

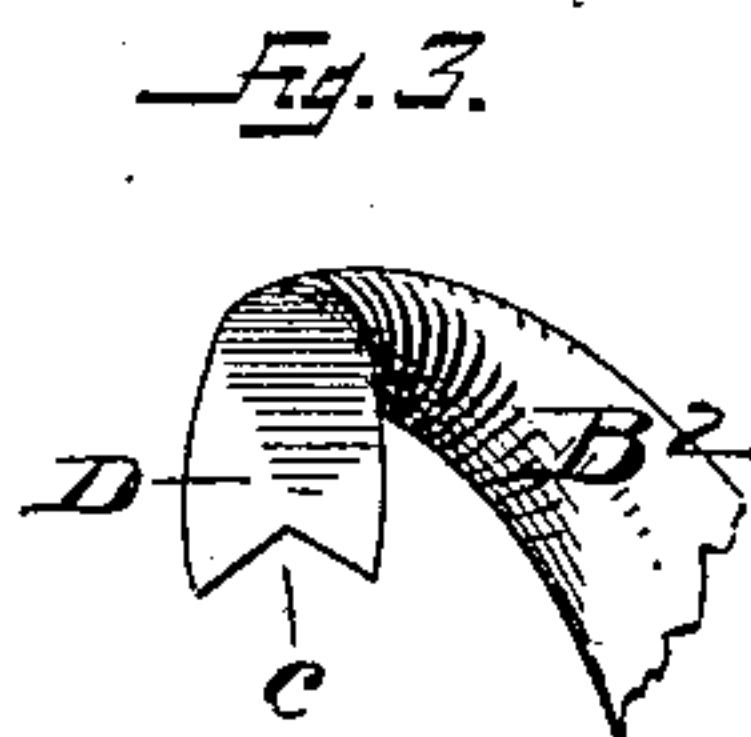
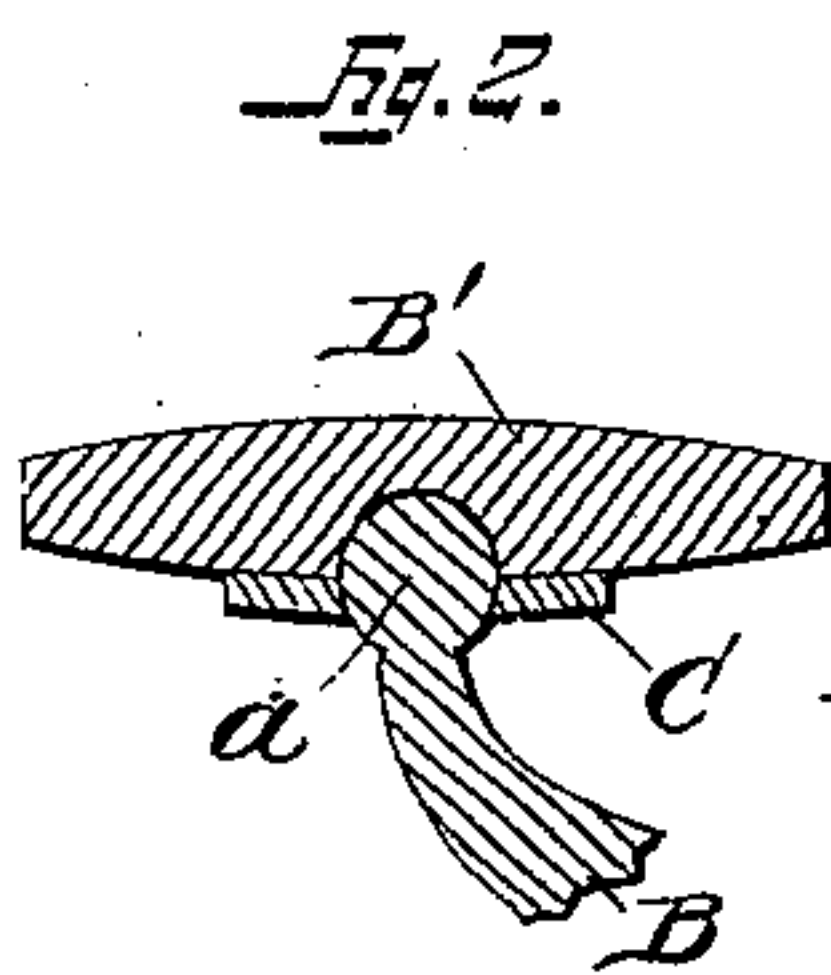
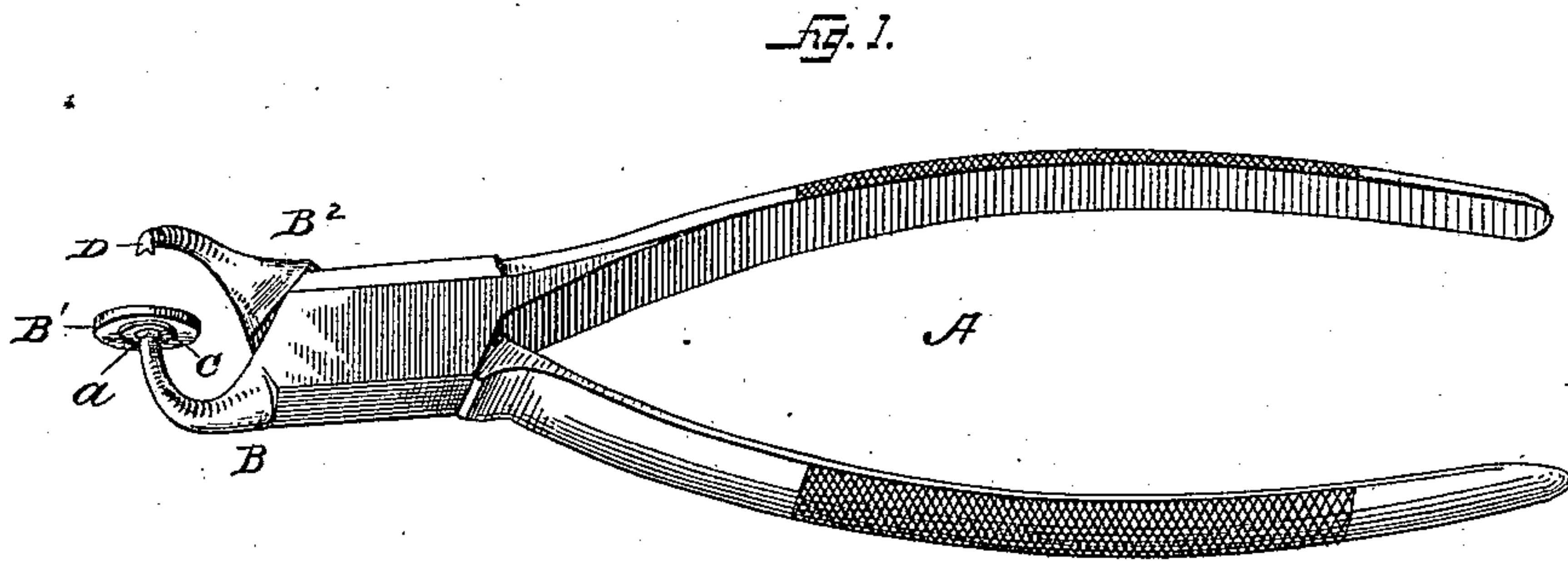
(No Model.)

