creation as recorded in the life of the past and of the present is within the reach of all who have the desire to read the open pages of nature's book. In the rocks we find the soul of history: the whole world throbs with life, and the joy of it all is ours to share:

> I said it in the meadow path,
> I said it on the mountain stairs—
> The best things any mortal hath
> Are those which every mortal shares.

This evening we have caught through the mists a glimpse of a scene on earth's stage separated from the present by a small fraction of time in relation to the whole span of geological history. The Thulean forests which we have visited included trees, shrubs and other plants of surprisingly modern aspect, though it is not to be supposed that they were absolutely identical specifically with their living descendants; from the material available it is impossible to define or assess the difference. What we have seen throws little light on the evolution of the plant-world; it is equally true that the main conclusion forced upon us by our retrospect can not fail to convince us that it is impossible to understand the present distribution of plants over the earth's surface unless we extend our survey into the past. Darwin spoke of geographical distribution as a noble science, "almost the keystone of the laws of creation." The living world can not be fully appreciated as an expression of creative energy unless we free ourselves from the cramping influence of the environment in which we live.

As a botanist whose first love was geology, may I make a plea for wider recognition of physical geography and geology as branches of knowledge possessing an inestimable value as a means of bringing young people into close companionship with nature and as a source of refreshment, a stimulus and an inspiration. Most of us would probably agree with the spirit of a remark made a good many years ago by the late A. C. Benson: "I find it hard to resist the conviction that, from the educational point of view, stimulus is more important than exactness." Arguments in favor of introducing geology into schools were put forward in a "Report on Scientific Education" presented at the Dundee meeting seventy-two years ago, and in 1936 and 1937 the association published two reports on the same subject. Let me add another argument of no little value: Hugh Miller wrote in a letter to a friend, "geology is, I find, a science in which the best authorities are sometimes content to unlearn a good deal." That is worth much; geology helps us to cultivate the not too common virtue of admitting that it is possible to make a mistake. In conclusion, I can not do better than quote with whole-hearted agreement words spoken by Sir William Bragg in his presidential address to this association eleven years ago: "Some speak of modern science as tending to destroy reverence and faith. I do not know how that can be said of the student who stands daily in the presence of what seems to him to be infinite." These words apply with equal force to searchers after truth whose main interest is in the living world no less than to those whose objective is the elucidation of the structure of matter that is called by contrast dead and yet vibrates with life. The earth was once lifeless; when and how living protoplasm had its birth we do not know, nor do we know whereupon were the foundations of the earth laid. We can only echo in our hearts the voice out of the whirlwind:

> Whereupon were the foundations thereof fastened?
> Or who laid the corner stone thereof;
> When the morning stars sang together,
> And all the sons of God shouted for joy?

SCIENTIFIC EVENTS

THE FORESTS OF GREAT BRITAIN

ACCORDING to the report of the British Forestry Commission for the year ending September, 1938, approximately 54,000,000 trees were planted during the year. Forty-seven per cent. of these trees were Norway and Sitka spruces, 24 per cent. Scots and Corsican pines, 9 per cent. European and Japanese larches, 1 per cent. Douglas fir and 16 per cent. broad-leaved species. The total addition to the woodland area of Great Britain as a result of the commission's operations during the year was 20,300 acres. Including reafforestation in the former Crown woods and replanting areas damaged by fire, 24,100 acres were planted, of which 21,600 acres were planted with conifers and 2,500 acres with hardwoods.

By the end of the forest year the commissioners had 125 forests in England and Wales and 107 forests in Scotland. The total area afforested is now 365,000 acres, and is being increased by some 30,000 acres a year. During the year 92,000 acres of land were acquired, including 64,100 acres of plantable land. The commission now controls 1,100,000 acres in Great Britain. The commission mainly plants conifers, principally because the demand for coniferous timber, called softwood, is about nine times the demand for hardwood, and the commission's policy is to afforest land of little agricultural value, which is generally unsuitable for hardwoods.

The year under review was one of the worst for forest fires, which burnt 2,100 acres of planted land and cost £39,900. The worst year on record was 1929, when the damage from fire amounted to £46,000.

Railways and the general public were mainly responsible.

