

GENETICS

Longevity is Inherited From Long-Lived Parents

OLIVER WENDELL HOLMES' advice to "advertise for a couple of parents both belonging to long-lived families" in order to live to a ripe old age has been tested actuarially by Dr. Raymond Pearl and his associates in the department of biology of the School of Hygiene and Public Health of Johns Hopkins University.

He finds that longevity is inherited and that there are scientific grounds for the widely prevalent idea that length of days tends to run in families. Preliminary results of his extensive studies of the inheritance of longevity are reported in the current issue of Human Biology and they promise to cause geneticists to consider length of life as much an inheritable family trait as color of eye, shape of head, form of nose or other physical features.

Thousands of Records

Thousands of family history records collected by Dr. Pearl's department were used in the investigation. Using methods by which life insurance companies determine the life tables upon which they base their rates, Dr. Pearl reports, "that the expectation of life of sons of fathers dying or living at 80 or over years of age, is greater at all ages from birth on, than the expectation of life of sons of fathers dying at ages between 50 and 79 years inclusive, and is still greater than the expectation of life of sons of fathers dying under 50 years of age."

In order to establish still more soundly the conclusions, Dr. Pearl also studied the expectation of life of parents of long-lived sons and daughters in comparison with the expectation of life of parents of short-lived sons and daughters. Many other similar actuarial comparisons were made.

Parents of children dying at 50 years or over live longer by 7 to 28 per cent. than parents of children who die under 50 years of age. Grandparents whose children live to over 50 years of age themselves by the life tables have lifetimes 7 to 59 per cent. longer than the grandparents with shorter lived children.

Over half a million years of life were contained in the records upon

which the studies were based. Extensive pedigrees of over 100,000 members of white Baltimore families were available for the study, each record of which was obtained by a trained field worker

Science News Letter, May 30, 1931

ENTOMOLOGY

"Fifty-Fifty" Mosquito Reared In England

A MOSQUITO that is neither male nor female, but shows a grand jumble of characters belonging to both sexes, has been reared at the British Mosquito Control Institute. Its abdomen is typically female, but its "feelers" are male. The mouthparts are those of a male except for one fully developed maxilla. The left wing is of female proportions, but the claws of the fore- and mid-feet and the narrower right wing are essentially male.

The director of the Institute states that out of many thousands of adult mosquitoes examined in their laboratories only once before has such a "gynandromorph" been found.

Science News Letter, May 30, 1931

NUTRITION

Fiji Babies Raised On Coconut Milk

YOUNG COCONUTS have been successfully used as a milk substitute in feeding Fiji Island babies six months or more of age, a report recently received by the U. S. Children's Bureau indicates.

The high infant mortality among the native Fijians, coupled with a milk scarcity due to a disinclination of the islanders to raise cattle or goats, led Dr. Regina Flood-Keyes Roberts, wife of the American Consul at Suva, in the Fiji Islands, to conduct a unique health campaign in which the substitution of coconut for milk was only one of the many innovations. New rules for child rearing had to be made. Talk of thermometers, sugar of milk, sanitary milk containers, fat emulsions and such would be wasted in Fiji.

Telling when to feed the infant, for instance, Dr. Roberts did not so much

as mention a clock. Instead she told mothers that they should feed their babies regularly: when the sun is up, again when the sun is half way up in the sky, once when the sun is overhead, again when it is half way down, once at sunset and when it is bedtime.

Warning against the indiscriminate feeding of children with all sorts of indigestibles, Dr. Roberts recommended the milk-like jelly of the very young coconut, when mothers could not nurse their babies and cow's and goat's milk was not obtainable. About six coconuts a day are required.

"Many Fijians think the baby can use hard food such as bananas, taro, and other things and then the baby dies," Mrs. Roberts explains. "The people say God has taken the child but the truth is the parents have killed it by feeding food before the stomach was ready and the teeth developed and strong enough to chew properly."

Science News Letter, May 30, 1931

SPENCER SCIENTIFIC AND EXPERIMENTAL WORKS
4503 Wolf Street, Denver, Colorado
Optical Engineering and Designing
Repairing and Special Work
Assistance in Experimental Work
Instruction in Technical and Scientific Subjects
Astronomical telescopes, reflectors, prisms, gratings, lenses, standard flats, gauges, optical instruments, supplies, patterns, castings, agate work, crystal specialties, testing, and used equipment.

The new science of dynamics

Nature's horror of a vacuum, the laws of inertia, motion, and the Archimedes Principle are among the many fascinating topics discussed in

This Mechanical World

By Morton Mott-Smith

HERE is the story of the physical principles upon which the mechanical wonders of our modern world are based, the physical laws by which our daily lives are governed—a realm of wonders to enthrall the reader. The author has circumvented the intricacies of mathematics and formulae and has described his hundred and one related topics simply and interestingly.

Copiously illustrated \$2.00

D. APPLETON AND COMPANY
35 West 32nd St., New York