

brilliantly interpreted these minute subdivisions of the plants he studied as the ultimate organized living units. He described with considerable accuracy the course of cell division, and regarded it, correctly, as the essential basis of multiplication and growth.

General application of Schleiden's theory to both plants and animals was made by another German, the zoologist Theodor Schwann, much of whose career was spent in the Belgian universities of Louvain and Liège. He found nucleated cells in the tissues of some of his animals, especially in embryonic tissues, and established the general applicability of the cell theory to all growth and development.

Erik Nordenskiöld declares, in his *History of Biology*: "It is thanks to this theory that the present age has been able to work out its conception of life-phenomena as a connected whole; without Schwann, Darwinism would hardly have been victorious."

Science News Letter, November 26, 1938

DENTISTRY

Caries Cure May be Found In Mouths Free From Decay

LIVES there the man or woman who has no decayed teeth and never has had any? If so, he or she should come forward and volunteer for tests which may lead to the finding of a cure or preventive of that wide-spread ailment, dental caries.

This idea was put forward by Dr. John A. Marshall of the University of California College of Dentistry at the meeting of the Southern California Dental Association.

Persons immune to caries, Dr. Marshall said, have something the rest of us lack. Study of such persons might lead to more rapid progress in the search for causes, cure and prevention of tooth decay.

Science News Letter, November 26, 1938

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GENERAL SCIENCE

Antivivisection Defeat Will Encourage Scientific Work

California passed its intelligence test on health and medicine by defeating by 60,000 votes the so-called humane pound referendum proposition No. 2, one of the 25 proposed laws put before the people on Election Day. This was the bill which threatened to throttle the efforts of Cali-

formia scientists to find ways of preventing or curing such ailments as cancer, infantile paralysis, high blood pressure, leukemia and heart disease. It was attacked by leading scientists as a disguised anti-vivisection measure. (See SNL, Nov. 5.)

By ELLIOTT C. CUTLER, M. D.

Moseley Professor of Surgery Harvard Medical School; Chairman, A. M. A. Committee for Protection of Medical Research.

THE defeat of the so-called humane pound initiative measure in California will encourage all scientific bodies, defenders of biological research, and doctors everywhere to continue their investigations for the betterment of the health of the American people.

The defeat on this bill is a clear indication that the public as a whole be-

lieves in defending the frontiers of knowledge and in training doctors in technical methods in surgery through the use of animals.

It is to be hoped that the recent defeat to the misguided sentimentalists in their attempt to embarrass and hinder medical research will lead people to appreciate that the promise of future improvements in public health matters and the discoveries which will better their welfare will largely depend upon the freedom with which scientists may conduct investigations.

Science News Letter, November 26, 1938

MEDICINE

Vienna Medical Faculty Has Lost Half Its Assistants

HALF the assistant professors and instructors on the medical faculty of the University of Vienna at the time Austria was seized by Nazi Germany have lost their positions, it is reported in a survey published by the technical journal, *Science* (Nov. 11)

With a liberal sprinkling of great names whose disappearance from what was once a medical faculty renowned for the ability of its members, the list includes a considerable number of "Aryans" as well as Jews.

Prof. Egon Ranzi, director of the university's surgical clinic, has been forced to relinquish the directorship of the clinic and has been retired on a pension because he had been a supporter of Schuschnigg, according to the journal, which quotes the Berlin correspondent of the *Journal of the American Medical Association*.

Prof. Leopold Arzt and Wilhelm Kerl, both "Aryans" and both ranking dermatologists, have met the same fate

and for the same reasons. Prof. Ernest P. Pick, pharmacologist, was forced to retire because he is a Jew. Dr. Arnold Durig, a physiologist, has been retired for reasons unknown. Prof. Otto Lowei, of Graz, Nobel Laureate, has been stripped of his post and was in custody until a short time ago. Psychiatrist Otto Kinders has been dismissed, probably on racial grounds. Sigmund Freud is in London; Hans Hoff, in the United States. Prof. Otto Marburg, noted neurologist, and Erwin Stransky have both lost their posts.

Others who have lost positions are: G. Hitzengerger, radiologist; David Scherf, cardiologist; Julius Bauer, endocrinologist; Karl Glaessner; Otto Porges and Walter Zweig. Prof. Ismar Boas, who had made Vienna his refuge from Germany, committed suicide by taking an overdose of barbitol.

The list of those dismissed includes Moriz Oppenheim, dermatologist; Gottwald Schwarz, roentgenologist; Josef

Friedjung, pediatrician; Richard Wagner and Heinrich Kahr, gynecologists; and Emil Froeschels, research phoniatrician. Prof. Heinrich von Neumann, the otologist, a "non-Aryan," was under arrest until the successful intercession of the Duke of Windsor, one of his patients.

