THE seventh annual meeting of the Virginia Academy of Science will be held at the Staunton Military Academy, Staunton, Virginia, on May 10 and 11.

THE building and equipment of the new Chemical Laboratory at Princeton University is now sufficiently advanced that its completion during the coming summer is assured. It is planned to hold the formal opening of the new laboratory on September 26. This will be followed by a two-day conference on the subject of "Catalysis and the Mechanism of Chemical Reactions." Princeton University is inviting on this occasion a number of foreign guests prominent in the field of chemistry to be discussed at the conference and it is expected that their contributions to the discussion will yield an important summary of the present state of knowledge in this field. The details involved in the organization of the conference are in the hands of a committee of the Princeton department of chemistry of which Professor R. N. Pease is the secretary.

FIFTY members of the English Ceramic Society of Stoke-on-Trent have arrived in New York on a three weeks' tour of the United States, the trip being the outcome of an invitation by the American Ceramic Society which visited England last year. It will permit the English ceramists to see at first hand American processes by mass production methods. Many of the earliest potters, craftsmen and designers in the United States came originally from Staffordshire.

FORTY-FIVE geologists from Oklahoma and Texas, under the guidance of members of the staff of the Oklahoma Geological Survey, attended the fifteenth Oklahoma Field Conference, which was held from April 11 to 14 in the Arbuckle Mountains of southern Oklahoma. The civic clubs of Ada tendered the visiting geologists a complimentary dinner, this being the fourth annual dinner so given. The chief object of the conference this year was to study type localities of geological formations, chiefly of lower Paleozoic formations, in the Arbuckles, the greater number of which were first proposed by Taff thirty years ago.

AMHERST COLLEGE has announced plans for its fifteenth geological and mineralogical expedition to the western area of the United States, under the direction of Professor Frederic B. Loomis.

A GEOLOGICAL field study expedition, under the auspices of the Summer Session of Columbia University and the University of Wyoming, will explore some of the highest ranges of the Rocky Mountains from June 17 to July 20. The headquarters will be in Medicine Bow Range, near Laramie, Wyoming, 10,000 feet up, and from this point weekly field trips for detailed geological observations will be made, at altitudes of 7,000 to 8,000 feet, the territory covered extending from the Continental Divide westward through Laramie Basin. The pre-Cambrian of the Front Range, the great Sherman batholith, 2,000 feet of Paleozoic red beds, the marine and continental deposits of the Mesozoic age as exposed in the Freeze-out Hills and at Como Bluff, the Oligocene of Central Wyoming at Bates's Hole and the precipitous 1,500 foot canyon of the Platte, will be used as the basis of field instruction in structural geology, stratigraphy and physiography. Studies will be made of oil domes, alpine glaciation and the Rocky Mountain peneplane. Professor Roy J. Colony, of Columbia University, and Professor Samuel H. Knight, of the University of Wyoming, will have charge of the expedition, in which many advanced students of geology will take part.

REPRESENTATIVE WM. I. SIROVICH, of New York, has reintroduced his bill to establish and operate a National Institute of Health, authorizing the government to accept donations for use in ascertaining the cause, prevention and cure of disease affecting human beings. He will introduce the bill again next session, if no hearings can be had before the close of this session. Senator Joseph E. Ransdell, of Louisiana, will introduce the bill in the Senate. Representative William B. Bankhead, of Alabama, has introduced a bill authorizing special appropriations for cooperation of the federal government with the states in promoting the health of the rural population of the United States.

UNIVERSITY AND EDUCATIONAL NOTES

THE new building for physics and geology at the University of Tennessee, built at a cost of $200,000, has been completed and is now ready for occupancy. The chemistry building is nearly completed. Additional buildings which will soon be under way comprise a library, an administrative and a memorial assembly building, which is to be erected jointly by the university, the City of Knoxville and Knox County. It is planned to spend $2,500,000 in all on the buildings.

THE corner-stone of the John Markle Mining Engineering Hall of Lafayette College will be laid on June 6.

DR. ROBERT MAYNARD HUTCHINS, dean of the law school of Yale University, has been elected president of the University of Chicago to succeed Dr. Max Mason, now director of the division of natural sciences of the Rockefeller Foundation. Dr. Hutchins, who is thirty years old, will assume office on July 1.

