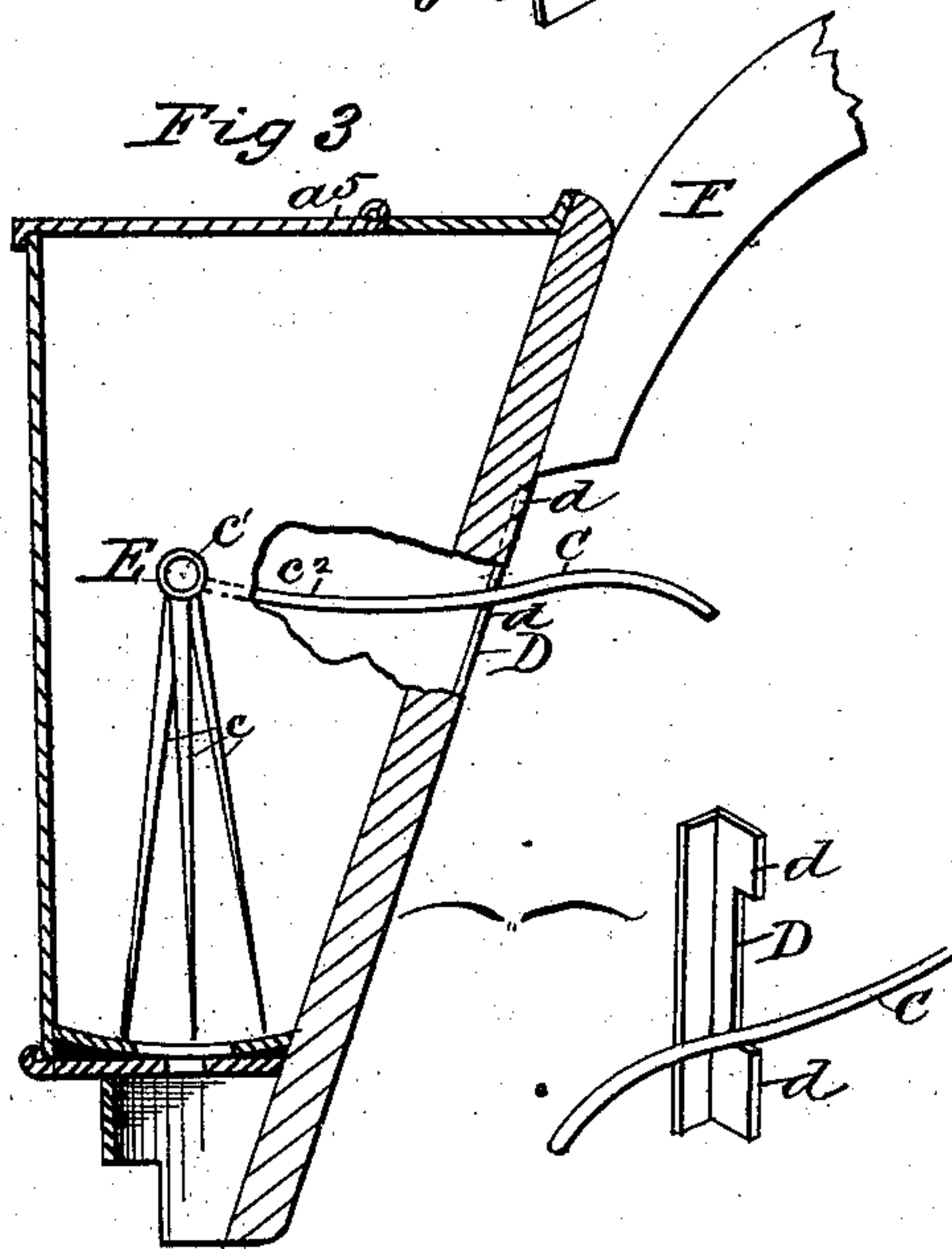
