

(No Model.)

S. B. DUNN.
VETERINARY FILE HOLDER.

No. 579,966.

Patented Apr. 6, 1897.

Fig. 1.

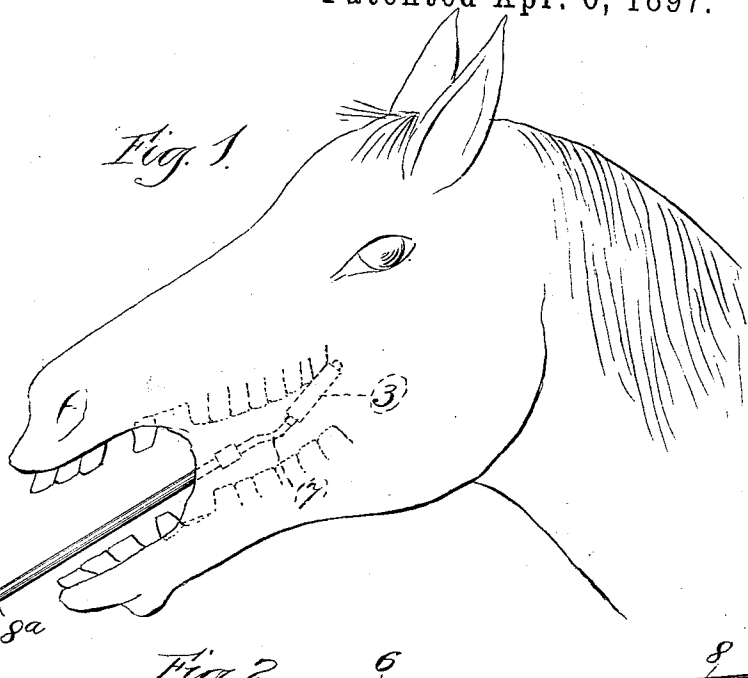


Fig. 7.

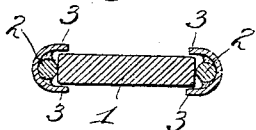


Fig. 2.



Fig. 3.

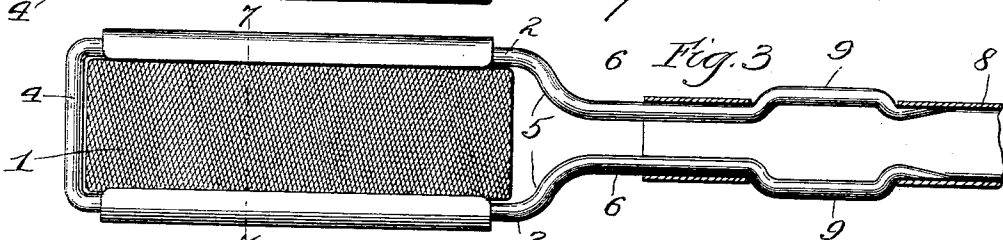


Fig. 4.

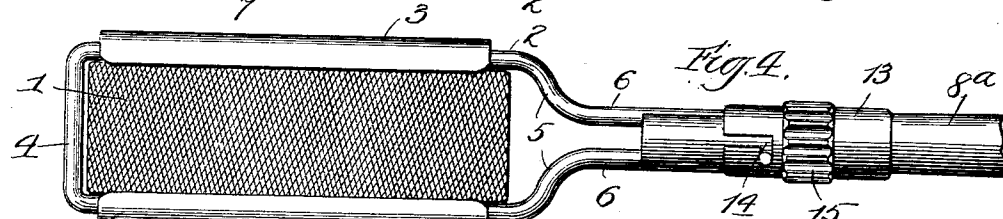
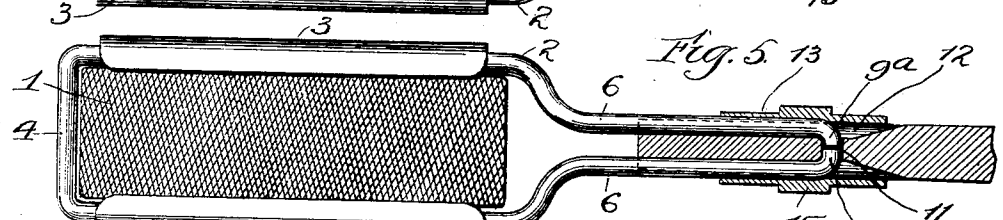
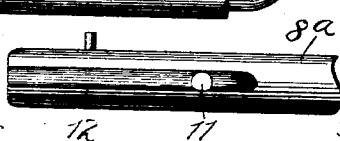


Fig. 5.



