

R. S. WILLIAMS.
Preparing Dental Filling.

No. 167,813.

Patented Sept. 14, 1875.

Fig: 1.

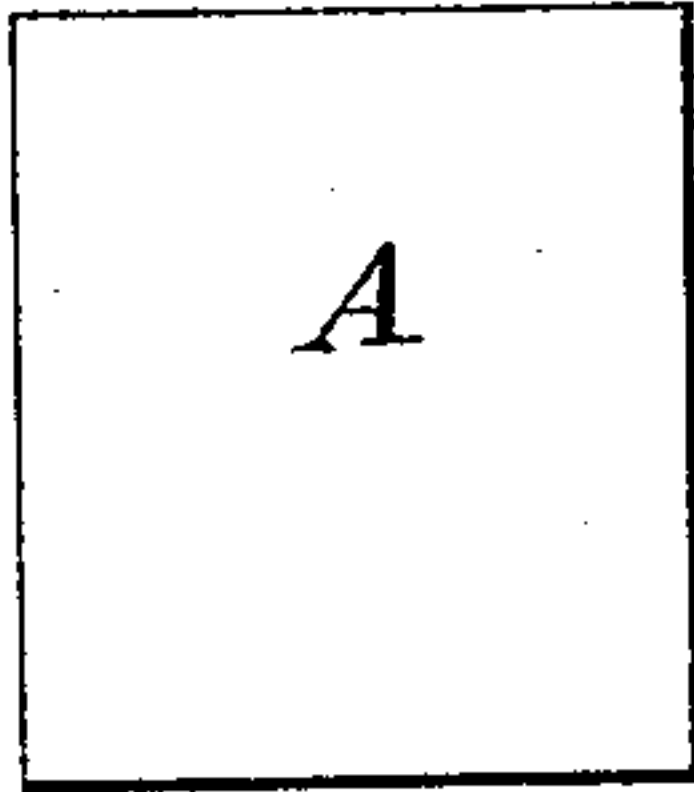


Fig: 2.

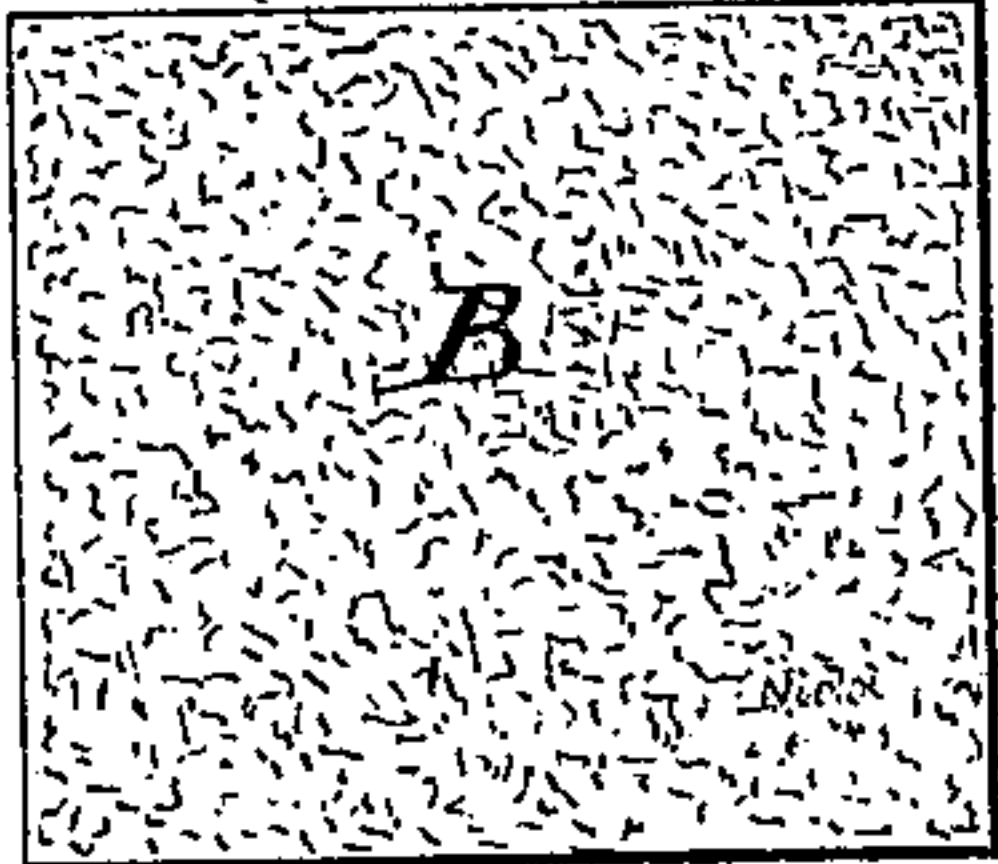


Fig: 3.

