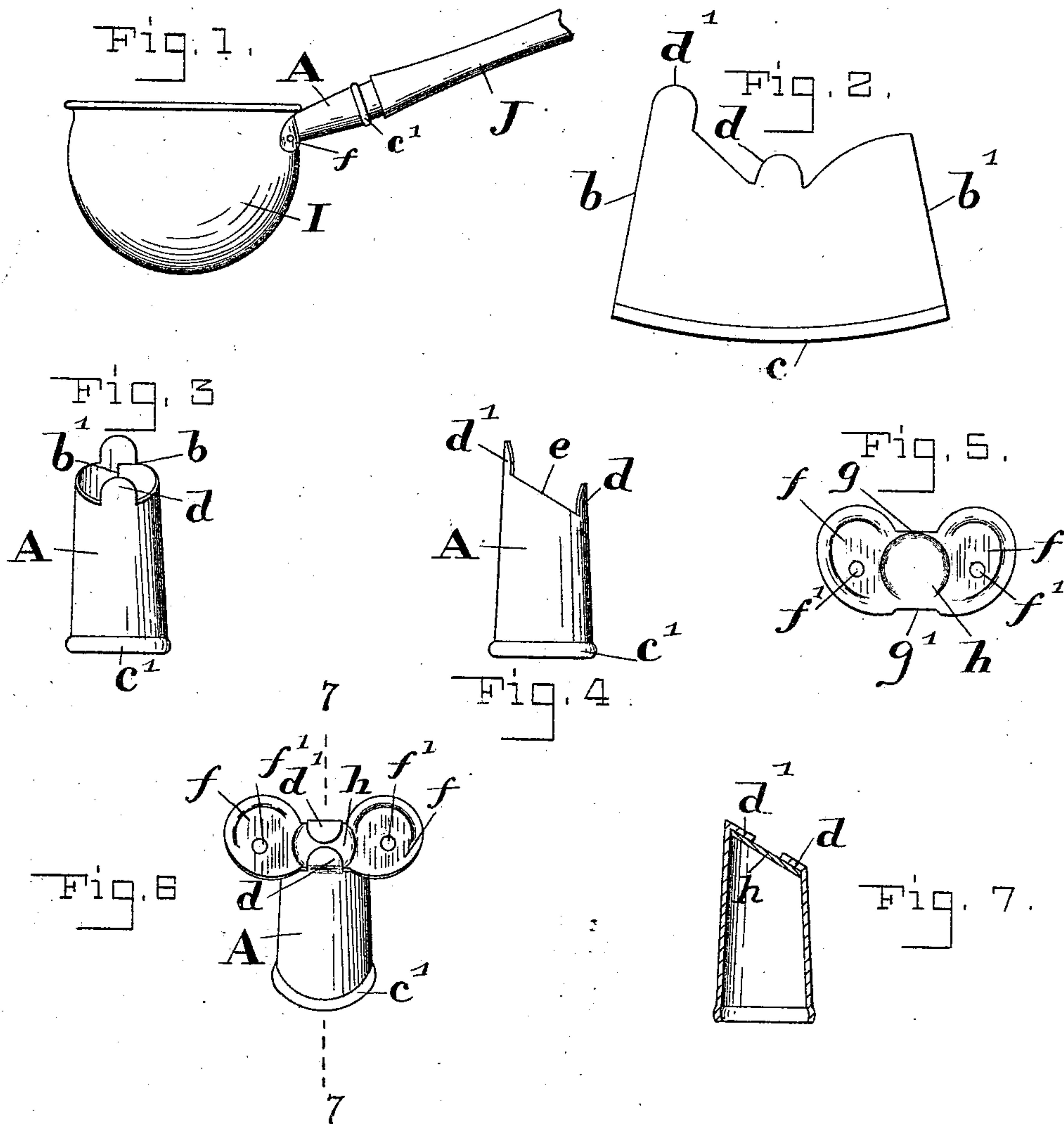


(No Model.)

G. W. KNAPP.  
SOCKET FOR DIPPERS.

No. 514,230.

Patented Feb. 6, 1894.



WITNESSES:-

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# UNITED STATES PATENT OFFICE.

GEORGE W. KNAPP, OF BALTIMORE, MARYLAND.

## SOCKET FOR DIPPERS.

SPECIFICATION forming part of Letters Patent No. 514,230, dated February 6, 1894.

Application filed November 20, 1893. Serial No. 491,437. (No model.)

### *To all whom it may concern:*

Be it known that I, GEORGE W. KNAPP, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Sockets for Dippers, of which the following is a specification.

