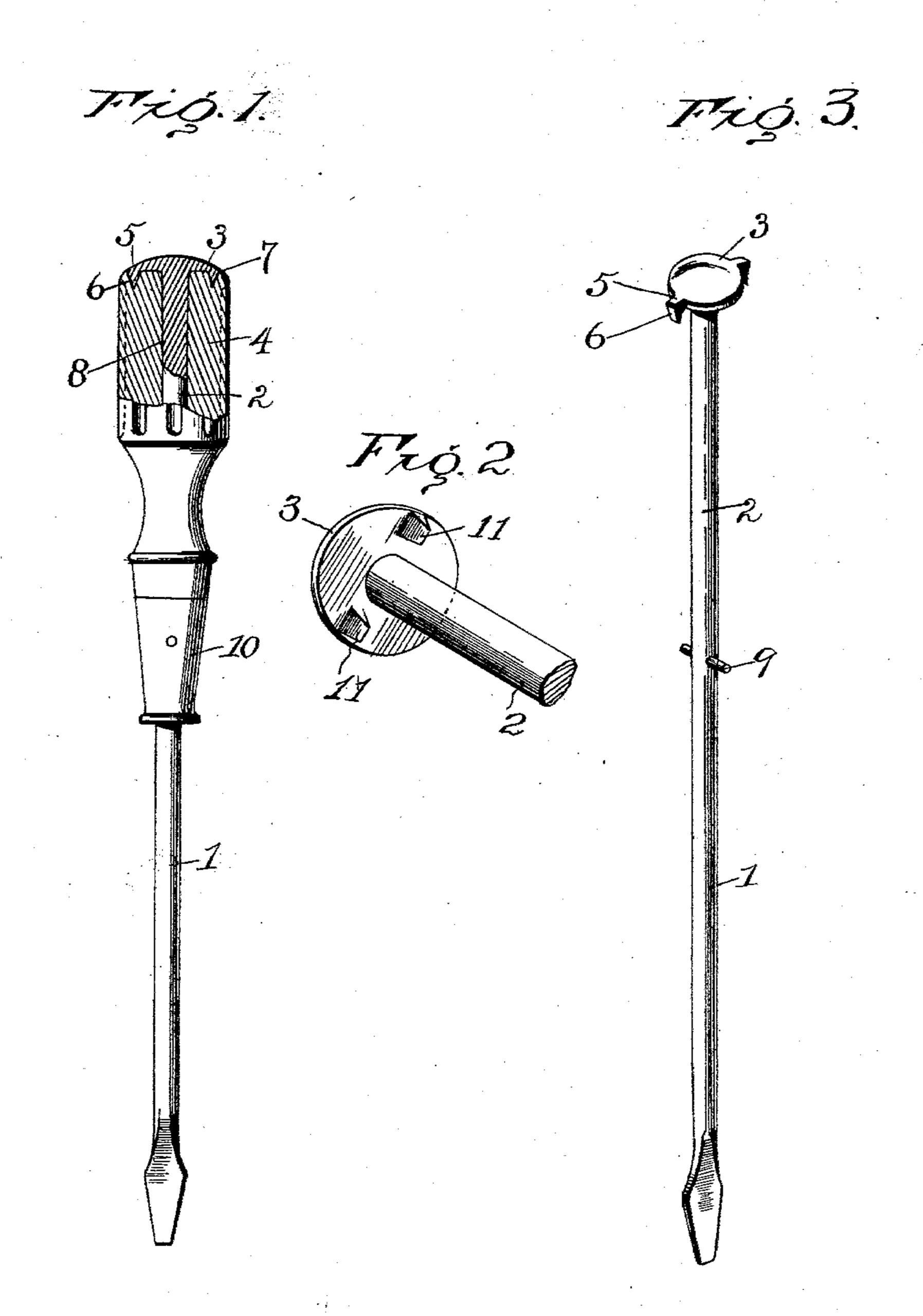
## G. E. WOOD. SCREW DRIVER.

APPLICATION FILED JULY 14, 1903.

NO MODEL.



Witnesses

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## United States Patent Office.

GEORGE E. WOOD, OF SOUTHINGTON, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE HURWOOD MANUFACTURING COMPANY, OF PLANTSVILLE, CONNECTICUT, A CORPORATION OF CONNECTICUT.

## SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 753,186, dated February 23, 1904.

Application filed July 14, 1902. Serial No. 115,523. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. WOOD, a citizen of the United States, and a resident of Southington, in the county of Hartford 5 and State of Connecticut, have invented certain new and useful Improvements in Screw-Drivers, of which the following is a specification.

My invention relates to the class of tools 10 which include a shank portion, usually located at one end, and to which a handle of wood or other like material is secured; and the object of my invention is to provide means in a tool of this class for firmly and intimately securing

15 the handle to the shank.

