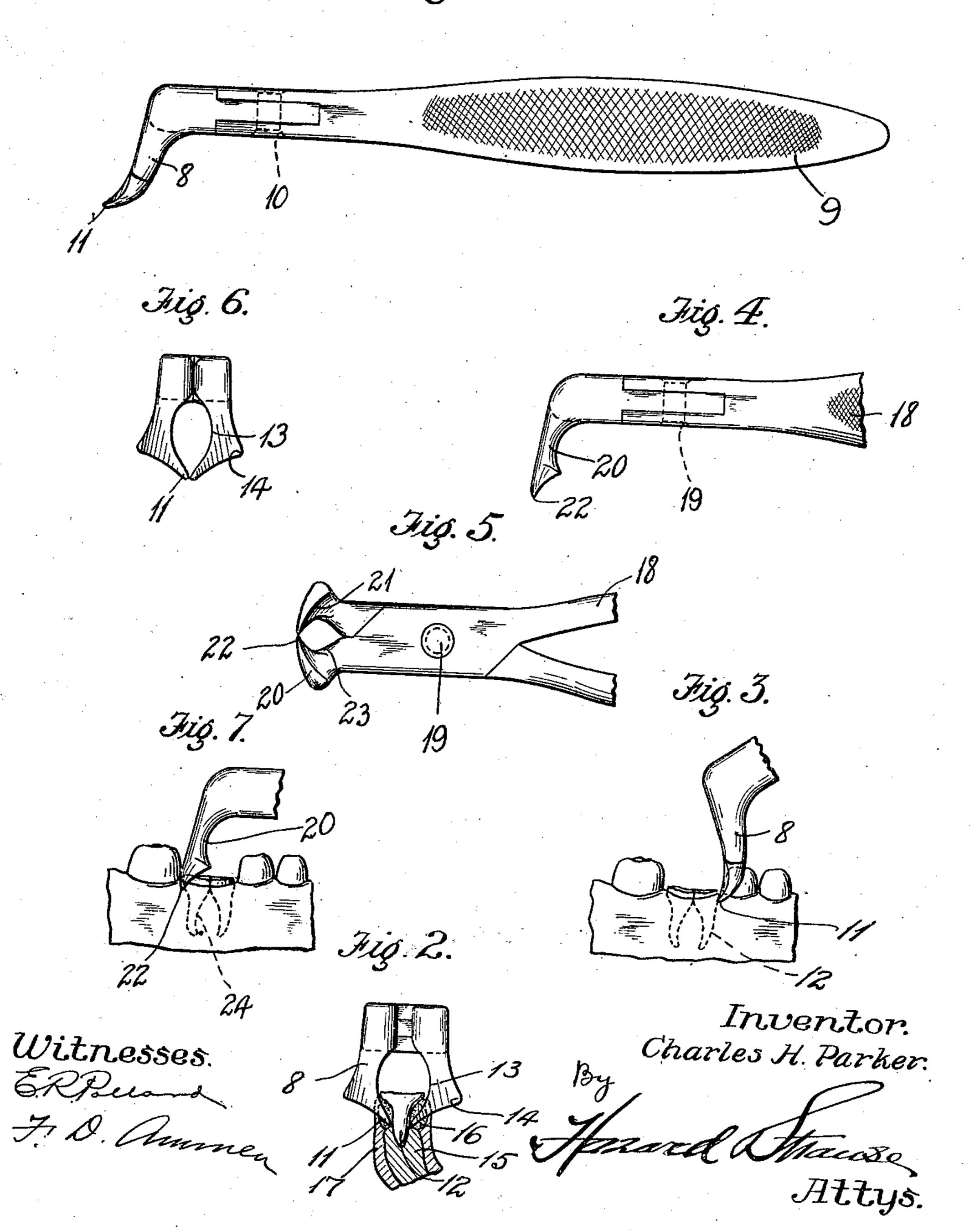
C. H. PARKER. ROOT FORCEPS. APPLICATION FILED MAY 9, 1910.

996,030.

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Fig. I.



UNITED STATES PATENT OFFICE.

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ROOT-FORCEPS.

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To all whom it may concern:

Be it known that I, Charles H. Parker, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Root-Forceps, of which the following is a specification.

