

E. H. TATE.
MOP HEAD.
APPLICATION FILED APR. 8, 1921.

1,406,244.

Patented Feb. 14, 1922.

FIG. 1.

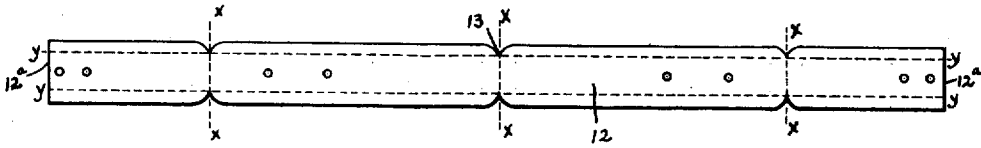


FIG. 2.

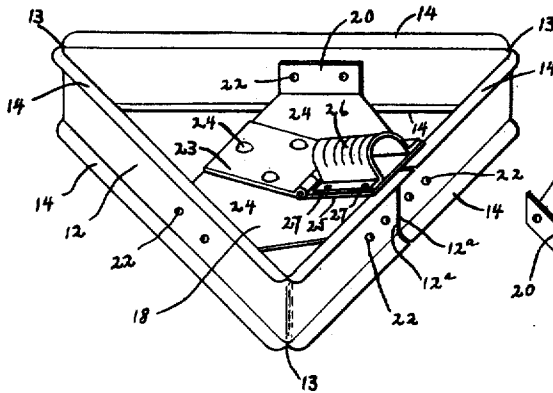


FIG. 5.

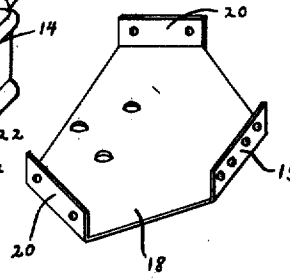


FIG. 3.

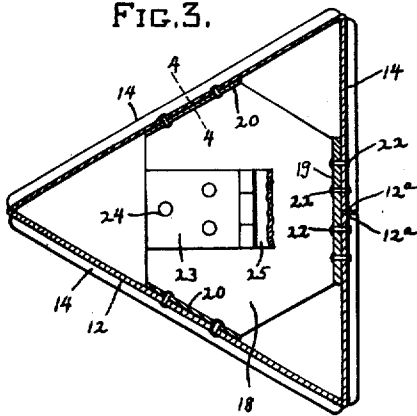
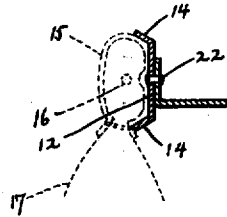


FIG. 4.



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MOP HEAD.

1,406,244.

Specification of Letters Patent.

Patented Feb. 14, 1922.

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To all whom it may concern:

Be it known that I, EDWARD H. TATE, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Mop Heads, of which the following is a specification.

This invention relates to a mop head having an external groove or channel in which is confined, by a clamping band, the neck portion of a mop, composed of fibrous threads depending from the neck portion and from the mop head. An example of a mop head and mop of this type is shown by my Patent No. 1,197,075, dated September 5, 1916.

The present invention has for its object to provide a simple mop head, which is light, strong, and durable, and is of such construction that it may be cheaply manufactured.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a plan view of the blank from which the frame of my improved mop head is made.

Figure 2 is a perspective view of the entire mop head.

Figure 3 is a horizontal sectional view, the handle socket shown by Figure 2, being omitted.

Figure 4 is a section on line 4—4 of Figure 3, showing by dotted lines a portion of the mop.

Fig. 5 is a perspective view of the reinforcing plate.

The same reference characters indicate the same parts in all of the figures.

From a strip 12 of sheet metal I form a triangular open frame by bending said strip crosswise on the dotted lines *x, x*, (Figure 1). The ends 12^a of the strip meet at the midlength of one of the sides of the frame. The longitudinal edges of the strip have notches 13, arranged on the bending lines *x, x*, and the strip is longitudinally bent on the longitudinal lines *y, y*, (Figure 1) to form outwardly projecting flanges 14, the ends of which are formed by the sides of said notches. The body of the strip and the flanges 14 form a channel at the outer side of the frame, in which the neck portion of a mop is confined by a clamping wire

16, as indicated by dotted lines in Figure 4, said neck portion surrounding the frame and the fibrous threads 17 of the mop depending from the neck and frame.

18 represents a reinforcing plate within the frame, having upstanding ears 19, 20, 20, seated on the inner surfaces of the frame sides and united thereto, so that the plate rigidly confines the frame sides against bending strains. The ear 19 bridges the joint formed by the meeting ends 12^a of the strip, and is united to the divided side of the frame at opposite sides of said joint, to constitute a splice. The ears 20 are united to the two continuous sides of the frame, as clearly shown by Figures 1 and 3. I prefer to unite the ears to the frame by spot-welding, although, for clearness of illustration, I have shown rivets 22 as the uniting means.

The plate 18 constitutes a support for a handle socket, which may be secured to the plate in any suitable way. I prefer to connect the handle socket with the plate by means of a leaf hinge, composed of a member 23, united as by rivets 24, or by spot-welding, to the plate 18, and a swinging leaf 25 articulated to the member 23. Said swinging member is adapted to be supported in an inclined position by one of the frame sides, as shown by Figure 1, and is provided with a handle socket 26, preferably composed of sheet metal bent and molded to form an arched portion, having on its crown segments of screw threads, the socket being provided with ears, which are connected as by rivets 27, or by spot-welding to the leaf 25. The leaf hinge may be of ordinary construction and procurable in the open market, the hinge requiring for its adaptation to the mop head only the attachment of the socket 26 to one of its leaves 25.

It will be seen that the construction of the head is extremely simple, and includes only two parts, namely, the strip 12, and the plate 18, the strip being readily formed into a triangular double flanged frame, and the plate with its ears, being readily formed from a suitable flat blank of sheet metal.

I claim:

1. A mop head composed of a sheet metal strip, bent crosswise to form a triangular open frame, and bent longitudinally to form outwardly projecting mop-confining flanges, the ends of the strip meeting at the mid-

length of one of the sides of the frame; a reinforcing plate within the frame, provided with upstanding ears united to the inner surface of the frame to rigidly confine the frame sides against bending strains, one of 5 said ears bridging the joint formed by the meeting ends of the strip, and united to the divided side at opposite sides of said joint; and a handle socket secured to, and supported by, said plate. 10

2. A mop head composed of a sheet metal strip, bent crosswise to form a triangular open frame, and bent longitudinally to form outwardly projecting mop-confining flanges, 15 the ends of the strip meeting at the mid-length of one of the sides of the frame; a reinforcing plate within the frame, provided with upstanding ears united to the inner surface of the frame to rigidly confine the frame sides against bending strains, one of 20 said ears bridging the joint formed by the meeting ends of the strip, and united to the divided side at opposite sides of said joint; and a leaf hinge, one of the leaves of which is rigidly attached to said plate, the other 25 leaf being supported in an inclined position by one side of the frame, and provided with a handle-receiving socket.

In testimony whereof I have affixed my signature.

EDWARD H. TATE.