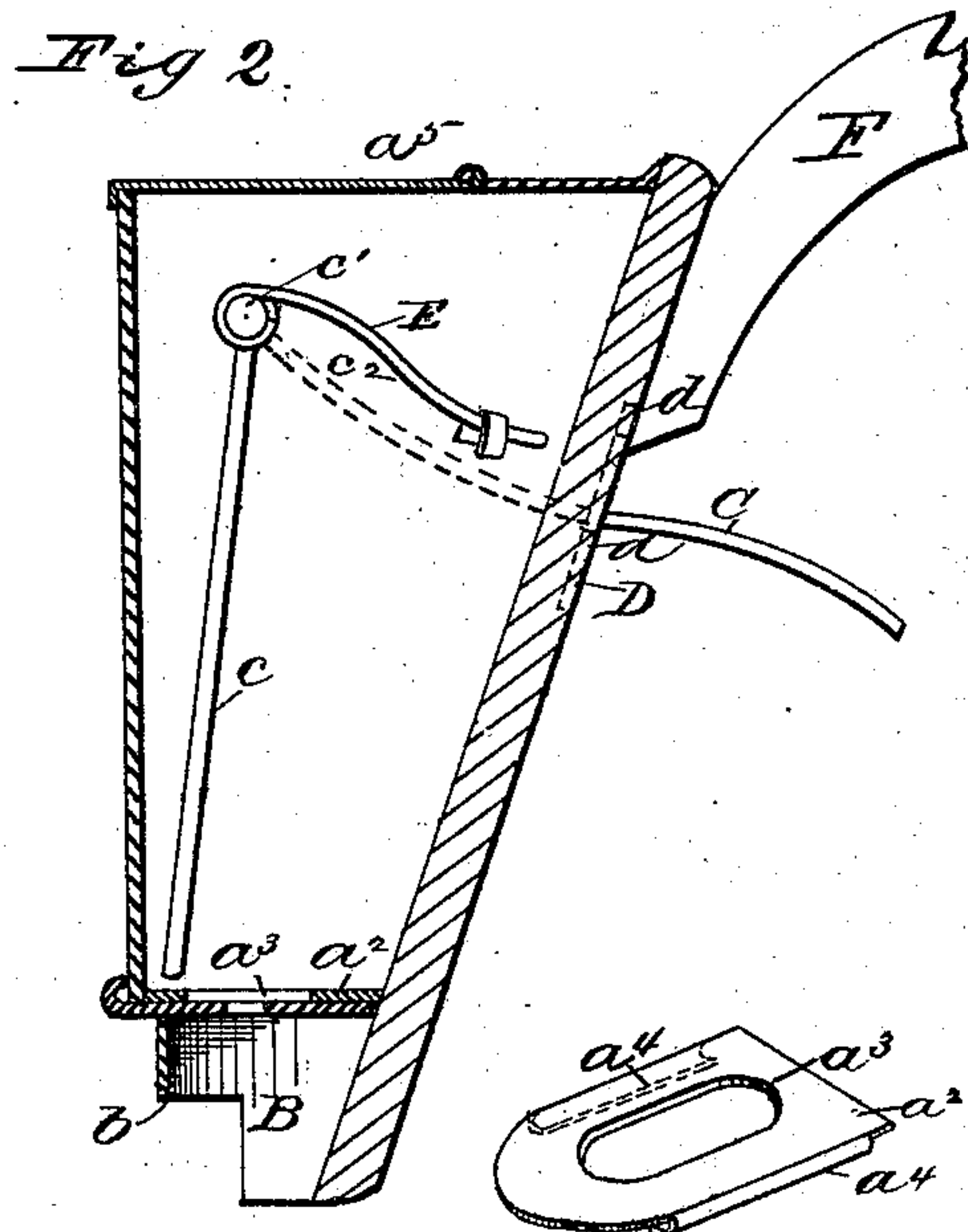
