lishing channels by American publishers under licenses to be granted on May 1.

To encourage immediate republication and assure the widest possible use of scientific works, licenses will be granted on a non-exclusive basis for a five-year period. They will be royalty-free until all original costs incidental to republication have been recovered and then will bear a royalty of 15 per cent. of the list price of the works.

Licenses for republication will be granted to the publisher making the books available to the public in the shortest period of time and at the lowest list price. Information pertaining to requests for publication of each title will be made available to the publisher licensed to reproduce each work.

In many cases books with a very limited market are nevertheless of the greatest value in certain technical fields. In order to insure the most complete opportunity for prompt exploitation of the works after a license has been granted, no further license will be granted for a period of six months. Under similar licenses many sets of war-urgent scientific works aggregating approximately two hundred and fifty volumes are now being published.

It is hoped that the exploratory work done by the custodian will be of material assistance in securing immediate republication of those works most essential in the war effort. The exploratory work will be continued for such time as it may be of assistance in obtaining reproduction of such works. Copies of the listings of works are available at the Office of the Alien Property Custodian, Washington, together with a detailed statement of the policy which will be followed.

RARE CHEMICALS

THE following chemicals are wanted by the National Registry of Rare Chemicals, Armour Research Foundation, 33rd, Dearborn and Federal Streets, Chicago, Ill.:

- 1. Sodium Saccharate
- 2. 4-methoxy-2-butanone
- 3. p-amino phenyl stibonate of sodium
- 4. Avelina Rosada (So. American drug)
- 5. Solanocapsine
- 6. Solanocapsidine
- 7. Alpha chloro butyric acid
- 8. Chloro pentonoic acid
- 9. Sodium Iodoacetate
- 10. 2-amino-heptane sulfate
- 11. Disodium phenyl phosphate
- 12. Gallium
- 13. Rubidium
- 14. Cesium
- 15. b-hydroxy glutamic acid
- Alcohols or mercaptans of the aliphatic series having 20 or more carbons in the molecule

THE SOCIETY OF THE SIGMA XI

DR. HARLOW SHAPLEY, director of the Harvard College Observatory, president of the American Association of Arts and Sciences, has been elected president of the Society of the Sigma Xi, the national honorary society for the promotion of research in science.

Dr. C. Frederick Hansen, vice-president and trustee of the Grant Foundation, director of research and planning of the W. T. Grant Company, has been elected a member of the Alumni Committee for a period of five years.

Dr. Carleton C. Murdock, professor of physics at Cornell University, has been named a member of the executive committee for the same term.

The other officers of the society are:

Dr. George A. Baitsell, of Yale University, Secretary; Dr. George B. Pegram, of Columbia University, Treasurer; Dr. Carl D. Anderson, California Institute of Technology; Dr. Harvey E. Jordan, University of Virginia; Colonel C. E. Davies, American Society of Mechanical Engineers; Dr. Fernandus Payne, Indiana University; Dean Edward Ellery, Union University, all members of the Executive Committee; and Dr. James R. Angell, National Broadcasting Company; John C. Parker, vice-president, Consolidated Edison Company of New York; Dr. A. Elizabeth Adams, Mt. Holyoke College, and Dr. Paul R. Heyl, National Bureau of Standards, all members of the Alumni Committee.

A new chapter was installed at the Polytechnic Institute of Brooklyn on March 25, with Dr. Shapley and Dr. Baitsell as the installing officers. Dr. Saul Dushman, assistant director of the Research Laboratories of General Electric Company, spoke at the dinner in the evening.

A new Sigma Xi chapter at Tufts College at Medford, Mass., was installed on April 2. After a convocation in the morning and formal installation ceremonies in the afternoon, there was a dinner, followed by the installation address on "The Mathematical Nature of Modern Physical Theories," by Dr. George David Birkhoff, Perkins professor of mathematics, Harvard University.

The Radcliffe College Chapter will be formally installed on Thursday, April 15. The installation address will be made by Dr. S. Gaposchkin, of the department of astronomy, Harvard University.

Sigma Xi was founded in 1886 at Cornell University by a small group of graduates in science. Only those who have carried on original and independent investigation are eligible to membership.

