News and views

A REPORT FROM WASHINGTON

LIBRARY OF CONGRESS SCIENCE DIVISION

Announcement of the formal establishment in the Library of Congress of a Science Division probably caused any scientist who heard or read it to envision a special science room or wing in the Library. This mind's-eye area undoubtedly was furnished with large reading tables and comfortable chairs, was enclosed by walls hung with the pictures of famous scientists, was surrounded by stacks containing the Library's total collection of scientific books and periodicals, and was entered by an impressive archway labeled Science Division. To indicate why this is not to be the case and to outline something of what is contemplated for this new unit of the Library is the purpose of this account.

The activities of the Library of Congress, as we know it today, are very much broader in scope than a strict interpretation of its name would imply, although service to the Congress continues to be its primary responsibility. It has become, in fact, a national library maintained for general public use. Luther H. Evans, Librarian of Congress since 1946, has summarized his viewpoint regarding the Library's place in science in these words, "By virtue of its responsibility to maintain a collection and a staff adequate for the research and reference demands of not only the Congress and the Executive and Judicial agencies of the Government, but of the private scholars, the research institutions, and the private citizens of the United States, the Library feels that it is justified in considering itself the National Library of Science as well as the National Library generally". Among the evidence supporting this claim is the fact that the Library's present holdings in science total over a million volumes involving six of the major classification categories. If they were consolidated into one stack area of conventional height and "density", these materials would occupy something in the neighborhood of a square city block, making the Library's scientific collection the largest in the United States and one of the most comprehensive in the world.

Discussion of the role planned for the new Science Division requires first brief consideration of the manner in which the Library's present over-all responsibilities evolved. Originally, it was strictly a library for congressmen and the Congressional Act of April 24, 1800, which established the Library of Congress provided simply, "for the purchase of such books as may be necessary for the use of Congress at the said city of Washington and for fitting up an apartment for containing them". Even this modest proposal had encountered considerable resistance prior to its adoption.

In David C. Mearns' interesting history of the Library of Congress entitled *The Story Up to Now*, the author cites as typical of the opposition viewpoint a letter written in 1790 to the editor of the Boston *Independent Chronicle*. The correspondent opined that when the elected representatives of the people come to Congress they are presumed already to be sufficiently well versed in history, law, and political science to be competent to manage the government and argued that to provide them with books for their further improvement and instruction would be entirely out of place and no more justifiable than to give them free board, room and clothing. Fortunately, this viewpoint did not receive majority support.

As one might guess from the above facts, science found little place in the early Library of Congress collection. The first significant material of a scientific nature came with the purchase by Congress in 1815 of the 7000-volume personal library of Thomas Jefferson. This acquisition formed the nucleus of the Library's present holdings and more than replaced the 3000 books destroyed the previous year when the British burned the Capitol. Extension of Library privileges beyond the Congress proceeded slowly, however. In 1850 the right to use the Library of Congress and to borrow books from it was limited to members of the Congress, the President and Vice President, executive department heads, Supreme Court judges, Secretary of the Senate, Clerk of the House, agents of the Library Committee, and foreign ministers.

Meanwhile, something more nearly of the nature of a national library had been developing at the Smithsonian Institution. Here, by 1850, some 6000 volumes were available to all who wished to use them. Although the terms of John Smithson's bequest had specified simply "an establishment for the increase and diffusion of knowledge among men", the Smithsonian library had become predominantly scientific, probably due largely to the circumstance that the Institution's first secretary was the eminent physicist Joseph Henry. Also, the fact that Smithson himself had been a physical scientist made such a development quite appropriate. The Smithsonian library was deposited in the Library of Congress in 1866 and served both to strengthen greatly the Library's holdings in science and to accelerate its progress toward becoming the national library with responsibilities toward the nation as a whole. Since that time, Library acquisitions covering all fields including science have brought this phase of the total collection to the more-than-a-million figure cited previously.

This very sketchy bit of historical background has been presented both to indicate the growth of science in the Library and to pave the way for a brief consideration of why Science Division plans do not consist of the simple reading-room-centralized-stacks concept mentioned earlier. It is inherent in the very idea of dividing things into categories that a classification system which is highly satisfactory according to one criterion is bound to be quite unsatisfactory on some other basis; that is to say, one man's orderly arrangement may be another's hodge-podge. A physicist, a chemist, and an engineer, for example, might wish respectively to classify a given group of substances on the basis of their physical properties, their chemical compositions, and their industrial applications, and the grouping of no one of the men would be wholly satisfactory to the other two. Or, a breakdown of college coeds according to intelligence quotients might be very useful to the dean but quite worthless to the man-about-campus whose major classification categories in this discipline are blondes, brunettes, and redheads. In other words, the best classification system for any given situation—whether for people, objects, or ideas—is simply the one that experience shows is the most useful. In the case of the Library of Congress, the organizational breakdown that has proved most practical from the standpoint of the job the Library has to do happens not to be one which subdivides its holdings strictly on the basis of field of subject content—although some units, such as the Music and Aeronautics Divisions, are so organized. Those defined according to a different criterion include among others the

Manuscripts, Maps, Rare Books, Prints and Photographs, and Orientalia Divisions—the last-named consisting of Chinese, Hebraic, Japanese, Near East, and South Asia Sections. Consequently, while the bulk of the total science collection is located conventionally in the Stack and Reader Division, valuable parts of it are found in localized areas of special divisions. To cite but a few examples, first editions of Copernicus' *On the Revolutions of the Spheres* and Sir Isaac Newton's *Principia* are with Rare Books; the original manuscript of Albert Einstein's *Das Bi-Vektor Field* is with the Manuscripts Division as also are letters and papers of a number of other scientists; certain writings of Dayton C. Miller which have scientific value are in the Music Division, and so forth. Thus, considerations of over-all library organization, as well as of bulk, make it both undesirable and impractical to attempt to group all science holdings in a single stack area adjacent to a science reading room.

