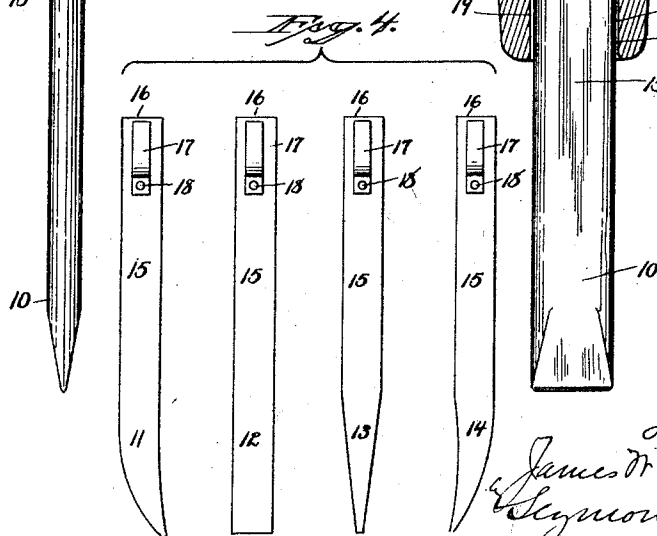
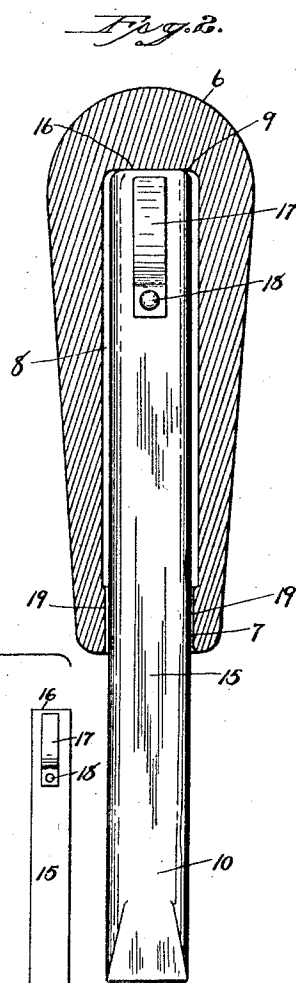
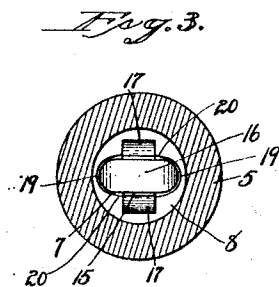
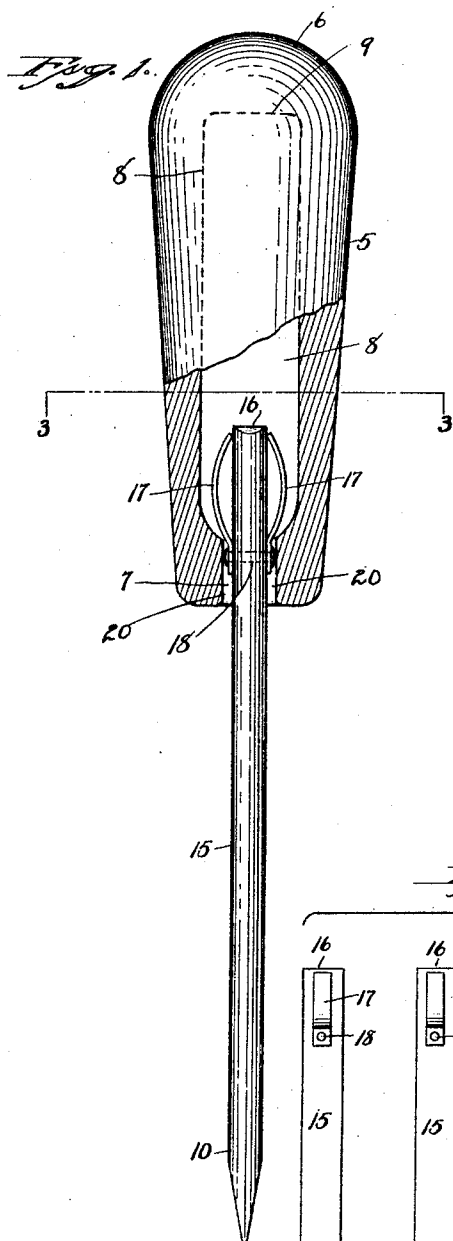


1,384,330.

Patented July 12, 1921.



Inventor
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UNITED STATES PATENT OFFICE.

