

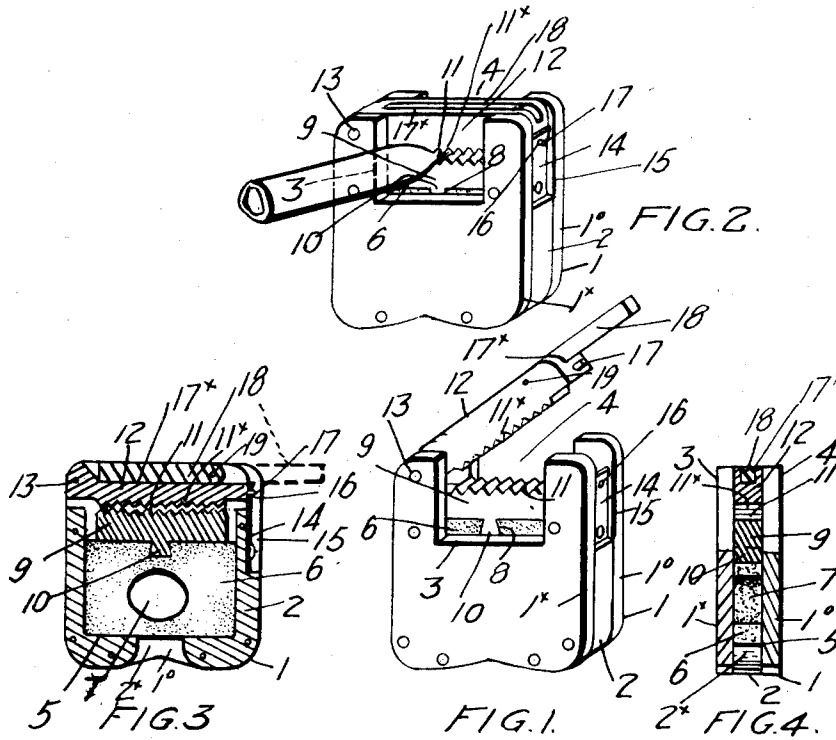
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UMBILICAL CLAMP

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UMBILICAL CLAMP.

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My invention relates to improvements in umbilical clamps, and the object of the invention is to devise a clamp which may be applied without first cutting the cord, holding the cord with forceps and then slipping the clamp longitudinally over the cord into position close to the child and thereby eliminating the consequent loss of blood, and in which there is no danger of the clamps slipping out of position and thereby producing hemorrhage, and it consists essentially of the arrangement and construction of parts as hereinafter more particularly explained.

Fig. 1 is a perspective view of my clamp in the position assumed ready for applying.

Fig. 2 is a similar view to Figure 1 showing the clamp in the applied position.

Fig. 3 is a sectional view through the clamp, and

Fig. 4 is a transverse sectional view.

In the drawing like characters of reference indicate corresponding parts in each figure.

1 indicates the body of the clamp which is preferably formed by three layers of material, the outer layers being 1^x and 1^o, and the intermediate layer 2. The outer layers 1^x and 1^o are provided with aligned recesses 3 and 4 and the intermediate layer 2 is recessed as indicated at 5 to form a receiving pocket in the lower portion of which fits a rubber cushion 6 provided with a central orifice 7 to increase its resilience, and a recess 8 in its upper edge.

9 is a lower jaw which fits in the upper portion of the recess 5 upon the upper edge of the cushion 6 and is provided with a tongue 10 which is preferably dove tailed in form fitting in the recess 8 to hold the jaw in position. The upper edge of the jaw 9 is provided with transverse serrations 11.

12 is a movable jaw which is pivoted between the layers 1^x and 1^o as indicated at 13 at one side of the recesses 3 and 4, the lower edge of the upper or movable jaw being also provided with transverse serrations 11^x opposing the serrations of the stationary jaw 9. 14 is a spring finger counter sunk in the recess 15 formed in the intermediate layer 2 between the outer layers 1^x and 1^o. The upper end of the spring is slightly out-turned as indicated and provided with a perforation 16.

17 is a pin extending from the free end of the movable jaw 12. The movable jaw 12

is provided in its upper edge with a longitudinal groove 17^x in which is pivoted a lever member 18 as indicated at 19 and which when swung outward to the dotted position shown in Figure 3 acts as a lever by which the movable jaw 12 may be forced downward from the position shown in Figure 2, that is, until the pin 17 is carried behind the spring 14 so as to pass into the perforation 16.

