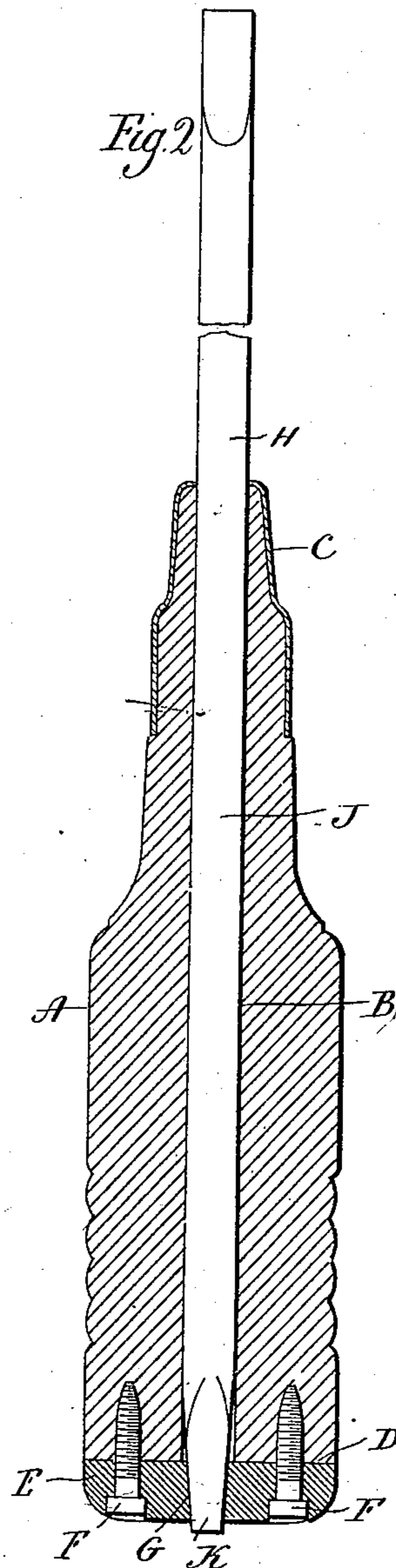
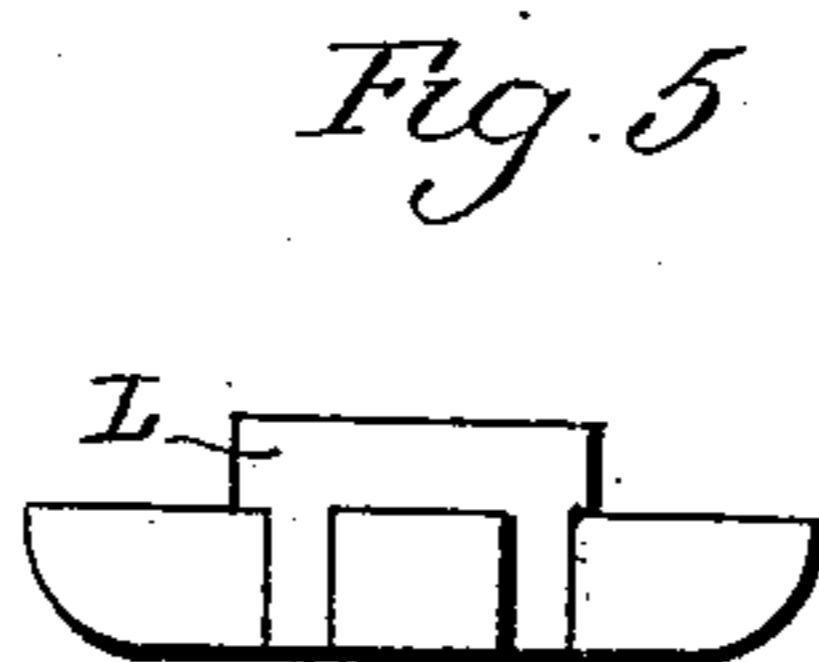
