

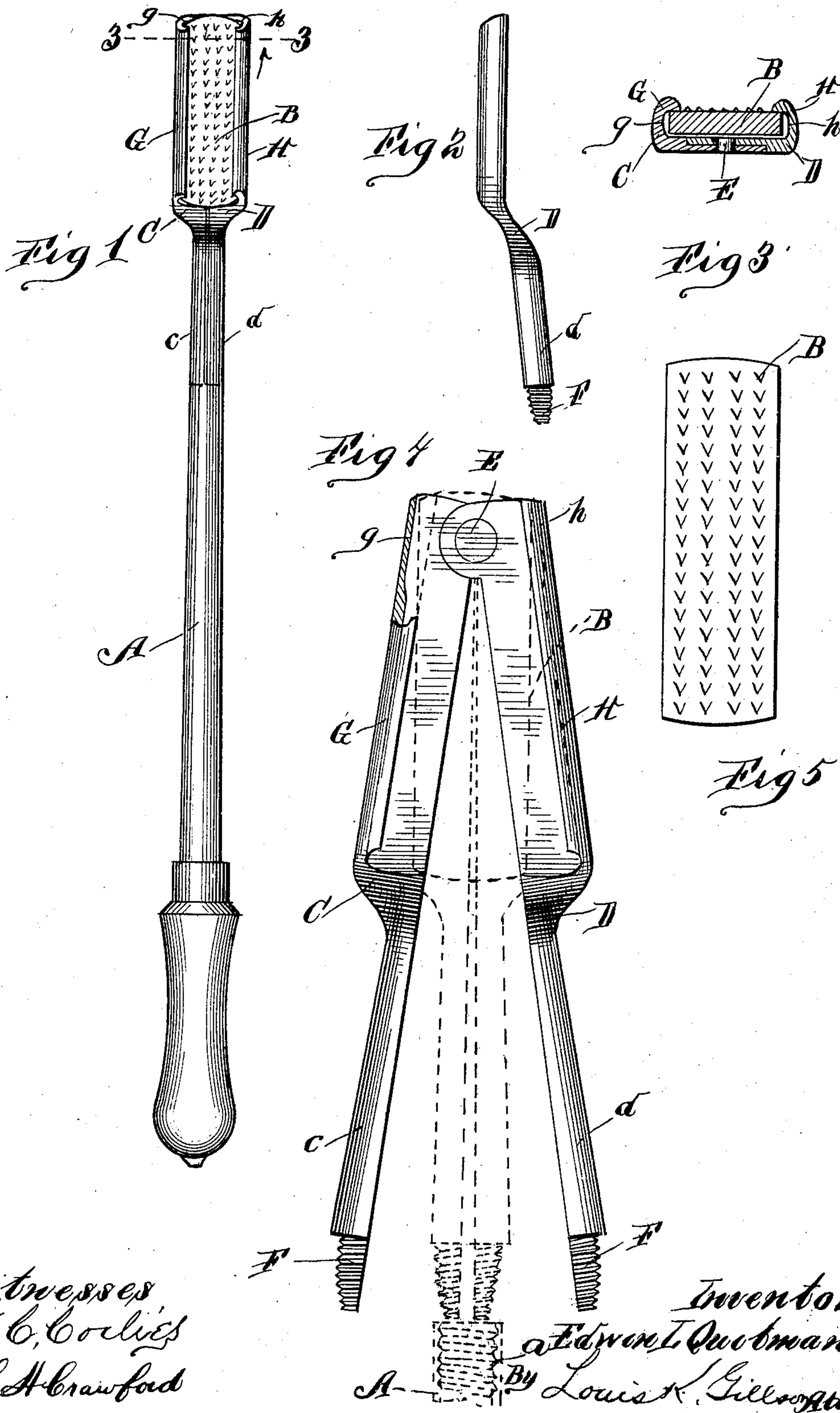
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Patented Sept. 17, 1901.

E. L. QUITMAN.
VETERINARY DENTAL FILE.

(Application filed Nov. 15, 1897. Renewed Dec. 11, 1899.)

(No Model.)



Witnesses
W. C. Coates
C. H. Crawford

Inventor
E. L. Quitman
By Louis K. Gillingham

UNITED STATES PATENT OFFICE.

EDWIN L. QUITMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
SIMON H. LEVY, OF SAME PLACE.

VETERINARY DENTAL FILE.

SPECIFICATION forming part of Letters Patent No. 682,997, dated September 17, 1901.

Application filed November 15, 1897. Renewed December 11, 1899. Serial No. 740,015. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. QUITMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Veterinary Dental Files; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide for the secure and yet removable holding of a reversible file-blade for veterinary dental uses, so that the user can easily remove the blade from the holder for the purpose of cleansing, &c.

