

(No Model.)

C. E. BLAKE, Sr.
DENTAL FORCEPS.

No. 478,217.

Patented July 5, 1892.

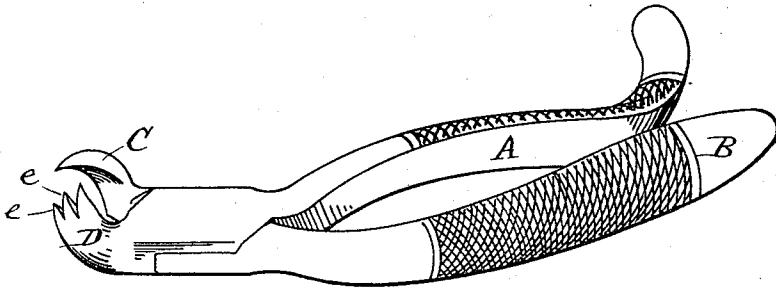


Fig. 1.

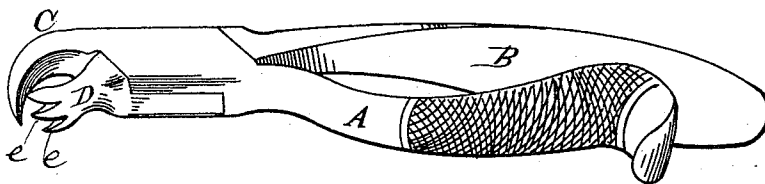


Fig. 2.



Fig. 3.

Witnesses.

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DENTAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 478,217, dated July 5, 1892.

Application filed October 22, 1891. Serial No. 409,539. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BLAKE, Sr., a citizen of the United States, residing at the city and county of San Francisco, and State of California, have invented certain new and useful Improvements in Dental Extracting-Forceps; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to a novel construction and arrangement of jaws for a dental extracting-forceps; and it consists in combining one eagle-beak jaw, similar to what is known as the "cow's-horn jaw," with a three-pointed (tricuspidate) jaw in such a manner that the eagle-beak jaw will pass down between the roots of the tooth on one side, while the tricuspidate jaw seats itself against the opposite side of the tooth and gives a firm and rigid grip for unseating and removing the tooth.

Referring to the accompanying drawings, Figure 1 represents a pair of forceps with the jaws turned upward. Fig. 2 represents the same with the jaws turned downward, and Fig. 3 represents the jaws grasping a tooth.

The handles A B are similar to the handles of an ordinary dental forceps, and they may be made of any suitable curvature or bend to suit the grip of the hand.

The jaw C is formed like an eagle's beak, and in this respect is similar to the cow's-horn beak, well known to dentists, while the opposite jaw D is made broad and furnished with two or more prongs *ee*. In the present instance I have shown three prongs (tricuspidate.) The beak-point C projects considerably in advance of the tricuspidate, so that when the tricuspidate is seated close down upon the alveolars on one side of the tooth the opposite or eagle-beak will pass down below the alveolars and enter between the roots of the tooth, thus giving a firm and rigid grip upon the tooth and at the same time lifting the tooth by the upward wedging action of the eagle-beak when the handles of the instrument are pressed together.

The jaw D can be made without the pointed prongs; but it must be broad and have a smooth polished slightly-concaved inner face, so as to

fit the convexity of the body of the tooth on one side, and it is made smooth and polished on its inner face, so that it will slip down easily when pressure is applied through the handles and seat itself on the tooth. The point of the eagle-beak C should also be made flat on the under side or triangular, so as to form sharp cutting-edges, which facilitate its easy and painless passage between the tooth and process.

This instrument is chiefly designed for the prompt and safe removal of lower molars when they are badly decayed on the buccal or lingual side below the gums. In removing this class of teeth with the ordinary forceps it often happens that the crown of the tooth is crushed and broken off, because the decayed character of the crown of the tooth will not stand the pressure required to grip it while it is being removed; but in applying my improved implement for this purpose the eagle-beak jaw will pass over and below this cavity or decayed part and engage between the roots of the tooth, while the flat or tricuspidate jaw will grip the opposite side and form a fulcrum that will permit the desired amount of pressure being applied without danger of crushing the crown. When the tooth is thus gripped, by giving the instrument a turning or loosening movement, the tendency in the majority of cases is to slip out the entire tooth at once. This will always be the case when there is sufficient strength of enamel or bone structure to resist the pressure of the instrument; but if the tooth be frail and weak the pressure of the eagle-beak jaw may split and loosen the roots, in which case the separate parts can easily be removed with the ordinary dental forceps. This construction is superior to the ordinary cow's-horn forceps, in which both beaks are made in the form of a cow's horn, because it provides a fulcrum or solid grip that prevents the instrument from wobbling, whereas the old-style instrument merely brought the points of the opposite beaks together between the roots on opposite sides and left the instrument unsupported except by the pressure at the points of the beaks. In this case the instrument is unsteady and wobbly and it required direct upward force to unseat the tooth.

My improved instruments are made rights

and lefts to accommodate the various locations of the teeth to be removed.

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

A dental forceps having one of its jaws made shorter than the other and formed into

two or more points or prongs, while its opposite jaw is a tapering, curved, and pointed beak, substantially as described.

CHARLES E. BLAKE, Sr.

In presence of—

WM. W. FITZ MAURICE,
IRA V. HITCHCOCK.