family Sciuridæ may suggest an intermediate stage in the process of evolution between the latter group and those higher mammals in which the fibers radiate to all parts of the retina from a circular optic disc. However, an extended investigation is necessary before any conclusion can be arrived at with regard to the possible taxonomic value of this character.

Experiments to trace the fibers of the optic tract are now in progress. As the optic nerve is spread out near the eyeball, it is a simple operation to cut either the inner or outer half for a study of the degeneration of its fibers.

So far I am not in a position to offer any opinion regarding the physiological significance of this peculiarity.

Note.—In the case of the squirrel and European marmot this peculiarity in the optic nerve is mentioned in Cuvier's "Leçons d'Anatomie Comparée," Tome 3B, p. 430.

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Biological and toxicological studies upon *Penicillium puberulum* Bainier.

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This species when grown upon Raulin's solution, in pure culture, produces a new organic acid which has been termed penicillic acid. This acid gives a brownish-red solution when treated with a dilute solution of ferric-chloride. With ammonia it gives a deep red color. From the analyses, molecular weight determinations and other data, it seems probable that this acid belongs to the same general class of compounds as are found in lichens, and termed lichen acids. Like them, it is slightly bitter and irritating. Pharmacologically, it is moderately toxic, having an antiseptic action and being a protoplasmic poison. It is not astonishing to find substances of this class in fungi, since lichens are symbiotic forms, composed of fungi and algæ. The finding of this type of substances in the pure culture of a fungus makes it probable that in lichens, lichen acids are the product of the fungus metabolism, and not of that of the algæ.