Bertuch, $750,000 to public purposes. Among these bequests are $100,000 to Columbia University for poor students and $50,000 to Cooper Union.

THE *Journal* of the American Medical Association reports that the Medical School of the University of Rochester is making progress. A research laboratory will be completed in about three months. An affiliation is being brought about between the city authorities and the university for the building of a municipal hospital on or near the university campus, and, in accordance with the arrangements, the university medical school will furnish the professional training and nursing staffs, and the medical teaching will be carried on in the hospital. Walter R. Bloor, Ph.D., of the University of California Medical School, has accepted the chair of biochemistry, and will begin his work this fall. Dr. George W. Corner, now at Johns Hopkins University, is to be the professor of anatomy. He will assume his duties at Rochester early in 1924. Dr. Nathaniel W. Faxon, now of the Massachusetts General Hospital, will assume the position of director of the University Hospital on October 15. The school will be ready to receive students in the fall of 1924 or 1925.

DR. RICHARD M. SMITH, instructor in pediatrics, Medical School of Harvard University, has been appointed assistant professor of child hygiene in the new school of public health.

DR. CHARLES P. ALEXANDER, of the Illinois Natural History Survey, has been elected assistant professor of entomology at the Massachusetts Agricultural College, to fill the vacancy caused by the resignation of Dr. W. S. Regan last autumn.

DR. ALEX. MCTAGGART, formerly agriculturist of the Department of Agriculture Museum at Wellington, New Zealand, has been appointed assistant professor of agronomy at Macdonald College, Canada. He will be in charge of plant breeding work, with special reference to grasses and clovers.

DR. J. W. MCLEOD, lecturer in bacteriology at the University of Leeds, has been appointed the first occupant of the Sir Edward Brotherton chair of bacteriology in that university.

DISCUSSION AND CORRESPONDENCE

THE ZODIACAL LIGHT

THE most brilliant display of the zodiacal light that I have observed occurred on the night of April 8, 1922. My point of observation was Poulan, Worth County, Georgia (latitude 31-30 north; longitude 83-45 west). The light covered more of the heavens than shown as a zone of zodiacal light in any of the several hundred charts made of it by an observer with Commodore Perry's expedition to Japan in 1853-1856, and printed in a huge tomed report by the United States government as a part of the reports of that historic occurrence. One great volume of the Perry reports is given over entirely to the zodiacal light, forming the most massive single piece of literature upon the subject. I have observed the zodiacal light from the Straits of Magellan to 46 north latitude without having seen such a display as the one here alluded to. It dulled the near full moon. There was not a cloud in the sky. In the brilliant moonlight the zodiacal light made the spots in the heavens unilluminated by it looks like coal sacks, so great was the contrast. I have seen the aurora borealis above the Arctic circle and the aurora australis below the Antarctic line, and seldom were these exhibitions more brilliant and effective than the display that was neither on the night of April 8 last. It must be true that observers in southern latitudes are often confused by the zodiacal light and take it for an auroral burst. The zodiacal light is usually most noticeable in the western sky. This one covered more than half the heavens irregularly. It continued from 9 P.M. until 3 A.M. with varying brilliancy. Judge Roberts P. Hudson, of Sault Ste. Marie, Michigan, was my companion observer on the night of April 8.

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THE MEALY-BUG CALLED PSEUDOCOCCUS BROMELIÆ, AND OTHER COCCIDS

IN my recent review of Wheeler on *Tachigalia* insects, I gave a footnote questioning the validity of the name *Pseudococcus bromeliæ* (Bouché), as applied to the species of mealybug found on *Tachigalia*. This has brought

me a letter from Hawaii, where an insect presumed to be the same is of economic importance, asking for additional information. Since the matter is one of importance to economic entomologists, it may be worth while to state explicitly why Bouché's name can not be used. I have not seen Bouché's original work (1834), but his whole description is quoted by Signoret. In 1875 Signoret received a mealy-bug on pine-apple, which he described, saying that it was probably Bouché's *Coccus bromeliæ*. Since there was already an entirely different *Coccus bromeliæ*, published in 1778 (now called *Diaspis bromeliæ*), it appears that Bouché's name was in any case unavailable. Signoret, uninfluenced by the homonym, was still in considerable doubt as to the identity of his insect, and accordingly gave Bouché's description, so that the reader might form his own opinion. That description is somewhat confusing, but we are told that the fertilized female takes the form of a convex, short, elliptical shield, a little narrower in front. The last abdominal segment is cleft. The females, after an early stage, remain in one place all their lives, unless one tears them off. The insect is common in greenhouses, on various plants. There can, I think, be little doubt that Bouché had before him the Lecaniid *Saissetia hemisphærica* (Targioni, 1867); surely it was not a mealy-bug. In the Fernald Catalogue of Coccidæ there is confused with this *Lecanium bromeliæ* Bouché, grey marbled with brown, which Signoret did not undertake to identify. It was probably *Lecanium hesperidum* (L.).

Another coccid which seems to need discussion is the large Lecaniid of the tulip-tree. Dr. W. E. Britton (Bull. 234, Conn. Agric. Exp. Station) gives a good account of this insect, but calls it *Toumeyella liriodendri* (Gmelin), stating that it was so identified by Sanders, "after a careful study." Gmelin's *Coccus liriodendri* was based on an account by Dr. John Hill, of London, appearing in the *Hamburgisches Magazine* for 1753. Many years ago I borrowed this work from the Library of Congress, and together with Mr. Pergande went over the description. The account is very vague, and contains some apparently inaccurate statements, but it evidently applies to a Lecaniid on the tulip-tree. We concluded at the time that it was not possible to reach a definite decision, and were not in favor of displacing Cook's name *tulipiferæ* (1878). There is no indication that any one has really reconsidered this evidence, and I think the scale should stand as *Toumeyella tulipiferæ* (Cook).

Sanders (*Journ. Economic Entomology*, 1909, p. 432), adopting *Pseudococcus adonidum* (L.) as the name of the common long-tailed mealy-bug (*P. longispinus* Targ.), refers to the "good description of the insect in *Systema Naturæ*, Ed. XII." The "good description" refers to "linea dorsalis longitudinalis elevata . . . area inter lineam dosalem marginemque totidem punctis in seriem longitudinalem dispositis . . . cauda bifida," etc. Conceivably this may be *Orthezia urticæ* (L.), but this is guessing. There is not anything to clearly indicate the mealy-bug, and part of the description contradicts such a reference. I am in favor of using the oldest names when there is real evidence, or even a satisfactory presumption, in their favor, but when the descriptions are inapplicable it is another matter.

The application of the generic name *Coccus* L. to the soft scales may have to be reconsidered. The original Coccus (the word meaning a berry) was the hard round scale of the oak, commonly called *Kermes*. Under the rules, a good argument can be made for considering *Coccus ilicis* L. (*Kermes ilicis*) the type of *Coccus*, on grounds of tautonomy, but there is room for diversity of opinion. *Lecanium pulchrum* King, well redescribed by Marchal (1908), should apparently stand as *L. rufulum* (*Eulecanium alni* var. *rufulum* Ckll.).

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THE DETERMINATION OF FAT IN CREAM

TO THE EDITOR OF SCIENCE: I noticed in SCIENCE for July 7, page 25, an abstract of a paper read before the American Chemical Society by E. G. Mahin and R. H. Carr, entitled "Errors in the determination of fat in cream."

In 1910, the dairy department of Purdue University, under the direction of Professor O. F. Hunziker, head of the department, made