Williams, Jr. (D–N.J.), held extensive hearings and recently published a report* that is a dispiriting picture of human chicanery. But instead of just shaking its head and concluding that the quacks will always be with us, the committee has made several recommendations that may go some distance toward putting them out of business. Two of these deserve particular attention.

The first major recommendation calls for the establishment of a single government antiquackery bureau within the Department of Health, Education, and Welfare. The government's power to move against the quacks is now divided among three agencies: the Food and Drug Administration has jurisdiction over misleading product labeling; the Federal Trade Commission, over deceptive advertising; and the Post Office, over mail frauds. Since many hucksters inevitably utilize all three techniques for deception, such separation is illogical; and since coordination between federal agencies is not always what it should be, separation is inefficient as well. A single bureau of the kind proposed would not end the divided authority but it would supplement the actions of the three other units and give some sense of coherence to the government's enforcement activities.

The committee's second major recommendation is that the medical devices that are so lucrative for the quacks be subjected to regular premarket screening by the Food and Drug Administration. A similar proposal was made by President Johnson in his health message to Congress in January. Essentially it calls for applying to therapeutic devices the same tests of safety and effectiveness that are now in force for drugs. These devices include thousands of respectable pieces of equipment that are essential to modern medicine and surgery. But they also include an array of entirely fraudulent gadgets. One of these, for example, is the Auto-Electronic Radioclast, supposed to detect diseased organs; this, the subcommittee reports, is "actually nothing more than a wooden cabinet containing a combination of electronic circuits, pilot lights and dials operated by a practitioner allegedly trained to interpret its mysteries." Another is the Micro-Dynameter, supposed to diagnose an assortment of diseases by "measuring minute electrical currents generated when metal attachments were applied to the skin of the patients." In 1963 the FDA discovered that the machine in fact measured only the amount of perspiration on the skin, and it rounded up about 1200 of them, many of them in use by what the committee referred to as "licensed practitioners." But the machines had sold for $875 each, and treatment was estimated to have cost the patients $25 to $50 million. There are dozens of other such gadgets, at least as costly and fraudulent.

The immediate prospects for action on the subcommittee's proposal are extremely slim, for despite its endorsement by President Johnson, no one seems to be paying much attention at the moment. In addition, the regulation proposed is extremely delicate and likely to be the focus of extended controversy when it finally does receive congressional attention. The major problems will be to find a formula that eliminates the quacks without unnecessarily harassing the respectable manufacturers, and to avoid putting cumbersome restrictions on production of the thousands of simple devices, from adhesive bandages to surgical tools, that are generally recognized as useful and safe.

Presumption of Innocence

Underlying the government's present difficulties in dealing with the quacks is a situation stressed repeatedly in the hearings, the astonishing weakness of present laws. The quacks are a major beneficiary of the presumption of innocence that characterizes our legal system, and no one would take this protection away from them. But the system does have some unfortunate side effects—chiefly, that the agencies cannot usually curb the business operations of the accused while a case is pending either administratively or in the courts. Anything can be sold while the government takes the time and manpower to accumulate detailed evidence. In California, for example, according to the subcommittee, "investigators and attorneys worked for two years to prepare evidence needed to proceed against a device that, in the name of therapy, actually generated gases harmful to humans."

The result of this regulatory lag is that many a crook has continued fleecing the public (and salting away great sums) while the government has been compiling its case. Frederick Stare, chairman of the Department of Nutrition of Harvard's School of Public Health, described a fairly typical case for the subcommittee. The item in question was a book Stare described as "filled with misstatements, with falsehoods, and with all kinds of errors and implications." "I don't know how long it has been available," Stare told the committee, "my guess would be at least 5 years. Well, the Federal Trade Commission got after the publisher [for deceptive advertising] and asked if I would be a witness for them, and I said that I would be. This case was to come to trial four or five times, and then at the last minute it would be postponed.

