

ideally desirable, yet it is hoped that a report may be prepared, based on the constructive thought of many competent persons, that may prove very valuable, possibly forming a conspicuous mile-stone in the progress of American education.

Through its director, Dr. Max Farrand, the Commonwealth Fund of New York City has granted to the American Association for the Advancement of Science a fund to aid this work, the money to be used for paying travel expenses incurred by the committee members in attendance at called meetings.

Those interested in science education and in the part that science is playing and will play in American civilization and in our national welfare will cordially welcome the inauguration of this study under the auspices of the American Association for the Advancement of Science.

Existing Reports on American Science in Secondary Schools

In the Report of the Committee of Ten of the National Education Association published in 1893, there appeared definite statements of objectives and lists of recommended science subjects. This report was highly valuable and it served its purpose for a time, but it was eventually superseded in practice and it finally became less than an adequate record of actual accomplishment.

In 1913 a committee of fifty science teachers, under the auspices of the National Bureau of Education, began work on a revision of secondary-school science studies. Its report was published in 1920 as Bulletin 26 of the United States Bureau of Education, and was widely distributed. The purposes, outlines of subjects and sequences of subjects, as presented in that report, were based upon practices then in use in the more advanced school systems. Since the report was issued the types of courses and sequences advocated have become fairly common. Nevertheless, limitation in available time of pupils, in which they may take science, and limitation in availability of teachers with desired preparation, have probably prevented many pupils from securing as much instruction in science or the kinds of instruction thought desirable. Furthermore, the failures of the content, method and organization of science courses to respond to the most pertinent needs of modern social, industrial and esthetic uses is thought to have kept some of the objectives of the report from being as widely realized as was expected.

It seems likely that the report to be prepared by the present American Association for the Advancement of Science committee may deal not only with this problem of elementary and secondary education through school curricula, but also with the problems

of science teaching in American colleges, with the social and industrial aims and interpretation of scientific research and with the problem of a proper popularizing and socializing of science knowledge.

The American Association for the Advancement of Science committee requests that all who are interested will make suggestions regarding the plan to be followed in the projected investigation, purposes, means, limitations, worthwhileness, etc., and also regarding men and women who might probably make distinct contributions to the work in hand.

The Special Committee on the Place of Science in Education.

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THE RICE EXPEDITION TO SOUTH AMERICA

A SUMMARY of the medical activities undertaken by the department of tropical medicine of the Harvard Medical School in connection with the Hamilton Rice expedition to South America during the present year is contained in a statement by Dr. Richard P. Strong, professor of tropical medicine in the medical school, published at the university.

Dr. Strong, who arrived in America a week ago, organized the medical activities of the expedition, having special reference to the investigation of the diseases which prevail in man and animals in the regions traversed. The expedition was organized and conducted by Dr. Hamilton Rice, first, for the purpose of geographical exploration, and second, for medical study and research. The principal geographical object was the study of the sources of the Orinoco River and the physical geography of the country in the vicinity. Dr. Rice is still in Brazil with Dr. George C. Shattuck, assistant professor of tropical medicine of Harvard University, continuing his investigations, and has with him also a trained staff and extensive equipment for making scientific observations.

The other medical members of the party, who returned with Dr. Strong, were, besides Dr. Shattuck, Dr. Joseph Bequaert, instructor in entomology in the department of tropical medicine at Harvard, and Ralph E. Wheeler, of Boston, a third-year Medical School student. Dr. Strong sailed last May to attend the congress of the Royal Institute of Public Health at Bordeaux, the remainder of the party leaving late in June. They brought back with them a large amount of material which will be further studied in the laboratories of the department of tropical medicine at Harvard University. When the study of this material has been completed a scientific report of the results will be published.

