G. MOE.

BRUSH.

APPLICATION FILED JULY 31, 1916.

1,222,971. Patented Apr. 17, 1917.

Fig. 1.

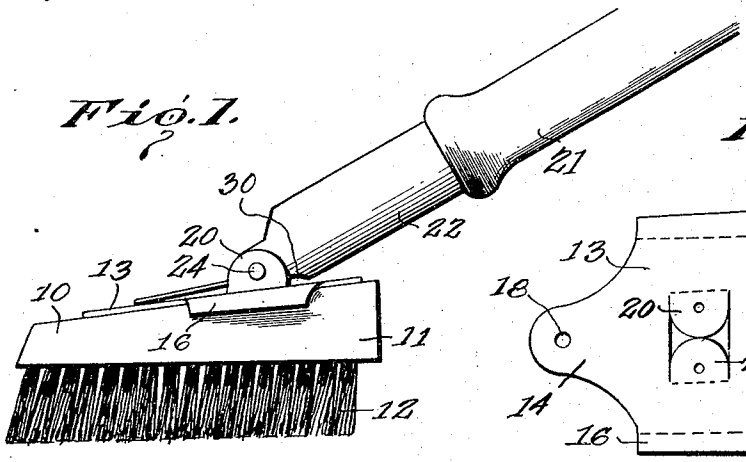


Fig. 6.

Fig. 2.

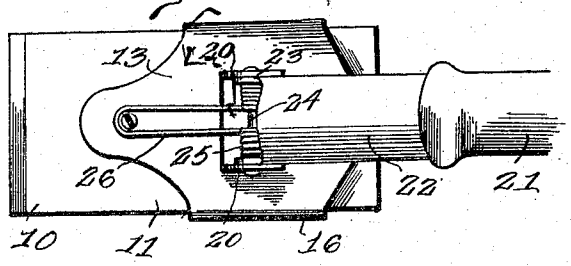


Fig. 3.

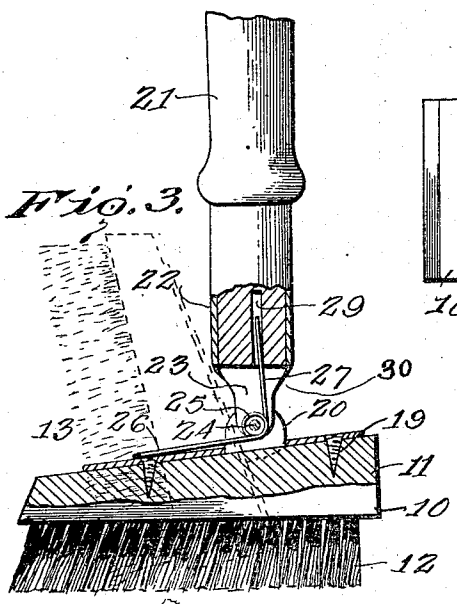


Fig. 4.

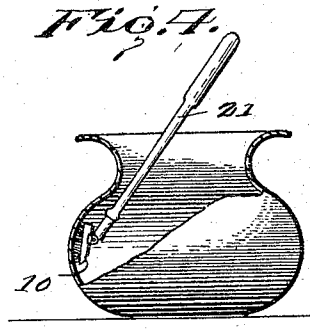


Fig. 7.

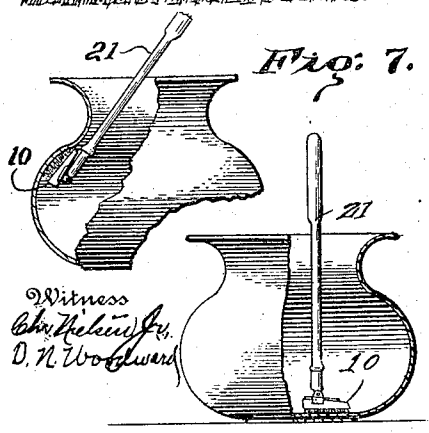


Fig. 5.

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UNITED STATES PATENT OFFICE.

GEORGE MOE, OF DULUTH, MINNESOTA.

BRUSH.

1,222,971. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed July 31, 1916. Serial No. 112,314.

To all whom it may concern:

Be it known that I, GEORGE MOE, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

The invention has for an object to effect an improvement in brushes, particularly useful in cleaning out receptacles of various kinds, as, kitchen sinks, cuspidors, bath tubs, pots and pans, and for similar uses. The device is also applicable to other uses besides those indicated, as will be understood.

It is a particular object to effect an improvement in the form of the mounting of the brush, simplifying its manufacture while giving an efficient appliance for the purposes in view. My invention attains simplicity in the machine operations necessary for the production of the parts, and also a simplification of manual operations in its assembly. The number of elements required in the device is also reduced to a great extent.

