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.*

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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]

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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.

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?

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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