"This past fall," Stare continued, "just the day before it was to finally come to trial in New York, as usually happens, they throw in the sponge and say 'The Federal Trade Commission was right,' and they quit. But in the meantime, they have had a few years to sell this book and get all this nonsense around to the American public. Also during this stalling they have time to write a similar book, giving the same old nonsense, bringing it up to date, and coming out with it about the time they throw in the sponge on the former book. This has happened—same author, same publisher, only a different title. So here they go again for a few years while the FTC prepares a new case."

The pattern noted by Stare is a favorite not only of the quacks with literary ambitions but of those who purvey phony medicines and devices as well, and no remedy proposed by the committee or by anyone else would actually have much effect on it. It is hoped, however, that if the government is empowered to inspect at least some of the fradulent materials before they can be sold, the number of fields for lucrative quackery will at least be reduced somewhat.—ELINOR LANGER

Announcements

A **Center for Crystallographic Research** is being established in Buffalo, New York. It is supported financially by the Roswell Park Division of Health Research, Inc., an organization created to administer grants in support of scientific research at the Roswell Park Memorial Institute. The Center's personnel

* The report, "Frauds and Deceptions Affecting the Elderly," together with the hearings on which it is based, are available from the Government Printing Office, Washington, D.C. 20402 for $1.90. The hearings are entitled "Health Frauds and Quackery."

will consist of: about five scientists at the professorial level; about ten scientists ranging from postdoctoral fellows to associate professors, holding appointments of from 1 to 5 years; and, eventually, about 30 graduate students, who will be from departments of established universities, but doing research under the direction of members of the other two categories listed. Graduate students at universities where no work in crystallography is offered will be able to study at the Center, and receive degrees from their own institutions. Cooperative arrangements of this kind are now being negotiated between the Center and several universities. Further information about the Center and its programs is available from its director, David Harker, who is also Director of Biophysics Research at Roswell Park Memorial Institute, Buffalo 3, New York.

A seminar service on **salmonellosis** is being offered by the Public Health Service to help state and local health officials tighten their control of the disease's spread. Salmonellosis, spread through contaminated food, may result in severe if not fatal intestinal disorders. The seminars will provide information on new methods of investigation, laboratory procedures, collection and handling of specimens, and epidemic patterns. The services are available to state health associations that wish to hold meetings on the disease during their annual professional meetings. For additional information, contact G. Stenhouse, Information Office, Communicable Disease Center, U.S. Public Health Service, Atlanta, Ga.

The Department of Commerce recently established a **clearinghouse for federal scientific and technical information** as part of the Institute for Applied Technology at the National Bureau of Standards. Besides serving as the central source for government research data in the physical sciences and engineering, the clearinghouse is responsible for the document distribution program formerly under the Office of Technical Services. It also has taken over the processing and distribution of all unclassified, unlimited Defense Department research reports. The new facility is headed by Bernard M. Fry. (Requests for documents formerly handled by the Office of Technical Services should now be sent to the Clearinghouse, U.S. Department of Commerce, Springfield, Va. 22151)

The Rockefeller Foundation's virus laboratories have been moved from New York to Yale University, where they will be known as the **Yale Arbovirus Research Unit**. The move includes the appointment as professors in the Yale medical school of Wilbur G. Downs, director of the foundation's virus program, and Max Theiler, former director of the laboratories. The new address of the unit is 60 College St., New Haven, Conn.

The cooperation of physicians is requested in a study of **chronic myelogenous leukemia,** being conducted by the medicine branch of the National Cancer Institute at NIH. Referrals of patients of all ages with chronic myelogenous leukemia are needed. Patients with high white blood cell counts and platelet counts are needed for studies of newer chemotherapeutic agents and as a source of white cells and platelets for in vitro and in vivo study. Physicians who wish to have their patients considered for the study may write Dr. P. P. Carbone, Clinical Center, Room 6B-13, NIH, Bethesda, Md. 20014.

