Feb. 18, 1930. A. H. RACICOT 1,747,647

HANDLE

Filed July 18, 1927 2 Sheets-Sheet 1

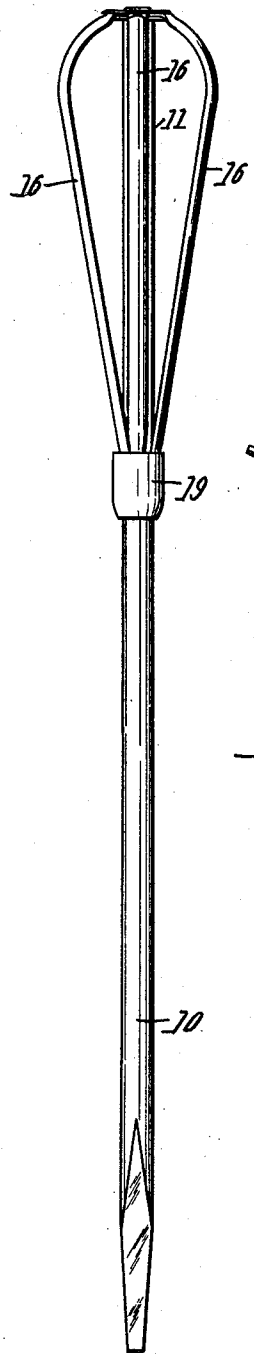



Fig. 1.

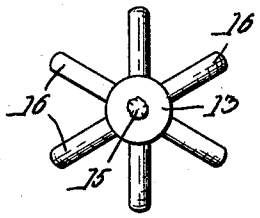



Fig. 2.

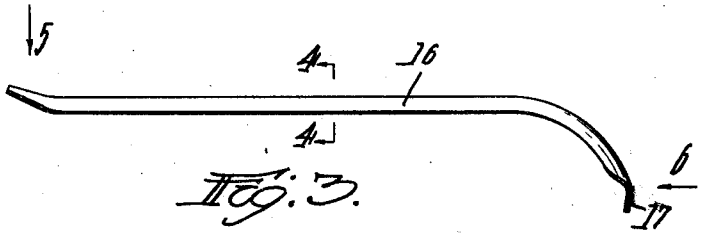



Fig. 3.




Fig. 4.




Fig. 5.

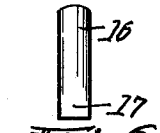



Fig. 6.

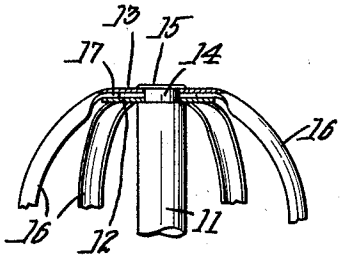



Fig. 7.

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HANDLE

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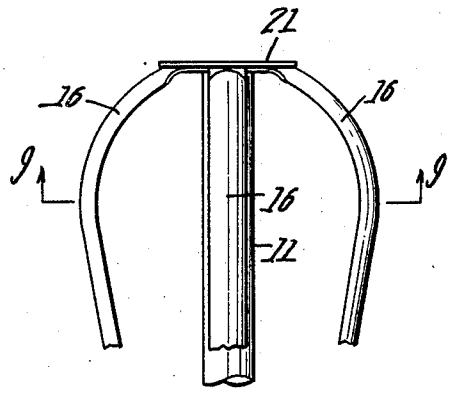



Fig. 8.

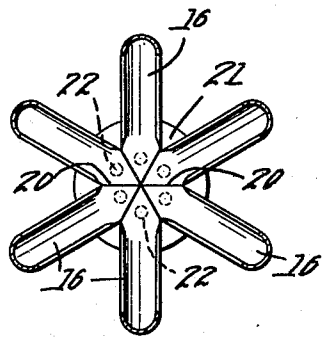



Fig. 9.

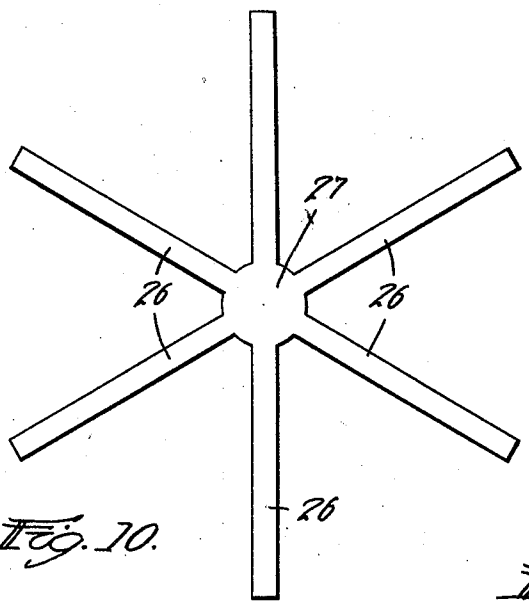



Fig. 10.

