

digging of mounds in the Eastern and Central States; thus the archæology of that portion of America can be very well studied in the museum. During the years 1887 to 1893 the late Mrs. Mary Hemenway provided funds for archæological and ethnological expeditions to the Pueblo Indians of Arizona and New Mexico.

The history of the progress of anthropology in Chicago is eminently characteristic of that typical American city.

There is no need to give a detailed history of the anthropological department of this museum, as Dr. Dorsey has already done so in the *American Anthropologist*, n.s., ii. 1890, p. 247; but I will briefly indicate the main collections and their origin.

The anthropological collections which formed the foundation of the department were obtained through special expeditions sent out under the direction of Prof. F. W. Putnam, or by collectors resident in the field, who were commissioned by the department of ethnology to undertake the work. A mass of interesting and valuable material from Alaska to Peru was thus accumulated. A few collections from other quarters of the globe were also obtained. The history of the museum since then has been one of almost unparalleled activity. Expedition after expedition has been sent out to collect ethnological and archæological material in North and Central America; some of these have been paid for out of the museum funds, while others have been rendered possible by special donations from benefactors, most of whom are Chicago merchants.

The more technical aspect of the museum has been so well described by Dr. A. B. Meyer that I need not dwell upon it.

The most recent inauguration of anthropological activity is that displayed by the University of California. A department of anthropology was established by the Regents of the University in September, 1901.

As an encouragement to others and as an expression of her great interest in the new department, Mrs. Phoebe A. Hearst, who is one of the Regents and a most generous benefactor to the University, has promised 10,000*l.* (50,000 dollars) a year for five years for anthropological research. In this manner is struck the key-note of the new department. Research first and foremost. We may look forward in the immediate future to the establishment of a really important museum on the Pacific coast which, being under the jurisdiction of the University of California, will be the centre of considerable anthropological research and instruction.

Now that the financial position of the Stanford University at Palo Alto is permanently secured, it is to be hoped that the claims of anthropology will not be overlooked.

This is not the place to describe the points of interest in the various museum buildings, the installation of the collections and the details relating to museum administration and technique. It is the less necessary as Dr. A. B. Meyer, of Dresden, who is a recognised authority on all matters pertaining to museums, travelled in the United States in 1899, and he is publishing a series of well-illustrated reports on the institutions he visited. These reports are invaluable to all those who are interested in the promotion or maintenance of museums and libraries, and it is to be hoped that no architect in the future will attempt to draw up plans for a new museum or library until he has consulted this work.¹

II. *The Teaching of Anthropology in the United States of America.*

In America courses of anthropology were established about fifteen years ago at Harvard University and at the University of Pennsylvania. It was one of the first subjects introduced into the curriculum of the University of Chicago. Seven or eight years ago anthropology was recognised in Columbia University in the city of New York. At the present time some thirty-three universities and colleges offer instruction in anthropology. Limit of space precludes my giving details concerning the instruction in anthropology in these numerous institutions, so I confine myself to a consideration of two of the universities where the teaching is most firmly established. Further information on this subject will be found in Prof. G. G. MacCurdy's report on "The Teaching of Anthropology in the United States" in *Science*, n.s., vol. xv. 1902, p. 211.

It would be impossible to include within the limits of a brief

¹ The two parts already issued are entitled "Ueber Museen des Ostens der Vereinigten Staate von Nord Amerika." *Reisenstudien von A. B. Meyer.* (Berlin: R. Friedländer und Sohn.)

address an account of all the work that is being done in anthropology by the Government, by public and private institutions, or by individual effort in the United States of America. Much as I should have liked to have emphasised the interest exhibited in the subject and the wonderful activity that is being displayed, the bare enumeration of all this activity would make a very weary chronicle.

I must confess that I felt a not inconsiderable amount of envy when on every hand I witnessed this energy and then recalled the apathy which pervades our own country.