Suicides, beside Dr. Boas, include Prof. Wilhelm Knoepfmacher, pediatrician; Prof. Oskar Frankl, 74-year-old gynecologist; and Gabor Nobl, dermatologist.

Jews were prominent among the instructors and assistant professors, whereas few Jews have held full professorships in recent years. This, the journal points out, accounts for the large number of victims in this group.

Science News Letter, November 26, 1938

ARCHAEOLOGY

Huge Burial Mound of Vanished Race Unearthed

A VAST burial mound and trash heap combined, left by long-vanished immigrants into prehistoric America, has been unearthed on the island of Umnak in the Aleutian Islands, which swing out from Alaska.

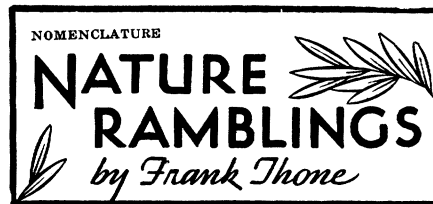
Discovery of this evidence of "pre-Aleut" people who presumably came to America from Siberia by crossing the chain of Aleutian Islands, is reported by Dr. Ales Hrdlicka, Smithsonian Institution anthropologist.

Besides skeletons of these unknown "pre-Aleut" people, the mound yielded their bone and stone implements, beautifully made blades of black basalt, curiously decorated harpoon points, and ivory articles. This material is now at the Smithsonian, where Dr. Hrdlicka will study it in order to build a picture of the life of the vanished people.

Volunteer college students, Dr. Hrdlicka said, assisted him in investigating the contents of the mound. Resembling a natural hill, the enormous accumulation of refuse material was hidden in mound 35 feet high, over 600 feet long, and 250 feet broad.

A search for traces of ancient migration was also made by the expedition in the Commander Islands, which are the far western links in the Aleutian chain, and which swing close to Kamchatka. Finding no trace of ancient relics in these islands. Dr. Hrdlicka concludes that if the Aleutians were a migration trail long ago, the people crossed them by way of the Kurile Islands, or from the north of Kamchatka.

Science News Letter, November 26, 1938



Borrowed Names

DEEP-seated, ineradicable, seems to be the tendency of people in strange lands to give old names to new things. Thus, in comparatively recent times, have English-speaking people given the names custard-apple, alligator-pear, and grapefruit to tropical products that are neither apple, nor pear, nor grape.

Four and a half centuries ago, when men were looking with excited eyes of wonder on whole new continents, the need for new names apparently ran far ahead of their imaginations. So we have America named for a geographer who did not discover it, and its aboriginal inhabitants named in a mistaken identity with the natives of the lands its real discoverer thought he had found. And the attempt to give the red-men a distinctive title of their own, with the book-name "Amerind," only compounds the felony!

Beasts and birds and plants fare no better. The animal that we continue to call buffalo, in the face of despairing protests by zoologists, is no buffalo. The real buffalo is a quite different kind of cattle, native to tropical Asia and South Africa. Truer is his kinship to the Old-World wisent, so that the variant word "bison" fits him much better. But only the bookish call a bison a bison.

The grotesque misnaming of our wild-fowl as a turkey is of course classic, as is also the misapplication of the name of robin to what is really a reddish-breasted thrush. The pronghorn antelope of our West is no antelope, nor is the mountain goat really a goat.

Plants on the whole have fared no better. When Columbus took back ears of maize with him he took also the native name "mahiz"; and maize the plant remains to the English and (in

various close transliterations) to the various tongues of Europe. But we on this continent insist on calling it simply corn, which is the common English term for the small grains generally, and wheat in particular.

Transfers of such names as pumpkin, squash, and beans from Old-World relatives to New-World forms are more excusable, though sometimes the kinship is not too close. The peanut represents more ingenuity than botanical accuracy, for the plant is neither a pea nor a nut; though it must be admitted that it is related to the pea and tastes like a nut.

Yet a few native names have managed to filter through: potato, tomato, tobacco, chocolate; and with these we must perforce be content.

Science News Letter, November 26, 1938

RADIO

Ultra Short Radio Waves Bend Around Earth Surface

THE DREAM of using ultra-short radio waves as secret signalling means during wartime is receiving little encouragement from experiments undertaken at California Institute of Technology, indicating that such waves—believed at first to travel solely in line-of-sight fashion—really can bend around the surface of the earth.

Prof. G. W. Potapenko and Dr. Paul S. Epstein of the Institute have recently completed preliminary studies showing that waves of five meters and one meter length can be picked up at a distance of 18 miles at sea.

Marconi first noted such bending characteristics several years ago. At that time Dr. Epstein formulated a mathematical theory of the bending and, with aid from funds from Carnegie Institution of Washington, he and Prof. Potapenko have built the apparatus needed to carry out the studies.

Science News Letter, November 26, 1938

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