In order to clamp the cord off it is rested upon the lower jaw 9 and the upper or movable jaw 12 forced downward towards the stationary jaw compressing the cushion 6 so that the cord is gripped and crushed between the opposing serrations of the jaws 9 and 12, the stationary or lower jaw being forced downward against the resilient cushion 6 compressing it until the pin 17 enters the perforation 16 so as to effectually lock the jaws together, the resilient cushion serving to keep the jaws as tightly clamped as is necessary against the cord to crush the cord and cut off circulation. The clamp is left in this position, the cord gradually drying up, the pressure being maintained by the cushion 6.

It will also be noted that the spring 14 and pin 17 are located in the recess 15 and thereby protected so that there is no danger of their catching and being inadvertently sprung apart and the jaws allowed to open producing hemorrhage.

The intermediate layer 2 is cut away as indicated at 2^x to form an opening through which an instrument may be passed when the clamp is open to force the cushion 6 out of its recess for the purpose of sterilization or for renewal.

It will also be seen that the several parts forming the clamp may be readily separated apart for the purpose of cleansing and sterilization whenever necessary.

From this description it will be seen that I have devised a very simple but effective form of clamp which may be easily applied without the use of forceps or the cutting of the cord prior to clamping it off, dispensing with the prior cutting and slipping of the clamp longitudinally over the cord into position.

By my construction the clamp is directly applied to the point to which the cord is to be clamped off and locked in position so that the consequent pressure is maintained upon the cord to cut off circulation, and at the

same time eliminate any danger of the clamp slipping out of position before the cord has dried up and thereby producing hemorrhage.

What I claim as my invention is:—

5 1. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, a resilient cushion fitting within the recess, a lower jaw supported upon the cushion to move freely within the recess as the cushion
10 is compressed, a movable jaw pivoted above the aforesaid jaw and adapted to be forced downward into engagement therewith, and means for detachably locking the jaw in its closed position.

15 2. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, a resilient cushion fitting within the bottom of the recess having a recess in its upper edge, a lower jaw provided with a tongue fitting
20 the recess, a pivoted upper jaw opposing the lower jaw and means for detachably locking the upper jaw in its closed position.

3. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, a
25 resilient cushion fitting within the recess, a lower jaw supported upon the cushion to move freely within the recess as the cushion is compressed, a movable jaw pivoted above the aforesaid jaw and adapted to be forced
30 downward into engagement therewith, a spring locking finger counter sunk in the clamp body and provided with a perforation at its free end, and a pin extending from the end of the movable jaw adapted to enter
35 the perforation when the jaw is carried to its closed position.

4. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, a resilient cushion fitting within the recess,
40 a lower jaw supported upon the cushion to move freely within the recess as the cushion is compressed, a movable jaw pivoted above the aforesaid jaw and adapted to be forced downward into engagement therewith,

means for detachably locking the jaw in its closed position, and a lever pivotally mounted upon the upper jaw to be swung outward past the free end thereof.

5. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, 50 a resilient cushion fitting within the recess, a lower jaw supported upon the cushion to move freely within the recess as the cushion is compressed, a movable jaw pivoted above the aforesaid jaw and adapted to be forced downward into engagement there-
55 with and provided with a longitudinal groove in its upper edge, a lever member pivotally mounted within the groove adjacent the free end of the jaw and adapted to be swung outward past such free end, and means for detachably locking the jaw in its closed position.

6. An umbilical clamp comprising a clamp body provided with a jaw receiving recess 65 and an orifice extending through the bottom of the clamp body into the recess, a resilient cushion fitting within the lower portion of the recess, a jaw member resting upon the upper edge of the cushion within the recess,
70 a movable jaw member pivotally mounted within the aforesaid jaw, and means for detachably locking the movable jaw in its closed position.

7. An umbilical clamp comprising a clamp body provided with a jaw receiving recess, 75 a resilient cushion fitting within the recess, a lower jaw supported upon the cushion to move freely within the recess as the cushion is compressed and provided in its upper edge
80 with transverse serrations, a movable jaw pivoted above the aforesaid jaw and provided in its lower edge with transverse serrations opposing the aforesaid serrations and adapted to be forced downward into engage-
85 ment therewith, and means for detachably locking the jaw in its closed position.

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