The American public is more intelligently alive to the interest and importance of anthropology than is our public. The exponents of the science are energetic, enthusiastic and competent, and they succeed in gaining the practical sympathy of wealthy merchants, who are not averse to spending money freely when they see that the money will be wisely spent for the good of the State or of the city. One cannot say that the wealthy Americans are more intelligent than are our rich men, but they do seem to appreciate the value of learning to a much greater extent than do ours. At all events, they respond more readily to the very pressing need there is for the endowment of research and of those institutions which bring the knowledge of the expert down to the comprehension of the masses.

I am quite willing to admit that the fault in this country may lie as much with the specialist as with the capitalist. In any case we have an inspiring demonstration in the United States of America of what can and should be done in Great and Greater Britain, and I venture to thank our American colleagues in the name of anthropological science for this good example of strenuous effort and praiseworthy accomplishment.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

THE new municipal school of technology in Manchester will be opened by Mr. Balfour on October 15.

DR. W. PALMER WYNNE, F.R.S., professor of chemistry in the School of Pharmacy of the Pharmaceutical Society, will deliver an address at the inauguration of the sixty-first session of the School on October 1.

MR. PARKIN, who has just gone to America to formulate a plan for putting into execution the provisions of Mr. Cecil Rhodes's will, has, a correspondent of the *Times* reports, been trying to interest Mr. Pierpont Morgan in a plan whereby the Rhodes scholarship scheme should be made reciprocal, the same number of young Englishmen being educated at American universities as Americans at Oxford. When he landed at New York on August 20, Mr. Parkin said:—"I think it would be a most splendid thing for some liberal American, or several Americans, to endow in some of your great colleges scholarships for the benefit of English youths similar to those founded by the bequest of Mr. Rhodes for the young men of America at Oxford." The same idea was put forward in several American papers when the terms of Mr. Rhodes's will were announced.

THE Childhood Society was founded some five years ago by the late Sir Douglas Galton, and, as its fifth annual report shows, it continues to grow in importance and usefulness. The objects of the Society are to promote the study of educational methods and of the environment of children during school life, with a view to discover the conditions best suited to ensure the healthy mental and physical development of normal children, and those best adapted to the peculiar needs of the mentally feeble and otherwise abnormal children. For the first time, the council of the Society has printed and issued the lectures and papers delivered at its meetings in book form, under the title of "Volume I. of the Transactions of the Childhood Society." A glance through the list of the Society's officers for the current year reveals a desirable cooperation between medical men and professional educationists which cannot fail to result in an improvement in the structure and equipment of schools as well as in the less material conditions of the class room.

A RECENT return printed by the order of the House of Commons, tabulating the sums applied by local authorities to the purposes of technical education, shows that the total amount expended on technical education in England and Wales during 1900-1 was 1,051,422*l.*; but this does not include sums allocated to intermediate and technical education under the Welsh Intermediate Education Act. The total amount of

money available under the Local Taxation (Customs and Excise) Act for technical education in England (excluding Monmouthshire), or, as the grant is usually called, the "whisky" money, was during the same period 924,360*l.*, but only a part was appropriated to educational purposes, 60,513*l.* going to the relief of rates, the London County Council recognising this unenlightened policy to the extent of 32,711*l.* It is gratifying to find, however, that nine only of the forty-nine county councils included in the return devote part of their funds available for education to the relief of rates, and only six of the sixty-two county borough councils allow any such diversion of funds. More than this, two county councils, twenty-four county borough councils, ninety-nine boroughs and 195 urban districts are making grants out of the rates under the Technical Instruction Acts. In Wales and Monmouth, the whole of the "whisky" money is devoted to education, and in addition to this sum about 24,000*l.* raised by rates was expended for the same purpose during the period under review.

