(No Model.)

T. J. HENRY.

DENTAL FOIL.

No. 382,085. Patented May 1, 1888.

Fig. 1

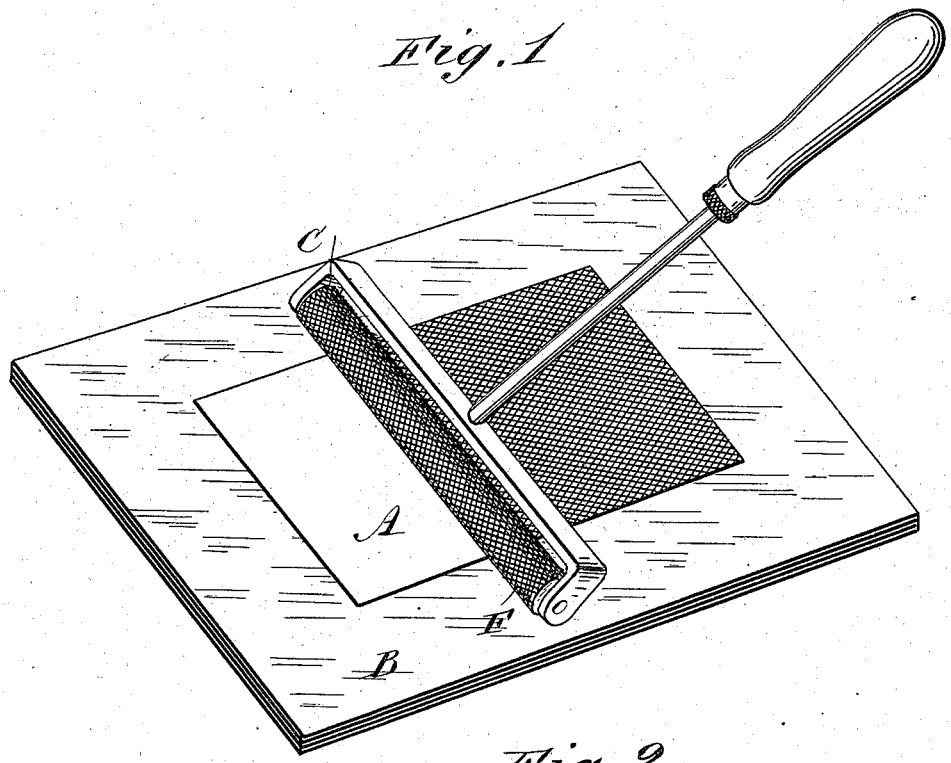

Fig. 2

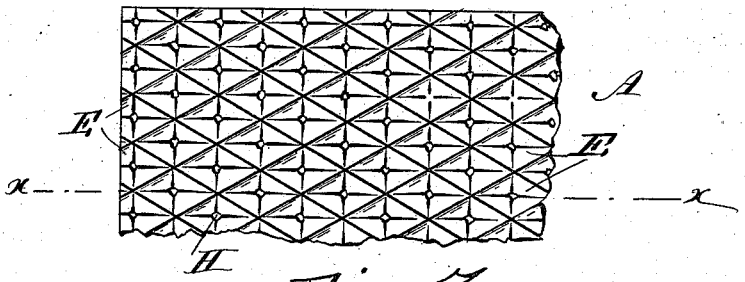

Fig. 3.

WITNESSES:

C. Neveux

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UNITED STATES PATENT OFFICE.

THOMAS J. HENRY, OF NEW YORK, N. Y.

DENTAL FOIL.

SPECIFICATION forming part of Letters Patent No. 382,085, dated May 1, 1888.

Application filed November 22, 1887. Serial No. 256,336. (No specimens.)

To all whom it may concern:

Be it known that I, THOMAS J. HENRY, of the city, county, and State of New York, have invented a new and useful Improvement in Dental Foil, of which the following is a full, clear, and exact description.

The invention consists in a sheet of dental foil having depressions causing breaks or punctures in the continuity of its fiber, and not mere superficial indentations for purposes of ornamentation, substantially as set forth and claimed.

In order that my invention may be clearly understood, I will give a detailed description of the process, which, however, forms no part of the matter claimed in the present application, as it is my intention to file a separate application therefor, the means employed in carrying on the same, and the nature of the improved gold-foil thus produced.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view illustrating the improved foil in process of manufacture. Fig. 2 is an exaggerated plan view of a portion of gold-foil thus treated. Fig. 3 is an exaggerated sectional view of the same, taken on the line *x x*, Fig. 2.

A sheet of the gold-foil, A, to be treated by my process, either before or after trimming, is laid out flat on a bed, B, which I prefer to form of several superposed layers of common blotting-paper, so that a fresh working-surface can be readily obtained when desired by removing the top layer. The bed B may, however, be made of rubber, leather, or any other substance that will yield to the individual projections of a roughened surface when pressed thereupon without giving away beneath the body of the same. Over the dental gold-foil, A, thus supported I then run under considerable pressure a roller, C, of metal or other hard substance, having a roughened surface, the projections studding which form depressions E in the surface of the foil and break the continuity of the fiber of the metal, making it slightly foraminous.

I find best adapted for the roller C a surface studded with diamond-pointed projections formed by cutting two series of equidistant V-shaped grooves in the substance of the roller, crossing at an angle, as is commonly seen on rasps and kindred appliances. The dull points act to slightly open the metal of the foil at the bottom of the depressions formed by the projections on the roller, leaving minute punctures H, which are an important element in softening the foil. These punctures, however, do not give a ragged edge to the foil when cut, nor to the cut edge of the foil, the continuity of the metal being not totally destroyed thereby, but the metal only excessively thinned, so as to open slightly. By this process the size of a trimmed leaf is not in the least diminished, as occurs with the ordinary wrinkling and corrugation of gold-foil, for while in the latter cases the area of the leaf is drawn on to form the wrinkles and corrugations, by my process the thickness only of the metal is drawn on for the depressions.

I am aware that wrapping tin-foil has been ornamented by first matting its surface and then embossing a pattern on the matted foil by means of a pair of embossing-rolls, and I do not claim the same as my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A sheet of dental gold-foil having depressions covering its surface, the continuity of the metal at each of said depressions being slightly broken, as and for the purpose specified.

THOMAS J. HENRY.

Witnesses:

CLARENCE H. BURGER,

C. SEDGWICK.