A group of professional societies in physics and electronics have established the **Joint Council on Quantum Electronics**. Hubert Heffner, professor of electrical engineering at Stanford, is chairman. The organization will be responsible for organizing and coordinating general meetings on quantum electronics and for representing the sponsoring societies in international activities. The members of the council include the American Institute of Physics, American Physical Society, Optical Society of America, and the Institute of Electrical and Electronics Engineers groups on electron devices and on microwave theory and techniques.

Courses

A laboratory course in the **gas chromatographic analysis** of steroids in biological material will be held at Boston University Medical Center 21–26 June. Instruction will include the preparation of samples for analysis and the use of gas chromatographic equipment. Lectures will be given in the basic principles and practice of gas chromatography. The fee for the course is $175. (H. H. Wotiz, Boston University School of Medicine, 80 East Concord St., Boston, Mass.)

The College of Mineral Industries at Pennsylvania State University will conduct a summer institute in **mineralogy, geochemistry, and petrology** for college teachers of geology, 28 June to 7 August. Financed by a National Science Foundation grant, which will cover the cost of the program and the expenses of its participants, the institute is designed for teachers of earth sciences at small colleges and universities. Applicants must have had some formal training in mineralogy, optical mineralogy, and petrology, and must be teaching in these earth science areas at the college or junior college level. (C. P. Thornton, Department of Petrology, Pennsylvania State University, University Park, Pennsylvania)

Princeton University will be the site of a summer institute in **hydrology**, 28 June to 20 August. The institute will offer formal courses and advanced seminars in ground-water hydrology and geology, surface-water hydrology, open channel flow, and water pollution abatement. A National Science Foundation grant will provide tuition and support for up to 30 college and university teachers, and total enrollment will be limited to approximately 45. (R. J. M. De Wiest, Department of Geological Engineering, Princeton University, Princeton, New Jersey)

Tuition scholarships are available for a 2-week course in **advanced crystallography**, to be offered 9–20 August in Chicago by the McCrone Research Institute. (The regular course fee is $300.) Students who will have senior or graduate status by the end of the academic year are eligible to apply. Letters of application should include the applicant's academic record, a statement of professional interests and reasons for interest in microscopy, and an endorsement from his major professor or department head. Deadline: *28 June.* (J. Teetsov, McCrone Research Institute, 451 East 31st St., Chicago, Ill. 60616)

The Western New York Nuclear Research Center will conduct its fourth annual **radioisotope techniques** institute 7 June to 2 July in Buffalo. The course will provide lecture and laboratory sessions in the handling of radioisotopes. (Radioisotope Techniques Institute, Western New York Nuclear Research Center, Inc., Power Drive, Buffalo, N.Y. 14214)

New Journals

American Education, vol. 1, No. 1, December 1964–January 1965. T. E. Carlson, Editor. 10 times a year, $3 per year. (U.S. Government Printing Office, Washington, D.C. 20402). Replacement of U.S. Office of Education magazines, *School Life* and *Higher Education*.

International Journal of Psychiatry, vol. 1, No. 1, January 1965. J. Aronson, Editor. Quarterly, $20 per year. (The Journal, Box 462, 32 Fruit St., Boston, Mass. 02114). Reprints and discussions of articles selected from 214 publications in the field throughout the world. Written in English, with summaries translated into French, German, Spanish, Polish, and Russian.

Journal of Experimental Social Psychology, vol. 1, No. 1, January 1965. J. Thibaut, Editor. Quarterly, $16 per year for institutions; $8 per year for individuals. (Academic Press, 111 Fifth Ave., New York 10003). Current significant research in the various areas of social psychology.

Publications

The National Aeronautics and Space Administration has issued a list of its 221 "Tech Briefs" and other **technology utilization publications** issued on innovations from space research. The list catalogs the "Tech Briefs," along with more detailed technology reports, surveys, and handbooks published by NASA's Technology Utilization Division. Copies of the list are available at no charge from NASA headquarters, Code ATU, Washington, D.C. 25043.

