G. E. WOOD.

PERCUSSIVELY OPERATED HAND TOOL.

APPLICATION FILED AUG. 11, 1908.

913,340. Patented Feb. 23, 1909.

Fig. 1.

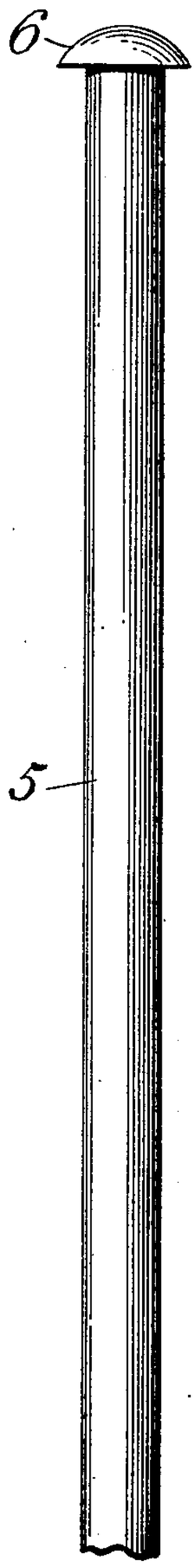


Fig. 3.

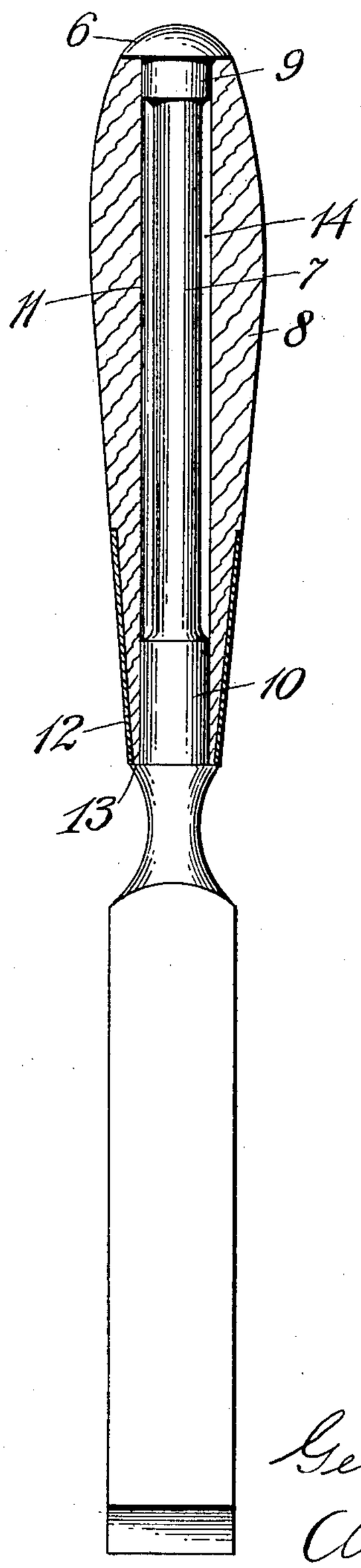
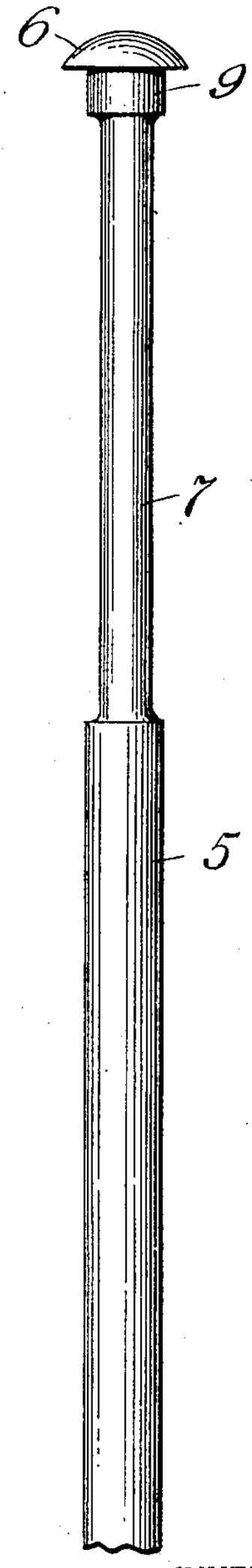


Fig. 2.



