

sies and attentions, and to say that he approached South America somewhat oppressed by the thought that he should find himself a stranger in a strange land, but that, on the contrary, there was not a day of the two months spent in the Latin-American countries on which he was not made to feel entirely at home and among appreciative and generous friends.

The universal feeling at the close of the congress was that the meeting had fully justified the plans of its projectors; and the story is not entirely told when it is stated that the elaborate program, covering nearly every branch of science, was successfully carried out. The more thoughtful find in this and in kindred assemblages, much that is of significance for the future of the American republics. This congress was a decided step in the direction of bringing about a better understanding among the nations represented. It was a step toward a fuller appreciation of the common interests of each and every American nation. It was an appreciable forward step in the development of the means and methods of promoting the common interests of the continent. It was a step toward making the experience and the accumulated wisdom of each people represented the experience and wisdom of all. In the Section of Pedagogy, the best that has been developed in the theory and practise of teaching was made the common property of all the American republics. In the Section of Sanitary and Medical Science, the latest achievements of each nation in the battle with disease were made familiar to every participant. In the Section of Agriculture and Zootechny, steps were taken in the direction of properly utilizing and conserving the resources of the continent in these important realms. In the Section of Engineering, the best methods of overcoming the various physical obstacles to progress and of winning the riches of the earth, were

explained for the benefit of all America. In the Section of Government and Law, the principles of statecraft and the administration of justice were discussed for the benefit of every American government. In the Section of the Fiscal Sciences, practical methods of conducting the monetary affairs of the nations were presented and explained. And in every other branch of science, practical and abstract, the various forces and agencies that contribute toward progress and enlightenment were in a measure the subject of serious attention. The congress was an initial step toward making the best of all the peoples of the western hemisphere. It was an initial step in making the best, for to-day and for all time, of the resources of the continent. It was an initial step which in many ways must make for the peace and prosperity of the continent. It was a noteworthy step in conformity with manifest destiny as expressed in the phrase "America for Americans."

The success of the congress of 1912 depends upon the interest displayed in it by the scientific world, and on the support accorded by the Pan-American governments. The time is ample, and the appointment of an organization committee representative of a wide range of scientific interests is the first step in making the Washington meeting an event worthy of the nation and its capital.

W. H. HOLMES

BUREAU OF AMERICAN ETHNOLOGY

MARTIN HANS BOYE

DR. M. H. BOYÈ died at Coopersburg, near Bethlehem, Pa., on March 5, aged ninety-seven years. He was born in Copenhagen, Denmark, in 1812, and in 1832 was graduated from the University of Copenhagen and in 1835 from its Polytechnic School, studying under Oersted, Zeise and Fodchhammer. In 1836 he removed to Philadelphia and entered the University of Pennsylvania, studying chemis-

try under the late Dr. Robert Hare. He was graduated from the university as doctor of medicine, but never practised regularly. In 1838 he was appointed assistant geologist of the first geologic survey of Pennsylvania. In 1845 he was elected professor of natural philosophy and chemistry in the Central High School of Philadelphia and retained this position for fourteen years.

In 1839 he was associated with Robert and James Rodgers, in analyzing limestone, coal, iron ore, etc. While engaged in these analyses he discovered a new compound of platinum chloride with nitric oxide. Because of this discovery he was elected to the American Philosophical Society, and in 1840 helped to organize the American Association of Geologists. He was the only surviving founder of this association and of its successor, the American Association for the Advancement of Science, of which he was a fellow for sixty years. In 1848 he also discovered the first of the violent explosives, perchloric ether, which he proved was ten times as powerful as gunpowder. He also found a safeguard against its unexpected explosion by dilution with alcohol. He was thus an important pioneer in the field of smokeless powder.

Dr. Boyè was the author of many papers on scientific subjects. In 1845 he invented a process of refining oil from cotton. Heretofore the product refined was almost black and very thick. His method produced a bland and colorless oil adapted for cooking or for salad dressing. At the age of eighty-one Dr. Boyè made an extended trip to Alaska, and at the age of eighty-five visited Honolulu and witnessed the transfer of the Hawaiian Island to the United States.

In his will Dr. Boyè devised the sum of \$12,000 to the University of Pennsylvania Hospital.

THE DARWIN CENTENARY

THE council of the senate of Cambridge University reports that the committee appointed by the council has informed the council that in July of last year letters signed by the chancellor were sent to more than 300 universities, colleges, academies and other cor-

porate bodies inviting them to appoint delegates to attend the Darwin celebration from June 22 to June 24, 1909. In answer to these invitations more than 200 delegates have been appointed. Since the beginning of the year individual letters of invitation have also been sent by the vice-chancellor to certain distinguished men of science, benefactors of the university and others.

A letter containing an invitation to a banquet on June 23 has been sent to about 150 resident members of the university, including heads of colleges, officers, professors and readers, members of council, university lecturers, demonstrators and other teachers connected with biological departments, fellows of Christ's College, contributors to the volume of essays, "Darwin and Modern Science," to be published by the University Press, and a few others selected on account of their official position or because of their connection with biological science. It is proposed to hold the banquet in the new Examination Hall, and it is estimated that between four and five hundred of those who have been invited will be present.

It is proposed that a letter of invitation to the reception by the chancellor in the Fitzwilliam Museum, on June 22, should be sent by the vice-chancellor to every member of the electoral roll.

A copy of the provisional program has been sent to all delegates. The committee has furnished the council with an approximate estimate of the expense likely to be incurred in carrying out the program. This amounts to considerably more than £500, but it is hoped that it may be possible to provide the excess above that sum by private subscriptions, and the council does not therefore ask the senate to authorize the expenditure of more than £500 from the university chest.

SCIENTIFIC NOTES AND NEWS

THE many friends of Major J. W. Powell, both in this country and abroad, will be glad to learn that congress appropriated \$5,000 for the erection of a memorial to him, on the brink of the Grand Canyon of the Colorado which he explored.