Dec. 8, 1925. 1,564,293

H. M. STURGIS

BRUSH HEAD AND HANDLE CONNECTION

Filed Nov. 14. 1924

Fig. 1.

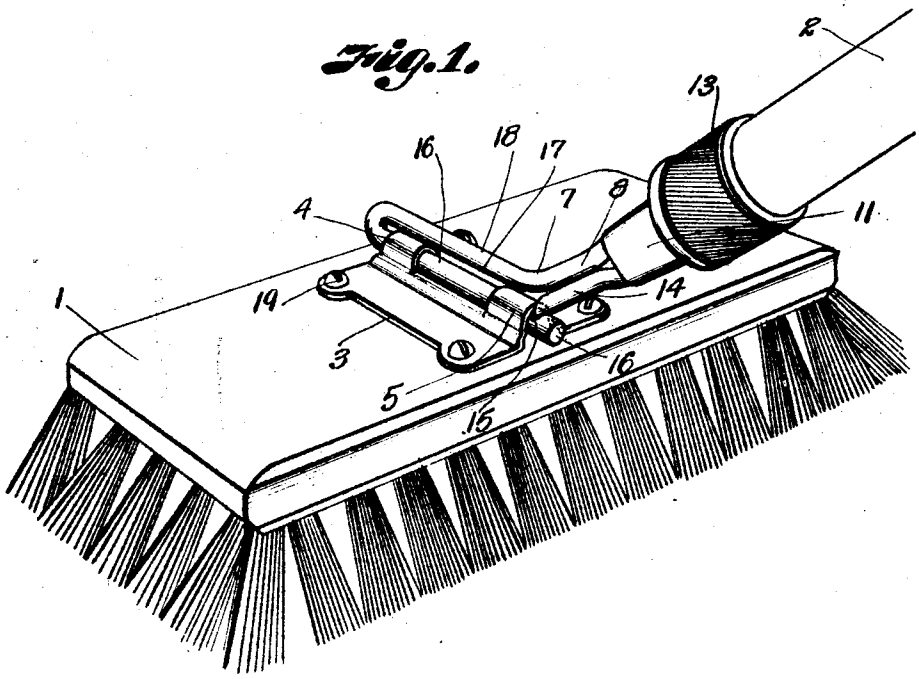


Fig. 3.

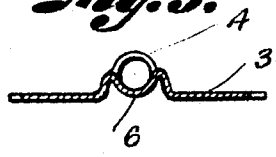


Fig. 2.

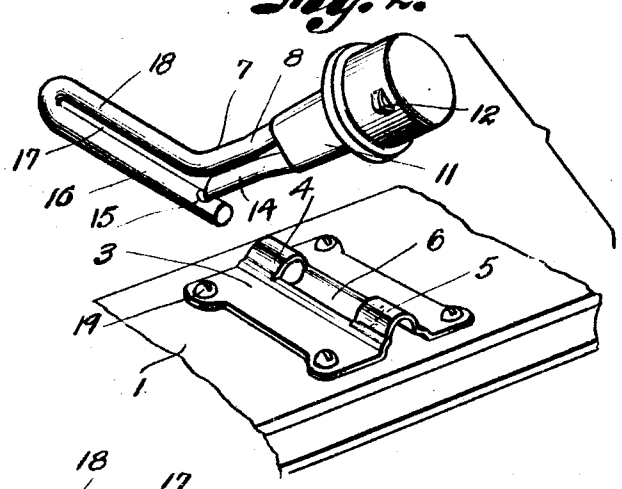
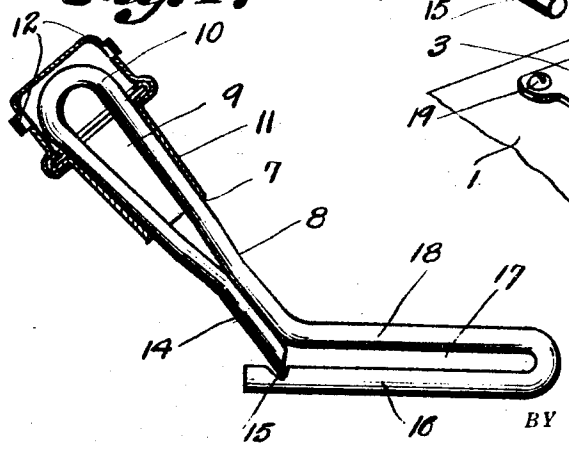


Fig. 4.



BY

INVENTOR.
Herbert M. Sturgis
Albert G. Brown.
ATTORNEY.