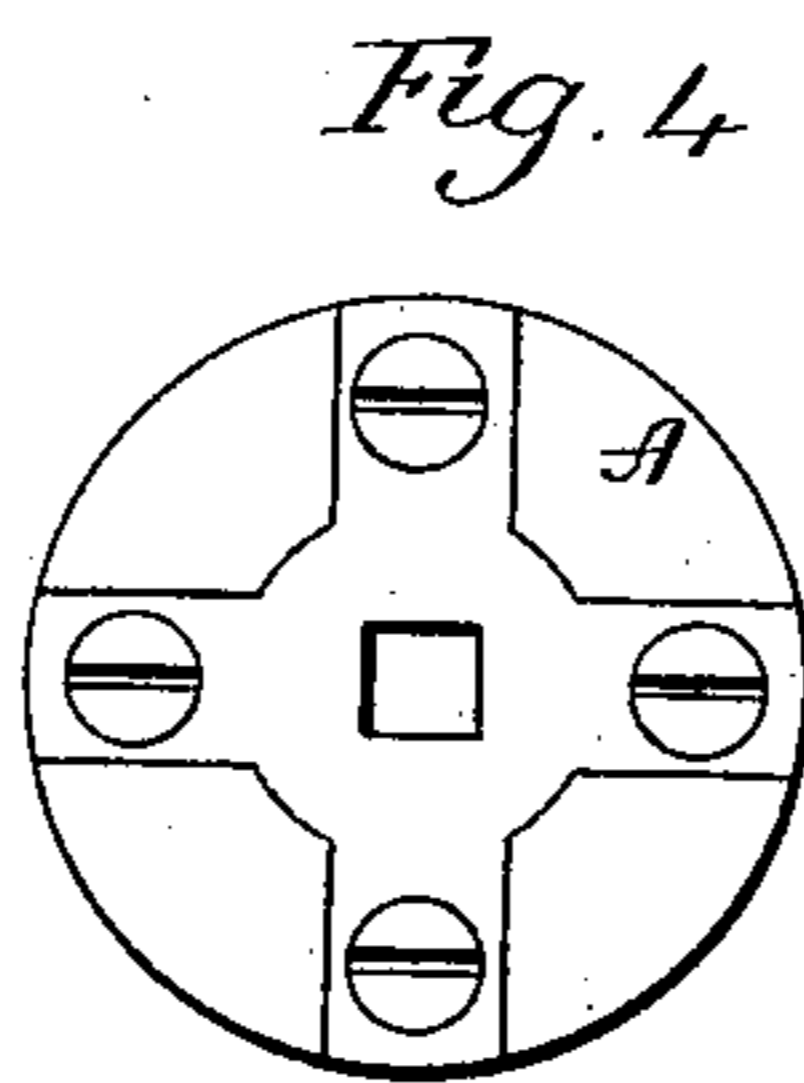
