

PUBLIC HEALTH

Voluntary Health Groups

► VOLUNTARY HEALTH AGENCIES must not attempt to take over the responsibilities of the protection of the health of the public that do not belong to it, Dr. Gaylord W. Anderson, director of the School of Public Health of the University of Minnesota, warned at the American Philosophical Society meeting in Philadelphia.

Trouble has sometimes developed, he explained, when a voluntary health agency, being concerned usually with a particular disease, has created undue public apprehension or fear, or has stirred up clamor for unproved control programs.

The voluntary agency has sometimes sown the seed of public distrust of health departments that were proceeding with due caution in the adoption of that which was yet to be proved, Dr. Anderson explained.

In many fields of public health a non-official agency is actually more important and carries a major share of the burden of the organized community program designed to prolong efficient human life. Its role, in Dr. Anderson's opinion, is that of education, research, demonstration, promotion and service.

Voluntary health societies now have a combined income of well over a hundred million dollars, Dr. Esmond R. Long, professor emeritus of pathology, The Henry Phipps Institute of the University of Pennsylvania, reported.

The National Tuberculosis Association

was the pioneer organization that attacked successfully by organized effort a health problem slighted by official health departments, he explained.

There are now at least 20 organizations in the United States that devote their efforts to single diseases such as infantile paralysis, or grouped medical entities such as mental disease.

The multiplicity of drives to support the voluntary health organizations is a growing personal and community problem in Dr. Long's opinion.

Most voluntary health organizations are not members of the Community Chest because they believe their programs are national in scope and built around drives that are themselves of educational value.

A few of the societies, Dr. Long said, now have their original goals in sight and these organizations are now considering their future operations.

The man in the street plays an important role in basic scientific research today, Dr. John M. Russell, executive director of the John and Mary R. Markle Foundation, said.

The layman assists or hinders research by giving or failing to give contributions, both voluntary and through taxes. Dr. Russell predicted that scientific directors will supplant money-raising experts and that these scientifically-trained executives will become spokesmen on scientific matters for the voluntary health agencies.

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TECHNOLOGY

Basic Petroleum Studies

► TO SUBJECT CHEMICALS to high energy and attempt to create entirely new products from petroleum for use in the atomic age, Shell Development Company's 1,500-man laboratory, Emeryville, Calif., is now using a 3,000,000-electron-volt Van de Graaff accelerator, which is claimed to be the most powerful radiation source used in industry.

It is 50 times as powerful as the largest cobalt-60 radiation source in industrial use. Since the accelerator produces one of the kinds of radiation given off by atomic reactors, it will be used to determine the behavior of petroleum products under operating conditions in atomic power plants.

The electron beam produced will be used as a probe in molecular studies during various processes.

Energy produced by the accelerator will change a liquid chemical to a solid plastic, vulcanize rubber, perhaps even create entirely new products.

Dr. Harold Gershinowitz, president of Shell Development Company, said the machine may lead to new methods of chemical

manufacture because of the type of energy it provides, easier to apply than ultraviolet light and in many cases more selective than heat, the traditional energy source.

The new machine is watched through a closed TV circuit and a system of mirrors. Thick concrete walls separate the actual operation of the accelerator from the scientists conducting the experiments.

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GENERAL SCIENCE

Industry Urged to Make Information Believable

► INDUSTRY should make its advertising and other communications to the public more believable, Dan J. Forrestal, Monsanto Chemical Company public relations manager, urged the Synthetic Organic Chemical Manufacturers Association meeting in New York.

"Tell the plain, beautiful, low-pressure truth," he recommended.

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GERMANY'S RADIO TELESCOPE

—To receive radio waves from space emitted by neutral hydrogen atoms at a wavelength of 21 centimeters, the Germans have built this radio telescope on Mount Stockert. Driven by several servomotors, the antenna was set on top of a four-story building with the technical guidance of Telefunken.

MARINE BIOLOGY

Coelacanth Discoverer Finds Impaled Spear

► THE DISCOVERER of the coelacanth, the living "fossil" fish, has found a large marlin's spear, two feet long, embedded 13 inches in a floating bale of rubber.

Dr. J. L. B. Smith of Rhodes University, Grahamstown, Union of South Africa, reports in *Nature* (Nov. 10) on a black marlin that "paid dearly for its pugnacity." The 400-pound fish, moving at great speed, attacked one of the rubber bales still floating in East African seas, debris from ships torpedoed during World War II.

Shark's teeth gave Dr. Smith a clue to events.

Hampered by the heavy bale impaled on its spear, the 11-foot marlin could neither withdraw the spear nor break it off. Its struggles attracted sharks, and they rapidly tore it to pieces, becoming blood-crazed in the process.

"In the melee," Dr. Smith concludes, "one of them must have seized the bale of rubber and it was doubtless this that provided the extra force needed to fracture the stout spear."

The bale was then light enough to float. If other similar marine accidents have occurred, they were sunk from human sight. The weight of the severed marlin head, left by the feasting sharks, would cause the pierced rubber bale to sink.

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