

carried out, the National Research Council for the area be urged to initiate and further the work.

(2) *Whereas*: (1) It is certain that many economically valuable species of marine mammals such as fur seals, sea otters, whales and elephant seals and dugongs once occurred in various portions of the Pacific in such numbers as to constitute the bases of important industries; (2) extremely unwise and wasteful modes of prosecuting these industries have resulted in reducing most of these animal resources nearly to commercial extinction; (3) it is known that small remnants of many of these species still exist in widely separated regions of the Pacific; (4) there are excellent grounds, notably in the rehabilitation of the Behring Sea fur-seal herds under this protection of international treaty for believing that many of these depleted species could be restored to their former abundance by protective measures; *therefore, be it resolved*: That, with a strong belief in the possibility of securing the restoration and perpetuation of many of these useful animals, this second Pan-Pacific Science Congress recommends that: Steps be taken at once by the nations of the Pacific having interests in these species either acting independently or jointly in cases where independent action would be ineffective (a) to make a thorough scientific investigation of the present condition, the history, and the scientific and economic worth of these species with a view to such action as may be necessary to secure the desired end; and (b) to obtain such governmental measures, either by the nations concerned acting separately or jointly where necessary by international convention as would make effective the measures found essential by the scientific investigations for the protection and restoration of the depleted herds and species.

(3) (Endorsed by Geography Section.) In view of (a) the wealth of marine life, including the microplankton at one extreme and fishes and marine birds and mammals at the other, in certain portions of the Pacific Ocean; (b) the seeming barrenness of certain other parts; (c) our very imperfect knowledge of the delimitation of these areas and of the physical and other conditions which determine the fertility or otherwise of a given oceanic area; (d) the moral certainty that with the growth of population in the Pacific Region, already dense in some portions thereof, the future will be obliged to requisition these sources of organic life for food and other human needs, much more extensively than is now the case; and finally (e) the slowness and difficulty of gaining reliable knowledge in this domain of science; *therefore, be it resolved*: That the Second Pan-Pacific Science Congress urges upon the nations of the Pacific the importance of researches in all those aspects of oceanography, physical and biological, essential to an understanding of the organic productiveness of the Pacific and to the utilization and conservation of such portions of that productiveness as may be available for the needs of mankind; and further, that this Congress urges the necessity for the establishment of marine biological stations upon such portions of Pacific coasts as do not already possess them.

HERBERT E. GREGORY

THE FRIENDS OF MEDICAL PROGRESS

Two years ago the Committee for the Protection of Animal Experimentation was organized in Boston to cope with an unusual period of activity on the part of local antivivisection cults. The work of the Committee was successful. For a year or more after this emergency there was a wide correspondence and much discussion both here and with England, where a Defense of Research Society became necessary some years ago. For many years our physicians have carried on the freedom of research defence here in America purely as a civic duty and with much expenditure of time and energy and they have been far more successful than their English colleagues. Abroad they made an unfortunate compromise, with the antivivisectionists who nevertheless now cry louder than ever for the total abolition of all Animal Experimentation. Latterly these misguided cults in America have been increasing in power as their funds have gradually accumulated.

Therefore there has been an insistent and widespread demand that the work of the old Committee be given permanent form and a National Society in the control of Laymen has been organized called the Friends of Medical Progress. The purpose of this Society is not controversial but educational, along the broadest lines, and the articles of incorporation state its purposes as follows:

(1) To encourage and aid all research and humane experimentation for the advancement of medical science; (2) to inform the public of the truth concerning the value of scientific medicine to humanity and to animals; (3) to resist the efforts of the various persons and societies constantly urging legislation dangerous to the health and well-being of the American people.

The Committee did much to protect experimentation in biological laboratories and the new Society is naturally likewise committed to the same policy. The officers of the Society are:

Honorary President

CHARLES W. ELIOT

President Emeritus Harvard University

President

THOMAS BARBOUR

Museum of Comparative Zoology, Cambridge, Mass.

