

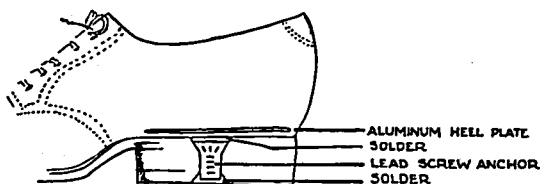
Aneroid manometer with attached membrane, liquid filled, to be attached to intra-arterial catheter for continuous indication of mean pressure.

fluid which will neither rust the manometer nor rot the rubber. At zero pressure the membrane must be partly collapsed to avoid its introducing pressure. The outside is cleaned and left in sterilizing solution. Before use the membrane is rinsed with sterile heparin-saline solution (10 mg. per 100 ml.) and a sterile syringe barrel filled with solution fitted over it. The three-way stop cock permits the catheter to be flushed periodically.

### CONDUCTIVE OPERATING SHOES

Dr. Ralph T. Streeter of Dayton, Ohio, believes that special shoes with conductive soles constitute a considerable expense for the surgeon who may be required to have a pair at each of several hospitals, and although devices which attach to ordinary shoes are inexpensive they have shortcomings. Conductive tape wears out, and aluminum strips from infusion bottles sometimes tear stockings and may catch on table legs. He believes the following device for conductive shoes eliminates the shortcomings of previous methods. It can be permanently inserted in a few minutes with a drill and soldering iron.

The device is a conductive nonferrous core running through the heel of the shoe and a conductive heel plate inside the shoe itself. The necessary materials are: 2 lead screw anchors ( $\frac{3}{8}$ -inch or larger) which can be obtained at any hardware store, 2 pieces of heavy (.006 to .010 gauge) aluminum foil such as is used in frozen food containers, and plumber's or tinker's solder.



Cross section of heel with conductive core inserted.

Installation consists of drilling a hole in the heel of each shoe the same diameter as the lead screw anchor and enlarging each end with a countersink bit. The screw anchor will fit snugly into this hole. The  $\frac{3}{8}$ -inch size is recommended as its length is almost the same as the thickness of the average heel. Any extra space is filled with molten solder, and the hot solder is leveled even with the surface of the shoe. Because of the resultant dumbbell shape of this metal core, it is self retaining; and as the metal wears at about the same rate as the heel, it requires no further attention once inserted. To insure adequate contact between this core and the wearer, a heel plate is cut from the aluminum and glued inside the shoe. The glue, however, must not cover and insulate the lead core. Most shoes have a paper or leather heel liner which can be removed and used as a pattern.

Dr. Streeter also has devised a self-retaining conductive plug using this principle which can be installed without the use of molten solder and which he hopes to make available soon.

#### CASE REPORT: SEPARATION OF CRANIOPAGUS

Doctors Kenneth D. Hall, John Merzig, and Forbes H. Norris, Jr., of the National Institutes of Health, Bethesda, Maryland, report an interesting anesthetic and surgical problem.

The operation consisted of separating two healthy, twin, three-month-old girls joined at the head (craniopagus), brow to brow. Although there was nothing unique in the anesthesia or procedure of surgical separation, careful attention to details was important.



FIG. 1. Twin girls joined brow-to-brow. Separation was achieved in a 2-stage operation.