

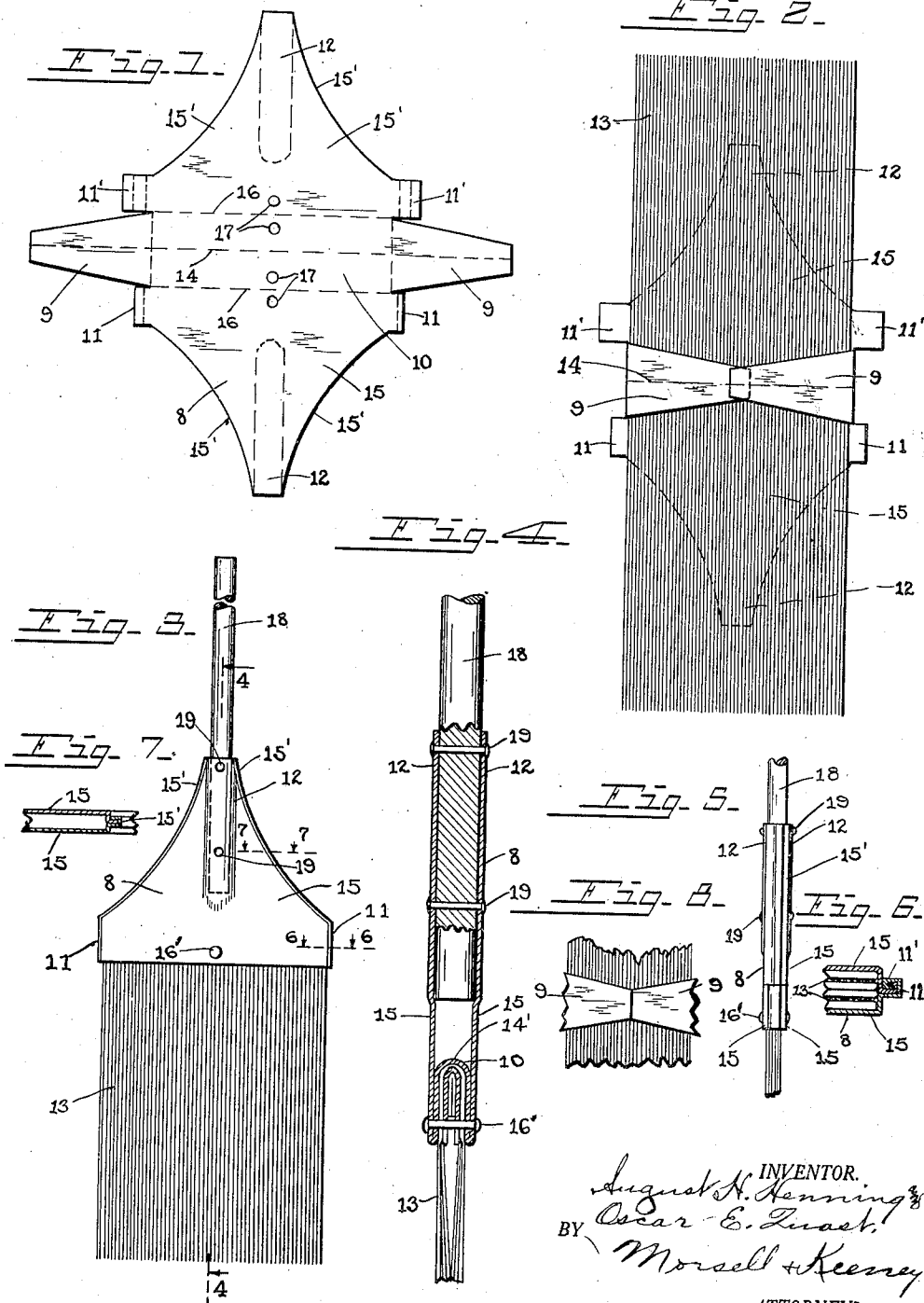
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BROOM AND METHOD OF MAKING SAME

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BROOM AND METHOD OF MAKING SAME.

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To all whom it may concern:

Be it known that we, AUGUST H. HENNING and OSCAR E. QUAST, citizens of the United States, and residents of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Brooms and Methods of Making Same, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention relates to brooms and method of making the same.

This invention relates to improvements in brooms and method of making the same in which the fibers or straws of the broom are firmly held in position by bending portions of a metal piece forming the frame upon itself with the broom material therebetween.

A further object of the invention is to provide a broom in which the fibers or straws are secured against lateral or lengthwise movement in the frame by bending or forming the frame about the fibers or straws and thus eliminate the use of additional fastening means.

A further object of the invention is to provide a broom having a unitary frame portion which also serves as the socket member for receiving the handle of the broom.

A further object of the invention is to provide a broom having a unitary frame portion which is formed of metal reinforced by bending over and overlapping portions of the frame.

A further object of the invention is to provide a broom in which a single metal blank is bent and shaped to hold the fibers or straws and receive the handle to form a rigid engagement therewith.

A further object of the invention is to provide a broom of simple construction which is strong and durable, and inexpensive to manufacture and is well adapted for the purpose described.

