it would make good reading. Is it not an error to perpetuate errors in scientific names? Only yesterday my attention was called to the following: A deer was found in Big Pine Key in South Florida different from the common deer (*Odocoileus virginianus*). Barbour and Allen gave it the subspecific name *clavium,* meaning "of the Keys." Unless my Latin is very much at fault, this word refers to the kind of keys that you lock doors with, and is no way related to the word quay, cay or key—terms applied to little islands on the Florida coast and in the West Indies. The word "keyensis" or "cayensis" should be used.

There are many like the following.

Our Fiddle-wood belongs to the genus Citharexylon, which means fiddle or violin wood. The woods of this genus are usually extremely heavy and hard and probably have never been used in the manufacture of fiddles. The word fiddle in this instance is probably a corruption of the French word *fidèle,* meaning strong, true and trustworthy.

We should be all the more careful because errors in nomenclature seem to stick forever, as in the word Cocopalm. Many books still insist that coco comes from *kokkos,* the Greek for seed, and there is apparently no reason for it except the superficial similarity of the words. When L. named the genus Cocos he probably had the word coccus in his mind.

The serious business of naming persons and places is even more haphazard. A colored woman in Key West liked the name "Dora," but it was too common in her neighborhood. A naval officer for whom she worked suggested "Cuspidora" in a joke. The child was so christened and is probably the only person in all the world with such a name. No doubt many plant and animal scientific names have a similar basis.

JOHN C. GIFFORD

SPECIAL CORRESPONDENCE

THE ADVANCEMENT OF GEOLOGY THROUGH COOPERATIVE RESEARCH

BECAUSE it has become evident that the advancement of the geological sciences requires the cooperation of a number of highly trained specialists, a geological expedition is now being organized to make a comprehensive study of the exceedingly interesting region just north and east of Yellowstone National Park. According to the plans formulated federal and state agencies, universities, research organizations and individual scientists will cooperate in the threefold plan of training students, conducting scientific research and studying mineral deposits which may be found to have commercial value.

Work planned for the present summer includes airplane and topographic mapping by the War Department and U. S. Geological Survey, and geological field work by the Montana Bureau of Mines and Geology and the U. S. Geological Survey; and during 1931 gravity studies will be made in the region by the U. S. Coast and Geodetic Survey in an effort to compare and harmonize geological and geodetic evidence afforded by the area.

Preliminary studies of the geography, land forms and glacial geology of the Beartooth Plateau and adjacent lowlands will be made jointly by Professor Nevin M. Fenneman, of the University of Cincinnati and National Research Council; by Professor Paul McClintock, of Princeton and the Illinois State Geological Survey, and probably by Dr. Arthur Bevan, who was formerly at the University of Illinois, is now state geologist of Virginia and did his thesis work for the University of Chicago on the physiography of the Beartooth region.

Study of the Cambrian geology of the region, which is a continuation of the work of the late Dr. Charles D. Walcott, of the Smithsonian Institution, will be directed by an informal committee consisting of Dr. C. E. Resser, of the U. S. National Museum; Dr. Ira Edwards, of the Milwaukee Museum, and Professor B. F. Howell, of Princeton. Work on special details of local Cambrian geology is to be done by Gordon Knox Bell, Jr., of New York City, a graduate of Harvard and at present a graduate student at Columbia University.

Work on the chromite deposits and other ore deposits of the Beartooth region, and on the intrusive and volcanic rocks of the area, will be planned by a group including Dr. C. H. Clapp, president of the University of Montana; Dr. Francis A. Thomson, president of the Montana School of Mines and director of the Montana Bureau of Mines and Geology; Professor A. F. Buddington, and Professor Edward Sampson, of Princeton. Special phases of the petrologic work will be taken up by Dr. E. L. Perry, of Williams College.

The underground water resources of the Montana portion of the area will be studied by Dr. Eugene S. Perry, of the Montana Bureau of Mines and Geology, assisted by students from the Montana State School of Mines; and the coal and oil geology of the region will be studied in a broad way by Dr. C. E. Dobbin, of the U. S. Geological Survey; and by Dr. W. T. Thom, Jr., of Princeton, who is a participant in the research work of the American Petroleum Institute

and American Association of Petroleum Geologists, besides being a member of the National Committee engaged in the scientific classification of North American coals.

