has tried to determine what parasite originates the formation of pearls in North American freshwater clams, although several investigators have mentioned incidentally that cysts of larval trematodes occur in our freshwater Unionidae and that pearls are formed around them (see Clark and Wilson 1911[1]; Wilson and Clark 1911[2]). In Central Illinois several species of clams are often heavily infested with encysted metacercariae which I have identified as the larvae of *Allocreadium ictaluri* Pearse 1924; the cysts are particularly abundant on and in the margin of the mantle. I have dissolved small pearls from *Leptodia gracilis* in acetic acid; a small metacercaria can be seen in a cyst at the center of each pearl, but not in condition to make positive identification possible. However, all the encysted metacercariae which have been found in Unionids of this locality belong to *Allocreadium ictaluri,* so there is good presumptive evidence that this is the pearl-inducing species. I have also found metacercariae of *Allocreadium ictaluri* in fresh-water clams from the Sunflower River, Miss. Professor Henry B. Ward has found encysted distomes in Unionids at New Baltimore, Mich., which I have identified as the metacercariae of *Anallocreadium armatum* (MacCallum 1895). It is possible that this species may also sometimes encyst on the mantle and induce pearl formation, but according to Professor Ward's field notes the cysts were found only in the foot. The adults of both *Allocreadium actaluri* and *Anallocreadium armatum* live in the intestine of mollusk-eating fishes; the former has been found most frequently in the channel catfish, *Ictalurus punctatus,* and the latter in the sheepshead, *Aplodinotus grunniens.*

SEWELL H. HOPKINS

DANVILLE JUNIOR COLLEGE
DANVILLE, ILL.

## TOBACCO SMOKING AND BLOOD SUGAR

HAGGARD and Greenberg have reported, as a new observation, that a rise in blood sugar follows the smoking of tobacco.[1] They infer, since nicotine produces hyperglycaemia, that "the smoker obtains from tobacco repeated minute doses of nicotine," but they do not mention that this point has been directly established by recovery of nicotine from the urine.[2] It is not wholly clear whether it is the physiological effect of nicotine in general, or the rise in blood sugar in particular, that they refer to as "the source of at least a considerable part of the gratification from smoking." If the rise in blood sugar is credited with this rôle (and there seems to be no other evidence of psychological effects of fluctuations in carbohydrate metabolism within normal limits, except in connection with hunger contractions of the stomach), it may be pertinent to recall that many smokers enjoy tobacco especially after meals, when the rise of blood sugar admittedly does not occur. Finally, it should be observed that this rise in blood sugar after smoking is no new discovery, but has been described repeatedly[3, 4] and is indeed the subject of a considerable monograph.[5]

D. L. THOMSON

MCGILL UNIVERSITY

## A PECULIAR OPTICAL PHENOMENON

ON the evening of February 25 at about 6 to 7 P. M. there was visible a most peculiar optical phenomenon in the neighborhood of Bangor and Orono. The sky was nearly clear of clouds and the moon was about three quarters full. There was a very distinct halo around the moon, which was slightly colored toward the zenith. But most peculiar was the fact that a second circle of light was distinctly visible, which was parallel to the horizon, the zenith was the center of the circle and the moon was in the circumference of this circle. The circles distinctly crossed and could each be seen entire. At a short distance outward from the moon and from the points of intersection bright places appeared. This was no doubt due to the intersection of the second halo with the larger circle, although the rest of the second halo was not visible.

Considerable discussion has arisen as to the cause of the large circle with the zenith as its center. Perhaps some of your readers could explain this in a later issue if you would be so kind as to print this request.

Might this be due to the moonlight reflected from the snow-covered earth?

A. L. FITCH

UNIVERSITY OF MAINE

## THE DISGRACE OF GERMAN SCIENCE

THE material and moral degradation of scientific men in Germany because they are liberals or of Jewish descent (so-called non-Aryans) continues uninterruptedly, and not a voice is raised there in protest. It seems that only the religious leaders have sufficient courage of their convictions to protest against the government's infringements upon their rights and beliefs. Is it possible that no groups of scientists or technicians have courage enough to protest against

[1] H. W. Clark and C. B. Wilson, "The Mussel Fauna of the Maumee River," U. S. Bur. Fish. Doc. 757; 72 pp., Wash., 1911.

[2] C. B. Wilson and H. W. Clark, "The Mussel Fauna of the Kankakee Basin," U. S. Bur. Fish. Doc. 758; 52 pp., Wash., 1911.

[1] H. W. Haggard and L. A. Greenberg, SCIENCE, 79: 165, 1934.

