HENRY E. BLISS, Plainfield, N.J., 85, retired assistant librarian of the City College of New York, developer of a new system of bibliographic classification, author, 9 Aug.

DOROTHY L. BOOK, Boston, Mass., 52, dean of the Boston College School of Social Work, 9 Aug.

FRANK J. BRUNO, Lebanon, Ind., 81, former head of the sociology department of Washington University in St. Louis, 7 Aug.

WILLIAM L. CARLYLE, Calgary, Alberta, Canada, 85, former professor of animal husbandry at the University of Wisconsin, dean of agriculture at Colorado Agricultural and Mechanical College, dean of agriculture at the University of Idaho and director of the United States experimental station in Idaho, acting president of the University of Idaho, and dean of agriculture at Oklahoma Agricultural and Mechanical College, 6 Aug.

JOEL E. DEUTERMAN, Elgin, Ill., 53, cancer research specialist, 7 Aug.

WILLIAM J. HALE, Midland, Mich., 79, retired director of the organic research laboratory of the Dow Chemical Co., author, 8 Aug.

ABRAHAM LIGHTSTONE, New York, 80, surgeon, formerly on the faculties of the New York University and Fordham University medical schools, 6 Aug.

GEORGE W. LUCAS, Detroit, Mich., 46, supervisor of carbide materials and process engineering, Carboloy Department of General Electric Co., 28 July.

FREDERICK PEARSON, Williams Bay, Wis., 68, retired head lens grinder at Yerkes Observatory, authority on astronomical optics, 8 Aug.

Education

■ An article in the July issue of the Plant Science Bulletin describes one of the difficulties encountered by those seeking university appointments. It is entitled "The responsibilities contingent upon the solicitation of applications," and it is accompanied by an editor's note that says: "This brief paper, submitted by two former graduate students who have recently received their Ph.D. degrees from large state universities . . . and who wish to remain anonymous, presents a viewpoint which might have a message for some academic administrators."

Several abstracts from the article follow:

"One of the anomalies of etiquette is that it is quite improper to call a person's breech of the rules of decorum to his attention. Even if this were not so, however, no [job] applicant in his right mind would dare endanger his position by writing anything but the most discreet note asking whether his application had been received and, possibly, whether or

not it was being considered. . . . The proper acknowledgment of receipt of all applications and supporting papers is the least an administrator can do for the people who have submitted applications, whether they were solicited directly or not. . . .

"Several of us have compared our application correspondence over the past few years and find that . . . [the] 'solicit and forget' attitude is not limited by university size or geographic location. North, east, south or west, the story is commonly the same. . . . The time schedule would often do justice to a sleepy snail. One . . . simple inquiry about an application was made on November 24. The answer was received (via airmail) the following February 12!

"If such treatment is intentional, perhaps as a form of academic natural selection in which only the most stubborn stay in the race, there may be some merit to the procedure. If, on the other hand, this is not the idea behind such treatment we should imagine that . . . chairmen the country over are becoming afraid to look a stranger in the eye-it might be that applicant they just never bothered to write. In any event the actions of some administrators on this score certainly cannot be said to be beneficial to our science. Aside from the low salaries, the very least that a prospective colleague should expect from the profession he has chosen is a moderate amount of consideration at a relatively critical point in his career."

■ On 12 Aug. 24 secondary-school teachers of science and mathematics from Alabama, Georgia, Mississippi, and North Carolina received certificates for the successful completion of the first session of an 8-week intensive summer program at Howard University that is supported by the Phelps-Stokes Fund of New York. Each of these teachers was enrolled in astronomy, geology, and science education courses. In addition, each studied two of these four subjects: biology, chemistry, mathematics, and physics.

All courses were especially designed for secondary-school teachers. The group visited government laboratories and museums, and there were four Saturday field trips. The grant of \$50,000 by the Phelps-Stokes Fund to Howard will permit repetition of the program during the summers of 1956 and 1957.

