

J. A. McClelland,

Dentists' Forceps.

N^o 17,107.

Patented Apr. 21, 1857.

Fig. 1.

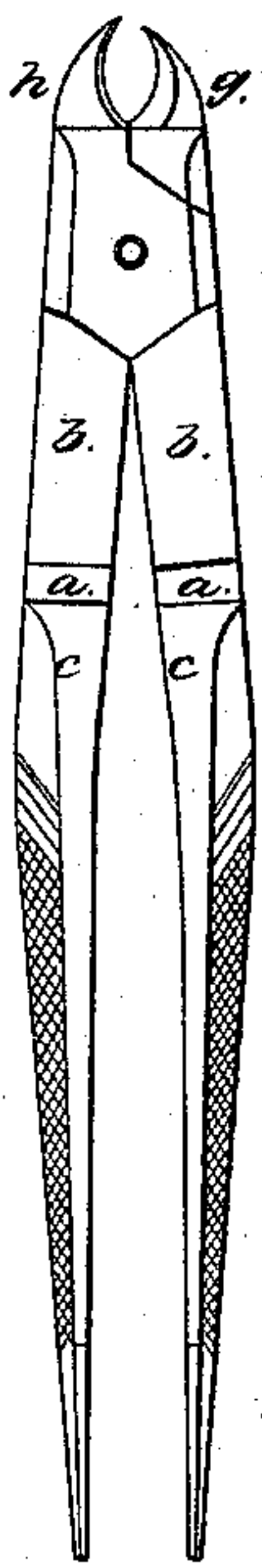


Fig. 2.

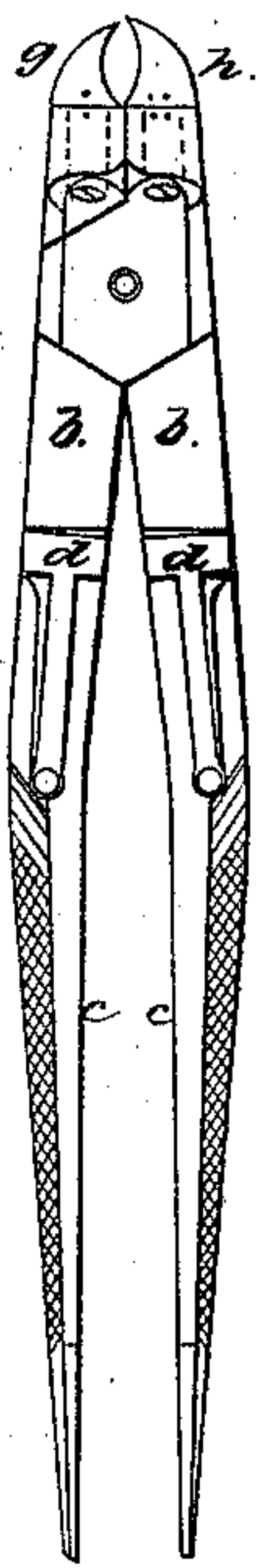


Fig. 3.

