Suppose, on the other hand, that total war is the outcome. The experience of World War II and of the Korean War has shown the idea of quick and easy victory to be an illusion. With Western Europe devitalized by World War II, the vast human resources and geographical spaces of Russia and much of Asia actively against us, and the atom bomb available to both sides, civilization, and science along with it, would inevitably be the chief casualty. One cannot easily conceive of any other outcome.

If these were the only alternatives, then for one who believes Communism to be an ultimate and unmitigable evil there would be little hope indeed. But we assert the existence of another alternative, which transcends these; one which is positive, holds out immediate hope, and utilizes the strengths and not the weaknesses of the democratic philosophy. Discussion on this question has been closed prematurely. It must be revived before the degeneration of science and democratic freedom is allowed to progress any further. This is the alternative of peace.

Toward a solution. The advocacy of peace can be, with some, a matter of words. Everyone is in favor of peace. This is not enough. War can be prevented only through an active, positive policy for peace.

It is here that we can utilize the constructive values of science and the wealth we have gained from it. We are told that we must fight for freedom. Yet the problem facing the vast majority of the people of the world today is not the danger of losing political freedom, since they have not had it. The struggle in the Far East, the unrest in Africa, stem from the demand for a different kind of freedom—freedom from hunger, want, and disease. These people seek to gain the material benefits of modern scientific civilization: health, literacy, adequate food and shelter. They need help, and will accept it whenever it is offered, whether in the form of President Truman's Point IV, or (preferably) through the largely unsupported United Nations program for the development of backward countries. War would indeed thwart their hopes for a better life; they, like us, have a big stake in its prevention. But if we offer them no positive alternative, then, hardened as they are by famine and natural catastrophe, they will not be deterred from a revolutionary course by fear of war or atomic bombs.

We propose that this situation be accepted as an opportunity, not as a threat. The weakness of present national policy is vividly illustrated by the defensiveness that sees every independent movement of peoples anywhere in the world as a danger to us. With all our technological advancement, our country is today probably the most frightened and insecure in the world.

To meet this situation we do not suggest a panacea like unilateral disarmament, scientific or otherwise. We propose a change in point of view, a willingness to use diplomacy as a means to agreement and not as a weapon for the aggravation of hatreds. We shall not attempt to blueprint our policy at this point. An excellent presentation of a positive alternative to present American foreign policy is contained in the pamphlet *Steps to Peace—A Quaker View of U. S. Foreign Policy.*[2]

A scientist will hardly dismiss a problem in advance as insoluble. To solve the problem of the peaceful coexistence of disparate political systems would at any time be a worthy human endeavor. It becomes a matter of absolute necessity when war threatens complete destruction. We are frankly urging scientists to utilize their political power in this cause.

[2] Obtainable from the American Friends Service Committee, 20 S. 12th St., Philadelphia 7, Pa.

News and Notes

AAPG Los Angeles Meeting

The joint meeting of the American Association of Petroleum Geologists, the Society of Economic Paleontologists and Mineralogists, and the Society of Exploration Geophysicists at Los Angeles, March 24–27, established a new record for attendance, with a registration of 3277 geologists, geophysicists, and wives.

AAPG President Frank A. Morgan addressed the meeting on the subject of "Oil Finding," stating that "there is no force which contributes more to the science of geology and to the technology of petroleum and natural gas than the business of oil finding," and adding that, "incidentally I like the term *oil finding* better than the term *oil exploration,* as we do find oil and we are going to continue to find it. We cannot afford not to." President Morgan presented the AAPG President's Award to Raymond Siever, of the Illinois State Geological Survey, for his paper entitled "The Mississippian-Pennsylvanian Unconformity in Southern Illinois," published in the AAPG *Bulletin* for March 1951. This award is made annually to the author, under the age of 35, of an outstanding paper published in the *Bulletin.*

The Sidney Powers Memorial Award, the highest honor conferred in the field of petroleum geology, was given to K. C. Heald, Gulf Oil Corporation, in recognition of his outstanding career as an exploration geologist and leader in the petroleum industry. Dr. Heald was presented to the association by Max W. Ball, who described him as "scientist and promoter of science, executive and business administrator, leader and developer of men."