This invention relates to root forceps, and the object of the invention is to produce a 10 dental instrument of this class which can be used effectively for elevating roots of molars preparatory to withdrawing them where the tooth has been broken off above the gum. In attempting to extract such roots any at-15 tempt to seize the tooth usually results in breaking off the projecting portion, and therefore such attempts are usually unsuccessful. With an instrument constructed according to this invention, the tool is formed 20 in such a way that it can be applied to the gum, and as the forceps close its points engage with the side of the root; this starts the root, and the root can then be withdrawn.

In the annexed drawing, which fully illus-25 trates my invention, Figure 1 is a side elevation of a pair of forceps constructed according to my invention and adapted to extract the anterior root. Fig. 2 is a vertical section taken through the jaw bone showing the gum 30 and the spongy bone or process through which the points of the instrument are applied to the root. This view shows the instrument applied so that the instrument is shown substantially in end elevation. Fig. 35 3 is a side elevation showing a portion of the jaw bone and illustrating the manner in which the instrument is applied, the head of the instrument being shown in side elevation. Fig. 4 is a side elevation of the for-40 ward portion of the forceps showing their form when adapted to withdraw a posterior root. Fig. 5 is a bottom plan view of the instrument shown in Fig. 3, the handle being broken away. Fig. 6 is a front or end ele-45 vation of the instrument shown in Fig. 1. Fig. 7 is a side elevation showing a portion of the jaw bone and indicating the posterior forceps being applied to extract the posterior root.

Referring more particularly to the parts, and especially to Figs. 1, 2, 3 and 6 8, 8 represent the shanks of the instrument, which are formed on the forward ends of handles or levers 9, which are pivotally connected by a pivot pin 10, as is usual in forceps of this type. As indicated in Fig. 1,

these shanks 8 extend laterally and forwardly in an inclined direction, and their lower ends are slightly curved forwardly and inwardly so as to form beaks or toes 11, 60 which are adapted to engage the root 12 of the teeth, as indicated in Fig. 2. As viewed from the front, these beaks 11 project downwardly and inwardly in an inclined direction, and on their adjacent sides they present 65 concave curved edges 13; in other words, the shanks and beaks are bowed outwardly from each other at their inner edges. The outer sides of the beaks are broad so as to make the beaks wedge shaped in cross-section; the 70 beaks terminate in rearwardly projecting heels 14, as shown.

In Fig. 2, 15 indicates the jaw bone in which the lower end of the root is seated, the upper portion of the root being embedded in 75 a process or spongy bone 16, over which the upper edge of the gum 17 extends.

Fig. 3 shows the manner in which this anterior instrument is applied to the anterior root 12. The instrument is applied in an 80 open position with the points of the toes 11 disposed against the gum near the anterior side of the anterior root. The instrument is then closed with force, and this drives the points or toes 11 down through the gum 85 and the spongy bone 16 into contact with the root and between the root and the adjacent tooth, as indicated in Fig. 2. The beaks act like wedges, the backs of which come against the adjacent tooth, forcing the root 90 upwardly and away from the adjacent tooth.

The posterior instrument will now be described, referring especially to Figs. 4, 5 and 7 inclusive. This instrument has two handles or levers 18 connected by a pivot 95 pin 19, and presenting laterally projecting forwardly inclined beaks 20. As indicated in Fig. 5, these beaks present concave cheeks 21 on their inner faces and their lower ends terminate in points or toes 22, 100 which incline downwardly and forwardly as indicated in Fig. 5. As in the anterior form, the adjacent edges 23 of these beaks are concaved or bowed away from each other. The manner of using this instru- 105 ment is indicated in Fig. 7. It is applied in an open position with the toes 22 disposed against the gum near the posterior root 24, and the instrument is then closed forcibly. This will drive the toes 22 down- 110 wardly and inwardly toward the root 24, in the same manner as that indicated in Fig. 2.

As soon as the points have engaged with the root 24, the root can then be extracted.

Having described my invention what I claim as new and desire to secure by Letters
5 Patent is:

Dental forceps for elevating the root of a broken tooth comprising two members pivotally connected and having beaks approximately at right angles, said beaks having bowed adjacent edges with concaved sides and having toes with sharp points inclined

downwardly and projecting toward each other, said toes being adapted to penetrate the spongy bone and detach the root to be extracted.

In witness that I claim the foregoing I have hereunto subscribed my name this 3d day of May, 1910.

CHAS. H. PARKER.

Witnesses:

F. D. Ammen, Edmund A. Strause.

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

Washington, D. C."

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