

current, literature should be cared for first as being the more important. The expense of this undertaking would be from \$16,000 to \$30,000. The committee believed that the index should include brief notes as to the character or scope of articles, since a single line of description would save the looking up of probably seven-eighths of the possible references.

IN *The Atlantic Monthly* for August Mr. Percival Lowell concludes his series of articles on Mars treating the 'oases.' He reviews the evidence on which he finds it probable that we see the effects of local intelligence on the surface of the planet as follows: "We find, in the first place, that the broad physical conditions of the planet are not antagonistic to some form of life; secondly, that there is an apparent dearth of water upon the planet's surface, and, therefore, if beings of sufficient intelligence inhabited it, they would have to resort to irrigation to support life; thirdly, that there turns out to be a network of markings covering the disc precisely counterparting what a system of irrigation would look like; and, lastly, that there is a set of spots placed where we should expect to find the lands thus artificially fertilized, and behaving as such constructed oases should."

DR. D. W. MCGEE, lecturer in Oriental literature in Toronto University, was drowned on July 22d.

DR. ERNEST HENRI BAILLON, the well-known naturalist, died recently in Paris at the age of seventy-two. He was professor of medical botany in the School of Medicine, and of hygiene in the Central School of Arts and Manufactures. He was the author of a number of books on botanical subjects.

PROFESSOR CHARLES C. BABINGTON, professor of botany in Cambridge University, died in Cambridge on July 22d, at the age 87 years.

DR. NORTON S. TOWNSHEND, professor of agriculture in the State University of Ohio, died recently at the age of seventy-nine. He was a student of medicine and graduated in New York in 1840. In 1863 he was appointed medical inspector in the United States army, in which capacity he served until the end of the war. In 1869 he accepted the professorship of agriculture in Iowa Agriculture College, of which he was one of the founders. He resigned a year later to assist in founding the Agricultural and Mechanical College of Ohio, in which institution, now known as the University of Ohio, he held the chair of agriculture from 1873 to the time of his retirement as professor emeritus.

PROFESSOR JULIUS ZUPITZA, the celebrated philologist, died recently in Berlin at the age of 51. He held the chair of English in Berlin University for nineteen years.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Board of Trustees of the City of New York have selected a site for the new College Building on Covent Hill. It consists of 127 city lots bound north by 138th street, south by 140th street, east by St. Nicholas avenue and west by Amsterdam avenue. The appropriation for the site is limited to \$600,000, but it is believed that the price of this land will come within the required limits.

THE accommodation of Radcliffe College has been enlarged by the purchase of a new house.

THE trustees of the estate of the late Miss Margaret Harris have given securities valued at £14,000 and yielding about £470 to establish a chair of physics in the Dundee University College.

IT is proposed to establish an economic museum in the University of Pennsylvania. The museum will contain samples of the products and materials of all the arts, in-

dustries and trades of productive, technical and constructive industry.

It is stated that Dr. Francis Walker has accepted a call to the department of political and social science in Colorado College.

THE University of Pennsylvania extends the right of naming one of the houses in the new dormitory to all contributors of \$10,000 or more to the building fund. The following are the names of the contributors up to the present date: Charles C. Harrison, Alfred C. Harrison, Thomas F. Dolan, Robert E. Foerderer, William M. Singerly, Hugh Craig, Jr., Alice D. Craig, Hatfield, Burnham, Williams & Co., the Misses Blanchard, Thomas McKean, E. H. Fitler, J. E. Bayard, Richard F. Loper and William W. Frazier.

CORRESPONDENCE.

ABORIGINAL SANDALS.

DEAR SCIENCE: In attempting to comprehend the practical part of drawings, etchings, carvings and sculptures in the mountain region of America from Mexico southward, I have often tried to get some information of the footwear. Any one who will look through the drawings of 'Kingsborough' will notice that the sandals on the feet of the different figures have soles and heelstraps looking almost like the quarters of a modern shoe or the heel of a Peruvian soldier's sandal, and that in some way a lacing passes around in front of the ankle on top of the foot. There is no intimation of a string or strap passing up between the toes as in the modern rawhide sandal, which may be seen by the thousands on the feet of peons in Latin America all the way from Arizona and New Mexico to the limits of Peru.

Wiener, in his work entitled '*Perou et Bolivie*,' figures a great many styles of these modern sandals which are, in form, allied to the thousand-and-one varieties in use anywhere about the Mediterranean, and

awakens a suspicion that the sandal with a single string passing between the great toe and the second toe is of Eurafrikan origin.

In plate (3) of '*Stone Sculptures of Copan and Quirigua*, with drawings by H. Meye and text by Julius Schmidt, published in New York in 1883 by Dodd & Mead,' there will be seen on the foot of the Monolith a sandal in which a string passes between the first and the second toe and the third and the fourth toe, forming a loop which is attached by means of a knot to an ornamental bandage encircling the ankle, and it is to this sculpture that I wish to draw special attention.

Those of my readers who were so fortunate as to visit the Cliff-dweller collections at the Columbian Exposition may recall the styles of sandals there exhibited; if not, they will please turn to '*Nordenskjold's*' illustrated work on the Cliff-dwellers' collections, made by him, and examine plate (46). There two styles of sandals are figured, not very distinctly, but the characteristics can be made out.

I am indebted, however, to Mr. Stewart Culin, of Philadelphia, for the privilege of examining carefully four examples of Cliff-dwellers' sandals in possession of the Museum of the University of Pennsylvania. In three of these there is either a loop or a provision for a loop, which passes between the first and the second toe and the third and the fourth, enclosing the second and third toe. In the fourth sandal a series of loops around the margin of the sole serve to receive the lacing which passes backward and forward, across the foot diagonally through one and then another, using up the whole series. These four sandals will now be more carefully described. In one of them the binding string or lacing commences at the instep and passes in a bend around the toeloop, and by another bend around the right side of the heel-