FOLLOWING the International Congress on Scientific Organization held in Brussels last September, a movement has been started in that city to organize a Belgian National Committee of Scientific Organization.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Rochester announces that the formal opening of its school of medicine and dentistry will be on October 25 and 26. There will be scientific medical conferences on these two days. Papers will be presented by Professor Friedrich Müller, of Munich; Dr. C. J. Martin, president of the Lister Institute of London, and by other leaders in medical science. The formal invitations will be sent out some time in September and the program will probably be complete before that date.

A GIFT of $50,000 from the estate of the late John D. Larkin, of Buffalo, N. Y., made through his son, John D. Larkin, Jr., has been announced by Lafayette College, which is to be added to a fund of $200,000 given in 1924 by Mr. Larkin for the maintenance of the department of chemistry.

DR. JOSEPH A. CUSHMAN, director of the Cushman Laboratory for Foraminiferal Research, has been appointed lecturer on micropaleontology at Harvard University. The laboratory at Sharon, Massachusetts, will be available to graduate students in the department of geology who desire to do research under Dr. Cushman's direction. This laboratory is especially designed and equipped for the investigation of foraminifera and other fossil remains of minute dimensions.

DR. GEORGE H. SMITH, of the department of bacteriology, and Dr. George E. Nichols, of the department of botany, have been promoted to full professorships at Yale University. Joshua I. I. Tracey and James H. Whittemore have been promoted to associate professorships in the department of mathematics.

AT Clark University, Dr. Charles F. Brooks has been promoted to professor of meteorology and climatology and Dr. Clarence C. Jones to associate professor of economic geography.

DR. J. EDWIN SWEET, of the University of Pennsylvania, has been appointed professor of surgical research at Cornell University Medical College and Dr. Walter C. Klotz director of the Cornell clinic and assistant professor of hygiene.

PROFESSOR W. W. SWINGLE, of Yale University, has been appointed professor of zoology and director of the museum at the University of Iowa. He succeeds Professor C. C. Nutting, who is retiring after forty years' service to devote his full time to research work.

AT the University of Pennsylvania, Dr. Eliot R. Clark, of the University of Georgia School of Medicine, has been appointed professor of anatomy; Dr. David H. Bergey has been promoted to professor of hygiene and bacteriology; Horace B. Baker to be assistant professor of zoology; Dr. Morton McCutcheon to be assistant professor of pathology; James C. Andrews to be assistant professor of physiological chemistry, and Dr. Stanley O. Chambers to be assistant professor of dermatology and syphilology.

DR. HARRY V. ATKINSON, professor of pharmacology at the University of Texas School of Medicine, has been appointed associate professor of pharmacology at Iowa State University College of Medicine. W. T. Dawson, now associate professor of physiology at Texas, has been appointed associate professor of pharmacology.

DISCUSSION AND CORRESPONDENCE

THE CONTRACTILE VACUOLE GRANULES IN AMOEBA PROTEUS

DR. MAST, in his fine paper upon "Structure, Movement, Locomotion and Stimulation in Amoeba,"[1] judges "that my observations upon the localization of the contractile vacuole function[2] were made upon inactive specimens (*i.e.*, specimens not in locomotion). It may be worth recording that the constant association of the contractile vacuole with a certain group of granules, the now vacuole appearing among the old granules, obtains in both mobile and immobile specimens, and that the phenomena were followed in all cases under high powers of the microscope, continuously for hours. I have no opinion as to the function of the contractile vacuole in Amoeba, though I followed the prevalent custom in calling the vacuole excretory and so called the granules excretory.

In *Protoopalina* there are similar (?) granules surrounding the posterior vacuole of the "excretory" system of tubules, and these granules stain differently from the cytoplasmic granules. In *Protoopalina* some of these "excretory" granules drop into the lumen of the posterior vacuole and are thrown out to the exterior when, at irregular intervals, it contracts.

In both *Amoeba* and *Protoopalina* granules resembling in size and appearance the cytoplasmic granules gather around the contractile vacuole. In *Amoeba* differential staining or extrusion of these granules has not been observed; in *Protoopalina* both differential staining and extrusion are readily seen, though prolonged observation may be necessary to catch the actual extrusion. The differential staining

[1] *Journal of Morphology*, v. 41, No. 2, March 5.
[2] *Journ. Exper. Zool.*, vol. 9, pp. 301–331.