F. G. HUGHES.

DENTAL FORCEPS.

No. 354,863.

Patented Dec. 21, 1886.



WITNESSES

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# UNITED STATES PATENT OFFICE.

FRANK G. HUGHES, OF GALT, ONTARIO, CANADA, ASSIGNOR TO JAMES W. WARD, OF SAME PLACE.

## DENTAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 354,863, dated December 21, 1886.

Application filed December 10, 1885. Renewed November 9, 1886. Serial No. 218,435. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK G. HUGHES, a subject of the Queen of Great Britain, residing at Galt, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Forceps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to forceps for dentists' use, and adapted more especially for extracting certain kinds of roots of teeth.

The object of the invention is to provide forceps which shall be simple in their construction, thoroughly effective in their operation, comparatively cheap to manufacture, and strong and durable.

The invention consists in the improved construction and combinations of parts herein-after fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a pair of forceps embodying my invention. Fig. 2 is a transverse section through one of the beams, and showing the manner of swiveling the pad; and Fig. 3 is a detail view of the beak on the other end of the forceps.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents the forceps, which are composed of two parts or sections pivotally connected together, as shown. The lower end of one of the parts B is turned inwardly at right angles to its body, and is formed with a spherical or ball-shaped head, *a*.

B' represents a metallic disk, which is con-

vexo-convex, which is formed with an opening to receive the ball or spherical head of the part B. A washer, C, may be fitted on the part B and secured to the inner face of the disk, to hold the same upon the ball-shaped head and prevent its detachment therefrom.

On the other part or section, B<sup>2</sup>, of the forceps is provided a beak, D, which has its end projecting inwardly and at nearly right angles to the said part B<sup>2</sup>, said end of the beak being hollow-ground, as shown at *e*, to permit it to fit upon the root of a tooth.

A pair of forceps constructed as before described are effective and positive in their operation, simple in their construction, and comparatively cheap to manufacture, and by providing the swiveled disk a free movement of the forceps is allowed.

Having thus described my invention, I claim—

1. The combination, with a pair of forceps, of a beak projecting inwardly from one arm thereof and hollow-ground, the other arm having an inturned end having a ball-shaped head, a convexo-convex disk having the head, and a washer, C, for the purpose set forth.

2. In forceps, the combination, with the part B, turned inwardly and formed with a ball-shaped head, of the convexo-convex disk having a socket to receive the head, and a washer, C, as and for the purpose set forth.

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

FRANK G. HUGHES.

Witnesses:

PETER KEEFER,  
ROBERT D. KAY.