

(No Model.)

B. E. BURGER.
DENTAL FORCEPS.

No. 436,210.

Patented Sept. 9, 1890.

Fig. 1.

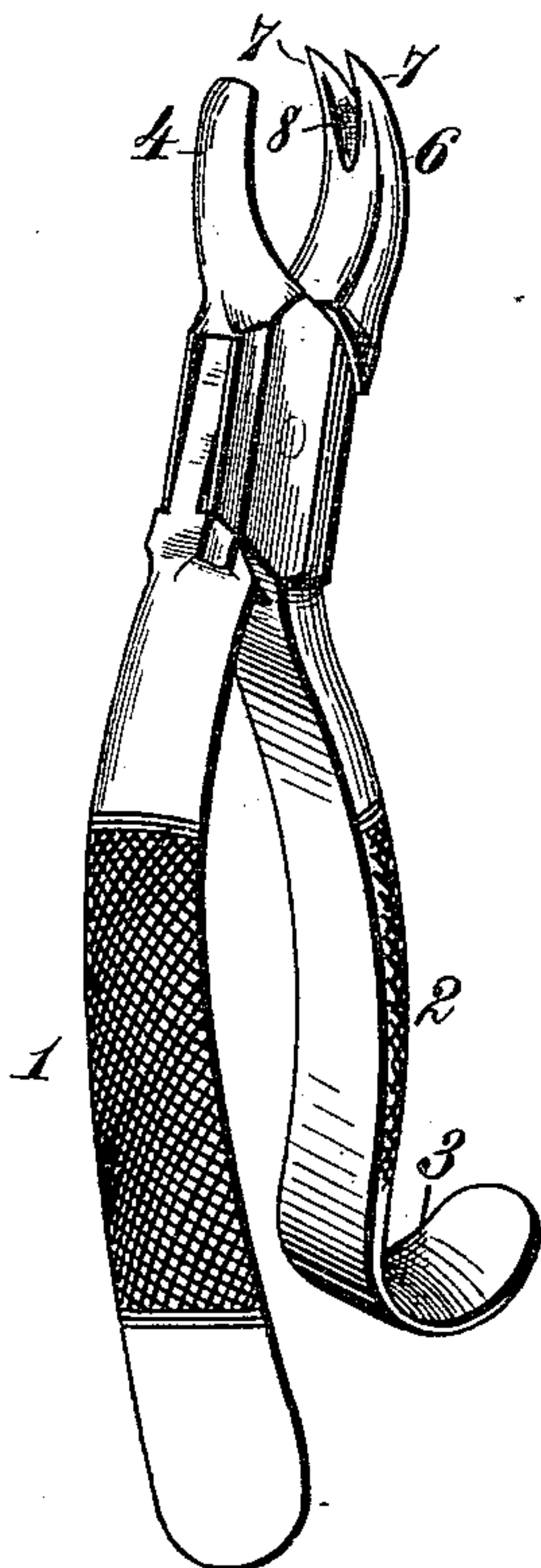


Fig. 2.

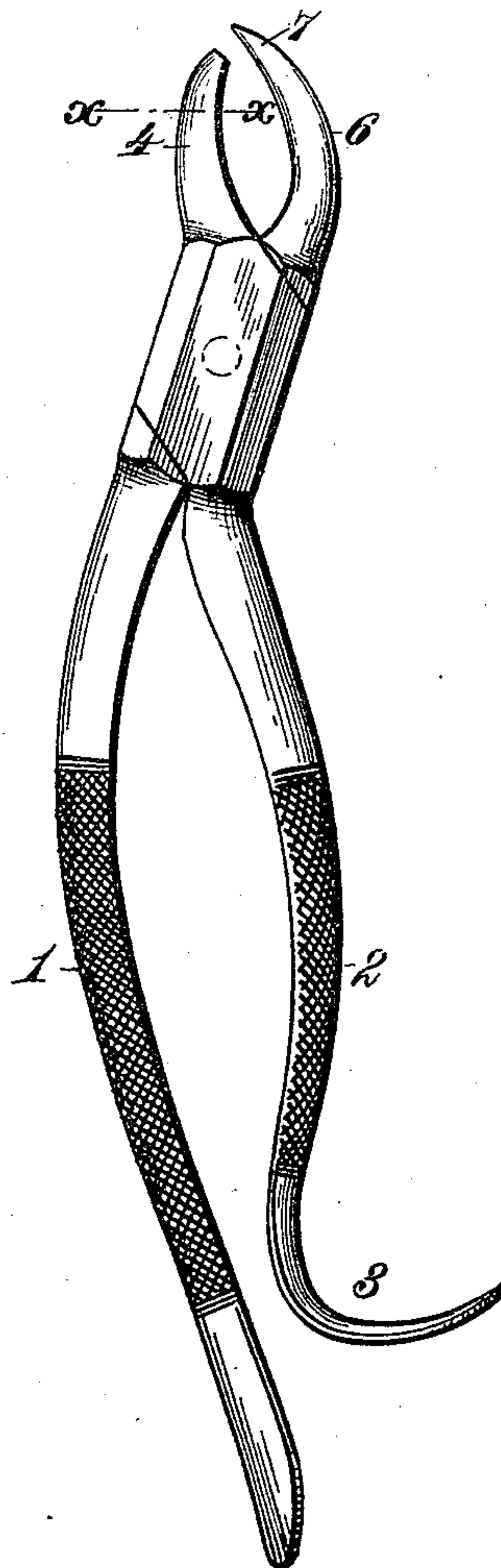
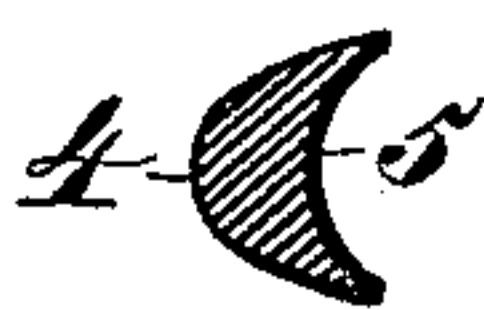