ON August 23, Prof. Geddes presided over the Nature-Study Conference organised in connection with the University Extension Meeting at Cambridge, and Mr. Willfred Mark Webb gave an address on his "Impressions of 'Nature-Study.'" Mr. Webb showed the importance of the three branches of nature-study which he recognises with reference to four of its non-utilitarian aims. "Scientific teaching will often provide," he said, "a definite hobby or interest in life." Going to the other extreme, simple "nature-love"—studied out of doors—may be expected to add to "the mere joy of existence," to produce "an appreciation of the country and its pursuits," and in correlation with "unsystematised nature-knowledge"—acquired in school as part of general education—to cultivate "habits of investigation by directing natural curiosity into rational channels." The necessity of emphasising outdoor work, the ease with which it may be undertaken off-hand by any teacher and the possibility of regarding it as nature-study in a restricted sense were touched upon. Mr. Macan's excellent suggestion that special nature-study training colleges should be inaugurated by groups of county councils was strongly commended. In the interesting discussion which followed, Miss Ravenhill showed how nature-study leads to the necessary consideration of man in his environment. Prof. Haddon hinted that the best naturalists, and therefore teachers of nature-study, were not necessarily those who had passed examinations. Mr. Oldham disagreed with those who would confine nature-study to animate objects and thus exclude the consideration of the earth itself. Miss Von Wyss described the voluntary biological work undertaken by all the students in the Cambridge Training College.

SCIENTIFIC SERIAL.

Journal of Botany, August.—Continuing their descriptions of "Crassulas from South Africa," Mr. S. Schönland and Mr. E. G. Baker introduce twelve new species of the genus.—A bryological article, with illustrative plate, by Mr. E. S. Salmon is mainly concerned with a consideration of the genus *Thiamea*, C. Müll, which he is inclined to sink in the genus *Wilsoniella* of the same authority, and the description of a variety of *Syrrophodon Gardneri*, Schwaegr.—Other articles are:—Buchanan's *Avan* Plants, J. Britten; *Hieracium murorum* and *H. caesium*, F. N. Williams; West Lancashire Notes, C. E. Salmon and H. S. Thompson.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, August 18.—M. Bouquet de la Grye in the chair.—The resistance to traction of mortar, by M. Considere. The experiments were carried out on prisms strengthened at the angles with iron wires. The results of the traction experiments were automatically recorded by the testing machine, and reduced facsimiles of these curves accompany the paper.—On the year's work at the observatory at the summit of Mont Blanc, by M. J. Janssen. The researches which are proposed for the present year include a study of the modifications which the hæmoglobin of the blood undergoes with muscular effort at varying altitudes, the relations between the altitude

and rarity of the atmosphere, and the richness of the spectrum in violet and ultra-violet rays, studies on atmospheric electricity, and the effect upon the composition of the blood and the respiratory exchanges of altitude alone or combined with muscular effort.—On the assemblage of two bodies, by M. G. Krœnigs.—On some organic addition compounds, by M. P. Lemoult. A description of the preparation and properties of some addition compounds of chlorodinitrobenzene with some diamines.—Experimental researches on the conservation of muscular potential in an atmosphere of carbon dioxide, by M. Lhotak de Lhota. Carbonic anhydride accelerates the fatigue of a muscle by stopping the disengagement of energy. On account of this the muscle cannot be used up; the energy may be given off after the removal of the carbon dioxide, and hence this gas constitutes a favourable factor in preserving muscular energy.—The comparative study of the organic fluids of the sacculina and the crab, by MM. Louis Bruntz and Jean Gautrelet.—On some fossil pollens, male prothallia, pollenic tubes, &c., in the Coal-measures, by M. B. Renault. Many pollen grains of the coal epoch contain a perfectly well-marked male prothallus, the compartments of which contain the mother cells of the antherozoids. This prothallus may emit a pollen tube, as in *Stephanospermum*, or allow the antherozoids to escape directly from the pollen chamber, as in *Aetheotesta*.—The influence of cream separation on the principal constituents of milk, by MM. F. Bordas and Sig. de Kaczkowski. The removal of the fat to the extent of 98 per cent. takes away at the same time 69 per cent. of the lecithin. In the authors' opinion, this is sufficient to explain the high death-rates through gastro-intestinal troubles in those towns where the sale of skimmed milk is allowed. It also accounts for some diseases in infants fed exclusively on sterilised milk.—On the physical geography of the Western Yaila, Crimea, by M. E. Daniloff.

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