JAMES WINFIELD MOSHIER, OF BRISTOL, CONNECTICUT, ASSIGNOR TO THE WALLACE BARNES COMPANY, OF BRISTOL, CONNECTICUT, A CORPORATION.

HAMMERING-HANDLE WITH INTERCHANGEABLE TOOLS.

1,384,330.

Specification of Letters Patent. Patented July 12, 1921.

Application filed February 3, 1921. Serial No. 442,192.

To all whom it may concern:

Be it known that I, JAMES W. MOSHIER, a citizen of the United States, residing at Bristol, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Hammering-Handles with Interchangeable Tools; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Figure 1 a view of the device in elevation, the handle being shown partly in section, and the tool proper being looked at edge-wise.

Fig. 2 a view showing the tool flatwise, and the handle in longitudinal section and as telescoped over the tool into its hammering position.

Fig. 3 a view in transverse section on the line 3—3 of Fig. 1.

Fig. 4 a view showing a group of four tools adapted to be interchangeably used with one and the same hammering handle in conjunction with the tool shown in the other figures.

My invention relates to an improved hammering handle with interchangeable tools therefor, the object being to provide a simple and convenient set of tools particularly designed for use by automobile repairmen and owners, though not so limited.

With these ends in view, my invention consists in a hammering handle with interchangeable tools, having certain details of construction as hereinafter described in the claims.

In carrying out my invention as herein shown, I employ a hammering handle 5 tapering from its outer to its inner end and circular in cross-section, the outer end of the handle being rounded at 6 to fit the palm of the hand, and its inner end being formed with an elongated opening or throat 7 having rounded ends and substantially flat sides, and leading into a relatively long cylindrical chamber 8 extending nearly throughout the length of the handle and terminating at its outer end in a flat striking-face 9. With such a handle I employ a variety of interchangeable tools, of which five forms are shown, though I do not limit myself to

them. The tools shown consist of a chisel or screw-driver 10, an oil-groove cutter 11, a blunt-ended drift 12, a pointed drift 13, and a cotter-pin puller 14. These several tools are differentiated from each other only in the conformation of their outer ends. Each of these is made integral with a flattened tool-shank or bar 15, of uniform cross-section throughout its length, and having its outer end formed with a flattened strike-face 16 for coacting with the striking-face 9 of the handle. The shank of each tool is provided at its outer end with a pair of bowed, retaining-springs 17, secured by a single rivet 18 passing directly through the shank, upon the flat opposite faces of which the respective springs are symmetrically arranged. The throat or opening 7 in the handle 5 is made just large enough to give passage to the outer ends of the tool-shanks when the springs thereof are flattened for being forced therethrough in either direction, *i. e.*, into or out of the chamber 8 of the handle. The throat 7 is proportioned to the cross-section of the tool-shanks so as to leave but a narrow clearance-space 19 between the edges of any shank and the rounded ends of the throat, whereas the flattened sides of the opening are slightly widened, as at 20, in line with the path of the springs 17 for the passage of the rivet 18 thereof.

It will be readily understood that by a slight manual effort the several tools may be interchanged with the handle, the effort required being merely to compress the bowed springs 17 sufficiently to permit them to pass through the throat 7 of the handle in either direction. The oblong form of the throat 7 and of the tool-shanks prevents them from rotating with respect to each other. The hammering handle may be used as a hammer or otherwise, according to the character of the tool upon which it is mounted.

I claim:

1. The combination with a hammering-handle having a longitudinal chamber closed at its outer end and having a throat intersecting the inner end of the said chamber and smaller in cross-section than the same; of a removable tool the shank of which is adapted in cross-section to freely reciprocate in the said chamber and throat, and a pair of outwardly-bowed retaining-springs applied to the outer end of the tool-shank

and adapted, when compressed, to pass in either direction through the said throat of the handle but normally clearing the side walls of the said chamber therein to permit
5 the relative longitudinal movement of the handle and tool without friction.

2. The combination with a hammering-handle having a longitudinal chamber closed at its outer end and having a throat enter-
10 ing the inner end of the handle and intersecting the inner end of the said chamber and smaller in cross-sectional area than the same; of a removable tool the shank of
15 which if adapted in cross-section to freely reciprocate in the said chamber and throat, and an outwardly-bowed retaining spring

riveted at one end to the outer portion of the tool-shank, and bearing at its opposite end thereupon, the said spring being adapted, when compressed between its ends, to
20 permit the shank to pass in either direction through the throat of the handle and to clear the side walls of the said chamber therein to permit the relative longitudinal movement
25 of the handle and tool without friction.

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

JAMES WINFIELD MOSHIER.

Witnesses:

J. ERNEST ANDREW,
CARRIE M. HANNA.