Fig. 3.



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UNITED STATES PATENT OFFICE.

BENJAMIN E. BURGER, OF MERRILL, WISCONSIN.

DENTAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 436,210, dated September 9, 1890.

Application filed July 1, 1890. Serial No. 357,419. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN E. BURGER, a citizen of the United States, residing at Merrill, in the county of Lincoln and State of Wisconsin, have invented new and useful Improvements in Dental Forceps, of which the following is a specification.

This invention has for its object to provide a new and improved dental forceps especially constructed as regards its beaks for extracting such teeth as incisors, cuspids, and bicuspids, which require rotary motion to break up their attachments.

To such end the convention consists in a dental forceps having on one handle a curved hollow-ground beak, which is crescent-shaped, or approximately so, in cross-section, and on the other handle a curved bifurcated swallow-tail beak, with the bifurcations hollowed out at their adjacent edges and projecting beyond or past the extremity of the hollow-ground beak.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the improved forceps, showing the beaks partially opened. Fig. 2 is a side elevation with the beaks closed to clearly exhibit the extension of the bifurcated or swallow-tail beak past the extremity of the hollow-ground beak. Fig. 3 is a detail sectional view of the hollow-ground beak taken on the line *x x*, Fig. 2.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numerals 1 and 2 indicate the gripping-handles, pivoted together in any ordinary or desired manner, and one having preferably a hand-rest 3. The beak 4 on the handle 1 is curved and hollow ground, as at 5, to give it an approximately crescent shape in cross section, and the beak 6 on the jaw 2 is also curved and bifurcated to give it a swallow-tail form. The bifurcations 7 diverge outwardly and are ground or hollowed out or beveled, as at 8, on the adjacent edges, and these diverging bifurcations extend beyond or past the extrem-

ity of the hollow-ground beak when the forceps is closed, as clearly shown in Fig. 2. The hollow-ground or crescent form of the curved beak 4 adapts it to the labial surface of the incisor, cuspid, or bicuspid to be extracted, and the pointed bifurcations embrace the tooth, all in such manner that when a tooth is gripped and the instrument is rotated it is impossible for the beaks to slip round on the tooth. By the specific construction described and shown the forceps is particularly adapted for axially rotating a tooth—such as an incisor, cuspid, or bicuspid—and for breaking up or severing its attachment without liability of the instrument slipping.

For correct scientific extraction of teeth—such as incisors, cuspids, or bicuspids—where axial rotation of the tooth is required, the swallow-tail beak should be curved in the segment of a circle of greater radius than the curve of the hollow-ground beak, and the latter must be hollowed out, as shown, to be of crescent shape, or approximately so, to operate in combination or conjointly with the swallow-tail or bifurcated beak to effectually avoid slipping when the pressure is exerted to axially rotate the tooth. The bifurcations must also diverge and be of such length as to lie along their length upon the tooth, for which purpose the hollow or beveled adjacent edges of the bifurcations are important.

Having thus described my invention, what I claim is—

A dental forceps having one handle provided with the segmental hollow-ground beak approximately crescent-shaped in cross-section, and the other handle provided with a segmental swallow-tail beak having the bifurcations diverging, hollowed, or beveled on their adjacent edges and projecting beyond or past the hollow-ground beak, substantially as described and shown.

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

BENJAMIN E. BURGER.

Witnesses:

GEORGE CURTIS, Jr.,
W. T. CORWITH.