

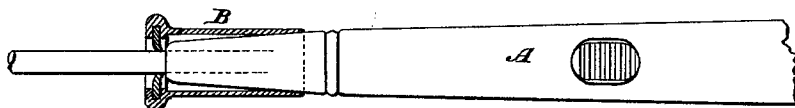
J. E. SWALLOW.

ATTACHMENTS FOR DENTAL ENGINES.

No. 185,651.

Patented Dec. 26, 1876.

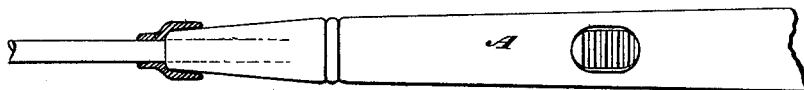
*Fig 1.*



*Fig 2.*



*Fig 3.*



WITNESSES.

*Wm A. Sinkler.*  
*L. Stick*

INVENTOR.

*John E. Swallow.*

By *his Attorneys*

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# UNITED STATES PATENT OFFICE

JOHN E. SWALLOW, OF HAGERSTOWN, MARYLAND, ASSIGNOR TO SAMUEL S. WHITE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN ATTACHMENTS FOR DENTAL ENGINES.

Specification forming part of Letters Patent No. **185,651**, dated December 26, 1876; application filed October 24, 1876.

*To all whom it may concern:*

Be it known that I, JOHN E. SWALLOW, of Hagerstown, in the county of Washington and State of Maryland, have invented a new and useful Attachment for Dental Engines, of which the following is a specification:

The object of my invention is to exclude saliva, grit from corundum disks, tooth-chippings, and other foreign and injurious matter from the bearings of dental-engine hand-pieces. To this end my invention consists in the employment of a cover or shield, carried either by the hand-piece or operating-tool, to close, cover, or shield the end of said hand-piece.

In the accompanying drawings, which show two ways of carrying out my invention, Figure 1 is a view of a hand-piece with a shield or cover applied thereto; Fig. 2, a detached view of the shield, and Fig. 3 a view of a tool or instrument with a shield or cover mounted thereon.

The hand-piece A, shown in the present instance, is that of the well-known and much-used S. S. White dental engine.

In Figs. 1 and 2 is shown a shield or cover, B, consisting of a metal flange or tube adapted to be slipped upon the end or nose of the hand-piece, which flange carries in its outer end a ring or gasket of rubber, or some other elastic or proper substance, through which the shank of the operating-tool passes on its way to the chuck or tool-holder, by which means a close joint is formed in advance of the end or nose of the hand-piece.

In Fig. 3 a cup shaped disk of rubber is shown as mounted upon the operating-tool,

which disk envelopes the end of the hand-piece and effectually closes it against access of injurious matter.

Various other forms of covers or shields, more advantageous in particular cases than those shown and described, will suggest themselves to those skilled in the art, some of which may, in certain instances, be permanently fixed to the hand-piece or operating-tool, or form part thereof.

By preventing the flow of saliva into the hand-piece, and excluding therefrom foreign and injurious matter, its durability, and that of the operating-tools, is much increased, and the annoyance of wabbling tools, caused by wearing of the parts, in a great measure prevented.

I claim as of my own invention—

1. A dental-engine hand-piece shield or cover, constructed substantially as hereinbefore described, with a perforation for the passage of a tool, and a flange to overlap the hand-piece, whereby a water-tight joint is formed in advance of the nose of the hand-piece to prevent the entrance of saliva, grit, and other matter, as set forth.

2. The combination, substantially as hereinbefore set forth, of a hand-piece, a shield, or cover, and an operating-tool, whereby the tool may be operated without allowing access of injurious matter to its bearings.

In testimony whereof I have hereunto subscribed my name.

JOHN E. SWALLOW.

Witnesses:

S. H. DORSEY,  
FREDK. W. STOVER.