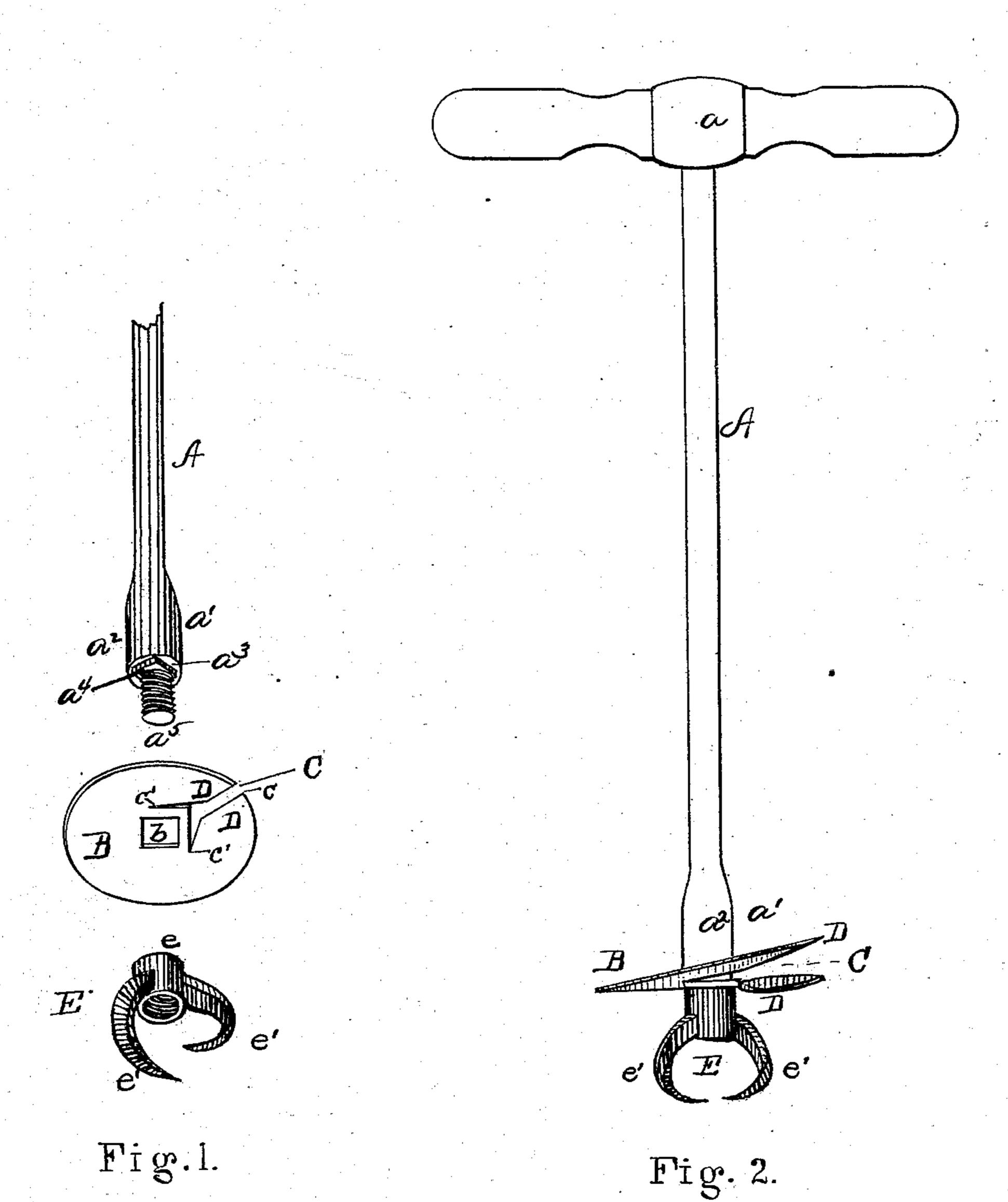
(No Model.)

## M. J. ROMINE & D. P. LEE.

POST HOLE AUGER.

No. 283,283.

Patented Aug. 14, 1883.



Wilnesses
Mille Genelles

Inventors
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athi

## United States Patent Office.

MALCOLM J. ROMINE AND DAVID P. LEE, OF NEVADA, MISSOURI.

## POST-HOLE AUGER.

SPECIFICATION forming part of Letters Patent No. 283,283, dated August 14, 1883.

Application filed June 1, 1883. (No model.)

To all whom it may concern:

Be it known that we, MALCOLM J. ROMINE and DAVID P. LEE, of Nevada, in the county of Vernon and State of Missouri, have invented 5 certain new and useful Improvements in Post-Hole Augers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of the parts of the auger detached, and Fig. 2 a side view

of the parts together.

This invention relates to improvements in 'earth-augurs;' and it consists in the con-

struction hereinafter set forth.

In the annexed drawings, the letter A denotes the shaft of the auger, solid or hollow, and provided with a handle, a. At its lower end, a', this shaft has an enlargement, a<sup>2</sup>, forming a shoulder, a<sup>3</sup>, at which is made an angular boss or seat, a<sup>4</sup>, from which projects a threaded end, a<sup>5</sup>.

The letter B designates the bit for removing the earth. This is made of sheet metal, circular in form, and having a central angular opening, b, corresponding with the boss or seat a<sup>4</sup>. In this bit is made a cut, C, running radially in from the circumference, as shown at c, and then diverging, forming the two slits c' c', giving this cut C a Y shape.

The edges D D along the radial cut c are to be beveled off, as shown, and bent so as to be out of line, giving the bit the spiral form clearly shown in Fig. 2. This bit is to be slipped over the lower end of the stem A, the

40 opening b fitting over the seat  $a^4$ .

The letter E indicates a feeder having the internally-threaded center e, to fit the threaded end  $a^5$  of the shaft A, and the spiral points e'e', curving in the same direction. This spiral feeder is screwed on the end of the shaft after

the bit is put in place, thus securing the latter, and the threads are arranged in such direction that in working the auger the tendency is to bind the feeder tighter on the shaft.

The use of this device of course is obvious. 50 The spiral feeder opens the ground ahead of the bit, giving the latter an easier entrance, especially when the ground is stony or gravelly.

The bit as seen is reversible, and as one edge D is used the other is sharpened, so that 55 on one becoming dulled the bit is reversed, the other edge used, and the dull one sharpened.

We are aware that an earth-auger has been provided with a bit consisting of two semicir- 60 cular plates secured together, and having their straight edges turned up so that there are slits running in from the periphery of the bit, and having transverse slits at their inner ends.

Having described our invention, what we 65 claim is—

1. The earth-auger shaft having the angular eat and threaded end, in combination with

seat and threaded end, in combination with the bit having the angular opening, and the feeder having the threaded center, as set forth. 70 2. The bit B. consisting of a disk of sheet

2. The bit B, consisting of a disk of sheet metal having the slit c c' c', the edges of the portion c being beveled, as set forth.

3. The shaft A, having the seat  $a^4$  and threaded end  $a^5$ , in combination with the bit 75 B, having the angular central opening, b, and the beveled edges D D out of line, and the feeder E, having the internally-threaded center e and the spiral points e' e', all combined, constructed, and arranged as and for the pur-80 pose set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

> M. J. ROMINE. D. P. LEE.

Witnesses:

JOHN T. BIRDSEYE,

W. A. FORSTER.