dioxide in concentrations of 0.1 per cent to 0.5 per cent, averaging 0.3 per cent, appearing within the first three hours. Each curve thereafter remained fairly level up to a total of 12 hours of use. In 2 curves of measurement made over a 16-hour period, the carbon dioxide level rose gradually to an average of 0.6 per cent.

As the curves obtained were entirely different from those shown in various published studies, comparison was made under the same conditions with a cylindrical Foregger-Morris canister whose capacity was weighed at 875 Gm., identical with that of the Chicago canister. Carbon dioxide output was zero for 15 to 17 hours.

It was thought that the accumulation of carbon dioxide was due to a by-pass in the canister. The current of gas in the glass canister is U-shaped, entering at the top, flowing downward under a single baffle plate, upward to the other side, and out at the top. It was found that the edges of the canister were not perfectly straight, and that a perfect seal with the straight adjustable metal edge of the baffle plate was impossible. Sealing of the baffle plate edges was accomplished with a small amount of caulking compound. Subsequent carbon dioxide analyses under the same clinical conditions showed zero levels for 10 to 15 hours.

It is recommended that users of Chicago anesthetic machines seal the baffle plate edges of the soda lime canister in order to insure perfect carbon dioxide absorption.

CORRESPONDENCE

ADDITIVE FOR TRANSFUSED BLOOD

To the Editor.—This comment is directed toward the note “Additive for Transfused Blood,” appearing on page 625 of the July-August issue. The contributors state that this additive produces no ill effects and is designed to maintain capillary integrity and counteract the acidity present in stored blood. It is not surprising that a solution of sodium bicarbonate and vitamins in water produces no ill effects. There is no mention of beneficial results. There also exists some question as to the efficiency of this amount of ascorbic acid in maintaining “capillary integrity.”

It seems that this “additive” is presented with no evidence that it is beneficial or needed.

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SIMPLE STERILIZATION OF POLYETHYLENE TUBING

To the Editor.—This letter is about something we are using with very good results in our department to keep polyethylene tubing sterilized and ready to use.

We remove from old bottles of intravenous fluids the little glass tube that is used for air aspiration. We seal one end in a flame, fill it with “Cetvalon,” and put the desired length of polyethylene inside. Afterward, we close the other tip in the same way, and make a circular marking with a diamond. After some hours, it is ready to use and keeps so indefinitely.

We learned this method from Dr. Pedro Bataglia, S. Paulo, Brazil.

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