

tion of photographs. The upper half of Plate 20 reduces Holmes' drawing of the shore lines of Lake Bonneville, from Gilbert's monograph; the lower half represents the floor of an extinct lake in the Swiss valley of Engelberg, from a photograph; and the first is distinctly more educative than the second. The Delaware and Grand Rivers, Plate 16, are not successful reproductions; good drawings would be more instructive, even if less accurate than the original photograph; but good drawings cost too much nowadays. Brevity of treatment in a number of passages calls for the aid of a good teacher before the student will understand the problems discussed.

W. M. DAVIS.

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CURRENT NOTES ON ANTHROPOLOGY.

AMERICAN GAMES AS EVIDENCE OF ASIATIC INTERCOURSE.

IN the Internationales Archiv für Ethnographie (Bd. IX., Supp.), Dr. E. B. Tylor returns with fresh zeal to his ancient contention that the presence of two games so much alike as *parcheesi* in India and *patolli* in Mexico shows intercourse between the continents before the time of Columbus.

This betrays a regrettable misconception of the principles of ethnology as now adopted by its foremost students. Games are alike because men are alike the world over. The same similarity extends to myths, social constructions, laws and arts. That Lewis F. Morgan, forty years ago, should insist that the Iroquois of New York learned their totemic system from East Indians was pardonable in that day. Now it scarcely would be.

Dr Tylor should also study his ethnography closer. The Tarahumaras are not a distant people of an alien language' to the Aztecs, but closely related and speaking a tongue of the same Uto-Aztecan stock. That is why they call the game *patole*.

RACIAL STUDIES IN SWITZERLAND.

IN the first number of the new Swiss 'Archiv für Volkskunde,' Dr. Rudolph Martin, of Zurich, urges a complete and careful study of the living adult population of Switzerland, "in order to determine what types represent pure varieties, and what others indicate hybrid forms."

He proposes that the observer should use only a few simple implements, an anthropometer and a calliper, costing together about 85 francs. These, he suggests, could be provided by a society and loaned to observers who would find it inconvenient to purchase them.

His paper is supplemented with blank forms, showing what observations are desirable. These give the individual's name, age, birthplace, etc.; then his measurements, 28 in all; and his descriptive criteria, color of hair, eyes and complexion, shape of head, face, nose, etc. These items he believes would be ample for the purpose.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

DR. EMIL HEINR. DUBOIS-REYMOND, professor of physiology in the University of Berlin, died on December 26th, at the age of seventy-eight years.

THE Emperor of Germany has conferred upon Dr. Roux the Royal Order of the Prussian Crown of the second class, which is said to be the highest decoration in his gift. It will be remembered that this order was conferred upon Pasteur some two years ago and declined by him. The German Emperor has in this case shown tact in conferring the order on one who in many ways is Pasteur's successor, and who it is understood will accept it. Dr. Behring, the discoverer, with Dr. Roux, of the antidiphtheretic serum, has had the Grand Order of the Crown of Italy conferred on him.

THE Czar of Russia has conferred on M. Gérard, director of the Municipal Laboratory,

Paris, the Cross of the Commander of the Order of St. Anne; the Cross of St. Stanislas on Dr. Bordas, sub-director of the laboratory, and on Dr. Bertillon, director of the anthropometric service.

PROF. E. ABBE, of Jena; Prof. R. Fittig, of Strasburg, and Prof. J. Wislicenus, of Leipzig, have been elected corresponding members of the Berlin Academy of Sciences.

MR. RICHARD RATHBUN has been appointed assistant in charge of the Smithsonian Institution to succeed the late Mr. W. C. Winlock.

M. PERROTIN has resigned from the directorship of the Observatory in Nice to accept a position in the Astro-physical Observatory at Meuden.

NINE works are placed in competition for the Lobachévski Prize at Kazan, Russia, of which three are from America. It is probable that the prize will be awarded to the Third Volume of the 'Theorie der Transformationsgruppen,' by Sophus Lie.

It is stated in *Natural Science* that the Geological Society of Stockholm has completed twenty-five years of active life, and the fact is commemorated in a special number of its *Förhandlingar*.

MR. F. W. STOKES, an artist who accompanied the Peary expedition of 1892 and the North Greenland expedition of 1893-4, is now exhibiting at the Fifth Avenue Art Galleries, New York, paintings of Arctic scenery.

LADY PRESTWICH has given to the British Museum the collection of fossils of the late Sir Joseph Prestwich.

THE Arctic Club held its annual dinner in New York on December 26th, Prof. W. H. Brewer presiding. Dr. Frederick A. Cook stated that he was beginning the work of organizing an expedition to the Antarctic regions.

WE are asked to state that the time for the sending in of essays for the Welby prize is extended to January, 1898. Prof. Émil Boviach has been added to the committee of award.

