J. W. IVORY.

DENTAL CAP CROWN SLITTER.

APPLICATION FILED NOV. 10, 1910.

1,010,145. Patented Nov. 28, 1911.

Fig. 1.

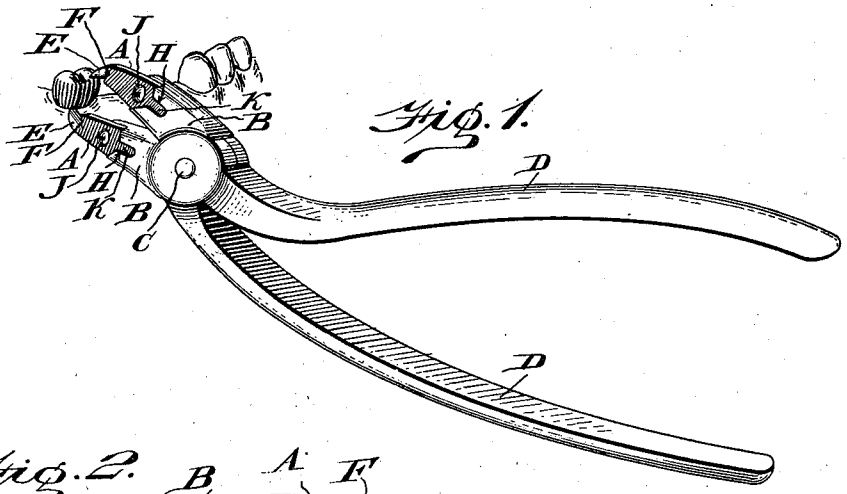



Fig. 2.

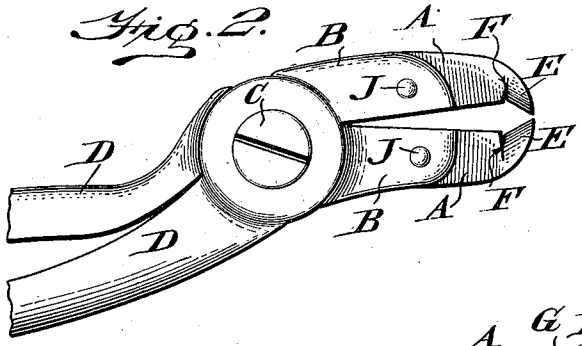



Fig. 3.

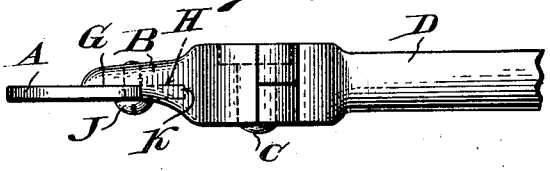



Fig. 4.

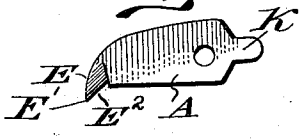
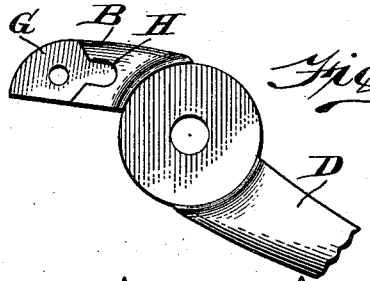



Fig. 5.




WITNESSES

H. F. Dieterich

L. Dowilles.

INVENTOR

BY James W. Ivory.

Wiedersheim & Fairbank

ATTORNEYS

# UNITED STATES PATENT OFFICE.

JAMES W. IVORY, OF PHILADELPHIA, PENNSYLVANIA.

## DENTAL CAP-CROWN SLITTER.

1,010,145. Specification of Letters Patent. Patented Nov. 28, 1911.

Application filed November 10, 1910. Serial No. 591,600.

*To all whom it may concern:*

Be it known that I, JAMES W. IVORY, a subject of the King of Great Britain, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Dental Cap-Crown Slitter, of which the following is a specification.