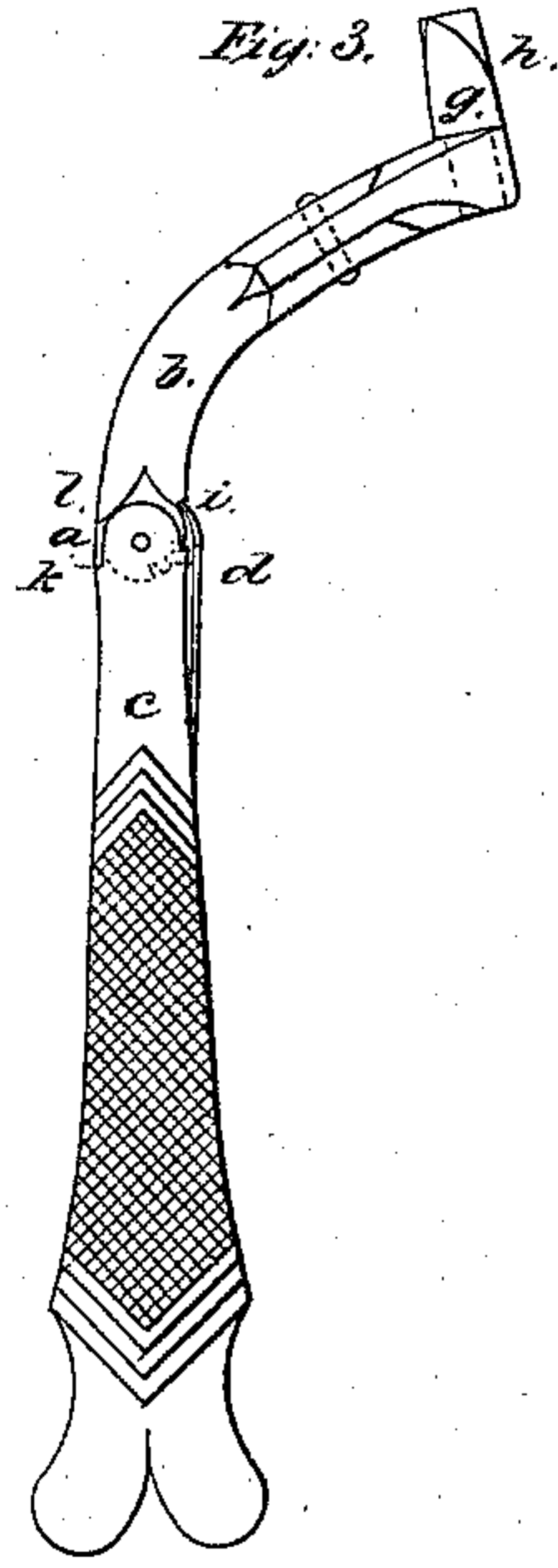


Fig. 4.

