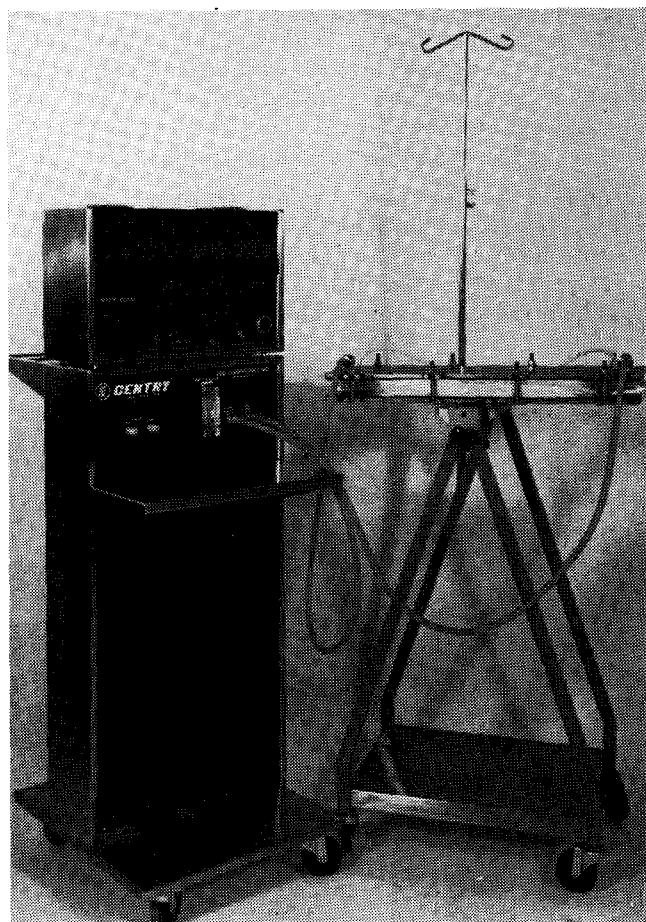


Cobe Laboratories, Inc., recently showed its new Mini-D dialyzer and Centry control unit at the CanSECT meeting in Toronto. The Mini-D claims improved efficiency from its molded cone-field membrane support system and controlled thin blood film. Designed for in-center training and patient home use, the Centry control unit features "mono-block" hydraulics and solid state integrated circuits to reliably monitor conductivity, temperature, negative pressure, blood line pressure, blood leak, water flow, and power failure. Circle Number 39 on the Reader Service Card and receive up-to-date information on this unique system.

