Neanthe elegans (Martius), the larger palm that Martius described, with a three-angled pistillode, and *Neanthe neesiana,* to serve as a specific name for the golden-flowered palm figured by Nees and cited by Oersted, with the pistillode nearly cylindric and the stigmatic rim very narrow.

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"RACES" AND "HOMING" OF PACIFIC SALMON

IN a recent communication Professor A. G. Huntsman[1] objects to my[2] use of the word "races" in referring to the local populations of Pacific salmon, on the ground that the genetic character of the observed differences in local populations is not proved, and he infers that without this proof my argument that the Pacific salmon show a homing reaction is invalidated.

As to the first point: The word "race" is used, and properly, in referring to local populations that are distinguishable, regardless of whether the differences are genetic or environmental. O. E. D. gives as one definition, "A group or class of persons, animals, or things, having some common feature or features." In dealing with the salmon of the Pacific Coast many of us have been accustomed to use the word in this sense and without implications as to the nature of the differences. While I believe that many of these differences are genetic I concede that the rigid experimental proof is lacking; but I think that the point is not relevant to the discussion of "homing."

As to the second point: My argument does not at all require that the observed differences in the local populations be genetic. If these local populations (or races) are distinguishable it does not matter whether the differences are genetic, the result of environmental influences during the early life in fresh water or the later life at sea or are artificial. If large numbers of the Pacific salmon travel beyond the "zone of river influence" and if the fish after distribution into their spawning streams show significant differences, whether the differences be genetic or not, "the simplest theory that will adequately explain . . . these facts is that the salmon do return predominantly to their home streams."

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THE FISH BOWL AS A FIRE HAZARD

THE recent note by Julian H. Lewis,[1] "A Possible Source of Laboratory Fires," recalls an experience in our laboratory early this spring.

Smoke was discovered coming from the unpainted woodwork back of the large bottle in which our distilled water is collected. The sun was shining directly on the bottle and the woodwork in question is but an inch or so removed from the back of the bottle, which has a diameter of about 18 inches and is roughly spherical in shape. Examination of the woodwork showed a number of rather deeply charred lines where the late afternoon sun's image formed by the bottle had burned its way along the wood. The lines were short, for it happens that the sun can shine directly on this bottle for but about an hour on any one day. We soon discovered further that the period of daily exposure of the bottle to the sun's rays was but a few weeks in length, in spring and again in fall. This burning has presumably been going on for about ten years.

It seemed at first odd to us that enough heat from the sun should be transmitted through the water to start combustion. Our intuition is probably due to the common use of a water cell to filter out the longer waves in a projection lantern in order to avoid overheating the slide. Inquiry to insurance companies brought out the fact that fires are occasionally caused by the "burning glass" action of the familiar fish bowl. Also the following brief consideration of the fundamental principles involved shows that the goldfish bowl in the direct sunshine should be regarded as a real fire hazard.

As may be found in standard text-books, the transmission data for water as a function of the wave-length of the radiation incident upon it shows great absorption for the longer wave-lengths. This absorption is just noticeable at the red end of the visible spectrum, the transmission falling to about 50 per cent. at 1,000 m μ and about 20 per cent. at 1,200 m μ.

Solar radiation arriving at the earth's surface has its peak power at about 500 m μ and falls to about 10 per cent. of this value at 1,200 m μ and 1 per cent. at 2,000 m μ. Thus, due to the sun's high temperature, its radiated power has its maximum in the visible region of the spectrum. Practically all the sun's heating effect is in and near the visible spectrum, namely, in the wave-length range which is transmitted by water.

The incandescent lamp, on the other hand, which is used as a light source for the projection lantern has a filament temperature but little over 3,000° K, as a consequence of which the peak of its radiation characteristic comes around 1,000 m μ. It has scarcely started to fall from this peak at 1,200 m μ and has roughly 70 per cent. of its total radiated energy in those wave-lengths which are longer than those transmitted by water.

Thus, for a tungsten filament lamp source, about two thirds of the radiated energy may be absorbed in a

[1] SCIENCE, 85: 582–583.
[2] SCIENCE, 85: 477–478.
[1] SCIENCE, 85: 605, June 25, 1937.