Witnesses:
Wm. A. Fleming
Edna B. Johnson



Inventor
Sola B. Dunn
by Elliott & Hopkins
Atty.

UNITED STATES PATENT OFFICE.

SOLA B. DUNN, OF CHICAGO, ILLINOIS.

VETERINARY FILE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 579,966, dated April 6, 1897.

Application filed September 7, 1895. Serial No. 561,851. (No model.)

To all whom it may concern:

Be it known that I, SOLA B. DUNN, 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 File-Float Holders, of which the following is a full, clear, and exact specification.

My invention relates to holders for holding short files or rasps while in use, and it has more especial reference to devices for holding the files or rasps employed in veterinary dentistry.

One of the objects of my invention is to so form and construct the holder that it will conform to and enable the file to operate on the crowns of the oppositely-curved lines of molars in the upper and lower jaws and at the same time to be capable of reaching and dressing off the extreme back edges of the last molars, especially in the upper jaw, without bringing the handle of the holder into contact with the incisors or necessitating that the animal's mouth be forced open to an abnormal extent.

Another object of my invention is to simplify and cheapen the construction of the clamp which grasps the file; and a further object is to improve the means of connection between the clamp and the handle, whereby the act of attaching the two together will also cause the clamp to grasp the file-float.

With these ends in view my invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which the said objects and certain other objects hereinafter described are attained, all as fully explained with reference to the accompanying drawings and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a view showing the method of operating upon horses' teeth with my improved apparatus. Fig. 2 is an enlarged side elevation of my improved device, the handle being broken away. Fig. 3 is a face view thereof, partly in longitudinal section. Fig. 4 is a face view showing a modified form of means for attaching the file-clamp to the handle. Fig. 5 is a similar view, partly in longitudinal section. Fig. 6 is a side elevation of the end of the handle, the clamp and other parts being removed; and Fig. 7 is

a transverse sectional view taken on the line 7 7, Fig. 3.

Like signs of reference indicate like parts throughout the several views.

In constructing the clamp which engages with and embraces the file-float 1 I prefer to employ a single strip or bar of wire or other suitable material, which is bent around so as to embrace the file, as clearly shown in Figs. 3, 4, and 5. To each of the side members 2 of this strip I secure by solder or other suitable means two lips or flanges 3, which form salient edges overlapping the edges of the file 1, as shown in Fig. 7, and thus hold the same against being pushed out of the clamp at an angle to the face of the file, while the latter is held against endwise movement in one direction by the end portion 4 of the clamp and in the other direction by two shoulders 5, which are formed at the inner end of the file by bending the branches 6 of the wire strip inward or toward each other.

The end portion 4 at least of the wire strip is of less or not greater thickness than the file, so as to leave the end of the file unobstructed on both sides and thus enable it to be rubbed against the teeth without obstruction. It will also be seen that by holding the rear end of the file by means of the shoulders 5, which are also of less or not greater thickness than the file, this end of the file is also left unobstructed, whereby a free passage from end to end of the file on both sides is provided, thus enabling either side of the file to be used on the teeth without removing it from the holder.

In order that one side of the file may be employed upon the upper row of teeth, which is downcurved or convexed, while the other side may be used upon the lower row of teeth, which is concaved, I provide the branches 6 of the clamp with a bend or curve 7, as shown more clearly in Fig. 2, whereby the upper side of the device when in the position shown in Fig. 1 will approximately conform to the curve of the upper row of teeth, while the lower side will conform to the lower row, as will be readily understood by reference to Fig. 1.

