

943,464.

Fig. 1,

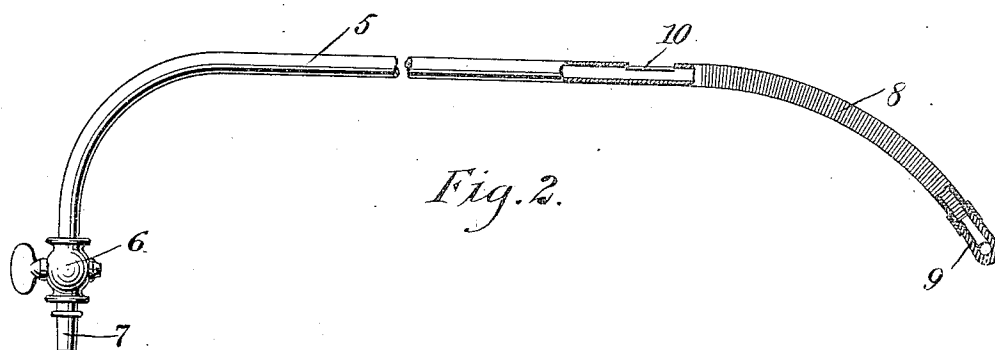
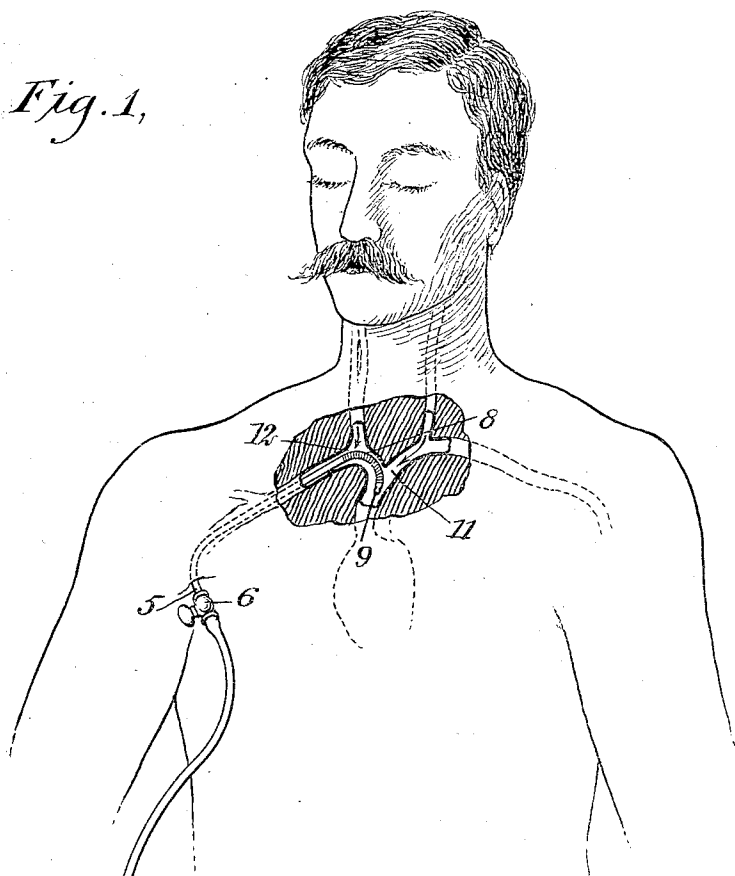


Fig. 2.

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EMBALMING INSTRUMENT.

943,464.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed July 8, 1909. Serial No. 506,485.

To all whom it may concern:

Be it known that I, THOMAS F. RILEY, a citizen of the United States, and a resident of Troy, in the county of Rensselaer and State of New York, have invented a new and Improved Embalming Instrument, of which the following is a full, clear, and exact description.

This invention is an improvement in instruments for draining the blood from the body in the process of embalming, and has for its purpose to provide a device adapted to conform to the curves of the circulatory organs, whereby it is possible to reach points ordinarily inaccessible and draw the blood off from two or more places simultaneously. In the conventional embalming instrument of this nature, the draining is adapted to take place only at the juncture of the sub-clavian and internal jugular veins, and if it should be attempted to force the instrument beyond this point, it will pass through the wall of the innominate vein which leads from the junction of the sub-clavian and jugular veins to the heart. My instrument is designed to conform to the curvature of the innominate vein and pass to the junction of its two branches, in which location it is adapted to drain from both sides of the head and body and thereby accomplish double the work.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a view illustrating the passage of my improved instrument when inserted in the body in the embalming process; and Fig. 2 is a side view of the instrument partly in central section.

The instrument, like the customary device of this character, is in the nature of a tube or pipe 5 having one end curved at substantially right angles, where it is provided with a cock 6 for controlling the flow of blood, and a nipple 7 at its extremity for the attachment of a rubber tube or such other connection conducting the blood into a receptacle. The opposite end 8 of the tube 5, which is designed to be inserted in the body, instead of being rigid, as is the usual practice, is of a flexible nature and normally curves slightly to the same side as the bend at the opposite end. The flexible construction of the end 8 of the tube is effected pref-

erably by providing a closely wound helix of wire which is suitably attached to the rigid portion of the tube, as also at its free end to a tip 9 of hard rubber or any other suitable material, the tip being provided with one or more openings in its side for the admission of the blood. An opening 10 is also provided in the side of the tube intermediate its length, for the inflow of the blood at this point.

In the use of the instrument, it is ordinarily inserted under the arm and passed either into the brachia or axillary veins, and is moved therein until the tip 9 passes opposite the junction of the two branches of the innominate vein 11. In this insertion of the tube its deflection after passing the juncture 12 of the sub-clavian and internal jugular veins is made possible by reason of the flexible construction of its inner end. When the point or tip of the tube is in the position shown in Fig. 1, the opening 10 is approximately in register with the internal jugular vein, which permits the draining of the blood to proceed simultaneously from this point with the draining from the opposite side of the head and body through the tip 9. In this way the instrument is adapted to perform double the work of the conventional drain tube, which only passes to the junction of the sub-clavian and internal jugular veins, and if attempted to be forced farther would break through the wall near the end of the innominate vein, as can be seen from Fig. 1. During the use of the instrument the flow of the blood may be started and stopped at will by the operation of the cock 6.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In an embalming instrument, a tubular member having fluid-tight walls adapted to be passed to the junction of the branches of the innominate vein, and provided with openings for respectively draining the blood simultaneously from this point and from the junction of the internal jugular and sub-clavian veins.

2. In an embalming instrument, an inflexible tubular member adapted to be inserted into and conform to the axillary vein, having a flexible end adapted to conform to the innominate vein and pass to the junction of the branches thereof, and provided with openings for respectively draining the blood

from said juncture and from the juncture of the internal jugular and sub-clavian veins.

3. In an embalming instrument, an inflexible tubular member insertible in the circulatory organs and having a curved outer end to conform thereto, and a flexible tube
5 joined onto the inner end of the inflexible tube.

In testimony whereof I have signed my name to this specification in the presence of 10 two subscribing witnesses.

THOMAS FRANCIS RILEY.

Witnesses:

RALPH C. RENIHAN,
SAYLES C. ROBINSON.