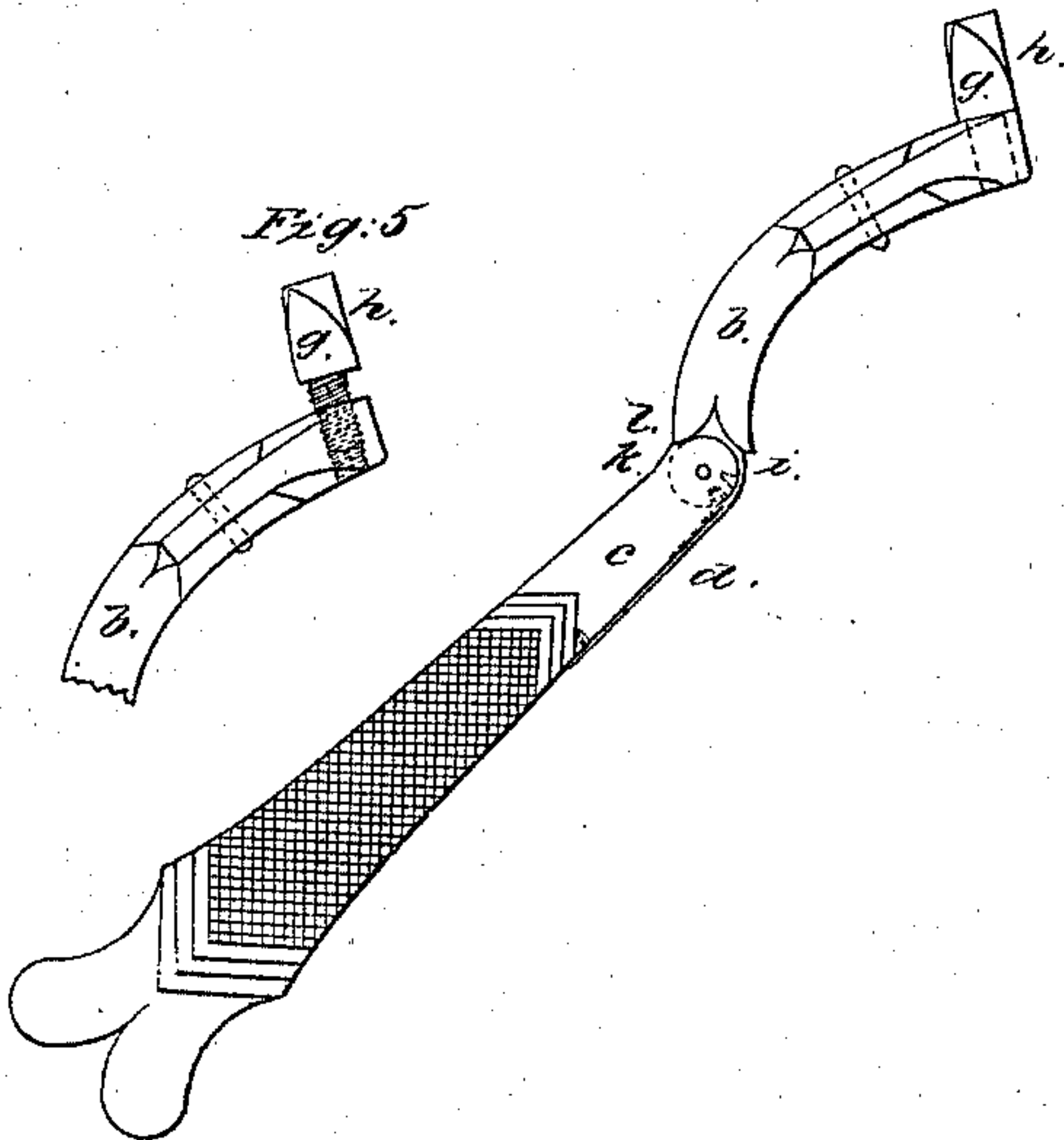
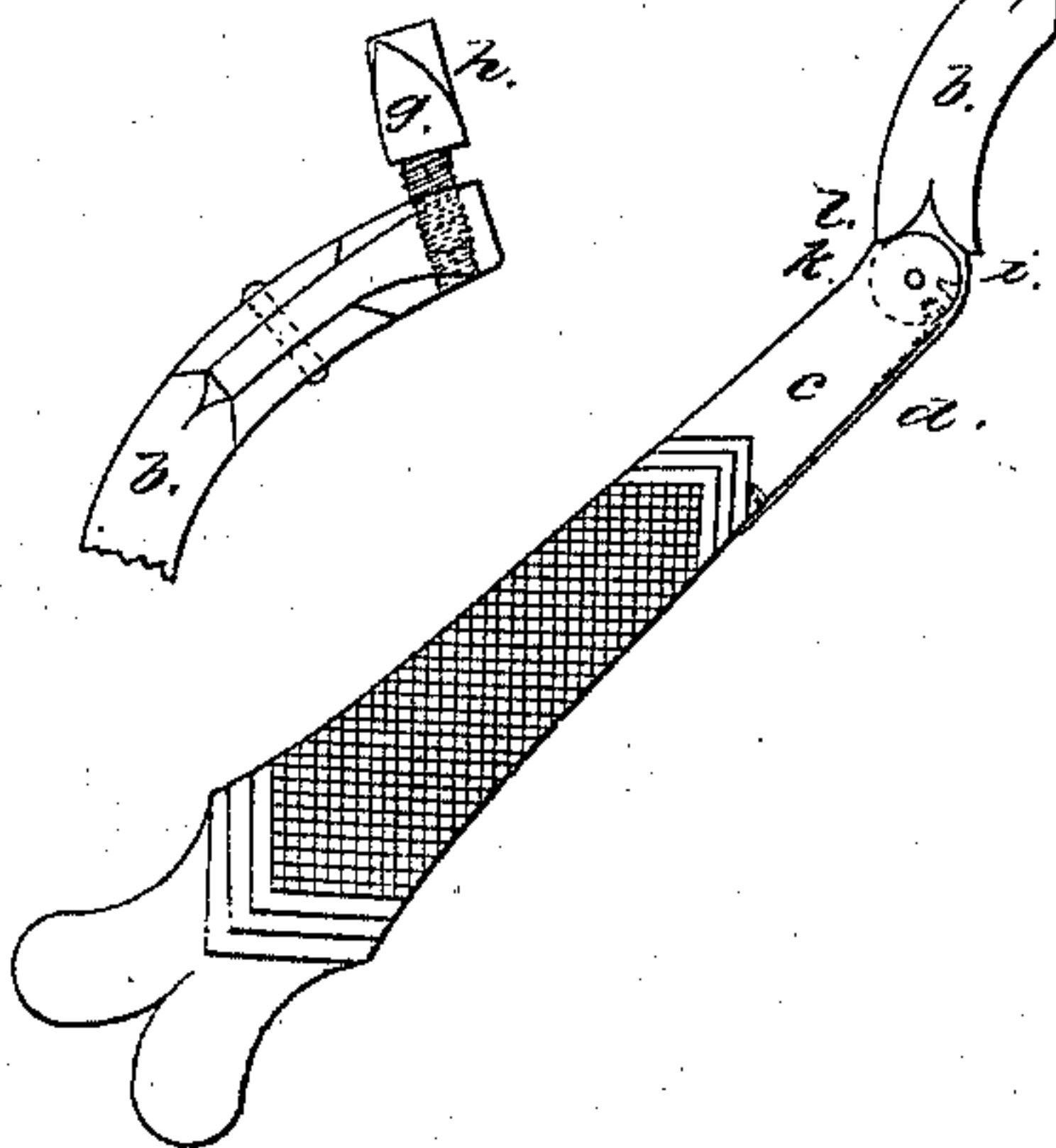


Fig. 5.



