Feb. 26, 1935. E. BOYENS ET AL 1,992,168

MOP CLAMP

Filed Jan. 5, 1934

Fig. 1.

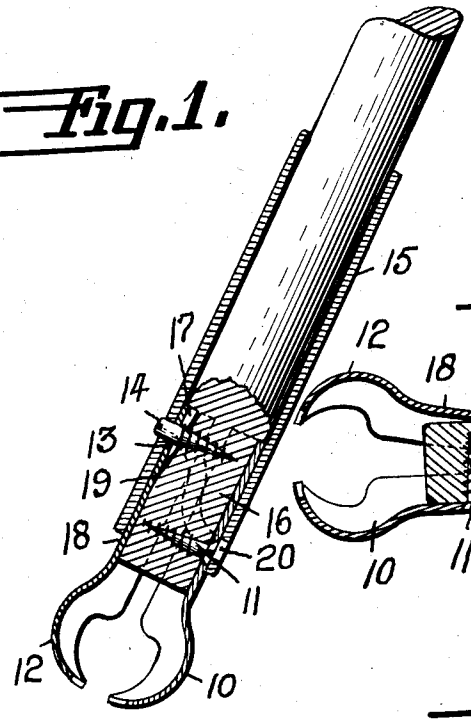



Fig. 2.

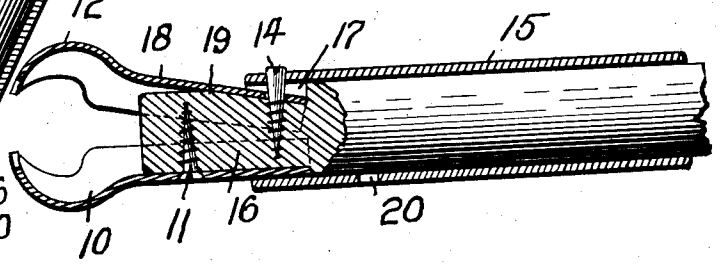



Fig. 4.

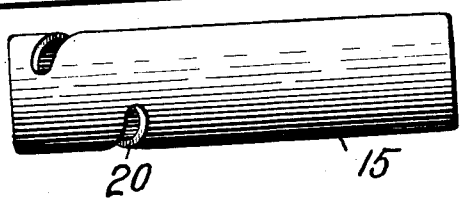
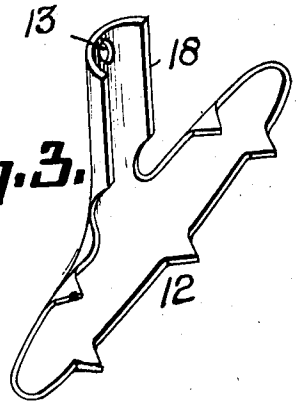



Fig. 3.

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By

ATTORNEY

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1,992,168

# UNITED STATES PATENT OFFICE

1,992,168

## MOP CLAMP

Emil Boyens, Richmond Hill, and Peter J. Salmon, Brooklyn, N. Y.

Application January 5, 1934, Serial No. 705,340

1 Claim. (Cl. 15—153)

Our invention relates to a new and valuable improvement in clamps, more particularly to that form that is used to secure mops to the handle or staff.

An object is to provide a simple, neat and cheap clamp, that is easily handled, yet functions perfectly. A clamp that is rugged in its make-up, and one that operates with the least amount of effort.

Another object of our invention is that the parts may be stamped into form with one operation, and be assembled by the addition of two screws. The jaws are provided with the usual teeth for biting into the mop for holding the same between the jaws when the sleeve is forced into its upper or locked position.

Further objects and advantages will become apparent as the description of our invention is hereinafter developed.

The invention will be better understood from the following description, taken in connection with the accompanying drawing, wherein is shown what is considered the preferred form of our invention, the advantages of which will be pointed out in the specification and in the appending claim.

Referring to the accompanying drawing forming a part of this specification, and in which like numerals of reference will indicate similar parts in the several views: Fig. 1 is a sectional view of the operating parts, as they appear when in a locked position; Fig. 2 is a like view showing the one jaw in an open position to remove or admit a mop; Fig. 3 is a detail perspective view of the movable jaw, and Fig. 4 is a side view of the sleeve.

It will be noted from the drawing that our clamp, when assembled on the handle or staff, will not require any further operation than to give the sleeve a turn, the retaining pin causing the same to move upwardly and lock the jaws, or when moved downwardly to release the same so as to permit the filling or removal of the mop from the clamp.

Referring to Fig. 1 it will be seen that the jaws are of pressed light sheet metal, each terminating on its upper end in a half circular section which is adapted to fit the reduced end of the handle. The jaw 10 is permanently secured to said reduced end by a screw 11. The other jaw 12 is provided with a bore 13 at its upper end, through which a screw 14 is placed after the locking sleeve 15 has been placed in position. Thus holding the movable parts, viz., the jaw and sleeve, with the one screw 14.

It will be noted that the reduced end of the handle 16, on the side to receive the movable jaw 12, is provided with a recess 17. Thus when the sleeve 15 is at its lowermost position the lower half of the circular section 18 of the stem of the jaw 12 fits closely the diameter of the reduced end 16 of the handle, and when the sleeve 15 is in its uppermost position that the upper end of the stem or half circular section of the jaw 12 will fit into the recess 17. The shoulder 19 on the handle thus forms a rocking point for the jaw 12. When the sleeve is in its raised position, the jaw 12 is free to be moved into clamping or unclamping position, but when the sleeve is in its lower position, the jaw 12 is securely clamped in mop clamping position. Jaw 12 is overlapped by sleeve 15 in both positions, so that it is thus constantly retained on the handle thereby.

As shown the half circular section 18 of the jaw 12 does not extend completely around the reduced end of the handle 16, thus providing a handy, simple method of allowing the jaw to be securely held in position when locked, or allowed to rock into an open position when the sleeve is at its uppermost position. The helical cam slot 20 in the sleeve is cut at such an angle as to hold the jaws secure without respect to the position of the pin 14 in relation to the same.

It is preferable to make the clamp from light sheet metal such as aluminum or other metal of like character that will not break or become bent, nor wil rust and otherwise get out of order. Again, by our construction the parts are simple to form and assemble in the shortest possible time. The parts of the clamp being of tubing and sheet metal forms a durable and handy clamp that may be fitted in the shortest possible time.

We have described that form which at present is preferred together with the means which we consider to represent the best embodiment thereof. We know that a great many mop heads having nuts of various designs to secure them on the handle and to hold the mop thereto have been made but all such require more or less machining and fitting of the parts, and after a short time they are of little or no use. Again, we have seen and experimented with the bayonet type of lock, but all such have defects which would not stand the wear and tear that is expected of it.

Having thus described our said invention, what we claim as new and desire to secure by Letters Patent is:

Mop clamping construction comprising an elongated handle, said handle being shouldered

at one end thereof to form a reduced end portion, said reduced end portion being provided adjacent the shoulder with a recess, clamp-forming jaws disposed on said end portion, said jaws including a fixed jaw and a jaw which is pivotally movable to and from clamping position about a point on said reduced portion adjacent said recess as a fulcrum, means for retaining said movable jaw, said means comprising a pin projecting laterally from said reduced portion, said movable jaw being loosely mounted on said pin and comprising an opening through which said pin extends, and a jaw actuating sleeve rotatably and slidably mounted on said handle end, said sleeve being provided with a cam slot through which said pin extends.

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