

man, M. L., and others: *Effect of Manual versus Automatic Ventilation on Elastic Recoil of the Lung*, *Ann. Surg.* 148: 899 (Dec.) 1958.)

**RESUSCITATION** A neuromuscular stimulator is described which delivers an 8,000 volt 25 microampere pulse of 300 microseconds duration. The skin electrode stimulates the phrenic nerves either where they traverse the thoracic cavity or on the diaphragm. Although ventilation was not measured, rabbits made apneic with thiopental were sustained. With prolonged resuscitation, respiration gradually diminished and finally disappeared. EKG was not monitored, but maximal stimulating intensities often caused a decreased heart rate. No nerve or skin damage was noted in chronic experiments. Its possible application to asphyxia neonatorum was considered. (Hon, E. H., and Hulme, G. W.: *An Electronic Resuscitator for Possible Use in Asphyxia Neonatorum*, *Yale J. Biol. & Med.* 31: 57 (Nov.) 1958.)

**CYCLOPROPANE** Controlled ventilation during cyclopropane anesthesia by either manual or mechanical means usually produces hyperventilation and respiratory alkalosis. Oxygenation of arterial blood may be less than 100 per cent even in the presence of hyperventilation if there is uneven ventilation and perfusion of the lungs. Cardiac arrhythmias perceptible by palpation rarely occur when cyclopropane is administered with ventilatory control. Downward displacement of the cardiac pacemaker as seen on the electrocardiogram may represent myocardial depression by cyclopropane superimposed on pre-existing myocardial disease or drug therapy. (Wester, M. R., and others: *Manual and Mechanical Control of Ventilation During Cyclopropane Anesthesia*, *J.A.M.A.* 168: 2249 (Dec. 27) 1958.)

**NEW SOPORIFIC** Trimethoxyhenzoylglycine-diethylamide (Trimeglamide) has been demonstrated to produce sleep without deep hypnosis or anesthesia as usually seen with commonly used barbiturates, chloral hydrate, etc. In animals there has been no evidence of ataxia, excessive central nervous system depression, cardiovascular or respiratory depres-

sion. The effects are said to be similar to physiological sleep. Dosages of 50 mg./kg. in dogs and cats produced soporific effects lasting 2-6 hours. At larger doses (100 mg./kg.) soporific effect was prolonged in cats and in some dogs evidence of stimulation became apparent at 500 mg./kg. dosages. In man dosage ranges 500-1500 mg. caused sedation, drowsiness and side effects in about half of 200 patients. Electroencephalographic recordings showed no drug induced spindling or disturbance of resting alpha rhythm. (Gronheim, G., Courzis, J. T., and Toekes, I. M.: *New Type Sedative and Soporific Drug*, *Science* 128: 1570 (Dec. 19) 1958.)

**ANALEPTIC** Micoren, a new analeptic drug, was administered to 436 patients subjected to various types of general anesthesia. The drug was found efficacious in lightening the depth of anesthesia and, postoperatively, in decreasing the depressant effects of morphine. (Cattaneo, A. D.: *Esperienze Cliniche con il Micoren*, *Um Nuovo Farmaco Analeptico*, *J. Internat. Coll. Surgeons* 31: 87 (Jan.) 1959.)

**SYNERGISM IN PAIN RELIEF** True synergism in the relief of pathological pain in man is claimed by Macris to be demonstrated for the first time. Papaverine (which has no analgesic power) and morphine were the drugs first used to demonstrate this synergism. (*Editorial: Synergism in Pain Relief*, *Canad. M.A.J.* 79: 848 (Nov. 15) 1958.)

**OXYGEN CONSUMPTION** Long term administration of the carbonic anhydrase inhibitor acetazolamide (Diamox) has been shown to lower oxygen consumption in rats. Antithyroid activity is demonstrated by increase in thyroid weight and decrease in blood protein bound iodine in the treated animals. This lowering of metabolism may explain why certain patients with chronic respiratory insufficiency are improved by acetazolamide without demonstrable increase in ventilation. (Tenney, S. M., and Schetter, A. B.: *Decrease in Oxygen Consumption Associated with Prolonged Administration of the Carbonic Anhydrase Inhibitor, Acetazolamide (Diamox)*, *Am. J. M. Sc.* 237: 23 (Jan.) 1959.)