

R. ELLIOT.
Earth-Auger.

No. 220,132.

Patented Sept. 30, 1879.

Fig. 1

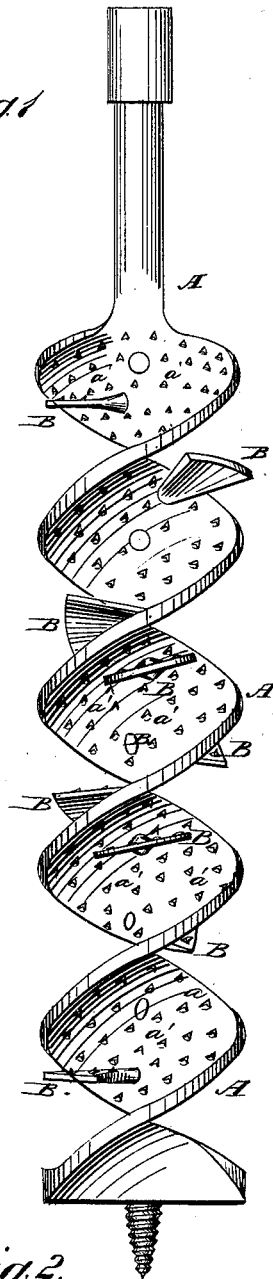
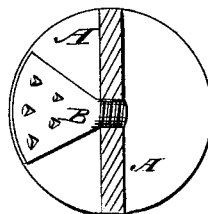


Fig. 2.



WITNESSES:

Francis McArdle.
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INVENTOR:

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UNITED STATES PATENT OFFICE.

RICHARD ELLIOT, OF PLAINFIELD, NEW JERSEY.

IMPROVEMENT IN EARTH-AUGERS.

Specification forming part of Letters Patent No. **229,132**, dated September 20, 1879; application filed March 19, 1879.

To all whom it may concern:

Be it known that I, RICHARD ELLIOT, of Plainfield, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Earth-Augers, of which the following is a specification.

Figure 1 is a side view of my improved earth-auger. Fig. 2 is a cross-section of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved auger for boring holes in the ground and removing the earth for the insertion of pipes to form wells, and which shall be simple in construction, convenient in use, and reliable in operation.

The invention consists in the combination of the stops or guards with the spiral groove of an earth-auger, and in an earth-auger provided with stops or guards in its spiral groove, and having teeth formed upon the surface of the said spiral groove, as hereinafter fully described.

A represents a spiral auger, which is made exactly like an auger for boring wood, except that it has a screw-coupling attached to its upper end to receive the pipe or rod by means of which it is operated, raised, and lowered.

In the groove of the spiral of the auger are formed holes, in which are secured, by screw-threads or riveting, the fan-shaped stops or guards B.

The guards B allow the earth to pass them as the auger is being screwed into the ground, but prevent the earth from sliding back when the auger is being raised, so that the said auger will take the earth up with it.

The surface of the spiral of the auger may have teeth *a'*, like rasp-teeth, formed in it, to assist the guards B in preventing the earth from sliding back when the auger is being raised.

The guards may be set directly across the groove of the auger, or at an inclination with it, according as the character of the soil may require.

The lower end of the auger A may be provided with any desired kind of a bit.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An earth-auger provided with guards B in the spiral groove, made fan-shaped to allow the earth to work up past them when the auger is working into the ground and prevent its relapse as the auger is pulled out.

2. An earth-auger having on its spiral face upwardly-inclined teeth *a'*, whose frictional contact with the soil will assist in preventing the earth from falling back as the auger is drawn out.

RICHARD ELLIOT.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.