Sigma Xi is now established in one hundred and twenty-five principal universities and cities throughout the country. This organization includes in its membership a large percentage of the scientific workers in all branches of natural science. The total membership is now about 50,000. Chapters elect 3,200 members and associates annually from faculties, graduate and undergraduate bodies. Sigma Xi promotes research through grants, national lectureships and publications. It publishes the quarterly, *The American Scientist*.

ISAIAH BOWMAN, PRESIDENT OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE newly elected president of the American Association for the Advancement of Science has had such important contacts with so many branches of the natural and the social sciences that any biographical sketch or introduction seems quite unnecessary. I shall, therefore, confine my remarks to a few comments which may give a more intimate picture of the character and personality of our new president.

In the depths of the early depression, the National Research Council felt the need of a strong guiding hand to steer it through financial shoals and at the same time to increase its usefulness in this time of urgent need. After careful survey of possibilities, it elected Isaiah Bowman to this post in 1933. The council immediately took on a new lease of vigorous life. At about the same time, the Federal Government was faced with the necessity of drastic curtailment of expenses, including those of its scientific bureaus. How, in spite of this, could the effectiveness of these bureaus be maintained and, if possible, increased? To this end the Science Advisory Board was invented by Isaiah Bowman and appointed by President Roosevelt. The only reason why Bowman was vice-chairman rather than chairman of this board was his own modesty in not wanting to take the headship of an organization which he himself had promoted. Though there was disappointment in failure to secure action on some of this board's important recommendations, approximately two thirds of its recommendations were put into effect and even its failures left a useful background of education of many governmental officials.

Again in this difficult period, the Johns Hopkins University sought a new head. Here again financial problems were insistent and discouraging. Furthermore, a long period of temporary administration had accumulated an unusually large number of problems to await solution by the new administration. Several years of painstaking search resulted in Isaiah Bowman's selection as the new president.

Now, in the midst of our greatest war, when travel restrictions even curtail or prevent its annual meetings, and when new problems and difficulties are encountered on every hand, the American Association for the Advancement of Science elects Isaiah Bowman to be its president.

One's first reaction to this recital might well be:

"What a bear he is for punishment!" To this I subscribe, with the comment that, like the early Christian martyrs, he suffers in a good cause. Unlike them, he seems to survive. Unlike them also, he seems to enjoy it. The real answer is not that he likes punishment, but that he is ever eager to throw his tremendous energies and abilities into any importantly constructive job which needs to be done as a public service, especially when this job involves the better utilization of science and the scientific method. He reacts quickly and vigorously, and always constructively, to a challenge.

Professionally, Isaiah Bowman is a geographer, but not in the limited sense of the little girl's definition of geography as "the study that tells us what's where." It is more in the sense of that verse in the Princeton Faculty song which runs: "He tells us how the world was made, and where the Lord the sidewalks laid." Isaiah Bowman's geography includes, in a vital way, the whole gamut of natural and social science-everything in fact which affects man's life on this planet; meteorology, climatology, oceanography, transportation, engineering, soil science, anthropology, geology, biology, political economy and many other specialized fields are, to him, aspects of the great science of man's life in his environment. It is hard to conceive of any other scientific background which would so well fit a man to head a great, diverse scientific body like the American Association for the Advancement of Science.

I recall Bowman's description of his experiences as member of both the National Research Council and the Social Science Research Council. He described the meetings of the latter council as full of interest, brilliant wit and repartee by members with rich backgrounds of cultural interest. The discussions wandered far and wide from the subject at issue and the actual business transacted was slim, but the meetings were thoroughly enjoyable. In the National Research Council, on the contrary, there were no frills; business was transacted in one, two, three order with cold efficiency, and the meeting adjourned. Bowman found satisfactions, and also some defects, in both performances.

The twenty most important years of Isaiah Bowman's career as a professional geographer were 1915 to 1935 while he was director of the American Geographical Society of New York, though before this, while on the faculty of Yale University, he headed productive research expeditions in Peru and the Central Andes generally.

I refer the reader to "Who's Who in America" or to "American Men of Science" for the details of some dozen honorary degrees, some six medals (four specified as golden!) from learned societies of five nations, and membership in more national and international scientific bodies than I could count twice with the