Secretary

EDWARD WIGGLESWORTH

Director, Boston Museum of Natural History

Treasurer and Assistant Secretary

MARY LEE THURMAN

28 Newbury St., Boston, Mass.

Field Secretary

ERNEST HAROLD BAYNES
Meriden, N. H.

The following distinguished list of Honorary Vice Presidents have consented to serve:

JAMES ROWLAND ANGELL
President of Yale University
HON. CHARLES EVANS HUGHES
Washington, D. C.
THE RIGHT REV. ALEXANDER MANN
Bishop of Pittsburgh
HIS EMINENCE, WILLIAM CARDINAL O'CONNELL
Archbishop of Boston
MISS ELLEN F. PENDELETON
President of Wellesley College
ERNEST THOMPSON SETON
Greenwich, Connecticut
OWEN WISTER
Philadelphia, Pennsylvania

The Medical Advisory Board consists of:

W. W. KEEN, M.D., *Chairman*
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University of Rochester, New York
DAVID S. WHITE, M.D.
Ohio State University, Columbus, Ohio
RAY LYMAN WILBUR, M.D.
Leland Stanford University, California

During a recent address before the American Public Health Association, Dr. George E. Vincent, of the Rockefeller Foundation, stated the aims of the Society in the following terms (no better summary is possible):

What the layman needs is education in the significance of modern science and especially with regard to medical science. He is troubled by what the anti-vivisectionist says. He wonders whether all these people that he has respected and heard about are engaged in this awful

torture of poor suffering creatures—wonders what it is all about. He is subjected all the time to the constant campaigns of societies that are organized to propagate these absurd notions about anti-vaccination and anti-vivisection. There is a systematic, well-organized propaganda going on in the United States, endowed and backed by large contributions from a large number of honest and fanatical people. Honest and fanatical people are the worst combination possible. You need not worry about people whose motives are bad. They usually take care of themselves, but a great mass of perfectly wrong-headed and nobly devoted people to a cause are a fearful calamity to any country, and we suffer from them.

We have all this organized wrong-headedness in this country, and it is not a thing to laugh at or despise; it is not a thing to suppose can be left alone and it will somehow burn itself out.

Therefore, I am sure that all of us have welcomed the organization of a society that frankly, systematically, intelligently and honestly proposes to enter the field to combat these dangerous ideas which are spreading and which are confusing the minds of the average layman. There has been organized the society known as the Friends of Medical Progress. The honorary president of it is that great man, that man whom we all honor and revere, that man who has been a force in American life that it is impossible to estimate, a man who in what in other men would be old age, is still possessed of all his vision, all his courage, idealism, all his interest in human affairs—President Eliot, of Harvard University.

This society is beginning a systematic, scrupulous, careful, thorough, scientific and conscientious campaign to educate the public of America as to the meaning of modern medicine, the meaning of modern science, the methods which modern science utilizes, what animal experimentation is. We have to call it vivisection because the people who are attacking it constantly talk of vivisection, and they say that calling it anything else is dodging the issue.

This society issues pamphlets and urges people to understand the meaning of animal experimentation, what it has done for public health and the benefit of mankind. This is a society which every member of this association ought to support, every member of this association ought to join, and it is hoped in communities all over the United States branch societies will be organized until we have a federation throughout this country of intelligent laymen keeping their heads, trying to get the right kind of information, going carefully into these things, running down rumors, having things investigated.

You know every time you have a talk about vaccination, somebody says that vaccination always results in tetanus, kills more people than it saves, and all that sort of thing. We need in every community throughout this country a group of right-minded, courageous men and women banded together to see that the American public gets the absolute truth with regard to this whole question.

