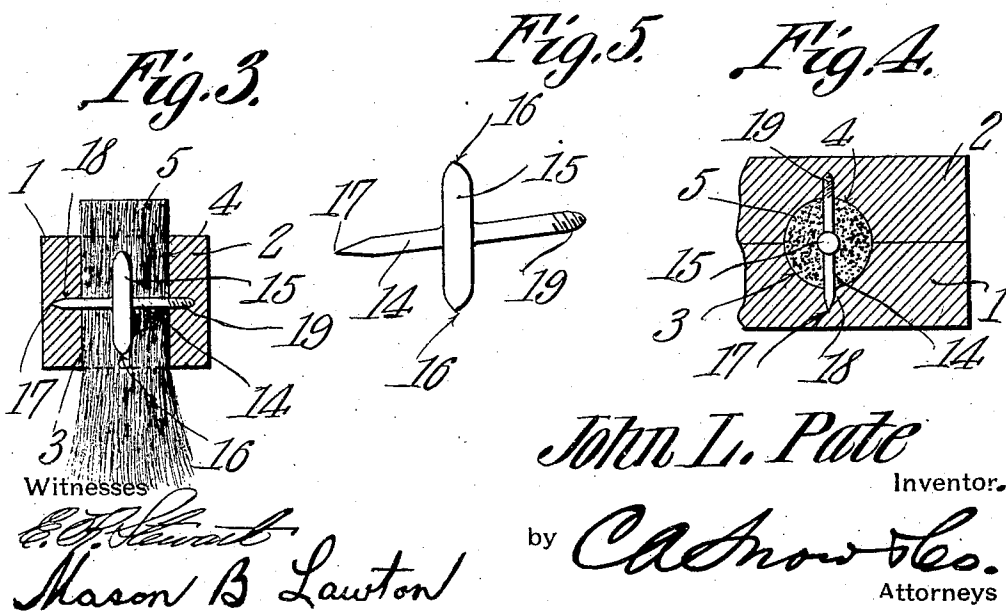
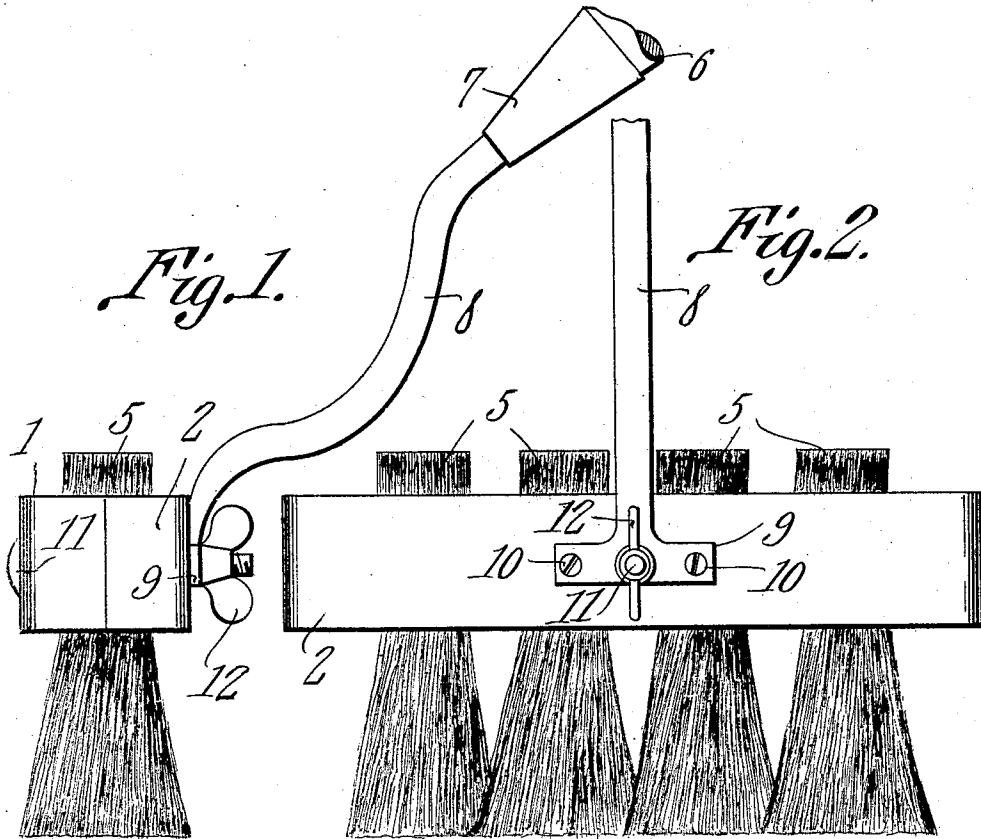


J. L. PATE.
 SCRUBBING BRUSH.
 APPLICATION FILED MAR. 22, 1910.

969,184.

Patented Sept. 6, 1910.



John L. Pate

Inventor.

by

Cashnow & Co.

Attorneys

Witnesses

E. J. Stewart
 Mason B. Lawton

UNITED STATES PATENT OFFICE.

