

assured. To demonstrate concretely the method and process of reconstructing these compositions and to illustrate the swing and rhythm, the mood and temper of their poetic contents, the writer read with explanatory comment his translation of "Inanna's Descent to the Nether World," a universally significant myth whose contents he has succeeded in reconstructing in the course of the past five years.

*The ship of the soul on a group of grave-stelae from Terenuthis:* CAMPBELL BONNER. In this paper four small grave-stelae from Terenuthis in lower Egypt are illustrated, and their interpretation is discussed. The period of the burials was at the end of the fourth or the beginning of the fifth century of the Christian era. In all four examples a figure representing the deceased person is in a boat or is about to enter one. It is well known that the ancient Greeks often compared human life to a voyage, and the imagery connected with the ship of life was taken over by the Christians. In consequence of this, the ship-symbol occurs on a number of Christian tombs in the catacombs of Rome. In previously published material

from Christian Egypt, this symbol is rarely found; and yet the Christian idea of the ship of the soul divinely guided to its final harbor was probably accepted all the more readily in Egypt, because the people had inherited from dynastic times the belief that the soul was carried in a boat, sometimes with the guidance of a divine ferryman, to the abode of the blessed.

*Some pre-armada propagandist poetry in England:* TUCKER BROOKE. In the years 1585 and 1586, when England was expecting invasion by Spain, and combating "fifth-column" activities which centered around Mary Queen of Scots, the Oxford University Press issued a series of sixteen-page pamphlets intended to sustain the national morale. They were in Latin verse and appear to have had a wide distribution, but they have never been reprinted and are almost unknown to bibliographers. A set has been discovered at the Huntington Library and another at Winchester College, England. The most interesting of the contents are twelve odes, written during 1585 and 1586 and offering practically a month-by-month expression of national feeling.

## SCIENTIFIC EVENTS

### A READING MACHINE FOR MICROFILMS

*Mathematical Reviews*, the new international abstracting journal of mathematics, which has established a microfilm reprint service enabling subscribers to obtain a copy of any article reviewed has now arranged for the manufacture and supply of a reading machine for microfilm.

When the microfilm reprint service was introduced, it was realized that the usefulness of this service would depend to a large extent upon the availability of reading machines. The Committee on Scientific Aids to Learning of the National Research Council is promoting, among other things, the use of microfilm. As a result of its efforts, a reading machine is being manufactured which will be sold at a retail price of \$32.00. A grant from the Committee on Scientific Aids to Learning has made it possible for *Mathematical Reviews* to distribute a limited number of these machines on the following terms:

A reading machine for microfilm will be given—as long as the available supply lasts—to any person who has paid his subscription, at the rate to which he is entitled, to *Mathematical Reviews* in advance for three years beginning January, 1941. The person who receives a reading machine must pay express charges and import duty, if any, from Buffalo, N. Y. Until January 1 this offer was made only to the present subscribers.

In the fall of 1939, an advisory group on microphotography to the Committee on Scientific Aids to Learning, composed of Keyes D. Metcalf, director of the Harvard University Library, *chairman*; Professors Ralph D. Bennett and Ernest H. Huntress,

of the Massachusetts Institute of Technology; Dr. Vernon D. Tate, of the National Archives, and Dr. Irvin Stewart, director of the Committee on Scientific Aids to Learning, *ex officio*, was requested to consider the possibilities of designing and making available a simple, inexpensive microfilm reading machine for the use of the individual scholar. Several designs were suggested, and three models were constructed. Each of these models was thoroughly tested both in the laboratory and in actual use; a set of plans and specifications embodying the final accepted design was prepared for distribution to manufacturers specializing in equipment of this type.

Bids for the manufacture of the reading machine were received from a number of companies, and the Spencer Lens Company was authorized to build a pilot model. It was built, tested and inspected, and the Committee on Scientific Aids to Learning has now signed a contract for a number of these machines. In addition, they will be placed on the market by the Spencer Lens Company.

### FELLOWSHIPS IN THE NATURAL SCIENCES OF THE NATIONAL RESEARCH COUNCIL

THE National Research Fellowship Board in the Natural Sciences of the National Research Council has made the following fellowship appointments for the academic year 1941–1942:

Paul J. Allen (Ph.D., plant physiology, University of California, 1941). At Harvard University. The intermediate carbohydrate metabolism of the obligate parasite, *Erysiphe graminis*, with a comparative study of different strains.

