

will help to make more men sane on more matters for a greater part of the time.

The second unknown in my thesis is whether every person subject to our ordinary educational processes, that is, every child above the moron stage, is capable of profiting by this type of education. There are those who argue that the venture would be a social and economic waste; that at most it should be reserved for the picked few; that all we can do for the rank and file is drill in the "three Rs," in the expectation (I assume) that such "drill" will make for more efficient "hewers of wood and carriers of water." That there are individual differences in capacity to learn, in imagination, in persistence, in practical ingenuity seems clear. We admit, in addition, the facts of heredity. But these facts do not lead to the doctrine of superman and a permanently inferior strata of humans. Speaking as physiologist, with some knowledge of men and a little acquaintance with history, I would say that the "superman" has neither bones, flesh nor good red blood. He is a creature either of conscious fiction or pitiful credulity. And the "superboob" belongs either to organic pathology or is a product of an ill-favored environment plus a perverted educational system. Every normal person would be benefited by a modicum of research at every stage in the formal educational program.

We hear so often that "this is the age of science," and the stereotyped dictum is usually followed by the evidence in the form of enumeration of the striking list of modern scientific discoveries and practical inventions. These achievements of the few have added to the conveniences of the many, but has society thereby achieved greater sanity? Look at the so-called civilized world about you! Scientific knowledge has increased a thousand fold, but we are yet looking for the dawn of scientific understanding in society. The very name science is being perverted to serve superstition, fakery and fraud. The results of scientific research may fill the bystander with awe, just as primitive man stood in awe before the eclipse, the earthquake, the lightning, the rainbow and the phosphorescent sea, but awe does not kindle the cool light of reason.

I am not sufficiently myopic to promise that individual research as a part of education at all levels will be a panacea against all the credulity and unreason of normal men. In urging it as a hopeful experimental therapy, I do not put undue emphasis on the hope, because society will interfere or try to interfere with the experiment. There will be interference on the part of teachers who are satisfied with present methods. And in any event, we start with material

already processed in *education by dictation* at the hands of parents and priests.

A. J. CARLSON

UNIVERSITY OF CHICAGO

THE BERMUDA BIOLOGICAL STATION FOR RESEARCH, INC.

IN August, 1925, twelve men interested in the Bermuda Biological Station for Research met at Woods Hole to consider the future of the station. The twelve, all but one of whom had worked at the station, were as follows:

C. L. Bristol	E. N. Harvey
E. G. Conklin	Edwin Linton
M. Copeland	E. L. Mark
E. V. Cowdry	J. W. Mavor
J. F. Fulton, Jr.	S. Morgulis
P. S. Galtsoff	H. W. Rand

The unanimous expression of the meeting was to the effect that a rich semi-tropical fauna and flora such as exist in Bermuda offer ideal opportunities for biological research and that Bermuda's advantages as a location for a biological research station are conspicuous. In Bermuda, reached from New York in about forty-eight hours, this semi-tropical life is accessible to biologists of a large portion of the United States and Canada at a minimum expense of time and money. Living conditions on the island afford reasonable convenience and comfort and freedom from exposure to the dangers which accompany living in a less civilized tropical region. The climate is as nearly as possible ideal. Even in mid-summer, biological work may be pursued either in the field or in the laboratory without serious discomfort.

The first organized biological research in Bermuda was carried on under the auspices of the Bermuda Natural History Society. In the establishment of this society, Professor C. L. Bristol, of New York University, took an active part. Then, in 1903, through the joint activities of Professor Bristol and of Professor E. L. Mark, of Harvard University, with the important cooperation of the Natural History Society and the support of the Colonial Government, the activities of the present station were inaugurated.

The station, while never operated on a large scale, may nevertheless fairly be said to be strongly established. It has been in operation for nearly a quarter of a century. In the course of that time about two hundred and fifty persons have carried on investigations at the station. The investigations, mainly zoological, but to some extent botanical, have covered a broad range of subjects including taxonomy, morphology, embryology, cytology, physiology, biological

chemistry, experimental morphology, parasitology and oceanography. For three years (July 1, 1915, to November 1, 1918) a resident naturalist, Dr. W. J. Crozier, was in charge of the station. While his time was largely given to physiological and biochemical studies, yet his numerous papers include many subjects referring to the morphology, embryology, behavior and adaptation of Bermuda animals. At the close of 1922, the published contributions from the station comprised 141 papers arranged in six volumes, and a seventh volume is accumulating.