So therefore the Society of Friends of Medical Progress has been founded because there is an or-

ganized, widespread and dangerous movement on foot to discredit the medical profession, to procure legislation which will prevent the progress of medicine and surgery, to break down the bulwarks of preventive medicine, and thus expose our people to the attacks of diseases which are now held in check by science, but which formerly took frightful toll of human life. This anti-medical campaign is being conducted by a considerable number of organizations professing various aims, such as antivivisection, anti-vaccination and "medical liberty," but all seeking by fair means or foul to bring into disrepute scientific methods of combating disease, and to substitute therefor every known form of pseudo-science and quackery.

The present headquarters of the Society are at 28 Newbury Street, Boston, Mass., in the house of The American Academy of Arts and Sciences by kind permission. The Society has a large quantity of educational literature available for distribution and sincerely hopes that every layman as well as every medical and biological investigator in America who may read this announcement will correspond with Miss Mary Lee Thurman, 28 Newbury Street, Boston, Mass., with a view to becoming a member of the Society and not only this but that they will give the Society whole hearted encouragement and support.

THOMAS BARBOUR

JOHN THOMAS GULICK, MISSIONARY AND DARWINIAN

JOHN THOMAS GULICK, son of a missionary, was born in Hawaii in 1832, and died recently in Honolulu at the age of ninety years. He has been widely and very favorably known as a student of the land snails of Hawaii (*Achatinellidae*), and of the lessons in evolution to be derived from their nature and distribution. He was greatly impressed, seventy years ago, with Darwin's account in "The Voyage of the Beagle," of the birds and reptiles of the Galapagos Islands, and the suggestion of localization as a moulder and determinant of forms. He found conditions even more striking existing in Hawaii. The many species of land snails on those islands occupy each a restricted area separated by barriers of stream or meadow which these slow-moving creatures practically never crossed. As he recorded the multitude of forms, the conviction grew with him that the relation of these geminate species of shells "was a marvelous self-revelation from the hand of the Creator himself and that if we could but learn the alphabet we might read from them the story of His method of creation."

Dr. Gulick, a graduate of Williams College (1859),

spent most of his life as a missionary in China and Japan. Even before he had read "the Origin of Species" he had reached the conclusion that "many genuine species had been derived from descent from one original stock or species." To find out the range of this possibility and how it came about he devoted his spare time for many years. His first paper: "The Variation of Species as related to their Geographical Distribution," was published in *Nature* in 1872. Numerous other papers on the formation of species through isolation and segregation followed, the most extensive being a volume, "Evolution, Racial and Habitual," issued by the Carnegie Institution.

Nearly all Dr. Gulick's scientific work relates to the multitude of genera and species of these tree snails of a family peculiar to small groves and thickets. No one considering the wealth of illustration given by Dr. Gulick can fail to recognize that isolation has been the immediate occasion of the moulding of each of the various forms; and while the evidence in most other groups of plants and animals is not so clearly visible, every competent field-worker finds the same factor in the origin of practically every species whatever. Adaptation is produced by Natural Selection: the final differential moulding by isolation and segregation.

In the details of his work Dr. Gulick was far ahead of his time, not many laps indeed behind Darwin, and in general conception of methods of evolution he is still in advance of many able workers who are prone to forget what they have not themselves seen. The internal factors in evolution, heredity and variation, are recognized by all authors. The external factor, selection, has been fully illustrated by Darwin, and can apparently be questioned only through ignorance or perversity. Another external influence, isolation with segregation, was regarded by Darwin as a feature of natural selection, its vital importance being overlooked by naturalists who have not studied wild life in nature's own workshops.

It is worth noting in these days of conflicts between knowledge and prejudice that Dr. Gulick was a thoroughgoing Darwinian, as well as a Christian missionary. His scientific studies were to him a reverent duty, a study of the actual ways of the Creator in His actual handiwork.

Dr. Gulick, after a happy and successful life, attained a happy old age. One of the red-letter days of the present writer was in 1922, when he received an invitation to Gulick's charming home in Honolulu, where, himself a champion of "*räumliche Sonderung*" as a necessary factor in evolution, he was privileged to stand by Gulick's side when one who had studied with both of us took our photograph together.

DAVID STARR JORDAN