A special feature of this four-day technical session was the Symposium on Fractured Reservoirs, led by

Research Chairman Edward A. Koester (SCIENCE, 114, 3 [Oct. 19, 1951]). As evidenced by the 15 papers in the symposium, a considerable amount of the world's future oil production will be derived from petroleum reservoirs that owe their commercial porosity to fractures. Such reservoirs include the fractured shales and schists of California, the vast Spraberry Reservoir of West Texas, and fractured limestones in Mexico and in the Persian Gulf area. An evening panel discussion, with A. I. Levorsen presiding, provided opportunity for floor discussion and for questioning the authors of papers included in the symposium.

Also well attended was a symposium on the Geology of some Relatively Unexplored Basins of the United States. A paper by M. King Hubbert, entitled "Entrapment of Petroleum under Hydrodynamic Conditions," stimulated much thought with the challenging conclusion that "stable oil and gas accumulations may be found in anticlines, but they may equally well occur in structural terraces, noses, monoclines, and other unclosed structures entirely devoid of lithologic barriers to updip migration."

The SEPM, under the presidency of Thomas A. Philpott, honored W. H. Twenhofel with an Award in Recognition of Services. President Philpott addressed the association on the subject "Paleofacies, the Geologist's New Tool."

The SEG, under the presidency of Sigmund Hammer, conferred honorary membership upon E. A. Eckhardt and presented L. Y. Faust with the award for the best geophysical paper published in 1951 by a young author. Dr. Hammer, in his presidential address, "Geophysical Exploration Comes of Age," commemorated the 21st anniversary of the Society of Exploration Geophysists and reviewed the growth of geophysical exploration, particularly in the U. S.

The presidential addresses delivered to the three affiliated societies were published in full in the *Bulletin* of the AAPG for July 1952. Also published in full in the same number was an address to the combined meeting of the three societies by Eugene Holman, president of the Standard Oil Company (New Jersey), whose optimistic speech on "Our Inexhaustible Resources" sounded the keynote for the convention. Mr. Holman commented that

> . . . by producing and using oil we have built a dynamic oil industry and have accumulated the means, both financial and technical, to find more oil. . . . As a result, in the United States alone, there has been produced since 1938 as much oil as was known to exist in the country at that time. And despite that great withdrawal, the domestic industry's proved reserves are at an all-time high level. It's as though we started out with a tank of oil, used it all up, and had a bigger tankful left. . . . Our present use of oil and coal supports an industrial and scientific structure in which men are already learning how to apply atomic power to constructive work and may learn how to harness solar energy. Such developments, of course, would probably displace the fossil fuels in some applications, thus making them available for other use. The over-all effect would be to again increase the total amount of energy available to humanity. [He continued with his thesis that] for many years people have tended to think of natural resources as so many stacks of raw material piled up in a storehouse. . . . The fact seems to be that the first storehouse in which man found himself was only one of a series. As he used up what was piled in that first room, he found he could fashion a key to open a door into a much larger room. And as he used the contents of this larger room, he discovered there was another room beyond, larger still. The room in which we stand at the middle of the 20th century is so vast that its walls are beyond sight. Yet it is probably still quite near the beginning of the whole series of storehouses. It is not inconceivable that the entire globe—earth, ocean, and air—represents raw material for mankind to utilize with more and more ingenuity and skill. . . . I do not advocate reckless squandering of natural resources; what I do advocate is true conservation—which is not hoarding but efficient and intelligent use. . . . In a very real sense raw materials do not exist, they are created. We know, for example, that in a region of great mineral wealth, people can grind out their lives in poverty and misery if they do not realize the wealth exists, or if they do not know how to get at it. It is use that makes it valuable. [He concluded that] the basic requirement for progress is freedom—freedom to inquire, to think, to communicate, to venture. . . . So we see, I think, that the most important thing in life is spirit. To the free man, all things are possible.

