Sept. 24, 1940. R. W. MARTINSON 2,215,725

EMBALMING CLAMP

Filed July 13, 1939

Fig. 1.

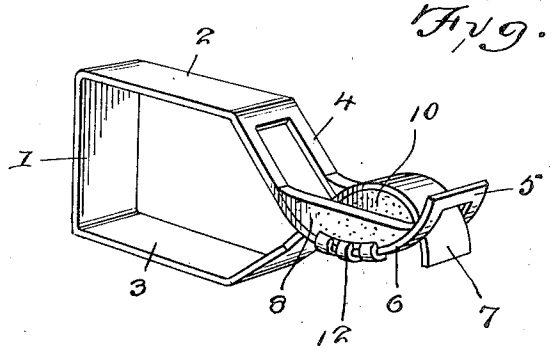

Fig. 2.

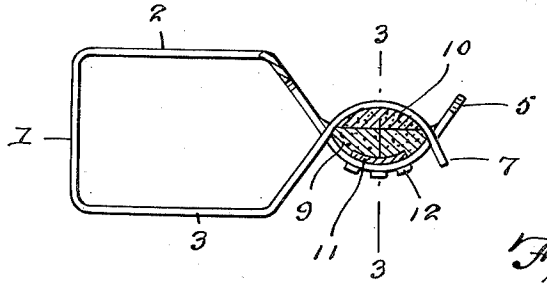

Fig. 4.

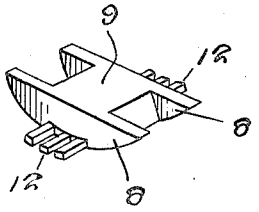

Fig. 3.

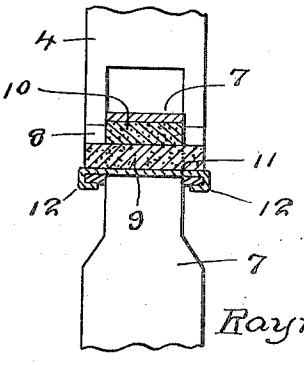

Fig. 5.

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EMBALMING CLAMP

Raymond W. Martinson, Suttons Bay, Mich.

Application July 13, 1939, Serial No. 284,366

2 Claims. (Cl. 27—23)

This invention relates to clamps, and its general object is to provide a clamp that is primarily designed to be used in embalming, for not only connecting the fluid lines or arterial or vein tubes of an embalming apparatus to the arteries and veins of a dead body when injecting fluid therein, but to hold the arteries and veins closed when the lines have been removed therefrom, so as to prevent leakage during and after embalming, and the clamp can be easily and expeditiously applied, as well as removed, if desired, but casual removal or displacement is practically impossible.

A further object is to provide a clamp for the purpose set forth, that includes cushioning means for the clamping jaws, to prevent the same from cutting or otherwise damaging the arteries and veins, yet the jaws are capable of setting up a positive clamping action therewith.

Another object is to provide a clamp that is simple in construction, inexpensive to manufacture, and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a perspective view of the clamp which forms the subject matter of the present invention.

Figure 2 is a side view partly in section.

Figure 3 is a sectional view taken approximately on line 3—3 of Figure 2.

Figure 4 is a perspective view of the cushioning element for one of the jaws.

Figure 5 is a similar view of the cushioning element for the other jaw.

Referring to the drawing in detail, it will be noted that my clamp, other than the cushioning elements, is made from a single flat strip of spring metal bent to provide a body that includes a straight rear wall 1 and parallel walls 2 and 3 extending from the ends of the rear wall for normal disposal at right angles thereto.

From the outer end of the wall 2, the strip is bent to provide an arcuate jaw 4 slotted along its longitudinal center for the major portion of its length and width, so that the jaw is in the form of a frame having a closed outer end 5 and relatively narrow side walls 6. From the outer end of the wall 3, the strip is likewise bent to provide an arcuate jaw 7 curved in a direction opposite to that of the jaw 4 and the jaw 7 has its longitudinal edge portions cut away for fitting association of the jaw 7 within the slot for movement of the jaws relative to each other, as will be apparent upon inspection of Figure 1 of the drawing.