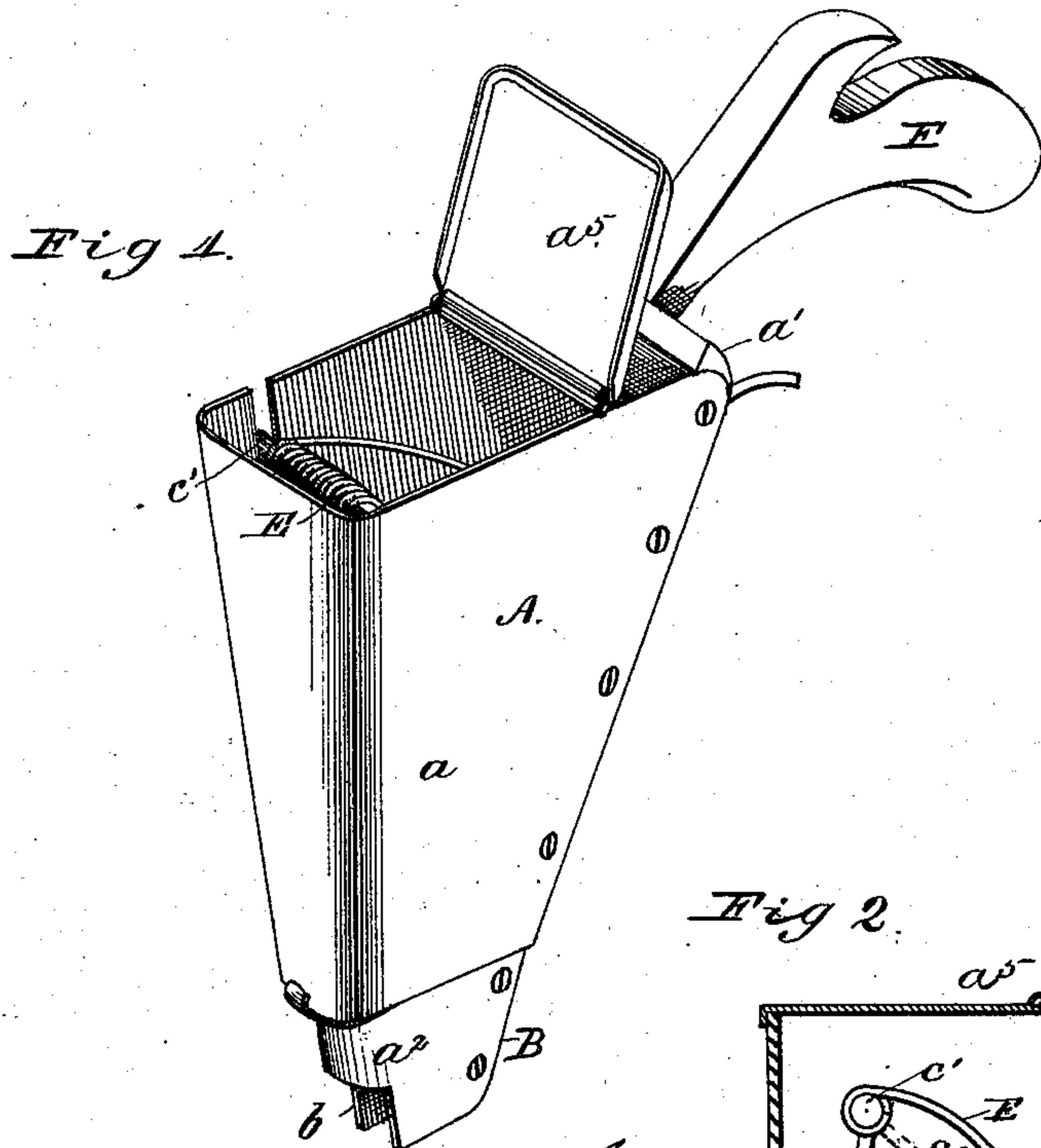