The invention consists in the various parts and arrangement of parts, as hereinafter fully set forth and as shown in the accompanying drawings, in which—

Figure 1 is a longitudinal view of the holder ready for use. Fig. 2 is a side elevation of the clamping portion of the holder. Fig. 3 is a sectional view on the line 3 3 of Fig. 1. Fig. 4 is a longitudinal view of the clamping portion of the holder open, its position when closed and the manner of applying it to the handle-bar being indicated in dotted lines; and Fig. 5 is a longitudinal face view of the file-blade.

A handle A is used, which may be of any desired form. Usually it is a simple straight bar. This handle-bar has a screw-threaded socketed end, as shown at *a*.

The file-blade B is of the usual form employed in tools of this character, being substantially oblong rectangular, its ends, however, being slightly rounded, and it is roughened on both of its flat faces, so that it is reversible.

The clamping portion of the holder comprises a pair of clamping-jaws C D, pivoted together near their outer ends, as shown at E, their shanks *c d* being half-round, so that their flat faces meet when the jaws are closed, and the ends of these shanks being screw-threaded, as shown at F, to adapt them for

engagement with the socket *a*. The outer edges of the body portions of the jaws C D are overturned, as shown at G H, to provide grooves for the edges of the file-blade B, into which it fits when the edges are brought together. The outer ends of the grooves formed by the overturned edges G H are slightly deeper than the inner portions of these grooves, as indicated at *g h*, for the reason that the jaws project a short distance beyond the pivotal point E, and without this provision the jaws would bind upon the outer end of the blade as they are opened.

File-blades used in instruments of this kind are supposed to be of standard width; but in practice there is some variation in sizes. The shank portions *c d* of the clamping-jaws are sufficiently elastic so that their screw-threaded ends may be brought together even though the file-blade B is slightly greater in width than the instrument is intended to accommodate. I taper the screw-threaded ends F F of the clamping-jaws, as shown, so that in case they do not close tightly together, they may nevertheless enter the socket *a*, and by screwing them into the handle-bar they will be forced together.

Instruments of this kind become wet and foul with use and need to be separated for the purpose of cleansing and in order to prevent the parts from becoming rusty. The most common form of veterinary dental file now in use is similar in general contour to the instrument shown in this application; but the blade is held in place by means of set-screws entering through the back of the holder and bearing upon the inner face of the file-blade. This construction is open to the objections that the blade cannot be removed without the employment of a tool for that purpose, and consequently is not apt to be disturbed even for the purpose of cleansing. The moisture finding its way behind the blade causes the screws to rust, so that it becomes exceedingly difficult to remove them, and as a result it is usual that only one face of the file-blade is ever used. Another objection is found in the fact that the screws are apt to project slightly beyond the back of the holder. Particularly is this true should

an effort be made to introduce a file-blade which is, as is often the case, somewhat thicker than these blades are usually made. As a result the heads of the screws are apt to lacerate the animal's mouth. In the construction shown the implement is so easily separated that the user will ordinarily detach its head for the purpose of storage and in doing so will separate the parts as they need to be separated for the purpose of cleansing. The blade is so easily removed that its two faces may be worn away uniformly, and this is apt to result accidentally, though the user may have no such intention, for the reason that he is quite as liable to reverse it after cleansing as to insert it with the same face exposed as was last used. He will also find it quite convenient to be able to reverse the blade at once should the exposed face prove to be too dull for the work to which it is being applied.

While I have shown in the drawings the most common form of handle, it will be seen that the invention is equally applicable to a straight handle with the head slightly offset by means of a curved shank, or the handle-bar may be of any other desired form, the only essential being that the clamping portion should have a shank capable of being longitudinally split.

I claim as my invention—

1. In a veterinary dental instrument the combination with a file-blade and a handle-piece, of a pair of clamping-jaws pivoted to-

gether at their outer ends and having over-turned longitudinal flanges at their outer edges for clamping the blade, the handle-piece being adapted to receive and hold the free ends of the jaws.

2. In a veterinary dental instrument the combination with a file-blade and a handle-piece having a screw-threaded socket in its end, of a pair of clamping-jaws pivotally secured together at their outer ends and having longitudinal clamping-flanges at their outer edges, the stems of such jaws being half-round and adapted to have their flat sides meet, and being screw-threaded at their ends to take into the threads of the handle-socket.

3. In a veterinary dental instrument the combination with a file-blade and a handle-piece having a screw-threaded socket in its end, of a pair of clamping-jaws pivotally secured together at their outer ends and having longitudinal clamping-flanges at their outer edges, the stems of such jaws being half-round and adapted to have their flat sides meet, and being screw-threaded at their ends to take into the threads of the handle-socket, the extreme ends of the jaw-shanks being tapered as to their rounded portion, substantially as and for the purpose set forth.

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

EDWIN L. QUITMAN.

Witnesses:

LOUIS K. GILLSON,
HESTER B. BAIRD.