place those that ascribe the phenomenon to puffs of wind, illusion and accident. The most naive of all would seem to be "that complete synchronism in the flashing of a group of fireflies is a very rare accident, occurring when the flashes of individuals chance to come at the same time."[4]

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A CASE FOR PRIORITY IN BOTANICAL NOMENCLATURE

THAT the principle of priority once regarded as the basic rule for determining "validity" or correct "usage" in botanical nomenclature has somehow fallen in disrepute is but natural because of the many individual cases where hewing to the line has resulted in extreme confusion. To-day few deny the practical advantage gained by recognition of *nomina conservanda* in preserving names familiarized through use. It must be recognized, however, that acceptance of a particular *nomen conservandum* without taking account of older recognized homonyms may cause greater confusion than that which it is aimed to correct.

A case in point is a recent proposal by J. E. Dandy[1] that the name *Eriospora* (Hochst. 1851), as used for a genus of 4 or 5 species of Cyperaceae, be accepted by the coming International Botanical Congress as a *nomen conservandum* in place of a synonym, *Catagyna* (Beauv. 1819). This proposal does not take account of the fact that the name *Eriospora* was previously published for a fungus by Berkeley and Broome.[2] The fungus genus *Eriospora,* with only four known species, has a well-defined place in the technical literature. If Mr. Dandy's proposal be accepted at this congress this particular genus of fungi becomes nameless, contributing an added difficulty to the already overcrowded and confused mycological nomenclature —unless, of course, fungi be ruled out of botany, as is proposed by some.

In this era of specialization the taxonomist of seed plants, of ferns, of fungi or of what not, is likely to be familiar only with those genera included in his specialty. It is inevitable, therefore, that a specialist will fail occasionally to realize that his preferred generic name may be preferred also by the student of another group for an entirely different organism. If only the natural interests, preferences and prejudices of the phanerogamists or of the cryptogamists are to be considered each group would favor validating its particular pet name; but neither party desires to invalidate a well-established usage. Accepting either name, however, necessarily invalidates the other. Since both names may have an equally meritorious usage by different groups of distinguished taxonomists and there is no adequate means for obtaining a fair judgment as to which usage is the more desirable the two points of view are patently irreconcilable without recourse to priority. In view of these considerations it would seem that wherever homonyms have both attained a well-established usage we must hew to the line of priority in nomenclature if we would avoid useless and endless confusion.

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[4] Frank C. Gates, SCIENCE, 46: 314, 1917.

[1] *Kew Bull. Misc. Inform.*, No. 2, p. 83, 1935.

[2] *Ann. and Mag. Nat. Hist.*, Ser. 2, 5: p. 455, 1850.

ACUITY OF HEARING

THIS laboratory has recently reported a study of performance following the noon meal at tests primarily of mental functions.[1] This work indicated that early afternoon sluggishness among mental workers is probably a form of drowsiness, related to the shift of blood to the splanchnic region following a meal. The sluggishness was most when a heavy meal was eaten at noon, and was least when a dairy lunch of a common cereal, such as corn flakes, was eaten.

Further data, of considerable importance to acoustical workers, are now available. The lower auditory threshold for a tone of 256 cycles on the Western Electric 2A audiometer was determined for seven healthy young men within half an hour after they had finished their noon meal. All these subjects showed a dulling of their sense of hearing after they had eaten their noon meal.

This dulling was greatest on the days when they had eaten a heavy noon meal, the average minimum intensity which was audible being 7.0 decibels on the heavy meal days. On the days when the cereal lunch was eaten, the same men averaged 4.5 decibels as their threshold intensity. This is a difference of 35.7 per cent. greater acuity on the cereal meal days.

Oculists tell me they notice a similar dulling of visual acuity when eye examinations are made after a heavy meal. It is possible, also, that the senses of touch may be dulled after a heavy meal, since it is known that blood is then drawn from the skin to assist in the processes of digestion. The change in acuity of hearing, however, may likely be due as much to the relatively anemic condition of the brain following a heavy meal as it is to an alteration in the circulation to the inner ear itself.

