

heated to a standard temperature. The definition of the degree of incandescence of such a surface appears at the present almost insuperable, but the committee is at work upon a method for the measurement of the temperatures of incandescent carbon, which may lead to results looking towards the solution of the problem. It also has in progress experiments looking to the production of a light standard in which not only the burning material, but also the atmosphere, shall be of known and definite chemical composition.

PROF. E. B. TITCHENER, of Cornell University, will translate into English Wundt's *Physiologische Psychologie* and, in coöperation with Mr. W. B. Pillsbury, Külpe's *Einleitung in der Philosophie*. Miss Julia H. Gulliver, of Rockford College, will translate Wundt's *Ethik*. WUNDT'S *Lectures on Human and Animal Psychology* and Külpe's *Outlines of Psychology* have already been translated into English by Prof. Titchener, the former in coöperation with Prof. Creighton, and his *Introduction to Psychology* is being translated by Dr. Judd. Consequently, after a too long delay, we shall have adequate English versions of Wundt's contributions to psychology, including those of one of his most prominent pupils, Prof. Külpe.

THE Chicago Academy of Sciences gave, from July 15th to August 15th, a free course of lectures by twenty-five different lecturers, the subjects included being Anatomy, Climatology, Optics, Geology, Astronomy, Physics of Electricity, Botany, Zoology, Entomology, Comparative Anatomy, Mental Science, Biology, Physiology, Malacology, Physical Geography, Surgical Anatomy, Physics of Optics, Bacteriology, Ornithology, Scientific Nursing, Latin, German, Anthropology, Chemistry, Surgical Philosophy, Medical Chemistry, Hygiene and Meteorology. Meteorology was demonstrated at the Auditorium Tower every Saturday afternoon from 2 to 4 o'clock by Prof. E. B. Garriott.

THERE has been established in Berlin a People's Society for Natural Science, the chief object of which is to offer scientific lectures that will be interesting to those having no technical knowledge of the subject. The first lec-

ture before the Society was given by Dr. Förster, Director of the Royal Observatory, and was entitled 'Conditions and beginnings of life on the earth.'

A CASE reported in *The British Medical Journal* may be of interest to American as well as English municipal authorities. The executors of the late Mr. T. H. Smith, of Moseley, near Birmingham, claimed, on behalf of his widow and six children, the sum of £10,000 damages from the King's Norton Rural District Council for negligence, which, it was alleged, caused the death of Mr. Smith from typhoid fever. It was stated that a ventilating shaft communicating with a chimney in the house of the deceased allowed sewer gas to be conveyed into the rooms. In 1891 the Council undertook to disconnect the shaft, but after Mr. Smith's death inquiry was made, with the result, it was alleged that a defect was found to exist which, still permitted the escape of sewer gas into the house. The jury gave a verdict for the plaintiff, with £3,500 damages.

WE learn from the New York *Evening Post* that, beginning with August 28th, the usual series of horticultural schools under the direction of the professors at Cornell will be conducted throughout western New York. Twenty-six schools have been definitely arranged for, to be in the charge of three distinct sets of teachers, having at their heads respectively Prof. L. H. Bailey, who travelled 15,000 miles back and forth through the State in carrying out this work last year; George T. Powell, of Ghent, and Prof. E. G. Lodeman.

UNIVERSITY AND EDUCATIONAL NEWS.

THE University of Pennsylvania will proceed at once with the erection of a new building for the department of dentistry, to cost \$120,000.

GROUND has been broken for the new library at Princeton University. The building is to be 200 x 180 feet in ground measurements, and will be four stories high. The estimated cost is \$598,000.

THE London University Bill, which it was hoped to pass through Parliament before its adjournment, has been abandoned, owing to the

opposition of a few members of the House of Commons who wish to introduce a Church of England 'Test' for the professorships in Kings College.

COL. W. C. BRECKINRIDGE, of San Antonio, has given \$30,000 to the University of Texas to be used for a dormitory and confectory for the women students of the medical department.

DR. A. C. ABBOTT has been appointed to succeed Dr. Billings, who has resigned the chair of hygiene in the University of Pennsylvania.

DR. EDWIN F. NORTHRUP, of Syracuse, N. Y., has been elected associate professor of physics in the University of Texas. Dr. Northrup is a graduate of Amherst College, was later a graduate student at Cornell University, and a fellow for two years at Johns Hopkins University.

MR. B. M. DUGGAR has been appointed assistant in cryptogamic botany in Cornell University.

PROF. THOMPSON has resigned from the chair of ophthalmology in Jefferson Medical College and will be succeeded by Dr. de Schweinitz.

DR. BURNEY YEO has been appointed by the Council of King's College professor of the principles and practice of medicine in succession to Dr. Lionel Beale, and Dr. John Curnow has been appointed to the chair of clinical medicine in succession to the late Sir George Johnson.

DR. C. v. EHRENFELS, of Munich, has been appointed assistant professor of philosophy in the University of Prague, and Prof. R. Anschütz, of Bonn, has been appointed acting director of the Chemical Institute of the University.

DISCUSSION AND CORRESPONDENCE.

A PROTEST AGAINST QUADRINOMIALISM.

IN the present days when systematists are continually confronted with puzzles in nomenclature, which owe their origin mainly to the inadequate descriptions and careless methods of the older naturalists, it seems of the greatest importance for us to consider carefully any new practices that may be proposed by writers of today, and to call attention to their good or bad points before they are adopted by others.

A case in point will be found in papers by Dr.

C. Hart Merriam, in 'North American Fauna,' Nos. 10 and 11. This is practically the proposition to introduce 'quadrinomials' into our nomenclature. Trinomialism, the use of 'subspecies,' has of late years become almost universal among zoologists in this country, and its advantages are well known. Dr. Merriam has always been a strong advocate of trinomialism, but in the papers just referred to he goes a step further and describes 'subspecies' of 'subspecies,' which is practically quadrinomialism, though he so writes the names as to use only three words.

For instance, *Blarina brevicauda*, is the common short-tailed shrew of the northeastern States. In the Southern States it merges into a smaller subspecies known as *Blarina brevicauda carolinensis*. In tropical Florida still another subspecies is found which Dr. Merriam names *peninsulæ*. This, according to our established usage would stand as *Blarina brevicauda peninsulæ*, but Dr. Merriam writes it *Blarina carolinensis peninsulæ* (N. A. Fauna, No. 10, p. 14).

It will be noticed that *carolinensis* is thus treated as the 'species' of which *peninsulæ* is made a subspecies, while on the preceding page *carolinensis* is itself treated as a subspecies of *brevicauda*.

In other words, the author prefers to unite in the trinomial name the two forms which are geographically contiguous and to omit the fourth name, *brevicauda*, for the sake of brevity. This is of course nothing more nor less than quadrinomialism.

There is no doubt but that quadrinomials or any form of polynomials may be employed under the same rules that now govern us in the use of binomials and trinomials, but the question arises, are they desirable or useful? Decidedly not. Trinomials serve a useful purpose in the designation of geographical races, which while quite distinct in their extremes are connected by a perfect series of intergrades. No other satisfactory method of designation has ever been suggested for these. But here let us draw the line. We cannot express the whole relationship of a species in its name, and if we could the name would become useless as such; and when it comes to dropping out a portion of it we only tend to confusion. Do we not lose