Another advantage in providing the device with this bend or curve 7 is that the file may be passed up behind the last molar in either the upper or lower jaw for dressing off the

rough edges of that tooth, as indicated in Fig. 1, without the necessity of forcing the animal's mouth open to an abnormal extent or of bringing the handle of the device down into engagement with the incisors.

The wire strip or clamp which embraces the file is preferably composed of spring metal and so constructed as to have a normal tendency to spring open and permit the file to dropout. Its branches 6 are brought together so as to hold the side members 2 firmly against the file, and such branches are secured to the handle 8 by some suitable means, which I will now describe.

In the form shown in Figs. 2 and 3 the end of the handle is hollow and flattened to conform to the thickness of the two branches 6, and into this hollow end such branches are inserted. The branches 6 are provided near their inner extremities with outwardly-bent lugs 9, which when arriving at the proper distance within the handle engage, respectively, in recesses or openings 10 cut in opposite sides of the handle, as clearly shown in Fig. 3, thus securely holding the branches 6 from being withdrawn from the handle until the lugs 9 have been depressed, which may be readily done by the thumb and finger. In the form shown in Figs. 4, 5, and 6, however, the branches 6 are provided, preferably, at their extreme ends with inturned lugs or hooks 9^a, which engage in a perforation 11, formed in the end of the handle 8^a, which in this instance is solid and provided in its opposite sides with channels or grooves 12, in which the branches 6 are seated. The branches 6 in this instance are held in their proper places with their lugs 9^a in engagement with the perforation 11 by means of a sleeve 13, arranged upon the handle and adapted to be slipped over the ends of the branches, such sleeve being itself held in place by a bayonet-joint 14, and it being provided with a milled ring 15, whereby it may be rotated for releasing it from the pin of the joint and thus permitting it to be slipped upward on the handle for uncovering the branches 6 of the clamp.

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

1. In a file-float holder, the combination with the file, of a bar or strip surrounding the edges of said file and having the lips 3 secured thereto and overlapping the file, the said strip or bar being not greater in thickness than the file whereby the file is exposed for use on both sides from end to end, substantially as set forth.

2. In a file-float holder, the combination

with the file and a handle, of a single strip bent around said file and having its ends brought together to form shoulders at the end of the file and being detachably secured to said handle, and lips 3 secured to the side members of said strip and overlapping the edges of the file, substantially as set forth.

3. In a file-float holder, the combination with the file and a handle, of a single strip bent around said file and being of not greater thickness at the ends of the file than the said file, lips secured to said strip and overlapping the side edges only of the file, the said strip having its extremities bent toward each other at the end of the file and secured to said handle, substantially as set forth.

4. In a file-float holder, the combination with the file, of a clamp embracing said file and having branches or members 6 provided with inturned lugs arranged at an angle to the main portion of the branches 6, a handle having seats for receiving said branches and lugs, and a sleeve arranged on said handle over said branches, substantially as set forth.

5. In a file-float holder, the combination with the file, of a clamp embracing and holding said file and having the branches 6, a handle having longitudinal exterior grooves in which said branches are seated, a sleeve arranged on said handle and over said branches for holding said branches against transverse movement, and means for holding said branches against longitudinal movement, substantially as set forth.

6. In a file-float holder, the combination with the file, of a clamp embracing and holding said file and having the branches 6 provided with the inturned angular lugs 9^a, a handle having grooves on opposite sides thereof for receiving said branches and a socket or recess for receiving said lugs, and a sliding sleeve arranged on said handle and over said branches, substantially as set forth.

7. In a file-float holder, the combination with the file, of a clamp embracing said file and having the branches 6 provided with lugs turned toward each other, a handle having longitudinal grooves formed in its sides and receiving said branches, the said grooves being provided with transversely-extending sockets for receiving said lugs, and a removable sleeve fitted on said handle over said branches and holding said lugs and branches in place, substantially as set forth.

SOLA B. DUNN.

Witnesses:

F. A. HOPKINS,
EDNA B. JOHNSON.