This interesting and unexpected phenomenon associated with hemastatics not only throws light on some of the diurnal variations in human performance,[2] but

[1] D. A. Laird, H. Drexel, D. DeLand, K. Reimer, "Early Afternoon Sluggishness." Proceedings of the National Office Management Association, June 4, 1935.

[2] G. L. Freeman, "Diurnal Variations in Performance and Energy Expenditure." Northwestern University Press, Chicago, 1935.

also suggests that the salesman who has a noisy used automobile to demonstrate could make the noise appear less if he took the prospect out in it after his big meal of the day. This may also explain why dinner orchestras seem to favor volume to melody, but I doubt if this gives an esthetic justification for their choice of volume.

The practical acoustical worker can quickly verify the data which have been reported, and they would indicate that he will get finer measurements when the ear is used if he has eaten wisely rather than too well.

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TETRAPODS IN THE DUNKARD SERIES

LITTLE vertebrate material of diagnostic value has been reported previously from the rocks of the Dunkard Series of the Allegheny foothill region. Recently a Carnegie Museum field party, consisting of Eugene Burke, William Moran and the writer, discovered well-preserved tetrapod fossils in Dunkard sediments in seven distinct localities. Two of the collecting sites are located in Pennsylvania, the rest in West Virginia and Ohio. While few of the specimens have been removed from the matrix, the material thus far exposed indicates a diversified fauna of amphibians and reptiles. Several skulls and articulated bones have been uncovered, and it is anticipated that some of this material will prove new to science, while at the same time it may be the means of a more exact correlation of the Dunkard rocks, hitherto correlated on the evidence furnished by fossil plants and insects. It is planned to describe this material at a later date in the publications of the Carnegie Museum.

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NOMENCLATURE OF CORPUS LUTEUM HORMONE

DURING the past year the progestational hormone has been isolated from the corpus luteum in pure form and its constitution established. Heretofore two different names have been used for this hormone in the literature (progestin, luteosterone). For the sake of international uniformity we agree to use hereafter in the scientific literature only the name *progesterone* for the pure hormone. As is known, the pure hormone exists in two different forms, one melting at 128° (uncorr.) and the other at 121° (uncorr.). The higher melting form (Compound B of Wintersteiner and Allen (1934)[2] and Compound C of Slotta, Ruschig and Fels (1934)[1]) will be known as α progesterone and the lower melting form (Compound C of Wintersteiner and Allen and Compound D of Slotta, Ruschig and Fels) as β progesterone. We hope that these names will be generally accepted in the scientific literature.

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SOCIETIES AND MEETINGS

THE INTERNATIONAL CONGRESS OF PHYSIOLOGY IN LENINGRAD[1]

THE fifteenth International Physiological Congress opened this morning in the central hall of the former Tauride Palace, now Uritsky Palace, after one of the early Bolshevik leaders who was assassinated in the summer of 1918.

In the great square hall, with its flat glass roof and terra cotta walls divided at regular intervals by huge white pillars, the 85-year-old Professor Ivan Petrovich Pavlov, Russia's foremost physiologist, rang a bell from the rostrum as he faced upward of 1,200 delegates from more than thirty countries, and declared the congress open.

Each delegate had earpieces and a little switchboard on his desk which enabled him to hear the speeches instantaneously in French, German, Russian or English, or to listen to the speaker direct in the language he was using. Professor Pavlov, who received a thunderous ovation, spoke with clarity and firmness that belied his age. He stressed the facilities given to the cause of science by the Soviet Government and declared it was the duty of scientists to strive not only for knowledge but for peace and mutual understanding among nations.

In his work, he said, is development toward the application to human beings, especially in cases of insanity, of the knowledge of conditioned reflexes that has been acquired by experiments upon animals. It must never be forgotten, he added, that physiology is not merely an abstract science but is intimately concerned with the functions of the human body, and thus is of vast medical and social importance.

Ivan A. Akulof, secretary of the Central Executive Committee of the U. S. S. R., welcomed the delegates

[1] Special cable to *The New York Times*, dated August 9, reprinted by permission.

[1] K. H. Slotta, H. Ruschig and E. Fels, *Berichte der deutsch. chem. Gesell.*, 67: 1270, 1934.

[2] O. Wintersteiner and W. M. Allen, *Jour. Biol. Chem.*, 107: 321, 1934.