The slot is of a length to allow the outer end of the jaw 7 to pass outwardly beyond the closed end 5 of the jaw 4 when the jaws are fully open to provide a passageway between the outer ends of the jaws for receiving an artery or vein therethrough for disposal of the artery or vein between the jaws in applying and removing the clamp with respect thereto.

In order to prevent the jaws from cutting or otherwise damaging an artery or vein each of the jaws is provided with a cushioning element formed from any suitable pliable material, such as sponge rubber or the like, and the element for the jaw 4 is substantially H-shaped, in that it includes a pair of elongated arm members 8 having curved surfaces following the shape of and engaged with the inner faces of the side walls 6, and a cross member 9 bridging the arm members 8, the cross member having a flat face for receiving the flat face of the cushioning element 10 which is in the form of a block provided with a curved surface following the shape of and adhesively or otherwise secured to the inner face of the jaw 7. The cushioning element for the jaw 4 is provided with a reinforcing plate 11 countersunk within the outer face thereof and lugs 12 are formed on the ends of the plate 11 and bent in clamping engagement about the outer side edges of the walls 6, as best shown in Figures 1 and 3.

In the use of my clamp, it is believed that it will be obvious that the usual incision is made in the dead body and the arterial and vein tubes of the embalming apparatus are inserted in the arteries and veins, thence my clamps are disposed in clamping engagement with the arteries and veins for holding the tubes therein. When the embalming fluid has been injected, the tubes of the embalming apparatus are removed and the clamps are left in clamping association with the arteries and veins in order to prevent leakage of the fluid therefrom, and then the incision is sewed up. When the clamps are in use for holding the fluid tubes with respect to the arteries and veins, it will be apparent, that a leak proof connection is provided between the same, especially due to the gripping association of the cushioning elements which likewise prevent the clamp

from cutting or otherwise damaging the arteries and veins.

It will be further obvious that the body of the clamp provides the handle therefor, and that when pressure is applied to the parallel walls 2 and 3 the jaws will open to allow for the passage of the arteries and veins between the outer ends of the jaws and when the pressure is released, the jaws will close to set up their clamping action, due to the inherent resiliency of the clamp.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. A spring embalming clamp comprising handle means, arcuate companion clamping jaws formed on the handle means and curved in opposite directions, one of said jaws being longitudinally slotted for the major portion of its length and width and the other jaw being reduced and mounted in the slot for movement of the jaws relative to each other, said jaws being normally disposed in clamping position and movable to open position when pressure is applied to the handle means, a cushioning element secured to and bridging the slotted jaw, a cushioning element secured to the other jaw, and said cushioning elements having flat confronting artery or vein engaging faces.

2. A spring embalming clamp comprising handle means including parallel walls, arcuate companion clamping jaws formed on the walls and curved in opposite directions, one of said jaws being slotted longitudinally for the major portion of its length and width and the other jaw being reduced and mounted in the slot for the disposal of the curved portions of the jaws in face to face relation and for movement of the jaws relative to each other, said jaws being normally disposed in clamping position and movable to open position when pressure is applied to the parallel walls, said jaws being associated to provide a passageway between the outer ends thereof when the jaws are in open position, a substantially H-shaped cushioning element for the slotted jaw and including a pair of arm members having curved surfaces following the shape of the curved portions of the slotted jaw, a cross member formed on and bridging the arm members, reinforcing means for the cushioning element and secured thereto to bridge the slotted jaw, lugs formed on the ends of the reinforcing means and bent in clamping engagement with the outer edges of the slotted jaw for securing the cushioning element thereto, a cushioning element secured to the reduced jaw, and the latter cushioning element and the cross member having flat confronting artery and vein engaging faces.

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