The 1953 annual meeting of the AAPG will be held in Houston, Texas, under the leadership of President-elect Morgan J. Davis.

ROBERT F. WALTERS
Walters Drilling Company
Wichita, Kansas

Scientists in the News

Luther R. Branting, works manager of Alcoa Mining Company's Bauxite (Ark.) operations, has retired after more than 32 years' active service with the company. He has been succeeded by **J. Thad Watters,** who began his Alcoa service as a draftsman in 1923 and who, since March of this year, has been assistant works manager at Bauxite.

Robert H. Broh-Kahn has been appointed scientific director of the Lasdon Foundation, of Nepera Park, Yonkers, N. Y. Dr. Broh-Kahn will coordinate research activities supported by grants made by the foundation, a nonprofit philanthropic organization established in 1946, to further scientific research in the field of medicine. Dr. Broh-Kahn was formerly associate director of the May Institute for Medical Research and assistant professor of experimental medicine at the University of Cincinnati. He was clinical associate professor of medicine at the State University of New York Medical School at Syracuse, and prior to joining the Lasdon Foundation, he was medical director of Whittier Laboratories, Chicago.

Robert O. Burns, head of the Systems Development Division, Navy Electronics Laboratory, San Diego,

since 1946, has resigned to accept the position of senior supervising physicist with a Signal Corps activity at Fort Monmouth, N. J.

Martha Stahr Carpenter, of the Cornell Astronomy Department, has been elected to the Commission on Radioelectric Observations of the International Astronomical Union. Mrs. Carpenter represented the Cornell Radio Astronomy Research Project, sponsored by ONR, at the meeting of the union in Rome Sept. 4–13.

Miles D. Catton, director of development of the Portland Cement Association since 1949, has been appointed assistant to the vice president for research and development. He succeeds **H. F. Gonnerman** (SCIENCE, **116,** 105 [1952]). Succeeding Mr. Catton as director of development is **Douglas McHenry,** previously administrative assistant to A. Allan Bates.

John I. Crabtree, of Eastman Kodak, was the recipient of the Progress Medal, presented by the Society of Motion Picture and Television Engineers. The medal is given each year to an individual in recognition of the invention, research, or development which has resulted in a significant advance in the development of motion picture technology. Mr. Crabtree is assistant superintendent in charge of the Photographic Chemistry Department at the Kodak Research Laboratories. **Herbert T. Kalmus,** president of Technicolor Motion Picture Corporation, Hollywood, was the recipient of the Samuel L. Warner Memorial Award for 1952. The award has been made annually since 1947, when **J. A. Maurer** received the honorarium created by the Warner Brothers in memory of their brother, to encourage the development of new and improved methods or apparatus designed for sound-on-film motion pictures, including any steps in the process.

William H. Crosby, chief of the Army Medical Service Graduate School's Hematology Department, has returned from a three-week trip to South America, where he lectured, attended meetings, and consulted with scientists in Santiago, Buenos Aires, and Caracas.

Robert B. Dean, former assistant professor of chemistry and director of chemical research at the University of Oregon, has joined the Borden Company's Chemical Division as chief analytical chemist at its Bainbridge, N. Y., resin plant.

Carl Eckart, director of the Marine Physical Laboratory of the University of California's Scripps Institution of Oceanography, is on sabbatical leave and has started a year's work at the Institute for Advanced Study, Princeton. He will be a member of the School of Mathematics.

H. D. Goodale, who has been with Mount Hope Farm, Williamstown, Mass., for 30 years, will join the staff of the American Foundation for the Study of Genetics. The foundation has assumed responsibility for continuing Mount Hope's work with mice, which includes a long-time progeny test program aimed at continued increase in body size and the step-by-step development of a strain of nearly white mice from a parent stock self-colored except for a few white hairs on the forehead.