UNITED STATES PATENT OFFICE.

J. A. McCLELLAND, OF LOUISVILLE, KENTUCKY.

DENTAL FORCEPS.

Specification of Letters Patent No. 17,107, dated April 21, 1857.

To all whom it may concern:

Be it known that I, J. A. McCLELLAND, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Dental Instrument, which may be properly termed a "Multiform Forceps;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1 and 2 are front and rear views of said instrument; and Figs. 3 and 4 are side views of the same with the jointed handles of the instrument secured in the proper positions for extracting upper and lower teeth; Fig. 5 represents a portion of the head of the multiform forceps with the beaks *g*, *h*, somewhat elongated; and the remaining drawings represent sets of beaks of different shapes and sizes whose screw shanks are of such a size as to adapt them to the screw apertures in the head-pieces *b*, *b*, of the said instrument.

Similar letters indicate like parts in all the drawings.

The first feature of my multiform forceps which distinguishes it from all other dental instruments, is its jointed handles arranged in such a manner that the shape of the instrument can be so changed as to adapt it to the extracting of upper and lower teeth. This is accomplished in the following manner viz: Spring pawls *d*, *d*, of the shape represented in the drawings, are combined with the handles *c*, *c*, of the instrument, in such a manner that when the instrument is thrown into the position shown by Fig. 4, the extremities of said pawls will bear against the shoulders *j*, on the head pieces *b*, *b*, of the instrument, and the pins which project inward from said pawls, will enter sockets in the joint-portions of said head-pieces, while at the same time the shoulders *l*, *l*, on the opposite sides of said head-pieces, will be brought into close contact with each other, and thereby the said handles of the instrument will be securely retained in the said position, represented in Fig. 4.

To change the shape of the instrument from that represented by Fig. 4, to that represented by Fig. 3, the pawls *d*, *d*, must be drawn backward a sufficient distance to

detach their pins from the sockets in the head-pieces of the instrument, when the said change of shape can be readily effected; and then, when the said pawls are allowed to spring forward again, their extremities will bear against the shoulders *j*, *j*, of the head-pieces *b*, *b*, and the pins which project from the inner surfaces of said pawls, will be driven into other suitable sockets in the joint-portions of the said head-pieces; then to make the said joints perfectly secure, dove-tailed wedges *a*, *a*, are driven in between the inclined shoulders *l*, *l*, on the opposite side of the instrument, which act in conjunction with the said pawls *d*, *d*, to securely retain the handles and head-pieces of the instrument in the aforesaid position, represented in Fig. 3, of the accompanying drawings.

Screw apertures are formed in the head-pieces *b*, *b*, of my improved multiform forceps, for the reception of the screw-shanks of the beaks to be used in the instrument. The screw-shanks of the said beaks should be of sufficient size and strength to enable either beak to be elongated by turning it around a sufficient number of times within the screw-aperture which receives the shank thereof. The advantages resulting from this feature, viz., being able to elongate at pleasure either beak of the instrument, and especially for adapting it to the drawing of teeth which are very much decayed, will be readily understood and appreciated by all dentists.

The head-pieces *b*, *b*, of my improved dental-forceps may be jointed to each other in the usual manner of forming such joints.

Having thus fully described my dentist's multiform forceps, what I claim therein as new and desire to secure by Letters Patent, is—

1. Connecting the handles (*b*) to the head-pieces (*c*) of the instrument by means of suitable joints and appendages arranged in such a manner that the shape of the instrument can be so changed as to adapt it to the drawing of upper or lower teeth, substantially as herein set forth.

I am aware that beaks of different sizes have been fitted to a dental forceps in such a manner that one beak can readily take the place of another, and therefore I do not claim this as my invention, but

What I do claim and desire to secure by Letters Patent, is—

2. Combining the beaks with a dental forceps in such a manner that their length can
5 be increased to any desirable extent, substantially in the manner herein set forth.

The above specification of my new and

improved dentist's multiform forceps, signed and witnessed this twentieth day of Feb. 1857.

J. A. McCLELLAND.

Witnesses:

GEO. B. FITTS,
D. McNAUGHTON.