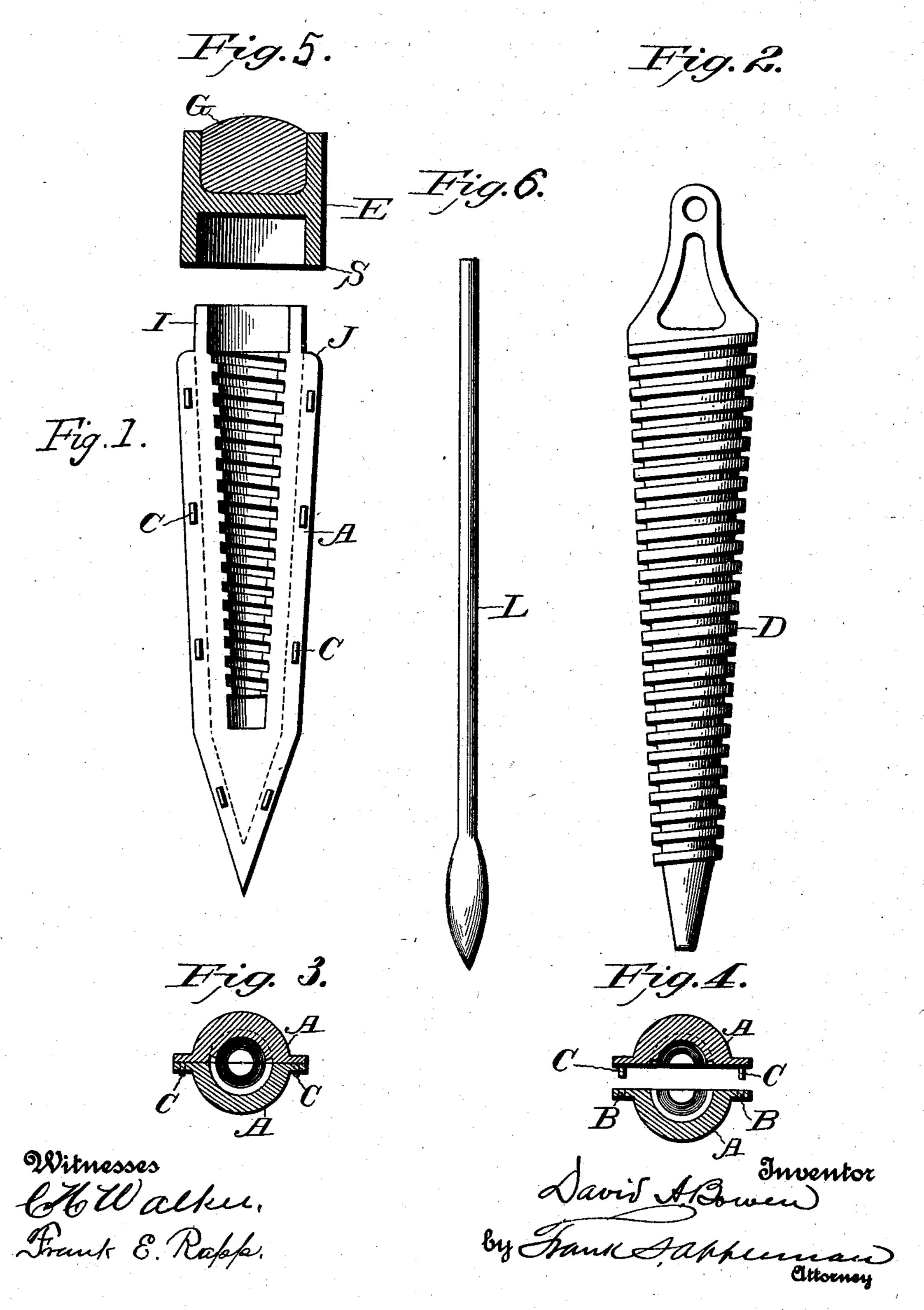
D. A. BOWEN. POST HOLE DIGGER.

(Application filed Jan. 23, 1902.)

(No Model.)



United States Patent Office.

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POST-HOLE DIGGER.

SPECIFICATION forming part of Letters Patent No. 701,992, dated June 10, 1902.

Application filed January 23, 1902. Serial No. 90,955. (No model.)

To all whom it may concern:

Be it known that I, DAVID A. BOWEN, a citizen of the United States of America, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Post-Hole Diggers, of which the following is a specification.

My invention relates to improvements in implements adapted to driving post-holes in which an inverted conical shell composed of corresponding sections is to be driven into the ground to the required depth and subsequently forced apart laterally to enlarge the holes sufficient to receive posts, as will be described.

The objects of my invention are to produce an implement simple and durable in construction and convenient in use whereby post-holes may be driven with facility in ground suitable for the purpose. These objects are attained by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section of a portion of my improved implement for driving post-holes. Fig. 2 is a side elevation of an inverted conical screw-plug corresponding in outlines with the interior of a conical shell to be used in connection therewith. Figs. 3 and 4 represent cross-sections, respectively, of a shell. Fig. 5 is a section of a cap detached to be placed over the end of the shell to receive the blows in driving, and Fig. 6 is an elevation of a bar with which to center the

shell preparatory to being driven.
Similar letters of reference refer to corresponding parts throughout the several views.

A complete shell is composed of corresponding inverted conical sections A, united and maintained in position by means of mortises B and tenons C, as shown in Figs. 1, 3, and 4. An inverted conical screw-plug D is provided corresponding in outlines with the interior of the complete shell, so that after the shell has been driven to the depth required it is inserted therein and the sections forced apart laterally to enlarge the holes sufficiently

to receive the posts, after which the shell, together with the screw-plug, may be withdrawn, the two separated, and the sections forming 50 the shell readjusted to repeat the operation.

To drive the shell without injury thereto, a metal cap E is provided fitted with a wooden plug G to receive the blows, the edge S of the cap resting upon the shoulders J of the 55 shell over which it is placed, the neck I maintaining the cap in position thereon.

For convenience of centering the shell preparatory to its being driven a bar L is provided and which may be conveniently emfor ployed as a lever in turning the screw-plug D into the shell.

The operation of driving a post-hole with my improved implement may be briefly stated as follows: After centering the shell is to be 65 driven to the required depth, the screw-plug inserted therein, and the sections forced apart laterally until the holes are sufficiently enlarged to receive the posts. The shell, together with the screw-plug therein, is with-70 drawn, the plug and the shell separated, and the sections again readjusted to repeat the operation.

Having described my improvement in implements adapted to driving post-holes, what 75 I claim therein as new, and desire to secure by Letters Patent, is—

In a post-hole digger, an expansible shell comprising two sections divided longitudinally through the head and point and having 80 their meeting faces provided with threaded grooves, mortise and tenon connections for the sections and a plug threaded approximately its full length engaging the threads of the sections in such manner as to separate 85 the sections from end to end substantially as described.

In testimony whereof I affix my signature, in the presence of two witnesses, this 9th day of January, 1902.

DAVID A. BOWEN.

Witnesses:
JNO. S. TITTLE,
E. G. KERR.