Science Academy Gift

A gift from the Equitable Life Assurance Society of the United States for the construction of a new wing of the National Academy of Sciences building in Washington, D.C., was announced last month. The gift will provide for the erection of the Equitable Life Assurance Society Hall of the Life Sciences, in which will be housed the many scientific activities of the academy and its National Research Council in the fields of biology and medicine.

Architects for the new hall will be Harrison and Abramovitz, who have been associated with the design of many buildings, such as Rockefeller Center, the Lincoln Square project in New York, and the United Nations building. Harrison, senior member of the firm, was as a young man associated with Bertram Goodhue in the design of the present academy building.

When the academy's building was erected in 1924, it was planned to accommodate additional wings as the need developed and funds became available. With the greatly increased scope of the academy's work, more space has been urgently needed and many activities of the Academy–Research Council have had to be housed in widely scattered locations throughout Washington.

Detlev W. Bronk, president of the academy, made the following comment on the gift: "Erection of this new hall of the academy to house the medical and life sciences will be of great value to our nation. It is eminently appropriate that the Equitable Life Assurance Society thus contribute to the work of the academy, for we are both private organizations devoted to the public welfare."

Thermonuclear Research Progress Slow

Leading atomic scientists from many countries, including the U.S., Germany, France, the U.S.S.R., Sweden, Belgium, and Italy, met in London last month to discuss the problems of thermonuclear processes. The 2-day conference on the study of the release of energy by fusion of the nuclei of light elements was the first meeting on the subject to be held in Britain. The convention was arranged by the Institution of Electrical Engineers in conjunction with the British Nuclear Energy Conference.

B. F. J. Schonland, director of the Atomic Research Establishment at Harwell, opened the meeting by pointing out that while there is no need for undue pessimism about the outcome of experimental thermonuclear work, there is little point at the moment in talking of a thermonuclear reactor. Schonland reviewed the present position of research work and said:

"It became clear in the course of 1958 —and crystal clear after the Geneva [Atoms for Peace] Conference—that in spite of much brilliant theoretical, experimental and engineering work, no one in the world had yet succeeded with certainty in the very first stage of producing a true, controlled thermonuclear reaction. The emission of neutrons from these devices has been in most cases only an index of plasma instability."

After the opening address a correspondent asked Schonland if research in this field is still very promising. Schonland replied:

"It has become clear that we are going to have success in this field only if we multiply the research needed to get an understanding of it. . . . Though everybody believes we shall solve the problem, I cannot hazard a guess as to when. It will take longer than we first thought, but there's general agreement that there is no race in this business. It is friendly cooperation that is needed."

He went on to say that cooperation with America and other countries is very close, but that since the field is completely unrestricted, there is no limit to cooperation with other countries by means of information exchanges and two-way visits.

Asked if he thought it necessary to modify in any way Sir John Cockcroft's prediction that power from thermonuclear reactions would be a reality in "twenty years plus," Schonland said: "I think the work of the last year has shown it would be a matter of extreme good fortune if we could reach the power stage in twenty years. But we might have luck . . . ."

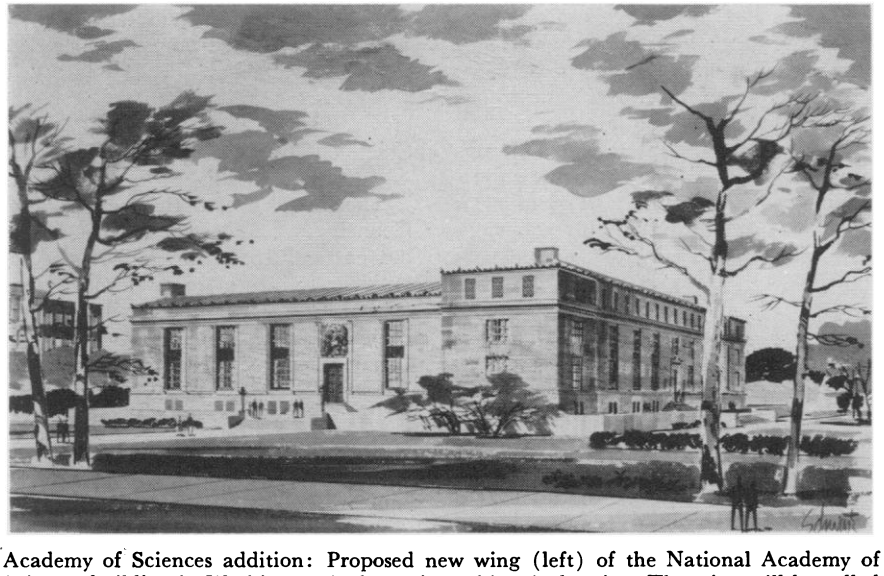
Teaching by Television

More than half a million American students, from the first grade through college, are receiving part of their classroom instruction by television, according to a joint report, *Teaching by Television*, that has been published by the Ford Foundation and the Fund for the Advancement of Education. As of 1 February, 117 colleges and universities offered courses for credit on television, 569 school districts made regular use of televised instruction, and 241 colleges and universities offered credit for the nationwide television course in modern physics, "Continental Classroom."

The report describes educational-television experiments that have been supported by the Ford Foundation and the Fund for the Advancement of Education involving more than 25 colleges and universities and 100 school systems and more than 100,000 students and their teachers. During the past 5 years, the Fund and the Ford Foundation have provided financial support amounting to more than $10 million for more than 50 different experiments at the school and college level involving the use of television as a medium of instruction. The report points out that practically every course in the school and college curriculum, from first-grade arithmetic to college zoology, is being taught somewhere over television.