A form of tool in which my invention may be embodied is illustrated in the accompany-

ing drawings, in which-

Figure 1 is a view in side elevation of the 20 tool with the upper part of the handle and shank broken away to show construction. Fig. 2 is a perspective view of the head and a portion of the shank, illustrating the preferred form of device. Fig. 3 is a perspective view . 25 of a modified form of the device.

In the accompanying drawings the numeral 1 denotes the blade of a screw-driver, which has been selected by me as a tool for the proper illustration of my invention. This 30 blade is constructed, preferably, of iron or steel, the blade 1 being located at one end and the shank 2 at the opposite end. At the extreme outer end of the shank 2 a head 3 is located, this head being comparatively thin and 35 rounded as to its outer surface to conform to the rounded end of the handle 4 and, in fact, complete the rounded end of said handle.

In the modified form of the device shown in Fig. 3 projections 5 are located on the edge of 40 the head 3, these projections preferably being located on diametrically opposite sides, although it is obvious that they may be located in any relative position and in any number desired. From each of these projecting portions 45 a prong 6 extends downward, the end of this prong being sharpened or pointed. As shown in the drawings, these prongs extend downward from the projections 5; but it is obvious

that various means of connecting them with or projecting them downward from the head 50 may be employed and yet come within the

scope of the invention.

In the preferred form of the device the prongs or holding-pins 11 are arranged on the under side of the head 3 and at or near its outer 55 edges. Both in the preferred and modified forms the prongs are of course projected from the under side of the head in position to be driven into the outer end of the handle of the screw-driver, and whether these prongs are 60 arranged upon the main portion of the head, as shown in the preferred form of the device in Fig. 2, or upon laterally-extending projections, as shown in the modified form in Fig. 3, is entirely immaterial. It is preferred, how- 65 ever, in either of the forms shown to form the lugs integral with the shank and head portion, and it is to be noted that in either case these holding-prongs do not project entirely across the under side of the head, but are, in truth, 7° isolated pins struck up from the body of the material.

The handle 4 is constructed of wood or any similar material suitable for the purpose, and the upper or outer end of the handle has a re- 75 cess 7 for the reception of the head 3, which fits nicely within the recess. The iron portion of the tool is inserted in the recessed end of the handle and through the central opening 8 therein, and the prongs 6 are driven into the 8. substance of the handle. The outer end of the handle is then curved, as shown in Fig. 1 of the drawings, the head 3 and the end of the handle so far as surface is concerned being

practically the same.

A pin 9 is inserted through the ferrule 10, the handle 4, and the shank 2, and this pin prevents any backward movement of the shank within the handle. The prongs 11 shown in the preferred form and the prongs 6, 9° together with the projections 5, shown in the modified form in Fig. 3 prevent any relative turning movement of the handle and shank, aided to a certain extent by the pin, the primary object of the pin, however, being to 95 prevent any backward movement, as above

described. The head 3 provides a surface upon which a blow may be struck for any desired purpose. The iron portion is inserted through the handle and the handle secured in place before the blade is formed, and the construction above described provides an extremely simple and durable means of connection between the handle and shank.

What I claim as my invention, and desire to

10 secure by Letters Patent, is—

1. In a screw-driver or the like, in combination with the blade having a shank, a flattened head secured at the end of the shank, prong-like projections extending from the underside of the head, and adapted to be forced into the material of the handle and a handle having a central opening adapted to receive the shank and a recess for the reception of the head.

20 2. In a screw-driver or the like, in combination with the blade having a shank, a flattened head secured at the end of the shank, projections extending beyond and downward from the edge of the head, and a handle having a central opening adapted to receive the shank, and a recess for the reception of the head.

3. In combination in a screw-driver or the like, a blade having a shank, a flattened head located on the end of the shank, projections extending downward from the edge of the head, a handle having a lengthwise opening and a recess for the head, said projections adapted to be driven into the material of the

handle and means for preventing backward 35 movement of the shank within the handle.

4. In combination in a screw-driver or the like, a blade having a shank, a flattened head located at the end of the shank, prongs formed integral upon the head and projecting down-40 ward therefrom, a handle having a central opening for the reception of the shank, and a recess for the reception of said head.

5. In combination in a screw-driver or the like, a blade having a shank, a flattened head 45 located at the end of the shank and formed integral therewith, projections extending beyond the edge of the head, downward-extending prongs located on said projections, a handle having a central opening for the reception of the shank, and a recess for the re-

ception of said head.

6. In combination in a screw-driver or the like, a blade having a shank, a flattened head located at the end of the shank and formed 55 integral therewith, projections extending beyond the edge of the head, downwardly-extending prongs located at the outer ends of said projections, a handle having a central opening for the reception of the shank, a re-60 cess for the reception of said head, and means for preventing backward movement of the shank.

GEORGE E. WOOD.

Witnesses:

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