AN INEXPENSIVE AND PRACTICAL OPEN BOX OXYGEN TENT

Because of the present difficulties in securing motor driven and refrigeration-type oxygen tents, this simple open box oxygen tent has been constructed and found to be of practical value.

This open box oxygen tent consists of a light rounded metal bar (A) as illustrated in a horizontal position for use. This right angle bar (A) is fastened firmly to the head of the bed by an adjustable clamp (C) which also regulates the height of the tent.

The tent canopy (D) was made out of heavy transparent contal (cellophane) ma-

![Diagram of the open box oxygen tent]

in figure 1, which was bent at right angles and folded downward by a hinged joint (B), which in turn allows only an up and down movement. Another short and slightly larger metal tube fits over the joint, thus immobilizing it when the bar is terial, and is supported by three firm metal hangers which encircle the bar above, parallel to the bed. These hangers fit into brass eyelets which have been placed in the upper part of the canopy and thus maintain it in a vertical position. A strip
of heavy duck cloth 5 cm. wide has been stitched around the upper inner margin of the canopy, thus reinforcing it as well as keeping the walls of the canopy apart.

The canopy may be quickly dropped by detaching the hangers from the brass eyelets, if necessary for the administration of any nursing care not accomplished through the open top. The canopy may be promptly replaced and an adequate concentration of oxygen re-established.

For use on adults the canopy may be provided in front with a collar and zipper mechanism through which the head may be inserted.

If a cooling effect is necessary, a metal container filled with chipped ice and containing at its lower aspect a drain and tubing leading to a pail, may be suspended by a short chain from the horizontal bar (A).

This type of oxygen equipment has been found particularly satisfactory in the treatment of infants and small children but may be employed with certain adult individuals. The cellophane canopy makes the patient visible at some distance, which is of particular value in the treatment of children. This device has been found simple and economical to construct, and a remarkably high concentration of oxygen can be maintained with a comparatively low liter flow.

GEORGE A. KNELAND, A.B., M.T., AND
HUBERTA M. LIVINGSTONE, M.D.,
The University of Chicago Clinics,
Chicago, Illinois

MANUFACTURE OF AN ENDOTRACHEAL CATHETER CUFF

The use of an endotracheal catheter in anesthesia is an established practice. The use of an inflatable cuff on the catheter is also an accepted technic. Frequently the cuff leaks at an inopportune moment. A procedure has been developed for the manufacture of an endotracheal catheter cuff which reduces the incidence of leak to a minimum.

I have found two sizes of cuff to be adequate, the 32 and 38 gage French endotracheal catheters. For the smaller catheter, a cuff made from 3/8-inch Penrose drain is satisfactory. The larger catheter requires a cuff made from 1/2-inch Penrose drain.

The materials needed for the manufacture of the cuffs are:

1 Ea. Tube of thick rubber cement
1 Ea. Length of 3/8-inch Penrose drain, new
1 Ea. Length of 1/2-inch Penrose drain, new
1 Ea. 32-gage endotracheal catheter
1 Ea. 38-gage endotracheal catheter
Several 8-gage French rubber urethral catheters
1 Ea. 22-gage French urethral catheter
1 Ea. Pair of scissors
1 Ea. Can of ether
2 Ea. Mosquito forceps

A number 8 urethral catheter is used rather than rubber tubing because it is more durable, does not collapse and can be used again. The same size layer of Penrose drain is used for both layers of cuff.

The base layer of drain is cut 5 cm. long and the outer layer is cut 4.5 cm. long. The tip of the number 8 catheter is cut off and two holes are cut in the sides near the end. The catheter is then cleansed with ether.

The cut drain is slipped onto the 22-gage catheter and rolled onto the proper size catheter, as shown in figure 1 (a larger catheter than 22 was used for photographic purposes).

The base layer of Penrose drain is rolled onto the catheter rather close to the edge as shown in figure 2. The outer layer is then rolled on top in the middle of the base layer.

The outer layer of drain is rolled up on the end away from the edge of the catheter and held with the fingers while it is being cleansed with ether. Thick rubber cement is placed on the drains at the junction of the rolled edge and well out on the base layer. It is well to place the cement well up on the rolled edge. The cement is allowed to dry. The outer drain is rolled all