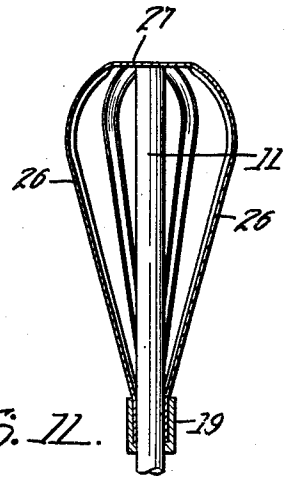



Fig. 11.

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# UNITED STATES PATENT OFFICE

ARTHUR H. RACICOT, OF WEBSTER, MASSACHUSETTS

## HANDLE

Application filed July 18, 1927. Serial No. 206,579.

This invention relates to a handle for a screw-driver or similar tool. The principal objects of the invention are to provide a handle for such a tool which will be light and rigid and will furnish a comparatively large leverage for the handling of the tool and at the same time will be made of a comparatively small amount of stock. The invention also involves the provision of a skeleton handle secured to the shank of the tool at a distance from the end of it and also at the butt end of the handle itself in a substantial and permanent manner.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which

Fig. 1 is a side elevation of a screw-driver with a preferred embodiment of this invention applied thereto;

Fig. 2 is a plan of the same, showing the butt end;

Fig. 3 is an edge elevation of one of the elements of the handle;

Fig. 4 is a sectional view on the line 4—4 of Fig. 3 on enlarged scale;

Fig. 5 is a face view of one end of one of the elements as indicated by the arrow 5 in Fig. 3;

Fig. 6 is an end view of the same element as indicated by the arrow 6 in Fig. 3;

Fig. 7 is a central sectional view of the butt end of the handle;

Fig. 8 is a side view of a modified form;

Fig. 9 is a sectional view of the butt end of the latter form of handle, taken from the inside, on the section line 9—9 of Fig. 8, the shank being removed;

Fig. 10 is a plan of a blank which is adapted to be used for formation of a handle in accordance with this invention but of modified construction; and

Fig. 11 is a central sectional view of a modified handle made from the blank shown in Fig. 10.

The invention is shown as applied to a screw-driver 10, the shank 11 of which extends clear to the top of the tool. In the form shown on the first sheet, the top of the handle is formed by two plates 12 and 13 centered on a reduced portion 14 of the shank and secured thereto by heading over its reduced portion at 15 and welding it if desired to the plate 13. The plate 12 is welded to the shank around the opening through the plate. These two plates are spaced apart and between them project the ends of a series of elements 16 in the form of strips of sheet metal. These elements are of concave formation as shown in Fig. 4 and each one has a projecting flat end 17. The ends 17 of the several strips 16 are brought into a plane and welded between the two plates 12 and 13 as indicated in Fig. 7. These strips extend down and converge toward the shank which they engage at a certain point. They are bent into a vertical position and cut off along converging lines 18 at the bottom so that, together, they constitute a practically continuous wall around the shank 11 with which they are in contact. Over this series of reduced ends is placed a sleeve 19 which is welded to the shank and to the ends of the strips 16.

In this form of the invention the strips are all convex on the outside so as to provide a good grip surface and they have spaces between them adding to that advantage. Also on account of the convex formation, they have much more strength than flat strips would have. They are spaced from the shank 11 and furnish a good leverage for the hand. The shank is securely welded to the butt end of the handle and the strips 16 are also. It will be seen therefore that it constitutes a rigid and strong construction which is particularly durable.

In the form shown in Figs. 8 and 9, the strips 16 are arranged in the same way at the bottom as they are in the first sheet of drawings, but they are cut off at the upper end along angular surfaces 20 so as to fit each other in a plane against a flat plate 21. Each one of them is spot welded at 22 to this flat plate 21. The shank 11 is cut off square at the top and butt-welded against the center of the area formed by the under ends of the strips. In this form, the handle is less expensive and the parts are very rigid because of the welded joints. In both these forms the handle is finished by a circular top plate 21.

In the form shown in Fig. 11, the several strips 26 are really arms formed on a blank 27 of sheet metal. This blank has a circular center furnishing the top plate. The strips 26 or arms are integral with it. They are concaved as in the other forms and come together under the sleeve 19 in the same way. The shank 11 is butt-welded directly to the bottom of the central plate at the top of the handle.

In all the forms, the advantages above mentioned are secured in different but analogous ways and with a high degree of efficiency. The invention can be applied to other tools than screw-drivers, but it is particularly adapted for that purpose.

Although I have illustrated and described only three forms of the invention I am aware of the fact that other modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claim. Therefore, I do not wish to be limited to all the details of construction herein shown and described, but what I do claim is:—

As an article of manufacture, a tool comprising a cylindrical shank, a handle therefor made up of a surrounding series of strips of sheet metal each hollow-curved laterally in cross section to present convex surfaces on the outside and concave surfaces on the inside to fit said shank, extending inwardly at the top in a horizontal direction and presenting a continuous top surface circular in shape, a plate outside the handle holding the upper ends of the strips in place and permanently secured thereto, the shank of the tool extending all the way through the handle from one end to the other and permanently welded to the underside of the top of the handle, the bottoms of said strips extending along the shank in contact therewith and being secured to the shank at a distance below the top by a ferrule surrounding and fitting the convex surfaces of the strip.

In testimony whereof I have hereunto affixed my signature.

ARTHUR H. RACICOT.