With the above and other objects in view the invention consists of the improved broom and method of making same, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a side view of the blank used

in forming the frame for holding the fibers or straws of the improved broom, the lines of fold and socket formation being indicated by dotted lines.

Fig. 2 is a side view of the frame and the fibers positioned thereon preparatory to be secured therein;

Fig. 3 is a side view of the completed broom;

Fig. 4 is a vertical sectional view taken on line 4—4 of Fig. 3;

Fig. 5 is an edge view of a medial portion of the broom;

Fig. 6 is a transverse sectional detail view taken on line 6—6 of Fig. 3; and

Fig. 7 is a sectional detail view taken on line 7—7 of Fig. 3.

Fig. 8 is a detail view showing the overlapped tongues 9.

Referring to the drawing the numeral 8 indicates a sheet metal blank which is of a shape to form a head having fiber or straw holding tongues 9, a medial body or clamping portion 10, end connecting clips 11 and 11', and handle socket portions 12. The improved method of making the brooms is as follows:

Fiber or straws 13 of a suitable length are placed on the metal blank and spread out to cover the greater portion thereof and the tongues 9 are then bent over the broom material and overlapped at their ends as shown in Fig. 2. The folded blank is now again folded over upon itself on line 14 to clamp the fibers 13 firmly in the crease 14' of the part 10. When thus folded the side portions 15 are folded over upwardly on the lines 16 to form the opposite sides of the broom holder or frame and the edge portions 15' thereof are then folded over to interlock the edges together as clearly shown in Fig. 7.

The clip portions 11 and 11' at the ends of the blank are also folded over each other to interlock the parts together as clearly shown in Fig. 6, and to further lock the parts together a rivet 16' is driven through openings 17, formed medially in the blank, and is riveted over at its ends.

Portions of the blank are bulged outwardly to form the socket 12, before mentioned, to receive the handle 18 and rivets 19 are driven through the bulged portions and the handle and riveted over at their ends to firmly secure the parts together.

While a broom has been described, it will

be understood that the invention contemplates the making of a brush in the same manner.

As thus formed the fibers 13 are firmly
5 wedged between the folded portions of the medial part 10 and the tongues 9 due to the fact that the tongues in being bent longitudinally will cause the medial part 10 to tightly clamp the fibers in being bent
10 around the bend of the tongues.

In the modified form shown in Fig. 8, the tongues 9 abut each other instead of overlapping each other as in the first mentioned form.

15 From the foregoing description it will be seen that the improved method of making brooms and the article of manufacture resulting therefrom are well adapted for the purpose described.

20 What we claim as our invention is:

1. A method of making a broom which consists in providing a piece of sheet metal having a medial body portion with longitudinally extending end tongues and trans-
25 versely extending complementary socket portions, placing medial portions of fibers transversely of the body portion and then bending the end tongues toward each other and over the fibers and then bending the
30 body portion and the tongues medially longitudinally, and the fibers transversely, to clamp the fibers medially of their length, and then bending portions of the body part on each side of the longitudinal bend up-
35 wardly toward each other to form a socket.

2. A method of making a broom which consists in providing a piece of sheet metal having a medial body portion with longitudinally extending end tongues and clip
40 portions and transversely extending complementary socket portions, placing medial portions of fibers transversely of the body portion and then bending the end tongues toward each other and over the fibers and
45 then bending the body portion and the tongues medially longitudinally, and the fibers transversely, to clamp the fibers between the body portion and the tongues, then bending portions of the body part on
50 each side of the longitudinal bend upwardly toward each other and shaping same to form a socket, and then folding the clip portions over each other to interlock the parts together.

3. A method of making a broom which
55 consists in providing a piece of sheet metal having a medial body portion with longitudinally extending end tongues and clip portions and transversely extending complementary socket portions, placing medial
60 portions of fibers transversely of the body portion and then bending the end tongues towards each other and over the fibers and then bending the body portion and the
65 tongues medially longitudinally, and the fibers transversely, to clamp the fibers between the body portion and the tongues, then bending portions of the body part on each side of the longitudinal bend upwardly
70 towards each other and shaping same to form a socket, and then folding the clip portions and the edge portion of the body parts over each other to interlock the parts together.

4. A broom, comprising a head formed
75 of sheet metal having a U-shaped medial body portion and inwardly projecting tongues of U-shape in cross section, said body portion also having side portions which extend upwardly and are connected
80 together along their edges to form a socket, a handle extending into said socket, said body portion also having end clips which are interlocked to connect the end portions of the body together, and fibers clamped
85 medially of their length between the U-shaped body portion and the U-shaped tongues.

5. A broom, comprising a head formed of
90 sheet metal having a U-shaped medial body portion and inwardly projecting tongues of U-shape in cross section, said body portion having side parts which extend upwardly from its lower edges and are connected
95 together at the edges and bulged outwardly to form a socket, a handle extending into said socket and connected thereto, said body portion also having end clips which interlock to connect the end portions of the
100 body together, fibers clamped medially of their length between the U-shaped body portion and the U-shaped tongues, and means extending through and connecting medial parts of the body portion together.

In testimony whereof, we affix our signatures.

AUGUST H. HENNING.
OSCAR E. QUAST.