■ The University of Pennsylvania has announced that it will prepare a group of civilian scientists to serve as Air Force operations analysts in event of a major national emergency. Under Air Force contract, the Institute for Cooperative Research at the university will form an "operations analysis stand-by unit" of some 10 to 20 men, drawn mainly from

its own faculties, according to Carl C. Chambers, the university's vice president for engineering affairs and acting director of the institute.

J. Parker Bursk, chairman of the department of economic and social statistics in the university's Wharton School of Finance and Commerce, will be project director. Unit members will include mathematicians, statisticians, engineers, and specialists in the various physical and social sciences. They will devote an average of 40 days annually to indoctrination in operations analysis and Air Force procedures.

Grants, Fellowships, and Awards

■ The Arctic Institute of North America is offering research grants in 1956 for scientific investigations dealing with the arctic and subarctic regions. Priority will be given to field investigations in North America or to studies at one of the institute's offices.

Applications for research grants are invited from those who have demonstrated their ability to conduct research work of superior quality in some field of science. Proposals in the broad field of the earth sciences, in marine biology, and in physiology are especially desired. Facilities of the Arctic Research Laboratory at Barrow, Alaska, are available for a limited number of scientists for both summer and winter investigations. The facilities include both housing and equipment

Application forms may be obtained upon request from: Arctic Institute of North America, 1530 P St., N.W., Washington 5, D.C. Completed applications should be received before 1 Nov. 1955. Late applications will be considered in special circumstances if additional research funds become available.

The Arctic Institute is also in a position to award grants from a sum of money provided by the trustees of the Banting Fund, which is used primarily to encourage Canadians, particularly recent graduates, in northern studies. Inquiries should be addressed to: T. H. Manning, 37 Linden Terrace, Ottawa 1, Ont., Canada.

■ The American Cancer Society is offering a limited number of clinical fellowships to provide graduates in medicine opportunities for postgraduate training that emphasizes diagnosis and treatment of cancer. Fellowships available on and after 1 July 1956 will be awarded for 1 year and are renewable for 2 additional years.

These \$3600 awards are made to *institutions only* upon application by deans, executive officers, or department heads. Therefore, individuals desiring this ACS

support should consult the appropriate authority in the institution of their choice.

Applications for 1956–57 fellowships must be submitted by 15 Sept. Further information may be obtained from the Professional Educational Section, American Cancer Society, 521 W. 57 St., New York 19.

■ The Ford family has announced that it is establishing a \$1-million fund to reward scientists who develop peaceful uses of atomic energy. Henry Ford, II, president of Ford Motor Co., and his brothers, Benson and William, will contribute the \$1-million total during the next 10 years from the Ford Motor Company Fund. The money will be administered by a nonprofit corporation to be known as Atoms for Peace Awards, a corporation that is to serve as a memorial to the brothers' grandfather and father, Henry and Edsel Ford.

The outline for the award proposes the creation of "a competent international jury of awards" to select the individual or group who has made the greatest contribution each year toward developing peaceful applications of atomic energy. Winning natural scientists, inventors, or engineers will be chosen "without regard for nationality or political belief."

The annual prize will consist of \$75,000 in cash and a "suitable medal to be designed and cast for the purpose." If no recipients can be found in any year, the money will go for scholarships and fellowships in peaceful atomic science.

In the Laboratories

■ Goodrich-Gulf Chemicals, Inc., Cleveland, Ohio, will build manufacturing facilities to produce its new synthetic rubber. A pilot plant will be located in northern Ohio and is expected to be in operation within 9 months to 1 year. When these facilities are completed, materials for testing will be available to other companies.

Announcement that Goodrich-Gulf scientists, working in the B. F. Goodrich Research Center, Brecksville, Ohio, had succeeded in reproducing the true molecule of crude rubber was made in Dec. 1954.

- A comprehensive program of nuclear research, aimed at investigation of new energy sources and improvement of petroleum refining and petroleum products, has been undertaken by Socony Mobil Oil Co., Inc., New York. The program encompasses:
- 1) Participation by Socony Mobil in a joint effort by eight American business enterprises in construction of the first nuclear reactor to be owned and oper-

ated by private industry for research in industrial and humanitarian fields.