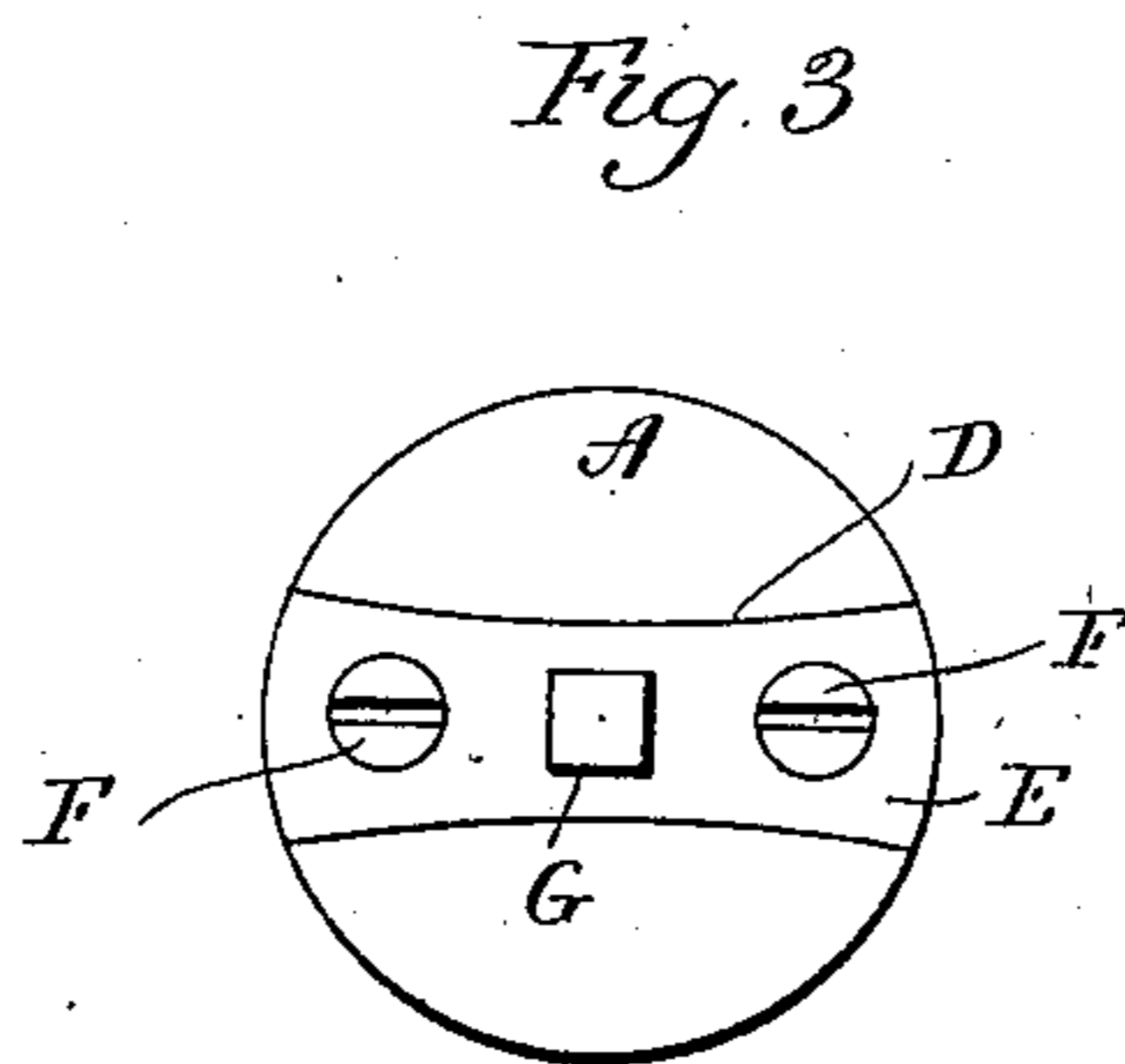
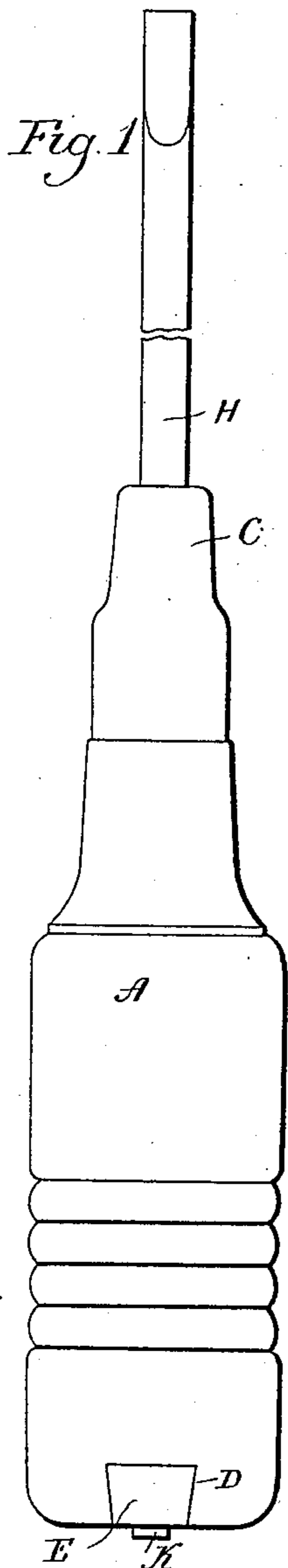


