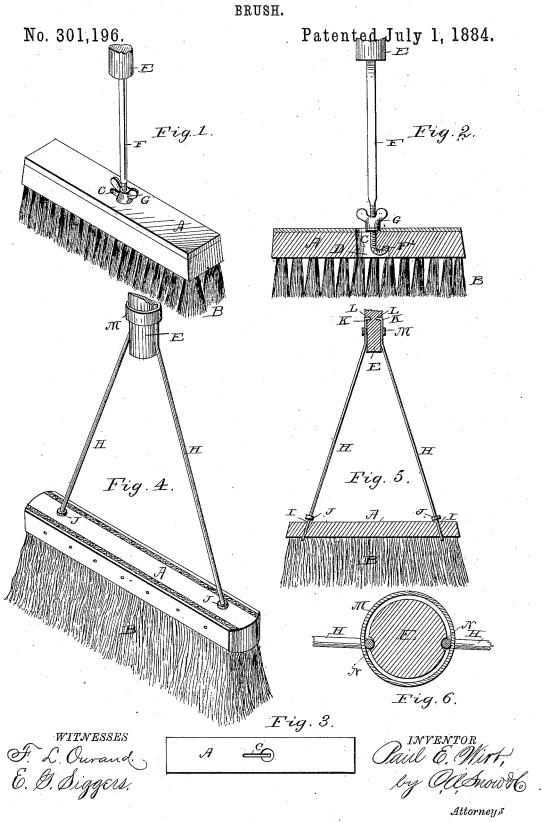
P. E. WIRT.



UNITED STATES PATENT OFFICE.

PAUL E. WIRT, OF BLOOMSBURG, PENNSYLVANIA.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 301,196, dated July 1, 1884.

Application filed September 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, PAUL E. WIRT, a citizen of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented a new and useful Improvement in Brushes and Brooms, of which the following is a specification, reference being

had to the accompanying drawings.

This invention relates to brushes and 10 brooms; and its object is to provide a device of this class possessing superior advantages in point of simplicity, inexpensiveness, dura-

bility, and general efficiency.

In the drawings, Figure 1 is a perspective 15 view of a broom embodying my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a top view of the head of the broom with the handle separated. Fig. 4 is a perspective view illustrating a modification. Fig. 5 is a vertical sectional view of the modification. Fig. 6 is a horizontal detail sectional view taken through the lower end of the

Referring to the drawings, A designates the 25 head of the broom, which carries the straws or bristles B, and is provided with a slot, C, from the under side of which extends a groove, D,

E is the handle, which is connected to the 30 head-block A by a spring, F, that is secured

to the handle, and has its free lower end, F2, screw-threaded and bent at an angle to the main portion, a thumb-nut, G, being arranged on the said screw-threaded portion. By this 35 arrangement the handle is readily connected to the head-piece A by simply passing the angular end F2 through the slot C, and then turning the said end around until its outturned portion registers with groove D, when, 40 by turning the nut G, the said end or portion is brought up into the groove to securely

clamp the handle and head together.

In the modification, in lieu of the spring F, two elastic rods, H H, are arranged to diverge 45 from the handle, and are sprung into corresponding holes or perforations, I I, in block A, the entrance of the rods H H being limited by flanges or buttons J J near their lower ends, and the spring or elasticity of the rods 50 retains the head from displacement. To enable the disconnection of rods H H from han-

dle E the former have their top ends, K K, turned in, so that they will enter corresponding holes or recesses, L L, in the end of the handle, and a ring, M, slides on the said han- 55 dle over the rods to retain their ends in the recesses L L. Grooves N N, extending from recesses L L, are preferably provided, to receive the top ends of said rods H.

The operation and advantages of my inven- 60 tion will be readily understood and appreciated. By means of the spring - connection with the handle, a degree of pliability and flexibility is attained that will greatly lessen the labor in use, will equalize the same, will 65 accommodate itself to uneven surfaces, and will therefore sweep smooth or uneven surfaces thoroughly and easily.

Brooms or brushes of my improved construction can not only be manufactured at less 70 cost than the ordinary brooms, but will be lighter in weight and more efficient in operation, and the head can be easily disconnected from the handle at any time for substitution or repair. Besides, one handle will serve for 75

varying sizes and qualities of brooms.

I do not wish to be understood as limiting myself to the exact construction and arrangement of parts herein shown, as numerous modifications can be made in my invention 80 without departing from its spirit or scope. For instance, four rods H may be employed instead of two, and all or any of the rods may be provided with the stop-buttons J J, and the spring-rods may extend entirely through 85 the handle at their point of connection thereto.

I claim as my invention-

The combination, with the head-piece having a slot terminating in a groove on its under side, of the spring-rod secured to the handle, and having a bent or angular end that engages the slot and groove, and provided with the clamping-nut, as and for the purpose set

In testimony that I claim the foregoing as 95 my own I have hereto affixed my signature in presence of two witnesses.

PAUL E. WIRT.

Witnesses:

GEO. E. ELWELL, J. K. BITTENBENDER.