

WILLIAM E. BALL.

Improvement in Post-Hole Diggers.

No. 126,773.

Patented May 14, 1872.

Fig. 1.

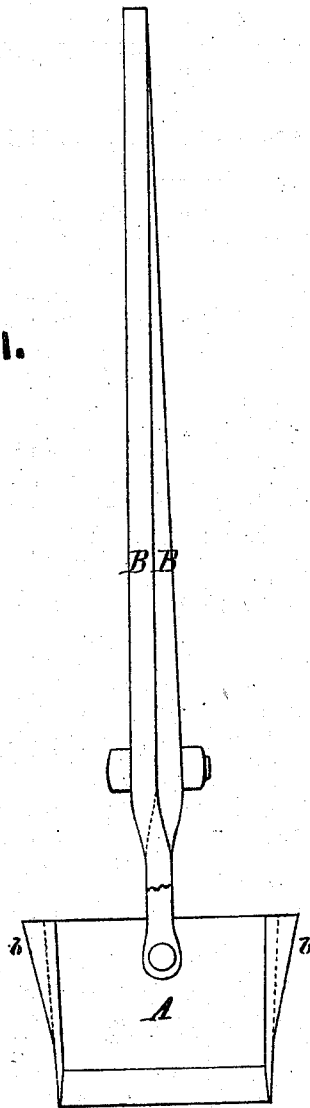
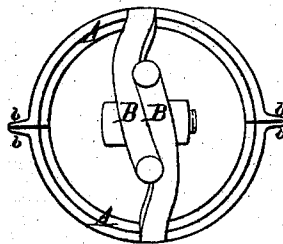


Fig. 2.



WITNESSES.

G. E. Upham.

E. A. Bates

INVENTOR.

William E. Ball
Chipman & Sonnet & Co
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM E. BALL, OF BETHESDA, OHIO.

IMPROVEMENT IN POST-HOLE DIGGERS.

Specification forming part of Letters Patent No. 126,773, dated May 14, 1872.

To all whom it may concern:

Be it known that I, WILLIAM E. BALL, of Bethesda, in the county of Belmont and State of Ohio, have invented a new and valuable Improvement in Post-Hole Diggers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical section of my invention. Fig. 2 is a plan view of the same.

This invention has relation to an improved post-hole digger, having a pair of jaws, which, when brought together, form a hollow cylinder or cone frustum inverted, and which are provided with a pair of crossed and pivoted operating levers. The novelty consists in constructing said jaws with flanges projecting outwardly and adapted to meet together when the jaws are closed in such a manner as to prevent the jaws from lapping or passing each other at the edges, all as hereinafter described.

Referring to the drawing, A A represent a pair of jaws, each preferably of the form of one-half of a frustum of a hollow cone inverted. These jaws are sharpened at their lower edges, and are provided with a pair of crossed and pivoted levers, B, adapted for use in opening and closing said jaws. When the jaws are closed their inner or vertical edges come together, as shown. At the upper parts of said edges flanges *b* are bent outwardly, as shown, and have the effect of preventing the edges of the jaws overlapping or passing each other when the jaws are tightly closed. These flanges have also the effect of giving strength and firmness to the jaws.

These jaws are designed to be made of steel plate or other suitable material.

The implement is used in the following man-

ner: The position of the post-hole being determined, the jaws are closed and their lower edges driven into the ground. The jaws are then withdrawn, and with them their contents in the nature of a core, which is afterward emptied by opening them.

The tool being smaller in diameter at its lower edge than at its upper, the work of digging is thereby greatly facilitated, and the withdrawing of the jaws rendered easier.

When the tool is used in very soft clay, the jaws may be opened a little before being driven, and then brought together before being withdrawn, the object being to compress the earth and prevent it from remaining in or falling back into the hole.

I am aware that post-hole augers have been heretofore constructed in the same general form as mine, but without the flanges *b*. By adding these flanges to the auger I am enabled to construct the jaws of much lighter and thinner material than would be practicable without them; for unless these flanges are added heavy and firm material must be used in the manufacture of the jaws to prevent them from slipping by each other. The flanges also provide against such slipping by in case the jaws become loose upon the pivot-pin.

I am well aware that concave jaws in post-hole diggers are not new; therefore do not claim such broadly.

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

In a post-hole digger constructed with semi-circular jaws, I claim the abutting flanges *b*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM E. BALL.

Witnesses:

FRANKLIN SWANY,
ABRAHAM C. HOOPES.