

jects Prehistoric?' followed by 'Primitive Metal Working,' by C. C. Willoughby. The entire question of aboriginal American copper-working is debated and many new evidences brought out by specialists who have devoted much time to the study of the problem of prehistoric metal-working and in experimental work with primitive appliances. In 'American Indian Games (1902)' Mr. Stewart Culin, the recognized authority on this subject, presents his most recent conclusions. Dr. George Grant MacCurdy reviews the 'Progress in Anthropology at Peabody Museum, Yale University,' during the last few years, describing the field work conducted and the more important collections made. Some 'Parsee Religious Ceremonial Objects in the National Museum' are described, with illustrations, by Dr. I. M. Casanowicz, introducing his paper with a brief account of the Parsees and their religious beliefs. Dr. Frank Russell, in an article on 'Pima Annals,' describes some interesting tally-sticks of the Pimas of Arizona on which are kept mnemonic or pictographic records of events, such as battles or skirmishes, infrequent natural phenomena, relations with white people, festivals, killings during drinking bouts, etc. The four 'annals' described cover the years 1833-4, 1836-7, 1857-8 and 1881-2. Mr. Clark Wissler, in a paper on 'The Growth of Boys,' gives in tabular form a series of correlations for the annual increments, based on some 1,500 annual measurements of about 300 individuals of a private school for boys. Dr. Maurice Fishberg treats of pigmentation among the Jews, continuing from the last number of the journal his discussion of the 'Physical Anthropology of the Jews.' Mr. S. C. Simms describes, with an outline figure, a curious 'Wheel-shaped Stone Monument in Wyoming,' the former use of which is problematical. Mr. George F. Kunz presents a biographic sketch, with an excellent portrait, of the late Heber R. Bishop, and describes the remarkable jade collection which Mr. Bishop presented to the Metropolitan Museum of Art. The proceedings of the meeting of Section H of the American Asso-

ciation for the Advancement of Science, with its affiliated societies, at the Washington meeting, is given by Dr. George Grant MacCurdy, and the number closes with an account of the organization of the American Anthropological Association, with its constitution and a list of the officers and members.

The *American Anthropologist* is now published under the auspices of the new association, of which it is the official organ, as well as that of the Anthropological Society of Washington and the American Ethnological Society of New York.

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#### SOCIETIES AND ACADEMIES.

##### THE ACADEMY OF SCIENCE OF ST. LOUIS.

At the meeting of April 20, 1903, Professor J. A. Holmes gave an illustrated account of some of the efforts that are being made in the United States to preserve the forests and other natural features of the country, showing what is being done for the preservation of some of the great scenic features and particularly what the national government is doing in the way of national parks and forest reserves and in the protection of the forests on such reservations.

One person was elected to active membership.

At the meeting of May 4, 1903, Mr. H. A. Wheeler gave an account, illustrated by several lantern slides and some of the recently ejected material, of the active Mexican volcano Colima, of which he saw some of the recent eruptions. It was shown that the material now being ejected is a trachyte, or belongs to the acid series of lavas, while the basal plain of the volcano is of basalt, which is basic, resting upon volcanic tufa. It was pointed out that this sequence reverses the Richtofen order of volcanic discharges, from which it was considered probable that there have been other centers of lava outflow besides the now visible vents of Mt. Colima (active) and Mt. Zapotlan (inactive). Samples of the ash from the eruption of February 28, in the form of granules 1 to 2 mm. in diameter, which fell at Tuxpan, some twenty-five miles from the crater, and which were secured by Pro-

fessor Trelease, contained 62.5 per cent. of silica, according to the analysis of Mr. W. M. Chauvenet.

An amendment to the by-laws was adopted, providing that the home recently presented to the academy shall not be mortgaged or voluntarily encumbered and shall not be sold except with the consent of two thirds of the members, obtained by letter ballot, and, if sold, the proceeds, or so much thereof as may be necessary, are to be used to provide another home for the academy.

At the meeting of May 18, 1903, Dr. C. Barck gave a detailed account of the Grand Cañon of the Colorado, with lantern illustrations. After an outline of the geology, past and present, of the plateau province and the cañon district, he gave a description of the latter and added a report of its first deliberate crossing. This was made by Mr. James and himself in 1901. They started from Bass's camp, about twenty-four miles west of the Bright Angel Hotel. Their point of destination, 'Point Sublime,' on the northern rim of the cañon, was reached, after some difficult traveling, on the fifth day; the return took three days.

One person was elected to active membership.

WILLIAM TRELEASE,  
*Recording Secretary.*

AMERICAN CHEMICAL SOCIETY. NORTHEASTERN  
SECTION.

THE forty-fifth regular meeting of the section was held on Friday, May 22, at 8 P.M., at the Technology Club, Boston, Vice-President Henry Howard in the chair. Thirty-five members were present.

