(No Model.)

W. D. A. GRAY & J. D. KLEPPER.

POST HOLE DIGGER.

No. 411,285. Patented Sept. 17, 1889.

Fig. 1.

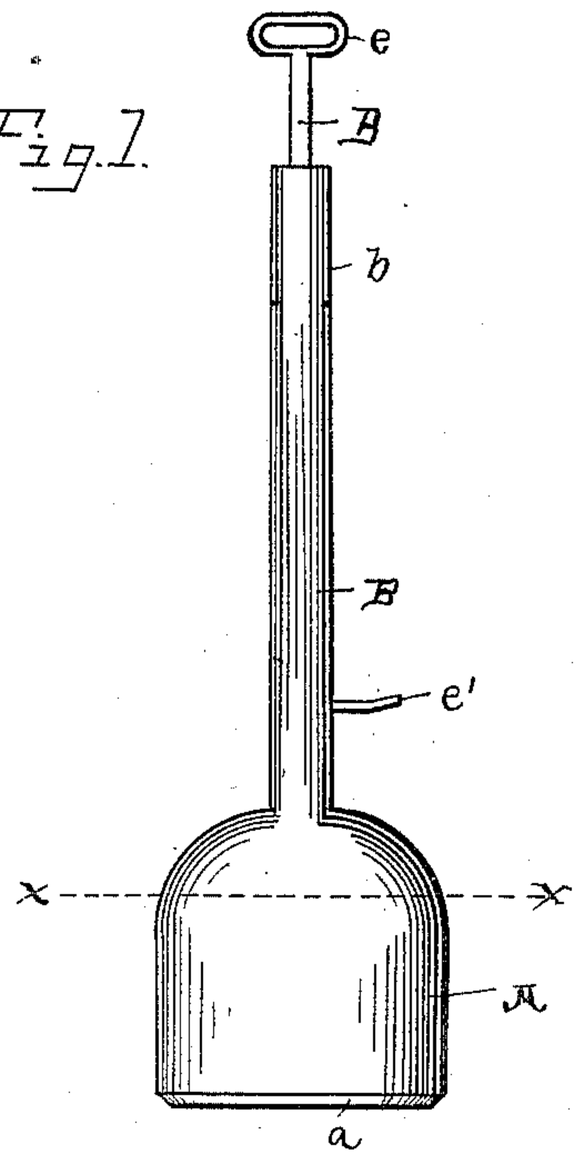


Fig. 2.

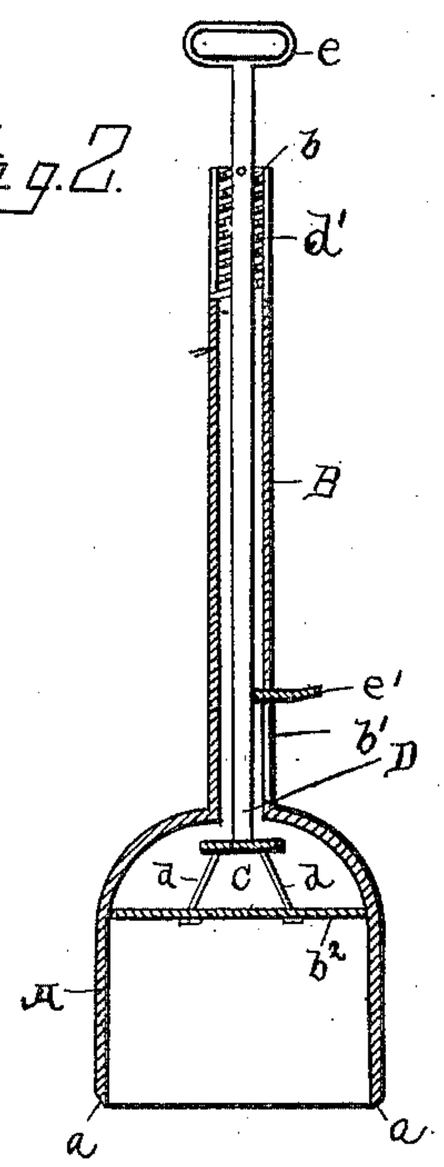
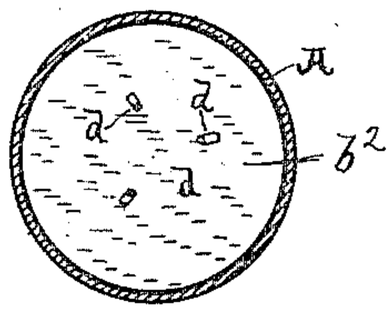


Fig. 3.



Witnesses
Wm. L. Hodges
Charles Brown.

Inventors
William D. A. Gray,
John D. Klepper,
By their Attorney
L. V. Morris.

UNITED STATES PATENT OFFICE.

WILLIAM D. A. GRAY AND JOHN D. KLEPPER, OF LIMESTONE, TENNESSEE.

POST-HOLE DIGGER.

SPECIFICATION forming part of Letters Patent No. 411,285, dated September 17, 1889.

Application filed June 14, 1889. Serial No. 314,238. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM D. A. GRAY and JOHN D. KLEPPER, citizens of the United States of America, residing at Limestone, in the county of Washington and State of Tennessee, have invented certain new and useful Improvements in Post-Hole Diggers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in post-hole diggers, having for its object the production of a new and improved highly-efficient device of this class that is extremely simple in construction and by means of which a post-hole is easily made and the dirt can be readily forced from the receptacle.

The invention consists, briefly, of an inverted-cup-shaped receptacle, a hollow tube preferably made integral therewith, a plunger or follower fitting said receptacle, and a spring-held rod connected to said follower; and the invention comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of our improved post-hole digger. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a horizontal sectional view on the line x x, Fig. 1.

Referring to the drawings, A designates the receptacle of approximately inverted-cup shape, the lower edge of which is provided with a continuous bevel a. From this receptacle projects a hollow tube B, opening into said receptacle and provided with upper and lower opposite openings b b', said tube being preferably made integral with said receptacle.

C is a plunger or follower composed of a flat circular plate b^2, fitting snugly within receptacle A. This follower is connected by bolts d to the lower end of a rod D, which is extended up through the hollow tube B, and to it is secured one end of a coil-spring d', resting at its lower end on the shoulders formed by the upper openings b in tube B. The upper end of the spring-held rod D is provided with a handle e, and a short rod or foot-rest e', secured to said rod D near its lower end, projects through the lower opening b' of the inclosing-tube.

In practice, after the operator has forced the cup-shaped receptacle into the earth, so as to form a post-hole, and then withdrawn, said receptacle, the dirt contained therein is forced therefrom by the operator pressing his hand on the upper end of the spring-held rod and his foot on the rod or rest e', the follower serving to immediately force the dirt from the receptacle.

We are aware that it is not broadly new to construct post-hole diggers with plungers or followers; but our invention is designed as an improvement over all similar inventions, and by means thereof the follower is normally held elevated against the top of the receptacle and is readily forced downward by hand or foot pressure applied by the operator.

We claim as our invention—

The herein-described improved post-hole digger, consisting of the receptacle of inverted-cup shape having a lower bevel edge, the hollow tube having upper and lower openings b b', the follower moving in said receptacle, the spring located in said upper opening b and engaging said rod, and the foot-rest projecting from said rod through said lower opening, as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM D. A. GRAY.
JOHN D. KLEPPER.

Witnesses:
E. J. BAXTER,
J. I. HAWKINS.