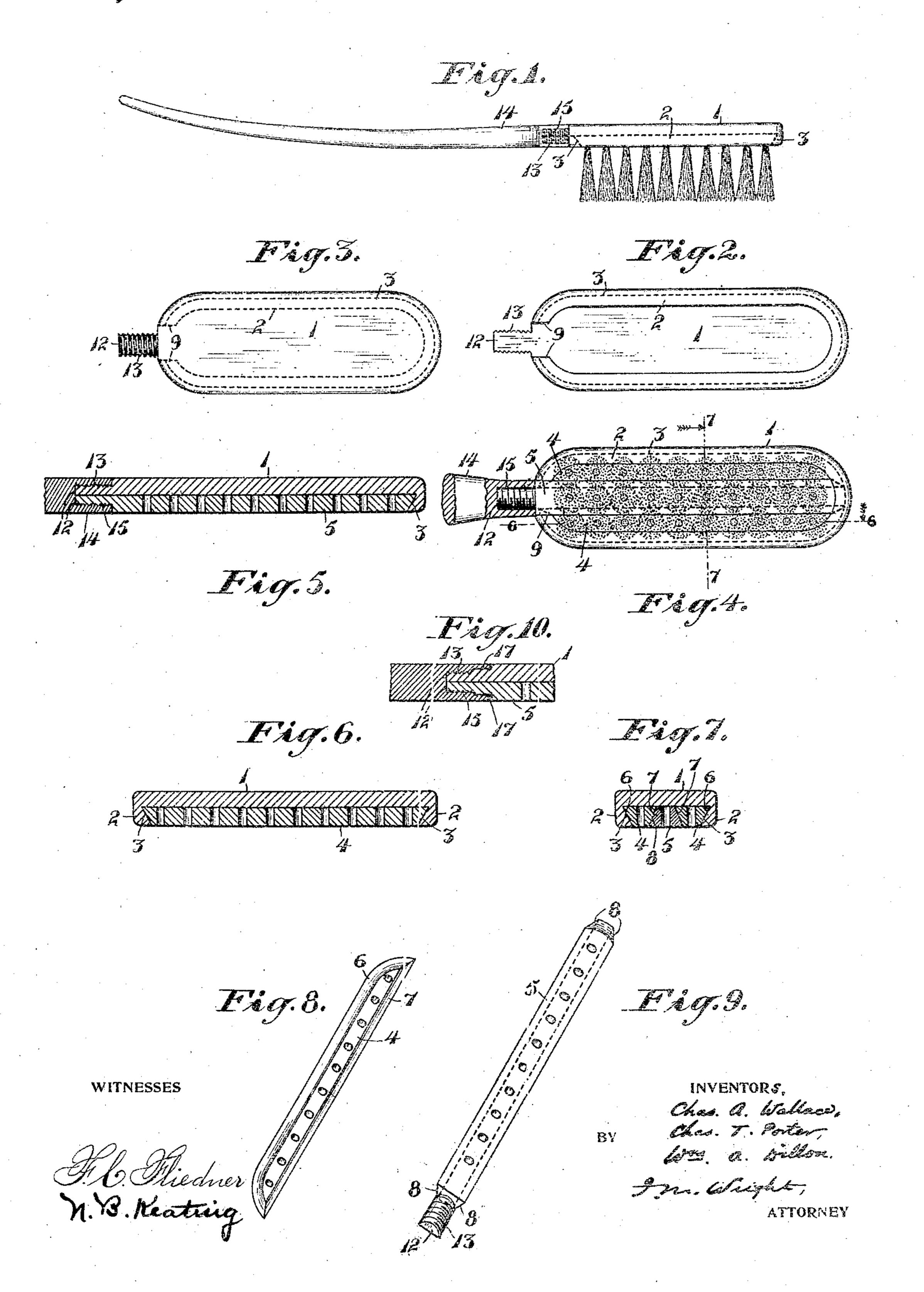
## C. A. WALLACE, C. T. PORTER & W. A. DILLON.

SEPARABLE BRUSH.

APPLICATION FILED SEPT. 6, 1910.

996,957.

Patented July 4, 1911.



## UNITED STATES PATENT OFFICE.

CHARLES A. WALLACE, CHARLES T. PORTER, AND WILLIAM A. DILLON, OF SAN FRANCISCO, CALIFORNIA; SAID WALLACE ASSIGNOR TO SAID PORTER AND DILLON.

## SEPARABLE BRUSH.

996,957.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed September 6, 1910. Serial No. 580,558.