(dull, dirty blue, contrasted with the clearer blue of the cytoplasmic granules) with Delafield's haematoxylin in *Protoopalina,* is no sufficient indication of renal function of the vacuole system and its granules. These granules may, of course, be merely degenerate and not at all specialized for renal function. Experimentation with chemical indicators and the micropipette upon the contractile vacuole contents in *Amoeba,* some large ciliate, like *Paramecium,* and upon *Protoopalina* (with its peculiarly behaving granules) should be of interest.

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DIGESTION OF WOOD BY THE SHIPWORM

WHETHER the marine wood-boring mollusks of the family Teredinidae, commonly known as shipworms, bore in submerged timber for protection only, or also for the purpose of utilizing the wood as food, has been a subject of considerable debate. It has been shown by Dore and Miller[1] that about 80 per cent. of the cellulose, and from 15 to 56 per cent. of the hemicelluloses, in Douglas fir piling disappear from the wood during its passage through the digestive tract of *Teredo navalis.* The conclusion was drawn that the carbohydrates which disappear are utilized by the organism as food. This conclusion has lately been substantiated by a different method, in the case of another species of a related genus.

A number of specimens of the Northwest shipworm (*Bankia setacea* Tryon), from one to two feet in length, were removed from samples of Douglas fir timber submerged about one year at the Puget Sound Biological Station. On dissection, a sufficient quantity of wood-borings was obtained from the caeca of these organisms to test for reducing sugars. A similar test was made on a pulverized sample of the original wood. The reducing sugars were determined as glucose by the Benedict-Osterberg method, as modified by Thomas and Dutcher.[2] The following results were obtained:

Reducing sugars (as glucose) in original wood	0.92 per cent.
Reducing sugars (as glucose) in wood from caecum	3.86 per cent.

The amount of reducing sugars in the wood from the caecum is thus about four times as great as the amount found in the original wood. The data are not of quantitative significance in indicating the total amount of sugar formed, as the wood in the caecum is presumably still in process of digestion, while on the other hand a certain amount of sugar has doubtless already been lost by absorption through the walls and typhlosole of the caecum. The results do, however, indicate a decided increase in the quantity of reducing sugars while the wood is in the digestive tract, which is the logical reciprocal of the disappearance of the more stable carbohydrates that was noted in the case of wood-borings which had passed through the digestive tract of *Teredo navalis.*

Thus there is evidence of the digestion of wood in a representative species of each of the two principal genera of shipworms, and it is probably a justifiable assumption that carbohydrates from the wood play an important rôle in the nutrition of this interesting group of lamellibranchs.

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[1] Univ. Calif. Publ. Zool., *22,* 383–400. 1923.
[2] *Jour. Amer. Chem. Soc., 46,* 1662–69. 1924.

WOODPECKERS AND THE AUTOMOBILE

I HAVE read with interest the letter of Henry L. Baldwin in regard to woodpeckers and the automobile (SCIENCE, April 2, 1926, p. 358), and am inclined to agree with much that he says. I have reason, however, to object to the following statement, contained in the letter: "The red-headed woodpecker is practically non-existent in this region, having been seen in northern New York only once by the writer, and that many years ago." I do not question the validity of his observations: but his apparent reliance upon his own notes as the sole source of information is open to criticism. In this region, which is certainly a part of northern New York, a number of records of the red-headed woodpecker have been obtained during the past four years: cursory examination of my notes shows records for this species on April 7 and 21, 1923, and on March 8, 1925. These records were all taken within ten miles of this place. Although they can not be taken as an indication of distribution outside of this limited area or of particular abundance, they certainly show that the species is somewhat far from non-existent.

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ANNUAL EXHIBITION OF THE ROYAL PHOTOGRAPHY SOCIETY

THE Royal Photographic Society of Great Britain are holding their seventy-first annual exhibition in September and October of this year. This is the most representative exhibition of photographic work in the world, and the section sent by American scientific men heretofore has sufficiently demonstrated the place held by this country in applied photography. It is very desirable that American scientific photography should