habits of organs seem more important than those of animals. Cushny remarked as long ago as 1915 that all the great therapeutic discoveries of the preceding 50 years had stemmed from the laboratory. Nevertheless medical science now derives strength more than ever from the study of life in the lower forms. It is not merely that cows have tuberculosis and pigs influenza. There exists a physiological kinship amongst organisms of the most incongruous kinds. The realization that Nature does not conform with man's meager imaginings but far exceeds them has always been one of the chief delights of the investigator. Could common sense have prophesied that observations on certain cells wandering within the negligible body of a skipping little crustacean, a waterflea, would tell how bacteria can be met and destroyed when they invade the human being? To find out anything from tobacco plants that will apply to human virus diseases seems a wild thought. Yet one can and does. It has dawned upon us, somewhat more than dawned, that the happenings in animals and plants have far greater meaning for us than their forms would imply. These overemphasize the differences in a most deceptive way; for living creatures are joined by their functional principles into a sort of vertical union. The same insulin that works in the cod-fish will save a diabetic man. What takes place within animals and plants is our own vital concern; no natural science but is in some sense our province. And the further the doctor peers amongst organic phenomena the more twos and twos can he see ready to be added up into fours.

Nothing in medicine has bettered so much throughout the years as the doctor's relations with Nature. Now he is more of a naturalist than ever. It may be urged that the change has been quantitative, that Hippocrates would find himself on easy terms with the good physician of to-day. Granted. Yet there are alterations which, though intrinsically quantitative, are qualitative in effect: they make the world look different. And the world of the body looks different now to the doctor, though it is only himself that has changed.

OBITUARY

IN MEMORY OF OTTO HILGARD TITTMANN

AT a meeting of the Board of Trustees of the National Geographic Society held on October 27, the following resolution was adopted on the death of Dr. Otto Hilgard Tittmann, one of the founders of the society and its president from 1915 to 1920:

With profound sorrow, the Board of Trustees of the National Geographic Society records the death on August 21, 1938, of Dr. Otto Hilgard Tittmann, a founder member of The Society.

A member of the Board since 1888, and President of The Society from 1915 to 1920, Dr. Tittmann had an important part in building The Society from a small group of pioneers to the world-wide organization of to-day. His keen scientific mind, his administrative ability, and his loyalty to The Society are recognized by this Board as vital factors in The Society's fifty years of progress.

Dr. Tittmann was an outstanding geodesist of his day. At seventeen years of age, in 1867, he began his scientific career as a member of field parties of the Coast and Geodetic Survey studying the Atlantic and Gulf Coasts. His frequent elevation to higher posts of responsibility in the Survey and his excellent work on special scientific assignments by his Government in the fields of geodesy and astronomy finally won for him, in 1900, the appointment of Superintendent of the Coast and Geodetic Survey.

At the early age of twenty-four years, he was assigned as assistant astronomer of an expedition to Japan to observe the transit of Venus. On his return to this country he continued his field work on the Atlantic and Pacific Coasts, and in 1887 was appointed Chief of the Office of Standard Weights and Measures, then a part of the office of the Coast and Geodetic Survey.

Outstanding among his achievements was his work in connection with the marking of boundaries between the United States and Canada and Alaska and Canada which covered the period from 1893 to 1911, and his researches in the field of geodesy.

In recognition of the valuable contributions of Dr. Tittmann to the National Geographic Society, of his important scientific achievements, of his inspiring leadership, be it resolved that this expression be spread upon the minutes of The Society and that a copy be transmitted to his family.

RECENT DEATHS AND MEMORIALS

DR. EDWIN HERBERT HALL, professor emeritus of physics at Harvard University, died on November 20 at the age of eighty-three years.

DR. JOHN C. PHILLIPS, research curator of birds in the Museum of Comparative Zoology of Harvard University, member of the faculty of the Peabody Museum of Harvard College and president of the Peabody Museum at Salem, Mass., died suddenly while shooting in the woods of New Hampshire on November 14. He was sixty-two years old.

DR. HOWARD A. MCCORDOCK, professor of pathology at Washington University School of Medicine, known for his work on sleeping sickness, died on November 13 at the age of forty-three years.

DR. HIRAM MILLER SHOWALTER, professor of biology at King College, Bristol, Tenn., died on Novem-