- Ernest Ball (Ph.D., botany, University of California, 1941). At Yale University. Experimental studies on the shoot apices of Angiosperms.
- Robert George Ballentine (Ph.D., biology, Princeton University, 1940). At the Rockefeller Institute for Medical Research, New York City. The chemical organization of cell surface.
- Edward Griffith Begle (Ph.D., mathematics, Princeton University, 1940). At the University of Michigan. The structure of generalized manifolds and related spaces.
- Orlin Biddulph (Ph.D., botany, University of Chicago, 1934). At the State College of Washington. Studies in translocation of phosphorus in plants (by means of radiophosphorus). (On a participating basis with the State College of Washington.)
- Charles Kilgo Bradsher (Ph.D., organic chemistry, Harvard University, 1937). At Duke University. Aromatic cyclodehydration. (On a participating basis with Duke University.)
- Stuart Robert Brinkley, Jr. (Ph.D., physical chemistry, Yale University, 1941). At Harvard University. A systematic study of the normal vibrations and force contents of related molecules.
- Sidney Michael Dancoff (Ph.D., physics, University of California, 1939). At the Institute for Advanced Study. Interaction of mesotrons and nuclear particles.
- Walter Gordy (Ph.D., physics, University of North Carolina, 1935). At the California Institute of Technology. Spectroscopic studies of the hydrogen bond.
- John Edward Harris (Ph.D., biochemistry, State University of Iowa, 1940). At the University of Pennsylvania. The influence of the metabolism of the erythrocyte on its cation permeability and osmotic properties.
- Walter Lincoln Hawkins (Ph.D., organic chemistry, McGill University, 1938). At Columbia University. The antimalarial constituents of *Alstonia* bark.
- Morton Henry Kanner (Ph.D., physics, Princeton University, 1940). At the California Institute of Technology. Photodisintegration of deuterium.
- Ellis Robert Kolchin (Ph.D., mathematics, Columbia University, 1941). At the Institute for Advanced Study. A further study of differential ideals.
- Merle Lawrence (Ph.D., psychology, Princeton University, 1941). At the Johns Hopkins Medical School. The cause of auditory impairment for high tones.
- James Van Gundia Neel (Ph.D., genetics, University of Rochester, 1939). At Columbia University. Studies on the interaction of mutations affecting the chaetae of *Drosophila*.
- Frederick Stanley Philips (Ph.D., zoology, University of Rochester, 1940). At Yale University. The isolation of anisometric proteins present in echinoderm and amphibian eggs and the study of their physical-chemical properties.
- Louis Douglas Roberts (Ph.D., physical chemistry, Columbia University, 1941). At Cornell University. The thermodynamic properties of partially miscible binary liquid mixtures near the critical temperature.
- Francis Joseph Ryan (Ph.D., zoology, Columbia University, 1941). At Stanford University. Temperature as a means for the identification of developmental processes.
- Richard Evans Schultes (Ph.D., biology, Harvard University, 1941). At the Instituto de Ciencias Naturales, Bogota, Colombia. The ethnobotanical aspects of the flora of Colombia.
- Carl Keenan Seyfert (Ph.D., astronomy, Harvard University, 1936). At Mount Wilson Observatory. The relationship between emission in the spectra of galactic and extragalactic nebulae.
- Roger Wolcott Sperry (Ph.D., zoology, University of Chicago, 1941). At Harvard University. Determination of the higher centers involved in development of new motor habits following operative disarrangement of peripheral nerves and muscles in mammals.
- Hubert Kirk Stephenson (Ph.D., geology, Princeton University, 1940). At the Massachusetts Institute of Technology. The magnetic properties of minerals.
- George E. Valley, Jr. (Ph.D., physics, University of Rochester, 1939). At Harvard University. Gamma-ray spectra.
- Sam Isaac Weissman (Ph.D., chemistry, University of Chicago, 1938). At the University of California. The spectra of coordination compounds of europium and the configuration of related compounds.
- Frank Bradshaw Wood (Ph.D., astronomy, Princeton University, 1941). At the University of Arizona. Photoelectric light curves and elements of eclipsing binaries.

#### A NEW SOCIETY FOR X-RAY AND ELECTRON DIFFRACTION RESEARCH WORKERS

THE replies to a questionnaire submitted to American x-ray and electron diffraction research workers by the National Research Council Committee on X-Ray and Electron Diffraction show a majority of about  $3\frac{1}{2}$  to 1 in favor of the formation of a new society by this group. Such a society is therefore being organized.

Any research worker in this field who has not already received an application blank and a ballot for the election of officers for 1941 and for deciding between the names "American Society for Molecular and Crystal Structure Research" and "American Society for X-Ray and Electron Diffraction," may obtain them by writing the undersigned. For the ballot to be valid, it must be returned on or before June 16. Those applying by that date will be included in the list of charter members. Dues for the balance of 1941 are one dollar.

The first meeting of the new society will be at Gibson Island, Md., from July 28 to August 1, coinciding with the Conference on X-Ray and Electron Diffraction, sponsored by Section C of the American Association for the Advancement of Science. Registration for this meeting is in the hands of Dr. Neil E. Gordon, Central College, Fayette, Mo., the director