In view of the facts mentioned above, it seems evident that, if the station could be provided with an adequate staff and equipment, it would become an instrument of international importance for advance in the biological sciences. About a year ago a group of biologists reached this conclusion, which was embodied in a report placed on file with the National Research Council. It is proposed that provision be made for a resident director and that the station be open to investigators throughout the entire year.

The outcome of the Woods Hole meeting of 1925 was a plan for the complete reorganization of the station. It was proposed to follow, in a general way, the scheme of administration which has proved so successful in the case of the Marine Biological Laboratory at Woods Hole. The ultimate control of the station is to be vested in a corporation composed chiefly, but not necessarily entirely, of working biologists, this corporation to be responsible for the management and welfare of the station through the medium of a board of trustees elected from among its own number.

As a step toward this organization, a list was prepared including about one hundred and seventy-five persons, residents of Great Britain, Canada and the United States, who, because of having done biological work at the present station or for other reasons, might be expected to be interested in the development of the station. To all these persons were sent letters requesting cooperation, and asking nomination of five persons to serve as a committee on reorganization. One hundred and thirty-four persons signified their willingness to join the corporation, and the following Committee on Reorganization was elected:

C. L. Bristol
E. G. Conklin (*chairman*)
E. V. Cowdry (*secretary*)
E. L. Mark
H. W. Rand

The Committee on Reorganization met in New York City on November 23, 1925. The primary importance of securing the cooperation and the support of the Bermudians was recognized. Accordingly, with this

in view, a circular compiled by Professors Bristol and Mark, together with a letter from the secretary of the committee, was sent to the governor of the colony, to the former members of the Bermuda Natural History Society (the society unfortunately being no longer active) and to several other residents of Bermuda; also an invitation to join the corporation was tendered to a number of Bermudians who have shown a specially active interest in the station. The responses were, in general, most encouraging and fifteen prominent Bermudians accepted membership in the corporation. During the past winter, Dr. A. G. Huntsman, of the Biological Board of Canada, and engaged in fishery problems in Bermuda, and Professor H. H. Whetzel, of Cornell University, acting as adviser to the Bermudian Department of Agriculture, visited Bermuda and actively interested themselves in plans for the reorganization of the station.

At its meeting of November 23, the Committee on Reorganization arranged for the election of a board of twelve trustees, to be divided into four groups, to serve for one, two, three and four years, respectively. It was provided that four of these trustees should be non-residents of the United States. On February 23, 1926, the secretary sent to all members of the corporation (then numbering one hundred and fifty-one) a letter and ballot for election of trustees. As a result of the voting, the following board was elected:

Non-Residents of the United States:

E. J. Allen, Director, and Secretary of the Council, of the Marine Biological Association of the United Kingdom.
J. H. Ashworth, Professor of Zoology, University of Edinburgh.
A. G. Huntsman, Director, Atlantic Experimental Station for Fisheries, Halifax, Canada.
E. A. McCallan, Director of Agriculture, Bermuda.

Residents of the United States:

E. G. Conklin, Professor of Biology, Princeton University.
E. V. Cowdry, Associate Member, Rockefeller Institute for Medical Research.
C. B. Davenport, Director, Station for Experimental Evolution, Carnegie Institution.
B. M. Duggar, Professor of Plant Physiology, Washington University, St. Louis.
R. A. Harper, Professor of Botany, Columbia University.
R. G. Harrison, Professor of Comparative Anatomy, Yale University.
E. L. Mark, Professor Emeritus of Zoology, Harvard University.
H. W. Rand, Associate Professor of Zoology, Harvard University.