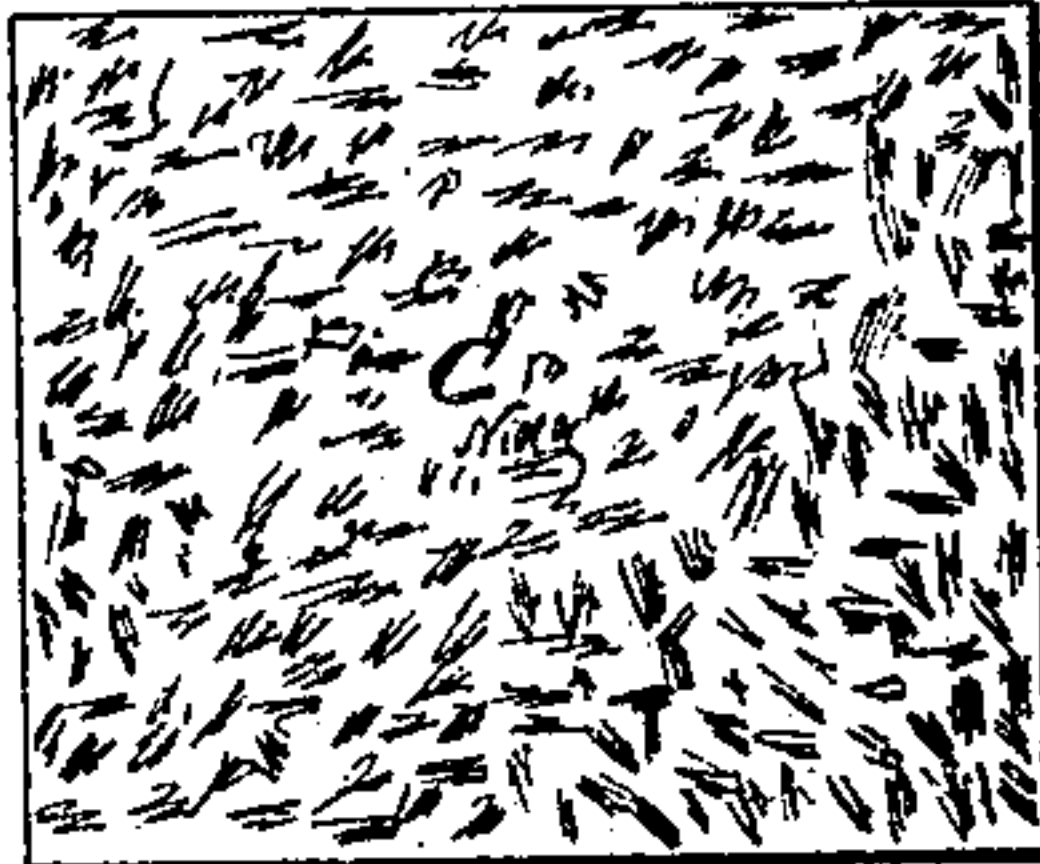


Fig: 4.



Fig: 5.



Fig: 6.

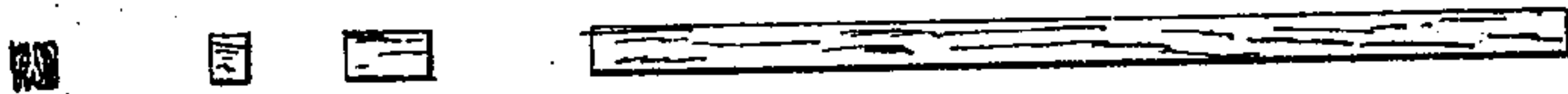


Fig: 7.