[2] E. Dingemanse and J. Freud, *Acta Brevia Neerland. Physiol.,* 3: 49, 1933.

[3] A. Caponetto, *Klin. Wochnschr.,* 7: 701, 1928.

[4] A. I. Burstein and I. D. Goldenberg, *Biochem. Ztschr.,* 200: 115, 1928.

[5] E. Lundberg and S. Thyselius-Lundberg, *Acta Med. Scand., Suppl.,* 38: 1, 1931.

the mistreatment of their colleagues, or are they merely glad of the opportunity of a few vacancies thus left open? Is it perhaps the unceasing and relentless propaganda which threatens to spread its vicious tenets throughout the world that prevents them from seeing in the proper light what is being done, in the name of nationalism, to degrade and dehumanize the best that there is in man?

Perhaps it is not sufficiently known that, in addition to the hundreds of professors who have been and are still being removed from their positions, in addition to hundreds of physicians and lawyers who are prevented from practising their profession, editors are removed from their positions without even proper credit, and men of science and learning are degraded in more ways than one. A few of the more recent illustrations may suffice.

Those professors who were left at the universities because of their war service record are being gradually removed on account of students' strikes. Neither the government nor the faculty does anything about it, and the former seems not only to acquiesce in that but takes advantage of the situation to remove the remaining professors.

At the recent meeting of the Society of German Chemists,[1] it was decided that non-Aryans could not be active members of the society.

The names of Haber, Willstätter and Neuberg have been left out as editors (honorary, without pay) from the *Berichte deutscher Chemischer Gesellschaft* and only those of Hofmann, Wollmer and Leuchs left! Compare the difference in reputation of the three first named with the latter ones!

The name of Grassmann was added to that of Neuberg as editor of the *Biochemische Zeitschrift.* How long will it take before the name of the latter is dropped altogether?

Hans Pringsheim has been removed as editor of *Cellulosechemie,* without even the customary decency of inserting a statement that he was former editor of this journal (has actually built it up)! These illustrations could be multiplied many times.

And so the process goes on! But how far! Is there no courage left among the men of science to say "Thou shalt go no further"? There were times when men of science were willing to die for their convictions! Or are these only cheap mountebanks that do not deserve the name of "Men of Science," that do not dare to raise the voice of protest against the mistreatment of their colleagues, teachers and friends? Many of them actually assist in spreading vicious propaganda by enclosing among their reprints cheap claptrap about the Polish Corridor, about France's mistreatment of Germany and about other matters on which they have no accurate or verifiable knowledge. Should a rare and solitary protest reach them from abroad, they dismiss it easily as foreign propaganda against Germany.—*A Correspondent.*

[1] Verein deutscher Chemiker, Berlin, November 28, 1933—*Angew. Chemie,* 46 (50): 790, 1933.

# REPORTS

## GRANTS OF THE AMERICAN PHILOSOPHICAL SOCIETY

THE American Philosophical Society has made grants during 1933–1934 to the following:

Admiral Richard E. Byrd to make the echo sounding equipment available for the Byrd Antarctic Expedition.

Warren K. Moorehead to help finance the work he is undertaking on the Amerinds of New England.

William B. Scott to enable him to prepare a monograph on the fossil mammals of the White River formation in Dakota and Nebraska.

James T. Young in support of a survey of local rural government in Pennsylvania.

Robert A. Millikan in support of work on the determination of the geological time scale in years.

Alfred C. Lane in support of a cooperative research in physics and chemistry as to the relations of the various radio-active elements and the lead produced therefrom.

Felix E. Schelling, chairman of the Supervisory Committee on the Variorum Shakespeare of the Modern Language Association of America, for the completion of the two plays now in progress and being edited by Professors Black and Shaaber for the Shakespeare Variorum.

W. F. G. Swann for investigation in nuclear physics.

The Academy of Natural Sciences of Philadelphia.

John R. Murlin for investigations into the effects of high frequency currents on the energy metabolism of animals and the human subject.

P. W. Whiting for investigations on genetics and sex-determination of the parasitic wasp Habrobracon.

A. J. Dempster for investigations of the exact atomic ratios of the chemical elements by the methods of mass spectroscopy.

Edward L. Bowles and Henry G. Houghton, Jr., in support of an investigation of the transmission of radiation through fog.

J. Lincoln Cartledge in support of an investigation of the factors which are responsible for increased mutation rate in aged seeds of Datura; the effects on the mutation rate of temperature, moisture, oxygen supply and other experimentally applied factors,