body temperature and avoidance of use of cold blood when large quantities are needed are prophylactic measures against ventricular fibrillation. (*MacLean, L. D., and van Tyn, R. A.: Ventricular Defibrillation, J. A. M. A. 175: 471 (Feb. 11) 1961.*)

DEFIBRILLATOR The shock of the human heart should not exceed 250 volts (12 amp.) for 0.2 second. Seldom does one find it necessary to exceed 5 amp. for 0.2 second. Excessive stimulation will also produce an atrioventricular block or asystole rather than a normal sinus rhythm. The use of saline in the pericardium to moisten the electrodes caused severe abnormalities of electrical conduction after the shock. These abnormalities could be reversed by the application of mammalian Ringer's solution. (*Shephard, R. J.: Design of Cardiac Defibrillator, Brit. Heart J. 23: 7 (Jan.) 1961.*)

HEART SOUNDS The intensity of cardiac sounds is frequently at or near the lower level of hearing, therefore, one must pay close attention to a particular sound or event in the cardiac sound cycle in order to obtain a good evaluation. The first and second heart sounds are relatively high pitched and result from valve closure. The interval between the first and second sound approximates mechanical systole of the ventricles. The third and fourth sounds are low pitched ventricular filling sounds that may occur during diastole. Opening snaps of the mitral and tricuspid valves are frequently associated with atrioventricular valve pathology. (*Schwartz, M. L., and Little, R. C.: Physiologic Basis for Heart Sounds and Their Clinical Significance, New Engl. J. Med. 264: 280 (Feb. 9) 1961.*)

BALLISTOCARDIOGRAPHY Quantitative ballistocardiography proved to be a practical and clinically useful research tool. In 7 out of 12 patients myocardial depression was demonstrated during Fluothane anesthesia. Ganglionic blockade and peripheral vasodilatation are insufficient to explain the hypotension during Fluothane anesthesia. (*Eger, W., and Hügin, W.: Ballistographic Investigations During Narcosis, Especially Concerning Hypotension Under Fluothane, Der Anaesthesist 10: 38 (Feb.) 1961.*)

VASOPRESSORS Different vasopressors were given during Fluothane-induced hypotension. All of them elevated peripheral resistance but caused a marked reduction of stroke and minute volumes as shown by ballistography. Anticholinergic drugs prevented hypotension to some extent without interfering with peripheral blood flow. (*Hügin, W., and Eger, W.: Ballistographic Investigations Concerning Effect of Vasopressors in Halothane Anesthesia, Der Anaesthesist 10: 44 (Feb.) 1961.*)

PERIPHERAL RESISTANCE Quantitative ballistocardiography showed that thiopental caused a marked reduction of stroke and minute volume with moderately lowered blood pressure. There was in every case a marked and sudden increase of peripheral resistance which subsides in about ten minutes after a single sleeping dose. Third stage cyclopropane anesthesia also caused increased peripheral resistance but with elevated blood pressure. These effects are prevented or abolished by *d*-tubocurare or ganglionic blockers. (*Hügin, W., and Eger, W.: Ballistographic Investigations Concerning Changes in Peripheral Resistance due to Thiopental or Cyclopropane Narcosis, Der Anaesthesist 10: 46 (Feb.) 1961.*)

CORONARY FLOW Changes in the hemodynamics of coronary blood flow were revealed in dogs by producing varying degrees of cardiac failure, with the aid of graded constriction of the pulmonary artery. The coronary blood flow may be considered the critical factor in determining cardiac performance and diastolic size. (*Bacaner, M., and others: Coronary Blood Flow as Critical Determinant of Cardiac Performance and Cardiac Size, Amer. J. Med. 30: 392 (Mar.) 1961.*)

BLOOD BRAIN BARRIER There may be no morphological evidence of a blood-brain barrier. The relationships for various agents may be explicable in terms of central nervous system metabolism and it is unwise to assume