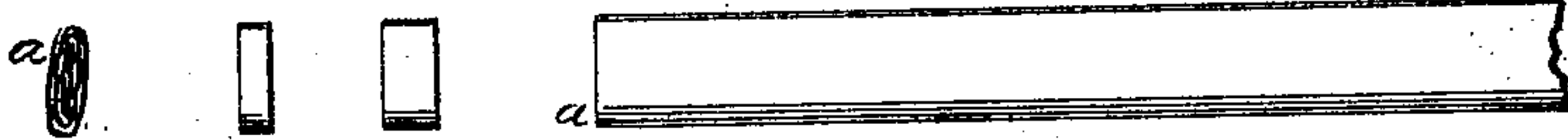
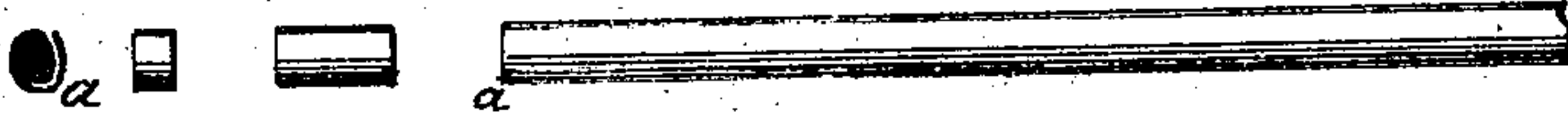


Fig: 8.



Witnesses:

H. C. Matzenberg
M. Lovell

Inventor:

Richard S. Williams
per C. M. Symonds
att'y

UNITED STATES PATENT OFFICE.

RICHARD S. WILLIAMS, OF NEW YORK, N. Y.

IMPROVEMENT IN PREPARING DENTAL FILLINGS.

Specification forming part of Letters Patent No. **167,813**, dated September 14, 1875; application filed June 7, 1875.

To all whom it may concern :

Be it known that I, RICHARD S. WILLIAMS, of the city, county, and State of New York, have invented a new and useful Improvement in Process for Preparing Dental Filling; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention is in the nature of an improvement in process for preparing dental filling; and the invention consists in the process, hereinafter particularly described, for preparing dental foil when made into blocks, cylinders, cubes, pellets, &c., by causing the last or overlapping fold, when the foil is made up into such forms, to adhere to the fold next immediately beneath it by or with the aid of collodion or other volatile solvent.

In the accompanying sheet of drawings, Figure 1 represents a sheet of plain foil. Figs. 2 and 3 represent sheets of dental foil prepared with corrugated or granulated surfaces. Figs. 4 and 5 represent the same formed into rectangular bars and cubical sections. Fig. 6 represents a rectangular bar with cubical and other sections of tin with slightly roughened surface. Fig. 7 represents a rectangular bar of tin or other foil, having plain surface, and sections with rounded edges; and Fig. 8 represents a cylinder made from plain foil with sections.

Similar letters of reference indicate like parts in the several figures.

A represents a sheet of plain foil, and B and C represent sheets of foil with granulated or roughened surfaces.

These foils, whether plain or granulated, may be formed from gold, silver, platina, tin, or any other suitable metal.

If the surfaces of the foil are roughened or granulated, it may be done either in the well-known manner by shrinkage between paper under pressure and by heat, or it may be

granulated or roughened by confining the sheets of foil beneath or between sheets of stretched india-rubber, which, when allowed to contract, will draw up the foil so confined or placed; or it may be roughened in any suitable way, the roughening of the surfaces making no part of the present invention.

The foil having been suitably prepared, either in a plain or roughened state, as before described, it is formed up into squares, parallelopipeds, cylinders, or any other convenient shape, and to the last or overlapping layer *a* a film of collodion or ether, or other volatile substance, holding any suitable gum in solution, is applied to it. The volatile fluid evaporating, causes the layer to adhere to the body of the cylinder, &c., by the remaining gum. The substance thus remaining is peculiarly adapted for the purpose of causing the overlapping fold to adhere, for the reason that it is tasteless, inodorous, elastic, transparent, and almost imperceptible and wholly innocuous.

The sections of cylinders, blocks, &c., that are made from the larger rolls or other figures, are formed by cutting them from these larger pieces, so that their ends will not be compressed or consolidated. This manner of cutting may be by the process heretofore patented by me on the 30th day of April, 1872, or in any desirable way.

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

The process hereinbefore described of preparing foil for dental purposes, by causing the last or overlapping layer of foil to adhere to the fold next beneath it by or with the aid of collodion or other substances dissolved in a volatile fluid, substantially as described.

RICH'D. S. WILLIAMS.

Witnesses :

H. L. WATTENBERG,
G. M. PLYMPTON.