2) Establishment of a Nuclear Research Center wholly owned and operated by Socony Mobil Research Laboratories and including: (i) Van de Graaff accelerator and associated facilities providing high-energy electrons, protons, x-rays, and neutrons for research in nuclear physics and radiation chemistry; (ii) "hot" laboratories equipped for manipulation of fission-waste radioisotopes as well as secondary radioactive sources, such as antimony-124, cobalt-60, and iron-59, which will be activated by irradiation in the nuclear reactor; and (iii) a "counting" laboratory for assaying radioactive materials, general research laboratories, offices, and facilities for health protection of staff members.

Construction of both major facilities—the reactor and the Nuclear Research Center—is expected to begin in early fall, and plans call for the start of operations within a year. Exact geographic location of the two facilities has not yet been finally determined.

- The board of directors of Nuclear Development Associates, Inc., White Plains, N.Y., has announced a change in the name of the organization to Nuclear Development Corporation of America. The change was effective on 1 Aug. The firm is developing a 1200-acre tract near Pawling in Dutchess County, New York, to serve as a nuclear experimental station.
- A joint program of applied research to advance supersonic aircraft and missile propulsion has been established by Marquardt Aircraft Co., Van Nuys, Calif.; Reaction Motors, Inc., Denville, N.J.; and Olin Mathieson Chemical Corp., New York. The new coordinated technical effort of complementary skills, known internally as the OMAR program, combines the research, engineering, and production resources of the three organizations.

Administration of the OMAR program is under the direction of a technical liaison committee comprised of representatives of the participating companies. Members of the committee are Harry A. Sosnoski, Olin Mathieson, chairman; T. F. Walkowicz, of the staff of Laurance Rockefeller, vice chairman (L. Rockefeller is a stockholder in both Marquardt and Reaction); John A. Drake, Marquardt Aircraft; William P. Munger and Warren P. Turner, Reaction Motors; and L. Kermit Herndon, Joseph H. McLain, and John J. O'Neill, Jr., Olin Mathieson.

The research and development program embraces rocket and ramjet engine design, rocket and ramjet engine propellants, and special mechanical and chemical engineering processes. It is directed

toward advancing basic propulsion science and providing improved methods for the production of rocket and ramjet engines, their propellants, and related devices.

Miscellaneous

■ The Army has received authority from the Civil Service Commission to employ civilian physicians at dispensaries, infirmaries, outpatient clinics, and laboratories at the top step of each respective CSC grade. For example, effective immediately, civilian physicians may receive beginning salaries of from \$7465 to \$11,395 per annum.

Although increasing numbers of civilian doctors are joining Army medical installations throughout the country, openings exist in practically every locality. On 30 June, the Army was employing more than 20 percent more civilian physicians than it was 6 months earlier. Those interested in securing employment with the Army, and who have a license to practice medicine in any of the states or the District of Columbia, should communicate with the personnel officer at the nearest Army installation of their choice.

- The International Film Bureau Inc., 57 E. Jackson Blvd., Chicago 4, Ill., has published a descriptive list entitled "16mm films in health, education and welfare." The large majority of the films listed deal with human relations and are classified under such headings as mental health, psychology, child study, education, community action, teaching aids, education of the retarded, medical sciences, nursing, and safety and welfare. The psychology films available are arranged in four groups: general, comparative, child psychology, and child care.
- A 374-page bibliography on infrared radiation and its multitude of applications in science, technology, and industry has been made available to the public by the Office of Technical Services, U.S. Department of Commerce. Compiled by the Library of Congress under a contract from the Office of Naval Research, the bibliography includes all references to published literature on the subject from 1935 to 1951.

The classification proceeds from infrared theory and general infrared-optical properties through the various elements and components of infrared equipment, infrared spectroscopy and photography, to its various applications in science, technology, the arts and industry. *Infrared: A Library of Congress Bibliography*, (PB 111643) may be ordered from OTS, U.S. Department of Commerce, Washington 25, D.C., price \$3.