The number of forest workers directly employed by the commission varied between 4,555 in the summer of 1938 and 5,395 in the following winter. Further forest workers' holdings, which have an average of 11 acres each, were established, and increased the total number of holdings to nearly 1,400.

Seven eighths of the woodland in Great Britain is privately owned. A census of all those woodlands of not less than five acres was started early in 1938, and will provide reliable information on the condition and contents of the woods in view of the importance of the reserves of standing timber for national defense.

The commissioners have continued to assist planting and direct sowing by local authorities and private owners by means of grants up to £2 an acre for conifers and up to £4 an acre for hardwoods, and by a proceeds sharing scheme. So far 120,000 acres have been planted privately with the aid of grants.

Enthusiastic use has been made of the camping grounds in the Argyll National Forest Park, opened to the public by the commissioners in 1936. The number of visitors who made use of the facilities provided there was 29,500, compared with 20,400 in the previous year. Progress has been made with plans for establishing the Snowdonia and Forest of Dean National Forest Parks. The Dean National Forest Park will be opened shortly.

THE AUSTRALIAN METEORITE IN THE COLLECTION OF THE SMITHSONIAN INSTITUTION

A 2,000-POUND meteorite, probably a fragment of one of the largest to have struck the earth, has been added to the meteorite collection of the Smithsonian Institution. This specimen was found in 1903 near the town of Pearcedale, not far from Melbourne, Australia—the general area of the Cranbourne meteorite which was discovered in 1854.

The largest piece of the Cranbourne meteorite, weighing over three tons, is now in the British Museum; the second largest piece, weighing about one and a half tons, is in the Melbourne Museum. Smaller fragments are displayed in museums all over the world.

It is not known definitely whether this meteorite is actually a part of the Cranbourne fall, but according to E. P. Henderson, of the institution, it will probably prove to be so. That two separate meteoric falls of such large size would occur within such a limited area is quite improbable. The meteorite probably exploded in midair and fragments may be found some distance apart. It will shortly be placed on exhibition at the U. S. National Museum. A study will be made to determine its composition and relationships to the Cranbourne meteorite, which must be considered as one of the major collisions between the earth and a body from space. It is, however, said to be by no means the largest known meteorite.

Stony meteorites are more numerous than the iron variety, but all the largest falls, both as to size and weight, are iron meteorites. There are many scars upon the surface of the earth where meteorites have struck, notable among which is the great Meteor Crater in Arizona. The fall of 1908 which struck in northern Siberia produced a shock observed on seismographs far distant from the point of impact.

The Smithsonian has added thirty different falls to its collection so far this year. Most of these have been found in the United States. The Australian iron is by far the largest received this year, but several good-sized ones have come in from Chile and Mexico.

THE PROPOSED INTER-AMERICAN UNIVERSITY IN PUERTO RICO

SECRETARY ICKES has made public the report of the commission appointed by President Roosevelt to make recommendations for the proposed establishment of an Inter-American University consisting of six graduate schools and research units grouped about the University of Puerto Rico, of which they would be an expansion but not an integral part.

The chairman of the commission was Dr. Isaiah Bowman, president of the Johns Hopkins University. Other members were Senator Elbert D. Thomas; Frank P. Graham, president of the University of North Carolina; David L. Crawford, president of the University of Hawaii; Dean Thomas E. Benner, of the University of Illinois; Alvin Johnson, director of the New School for Social Research, New York; Victor S. Clark, economic consultant, Library of Congress; Richard Pattee, of the Division of Cultural Relations of the State Department, and Max Radin, professor of law, University of California.

Of the six special service units recommended for inclusion in the program, one already is in existence. This is a School of Tropical Medicine, the increased support and enlargement of which is recommended, as well as its merger with the proposed organization.

The other units would be a Graduate School of Tropical Agriculture, a Graduate School of Economics and Business, an Institute of Languages, Literature and History of the Americas, an Institute of Law and a Tropical Fishery Research Laboratory.

These units would form the Inter-American Institution of the University of Puerto Rico. Their control as a group by a single board independent of the university is recommended, although an interlocking relationship between this board and the board of trustees of the university is suggested.

Virtually the entire burden of building and support-