## New Product News

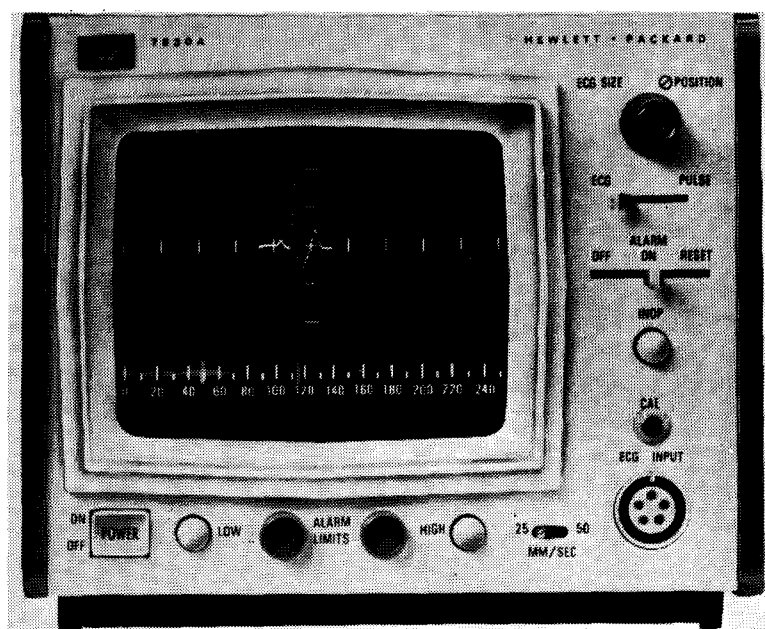


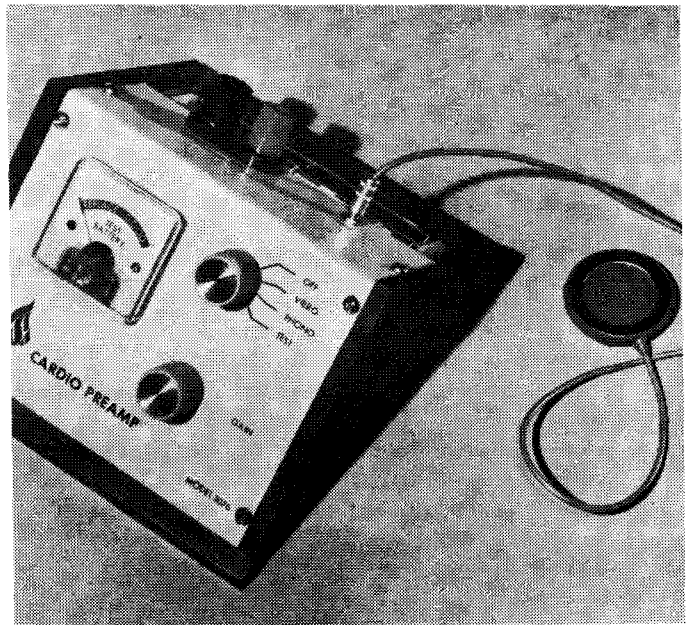
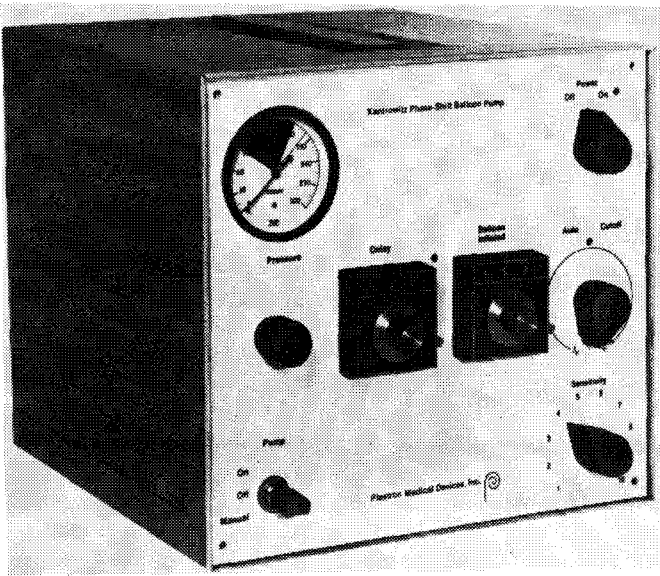
Don Wilson, of Cardiovascular Specialties, Inc., of Toronto, in addition to being the chief source of Rygg "bags" and Danish stopcocks on this continent, has revised his pulsatile pump. An interesting and safe new concept is the pump head, a double-bellows design in which a saline-filled compartment separates the silicone rubber diaphragms. The pneumatic control actuates one diaphragm which transmits this action across the saline to the other diaphragm which activates blood flow. Rupture of either diaphragm can not endanger the patient. In addition, the saline compartment can be "overloaded" with from one to fifty cc's of sterile saline while in operation to control stroke volume. Intrigued? Circle Number 40 on the Reader Service Card and receive all data.

Polysciences, Incorporated, has issued its 1971 catalog of research chemicals containing some 3000 entries of interest to workers in electron microscopy, life sciences, polymer research, organic chemistry and biomedical engineering. For your copy, circle Number 41 on the Reader Service Card.

Available after December is Hewlett-Packard's Model 7830A "All-in-one" Cardiac Monitor. This unit shows ECG (or pulse or pressure waveforms), heart rate and alarm limits integrated into one visible oscilloscope display. It is

small in size, 6½" high, 7¾" wide, and 11" deep, and weighs 13½ pounds. Complete information can be obtained by circling Number 42 on the Reader Service Card.





Plastron Medical Devices, Inc., of Brooklyn, New York, a Milton Roy company, is manufacturing and distributing the Kantrowitz Phase-Shift Balloon Pump. The balloon pump is positioned intra-aortically via a femoral arteriotomy and is connected to a pressurized helium source through the driving unit. The driving unit is synchronized to the ECG and operates synchronously and out-of-phase with the mechanical contraction of the heart. A brochure outlining the operation, characteristics, and references concerning this equipment is available via Number 43 on the Reader Service Card.

Electronic safety has finally received the attention it deserves from medical personnel. To assist in maintaining safe electrical standards, monitoring and testing equipment, like Shock Alert by Bio-Optronics, Inc., has become available. Shock Alert is a battery-operated leakage current meter sensitive to currents as minute as 5 micro-amperes. It is small, simple to operate, easy to read and understand, and moderately priced. For a complete dossier, circle Number 44 on the Reader Service Card.

To obtain phono- and vibrocardiographs, a new Cardio-Microphone and Cardio-Preamp has been developed by Industrial Scientific Research Corporation of Anaheim, California. The "heart" of the set is the miniature microphone, only 35 millimeters across and 6 millimeters thick, which has a frequency response of 1 to 1000 cps. Imbedded in the front surface of the silastic encapsulated microphone is a stainless steel disc, a double-faced adhesive disc attaches it to the patient eliminating straps. For information, circle Number 46 on the Reader Service Card.

## *Editorial Comment*

### COLLABORATION OF ENGINEERING AND MEDICINE

The need for more and better cooperation and collaboration between the medical and engineering professions has in recent years received much attention. Universities are expanding programs in Bioengineering and Biophysics. The medical instrumentation industry is rapidly growing and expanding. It has been said by some that in a few years the production of artificial organs will be among the nation's leading industries.

The growing collaboration between the engineering profession and the medical profession poses some difficulties that will take some solving.

#### Problems of Equality

"Few of us, if any, can say we have never messed up a project because we forgot the people involved . . . The trouble is that we rarely realize how often or when our thoughtlessness violates the fundamentals of good human relations. We need to work constantly at the problem of inter-personal relations since it transcends all our activities."<sup>1</sup>

"Engineers who work with physicians are likely to have little opportunity to participate in the selection of objectives, to formulate questions, to structure and re-structure problems, and to devise alternatives for their solutions.