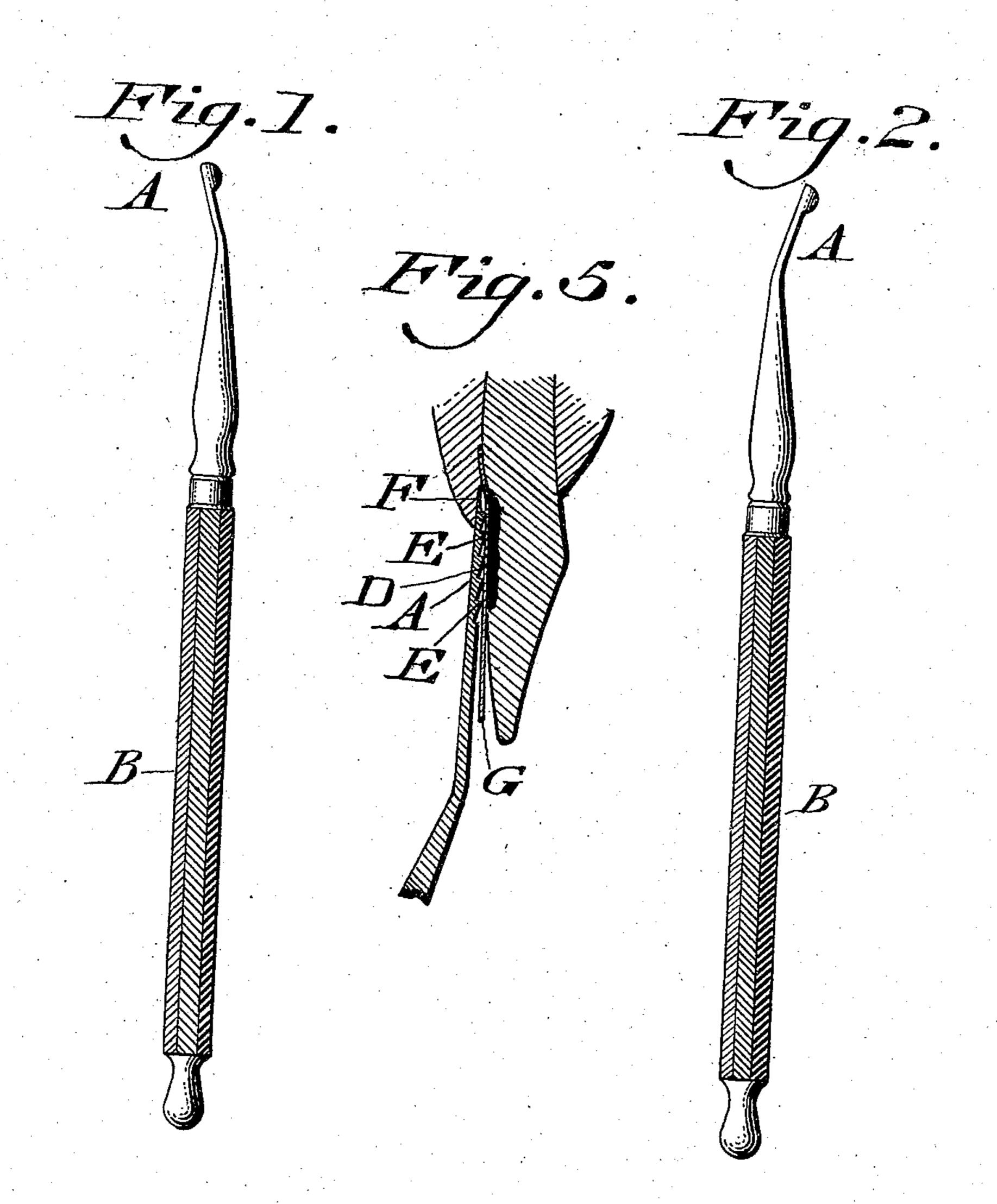
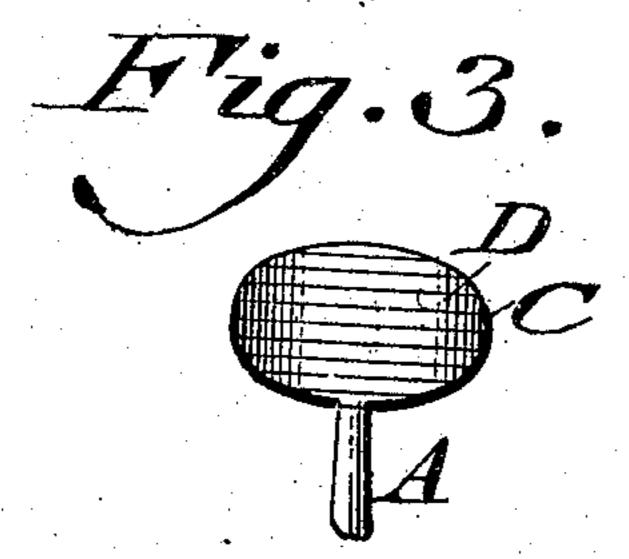
E. R. SAUSSER.

DENTAL TOOL.