AT Harvard University, Dr. Arthur Becket Lamb, since 1925 Sheldon Emory professor of chemistry and since 1912 director of the chemical laboratory, in charge of the new Mallinckrodt and Converse Laboratories recently completed, has been elected to the Erving professorship of chemistry in succession to the late Theodore W. Richards. He will be succeeded as Sheldon Emory professor by Dr. James Bryant Conant.

DR. ERNEST M. HALL, formerly of Stanford University, has been appointed professor of pathology and bacteriology in the school of medicine of the University of Southern California.

DR. SAMUEL VAN VALKENBURG, professor of geography at Clark University, has accepted appointment to the faculty of the City College of Detroit and will enter upon his new work in the autumn. He went to Clark University in 1927 after five years with the survey department of the Dutch government in Java.

AT Lehigh University, Associate Professor Lloyd L. Smail has been promoted to a full professorship of mathematics, and Dr. W. J. Trjitzinsky to an assistant professorship in the same department.

NON-RESIDENT lecturers who will take part in the summer session of Cornell University include Dr. Collier Cobb, professor of geology in the University of North Carolina; Dr. Arthur H. Compton, professor of physics in the University of Chicago, and Dr. P. S. Kupalov, professor of physiology in the Institute of Experimental Medicine, Leningrad.

IN German universities, Dr. Paul Krüger, professor of botany at Berlin, has been called to Vienna; Dr. Friedrich Hund professor of theoretical physics at Rostock, has been called to Leipzig, and Dr. Theodor Kaluza, professor of mathematics at Königsberg, has been called to Kiel.

DISCUSSION

THE REPORT OF THE NATIONAL ACADEMY OF SCIENCES ON REAPPORTIONMENT

ALL controversy concerning the mathematical aspects of the problem of reapportionment in Congress should be regarded as closed by the recent authoritative report of the National Academy of Sciences, signed by Professors G. A. Bliss, E. W. Brown, L. P. Eisenhart and Raymond Pearl, and printed in the Congressional Record for March 2, 1929. The National Academy is the body legally appointed to advise Congress on scientific questions, and the report mentioned was prepared at the request of Speaker Longworth of the House of Representatives.

The report lists the following five methods as the only ones that require consideration: "method of smallest divisors, method of the harmonic mean, method of equal proportions, method of major fractions and method of greatest divisors." These five methods are listed in the order in which they "favor the larger states," the first method favoring the larger states the least, and the last method favoring the larger states the most. In particular, the report points out, "the method of the harmonic mean and the method of major fractions are symmetrically situated on the list," so that "mathematically there is no reason for choosing between them"; and the same remark applies to the method of smallest divisors and the method of greatest divisors. (Incidentally, the list of five methods regarded by the academy as the only methods worth considering does not include the "method of minimum range.")

After full consideration of these five methods, *the report concludes that the "method of equal proportions" is the method to be preferred, for two reasons: first,* "because it satisfies the test [of a desirable apportionment] when applied *either* to sizes of congressional districts *or* to numbers of representatives per person"; and *secondly,* "because it occupies mathematically a neutral position with respect to emphasis on larger and smaller states."

The appearance of this statement from the National Academy which confirms authoritatively the established mathematical theory is particularly timely, since Congress has been in serious danger of being confused and misled by an erroneous theory. (See SCIENCE, December 14, 1928, and March 8, 1929.) The first reason given by the academy for adopting the method of equal proportions completely disproves the erroneous notion that there is some necessary conflict between the test as applied to "sizes of congressional districts" and the test as applied to "numbers of representatives per person," since *both* forms of the test are satisfied by the method of equal proportions. The second reason given by the academy completely disproves the erroneous notion that the method of equal proportions is unduly favorable to the smaller states, since this method is the one method which "occupies a neutral position" in the list, and does not favor either the larger or the smaller states.

The method which is at present competing with the method of equal proportions is the method of major fractions which was devised by Professor Willcox in 1910 and used in the apportionment for that year, more than a decade before the clarifying modern mathematical theory of the problem became available. The hold which this now obsolete method still maintains on the imaginations of many congressmen is due