To all whom it may concern:

Be it known that we, CHARLES A. WAL-LACE, CHARLES T. PORTER, and WILLIAM A. Dillon, citizens of the United States, re-5 siding at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Separable Brushes, of which the following is a specification.

10 The object of our invention is to provide a brush, the bristles of which are held by removable sections, so that when said bristles become wern said sections may be replaced

by new ones.

1.15 A further object of the invention is to provide a brush with a removable handle, so that the handle can be varied in style to

suit the taste of the user.

For the purpose of disclosure of the in-20 vention we show herein a tooth brush constructed in accordance with our invention. It is to be understood, however, that the invention can be used to advantage for brushes of various kinds.

In the accompanying drawing, Figure 1 is a side view of the brush; Fig. 2 is an | by its extension being screwed within the enlarged bottom plan view of the back, detached from the remaining parts; Fig. 3 is a similar top plan view of the same; Fig. 4 30 is a bottom plan view of the back, with the bristle-holding sections therein; Fig. 5 is a longitudinal central section of the back and a bristle holding section, the bristles however themselves being omitted; Fig. 6 is a 35 longitudinal section on the line 6—6 of Fig. 4; Fig. 7 is a cross section on the line 7—7 of Fig. 4; Fig. 8 is a perspective view of a side bristle-holding section, the bristles being omitted; Fig. 9 is a similar view of a 40 central section; Fig. 10 is a detail broken view of a modification.

Referring to the drawing, 1 indicates the back of a brush, constructed in accordance with our invention, the central portion of 45 which is comparatively thin, while the marginal portion 2 is for the most part of greater thickness, and is undercut, as shown at 3, to receive the bristle-holding sections. | tachable from the back, and bristle-holding These comprise side sections 4, shown par-50 ticularly in Fig. 8, and a central section 5, shown in Fig. 9. Each side section is formed with an outer edge 6, beveled to fit snugly in the under cut portion of the margin of the back, which is substantially par-55 allel with the handle 14 hereinafter de-

scribed, and an inner beveled edge 7. Said inner beveled edges of the two side sections are engaged by beveled edges 8 of the central section 5. The end of said central section 5 remote from the handle is also under- 60 cut, or beveled, to fit in the undercut marginal portion of the brush, and its end next to the handle fits within a groove or recess 9 formed in the under side of the brush through said marginal portion 2. The back 65 of the brush and the central section 5 have similar extensions 12 registering with each other when the section is in place in the back. Said extensions are threaded, as shown at 13, the threads registering with each 70 other, and the handle 14 of the brush is internally threaded, as shown at 15, and is screwed upon the threaded extensions. It will be seen that upon screwing the handle upon the said extensions, all the parts are 75 very firmly secured in position. The end of the central section remote from the handle is held by the undercut marginal portion of the back of the brush, the end near the handle is secured to the back of the brush 80 handle, and each of the side sections is held by its beveled edges engaging, one the margin of the brush, and the other the central section. Said sections may easily be sen- 85 arated and replaced by others. For this purpose it is only necessary to unscrew the handle, the central section can then be easily removed and the others can be moved laterally on the back and detached therefrom. 90

We do not limit our invention to the precise construction here shown or to the number of sections shown herein, as these may be varied without departing from the spirit of our invention.

In the modification shown in Fig. 10 the extensions 13 and 15 are formed with shoulders 17, and the adjacent end of the handle is formed with a recess to receive said shoulders.

100

We claim:—

1. A brush having a back, a handle desections detachable from the back, one of said sections being engaged by another sec- 105 tion to retain it in the back, and the latter section having means engaged by said handle to secure it to the said back, substantially as described.

2. A brush having a back, the central part 110

whereof is recessed, the margin being undercut, and bristle-holding sections having beveled edges one of said sections having an extension and the back having an extension registering therewith, said extensions being threaded, and a handle having an internal thread and screwed upon said extensions, substantially as described.

3. A brush having a back formed with a central recess and a narrow continuous undercut margin extending the whole circumference of said back except at the part adjacent to the handle, longitudinal bristle-holding sections having beveled sides fitting

and means for supporting the other sides of said longitudinal sections, substantially as described.

4. A brush comprising a back having an extension, detachable bristle-holding sec- 20 tions, one of said sections being held in said back by another section and the latter section having an extension registering with the extension from the back, and means engaging both extensions when so registering 25 to secure said latter section to the back, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of two sub-

scribing witnesses.

CHARLES A. WALLACE. CHARLES T. PORTER. WILLIAM A. DILLON.

Witnesses:

Francis M. Wright, D. B. Richards.

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