JOHN LEWIS PATE, OF MADISONVILLE, KENTUCKY.

SCRUBBING-BRUSH.

969,184.

Specification of Letters Patent.

Patented Sept. 6, 1910.

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To all whom it may concern:

Be it known that I, JOHN LEWIS PATE, a citizen of the United States, residing at Madisonville, in the county of Hopkins and State of Kentucky, have invented a new and useful Scrubbing-Brush, of which the following is a specification.

It is the object of this invention to provide a broom head, so constructed that the bristles may readily be mounted therein, and removed therefrom.

Another object of the invention is to provide a novel means for clamping the bristles within the contour of the head.

Another object of the invention is to provide a novel means for retaining the bristles in place, within the head, against slipping, either upwardly or downwardly, when the device is in use.

In the drawings,—Figure 1 is an end elevation; Fig. 2 is a rear elevation; Fig. 3 is a vertical transverse section; Fig. 4 is a fragmental horizontal section of the broom head; and Fig. 5 is a detail perspective of the spreader.

The broom consists of a pair of heads 1 and 2, preferably fashioned from wood. In the head 1, there are a plurality of notches 3, one of which is clearly seen in Fig. 4. In the adjacent face of the head 2 are a plurality of notches 4, the notches 4 coöperating with the notches 3 to define bristle-receiving sockets in the device. The bristles 5 which are mounted in these sockets, may be fashioned from any desired material. Broom corn, twigs, wire, rattan or the like may be employed, depending on the purpose for which the broom is to be employed.

In the handle proper 6 of the broom there is retained, by means of ferrule 7, the shank 8, curved into any desired, convenient form. Upon the lower end of this shank 8 there is an integrally formed transverse foot 9, adapted to bear against the outer face of the head 2. Adjacent its ends, the foot 9 is provided with openings adapted to receive screws 10, whereby the foot 9 may be connected to the head 2. A headed bolt 11 is passed transversely through the heads 1 and 2, and through the foot 9, between the screw openings therein. Upon the end of this bolt 11, there is a wing nut 12, and this wing nut 12, bearing against the foot 9, serves to draw the heads 1 and 2 together, to clamp the bristles 5 securely in the several seats in which they are mounted.

From the foregoing it will be seen that a person who is equipped with a broom constructed in accordance with my invention, may, as soon as the bristles 5 become worn, replace the same easily, with twigs, or any suitable material, by simply loosening the wing nut 12, shaking the old bristles out of their places, and renewing them with other, new ones.

About the only difficulty incident to the manufacture and operation of a broom of the character described, lies in the fact that when the heads 1 and 2 are clamped together by means of the wing nut 12, each bunch of bristles 5 will consist of an outer ring, the component bristles of which are closely packed together, while the central portion of each bunch of bristles 5 will remain somewhat loose. In order to obviate this difficulty, I employ a spreader of the character shown in Fig. 5. This spreader consists of a shank 14, provided in its intermediate portion with a transverse arm 15, the ends of which are pointed, as denoted by the numeral 16. The diameter of this arm 15 is preferably greater than the diameter of the shank 14. One end of the shank 14 is pointed as denoted by the numeral 17, while the other end thereof is threaded as denoted by the numeral 19.

In practical operation, by seizing the arm 15 between the fingers, the threaded portion 19 of the shank may be inserted into the head 2, within the contour of each of the notches 4 therein. The head 1 may then be driven down upon the head 2, the pointed end 17 of the shank 14 forming for itself, a seat 18 in the head 1, within the contour of the notch therein. Thus, when the head 1 is drawn into engagement with the head 2, the pointed ends 17 of the several shanks 14, engaging the seats 18 in the head 1, will serve to prevent the head 1 from twisting about on the head 2. Moreover, the arm 15 which is disposed in the center of each bunch of bristles 5, will so distend each bunch of bristles, that the bunch as an entity, will be securely held in place. By pointing the ends of the arm 15, as shown at 16, the bristles 5 will close about the arm 15, both above and below the same.

From the foregoing it will be seen that I have provided a device which is simple in character, the component parts of which may readily be separated, at the will of the operator, to receive new sets of bristles, as

soon as the old, original sets have become worn.

Having thus described the invention, what is claimed is;—

- 5 1. A broom consisting of oppositely disposed heads having alined notches defining a bristle-holding socket; and a spreader consisting of a shank secured at one end to one head within the contour of the notch therein, and a transverse arm upon the shank.
- 10 2. A broom consisting of oppositely disposed heads having alined notches defining a bristle-holding socket; and a spreader consisting of a shank adapted at one end to be secured to one head within the contour
- 15 of the notch therein, and at the other end adapted to form a seat for itself within the

contour of the notch in the other head, and a transverse arm upon the shank intermediate its ends.

- 20 3. As an article of manufacture, a spreader for broom heads, consisting of a shank threaded at one end and pointed at the other end, the shank being provided, intermediate its end, with a straight transverse arm having pointed ends.
- 25

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN LEWIS PATE.

Witnesses:

D. H. KINCHELOE,
VIRGIL SCOTT.