

"more chemists employed." The evidence is "more chemists would be discharged." It is a question whether, under the proposed code, professional men in many fields may not be compelled to have their tests done by these corporations.

Last summer, in response to the President's appeal for cooperation, both the Association of Consulting Chemists and the American Institute of Chemists inquired of National Industrial Recovery officials how they might best cooperate, and whether professional codes, based primarily on codes of ethics (rather than the expediciencies of business), were contemplated. After consideration, both organizations were informed that professional chemists and professional chemical engineers were not to be "coded." Therefore, when a code for commercial testing laboratories was proposed and discussed, the vast majority of professional men paid little or no attention to it. It was only when the letter of resignation of Arthur D. Little, Inc., was published that it became evident that into the "Commercial Testing Laboratory Code" there had been inserted wording of great danger to professions in general and to the chemical profession in particular. It is against public policy to allow incorporated testing laboratories controlled by public utilities and manufacturing corporations to dominate professional work.

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UNUSUAL STROKES OF LIGHTNING

LAST night (May 9, 1934) about one o'clock there was an occurrence which I believe is rather rare. In the course of a severe electrical thunderstorm lightning "struck" a tree about 100 feet from our house. The peculiar facts about the phenomenon are that it "struck" the same tree twice within about a second's time, and that the tree is a *dead* (walnut) tree, whereas within 75 feet of it, near our house, are two tall *live* Lombardy poplars. The old tree, about 50 feet tall and with a trunk close to 4 feet in diameter at its base, died several years ago, but had been left standing (it being in a vacant lot).

The lightning blasted off a layer of wood, a few inches to nearly a foot wide and two to three inches thick in pieces from a few inches to five or six feet in length from opposite sides of the tree from about twenty feet up to about two feet from the ground, hurling the pieces as far as a hundred feet from the tree. There was no searing or burning effect.

I have never heard of a case where lightning "struck" more than once so close to the same spot within so short a time.

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CLOCKWISE ROTATION IN PARAMECIUM TRICHIMUM

As Wenrich¹ and others have pointed out, the rotation of all species of *Paramecium* except *P. calkinsi* is typically counter clockwise while swimming freely. Inasmuch as the clockwise rotation of *P. calkinsi* is one of the characteristics given by Wenrich as diagnostic for this species, the following observations may be of interest.

I have seen numerous specimens of *P. trichium* change the typical counter clockwise rotation for a clockwise one. The clockwise rotation may be for a few turns only or it may persist for some time. In no case, however, has the "abnormal" rotation been observed to persist for longer than about twenty-five complete rotations of the body. Often an individual will rotate counter clockwise for fifty or more turns of its body, change to a clockwise rotation for from three to ten turns, and then resume the counter clockwise rotation. Rarely, individuals reverse this process, temporarily turning clockwise more than counter clockwise. If one individual be watched for an hour or more the counter clockwise rotation is always seen to be the more frequent.

These observations were made upon organisms cultured in a standard hay infusion. The animals showed no sign of abnormalities.

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THE "GUNS" OF SENECA LAKE

IN SCIENCE for April 13, Professor H. L. Fairchild explains the nature of certain mysterious muffled sounds or explosive noises long noted about or over Seneca Lake. These sounds, it may be said, are conclusively shown to be due to escape of gas from the deep Dundee gas area making its way through the glacial drift filling the bottom of the great canyon-like Tertiary river valley of central New York now occupied by the lake. As gas bubbles make their way upward, first through the drift and then through the deep water, heavy pressures are gradually released, and as the surface of the lake is reached the noises like those of muffled guns are heard. Although, exploitation in the Dundee field having greatly reduced the original pressure of 770 pounds per square inch, it is believed the ghost guns of the Seneca are about "silenced."

Is there not here seen a partial illustration of the nature of some of the mysterious sounds of the Yellowstone? Elsewhere I suggest a more physico-chemic explanation. The conditions about the Yellowstone and Shoshone lakes producing sounds which vary from explosive blurts to highly musical pitches must be complex. That any one explanation may suffice is unlikely. But it would be of interest to know what the impressions gained from hearing the

¹ *Trans. Am. Micros. Soc.*, 47: 280, 1928.