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High Pressure Pop-off Safety Device when Using the Bain Circuit for CPAP Oxygenation during One-lung Ventilation

To the Editor:—A recent letter to the Editor[1] suggested the use of a Bain circuit as an alternative method of supplying CPAP to the non-dependent lung during one-lung anesthesia.

We have used a similar Bain circuit configuration (fig. 1) at our institution for the same purpose. We, however, in addition have added a 15-cm H_2O PEEP valve (arrow, fig. 1) proximal to the breathing bag to function as a high pressure pop-off safety device. If the Bain circuit pop-off or oxygen tank flow is accidentally altered, no more than 15 cm H_2O pressure is exerted on the airway, thus avoiding potential barotrauma.

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REFERENCE

1. Scheller MS, Varvel JR: CPAP oxygenation during one-lung ventilation using a Bain circuit. ANESTHESIOLOGY 66:708, 1987

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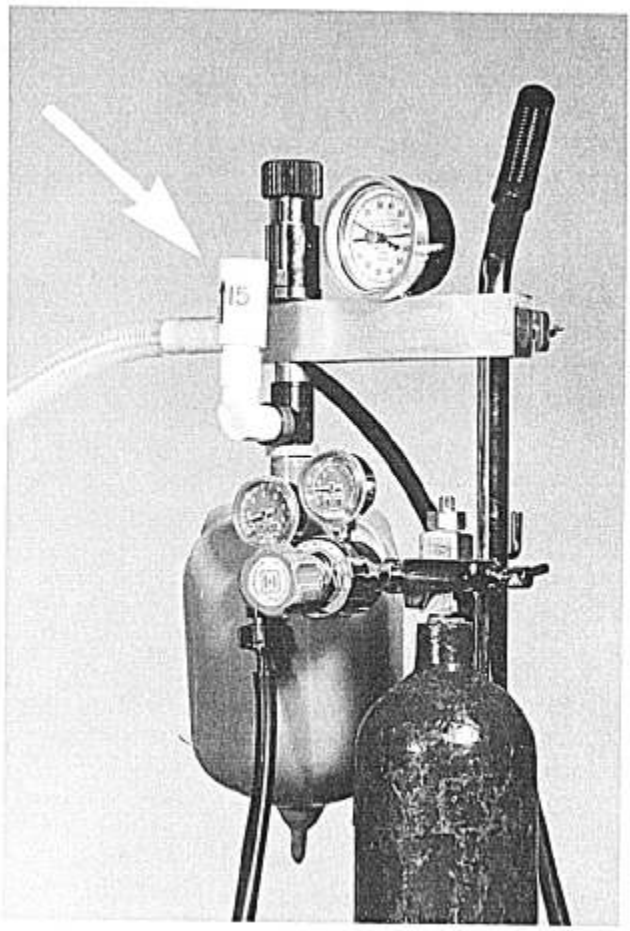

FIG. 1. PEEP valve inserted between breathing circuit and reservoir bag.

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Economic Impact of Low-Flow Anesthesia

To the Editor:—The Department of Anesthesiology at the University of Maryland had been using fresh gas flow rates of 3–5 liters per minute with the standard adult circle system. Over successive 6-month periods, beginning in July of 1983 through June, 1985, isoflurane increased from 40% to 76% of the total volatile agent purchased. The monthly expenditures for volatile agents (halothane [$0.08/cc], enflurane [$0.26/cc], isoflurane [$0.48/cc]) were escalating. Since most of the fresh gas and volatile agent were exiting the patient and the operating room *via* the scavenging system, and the most expensive volatile agent was being used most often, the Department chose to implement a low flow (<2 l/min)-closed system anesthesia (<1 l/min) educational campaign. The purpose was to reduce volatile anesthetic costs and environmental pollution and to im-