APPLICATION FILED AUG. 5, 1907.





Witnesses De Nagles. Couville. Frig.4.

Emerson P. Sausser.

33y Wiedersheim & Fairbanks.

Attorneys

UNITED STATES PATENT OFFICE.

EMERSON R. SAUSSER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO JAMES W. IVORY, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL TOOL.

No. 881,722.

Specification of Letters Patent.

Patented March 10, 1908.

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To all whom it may concern:

Be it known that I, EMERSON R. SAUSSER, a citizen of the United States, residing in the city and county of Philadelphia, State of 5 Pennsylvania, have invented a new and useful Dental Tool, of which the following is a specification.

My invention consists of a dental tool -adapted for forming a matrix for a cavity in 10 a tooth, the same serving to readily locate the matrix and permit its own displacement

without disturbing the matrix.

One of the main objects of my invention is to devise a dental tool, by the employment of 15 which a piece of foil or any suitable matrix material, such as for example platinum or gold, can be carried up between the gum and tooth in cases in which there is a cavity under the gum, in order that the matrix material 20 may be carried up above that portion of the cavity which extends under the gum. I preferably provide the construction with a blade edge, whereby the same may be readily inserted between the gum and the tooth and I 25 further provide the working face of the tool with suitable serrations, whereby the foil will be carried along with the tool on its forward stroke and when the tool is withdrawn, owing to the novel construction and arrange-30 ment of these serrations, the grip will be released and the matrix or foil will stay in its position underneath the gum and above the margin of the cavity. The working face of the tool is preferably so constructed and 35 tempered that it has a certain amount of spring or resiliency in order that it may readily adapt itself to the shape or contour of different teeth.

Figures 1 and 2 represent side elevations of 40 different forms of a dental tool embodying my invention. Fig. 3 represents a plan view of the head or blade of the tool. Fig. 4 represents an end view of the tool. Fig. 5 represents a longitudinal section of a portion 45 of the tool on an enlarged scale including a tooth with a cavity and the adjacent portions of the gums.

Similar letters of reference indicate corre-

sponding parts in the figures.

Referring to the drawings:—A designates a blade and B a handle therefor, said blade constituting the head of the tool, the same having a face C which is concave and provided with a number of serrations or teeth

D, whose shoulders E face towards the ad- 55 vancing end of the blade A in order that the serrations will grip the foil on the forward stroke of the tool since the shoulders of the serrations engage the foil and advance the same. When the tool is withdrawn, the face 60 of said teeth ride freely over the foil, and thus the latter is not disturbed. The outer terminal of the blade is reduced so as to form the sharp edge F which readily passes between the gum and adjacent tooth.

In making a matrix for a cavity in a tooth, I employ a piece G of foil and insert one end under the gum against the relative tooth. I now apply the tool, placing the blade against said piece G, whereby the serrations D en- 70 gage the latter and then push the foil along the tooth, whereby said piece is advanced step by step to a sufficient extent between the gum and the tooth so as to cover the cavity in the latter. In the tools heretofore 75 employed for accomplishing this result, it has been necessary to employ several different tools, and in as far as I am aware there has not been devised up to the present time, a tool which is primarily designed for this 80 purpose and by the employment of which the matrix or foil can be carried into position by a single stroke of the device, so that the foil will be placed in the proper position under the gum and between the gum and the 85 tooth, so as to cover the upper margin of the cavity which is hidden under the gum.

It is necessary in tools of this character, where the upper margin of the cavity is underneath the gum, that the foil or 90 matrix be carried above that point of the cavity which is under the gum. It is to be especially noted that the working face of my device has a certain amount of resiliency in order that it may be adapted to be employed 95

on teeth of varying contour.

Attention is especially directed to the fact that the concavity of the face C extends in the direction of the longitudinal axis of the tool or instrument and the serrations extend 100 at a right angle to said axis, so as to be capable of carrying the foil or matrix material along the tooth to a point beyond the cervical margin of the cavity, said material thus being adapted to be engaged from side to 105 side the full lateral width of the face C, thus insuring a uniform and complete advance of said material to the objective place.

It will be apparent to those skilled in this art that I have devised a novel and useful construction of a dental tool which embodies the features of advantage enumerated as desirable in the statement of invention and the above description, and while I have in the present instance shown and described a preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit and scope of my invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Let-

ters Patent, is:—

1. A dental tool for the purpose described, composed of a handled blade, the working face of which is concave and provided with serrations, the concavity of said face extending in the direction of the longitudinal axis of

the tool and said serrations extending at a

right angle to said axis.

2. A dental tool for the purpose described, 25 consisting of a blade, the working face of which is concave, a cutting edge on the forward end of said blade, and serrations on said working face, the concavity of said face extending in the direction of the longitudinal 30 axis of the tool.

3. A dental tool for the purpose described, consisting of a blade having a concave face, and serrations on said face, the shoulders of said serrations being directed forwardly.

4. In a dental tool, a resilient concave blade having the forward end converging to a sharp edge and provided with serrations contiguous thereto, the shoulders of which are directed forwardly.

EMERSON R. SAUSSER.

Witnesses:

E. B. Morris, Harry C. Dalton.