Now, having seen something of what the Library of Congress Science Division is not going to be, let us turn to what is envisioned for it. Raymund L. Zwemer, chief of the new division, sees its over-all task as involving both an internal responsibility to the rest of the Library and an external one to science as a whole. Internally, the Science Division must become and constantly remain aware of the exact extent, nature, and whereabouts of the scientific portions of the Library's total collection and be in a position to supply this information efficiently to the rest of the staff. Companion to this responsibility is the additional one of standing ready to advise and counsel with the other units of the Library in the acquisition and processing of scientific books and periodicals and in the adaptation of various technical advances to library operations.

Prerequisite to the discharge of any external responsibility is an internal one already mentioned—that of maintaining full and organized knowledge of the Library's science collections. It is not believed, however, that this knowledge and the Division's energies should be devoted to providing the kind of general technical reference service to which college students, writers of club papers, quiz contestants, and the like might write for scientific facts, figures, and quotations. (And, indeed, with its present initial staff, the provision of such service would be physically impossible even if it were deemed appropriate.) It is felt rather that the service which this division can render science should be something much greater than would be implied by maintaining such a question-and-answer department, and would consist fundamentally in making scientists and the scientific agencies of the nation aware of the facilities and holdings of possible interest to them, which are available in the Library of Congress. Beyond this, the advice of scientists and scientific organizations is earnestly sought with regard to specific ways in which the Library can serve science. Particularly valuable will be the opinions of experts regarding the completeness of present holdings in their respective fields of specialization and the gaps that can be filled most profitably.

To complete this brief description of the Science Division, two projects being carried on within it for the Armed Services can be mentioned. One is the Navy Research Section which operates under an Office of Naval Research contract and provides for the Navy bibliographic control and conventional library services—including cataloging, indexing, abstracting, and bibliography preparation—for technical reports resulting from government-sponsored research. This Section also is the official repository for all scientific reports of the World War II Office of Scientific Research and Development. The other Armed Services task is supported by the Corps of Engineers and involves provision of certain bibliographic services in the field of interest of that branch's Snow, Ice and Permafrost Research Establishment.

DWIGHT E. GRAY

THE PHOENIX PROJECT

ANN ARBOR'S RESEARCH CENTER

The University of Michigan's privately financed atomic research project, which promises to be unique in this country as a nongovernment-supported program designed to explore the field, formally came into being last October with the opening of a fund-raising drive and the announcement that some twenty research studies already were under way at Ann Arbor. Known as the Phoenix Project, the proposed research center will carry out a broad investigation of all constructive aspects of atomic energy research. All fourteen of the University's divisions (schools, colleges, and specialized institutes) will be actively involved in the project's work, which will include studies of social, economic, and cultural developments peculiar to life in the atomic age. Medical and biophysical research is expected to play a large part in the work of the new project, as will laboratory studies of cellular, molecular, and atomic processes.

The phoenix symbol, a direct derivative of that Egyptian bird, which, it is said, once rose again triumphant from its own well-cremated ashes, provides a note of quiet optimism unsullied by any inclusion of contracts for classified federal research at Michigan. While the Phoenix Project cannot hope entirely to compete with government-financed research in terms of wealth or equipment, still it is expected by those at Ann Arbor and elsewhere that much progress will be made (and that an example may be set which others will follow) in exploring the peace-time potentials of atomic energy.

ISOTOPE WORK AT OAK RIDGE

NEW ORINS COURSES

The special training division of the Oak Ridge Institute of Nuclear Studies has announced that three additional courses in the techniques of using radioisotopes in research have been scheduled during the winter and spring of 1951. They are to be held from January 8th to February 2nd, from February 19th to March 16th, and from April 16th to May 11th. Designed to acquaint research workers with the safe and efficient use of radioisotopes, the courses include laboratory work, lectures, and special-topic seminars. Experiments cover such matters as the use and calibration of instruments, purification and separation of radioactive materials from inert and other radioactive materials, and pile activation technology. The seminars cover various biological and medical uses of radioisotopes and the design of radiochemical laboratories.

Only thirty-two participants can be accommodated for any single course. Additional information and application blanks may be obtained from Dr. Ralph T. Overman, Chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

On February 5th a special two-weeks' advanced medical course in radioisotope work will be given by the Institute which will deal with radioisotopes in therapy and clinical studies. The course, intended for medical research workers who have had some experience in the basic techniques of using radioisotopes, will have as its lecturers specialists from