

No. 720,051.

PATENTED FEB. 10, 1903.

J. MOSS & E. R. BLANCHARD.
BRUSH.

APPLICATION FILED FEB. 1, 1902.

NO MODEL.

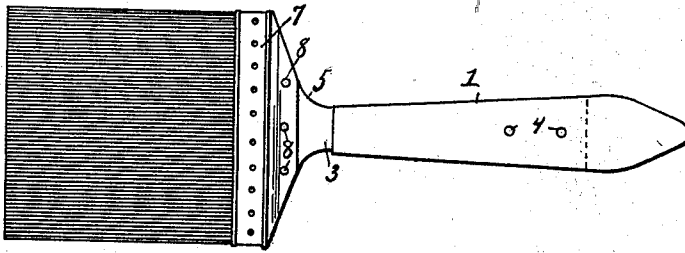


Fig. 1.

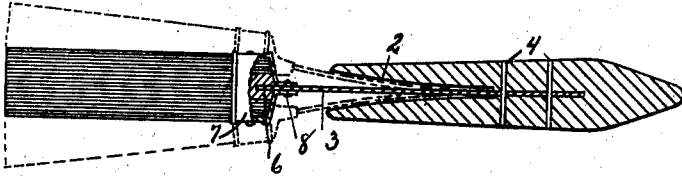


Fig. 2.

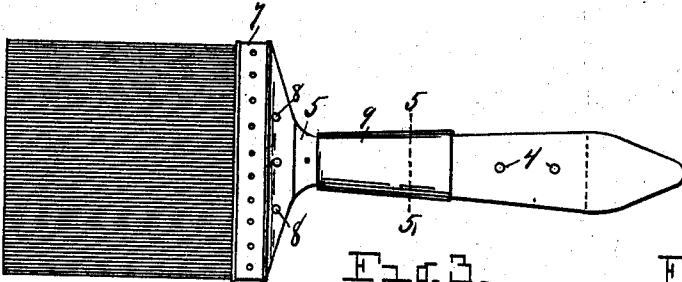


Fig. 3.

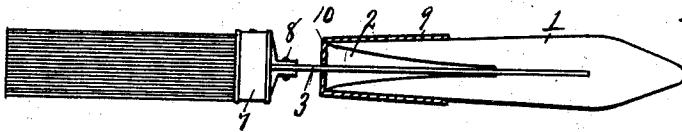
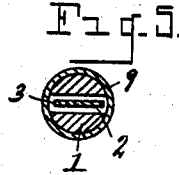


Fig. 4.

WITNESSES.

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JULIAN MOSS AND EDWARD R. BLANCHARD, OF DETROIT, MICHIGAN.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 720,051, dated February 10, 1903.

Application filed February 1, 1902. Serial No. 92,106. (No model.)

To all whom it may concern:

Be it known that we, JULIAN MOSS and EDWARD R. BLANCHARD, citizens of the United States, residing at 583 Fort street east, Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Brushes; and we 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 brushes; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a brush or a broom with a handle which shall have a limited springing or yielding action, so as to overcome the extreme rigidity present in the ordinary brush-handle and relieve the wrist or arm of the operator, at the same time providing means for maintaining the brush more perfectly in contact with the surface without regard to variation in the movement in the hand directing it. The arrangement is such that the springing or yielding action of the handle is limited, so that said handle may be made rigid when desired.

The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of an ordinary paint-brush involving this invention. Fig. 2 is a central longitudinal section through the handle of the brush and a portion of the brush-head. Fig. 3 is an elevation illustrating the use of a rubber sleeve upon the brush-handle to prevent paint or other substance from forming between the spring-blade and the walls of the opening in the handle in which said blade is inserted. Fig. 4 is a sectional view through the rubber sleeve. Fig. 5 is a transverse section through the handle and sleeve, as on line 5 5 of Fig. 3.

Referring to the characters of reference, 1 designates an ordinary brush-handle, which is formed, preferably, of wood and which is provided at one end with a flaring recess 2. Seated centrally in said recess is a flat spring-

blade 3, which extends beyond the base of the recess into the body of the handle and is secured by the pins 4 passing through the handle and said blade or by other suitable means. The outer end of the spring-blade flares slightly, as shown at 5, and enters the brush-head 6, as shown in Fig. 2. The metal bridle 7, which confines the brush fibers to the head, is made to embrace the flaring end of the spring-blade 3, to which it is secured by the rivets 8. The flaring channel 2 in the handle allows the spring-blade 3 to spring from side to side as pressure is applied to the brush, thereby rendering the brush-handle flexible and relieving the strain upon the wrist of the operator. Should it be desired to apply greater pressure to the brush than can be conveyed through the spring-blade 3, by applying additional force to the handle the spring-blade will be caused to engage the flaring side of the opening 2, rendering said blade rigid as against a force directed on the handle from the side that said blade engages, when any pressure desired may be applied to the brush. It will therefore be observed that the flaring walls of the recess 2 serve to limit the blade in its movement and to render the handle of the brush rigid when desired.

In applying this invention to the handles of paint-brushes and brushes for similar purposes it will be necessary to protect the open channel 2 from accumulated pigment. This is accomplished by means of a rubber sleeve 9, which is closed at one end, as at 10, except for an opening through which the spring-blade 3 passes. This sleeve is adapted to fit over the slotted end of the brush-handle and inclose the recess 2, so as to prevent the paint and other substances from flowing into said channel and filling it. The elasticity of the sleeve 9 does not interfere with the resiliency of the spring-blade 3, while serving to exclude foreign substance from the channel in the handle.

While this invention is herein illustrated in connection with a paint-brush, it is to be understood that it may be applied to brooms as well as brushes without departing from the spirit of the invention.

Having thus fully set forth this invention, what is claimed is—

1. In a brush or broom, the combination of

2
 a handle having a recess in the end thereof,
 a spring member fixed in the handle and extending centrally from said recess, the outer
 end of said spring being secured to a brush,
 5 and means for covering the sides of said recess to protect the hand of the operator from the edges of said spring member.

2. The combination in a brush, of a rigid
 handle having a recess therein provided with
 10 outwardly-flaring walls, a flat spring-blade fixed at one end in the handle and extending centrally from said recess between said flaring walls, which serve as stops to limit the movement of the blade in both directions said
 15 blade being adapted to bear against said flaring walls for its entire length as it springs from side to side to effect a gradual stiffening of the blade in use, said resilient member being secured at its outer end to a brush.

20 3. The combination of a brush, a handle having a flaring recess therein, a resilient

member mounted in the handle, and extending centrally from said recess, the outer end of said member being secured to the brush,
 25 and an elastic sleeve on the handle embracing said resilient member and closing said flaring opening.

4. The combination of a brush, a rigid handle having an outwardly-flaring recess therein, a flat spring-blade mounted in the handle
 30 and extending centrally from said recess, said blade being secured at its outer end to the brush, and means for covering the edges of said blade to prevent contact therewith by the hand of the operator.

In testimony whereof we sign this specification in the presence of two witnesses.

JULIAN MOSS.

EDWARD R. BLANCHARD.

Witnesses:

E. S. WHEELER,

E. C. DAVIS.