The following statement concerning the work is made by Dr. Strong:

The medical studies and investigations which have been carried out on the expedition relate particularly to that portion of the Amazon Valley extending along each side of and parallel to the equator from near the mouth of the Amazon on the east, to the River Branco on the west, a region obviously comprising the greater portion of the most tropical parts of Brazil, and constituting a strip of territory comprised between about 3° 8' south (Manáos), and approximately 2° 5' north latitude (Caracaray), and 50° 50' (Pará) to approximately 64° (Parahiba) longitude west of Greenwich. It is a large plain which with the exception of those portions upon which the cities of Pará and Manáos are located, is almost completely covered with forest, and a great portion of it is semi-inundated. The climate, therefore, as one might expect, is characterized particularly by great heat and moisture, and there are an extraordinarily large number of biting insects many of which transmit disease. The great humidity and continuous high temperature throughout the year render the climate especially debilitating and enervating to those who reside in it, and the population in large areas has been at different times decimated by the infectious diseases which have prevailed.

The prevailing diseases in these regions at the present time are malaria, tropical splenomegaly, chronic ulcerative processes of the skin, leprosy and syphilis. Hookworm disease is also very common, and beriberi, dysentery, typhoid and smallpox are not infrequently seen. Special studies were conducted with respect to the cause and nature of the chronic ulcerative processes of the skin, to the tropical splenomegaly which is so very prevalent, and to the biting insects which prevail, as well as to the infections which occur in the mammals of the forest, some of whom serve as the intermediate hosts of the parasites which cause either human disease or disease in domestic animals. In connection with these studies several species of biting insects, which are probably new, and several animal parasites which have probably been hitherto undescribed, were encountered. Incidentally a number of observations were made on insects injurious to economic plants. In addition a large amount of valuable pathological material for study and for teaching purposes has been obtained.

THE NEW ENGLAND INTERCOLLEGIATE GEOLOGIC EXCURSION

THE twentieth annual New England Intercollegiate Geologic Excursion was held in the vicinity of Providence, October 10 and 11. Professor Charles W. Brown, of Brown University, organized the excursion. Dr. Marion D. Weston led one group, Friday afternoon, to McCormick's quarry where fossil ferns and calamites occur in the Seekonk sandstones and conglomerates. A separate excursion was led by Dr. Bradford Willard, the same afternoon, to Lime Rock, a locality famous for its contact metamorphic minerals.

Saturday morning under the guidance of Professor Brown the unconformity between the basal carboniferous and the Milford granite at Neutaconkanut hill, southwest of Providence, was first visited and later a graphite mine at Rocky hill just east of the first locality. The party then motored south to the Sockanossett Mine, where Rhode Island coal is taken out to be sold at \$14.00 a ton.

Professor R. M. Brown, of the Rhode Island College of Education, became guide of the party at this point and Gaspee point on Narragansett bay was visited. A study was made of the cusped bar and folded clays near a submerged cedar swamp excited considerable discussion.

After lunch Professor C. W. Brown again assumed the leadership and an ancient Indian soapstone quarry at Ochee spring was studied. Later the intrusive contact of the Milford granite and the Precambrian quartzites and schists of the Marlboro and Westboro formations was seen at the Manton Avenue quarry. The excursion was brought to an end at the North Burial Ground where an esker of problematic relations was of interest to all.

Thirty-nine persons from ten institutions were present during the two days. The institutions represented were Brown (10), Clark (1), Colby (1), Harvard (8), Massachusetts Institute of Technology (7), Mount Holyoke (3), Rhode Island College of Education (2), United States Geological Survey (1), Wesleyan (3) and Yale (3).

WILBUR G. FOYE, *Secretary*

AWARD OF MEDALS BY THE FRANKLIN INSTITUTE

AT the stated meeting of the Franklin Institute held on October 15 the following medals were presented: The Louis Edward Levy Medal to Dr. Harvey Fletcher, of the Western Electric Company, New York City, for his paper on "Physical measurements of audition and their bearing on the theory of hearing," printed in the issue of the *Journal of The Franklin Institute* for September, 1923. This is the first award of the Levy Medal, which is awarded annually to the author of a paper of especial merit, published in the journal of the institute, preference being given to one describing the author's theoretical and experimental researches in a subject of fundamental importance.

The Edward Longstreth Medal was presented to Thomas C. McBride, of Philadelphia, for his invention of a locomotive feed water heater.

The Edward Longstreth Medal was also presented to Milton Roy Sheen, of Philadelphia, for his invention of the expansion machine for tunnel construction.