but it is remarkable that the island of Luzon should have produced the two smallest species of fish in the world, both gobies.

ALBERT W. HERRE

THE HYDROGEN-ION CONCENTRATION OF THE BLOOD IN CANCER

BOTH the lay and the scientific press have recently given considerable publicity to the low hydrogen-ion concentration of the blood in cancer. This is chiefly due to Dr. Ellice Macdonald, who mentions the subject in an address published in SCIENCE of the 15th *instant.* He seems to credit the discovery to Reding, of Brussels, making no mention of Dr. Maude Menken. Dr. Menken first observed the low hydrogen-ion concentration of the serum in cancerous patients and published her results in the *Journal of Cancer Research,* vol. 2, 1917.

H. O. NOLAN

ISOGRAM VS. ISONTIC

UNDER the title "Isontic?"[1] Lane voiced the need for a generic term applicable to the whole class of iso- and equi-lines and surfaces. Comment on this paper by Miller led to correspondence that we hope may be of sufficient interest to the readers of SCIENCE to merit a brief summary.

"Isogram" was proposed for the same purpose by Francis Galton in *Nature* (40: 651, 1889) and it has found acceptance by others.[2]

The expression "connecting points of," used by Galton and by Lane in defining isotherm and other isograms, lacks uniqueness, since lines not themselves isotherms can connect points of equal temperature. We recommend in lieu of it, the phrase "consists of" *e.g.,* isotherm, a line (or by extension surface) consisting of (extending, traced or drawn through) points of equal temperature. An isogram would be a line (or surface) all points in which are equal in some one respect.

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QUOTATIONS

A DESCENDANT OF JOHN HUNTER

ON February 11 there died in the Sisterhood Home, St. Hilda's, Shirland Road, Paddington, where she chose to spend the evening of a life spent in well-doing, Miss Helen Hunter-Baillie, the senior representative of the Hunter family and a woman of exceptional ability. She was eighty-five years of age, and could read without glasses and retained her freshness of mind to the end. On the death of her sole surviving brother in 1895 she became "laird" of Long Calderwood—the birthplace of William and John Hunter, and also of Dorothea Hunter, who became the mother of Dr. Matthew Baillie, physician, and Joanna Baillie, poetess. The excellent state of preservation of the old farmhouse at Long Calderwood is owing to Miss Hunter-Baillie's care and vigilance, and to the keen and intelligent interest she took in all that pertains to the men who did so much to mould the progress of medicine in this country during the eighteenth century. Her father, Mr. William Hunter-Baillie, was the only surviving son of Dr. Matthew Baillie, and was born in 1797 within the school which Dr. William Hunter built in Great Windmill Street—a building which still serves as an annex for the Lyric Theater. He was educated at Westminster School and Balliol College, Oxford, was called to the Bar, and, although he never practised, did act for a time as marshal to his distinguished uncle Lord Denman. He inherited a fortune from his father, devoted himself to literature, society and good works, and imparted much of his tastes and learning to his daughter, Miss Helen Hunter-Baillie. He lived for the greater part of his life at 96, Harley Street, and died in 1894 at the age of ninety-seven, and in his home Miss Hunter-Baillie met the leaders of literature and science of the nineteenth century. She wrote in her retreat a small typewritten volume of valuable reminiscences, a copy of which is preserved in the library of the Royal College of Surgeons of England. . . . At an early date she began to collect all old letters which had come down in the family from the Hunters, Baillies, Jenners, Barons, Denmans, Crofts; and these she arranged and catalogued and bound in seven volumes, and presented this valuable collection of documents to the library of the Royal College of Surgeons. To Miss Hunter-Baillie and to her brother, Captain William Hunter-Baillie, the Royal Colleges are indebted for many valuable portraits and busts of the Hunters, Baillies and also of Jenner. At the Hunterian Oration, given biennially in the theater of the Royal College of Surgeons, she was always a welcome guest, and had assigned to her a place of honor, which she well became. Students of the lineaments of John Hunter saw in her face, head, body, deportment and inquiring mind much which reminded them of those of her grand uncle. She was keenly interested in the Hunterian collections preserved in the museum and

[1] SCIENCE, 68: 37, 1928.

