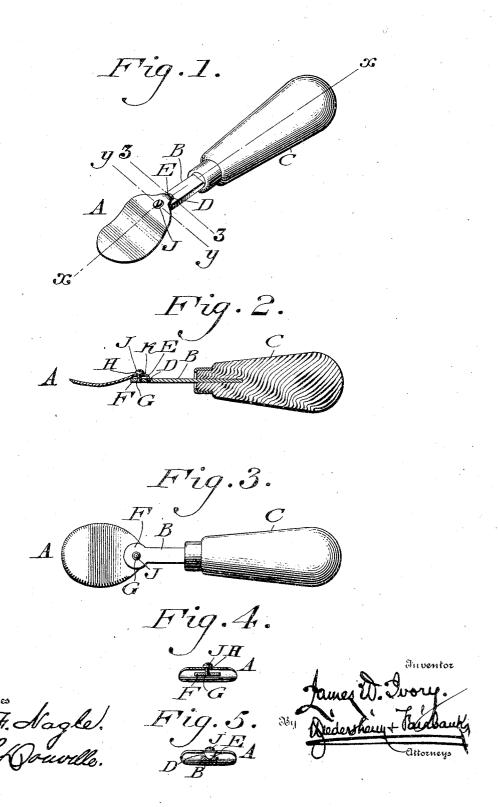
J. W. IVORY. DENTAL SCRAPER. APPLICATION FILED SEPT. 24, 1904.



UNITED STATES PATENT OFFICE.

JAMES W. IVORY, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL SCRAPER.

SPECIFICATION forming part of Letters Patent No. 788,909, dated May 2, 1905.

Application filed September 24, 1904. Serial No. 225,743.

To all whom it may concern:

Be it known that I, James W. Ivory, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Dental Scrapers, of which the following is a specification.

My invention consists of a tool more particularly designed for scraping dental plates, to the same embodying a blade, a shank, and novel means for connecting said blade with said shank, as will be hereinafter set forth.

Figure 1 represents a perspective view of a dental scraper embodying my invention. Fig. 15 2 represents a longitudinal section thereof on line xx, Fig. 1. Fig. 3 represents a plan view of the scraper, taken from the back thereof. Fig. 4 represents a transverse section on line yy, Fig. 1. Fig. 5 represents a transverse section on line zz, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in the figures.

Referring to the drawings, A designates a blade. B designates a shank on which said 25 blade is sustained, and C designates a handle of the tool, the same being properly connected with the tang of said shank. In the upper face of said shank is a recess or depression D, and on the heel end of said blade is a lip 30 E, which extends at an angle from the adjacent portion of the blade and enters said recess.

On the forward end of the shank B is an eye F, having an opening G therein. In the 35 portion of the blade forward of the lip E is an opening F, the openings G and H being in register and securing the screw J, which passes freely through the opening H and has its threads engaging with threads in the opening G, whereby when said screw is tightened the blade will be compressed against the adjacent face of the eye F and the lip forced into the recess D, thus firmly and reliably

connecting the blade with the shank in a simple and inexpensive manner. The holding 45 action of the screw J is increased by making the portion of the blade about the opening H somewhat curved outwardly or swelled, as at K, thus rendering said portion somewhat resilient, so that it will yield to the pressure of 50 the head of the screw and so more forcibly contact with the eye F, the effect of which is evident. The blade may be readily removed for any purpose requiring the same by properly rotating the screw J, thus disconnecting 55 the parts.

Various changes may be made in the details of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each 60

case to the same.

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

1. In a tool of the character stated, a blade, 65 and a shank carrying the same, said blade having a lip extending angularly from the heel end of said blade and said shank having a recess adapted to receive said lip and means for tightening said blade on said shank.

2. In a tool of the character stated, a blade, a shank carrying the same, said blade and shank having registering openings, and a screw in said openings, said blade having an angularly-extending lip on the heel end thereof and 75 said shank having a recess adapted to receive said lip.

3. In a tool of the character stated, a blade, a shank, and a screw in registering openings in said blade, and shank, the portion of the blade 80 around the opening therein being resilient.

JAMES W. IVORY.

Witnesses:

John A. Wiedersheim, Wm. Caner Wiedersheim.