

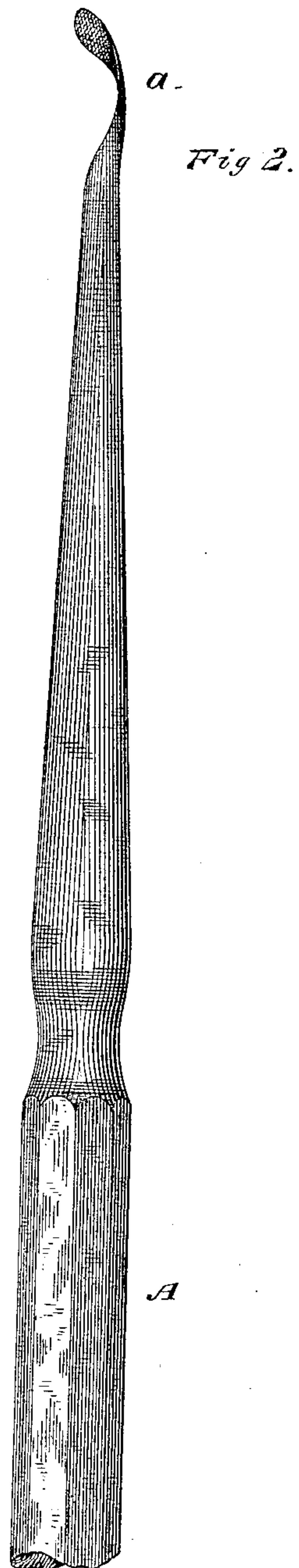
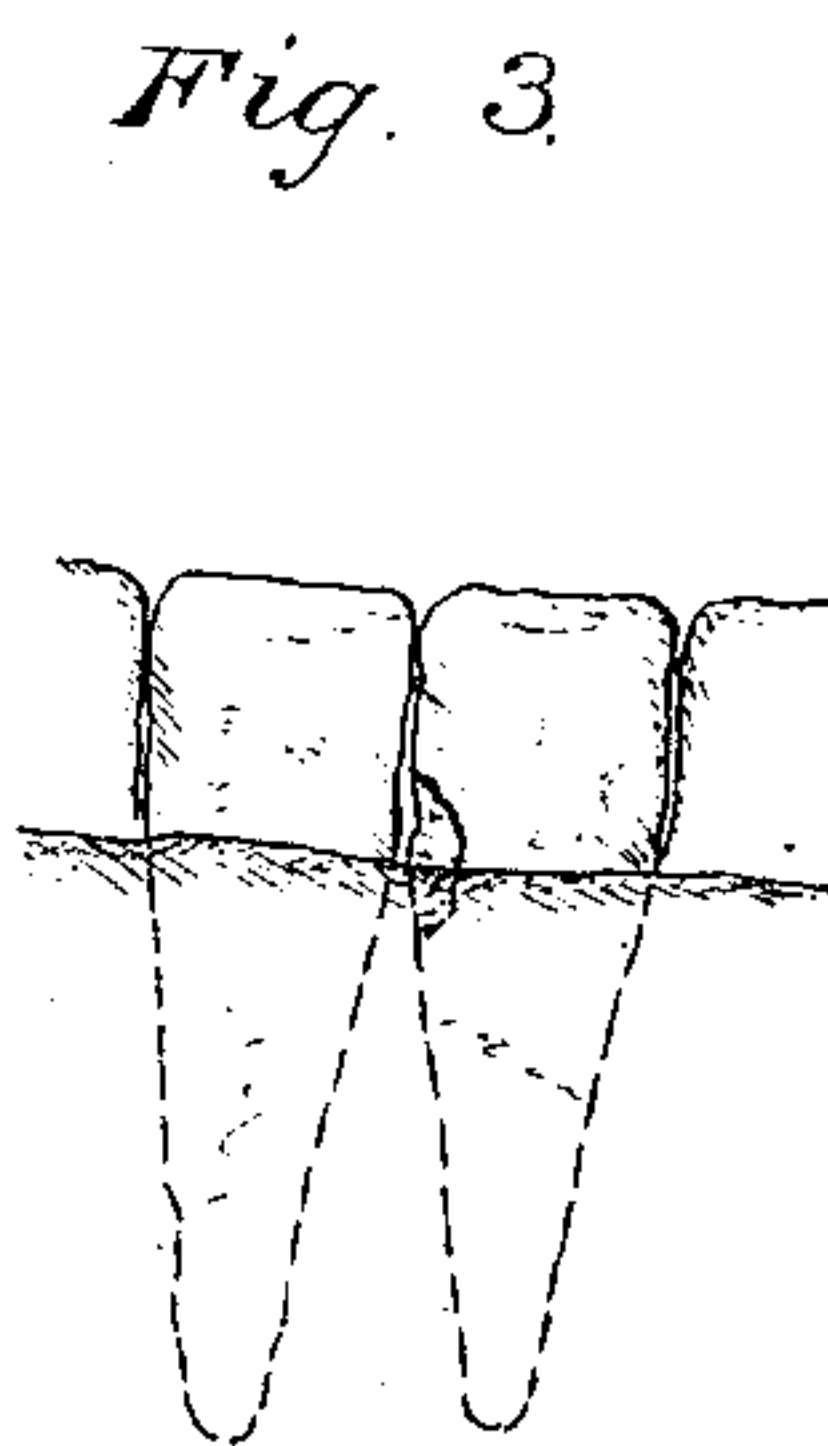
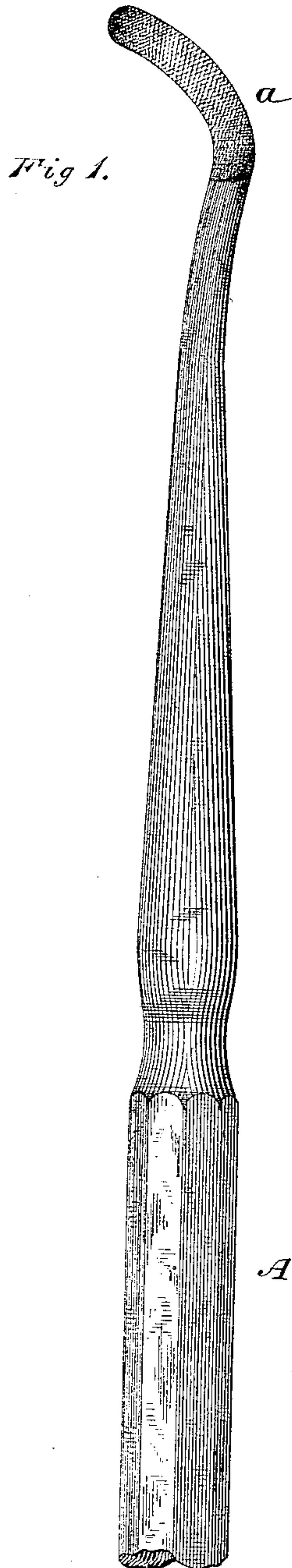
(No Model.)

