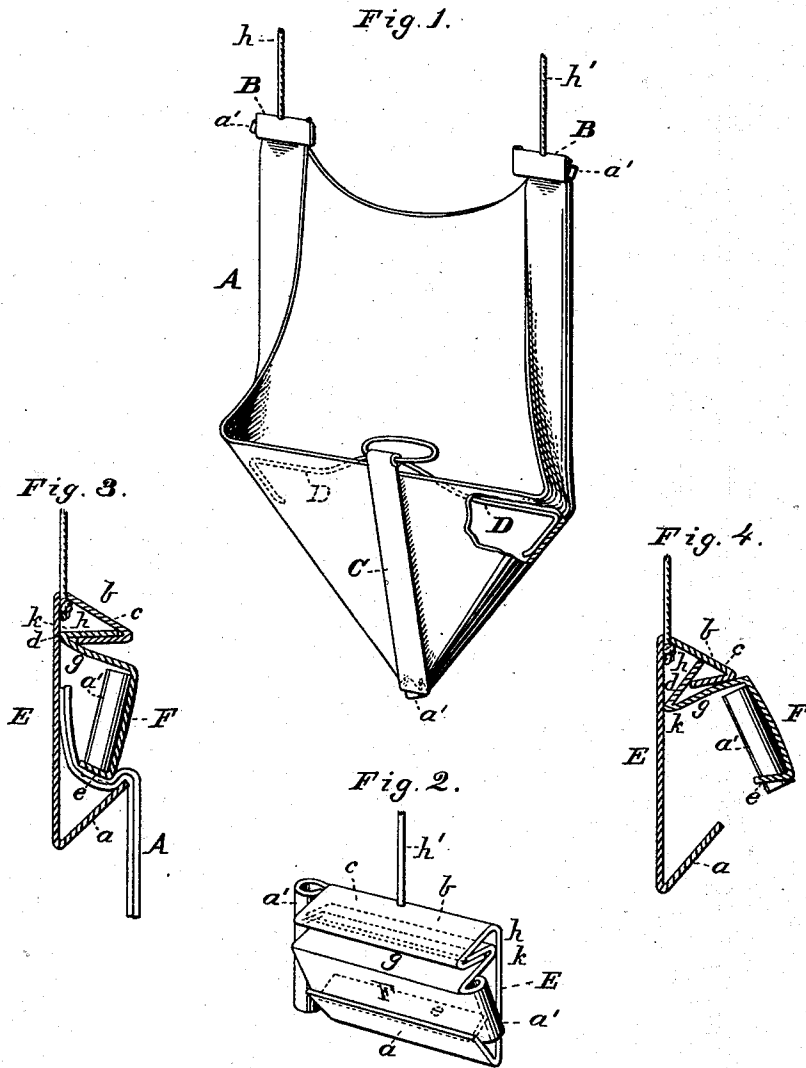


(No Model.)

J. D. ENNES.
DENTAL BIB CLAMP.

No. 410,083.

Patented Aug. 27 1889.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN D. ENNES, OF NORFOLK, VIRGINIA.

DENTAL-BIB CLAMP.

SPECIFICATION forming part of Letters Patent No. 410,083, dated August 27, 1889.

Application filed August 31, 1888. Serial No. 284,270. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. ENNES, a citizen of the United States, and a resident of Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Clamps for Dental Bibs; 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 letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of my invention attached to a bib. Fig. 2 is a perspective view of the clamp. Fig. 3 is a section showing the clamp closed, and Fig. 4 is a section showing the clamp open.

The invention relates to improvements in clamps for dental bibs; and it consists in the construction and novel arrangement of parts, as hereinafter set forth.

Referring by letter to the drawings, A designates the rubber-cloth bib, and BC are the clamps for holding the cloth as folded to form a pocket designed to catch the saliva and particles of decayed teeth. The three clamps are similar in construction, the lower one C, however, being somewhat longer than the upper ones and having secured to its upper end the arms D, which extend laterally within the pocket to hold or spread the bib over the chest of the patient.

Describing the clamps more particularly, the letter E designates the main or base plate of the clamp, having its lower edge *a* turned upward at an acute angle and its upper edge portion turned downward at an acute angle, forming the spring bearing-bend *b*, and thence turned inward or toward the body of the plate E, as indicated at *c*, terminating a short distance from said body-plate, so that an interval is left at *d* just sufficient to receive the bend of the angular portion of the movable plate, so that the latter is held against the base-plate. The movable plate F is formed

with a lateral upward bend *e* at its lower edge, the angle of which is designed to engage the bib or cloth when passed over the edge *a* of the main plate. The upper edge of the plate F is bent laterally, as at *g*, and then reversely at an acute angle, to provide the flange *h*, forming an engagement angle at *k*, which lies between the edge *c* of the main plate and its body. The edge *h* is made long enough to lie in the angle formed by the flange *c* and the bend *b*, and to engage said bend, so that a clamping pressure is secured. When, however, the clamp is opened for the removal or insertion of the edge of a bib, the flange *h*, moving upon the bearing-bend *b*, takes a position at right angles thereto, as shown in Fig. 4, so that the clamp is held open. The angles of the bends of these plates extend in parallel lines, so that the movable plate F can be adjusted laterally with reference to the plate E. The plate F is provided usually with a finger-piece *a'* to facilitate its adjustment. Strings or tapes *h'* are attached to the upper clamps, in order that the bib may be secured properly on the patient.

It will be understood that I make no claim in this application to subject-matter claimed in my application Serial No. 295,943—viz., a base-clamp having a front lip and a slotted angular rear fold provided with an edge approximating said base, a clamp-jaw having a V-form rear portion engaging said fold, a biting-lip to engage the lip of the base, and a removable pin in said fold; also to a spring-base having an angular rear fold and front clamping-lip, and a longitudinally-adjustable clamp-bar having a front lip and a V-form rear portion consisting of a shoulder and a spring-tongue, and also to a slotted angular fold of the base having a removable pin extending through said fold.

Having described my invention, what I claim is—

1. The combination, with the movable clamp-plate F, having the angle-bend *g* and flange *h*, and the piece *a'*, of the base clamp-plate E, having the acute-angle bend *b* and

edge flange *c*, and the spreader-arms arranged in the extension of the back plate of the clamp C, substantially as specified.

2. The combination, with a folded bib, of
5 a bib-clamp consisting of a vertical base clamp-plate having at its upper end the lateral spreader-arms D, and the elongated movable clamp F, applied to said base clamp-plate, substantially as set forth.

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

JOHN D. ENNES.

Witnesses:

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