Additional objects, advantages and features of invention will appear from the construction, arrangement and combination of parts hereinafter set forth, and shown in the drawings, in which,

Figure 1 is a side elevation of my invention,

Fig. 2, is a top view thereof,

Fig. 3, is a side view partly in section,

Fig. 4, shows the device in use, in one position,

Fig. 5, is a similar view illustrating a different position of the device,

Fig. 6 is a plan view of a blank for the attaching device.

Fig. 7 is a view further illustrating the use of the invention.

There is illustrated a brush head 10, which may be of any desirable construction, and in the present case comprises a wooden back 11, in which bristles 12 are set in a familiar way the back having a plane upper side upon which there is secured the attaching plate 13. The brush is of oblong form, and the plate 13 is provided with longitudinally extending tongues 14 and 15, intermediately of which there are lateral extensions 16 of a proportion suitable to project beyond the edges of the brush, their outer parts being turned downwardly over the sides of the brush and engaging snugly thereagainst. These down turned portions may be termed ears 16, and are of advantage in enabling the securement of the brush with a minimum number of fastenings. The forward tongue 14 is the longer one, and closely adjacent its extremity is provided with an aperture 18, while the rear tongue 15 is provided with a similar aperture. Through each there is engaged a screw 19, by which the plate is secured to the upper side of the brush back 11. Two pivot ears 20 are pressed upwardly from the center of the plate, extending at right angles to the plane of the plate and parallel to each other and to the longitudinal axis of the brush, to which there is pivotally connected a handle 21. The handle is provided with a ferrule 22, of cylindrical form, opposite sides of which are cut away in such a manner as to leave two ears 23, engaging snugly between the ears 20, a suitable pintle 24 being engaged through the ears of the ferrule and plate 13, as shown. A spring 25 is carried by this pintle 24, the spring being formed of a single piece of wire bent to form a narrow elongated loop 26 at its middle part, the opposite end portions being suitably coiled to form helical spring portions through which the pintle 24 is inserted, and the extremities of the wire being extended upwardly into a suitable opening 29 formed in the lower end of the handle 21.

The loop 26 of the spring serves as a bearing arm, engaging slidably upon the tongue 14 of the plate 13, this tongue being elongated for that purpose. The loop 26 is so formed as to pass around the screw 19 at the forward part, so that the screw or the opening through which it is engaged do not interfere with proper sliding movement of the bearing arm upon the plate 13.

It should be noted that on one side at least the ferrule 22 is cut away as at 30, sufficiently to permit the plate 13 at the rear end of the brush to move upwardly a sufficient distance for the brush to lie at an acute angle to the axis of the brush, as shown in Fig. 1. The ferrule 22 may be secured upon the handle 21 in any familiar way.

In use, the parts being assembled as described, and the springs 25 made of a proper sort of wire, the brush member will automatically accommodate itself to surfaces having various angular relations to the axis of the handle, as shown in Figs. 4 and 5, it

being only necessary to oscillate the handle in a plane as nearly as may be at right angles to the surfaces to be cleaned, while the brush is pressed against the surfaces. It is desirable that the point of pivotal connection between the brush and the handle be located quite near the rear end of the brush, in order that the pressure upon the bristles or other element in the forward part of the brush will not be excessive in order to give it the necessary pivotal movement to accommodate the brush to surfaces at different angles to the brush handle. This is especially useful when cleaning out devices such as globes, sinks and pans, where the efficiency of the brushing and scrubbing action is dependant largely upon the accuracy of adjustment of the brush with relation to the surfaces to be cleaned.

The appliance is adapted to be produced cheaply, and is extremely efficient and durable.

By using the device as shown in Fig. 7, the brush being adjusted with its longer projecting part directed backwards and close to the handle, as dotted in Fig. 3, it is possible to insure considerable pressure at the tip of the brush against sloping or other surfaces at the upper parts of jars, milk cans, cuspidors or other receptacles having large body portions and reduced necks.

What is claimed:

In a device of the class described, a brush body, a plate having forward and rear portions adapted to be secured to the brush and having lateral portions formed to engage snugly against the sides of the brush to prevent lateral movement thereof, central ears extending upwardly from the plate, a handle having a cylindrical ferrule engaged on the lower end, said ferrule having ears extended therefrom at opposite sides positioned to engage snugly between the said ears of the plate, a pintle engaged through the said ears of the plate and ferrule, a spring comprising a piece of wire bent to form a central narrow loop, one of the end portions being bent to form a helical spring portion, the ends of the spring being engaged slidably in the lower end of the handle, and said loop bearing upon said plate.

In testimony whereof I have affixed my signature in presence of two witnesses.

GEORGE MOE.

Witnesses:
JOHN HEINNANN,
E. L. GRUBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."