The new publication presents the following results from the experiments:

1) Two of the most extensive school experiments (Washington County, Md., involving some 18,000 students, and the National Program in the Use of Television in the Public Schools, a nationwide project involving in its first year nearly 40,000 students in more than 100 public-school systems) indicate that superior



Academy of Sciences addition: Proposed new wing (left) of the National Academy of Sciences building in Washington is shown in architect's drawing. The wing will be called the Equitable Life Assurance Society Hall of Life Sciences in honor of the company which is providing the funds for its construction.

teaching over television results in much better learning on the part of the student than ordinary teaching in the classroom.

2) Televised instruction requires the student to accept more responsibility for his own learning than is the case with conventional methods of instruction.

3) Students in television classes at the elementary and secondary level make more extensive use of the school library than students in regular classes.

4) Televised instruction has made possible more effective use of teaching time and classroom space.

5) The use of superior teachers on television has proved an important means of improving the teaching techniques of others teachers, particularly beginning teachers.

The report closes with the following statement:

"Television is not a panacea that will cure all the ills of American education or solve all its problems. It has been described, and rightly so, as the most important new educational tool since the invention of movable type, but like the textbook the new medium is essentially just that—a tool. Like any tool, it can be misused or badly used. But if it is wisely and imaginatively used, television can play a major role in broadening and enriching the education of American students at all levels of schooling."

Copies of *Teaching by Television* are available without charge from the Office of Reports, Ford Foundation, 477 Madison Ave., New York 22, N. Y.

British Association to Meet in Fall

The British Association for the Advancement of Science will return to York, the city in which it was founded, for its 121st annual meeting, to be held 2–9 September. The York meeting, at which approximately 3000 members will convene, will take its theme from the presidential address of Sir James Gray titled "The Proper Study of Mankind is Man."

Other addresses will be given by the presidents of the various sections of the association. In addition, Michael Swann will speak on "The Unseen Pattern of Growth," and Sir William Hildred will comment on "International Air Transport Problems."

A program of illustrated lectures for young people from schools in the York area will be offered during the meeting. A theater will present a continuous showing of scientific films. The program committee has also arranged for a number of visits and excursions to commercial and industrial concerns and to places of historical interest in York and the surrounding area.

Study of Pregnancy

Prospective mothers are now being chosen to take part in a 5-year study to evaluate causes of neurological and sensory disorders that arise during pregnancy and shortly after the birth of the baby. Sixteen medical centers across the nation are collaborating in the project, with the National Institute of Neurological Diseases and Blindness as the coordinator and central laboratory. The study will eventually include some 40,000 mothers and their infants; each case will be followed until the child is 6 years old.

All unusual events during pregnancy will be carefully documented. Should a neurological disorder develop in the infant, an attempt will be made to correlate it with events and conditions of pregnancy, birth, or infancy. As causes are discovered, they may point the way to means of preventing cerebral palsy, mental retardation, blindness, and deafness.

The 16 medical centers comprising the study are located in Boston, Providence, New Haven, New York, Buffalo, Philadelphia, Baltimore, Richmond, Memphis, New Orleans, Minneapolis, Portland (Ore.), and San Francisco.

Two Exchanges of Professors with Russia May Begin

Both Harvard and Columbia universities are working on plans for an exchange of professors with universities in the Soviet Union. Harvard, which would have a limited exchange with Leningrad State University, hopes to start its program by the beginning of the academic year, in September. Columbia hopes to begin in February of next year.

The two programs will differ in that the Harvard-Leningrad project will be mainly an exchange of research workers, whereas the Columbia program is expected to place more emphasis on teaching. Both programs are still described as "tentative," and both are expected to involve only a few professors. The exchanges now being negotiated were originally viewed as one part of an overall Soviet-American cultural exchange agreement concluded early last year.

Materials Research Committee Appointed by Academy

The National Academy of Sciences–National Research Council has announced the appointment of a 14-man committee to determine how materials research and development in the United States can be accelerated to meet the increasing demands of industrial progress and of national defense. The Committee on the Scope and Conduct of Materials Research has been asked (i) to determine how more rapid and effective progress in materials research can be realized through increased financial support, administrative or organizational steps, improved coordination of effort or other means; (ii) to consider both basic and applied research carried on for both defense and nondefense purposes in governmental, industrial, academic, and other research institutions; and (iii) to consider the resources of raw materials, personnel, and facilities.

Clyde Williams, president of Clyde Williams and Company of Columbus, Ohio, is chairman of the committee. A former president and director of Battelle Memorial Institute, he also served as chairman of the War Metallurgy Committee of the Academy-Research Council during World War II.

Film on Nutrition in Africa

A special documentary film that shows the work of United States nutrition survey teams in Ethiopia has been made. The 25-minute color film, entitled *People to People* was produced by the Government's Interdepartmental Committee on Nutrition for National Defense, whose secretariat is located at the National Institutes of Health. Early in 1956 this committee launched a nutrition program for the purpose of assisting developing countries, as a part of the U.S. Mutual Assistance Program. *People to People* is the story of the ninth nutrition survey.

The survey team spent 3 months in Ethiopia and traveled more than 10,000 miles on the ground and in the air. Nearly 9000 Ethiopians were examined by the physicians, biochemists, and food specialists on the team. The film shows how the surveys are carried out and illustrates the typical living conditions, agricultural practices, modes of transportation, and medical and educational facilities available.

Science Council Members Briefed

The members of the new Federal Council for Science and Technology are currently being briefed on the scientific activities of each of the governmental agencies represented on the council. These agencies are the National Science Foundation, the Atomic Energy Commission, the National Aeronautics and Space Administration, and the departments of Defense, Interior, Commerce, Agriculture, and Health, Education, and Welfare. Representatives of each of these agencies are giving brief reviews of the scientific activities which take place within their department. One such statement was recently released by the council. It was presented