

of the fluid, and the height of the pressure column. Not less than 1500 cc. should be allowed for each specimen.

The apparatus needed for embalming includes a reservoir for the fluid, provided with an exit pipe to which a rubber tube may be attached; about 6 feet of rubber tubing to connect with the operating table; several three-way pieces to divide the stream in case several specimens are to be handled at the same time; selected rubber tubing of the size indicated below to attach the cannulae; clamps for the tubing; and, finally, glass or metal cannulae for insertion into the femoral artery.

Glass cannulae suitable for the purpose are readily made by heating ordinary glass tubing over the Bunsen flame and drawing it out to the desired thinness. The tubing used for the purpose should be of about 6 mm. outside diameter. The cannula when completed should be about 7 cm. long; and its narrow end should have a uniform diameter of 1.5-2 mm. for about 2 cm. at the tip. The tip should be touched lightly in the flame in order to round the margin by fusion, otherwise it might damage the wall of the vessel.

The rubber tubing used to connect the cannula with the main tube should be of the best quality of soft rubber, and should have an inside diameter of 4mm., i.e., of proper size to slip on and off the cannula easily, but yet to retain its hold on the latter under moderate pressure.

The reservoir for holding the embalming fluid may be an aspirator or irrigator bottle, an enamel fountain, percolator or ordinary funnel. It may have a capacity of one or two quarts. The capacity, however, is immaterial, so long as the operator keeps the fluid replaced. The reservoir is suspended in such a way that it may be moved up and down within a distance of four feet above the top of the operating table.

At the time of beginning the embalming process the operator should have before him the reservoir, suspended at a height of about three feet, and a column of fluid, free from air-bubbles or foreign material to the tip of the cannula. This condition must be maintained throughout the operation. If at any time the pressure falls in the apparatus sufficiently to admit air, or allow coagulated blood to run back through the cannula, there is almost certain to be trouble, not only with the specimen under treatment, but also others which come after. The column of fluid is held back until the proper time by a clamp placed on the rubber tubing.

The animal is killed by administering ether or illuminating gas. It is placed on its back on the table, with the head away from the operator. The skin is first divided by a small incision on the inner side of the right thigh.\* By inserting the fingers well down into the incision, the skin may be torn backward and toward the ventral middle line, and at the same time the superficial epigastric vessels will be carried with the subcutaneous tissue well out of the operator's way. Small portions of

\* The embalming may be done from the common carotid artery of the neck, a vessel much larger than the femoral artery and therefore easier of manipulation. This is not recommended, however, because of the damage done to various important structures of the cervical region.