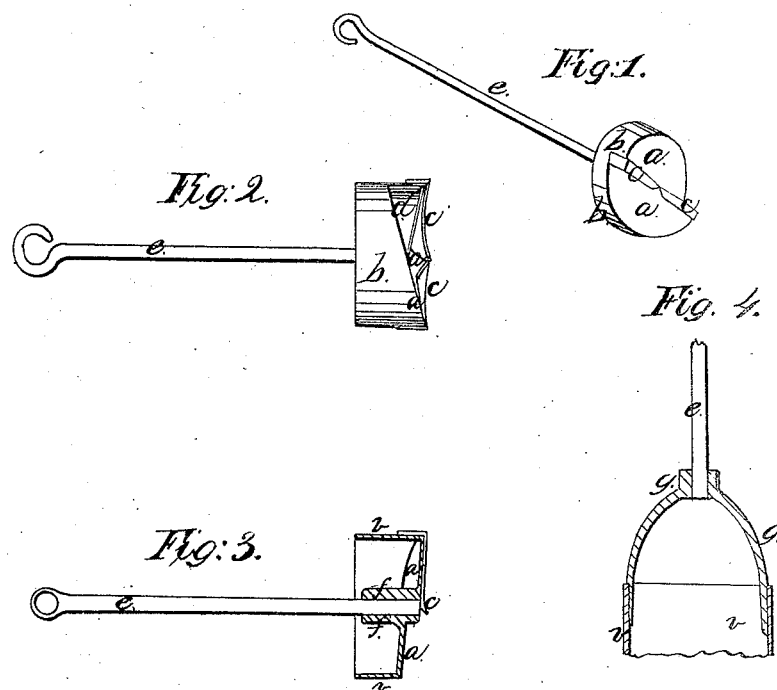


G. Page,
Earth Auger.
No. 1140. *Patented May 3, 1839.*



UNITED STATES PATENT OFFICE.

GEORGE PAGE, OF BALTIMORE, MARYLAND.

AUGER FOR BORING EARTH.

Specification of Letters Patent No. 1,140, dated May 3, 1839.

To all whom it may concern:

Be it known that I, GEORGE PAGE, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Augers for Boring Earth; and I do hereby declare the following to be a full and exact description of the same, with reference to the drawings accompanying and making part of this specification.

Fig. 1 is a perspective view and Fig. 2 a side view.

The peculiar feature of this auger consists in surrounding the cutting apparatus with a rim and in dispensing with the center piece or twist of the common auger.

a, a, Figs. 1 and 2, represents a circular plate of suitable dimensions, nearly cut into two equal parts or semicircles; leaving only a small portion of the center undivided. These two parts are twisted or inclined a suitable distance in opposite directions, and present the appearance of two inclined planes reversed. The outer circumference of the plate *a*, is surrounded by a rim *b*. Figs. 1 and 2, extending upward, parallel with the axis of rotation the required distance, to which rim, extending to the center, on a line with the divided parts of the above mentioned circular plate *a*, are attached two inclined knives or cutters *c*. Figs. 1 and 2, the inclinations of which are in opposite directions, at opposite sides and in accordance with the plate *a*. Consequently in the operation, when passing around they cut in the same direction one after the other. These knives or cutters *c*, are secured to the outer face of the plate *a*, by screws, and their inner points are sprung outward and back, thus bringing the center on a line with the outer ends and the cutting part comes in contact with the earth at a more obtuse angle at the points than nigh

the rim. The edge of the knives *c*, may be placed obliquely to a radial line drawn from their outer ends, and their inner ends terminating opposite the center of the auger and in a back position, to the direction that the auger moves. In the operation should there be a small stone at the center, these oblique placed knives will move around, and not come directly upon it and arrest the progress of the auger, as should be the case were they to unite at the center. The curved knives or cutters first act upon the earth and cut it spirally. The dirt so cut passes the aperture *d*, Fig. 2, formed by the twisting of the circular plate *a*, and is received into the tub formed by the rim and circular plate and can easily be withdrawn. The outer face of the plate *a*, being thus formed into two inclined planes or semi-spirals and their point of commencement and termination at opposite sides of the plate *b* and the difference between the inner and outer points, forms the open space or aperture through which the dirt enters the auger, as shown at *d*, Fig. 2.

Fig. 3 is a section of Fig. 2, in which the handle *e*, is inserted in the center or hub *f*, of the plate *a*.

Fig. 4 exhibits another method of securing the handle *e*, to the auger by connecting it to a bail *z*, which is secured to the inside of the rim *v*.

What I claim as my invention and desire to secure by Letters Patent is—

The employment of the cutters *c*, as combined with the rim *v*, and circular plate *a*, in the manner and for the purpose before described.

GEO. PAGE.

Witnesses:

THOS. B. ISRAEL,
THOS. B. COTTINGER.