This invention relates to an improvement in sockets for dipper handles, and the object is to provide a sheet-metal socket for the reception of the end of a wood handle,—the socket to be secured to the bowl of the dipper.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a dipper having a wood-handle which is attached to the bowl of the dipper by my improved socket. Fig. 2 is a view of the blank, as first cut out or struck up, from which the tubular part of the socket is formed. Fig. 3 is a side view of the tubular shank part of the socket, and shows the second step in the formation of the device. Fig. 4 is also a side view like Fig. 3, but gives a view in a transverse direction. Fig. 5 is a view of the flange part of the socket. Fig. 6 is a perspective view of the complete socket. Fig. 7 is a sectional view of the complete socket taken on the line 7—7 of Fig. 6.

Heretofore it has been the custom generally, when attaching wood handles to dippers and analogous articles, to use a cast-iron socket having a round shank to receive the end of the wood-handle, and a flange through which the rivets are driven to secure said socket to the bowl of the dipper. This socket is more or less unsightly, besides being comparatively expensive to manufacture and heavier than is desirable.

The tubular part, A, of the socket is formed from the blank shown in Fig. 2; this blank has two straight edges, *b, b'*, oblique to each other, a curved edge, *c*, between the two oblique edges, and the opposite edge has a central tang, *d*, and at one corner another tang, *d'*, projecting farther than said central tang. This blank is formed into a tapered tube as shown in Fig. 3; the two straight oblique edges, *b, b'* are overlapped and form a longitudinal joint; the curved edge, *c*, of the blank becomes the large end, *c'*, of the tapered tube

and the two tangs *d, d'*, project straight from the small end of the said tube; at sides diametrically opposite each other between the two tangs the end of the tube is inclined as at, *e*. The flange part of the socket, in this instance, is a separate piece shown in Fig. 5, which comprises two irregularly curved ends, *f*, having holes, *f'*, for the reception of fastening rivets; a central part connecting the two ends and having two opposite straight edges, *g', g'*, midway between the said two ends,—the said central part being in the form of a circular raised panel, *h*. This flange part is placed in position on the small end of the tapered tube with its short straight edges, *g, g'*, immediately facing the tangs, *d, d'*, and the central circular raised part, *h*, resting within the small tapered end of the tube so that the inclined edge, *e*, of said tapered end fits snugly around said raised part, and the ends, *f*, project from opposite sides of the tube; the tangs, *d, d'*, on the tapered tube are bent over the short straight edges of the flange and lay flat upon the concave side of the central part, *h*, so as to confine and hold said flange on the tube tightly; the socket is then complete as an article. As the flange part rests upon the inclined edge at the small end, said flange has a position angularly disposed with respect to the tube or shank. When the socket is secured to the bowl or body by this angularly disposed flange, the shank or tube part will thereby have an upward inclination with respect to said bowl or body.

Where the sockets are made of black-iron, that is, untinned iron or steel plate, I dip them in molten tin to cover the iron. The sockets are then ready to be secured to the bowl or body, I, of the vessel, in this case it is the bowl of a dipper. The flanges, *f*, are placed against the bowl and secured by means of rivets passed through the holes, *f'*, in the flange. Thus the bent over tangs, *d, d'*, are clamped between the flange part and the side of the bowl, which secures the socket part firmly. The whole may then be dipped in molten tin to close all crevices and give it a finish. A suitable wooden handle, J, is then inserted into the large end of the socket and fastened.



Although it is preferable to construct the sockets in the manner specifically described, it is evident that the construction may be varied to a certain extent without departing  
5 from my invention.

The socket may be employed on other vessels besides dippers.

Having thus described my invention, what I claim as new, and desire to secure by Letters  
10 Patent, is—

1. A socket for wood handles of dippers and other vessels, comprising a tubular shank having at one end two confining tangs,  $d$ ,  $d'$ , at sides diametrically opposite each other;  
15 and a separate flange part having two ends,  $f$ , provided with rivet-holes and a central part having two opposite, straight edges,  $g$ ,  $g'$ , midway between said ends, and the flange confined on the end of the tubular shank by  
20 the said two tangs being bent toward each

other over the said two opposite edges of the flange.

2. The combination of the dipper-bowl; a flange having two ends,  $f$ , provided with rivet-holes, and a central part having two opposite  
25 straight edges,  $g$ ,  $g'$ , midway between the ends, and said flange secured to the bowl; and a tubular shank having at one end two tangs,  $d$ ,  $d'$ , at sides diametrically opposite each other and which are bent toward each  
30 other over the said opposite edges of said flange,—the bent over portions of the tangs being clamped between the flange and the side of the bowl.

In testimony whereof I affix my signature in  
35 the presence of two witnesses.

GEORGE W. KNAPP.

Witnesses:

CHARLES B. MANN, Jr.

L. ISMY VAN HORN.