WITNESSES:

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PERCUSSIVELY-OPERATED HAND-TOOL.

No. 913,340. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed August 11, 1908. Serial No. 447,926.

To all whom it may concern:

Be it known that I, GEORGE E. WOOD, a citizen of the United States, and a resident of Plantsville, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Percussively-Operated Hand-Tools, of which the following is a specification.

My invention relates to the class of hand tools having a blade and shank of metal, the shank being arranged to receive a handle of wood or other fibrous material, and which tools, as for instance a chisel, are adapted in use to receive blows upon the handle end of the tool, and the object of the invention is to provide a tool of the kind specified having numerous novel features of advantage and utility.

A form of tool constructed to contain my invention, and in which the objects above set out are embodied is illustrated in the accompanying drawings in which—

Figure 1 is a view of a blank from which a tool embodying my invention is to be constructed, said blank being provided with a head. Fig. 2 shows a portion of the blank reduced and elongated to form a shank for a handle. Fig. 3 is a view of a tool embodying my invention, the handle being cut in section to show construction.

In the construction of tools of this class it has been found desirable to form the article from a blank of practically uniform diameter from end to end, this owing, among other advantages, to the facility and cheapness with which such a tool may be constructed. Such a finished tool, however, is found to possess the disadvantage of uneven "balance", that is, the handle portion is too heavy as compared with the blade, so that the tool does not "hang" nicely in the hands of the user. If the metal composing the handle or shank is merely reduced, without care as to the manner of such reduction, the spring of the comparatively light shank, under blows delivered on the handle end of the tool, will cause the handle to crack or split under the strain.

By my invention I have provided means whereby the shank of the tool may be reduced and the parts constructed in a manner not only to avoid any chance of splitting the handle, but also to result in a saving of stock and hence cheapening cost of manufacture.

In the accompanying drawings the numeral 5 indicates a blank of metal of practically uniform diameter from end to end, preferably round in cross section, and having a head 6 formed at one end. In the construction of a tool embodying my invention this blank is reduced near one end, as at 7, this reduction occurring at such point that it will be located within a handle 8 of wood or other fibrous material secured upon the shank. The manner of this reduction provides enlargements 9, 10, near each end of the shank portion of the tool, that, 9, immediately underlying the head 6 and that, 10, terminating at the opposite end of the shank near the blade.

The handle 8, of wood or other fibrous material, has a central opening 11 preferably of about the size of the enlargements 9 and 10, and its end is formed to nicely fit and to receive the head or button 6. The handle may be provided with a ferrule 12, which, together with the end of the handle, if desired, may rest against a shoulder 13 on the metal part of the tool. This construction provides a space 14 between the inner surface of the handle and the smaller part 7 of the shank within which this portion of the shank may freely spring under blows delivered upon the end of the handle, and without contact with the latter in such a way as to crack it. A material feature residing in this construction is a lightening of the shank in a manner to provide a nicely balanced tool with the weight removed from a point between the ends of the handle, leaving sufficient weight at the extreme outer end of the handle to cause the tool to "hang" well in the hands of the user.

While I have shown and described herein a preferred means of carrying my invention into practice, it will be understood that other forms of construction may be employed without departure from its scope or intent, and I do not limit myself to the preferred form of construction herein shown and described.

I claim:—

1. A percussively operated tool including a blade and a shank having a head, said shank being reduced to form an enlargement at an end of the reduced portion, and a handle of fibrous material fitted upon said enlargement of the shank to provide a space between the shank and handle.

2. A percussively operated tool including

a blade and a shank having a head, said shank being reduced between its ends forming enlargements at each end of the reduced portion, and a handle of fibrous material having an opening of a size to fit said enlargement providing a space between the shank and the inner surface of the handle.

3. A percussively operated tool including a blade and a shank having a head, said shank being reduced between its ends forming enlargements at each end thereof one located underneath said head, and a handle of fibrous material having an opening to fit said enlargements and located thereon against said head and providing a space between the inner surface of the handle and the shank.

4. A percussively operated tool including a blade and a shank, the latter being reduced to form an enlargement and having a head at its end, and a handle of fibrous material having an opening to receive said enlargement and providing a space between the shank and handle, said handle underlying said head.

GEORGE E. WOOD.

Witnesses:
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