state appropriation and from the emergency building fund raised several years ago by alumni and friends of the college.

THE following changes have been made in the department of chemistry at the University of Chicago. Dr. Thorfin Rusten Hogness, associate professor of physical chemistry at the University of California, has accepted an appointment as associate professor of physical chemistry. He will begin his work on January 1, 1930. Dr. William A. Noyes, Jr., assistant professor of chemistry, has resigned to accept an appointment as associate professor of physical chemistry at Brown University. His resignation will take effect on October 1. Dr. Preston Mayne Harris has been appointed instructor in chemistry. Dr. Harris is a Ph.D. of the Ohio State University and has spent the past year as National Research Fellow with Professor Arthur Compton at the University of Chicago. Dr. David M. Gans has been appointed instructor in physical chemical research, cooperating with Professor Harkins. Dr. Gans is a Ph.D. of the University of Chicago, 1929. The department of chemistry will occupy in September the George Herbert Jones Laboratory for research and graduate work in chemistry.

H. V. MOYER, PH.D. (University of Kansas), National Research Council Fellow at Yale University, and H. L. Johnston, Ph.D. (University of California), assistant in the department of chemistry at the University of California, have been elected to assistant professorships of chemistry at the Ohio State University. M. L. Wolfrom, Ph.D. (Northwestern University), National Research Council Fellow at the university, has been appointed instructor.

DR. F. W. LOOMIS, of the department of physics of New York University, has been appointed head of the department of physics in the University of Illinois.

THE University of Virginia announces the establishment of a chair of public health and hygiene and the appointment of Dr. Kenneth F. Maxcy, of the U. S. Public Health Service, as the first incumbent. Dr. Maxcy graduated at the Johns Hopkins University School of Medicine in 1915 and received the degree of doctor of public health at the Johns Hopkins in 1921.

MR. JAMES HOLMES, lecturer in geography at Armstrong College, Newcastle-on-Tyne, has been appointed professor of geography at the University of Sydney, in succession to Dr. Griffith Taylor, who recently joined the faculty of the University of Chicago.

DR. CLARENCE J. CAMPBELL, formerly professor of physiology at Syracuse University, has been appointed professor of pharmacology at Dartmouth College.

DISCUSSION

PRIORITY IN STRATIGRAPHIC NOMENCLATURE

PRIORITY is a fundamental principle in all types of scientific nomenclature, and it is equally as necessary as it is fundamental. Scientific units, whether they be animals or plants or minerals or chemicals or fossils, need specifically to be named, and, to be of value, this name must have universal adoption, must be in accord with other names for like units and must not be subject to unnecessary change. Professional ethics, if nothing else, has suggested that the first name properly applied to a scientific unit be adopted by other authors, in recognition of the work of the first designator as well as for convenience of description. Since it is not always possible to search out the original term or to understand its exact application, the first name is often undiscovered or unusable, and later names are accepted. This practice of recognizing the first name given to a unit—with the proviso that name and unit can be unmistakably associated—has been dignified in zoological nomenclature into the law of priority (Article 25, International Rules of Zoological Nomenclature).

In stratigraphic geology, to certain rock formations or sedimentary units are given definite names by which they may become known to other workers in geology. In most cases, these names are of geographic derivation, and are taken from the name of that place where the particular rock series is best exposed. Thus we may have the Shady dolomite, named from Shady Valley in Tennessee. But if this same series and sequence of rocks has in nearby regions been also called the Sherwood, Tomstown, Beaver or Aldrich limestone, by what principle should we choose the proper name to use? Since stratigraphers and geologists are more or less familiar with the rules of zoologic nomenclature, it has come to be largely accepted that the law of priority of designation should be applied in the naming of these sedimentary units in much the same way as this law is applied in the naming of fossil forms. In other words, that whatever name was first properly applied to a rock formation should be retained, while any later terms should be put into synonymy and abandoned.