The U.S. Geological Survey recently released a publication comparing developed and potential **water power** in the U.S. with that of other countries. The 38-page report is available free of charge from the USGS. ("Summary of Development and Potential Waterpower of the United States and Other Countries of the World, 1955–62." Geological Survey Circular 483; USGS, Department of the Interior, Washington, D.C. 20242)

A map showing the **distribution of natural vegetation in the United States** has been published by the American Geographical Society. It describes 116 types of vegetation and their relationships to each other; an accompanying manual includes details of most of these. The map is 65 by 40 inches; it and the manual are available for $8 for an unfolded map, $10 for a folded map and manual in a slip case. (Potential Natural Vegetation of the Conterminous United States, American Geographical Society publication No. 26, The Society, Broadway and 156th St., New York)

Scientists in the News

Thomas H. Fields recently was named director of the high-energy physics division at Argonne National Laboratory. He will retain his post as professor of physics at Northwestern University.

The new president of the Association of Clinical Scientists is **F. William Sunderman, Jr.**, director of clinical laboratories in the University of Florida Medical College's teaching hospital and clinics.

W. Roger Ney, formerly scientific assistant to the chief of the National Bureau of Standards Radiation Physics Laboratory, has been appointed executive director of the National Council on Radiation Protection and Measurements (NCRP). The Council recently established a national headquarters in Washington, D.C. at 4000 Brandywine St., NW.

The new chairman of the board of trustees of the American Type Culture Collection is **Vernon Bryson,** microbiology professor at Rutgers University.

Harris B. Stewart, Jr., has received the Commerce Department's gold medal, highest honor of the department, for his work on the International Indian Ocean Expedition. He is deputy assistant director of the Office of Oceanography, U.S. Coast and Geodetic Survey.

William D. Neff, research professor of psychology at Indiana University, has been named to head the school's new center for neural sciences.

William F. Neuman and **Aser Rothstein** will become co-chairmen of the University of Rochester's department of radiation biology and co-directors of the school's atomic energy project. Plans call for them to alternate administrative responsibilities every 2 years, with Neuman serving first, from 1965 to 1967. Both are currently members of the university faculty.

Alan D. Conger, formerly a graduate research professor at the University of Florida, has been appointed director of a new radiobiology research program at Temple University medical school.

Ronald E. Myers, formerly director of the laboratory of neurological sciences at Spring Grove State Hospital, Baltimore, has become chief of the laboratory of perinatal physiology, National Institute of Neurological Diseases and Blindness. The laboratory is in San Juan, Puerto Rico.

The Smithsonian Institution has announced the appointment of **William L. Stern** as chairman of the department of botany. He had been curator of the division of plant taxonomy.

Mason Boudrye, formerly executive secretary of the Minnesota Academy of Science, has become administrator of the Minnemath Center of the Institute of Technology, University of Minnesota.

The American Chemical Society has elected **Charles C. Price** president. He is head of the chemistry department at the University of Pennsylvania.

Henry Wishinsky, formerly director of the biochemistry division, Sinai Hospital, Baltimore, Md., has been appointed director of Ames Research Laboratory, Elkhart, Indiana.

Nathan C. Kirsch, manager of the sterile products department of Schering Laboratories, has been elected president of the Parenteral Drug Association for the year 1965.

Jefferson Medical College has appointed **Roy G. Holly** professor and head of the department of obstetrics and gynecology. He had been vice chancellor for graduate and professional education and research at the University of Nebraska.

Leon Levintow, assistant chief of the cell biology section at NIH, will become professor of microbiology at the San Francisco Medical Center, University of California, in July. He is to establish a teaching and research program in virology.

Erratum: In the article "Radio frequency stimulation: a research and clinical tool" by L. Eisenberg, A. Mauro, W. W. L. Glenn, and J. H. Hageman (5 Feb., p. 578), it should have been noted that Figs. 4 and 5 had previously appeared in *Annals of Surgery* **160**, No. 3 (1964).