Patented Dec. 8, 1925. 1,564,293

UNITED STATES PATENT OFFICE.

HERBERT M. STURGIS, OF KANSAS CITY, MISSOURI.

BRUSH HEAD AND HANDLE CONNECTION.

Application filed November 14, 1924. Serial No. 749,815.

To all whom it may concern:

Be it known that I, HERBERT M. STURGIS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Brush Head and Handle Connections; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to brush head and handle connections and the primary object is to provide a simple, effective connection for fastening the handle to the brush head so that it may be easily removed and a new brush substituted for the worn out brush thereby effecting a saving in the cost of the handle and connection.

In the drawings,

Fig. 1 is a perspective view of the brush and handle to which my invention is applied.

Fig. 2 is a fragmentary view of a brush head showing the two connecting members for attaching the head and handle in detached relation.

Fig. 3 is a cross sectional view through one of the connecting members, and

Fig. 4 is a longitudinal sectional view through a ferrule attached to the other connecting member which is shown in elevation.

The brush 1 may conform to the usual construction of such devices. It is illustrated as a scrubbing brush and the invention resides in the novel means of attaching the handle 2 thereto. One of the members for effecting the connection between the brush and the handle is illustrated as comprising a plate 3 bent up intermediate its ends to provide the barrels or loops 4 and 5 with an intermediate depressed portion 6 to provide a bearing for the complementary member 7. The complementary member 7 consists of a bar or rod having a stem 8 in the form of a loop 9, the loop being enlarged at its upper edge 10 to be received in a ferrule 11, the ferrule having cam projections 12 to be engaged by a complementary part, not shown, on the collar 13, carried by the end of the handle 2.

The connection between the ferrule and the collar is immaterial so I have deemed it unnecessary to illustrate or describe this particular feature as any suitable means will suffice. For example, instead of having the projections 12 to be engaged by internal cams on the collar 13, the collar could be screwed to the ferrule 11 or as above stated any suitable means could be used for effecting the connection.

The loop 9 terminates in a pawl or latch 14 adapted to engage a notch 15 in one end of the rod 8. The notch is in the end of a finger 16 constituting part of an open loop 17 formed by the extensions 18 at the end of the loop 9 and by the finger 16. The finger 16 is a spring finger because the bar 8 is preferably made of spring metal, consequently when it is desired to attach the connecting member 7 to the member 3, the finger 16 is slid into the loops 4 and 5 being guided along the bearing 6. While this is taking place, the dog or detent 14 at one end of the rod 8 is sprung out of the notch 15.

When the finger is in the position shown in Fig. 1, the dog 14 is permitted to swing back into the notch and since it lies against one edge of one of the loops 4 or 5 as the case may be and since the thicknesses of the loops 4 and 5 are approximately equal to the space between the extension 18 and the finger 16, the member 7 will not become accidentally detached from the member 3. The device is now ready for use. If the brush wears along one longitudinal edge, as it is liable to do, the connection can be reversed by slipping out the member 7 and reversing it, that is instead of the finger first entering the loop 4 and then the loop 5, it can be caused to first enter the loop 5 and then the loop 4. If the reversal of the connection is made frequently enough, the brush bristles will wear evenly. It is understood of course that the plate 3 may be fastened to the brush by any suitable means as for example by the screws 19.

What I claim and desire to secure by Letters-Patent is:

1. A connection for fastening handles to brushes, said connection comprising two members, one member consisting of a bar bent back upon itself to form a loop, the loop terminating in a pawl, the other end of the bar being bent back upon itself to form a spring finger for engaging a looped portion in the complementary member and hav-

ing a notch for engagement with the pawl.

2. A connection for fastening handles to brushes, comprising two members, one of which is adapted to be fastened to the brush and the other to the handle, one member consisting of a single bar bent intermediate its ends to provide two arms, one at an obtuse angle to the other, one arm being doubled back to form an open loop, the bar having a notch at one end adjacent to the open loop, the other arm being doubled back to provide a closed handle engaging loop, the second end of the bar extending beyond the end of the closed loop terminating in a pawl to engage the notch, the open loop being engageable with the other member.

3. A connecting member for fastening handles to brushes, comprising a bar, bent intermediate its ends to form two loops, one an open loop and the other a closed loop, the closed loop being at one end of the open loop and provided with a straight end constituting a pawl to engage a notch in the end of the bar constituting part of the open loop.

In testimony whereof I affix my signature.

HERBERT M. STURGIS.