A meeting of the board of trustees was held at the Rockefeller Institute in New York City on April 29,

1926. Dr. B. M. Duggar was elected chairman and Dr. H. W. Rand secretary-treasurer of the board. Papers of incorporation under the laws of the state of New York were approved, and a certificate of incorporation was filed by E. V. Cowdry, B. M. Duggar, R. G. Harrison, E. L. Mark and H. W. Rand. Subsequently, to satisfy the legal requirement that at least one of the signers should be a resident of the state of New York, the name of Mr. Lawrason Riggs, Jr., was added to the papers. Committees were appointed to draft the by-laws of the corporation and to draw up detailed plans setting forth the aims and proposed equipment of the station.

Pending the completion of the legal processes of incorporation, further steps were taken to secure the cooperation of the Bermudian government and residents, and also to elicit the approval and support of the Royal Society, the Biological Board of Canada and the National Research Council.

These efforts to secure cooperation are meeting with most encouraging responses. Under date of July 5, 1926, Dr. E. A. McCallan, director of the department of agriculture of Bermuda, writes that he is interviewing representatives of the Bermuda government with a view to ascertaining the government's attitude toward the station, and intimating that it is highly probable that the government will be willing to make some provision for the needs of the station, possibly in connection with the Bermuda Aquarium, now in process of construction. Dr. McCallan also expresses the hope that close relations may exist between the station and the department of agriculture, and he offers the facilities of the laboratory of the department of agriculture for the use of botanists who may be working under the auspices of the station.

The following is quoted from a letter, bearing the date of July 12, 1926, received from the secretary of the Royal Society:

At a meeting on the 8th July information was laid before the Council of the Royal Society of London by Professor J. H. Ashworth and Dr. E. J. Allen concerning the steps which are being taken to reorganize the Bermuda Biological Station for Research and to develop it as an international laboratory.

I am directed to express to you the Royal Society's interest in the statement which was placed before them and the satisfaction with which they have learned of the steps which are being taken thus to widen the scope and value of a station which offers such exceptional advantages of position and which, though situated in British territory, had hitherto owed its existence and development to American enterprise.

The Council of the Royal Society hope that they may be kept informed concerning the progress of the scheme.

This letter was followed by one from Professor Ashworth, explaining that the Royal Society's funds are almost entirely restricted for special uses and that the contribution proposed by the society should be regarded not as a measure of the society's approval but as a "Token grant," expressing the society's "interest in and sympathy with the proposals of the Trustees" of the Bermuda Biological Station.

Articles of incorporation were approved by the Supreme Court of the state of New York on June 28, 1926. The certificate of incorporation provides that:

The principal objects for which the corporation is formed are to establish and maintain a Laboratory or Station for scientific study in Biology; the acceptance and holding of funds, whether from bequest, devise, gift or otherwise, and the application of such funds and the income therefrom to the purposes of this corporation.

The name of the corporation shall be *The Bermuda Biological Station for Research, Inc.*

The territory in which the operations of the corporation shall be principally conducted is in the State of New York and in the Island of Bermuda.

The first annual meeting of the corporation shall be held at the City of New York and State of New York, on the 27th day of December, 1926.

The certificate of incorporation was filed in the office of the secretary of state of New York on June 30, 1926.

HERBERT W. RAND,
Secretary of the Corporation

A COUNTERFEIT COLLECTION OF MEXICAN PLANTS FALSELY ATTRIBUTED TO BROTHER G. ARSENE

A FEW years ago the U. S. National Museum was fortunate in receiving a very large collection of plants made in Mexico by Brother G. Arsène, who was engaged for several years in teaching in the schools of the Christian Brothers in Puebla and Morelia. Brother Arsène is a most enthusiastic botanist, and was enabled to devote much of his time to collecting, with the result that his collections from the vicinities of these two cities amounted to some ten thousand numbers of flowering plants, besides large quantities of mosses, hepatics and lichens. His collections of cryptogams are doubtless the largest ever made in Mexico, and no person has ever made local collections in Mexico at all comparable in size with those which he obtained about Puebla and Morelia.

In his work of collecting Brother Arsène was assisted by other members of the same order, especially