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H. R. HUSTAD
SPECIMEN TAKING TOOL

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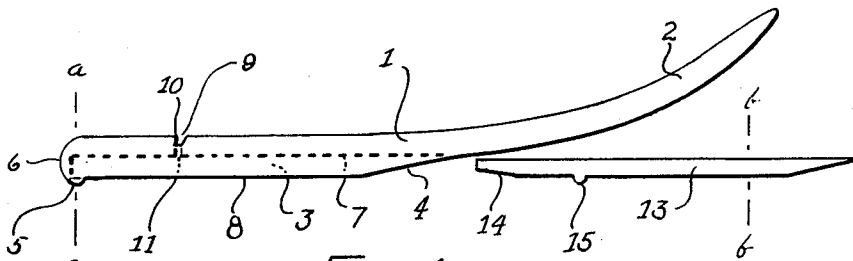


Fig. 1.



Fig. 2.



Fig. 3.

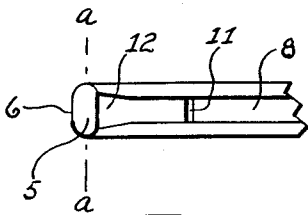


Fig. 4.

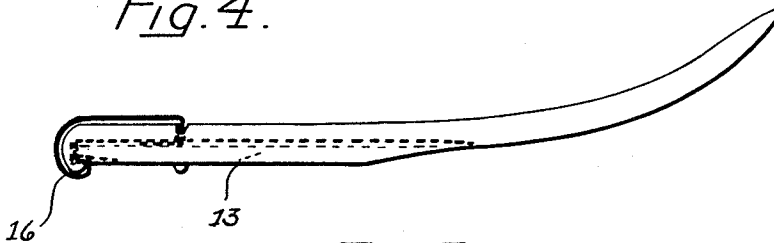


Fig. 5.

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4 Claims. (Cl. 128-263)

My invention relates to tools and particularly to specimen taking tools, the general object of the invention being to provide a tool for holding securely in determined position material used for the sampling of cervical fluid at the neck of the cervix in the human vagina.

Details of my invention and its construction are shown incorporated in the structure disclosed on the accompanying drawing, in which:

FIG. 1 shows a side view of the tool base with a slide-lock in position to be inserted into the tool base,

FIG. 2 shows a cross section of FIG. 1 and FIG. 4 at *a-a*,

FIG. 3 shows a cross section of FIG. 1 at *b-b*,

FIG. 4 shows a bottom view of a portion of FIG. 1, and

FIG. 5 shows the tool in operative assembly.

The complete tool as shown in FIG. 1 consists of: a tool base element 1 with curved handle 2, a three-surfaced slot 3 open at end 4 under the upward curve of said handle 2, and extending under a short cover portion 5 at the operational end 6 (see also FIG. 4) of said tool base 1, the bottom surface 7 (see also FIG. 2) of said slot 3 being wider than open side 8 (see also FIG. 4) of said slot 3, a notch 9 a short distance back from said operational end 6 and opposite said open side 8, said notch 9 having an angular corner 10, a hole 11 from said notch 9 to said slot 3, and the widening 12 (see FIG. 4) of said open side 8 near and to said cover portion 5; and a slide-lock element 13 shaped as in cross section *b-b* shown in FIG. 3 to fit into said slot 3, said slide-lock 13 having taper 14 to slide with decreasing clearance under said cover portion 5, and said slide-lock 13 having a raised thumb-knob 15 to facilitate the operation of said slide-lock 13 within said slot 3. FIG. 5 shows a strip of material 16 held firmly on said operational end 6 of said complete tool in a pressure-lock position.

For use: the slide-lock 13 is inserted into slot 3 to a point short of hole 11; the first end of strip 16 is threaded into hole 11 from notch 9 and extended into slot 3; slide-lock 13 is pushed toward operational end 6 to securely hold (with aid of angular corner 10) the first end of strip 16 between bottom surface 7 and slide-lock 13; the loose second end of strip 16 is extended around operational end 6 and into widening 12 of slot 3 (the widening 12, being for easy insertion of strip 16); and slide-lock 13 is pushed under cover portion 5 until the second end of strip 16 is held in a pressure-lock position between cover portion 5 and taper 14 as a result of the decreasing clearance between cover portion 5 and taper 14.

The operational end 6 of the tool with the strip of material 16 held secure is inserted into the vagina with curved handle 2 pointing upward and until operational

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end 6 presses against the neck of the cervix and strip 16 is at the cervical canal for the sampling of the cervical fluid. The curved handle 2 facilitates handling of the tool and makes certain that strip 16 faces upward for contact with the cervix extending downward. On removal of the tool from the vagina, the strip 16 is easily released from the tool by using thumb-knob 15 to slide slide-lock 13 away from operational end 6.

I have shown a practical and efficient embodiment of the various features of my invention, and I do not desire to be limited to the exact construction, arrangement and operation shown and described as changes and modifications may be made without departing from the scope of the invention as outlined in the accompanying claims.

I claim as follows:

1. A tool for holding securely a strip of material exposed at one end of said tool, said tool having: a base element and an integral slide-lock element; said base element and said slide-lock element so shaped in relation one to the other as to increase and reduce the clearance between portions of said elements as relative positions are changed by sliding said slide-lock element in said base element; and two openings in said base element one each for opposite ends of a strip of material to be inserted into positions which will place said strip ends between said portions of said elements by sliding said slide-lock element in said base element.

2. A tool for holding a strip of material exposed along a portion of one side of said tool and extending over one end of said tool, said tool having: a base element and a sliding element; a channel in said base element shaped for holding in position said sliding element; a hole from said channel to a side of said base element for threading a first end of said strip for exposure of said first end into said channel; said sliding element for folding and holding said first strip-end against a surface of said channel; and a cover portion over one end of said channel around and under which cover portion the second end of said strip can be placed, and under which cover portion said sliding element will slide to hold said second strip-end.

3. A tool as under claim 2: said hole opening into a notch on said side; said notch having an angular edge over which edge said strip is bent; said channel widening toward and at said cover portion; and said sliding element having a tapered end to slide under said cover portion to provide a decreasing clearance between said cover portion and said tapered end as said tapered end is pushed under said cover portion.

4. A tool as under claim 3 having a curved handle and having a thumb-knob on said sliding element.

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