Wayne H. Keller has been appointed director of the Chemistry Department at the National Research Corporation. Dr. Keller was a member of the uranium project at Iowa State College, where he was director of chemical metallurgy for the Manhattan District. In 1945 he joined the staff of the Mallinckrodt Chemical Works, St. Louis, as assistant technical director on the uranium project. Among Dr. Keller's duties will be the direction of the research program at National Research, which is aimed at the economical reduction of metallic titanium.

James B. Lackey has resigned as science editor of the Blakiston Co., to accept appointment as research professor in the School of Engineering, University of Florida, Gainesville. Dr. Lackey's major interest will be in sanitary biology.

John W. Palmer has been appointed director of biological production at Hyland Laboratories, Los Angeles. He was formerly with E. R. Squibb & Sons, where he spent 16 years in production, research, and product development. For the past three years he was Squibb's director of biological development, in charge of endocrine development, nutrition research, physiological chemistry, and applied physics.

Robert E. Powers, of Oklahoma A & M College, has been appointed academic dean of Briarcliff Junior College, Briarcliff Manor, N. Y. Dr. Powers was chairman of the general Social Science Department at the agricultural college.

William H. Steinkamp has been appointed vice president and general sales manager of Beckman Instruments, Inc., South Pasadena, Calif. Mr. Steinkamp was associated for 22 years with the Brown Instruments Division of Minneapolis Honeywell Regulator Company.

Victor Sutter has been appointed assistant director-general of the Department of Advisory Services of the World Health Organization, succeeding **M. G. Candau,** of Brazil (SCIENCE, **115,** 32, 33 [1952]). Dr. Sutter has been acting assistant director-general since the departure of Dr. Candau. He studied at the National University of San Salvador, and at Johns Hopkins. Since joining WHO in 1950, Dr. Sutter has been director of the Division of Communicable Diseases and of the Division of the Organization of Public Health Services.

Luther E. Wear, Caltech associate professor of mathematics, has retired after 34 years of teaching. He went to Caltech in 1918 and has devoted his time at the institute to instruction rather than research. Dr. Wear's field is algebraic geometry.

Education

The scientific library of Henry D. Dakin, composed of about 1000 volumes, has been presented to **Adelphi College** by his two stepdaughters. Included in the gift was Dr. Dakin's laboratory, with a collection of rare chemicals. Subsequent gifts from his sister and his niece have made it possible for the college to establish the Dakin Memorial Room, which was dedicated on Oct. 9. The college has also established an annual lectureship in memory of the internationally known biochemist. Each year near the date of his birth, Mar. 12, an outstanding biochemist will lecture on the Adelphi campus on an important development in scientific research.

Illinois Institute of Technology has made the following promotions: Richard B. Bernstein, director of the Freund Instrumentation Laboratory, and Frank M. Hrachovsky, to associate professors; Robert M. Leger, Bernard Rabinovitch, Mervin E. Runner, and Sei Sujishi to assistant professors.

Jefferson Medical College has promoted John B. Montgomery and Heinrich Brieger to professor of obstetrics and gynecology, and industrial medicine, respectively. Sherman A. Eger, Kenneth E. Fry, and George J. Willauer were made clinical professors of surgery, and Mario A. Castallo, I. Charles Lintgen, and Roy W. Mohler, clinical professors of obstetrics and gynecology. Theodore R. Eberhard was made clinical professor of radiology.

The **University of Michigan** is expanding its program for the training of specialists on the Near East, with the assistance of a grant from the Ford Foundation. The history, religions, cultures, and social, economic, and political structure of the area will be emphasized. George G. Cameron will direct the program, which will cover North Africa, the Arab countries, Israel, Turkey, and Iran.

New York University has reorganized its School of Education into three divisions: the Division of Scientific Study and Advancement of Education, under Alonzo G. Grace; the Division of Professional Studies in the Fine and Practical Arts, under Ralph E. Pickett; and the Division of General Teacher Education, Community and Field Services, under Francis C. Rosecrance. The change was made in the interest of more effective integration of related fields and courses.