J. D. CROSTHWAITE.

FILE.

No. 273,821.

Patented Mar. 13, 1883.



WITNESSES
Wm A. Smith
Harry King

INVENTOR,
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UNITED STATES PATENT OFFICE.

JAMES D. CROSTHWAITE, OF PHILADELPHIA, PA., ASSIGNOR TO THE S. S. WHITE DENTAL MANUFACTURING COMPANY, OF SAME PLACE.

FILE.

SPECIFICATION forming part of Letters Patent No. 273,821, dated March 13, 1883.

Application filed October 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. CROSTHWAITE, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Files, more especially useful for dental purposes, of which the following is a specification.

My invention relates to files, especially useful in contouring approximal fillings of natural teeth. They will be found very useful in trimming this class of fillings to the cervical walls when underneath the gum, beyond the reach of the polishing tape or strip usually employed for finishing, trimming, or contouring the fillings.

The invention consists in providing a dental instrument with a thin curved end, the outer or convex surface of which is safe-sided or smooth, while the inner or concave surface is file-cut and constitutes the working-surface of the instrument.

In the accompanying drawings, Figure 1 is a view on an enlarged scale of the instrument, showing the inner or concave face of the curved and thin file-cut end. Fig. 2 is a similar view, showing more especially the edge and smooth or safe-sided convex back of the thin file-cut bent end, the extreme end of the file-cut inner surface of the tool being also shown; and Fig. 3 is a representation of one of the approximal fillings of a tooth extending underneath the gum, for the contouring, trimming, or polishing of which my implements are especially designed.

The thin concavo-convex safe-sided file ends preferably constitute the working terminations of instruments having metal handles A, like the metal handles of the hand plugging-tools commonly used by dentists; but of course they may constitute the working ends of other forms of handles.

As before stated, the drawings are on a greatly-enlarged scale.

Right and left tools will of course be provided for the use of the dentist in practice.

The preferred method of constructing my improved dentists' files is as follows: The metallic shanks of suitable blanks are first made straight at their ends and comparatively thin, with one side of the thin end smooth or safe-sided, and preferably rounded slightly in cross-section. The opposite flat side of the thin end is then file-cut, in any preferred way, from the extreme end of the tool to a point where the thin portion joins the cylindrical part of the shank. The file-cut end of the tool is then bent into the curved or concavo-convex shape shown in Figs. 1 and 2, while the cylindrical shank is also preferably slightly bent a short distance above the file-cut end, as shown in said figures. The file-cut end of the tool is then tempered in the ordinary way of tempering the ends of dentists' tools, whereupon the instrument will be ready for use or for being polished or finished.

I claim as my invention—

1. The improved tool having its operating end bent or curved, the inner or concave face of said bent end file-cut and the outer or convex face safe-sided or smooth, substantially as described.

2. The improved tool having a thin convex operating end, bent laterally edgewise relatively to the shank of the tool, and said operating end on its concave or inner face being file-cut and on its opposite face safe-sided or smooth, substantially as described.

3. The improved method of constructing implements having a bent or curved file-cut operating-surface at their ends, hereinbefore set forth, which consists in file-cutting the end of a straight blank, bending said end to the shape desired, and tempering the tool.

In testimony whereof I have hereunto subscribed my name this 14th day of October, A. D. 1882.

JAMES D. CROSTHWAITE.

Witnesses:

JOHN URIAN,
ELI T. STARR.