

when under a pressure of something less than two atmospheres, is violently explosive; whereas, at a pressure of less than one and a half atmospheres, it appears to be reasonably free from liability to explosion, provided it is not admixed with oxygen or atmospheric air. For commercial and practical purposes it is considered sufficient to allow a pressure of twenty inches of water above that of the atmosphere (*i.e.*, roughly about one and one-twentieth atmospheres), and it is accordingly proposed to draw the safety line at this point, and to declare acetylene, when subject to a higher pressure, to be an 'explosive' within the meaning of the Explosive Act of 1875. In France and Germany the authorities have fixed the limit of danger at one and a-half and one and one-tenth atmospheres respectively, and have imposed prohibitions or restrictions on the keeping or the manufacture of the gas when it is at a higher pressure.

Two notable articles in the *Revue de Mécanique* for October are those of Dwelshauvers-Dery on the effect of compression of steam in the 'dead spaces' of steam engines, and Sinigaglia on the employment of superheating as a source of gain in thermodynamic and actual efficiency. The former finds by trial with the 'experimental steam engines' of the University of Liège that increasing compression results in increasing waste and decreasing efficiency, the loss of power in the engine more than counterbalancing the 'initial' condensation in the steam cylinders. The latter describes in the third of a series of papers the various types of superheating apparatus employed, and gives results of their use, the gain being sometimes 20 % and more.

At the Sydney meeting of the Australasian Association for the Advancement of Science, to be held in the second week in January, Sir James Hector, F.R.S., will give a popular lecture on 'Antarctica and the Islands of the far South,' and Professor R. Threlfall and Mr. J. Pocock will give a lecture to workmen on 'Electric Signaling without Wires.' The Sydney *Morning Herald* states that the Australasian Association originated in a letter from Professor Liversidge published in that journal in 1884.

The first meeting of the Association was held in Sydney from August 27th to September 5th of the Centennial year, 1888, under the presidency of Mr. H. C. Russell, F.R.S., when 850 members were enrolled. Meetings have also been held at Melbourne, with 1,162 members, in 1890, when the late Baron von Mueller, F.R.S., was President; at Christchurch, New Zealand, with 550 members, in 1891, President Sir James Hector, F.R.S.; at Hobart, with 600 members, in 1892, President Sir Robert G. C. Hamilton; at Adelaide, with 488 members, in 1893, President Professor Ralph Tate, F.G.S.; and at Brisbane, with 524 members, in 1895, when the Hon. A. C. Gregory was President. The governments of Victoria, Tasmania, New Zealand, South Australia and Queensland have each in turn given assistance to the extent of about £1,200, either wholly or in part, as a money grant towards the expenses of the session and publication of the annual volume.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. DEAN SAGE and Mr. William D. Sage have given to Cornell University the house of the late Henry W. Sage for a University Infirmary. They also endow the institution with \$100,000 and will equip the building for a hospital, the total value of the gift being \$200,000.

THE will of the late Sir Thomas Elder, of Adelaide, South Australia, leaves large sums to charitable and public institutions of Adelaide, including the following: To the Zoological Society, £2,000; to the Geographical Society, £2,000; to Way College, £2,000; to Prince Alfred College, £4,000; to the Picture Gallery, £25,000; for a chair of music at the University, £20,000; to the Medical School of the University, £20,000, and to the University £25,000.

MR. ANDREW CARNEGIE has given \$10,000 to the endowment of the Mechanics' Institute in Richmond, Va.

THE late Sir William Mackinnon has left a legacy of £2,000 to the University of Glasgow for a scholarship, in the following subjects: (1) Geology; (2) Natural History, together with Comparative Anatomy; (3) Modern Foreign Languages; the examination in each subject to be taken in each succeeding year in rotation.

KING'S COLLEGE, London, has received an anonymous gift of £25,000 towards the liquidation of its debt.

MR. JOHN P. ASHLEY, PH.D., has been elected President of Albion College, at Albion, Mich., succeeding Dr. Lewis R. Fiske, who has resigned, owing to advanced age, after twenty years of service.

DR. E. G. LANCASTER has been appointed professor of psychology and pedagogy at Colorado College.

A CHAIR of 'tropical diseases,' with Dr. J. E. Stubbert as the first incumbent, has been established in the New York University Medical College.

A COMMITTEE has been formed in London to present a plan for a London University, to be called University of Westminster, in case the bill before Parliament meets with continued opposition. The present degree-conferring University of London would according to the plan remain unchanged, while the different institutions of London would form themselves into a faculty of law, a faculty of medicine, etc., each institution to be financially independent and only to agree on the nature and duration of the studies required for degrees and distinctions.

DISCUSSION AND CORRESPONDENCE.

IN REGARD TO THE MARINE BIOLOGICAL LABORATORY AT WOODS HOLL, MASS.

TO THE EDITOR OF SCIENCE.—A full and adequate rejoinder to the statement which appeared in SCIENCE October 8, 1897, has been prepared and is now ready. In our opinion, however, controversial matters relating to the management of a scientific institution, especially when consisting of details, statistics or mooted points, are out of place in public prints. The subject is not of general interest, and discussion of this kind tends to injure any institution in the public estimation.

The undersigned, therefore, prefer to reply only to those concerned in the matter. To this end we shall issue to all members of the corporation and others concerned a detailed reply to the charges brought by the former Trustees. Others who may feel interested can obtain

copies by applying to the Secretary of the Trustees of the Marine Biological Laboratory, Woods Holl, Mass., or to either of the undersigned.

SAMUEL F. CLARKE,
EDW. G. GARDINER,
J. PLAYFAIR McMURRICH.

SCIENTIFIC LITERATURE.

Anthropologische Studien ueber die Ureinwohner Brasiliens. Von DR. PAUL EHRENREICH. Braunschweig, Vieweg und Sohn. 1897. 4to. Pp. 168. 30 Plates.

This work ranks among the most valuable which have appeared for years in American Anthropology. It is, to be sure, somewhat limited in its area of observation, being principally confined to the states of Matto Grosso, Goyaz and Amazonas in Brazil; but this is more than compensated by the abundance and accuracy of the material, and the skill with which the author has brought it into bearing on the leading general questions relating to the American race.

These are treated in the general portion of the volume, occupying forty-five pages. It embraces two chapters, one on the aims and methods of physical anthropology and its bearings on ethnology; the other specifically on the anthropologic position of the American race. Much of the former is concerned with defining such terms as race, type, people, stem, family, etc.; with the conclusion that race means blood relationship, and that the racial characteristics and variations are the only real objects of study in physical anthropology. The author is here on thin ice, and his definitions, carefully trimmed as they are, can often be punctured. Blood relationship, *Blutverwandschaft*, really means nothing, for, in one sense, the whole human species is related by blood; and as much might be said of other terms assumed to have a generally recognized sense. This merely shows how needful it is to settle on an international terminology in anthropology.

The chapter on the American race is more satisfactory. He regards it as strictly one, in the Blumenbachian sense. As for the question, Whence it came? He regards it superfluous to inquire, as it has certainly been on the continent from remotest human antiquity, probably