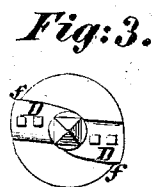
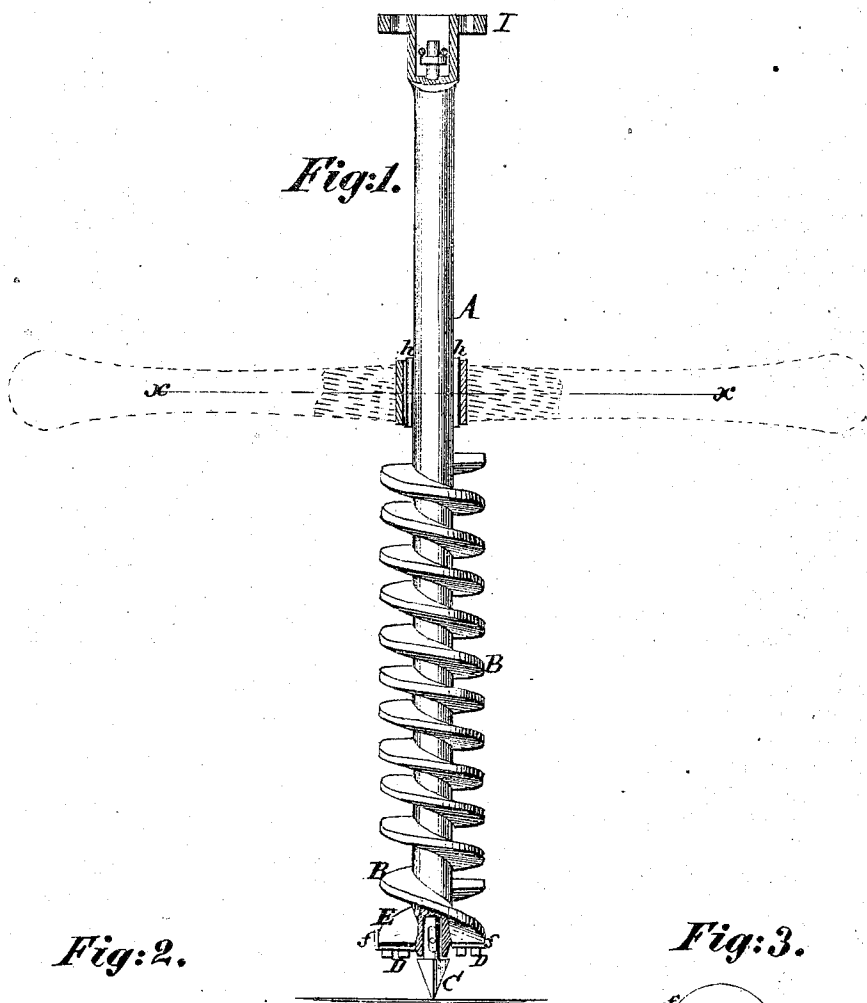


H. R. King, Well Auger.

No. 120,076.

Patented Oct. 17, 1871.



Witnesses
Mr. Vorlaend
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Inventor
H. R. King
per: Munn & Co.
Attorneys

UNITED STATES PATENT OFFICE.

HILLERY R. KING, OF POPLAR BLUFF, ARKANSAS.

IMPROVEMENT IN WELL-AUGERS.

Specification forming part of Letters Patent No. 120,076, dated October 17, 1871; antedated October 14, 1871.

To all whom it may concern:

Be it known that I, HILLERY R. KING, of Poplar Bluff, in the county of Ashley and State of Arkansas, have invented a new and useful Improvement in Well-Augers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvement in hollow augers for boring in the earth; and it consists in providing the lower or cutting-end of an auger with a short web or a section of a spiral flange in addition to the continuous spiral, whereby clogging is prevented and a suitable support for two cutters is formed.

I will describe the auger complete, as I propose using it; but I claim only the short spiral web.

In the accompanying drawing, Figure 1 represents a view of the auger partly in section. Fig. 2 is a cross-section of Fig. 1 on the line *x x*, showing the device for holding the driving-lever in starting the auger. Fig. 3 is a view of the cutting-end of the auger, showing the removable lips.

In Fig. 1 the starting-lever is seen in dotted lines, the clamps or boxing for holding it being shown in section on the line *y y* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A is the stem of the auger. B is the spiral

web around the stem. C is the removable central point, which is attached to the stem by a pin, as seen in the drawing. D D are the cutting-lips, one of which is fastened to the end of the web B, and the other to the short web E. The auger is thus made with double cutting-lips, while the earth is carried up by a single spiral web, which affords ample room, and prevents the clogging of the earth in the spiral channel. The lips have angular cutting-edges, which cut the sides of the hole smooth through clay or other tenacious earth, and which angular cutters *ff* project slightly, as seen in the drawing, so as to cut the hole a little larger in diameter than the web of the auger to prevent binding. I is a guide-flange on the end of the stem, through which are holes for the air to pass when the auger is drawn out of or inserted in the hole which has been bored. The lower end of the stem of the auger is extended somewhat beyond the web B, so that the lip on the short web E may be fitted close to the stem.

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

The short spiral web E, formed on the lower end of the hollow stem A, and arranged, with relation to the main spiral B, as shown and described, for the purpose specified.

HILLERY R. KING.

Witnesses:

A. M. KING, Sr.,
T. B. SANDERS.

(51)