The Division of Anatomy, **University of Tennessee** Medical Units, has added the following new staff members: George G. Robertson, of Baylor University; Harry H. Wilcox, of the University of Pennsylvania; and Marvin I. Gottlieb.

New appointments at the **Woman's Medical College of Pennsylvania** include H. Walter Forester, Jr. (ophthalmology), Leonard J. Kimmelman (bacteriology and clinical pathology), Melva J. Derrick (bacteriology), and Francis Schumann (surgery).

Grants and Fellowships

Kappa Kappa Gamma and the **California Institute for Cancer Research** have established a research award amounting to $1500 (or more) for outstanding achievement by a California woman in the field of cancer research. Deadline for entries is *July 1.* The award was established in honor of Marion Howell Tompkins, a member of the fraternity.

The **Life Insurance Medical Research Fund** invites faculty members to nominate candidates for 1953–54 predoctoral fellowships for research in the medical sciences. The fellowships are open to those who will have completed a year or more of work in a medical or graduate school and can devote most of their time to research. Stipends vary from $2000 to $2400, and the nomination deadline is *Dec. 31, 1952.* For full information, address the fund's scientific director, 2 E. 103rd St., New York 29.

Under a program of **McGill University** and the **Arctic Institute of North America,** supported by the **Carnegie Corporation of New York,** scholarships tenable at McGill for one year and averaging $750 for the academic session, plus $1500 for expenses of a summer's field expedition, are available for 1953–54. Applications should be submitted by *Apr. 1* to the secretary, Carnegie Arctic Program, Arctic Institute of North America, 3485 University St., Montreal. If field work is contemplated, applications must be in by *Jan. 1.* Applications for an annual fellowship, with a stipend of $4000, must reach the institute by *Jan. 1* also.

The **National Research Corporation Scientific Trust,** which was established in 1951, has recently made the following grants for the support of basic research: James N. Pitts, Jr., of Northwestern, $4000; Kent D. Lawson, Rennselaer Polytechnic, $3480; Anton E. van Arkel, Rijks University, Leiden, $3125.

Applications for grants in radiological research, a program administered by the **National Research Council** for the James Picker Foundation, must be received before *Nov. 30.* The foundation is particularly interested in research oriented toward diagnostic aspects of radiology. For full details write the secretary, Division of Medical Sciences, NRC, 2101 Constitution Ave., N.W., Washington 25, D. C.

In the Laboratories

The **Air Force Air Research and Development Command** has begun operation of its European Research Office in Brussels. The office will contract for research in Western Europe and monitor Air Force contracts already established in Europe. The staff will include Ralph J. Nunziato, chief, George Gogel, Constantine Svimonoff, and Candido Suarez.

Chrysler Corporation will establish a metallurgical laboratory at its Dodge San Leandro (Calif.) plant to improve the quality of airplane propellers that will

be manufactured there. The new laboratory will be under the direction of Volney F. Landry and A. T. Hanson.

Recent additions to the staff of **Arthur D. Little, Inc.**, include Edward A. Hebditch, electrical engineer, and Donald E. Keyt and Frank E. Maddocks, Jr., mechanical engineers.

Standard Oil Development Company has been authorized by the Creole Petroleum Corporation to proceed with the engineering of a new 10,000 barrel per day fluid hydroforming unit for its Amuay Bay, Venezuela, refinery. The process is a method of upgrading, by catalytic reforming, low-octane heavy naphtha to high-octane motor and aviation gasolines.

Timber Engineering Company, an affiliate of the National Lumber Manufacturers Association, has appointed Nicholas V. Poletika assistant director of research at its Lumber and Wood Products Laboratory. Robert R. Blumenstein has been named manager, and Charles H. Hoffman assistant manager.

Meetings and Elections

The **American Society of Civil Engineers** has elected Walter L. Huber, of San Francisco, president, succeeding Carlton S. Proctor, of New York. G. Brooks Earnest and Edmund Friedman were elected to two-year terms as vice presidents.