P. F. RANDOLPH.

SEED-SOWER.

No. 173,495.

Patented Feb. 15, 1876.



Witnesses;

Harry C. Clark  
Chas. A. Brainerd

Inventor

P. F. Randolph  
by H. W. Beadle Res.  
his Attys



# UNITED STATES PATENT OFFICE

PETER F. RANDOLPH, OF LIBERTY CORNER, NEW JERSEY, ASSIGNOR TO  
JAMES D. VAN DEVERE, OF SAME PLACE.

## IMPROVEMENT IN SEED-SOWERS.

Specification forming part of Letters Patent No. 173,495, dated February 15, 1876; application filed  
September 25, 1875.

*To all whom it may concern:*

Be it known that I, PETER F. RANDOLPH, of Liberty Corner, in the county of Somerset and State of New Jersey, have invented a new and useful 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.

This invention relates to that class of seed-sowers which are carried by the planter and operated by hand; and it consists mainly in the employment, in connection with the seed-hopper and a suitable discharge-opening, of an agitator, which is adapted to cause the discharge of the seed through the opening when operated by the finger of the planter, as will be fully described hereinafter.

In the drawings, Figure 1 represents a perspective view of my invention; Figs. 2 and 3, sectional elevations of the same.

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

A represents the hopper, constructed of any proper shape or size and suitable material, but which may be made of the metal plate *a* and wooden strip *a*<sup>1</sup> united to form the frustum of a pyramid, having one or more of its sides sharply inclined. *a*<sup>2</sup> represents the hopper bottom, constructed of a curved or straight plate provided with the large oval opening *a*<sup>3</sup>, as shown. *a*<sup>4</sup> *a*<sup>4</sup> represent flanges, formed in any suitable manner upon the sides of the hopper bottom, which are adapted to hold any one of a series of plates provided with discharge-openings of varying sizes. *a*<sup>5</sup> represents a cover of any suitable construction for closing the top of the hopper. B represents the earth-opener, located below the seed-hopper and surrounding the discharge-opening, which may consist of a metal strip united to an extended portion of the wooden strip *a*<sup>1</sup>, as shown. If desired, however, this may be made in one piece with the hopper, the latter also being constructed of a single piece of metal, if desired. It is inclined at its front side for the purpose of entering the earth more readily, and is constructed at its rear side with a recess or cut-away portion, *b*, designed to permit the earth to fall and cover the seed. C represents the

agitator, consisting of a vertical rod, *c*, having either a single termination, or, if desired, two or more prongs, which is united at its upper end to the transverse shaft *c*<sup>1</sup>, supported in suitable bearings, as shown. *c*<sup>2</sup> represents a continuation of the shaft *c*<sup>1</sup> upon the outside of the hopper, which is extended into convenient position for operation by the finger of the planter. D represents a bar or plate secured to the side of the hopper, which is provided with stops *d d*, adapted to limit the movement of the agitator-arm in either direction. E represents a spring, of any suitable construction, which is adapted to give the agitator its proper return movement after it has been moved by the finger. F represents the handle, of any suitable construction. If desired, it may be extended upward sufficiently to enable the implement to be used while the planter stands in an upright position, in which case, however, the mechanism for operating the agitator must also be extended.

The operation of the implement will be readily understood. A line having been drawn upon the ground, or the position of a row indicated in any other way, the planter, inserting the sower into the earth at one end, and moving backward and drawing the implement with him, operates the agitator with his finger, by which means the seed is caused to flow from the hopper in proper quantities. By changing the discharge-plate the size of the opening may be varied at will, to sow a greater or less quantity in a given space.

I do not wish to limit myself to any particular size, shape, or material; but

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

1. The combination of a hopper having a discharge-opening, substantially as described, an agitator, *c*, and a finger-lever, substantially as and for the purpose described.

2. The implement described, having the hopper A, earth-opener B, agitator *c*, and finger-lever C, as described.

This specification signed and witnessed this 21st day of September, 1875.

P. F. RANDOLPH.

Witnesses:

PETER VANNER,  
WM. C. VEGHTE.