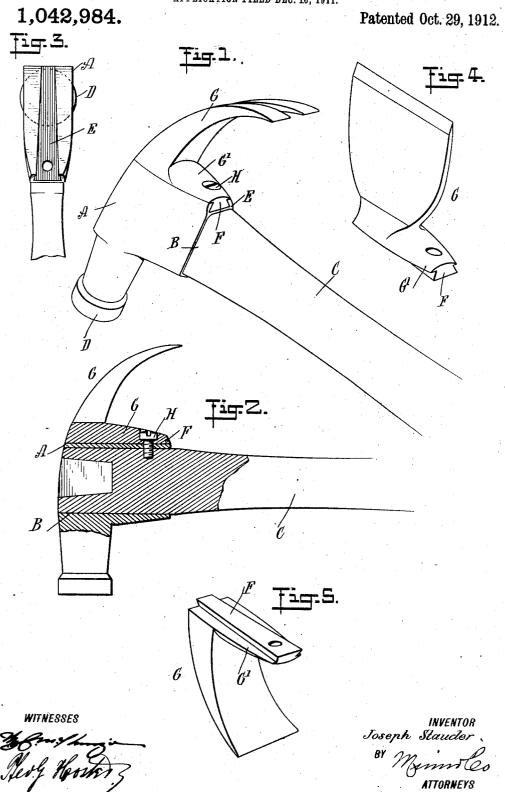
## J. STAUDER. COMBINATION TOOL. APPLICATION FILED DEC. 16, 1911.



## UNITED STATES PATENT OFFICE.

JOSEPH STAUDER, OF MOUNT VERNON, NEW YORK.

COMBINATION-TOOL.

1,042,984.

Specification of Letters Patent.

Patented Oct. 29,1912.

Application filed December 16, 1911. Serial No. 666,174.

To all whom it may concern:

Be it known that I, Joseph Stauder, a citizen of the United States, and a resident of Mount Vernon, in the county of West-5 chester and State of New York, have invented a new and Improved Combination-Tool, of which the following is a full, clear, and exact description.

The object of the invention is to provide 10 a new and improved combination tool, provided with interchangeable tool members to permit of readily converting the tool into or using it as a hammer, claw hammer, adz,

hatchet and the like.

For the purpose mentioned, use is made of a hammer head provided with an eye for engagement with a handle, the head being provided at one side with a dovetail groove converging outwardly and an interchangeable tool member provided with a dovetail tapering tongue fitting the said groove.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which 25 similar characters of reference indicate cor-

responding parts in all the views.

Figure 1 is a perspective view of the combination tool with an interchangeable tool member in the form of a claw; Fig. 2 is a sectional side elevation of the same; Fig. 3 is an edge view of the tool with the inter-changeable tool member removed; Fig. 4 is a perspective view of the interchangeable tool member in the form of a hatchet cutting 35 edge; and Fig. 5 is a similar view of the interchangeable member in the form of the cutting edge of an adz.

The hammer head A is provided with an

eye B in which is fastened one end of the 40 handle C, in the usual manner, and on one side of the head A is arranged integrally the peen D, and on the other side of the head A is arranged a dovetail groove E extending in the direction of the length of the head A 45 and converging in an outward direction, that is, being wider at the inner end than at the outer end, as will be readily understood by reference to Fig. 3. The dovetail groove E is adapted to be engaged by a 50 dovetail tapering tongue F, formed integrally on the base G' of an interchangeable tool member G, which may be in the form of a claw, as shown in Figs. 1 and 2, or in the form of a cutting edge of a hatchet, as shown in Fig. 4, or in the shape of the 55 cutting edge of an adz, as shown in Fig. 5.

The base G' of the tool member G is shaped so as to fit snugly onto the side of the head A having the groove E, to render the tool member G exceedingly strong and at the 60 same time preserve the appearance of the complete tool.

By arranging the groove E and the tongue F in the manner described, the interchangeable tool member G is held securely in po- 65 sition on the head A, as the strain on the tool member when used is in an outward direction, and hence the tool member G when used is drawn firmly in position on the head A without danger of becoming de- 70

tached therefrom.

In order to detach the movable tool member G, it is necessary to exert an inward pressure on the tool member so as to slide the tongue F inwardly out of engagement 75 with the groove E, it being understood that when an interchangeable tool member G is removed from the head any one of the tool members can be readily placed in active position on the head by sliding the tongue F 80 in an outward direction into the groove E until the outer end of the tool member is flush with the outer end of the head A.

In order to prevent accidental detachment of the interchangeable tool member G from 85 the head A, use is made of a screw H passing through the inner end of the tongue F and screwing into the wall of the eye B and in the handle C, as plainly indicated in Fig. 2.

It is understood that the interchangeable tool members G are shaped relative to the head A that when in position on the head A such tool member practically completes the combination tool, with the parts appearing 95 in proper symmetry, thus giving a neat and complete appearance to the combination tool.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A combination tool, comprising a handle, a head disposed upon one end of the handle and having, on one side, a dovetailed groove extending in the direction of the length of the handle, and further provided with an 105 opening which extends through the base of said groove at a point adjacent the inner end of the head, an interchangeable tool member having a dovetailed tongue on its base, and provided with an opening through said base, and a fastening member extending through said openings of the tool member and the head and into the material of the handle.

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

JOSEPH STAUDER.

Witnesses:
WILLIAM C. TWIDY,
GEORGE ODELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."