My invention consists of a dental cap crown slitter comprising a pair of jaws each having a slitting blade thereon, opposite to each other, whereby the crown may be slit in directions toward each other, thus quickly and easily effecting the removal of the same.

It consists further of novel means for firmly holding the blades on the jaws and adapting the same to be removed for purposes of sharpening and replacement by new blades when so desired.

For the purpose of explaining my invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a perspective view of a dental cap crown embodying my invention. Fig. 2 represents an elevation of a portion thereof taken from the side opposite to Fig. 1. Fig. 3 represents a top or plan view of a portion thereof. Fig. 4 represents a side elevation of one of the blades or slitters. Fig. 5 represents a side elevation of a portion of the instrument, the blade or slitter being removed therefrom.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings:—A designates blades which are attached to the jaws B, the latter pivotally connected as at C, and provided with handles D, for operating said jaws, and consequently moving said blades in directions to and from each other. Projecting downwardly from the front of the body of the upper blade is the beak E, and projecting upwardly from the front of the body of the lower blade is a similar beak E, said beaks being thin or narrow and being deflected toward each other, each of said beaks terminating in a well defined point E′, from which extends rearwardly in oblique direction, the cutting or slitting edge $E^2$, each edge being in the longitudinal axis or direction of the blade and having its inward terminal at the transversely extending shoulder F which is formed on what may be termed the sides of the bodies that face each other, it being seen that in the operation of the device, the points E′ are presented to the cap crown and the jaws are closed, whereby they take firm hold of said crown, then as the jaws are further closed, the points E′ pierce the crown, and the edges $E^2$ slice the same by a draw cut to the extent of the shoulders F, the latter acting as guides which ride on the exterior of said crown, then as the jaws fully close, said shoulders act as stops, the opposite points meet and the cutting edges have completed their work, incisions thus being made in the crown in opposite directions, and said crown accordingly severed or sliced in two in a quick and efficient manner, the removal of the crown then being conveniently accomplished. It will be noticed that owing to the longitudinally extending cutting edges of the blades, the crown has been sliced up and down with a single slice without striking on and being stopped by the top and bottom of the crown.

In order to attach the blades to the jaws, the sides of the latter are formed with recesses G, the rear walls of which have reentering slots H, the latter extending toward the pivot of the jaws. The blades A are adapted to conform to said recesses G, they being seated therein and secured to the side walls thereof by the screws J, which pass through the respective parts, as most plainly shown in Fig. 3. The heel ends of the blades are formed with tongues K, which enter the slots H and interlock with the walls thereof, by which means in addition to the screws J, the blades are firmly connected with the jaws, and prevented from shifting, rotating and other displacements, it being evident, however, that when the screws J are loosened and removed, the blades may be displaced for the purpose of sharpening or substitution by others, in case of fracture or breakage.

In some cases it may be desirable to drill small openings in the cap crown, the same being adapted to receive the point portions E of the blade, whereby the latter may take firm hold of the cap and be prevented from slipping therefrom, while the work of slitting will be more convenient and effective.

Having thus described my invention what

I claim as new and desire to secure by Letters Patent, is:—

1. In a dental cap crown slitter, a slitting blade having a beak on the forward end thereof, a well defined point on the outer terminal of said beak, and a cutting edge on the blade extending inwardly from said point to the body of the blade in the longitudinal direction of the blade.

2. In a dental cap crown slitter, a slitting blade composed of a body which is provided with an inwardly deflected beak at the forward end thereof, said beak having a well defined point on its outer terminal, a longitudinal cutting edge extending obliquely inward from said point toward the pivot of the implement, and a transversely extending guide and stop shoulder on the body at the inner terminal of said cutting edge.

3. A dental cap crown slitter composed of a pair of jaws hinged thereto, a slitting blade on each individual jaw, said blade being composed of a body which is provided with an inwardly deflected beak at the forward end thereof, said beak having a well defined point, and a cutting edge the same extending inwardly from said point to the body of the blade in the longitudinal direction of said body.

JAMES W. IVORY.

Witnesses:
JOHN A. WIEDERSHEIM,
WM. CANER WIEDERSEIM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."