The study of the structure of the mountains and subsidiary folds of the region will be planned by a group including Dr. Thom; Professor Walter H. Bucher, of the University of Cincinnati; Professor Chester R. Longwell, of Yale, and Professor Rollin T. Chamberlin, of the University of Chicago.

The fossil plants associated with the volcanic deposits lying east of the Yellowstone Park, or included in the river-laid clays of the Big Horn Basin badlands, will be collected and studied by Dr. Erling Dorf, with the advice of Dr. R. W. Chaney, of the Carnegie Institution, and Dr. David White, of the U. S. Geological Survey. Dr. Dorf has been assisting Dr. Chaney for several years in the study of the Pliocene floras of the Pacific Coast sponsored by the Carnegie Institution of Washington, and the doctor's thesis recently submitted by Mr. Dorf to the University of Chicago covered a part of these paleobotanic studies and is being published by the Carnegie Institution.

Study of the processes of marine and continental sedimentation as illustrated by the sedimentary forms of the Big Horn Basin region will be developed by Professor R. M. Field, of Princeton, as a continuation of his studies of sedimentation now taking place in the Bahamas and Florida east coast areas. Dr. Field, together with the other members of the International Summer School of Geology and Natural Resources, will visit the Yellowstone and Big Horn Basin regions this summer. Foreign guests of this year's summer school include: Dr. Frank Debenham, head of the department of geography of Caius College, Cambridge University; Dr. H. Schneiderhöhn, professor of economic geology and director of the Mineralogical Institute of the University of Freiburg; Dr. P. Ramdohr, professor of mineralogy of the Mineralogical Institute of Aachen; Dr. Otakar Matousek, associate professor of methods of geology, Charles IV. University, Prague, Czechoslovakia.

Administrative direction of the field research work is under the direction of Dr. Thom, acting with the advice of Professor J. P. Rowe, chairman of the department of geology at the University of Montana, and of Professor Field as director of the International Summer School. Doctors Dorf and Perry will participate as executive assistants as well as scientific investigators.

A cabin colony will probably be established in 1931 at some strategic point along the eastern or northeastern foot of the Yellowstone Park Plateau. This colony will serve as headquarters both for the students who are receiving practical training and for the experienced geologists who may wish to spend their summers in group study and research in the Yellowstone-Big Horn Basin province.

Through the prosecution of plans laid out by such a group of scientists, it seems certain that geology will be advanced as a science and that a popular understanding of geology and an appreciation of the work of the federal and state surveys will both be promoted to an appreciable degree.

W. TAYLOR THOM, JR.
RICHARD M. FIELD

PRINCETON UNIVERSITY

SCIENTIFIC BOOKS

Mathematical and Physical Papers. SIR JOSEPH LARMOR. In two volumes. Vol. I, pp. xii + 679; Vol. II, pp. xxxii + 811. Cambridge University Press, 1929.

THESE two large beautifully printed volumes contain one hundred and four papers on mathematics and mathematical physics as well as nearly fifty additional notes or papers in the form of appendices, a few of which follow the papers to which they refer but most of which are collected at the end of each volume. Nine papers relating to physical relativity have been omitted from the collection, since the author felt that their significance has been vitiated by more recent developments of the subject. The following rough classification of the one hundred and four numbered papers gives an idea of the range of Professor Larmor's interest. In mathematics without direct physical applications there are nine papers of which six are predominantly in the field of geometry. Twelve papers fall in the domain of dynamics, several of them having to do with celestial mechanics or geophysics; the theory of elasticity claims three, and hydro and aerodynamics seven. Relating to thermodynamics, statistics and atomic theory there are eight papers. The largest categories, however, are electromagnetism, including the ether, and optics. Although it is not possible to distinguish sharply between these two, we may classify thirty-seven as belonging to the former and twenty-two to the latter. Then there are three obituaries or appreciations (Gibbs, Kelvin, John Michell), a paper on the periodicity in sun-spots, an address before the British Association in 1900 on the "Methods of Mathematical Physics" and the presiden-