No. 843,800. PATENTED FEB. 12, 1907.

J. S. DURNING.

POST HOLE DIGGER.

APPLICATION FILED APR. 25, 1906.

FIG. 1

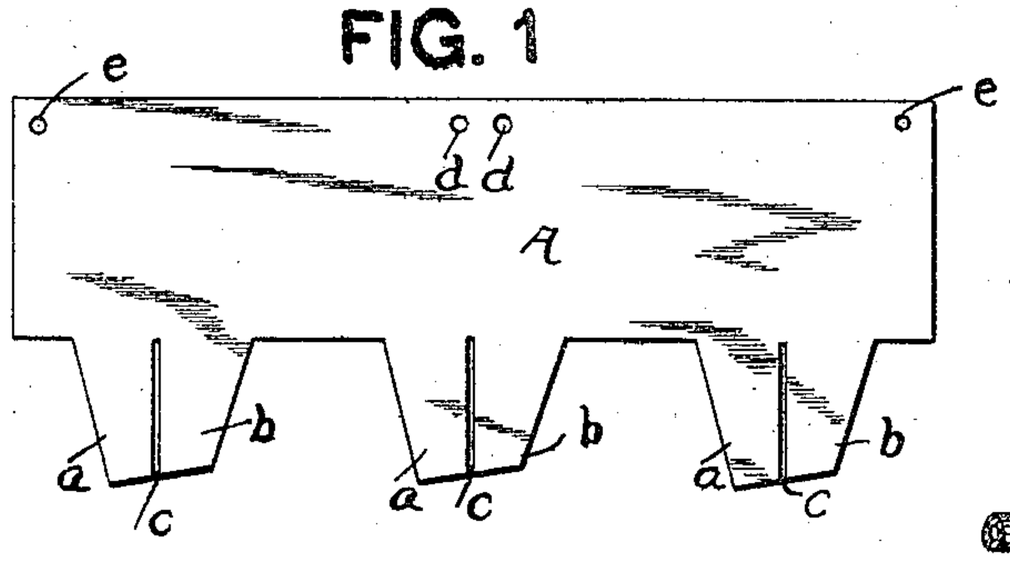


FIG. 2

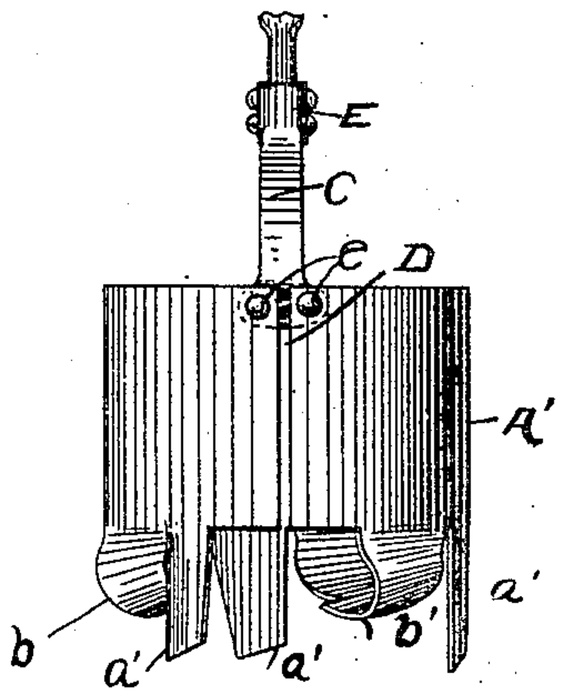


FIG. 3

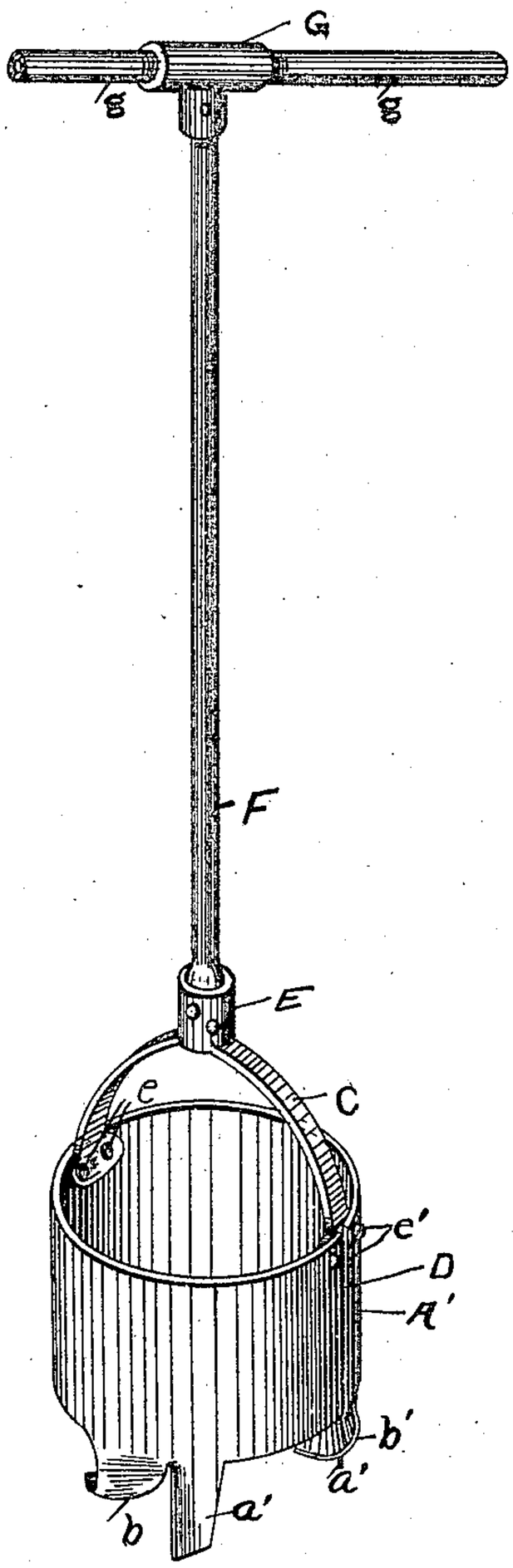
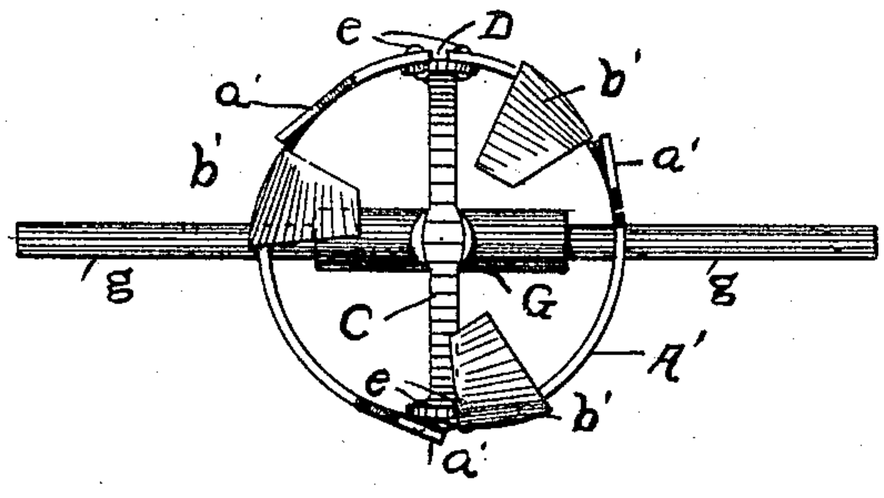


FIG. 4



WITNESSES.

W. A. Keller

C. E. Eggers.

INVENTOR.

Joseph S. Durning

by James K. Bakewell

his attorney

UNITED STATES PATENT OFFICE.

JOSEPH S. DURNING, OF AVALON, PENNSYLVANIA, ASSIGNOR TO JACOB O. BOWER, OF AVALON, PENNSYLVANIA.

POST-HOLE DIGGER.

No. 843,800. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed April 25, 1906. Serial No. 313,550.

To all whom it may concern:

Be it known that I, JOSEPH S. DURNING, of Avalon, in the county of Allegheny, State of Pennsylvania, have invented a certain new and useful Improvement in Post-Hole Diggers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of the blank from which the bucket of the digger is formed. Fig. 2 is a side elevation of the bucket of the digger. Fig. 3 is a perspective view of the digger, and Fig. 4 is a bottom view of the same.

My invention relates to an improvement in post-hole augers or diggers; and it consists in a digger having a bucket formed with alternate cutters and lifters, as is hereinafter more fully set forth.

In the drawings, A represents the blank, formed of sheet metal having two or more series of teeth *a b* arranged at suitable intervals along its lower edge, there being preferably three sets of teeth, the teeth *a b* being separated from each other by the narrow vertical slot *c*. This blank A having been cut or otherwise formed in the desired shape is bent by any suitable means into the form of a cylinder A′, as shown in Fig. 2, and the teeth *b* are bent inwardly, forming the lifters *b′*, while the teeth *a* are allowed to remain on a line with the circumference of the bucket A′, thus forming the cutters *a′*. The cutters *a′* are designed to cut the earth on a line with the circumference of the bucket of the digger, while the lifters *b′*, being bent inwardly, serve to cut, scoop, and lift the earth within the cylindrical bucket. Near the top of the blank A and rivet-holes *e e d d*, through which, after the blank has been bent into cylindrical form, rivets *e′* pass, by means of which the yoke C is riveted to the upper portion of the bucket A′, one arm of the yoke being secured to the cylindrical bucket, a rivet passing through the ear of the yoke in each side of the vertical slot D, the purpose of which slot is to permit a certain amount of spring in the cylinder. The other arm of the yoke C is secured to the bucket A′ by rivets passing through the rivet-holes *d*. The effect of this relative arrangement of the yoke and cylinder is to afford absolute stiffness to the upper portion of the cylinder without interfering with the necessary spring at the lower part. At the upper portion of the yoke C is the socket E. Fitting in this socket and riveted thereto is the handle-rod F. At the top of the rod F is a two-armed socket-piece G, the sockets of which are threaded to receive the cross-bars *g g*. The rod F and cross-bars G may be formed of pipe.

The advantages of my invention will be appreciated by those skilled in the art.

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

1. A post-hole-digger blank having a plurality of series of teeth, the teeth being separated from each other by narrow vertical slots and the series being separated from each other by greater intervals.

2. In a post-hole-digger having a cylindrical bucket formed of a single piece of metal, and having a plurality of series of teeth, each series being composed of a cutting-tooth and a lifting-tooth, the series being separated from each other by an interval.

In testimony whereof I have hereunto set my hand.

JOSEPH S. DURNING.

Witnesses:
JAMES K. BAKEWELL,
C. E. EGGERS.