The seventeenth **Educational Conference** will be held at the Hotel Roosevelt, New York, Oct. 30–31. General theme of the conference will be "Modern Educational Problems," and the following educators will speak: Francis Keppel, I. L. Kandel, Alvin C. Eurich, Warren G. Findley, Percival M. Symonds, John C. Flanagan, Gertrude Hildreth, Arthur I. Gates, Helen M. Robinson, Mildred McAfee Horton, and Walter N. Durost. Immediately following the conference the **National Association for Remedial Teaching** will meet at Hunter College. Among the speakers at the general session will be Lou LaBrant, Arnold Gesell, and Anne S. McKillop. Sectional meetings will also be held.

The **Gerontological Society**, meeting in Washington, D. C., elected Edmund V. Cowdry president and Nathan W. Shock secretary. Ephraim Shorr is the AAAS Council representative. The 1953 meeting of the society will be held in September in Berkeley, Calif.

The fifth annual session of the **Gulf and Caribbean Fisheries Institute**, sponsored by the Marine Laboratory of the University of Miami, Coral Gables, will be held at the Delano Hotel, Miami Beach, Nov. 17–21. The following sessions will be held: Commercial Fisheries, Shellfisheries, Economics, Exploratory Fishing and Technology, and the Caribbean.

The **Society of Protozoologists**, affiliated with AAAS Section F, elected the following officers at its annual meeting in Ithaca, N. Y., in September: president, Theodore L. Jahn, of the University of California, Los Angeles; vice president, Lowell E. Noland, of the University of Wisconsin; secretary, Norman D. Levine, of the University of Illinois.

Miscellaneous

Deadline for receipt of entries for the **Howard W. Blakeslee Award** of $1000, established by the American Heart Association in honor of the late science editor of the Associated Press (SCIENCE, **115**, 699 [1952]), is *Jan. 15,* for material published or produced during the calendar year 1952. For full information address the chairman of the Managing Committee, American Heart Association, 44 E. 23rd St., New York 10.

Recent debate in the House of Lords of the British Parliament brought out the fact that a **British Science Centre** is being planned and will be located on the Thames River, downstream from Waterloo Bridge and facing Somerset House. Land for this purpose has already been set aside by the London County Council. The present government is also planning at least one institution of university rank that will be devoted predominantly to the teaching of the several branches of technology, and it is also proposed to provide additional financial assistance that will enable existing technical colleges to expand instruction at higher technological levels. The debate brought out the fact that the present government is opposed to the plan endorsed by Mr. Attlee's government to establish a nonteaching, award-making body under the title of Royal College of Technology. The need to train a larger number of technologists is receiving increasing recognition in British government circles (SCIENCE, **116**, 3 [Oct. 10, 1952]).

R. A. E. Galley, formerly secretary of the Inter-Departmental Insecticide Committees of Britain's Agricultural Research Council, has succeeded **John Simonsen** as director of Colonial Products Research.

The **Gulf Fishery Investigations** of the U. S. Fish and Wildlife Service are making extensive plankton collections in the Gulf of Mexico. Samples are predominantly zooplankton and include much invertebrate material (fish eggs and immature fishes are removed for the Investigations' own studies), which should be of interest to taxonomic specialists. The Investigations are interested in having this material worked up and will supply aliquots of the whole samples to qualified persons. Write to Chief, Gulf Fishery Investigations, Fort Crockett, Galveston, Texas, giving résumé of qualifications.

The **Harvey Lectures**, of the New York Academy of Medicine, began on Oct. 23 with a lecture by James Bonner. Succeeding lectures will be given by Frank L. Horsfall, Jr. (Nov. 20), Konrad Bloch (Dec. 18), Josef Warkany (Jan. 22), Julius H. Comroe, Jr. (Feb. 19), Gerty T. Cori (Mar. 19), and Robert F. Pitts (Apr. 16).