Professor S. W. Stratton, of Washington, D. C., gave an address on 'The National Bureau of Standards,' in which he first gave a historical introduction describing the legal standards of length and weight used in this country from 1776 to 1901, when the National Bureau of Standards was established by act of Congress. The functions of this bureau are briefly the comparison of the standards used in scientific investigation, engineering, manufacturing, commerce and educational

institutions with the standards adopted or recognized by the government, the construction when necessary of standards, their multiples and subdivisions, the testing and calibration of standard measuring apparatus, the solution of problems which arise in connection with standards, the determination of physical constants and the properties of materials. The bureau is authorized to exercise its functions for the government of the United States, for state and municipal governments within the United States, for scientific societies, educational institutions, firms, corporations or individuals. Temporary quarters are now occupied by the bureau, and two permanent buildings in the outskirts of Washington are in process of erection, one of which, the mechanical laboratory, is now nearly completed, and will contain the mechanical and electrical plant, instrument shop and laboratories for experimental work or testing requiring considerable power or large currents. The second building is a physical laboratory and will be of extra heavy construction, and will contain laboratories for testing and investigation in connection with problems concerning length, mass and capacity. A large space is to be devoted to electrical measurements of all kinds, and the upper floors are to be used as chemical laboratories. The buildings are connected with a tunnel, part of which will be used as a laboratory for experiments requiring a long distance.

The lecturer described the present work of the bureau in verifying standards of length, mass and capacity, electrical resistance and capacity, electromotive force, photometry, temperature standards, calibration of chemical glassware, etc., and showed several lantern slides of plans of the buildings under construction.

ARTHUR M. COMEY,  
*Secretary.*

MEETING OF THE BERZELIUS SOCIETY.

THE eighty-fifth monthly meeting of the Berzelius Chemical Society was held in the Department of Agriculture Laboratory, Monday, May 4. The program was filled by Mr. J. W. White, student in dyeing at the A. &

M. College, and by Dr. B. W. Kilgore, state chemist.

Mr. White read a paper embodying a report of studies made of the sulphur class of dyes, which are to-day the most interesting class of colors with which the cotton dyer has to work. Samples were obtained from Mr. White from all the leading dye-stuff dealers. These samples were submitted to all the different tests corresponding to the tests through which the cotton must pass in actual use, and in all these tests the new class of sulphur colors showed themselves very much superior to the direct cotton colors now in use, and they promise to ultimately replace the dye-stuffs now on the market, and entirely change the method for dyeing cotton goods with direct dye-stuffs. The paper was illustrated with dyed samples which had been tested to all the different conditions.

Dr. Kilgore filled the program for a short time with a discussion of the recent work of the soil survey in this state. Though the work has not progressed far enough to draw very many conclusions, several very interesting things were noted. In analysis made of soil waters, for plant food, as was to be supposed, it was found that the more leachy sandy soils contained the largest amount of plant food in solution in the third and second foot in depth. It is interesting, however, to note that the same holds with the red clay soils in the Piedmont section of the state.

In the study of the composition of type soils of the state, which work is being carried on by the department, it has been found that lime is present in seemingly unusually small amounts. In the red-clay soils in the Piedmont section of the state, where there were considerable amounts of phosphoric acid, nitrates and potash, analysis revealed scarcely a trace of lime. This would indicate that the soils are in actual need of an application of lime, but of course for definite conclusion this would have to be tested experimentally.

J. S. CATES,  
*Secretary.*

RALEIGH, N. C.,  
May 5, 1903.

#### DISCUSSION AND CORRESPONDENCE.

##### MOUNT PELEE.

TO THE EDITOR OF SCIENCE: Should not the Martinique volcano be called either *Mont Pelé* or *La Montagne Pelée* or in plain English *Mount Pelee* (no accent)? My impression from a visit to St. Pierre and Morne Rouge in 1895 is that the common name was *La Montagne Pelée* and I understood that *pelée* was an adjective meaning *bare* like the Spanish *pelado*, also applied to bare or woodless hills. I remember that the mountain did not then seem to have any bare surface at all. Of course, if an adjective, the form to go with the masculine *mont* is *pelé* and with the feminine *montagne* is *pelée*, and the combination *Mont Pelée* is neither French nor English. I am reminded of this now by what seems a complete confirmation in Professor Heilprin's book at page 166, although he calls his work 'Mont Pelée and the Tragedy of Martinique.' Geo. Kennan's 'Tragedy of Pelée' is non-committal and his use of the name always accurate.

In Stark's 'Guide to Barbados and the Caribbee Islands,' Boston, 1893, the form *Mt. Pelee* (no accent) occurs at p. 42. This I suppose should be read *Mount Pelee* on usual English analogies. The writing of a French accent, however, seems to involve the correct French form of the word.

MARK S. W. JEFFERSON.

##### THE PROPOSED BIOLOGICAL LABORATORY AT THE TORTUGAS.

TO THE EDITOR OF SCIENCE: Professor Mayer, of the Brooklyn Museum, has asked me to give my opinion on the advisability of establishing a tropical-biological station in American waters.

I think that such a station would be an invaluable aid to biological research in all departments, and no one who is acquainted with the rich fauna of the Mediterranean and even of British seas can help regretting the way in which work is hampered by the comparative paucity of life on our northeastern coasts.

West Indian waters would, however, surpass in interest and variety of species the Mediterranean.