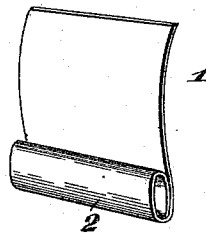
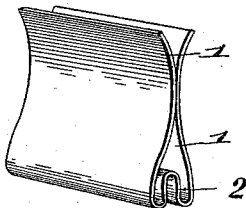
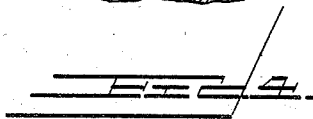
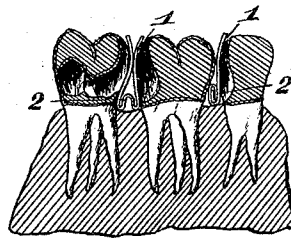
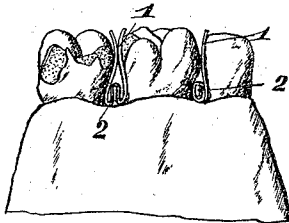
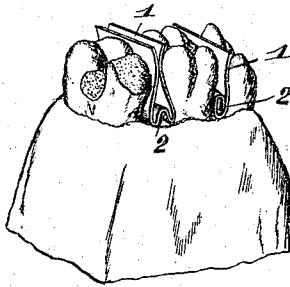


(No Model.)

C. J. PETERSON.
DENTAL MATRIX.

No. 552,697.

Patented Jan. 7, 1896.



Inventor,

Charles J. Peterson,

By his Attorneys,

Witnesses

W. F. Doyle.
R. M. Smith.

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES J. PETERSON, OF DUBUQUE, IOWA.

DENTAL MATRIX.

SPECIFICATION forming part of Letters Patent No. 552,697, dated January 7, 1896.

Application filed May 31, 1895. Serial No. 551,165. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. PETERSON, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented a new and useful Dental Matrix, of which the following is a specification.

This invention relates to an improvement in dental matrices, and the principal object of the invention is to provide a simple, inexpensive and efficient matrix, which is capable of being applied between the molars or between a molar and bicuspid or between adjacent front teeth in such manner as to form an artificial and translucent wall, which will conform closely to the cervical margin of a carious tooth which it is desired to fill.

To this end the invention consists in a matrix composed of some translucent and resilient material, such as celluloid, the same being folded or shaped in such manner as to be self-retaining, as hereinafter fully set forth, illustrated in the drawings, and finally embodied in the claim.

In the accompanying drawings, Figure 1 is a perspective view of a pair of molars and a bicuspid having caries therein, showing a single and a double matrix applied in operative position. Fig. 2 is a similar view showing a molar and adjacent bicuspid with a double matrix inserted between them. Fig. 3 is a side elevation similar to Fig. 1. Fig. 4 is a sectional view through adjacent molars and a bicuspid, showing cavities therein and the relation of matrices of different forms thereto. Fig. 5 is a detail perspective view of a single matrix. Fig. 6 is a similar view of a double matrix.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The matrix contemplated in this invention is formed from a thin piece or sheet of transparent material, such as celluloid or other substance combining the necessary degree of translucency, hardness and elasticity. A single matrix comprises a vertically-extending wall 1, having its lower end or edge rolled or bent in such manner as to form a roll or scroll 2. This matrix is inserted between adjacent teeth with the smooth side, or that side which is opposite to the scroll 2, against the tooth to

be operated upon. In this position, the scroll 2, by reason of the resilient nature of the material from which the matrix is formed, will force the wall 1 of the matrix closely against and cause it to conform to the cervical margin of said tooth. The double matrix is also formed from a single piece of celluloid or other material of approximately twice the size of the piece from which the single matrix is formed, said matrix comprising two independent walls 1, which are disposed in such manner as to contact with the adjacent teeth between which the matrix is placed. The central portion of the matrix, or that portion which connects the walls 1 at their lower ends, is crimped or otherwise folded or bent in such manner as to spread the matrix at its base, thereby causing the opposing walls to bear firmly against the adjacent faces of the teeth.

It will be understood that a single matrix will ordinarily be employed where only a single cavity is to be filled and that the double matrix will be used when cavities in adjacent teeth are being treated. The material from which the matrix is formed being very thin, a matrix may be trimmed with scissors into the desired shape and size, after which it is passed between adjacent teeth either from the outside or inside or top as found most expedient. The base of the matrix may be compressed between the fingers or by a pair of pliers where the matrix has a tendency to fit too tightly. If it does not fit tightly enough, an additional roll or crimp may be given thereto. By reason of the walls of the matrix curving upwardly instead of laterally or horizontally in the usual manner, access may be obtained to the filling from the sides for the purpose of burnishing the edges of the filling. After the filling has been completed, the matrix may be removed from the side by pressing down slightly, and then the filling may be finished off as desired. The matrix above described is especially adapted for amalgam and cement fillings and is perfectly self-retaining. The force with which the matrix retains itself in position may be varied according to the wish of the operator by increasing or diminishing the number and size of the scrolls or crimps at the base of the matrix, and by reason of the upward curve of the matrix-walls the same is caused to conform more closely and accu-

ately to the contour and cervical margin of the tooth being filled.

The device combines simplicity and perfect adaptability with cheapness of manufacture, 5 and by reason of the translucent nature of the material of which it is composed the operator can observe the progress of his work.

Another important advantage of this matrix is that it will not stick to or disturb the 10 filling as it is removed.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

A dental matrix made from a piece of resilient and transparent material such as celluloid and formed at its base with a roll, 15 crimp or bend, whereby said matrix is rendered self-retaining, substantially as specified.

In testimony that I claim the foregoing as 20 my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES J. PETERSON.

Witnesses:

C. A. NOYES.

C. J. FAWKES.