P. S. MANNING.
UPPER CUSPID FORCEPS.
APPLICATION FILED MAR. 14, 1903.

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No. 731,586.

PATENTED JUNE 23, 1903.

F. S. Manning
Upper Cuspid Forceps
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FRANCIS S. MANNING, OF VERSAILLES, MISSOURI.

UPPER-CUSPID FORCEPS.


Application filed March 14, 1903. Serial No. 147,783. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS S. MANNING, a citizen of the United States, residing at Versailles, in the county of Morgan and State of Missouri, have invented certain new and useful Improvements in Upper-Cuspid Forceps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention, which relates to dental appliances, contemplates the production of an improved forceps adapted for use in extracting certain of the upper teeth, and more especially the upper-cuspid teeth, the objects of the improvement being to eliminate all danger consequent upon slipping or sliding of the forceps in the extraction of the class of teeth referred to and to prevent injury to the hand of the operator from the handles of the instrument.

The nature of the invention will be readily comprehended, reference being had to the following detailed description and to the accompanying drawings, in which—

Figure 1 is a front elevation of a forceps embodying my invention. Fig. 2 is a side elevation. Fig. 3 is an elevation of the opposite side. Fig. 4 is an enlarged top view. Fig. 5 is an enlarged sectional view of the beaks of the forceps. Figs. 6 and 7 are enlarged inside views, respectively, of the palatine and the labial beaks. Fig. 8 is a sectional view on line 8-8 of Fig. 1.

Referring to the drawings by numerals, 12 denote the forceps members, which are pivoted together by a pin 3 or the like. The inner, or what is termed the "palatine," beak of the forceps is designated by the numeral 4 and is integral with its handle 5, and the outer or labial beak 6 is integral with its handle 7. The beaks at their outer side describe the segment of a circle substantially as shown, and the inner faces of each, which likewise describe a somewhat similar segment, are slightly separated in the closed condition of the instrument.

Lengthwise of the inner face of the palatine or inner beak is a groove 8 approximately one-eighth of an inch wide and which is of slightly less width than the beak and has its greatest depth approximating one-sixteenth of an inch. The groove is of uniform in cross-section, whereby the fang of the tooth is engaged at two points by the straight sides of the groove and at a point opposite the fang is engaged by the labial or outer beak, which has its inner face concaved, as shown at 9. Both of the inner faces of the beaks are serrated to increase the friction or traction, and with the fang engaged at these three points a rotary movement of the tooth is accomplished without liability of the forceps slipping off or sliding on the fang. The beaks are by the described construction made to conform very closely to the class of teeth which the forceps is designed to extract, and the ends of the beaks are brought to a sharp edge to enable the insertion of the ends beyond the gum. The width of the beaks is approximately five-thirty seconds of an inch, which width is maintained; but the thickness of the beaks may be varied according to the degree of strength required.

The handles are of improved construction with the view to securing exact conformation to the hand of the operator and also to prevent injury to the hand by cutting, pressing, or impaling when in use. As shown in Fig. 8, the inner surfaces of the handles at the point of closest approach are each made convex, so that gripping action is prevented. The handle 5 at its lower end 10 crosses the line centrally through the instrument, (indicated in Fig. 1,) and said lower end is slightly twisted, as shown in Figs. 1 and 4. Also the hook 11 of the handle 7 is transversely inclined, as shown in Figs. 1 and 3. The described formation of the handles insures exact conformation to the hand of the operator in grasping the instrument and prevents injury thereto in the manner stated. The outer surfaces of the handles are provided with the usual serrations shown to prevent slipping in the hand.

I claim as my invention—

1. An upper-cuspid forceps having its inner beak provided with a V-shaped groove, and its outer beak concaved.

2. An upper-cuspid forceps having beaks the outer sides of which describe the segment
of a circle and the inner faces of which describe the segment of a circle and are slightly separated in the closed condition of the forceps, the inner beak being provided at its inner face with a serrated V-shaped groove, and the outer beak being provided with a serrated concave groove.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS S. MANNING.

Witnesses:

W. H. KAVANAUGH,
ALFRED HEIMMAN.