Any system of scientific nomenclature is an artificial and arbitrary scheme, created largely for the

proper purpose of preventing or eradicating error and confusion in scientific discussion. That is to say, to make sure that what is referred to under a certain name by one man will be known to all others in that field by the same name. Not always, however, is precision profoundly served by rigid adherence to the rules of any system of nomenclature. Even the carefully planned International Rules of Zoological Nomenclature may cause inconvenience if not confusion if too strictly applied in every instance. As a possible example of this, consider the case of Nummulites, one of the most widely known fossils and invertebrates. It is not necessarily certain that convenience will be served and confusion avoided if the name of this form be changed to Camerina, on the ground that Brugnière in 1792 and not Lamarck in 1801 gave the first name to the fossil foraminifer. Similar instances arise from a strict application of the law of priority to stratigraphic names. The writer was recently interested in the nomenclature of a certain formation in the Appalachian Valley to which in good faith but at different outcrops eight separate names had been applied by seven workers, and the first name to be applied was the least used of the lot. Of the eight names given to this unit, obviously seven should be discarded, but why abandon the one most widely used in preference to the one least known?

For some time, the writer has been opposed to the practice of rigidly applying priority of designation in stratigraphic nomenclature, and he has been recently gratified to find that the U. S. Geological Survey is similarly opposed to too strict an application of this principle. The writer would like to propose what he would call the law of priority of adopted usage which, together with the established law of priority of designation, would apply to the determination of the proper names for stratigraphic units.

In other words, when (as in the case of the Shady dolomite) it is necessary to choose from a number of names applied to a rock formation one which is to serve as the future corrected name, the first term properly applied should be retained and the others discarded, *unless* by so doing that name which has gained the widest currency in geologic literature will thereby be abandoned in preference to an obscure term. In that case, let priority of designation be waived in favor of priority of adopted usage, lest confusion rather than precision be gained. The application of this proposal is neither strikingly new nor novel in current geologic practice, and it is hoped that it will be more widely adopted. Its application in zoologic nomenclature is worthy of consideration.

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NEW JERSEY LAW SCHOOL
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DID JOHN NAPIER INVENT LOGARITHMS?

IN 1904 H. Poincaré published a letter under the heading "La Terre Tourne-t-elle?" in which he explained a point of view according to which the rotation of the earth can not be regarded as an established fact, but he emphasized at the same time the desirability of assuming that the earth does rotate, since this assumption is a fundamental harmonizing factor in our scientific thinking. Similarly, the heading of the present note aims merely to emphasize a point of view according to which one might be inclined to say that John Napier did not invent our common logarithms, since the nature of Napier's contributions becomes much clearer if it is viewed also from this standpoint.

The term logarithm itself, which Napier applied to his tables, points to a wide difference between the use he had in mind and our present common view of the main use to be made of logarithmic tables. The term logarithm means ratio number, and Napier's tables were invented with a view to their usefulness in working with ratios, especially with the equality of ratios, or proportions. Hence the fundamental laws that the logarithm of the product is equal to the sum of the logarithms of the factors and that the logarithm of 1 is 0 do not apply to his tables. These facts suffice to exhibit a very wide difference between his tables and our modern logarithmic tables and they seem to justify the heading noted above.

It is true that Napier expressed some views relating to logarithms which were not embodied in his tables, but these tables are commonly called the earliest logarithmic tables and the claim that Napier is the inventor of logarithms has been largely based thereon since the theory of logarithmic computation was developed by earlier writers, especially by N. Chuquet and M. Stifel. In fact, traces of this computation are found in Euclid's "Elements," and more explicitly in the work of Archimedes. If we regard the terms of the arithmetic series which Archimedes associated with a geometric series as the logarithms of the corresponding terms of the latter series it results that the logarithm of the product of two factors is equal to the sum of the logarithms of these factors diminished by the logarithm of 1, which is not 0, just as in Napier's tables.

It is, however, not our main object to prove here that the question noted in the heading should be answered in the negative, but to direct attention to another clear illustration of the general principle that many scientific questions which are commonly answered in the affirmative may be greatly clarified by considering also the negative thereof. Historical questions seem to be especially adapted to be presented in the form of disputations since the negative side of commonly accepted views is more likely to