No. 693,123.

Patented Feb. 11, 1902.

W. W. FAIRCHILD.
SCREW DRIVER, &c.
(Application filed Nov. 22, 1901.)

(No Model.)



Witnesses.
J. H. Shumway.
C. L. Reed

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UNITED STATES PATENT OFFICE.

WILLIAM W. FAIRCHILD, OF TRACY, CONNECTICUT.

SCREW-DRIVER, &c.

SPECIFICATION forming part of Letters Patent No. 693,123, dated February 11, 1902.

Application filed November 22, 1901. Serial No. 83,215. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. FAIRCHILD, of Tracy, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Screw-Drivers and Kindred Tools; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a tool constructed in accordance with my invention; Fig. 2, a sectional view thereof; Fig. 3, a top or plan view of the outer end of the handle; Fig. 4, a top or plan view of the outer end of a handle with a modified form of socket; Fig. 5, a side view with the modified form of socket detached.

This invention relates to an improvement in screw-drivers and kindred tools, and particularly to that class in which the tools may be readily removed from the handle, so that one handle may serve for several different tools, the object of the invention being a simple construction which may be readily assembled and which permits the easy insertion and removal of the tools; and the invention consists in the construction as hereinafter described, and particularly recited in the claims.

The handle A, herein shown as round, may be of any approved shape. Longitudinally through the handle is a hole B, and at one end is the usual ferrule C. In the butt of the handle is a transverse groove D, preferably, and as herein shown, undercut on opposite sides. Into this groove a plate or socket E is inserted and secured to the handle with screws F or other convenient means, the plate or socket being flush with the end of the handle. In this plate or socket is an angular opening G in line with the hole B in the handle. The tool H, which is herein shown as a screw-driver, but which may be a chisel, gouge, or other tool, is provided with a shank J, preferably round, adapted to pass through the hole in the handle. At its inner end this shank is tapered and formed with an angular portion K, corresponding in shape to the

shape of the opening in the plate or socket, which is herein shown to be square, but which may be of any angular form desired. Preferably the taper at the end of the shank is such as to permit the extreme outer end to project beyond the face of the socket, so that when it is desired to remove the tool the end of the shank may be struck, and thus forced out of the socket should it stick therein. With this construction I am enabled to use tools having round shanks, which is desirable, as a round shank has greater strength than a flat one, and tools, particularly screw-drivers, are readily formed from round rods. If the end of the shank does not project beyond the face of the socket, its end will be exposed through the opening in the socket, so that the shank may be readily started out of the socket by the introduction of a nail-set or other similar instrument.

Instead of forming the handle with a single transverse groove and the plate or socket so as to extend across the handle in one direction only the handle may be provided with two grooves crossing each other at right angles, as shown in Fig. 4, in which case the plate or socket will be of corresponding shape, so as to be located therein, and, if desired, the inner face of the socket may have a central hub or boss L, adapted to extend into the recess formed in the center of the handle and so as to give a greater bearing-surface for the tapered end of the shank.

I am aware that screw-drivers and kindred tools have been made in which a round shank having a tapered angular end has been forced through a longitudinal hole into a socket located in the handle, and therefore do not wish to be understood as claiming such as my invention.

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

1. A screw-driver, or kindred tool, comprising a handle having a longitudinal hole extending through it, a transverse groove in its outer end, a socket located in said groove and means for securing it therein, an opening in said socket in line with the hole in the handle, and a tool having a shank adapted to be passed into said handle, said tool having a ta-

pered, angular end adapted to pass into the opening in the socket, substantially as described.

2. A screw-driver, or kindred tool, comprising
5 ing a handle having a longitudinal hole extending through it, a transverse undercut groove in its outer end, a socket located in said groove and means for securing it therein, an opening in said socket in line with the
10 hole in the handle and secured to said handle, and a tool having a shank adapted to be

passed into said handle, said tool having a tapered, angular end adapted to pass into the opening in the socket, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

W. W. FAIRCHILD.

Witnesses:

FREDERIC C. EARLE,
C. L. WEED.