[2] Talman, *Sci. Am. Supp.,* Nov. 12, 1910, and *Monthly Weather Review,* 43: 195, 1915.

library of the college. Miss Hunter-Baillie is now represented by the children of her two younger sisters —Henrietta, who married the Reverend J. Maconechy, of All Saints', Norfolk Square, and Agnes, who married the Reverend R. B. Oliver, of Whitwell, Isle of Wight. In the Oliver family she had two nephews—the Reverend B. L. Baillie Oliver and the late Matthew William Baillie Oliver, F.R.C.S., whose early death three years ago was a great blow to her. These two nephews have left no descendants. A daughter of Mrs. Maconechy became the wife of Dr. T. Battersby Jobson; of that marriage there are four children. Thus, of the ten children born to John Hunter and his wife Agnes Paul, in the farmhouse of Long Calderwood two centuries ago, there are now only eleven lineal living descendants, representing the fifth and sixth generations. Although these are all that are descended from the Calderwood branch of Hunters, there is another line of Hunters which traces its origin to a senior brother of the John Hunter who became laird of Long Calderwood. The representative of this senior branch is Colonel C. S. Hunter, D.S.O.—*The British Medical Journal.*

SPECIAL CORRESPONDENCE

THE PUGET SOUND BIOLOGICAL STATION

MARINE biological stations meet a definite need by affording professors and students of institutions far from the ocean an opportunity to study the marine flora and fauna. The famous station at Naples has added immensely to our knowledge of the flora and fauna of the Mediterranean; and the station at Woods Hole, Mass., has done similar service for our Atlantic forms; and equally valuable has been the annual assembling of investigators whose discussions and personal acquaintance have enabled many of them to accomplish what they could not have done in the seclusion of their own laboratories.

The Puget Sound Biological Station is comparatively new, but it is offering increasing facilities to students and investigators. It is situated on San Juan Island in Puget Sound, between Vancouver and Seattle, and is maintained by the University of Washington under the efficient direction of Professor T. C. Frye. The coast line is ideal and there is a wonderful display of plant and animal life. Immense brown algae a hundred feet long can be seen from the laboratory windows; and, at night, every stroke of an oar brings a phosphorescent flash from flagellates or jelly fish. Land flora is equally rich, with eight genera of Gymnosperms within botanizing reach.

As early as 1895, biologists were becoming impressed by the wealth of material and small classes were held at various places. In 1903, Professor Trevor Kincaid urged the establishment of a permanent station and the next year, with Professor T. C. Frye, he spent six weeks at Friday Harbor, a small town less than two miles from the present station. Their laboratory was a table three and one half by ten feet, under a Douglas fir tree. There was no class work; but in 1906 they were given the use of an abandoned fish cannery and they offered one course in zoology and one in botany. The cannery was soon sold, but an enterprising citizen of Friday Harbor gave them four acres of land and the university built a laboratory and dining-hall. For a time, Professor Kincaid was director, but since 1913 Professor Frye has been the director and the station has continued to develop, with increasing laboratory space and increasing facilities for research. In 1922 the unused military reserve of 484 acres was secured and permanent buildings were erected. There are now five laboratories for class work, one for research, a stock room and a dining-room, besides cottages for the director and curator. The students and investigators live in comfortable army tents. Library facilities are increasing.

The station has a steamer which makes almost daily trips, with no additional expense to the student, so that there is an opportunity to visit almost every island in Puget Sound. There is a large dredge which brings up deep-sea life in perfect condition. Besides, the station is near the heart of the salmon industry, so that forms which might not be secured in any other way can be gotten from the immense fish traps.

While courses are offered only during the summer, arrangements are being made to keep the station open for research throughout the year.

Teachers and investigators are brought in from all parts of the country and even from abroad. Specialists in various fields have catalogued material, so that identification of much of the flora and fauna is well under way. The following partial list of men who have been at the station as teachers or investigators will give some idea of the work:

J. M. Aldrich, U. S. Natural History Museum, insects; Rupert S. Anderson, Columbia University, phosphorescence; Charles E. Bessey, plant morphology; C. M. Child, University of Chicago, animal senescence; Bruce Fink, Miami University, lichens; E. M. Griffin, Reed College, corals; H. H. Gran, Oslo, Norway, diatoms; N. L. Gardner, University of California, marine algae; Harold Kylin, University of Lund, Sweden, marine algae; Trevor Kincaid, University of Washington, oysters; Wm. Kellogg, Williams College, clams; W. C. L. Muenscher, Cornell University, plant diseases; E. B. Powers, University of Tennessee, animal ecology; V. E. Shelford, University of Illinois, animal ecology; E. C. Starks,