S. S. WHITE.

DENTAL POLISHING-TOOL.

No. 169,753. Patented Nov. 9, 1875.

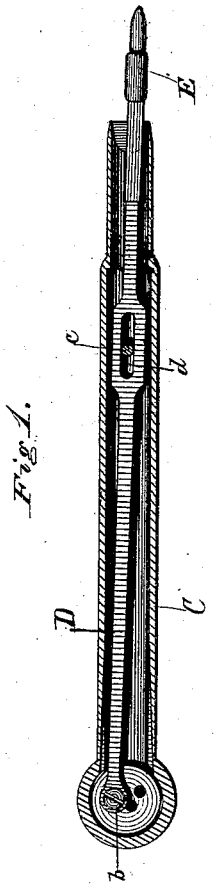

Fig. 1.

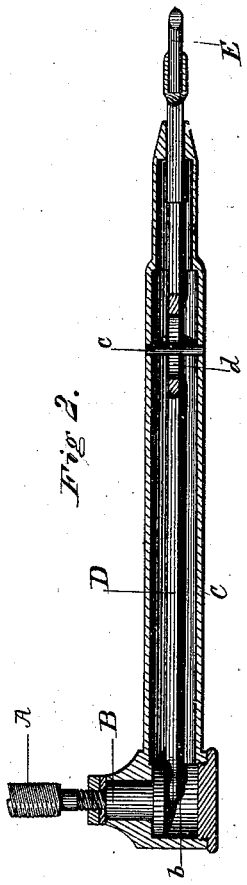

Fig. 2.

WITNESSES

Harry King

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By his Attorney Wm. D. Baldwin

UNITED STATES PATENT OFFICE.

SAMUEL S. WHITE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DENTAL POLISHING-TOOLS.

Specification forming part of Letters Patent No. **169,753**, dated November 9, 1875; application filed July 9, 1875.

CASE E.

To all whom it may concern:

Be it known that I, SAMUEL STOCKTON WHITE, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Polishing-Tools, of which the following is a specification:

My invention relates to that class of polishing instruments in which a reciprocating movement is imparted to the tool. Its objects are to furnish a direct-acting reciprocating polisher, which shall be simple in construction, efficient in operation, and readily adjustable to vary the length of stroke of the polishing-tool; to which ends my invention consists in imparting to the tool a lateral vibratory motion in addition to the ordinary reciprocating motion, thus producing an efficient rubbing action.

The subject-matter claimed is hereinafter specifically designated.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section through my improved polisher; Fig. 2, a similar horizontal section therethrough.

In order to give a wide range of movement to the instrument, I prefer to drive it from any suitable motor by means of a flexible shaft, A, of well-known construction, which drives a crank-shaft, B, mounted in bearings in a suitable casing or hand-piece, C. The crank *b* drives a pitman, D, the throw of which may be adjusted by means of a series of holes in the crank-wheel at different distances from the center, or by a slot and set-screw, or other well-known equivalent means. A longitudinal slot, *d*, is formed in the pitman, through which a pin, *c*, passes, and on which pin the pitman rocks as it is reciprocated; consequently the outer end of the pitman will be vibrated laterally as well as reciprocated longitudinally, thus imparting to the tool E, inserted in a socket in the pitman, or secured thereto in any well-known way, a compound rubbing motion, which is very efficient.

The range of motion of the polisher can be varied by adjusting the crank-pin, and by moving the fulcrum-pin *c* backward or forward in the casing, which can be done by mounting it in a sliding sleeve actuated by a screw; or a simple slide will answer.

I claim—

In a polishing-tool, the combination, substantially as hereinbefore set forth, of the casing or hand-piece, the crank-shaft, the longitudinally-slotted pitman or tool-holder, and the pin on which the pitman slides and rocks, whereby a compound longitudinal and lateral reciprocation is imparted to the tool.

In testimony whereof I have hereunto subscribed my name.

SAMUEL S. WHITE.

Witnesses:

J. A. B. WILLIAMS,

FRANK L. HISE.