THE Biological Society of Washington has elected officers for the ensuing year as follows: President, L. O. Howard; Vice-Presidents, Richard Rathbun, C. D. Walcott, B. E. Fernow,

F. V. Coville; Recording Secretary, Charles L. Pollard; Corresponding Secretary, F. A. Lucas; Treasurer F. H. Knowlton.

PROF. CHARLES R. CROSS, of the Massachusetts Institute of Technology, began on December 29th a course of eight lectures at the Lowell Institute, on the X-rays of Röntgen and related Phenomena of Electric Discharge.

THE Texas Academy of Sciences have sent out a preliminary program for the formal meeting in San Antonio on December 31st. Papers were promised by Mr. Thomas Fitz-Hugh, Dr. C. F. Francis and Mr. W. W. Norman, and addresses by Maj. C. E. Dutton and Dr. G. B. Halsted, the President of the Academy.

AN international exhibition for hygiene, alimentation and industrial art will be held at Lille during the months of March and April, 1897.

FOLLOWING the explosion of acetylene in M. Pictet's laboratory at Paris, another serious explosion has occurred in Berlin, killing Mr. G. Isaac and three assistants, who were experimenting with acetylene.

THE anthropometric system for the identification of habitual criminals has been extended to Ireland, so that it is now in operation throughout the United Kingdom.

DR. S. C. CHANDLER states in the last number of the *Astronomical Journal* that, feeling the desirability of counsel and collaboration in the conduct of the *Journal*, he has invited Prof. Asaph Hall and Prof. Lewis Boss to share in its editorship, and they have accepted.

Harper's Magazine for January contains an illustrated series of articles on the progress of science during the century, by Dr. Henry Smith Williams.

WITH its issue of last week the New York *Medical Record* completed its fiftieth volume. Since its foundation it has been edited by Dr. George F. Schrady and published by William Wood & Co. The *Journal* has grown with the advance of medical science, to which it has in no small share itself contributed.

THE New York Board of Education has appointed 150 physicians to act as medical inspectors, one for each school district in the city.

This action will undoubtedly lead to a diminution of contagious diseases among children.

ACCORDING to the *British Medical Journal* the Italian General Medical Council has presented a request to the government to the effect that all foreign doctors should be prohibited from practicing in Italy.

AN exhibition will be held early next year at the Imperial Institute, London, illustrating progress in sea-fishing, yachting and life-saving appliances.

THE Secretary of the Interior has recommended, through the Treasury Department, an increase in the salaries of the Commissioner of Education and of some other officers of the Bureau. The present Commissioner, Dr. W. T. Harris, to whom education and philosophy in America is so greatly indebted, receives an annual salary of \$3,000 only, which is no more than that of some of the principals in the New York City public schools. There seems no reason why the Commissioner of Education should not receive as high a salary as the Commissioners of Indian Affairs or of Railroads, for as Mr. Francis, the Secretary of the Interior, writes: "The dignity of the Bureau of Education is certainly equal to that of other Bureaus of the Department, and the character of the work done therein is certainly of no less importance."

A CASE of alleged telegony was exhibited by Mr. Chalmers Mitchell at a recent meeting of the London Zoological Society. Sir Everett Millais, who has had much experience in the breeding of dogs, believed it to be a case of reversion, and so explained all cases of reputed telegony. Mr. Tegetmeier, who has also had much experience in breeding, concurred in this conclusion. At the same meeting Mr. Leonard Hill reported that he was unable to confirm Brown Séquard's results on the Inheritance of Acquired Characteristics following division of the cervical sympathetic nerve.

A RECENT issue of the *Washington Star* contains an account, by Mr. Frank G. Carpenter, of a trial of Prof. Langley's Aerodrome witnessed by him on November 28th, together with an interesting interview with Prof. Langley on his researches. On the day in question the aero-

drome was launched from a boat in the Potomac River about 30 miles below Washington, and flew nearly a mile in 1½ minutes, when it gently rested on the water. Its flight was only limited by the exhaustion of the water, less being used than the machine could carry. Prof. Langley is reported to have said: "I have proved both theoretically and practically that machines can be made which will travel through the air. The question of the development of the fact is one of the future. My motive and interest in the work up to this time have been purely scientific ones, but if I had the time and money to spend upon the construction of a large machine I believe I could make one on a scale such as would demonstrate to the world that a large passenger-carrying flying machine can be a commercial as well as a scientific success. There are many things yet to be learned concerning it, but I have no doubt that they will be discovered in the future. The moment that men see that such machines are not only practicable, but that they may be made commercially profitable, there will be a thousand inventors working upon the problem where there is now one. I believe, however, that the flying machine will first come into national use in the arts of war rather than those of peace. In an event of a great war by means of an aerial machine the armies of one nation will be able to know exactly what those of the enemy are doing, thus radically changing present military strategy and tactics, to say nothing of their power of dropping down bombs out of the sky. I believe, however, that such inventions will finally be of even greater advantage in the arts of peace. I have faith that the swiftest, and perhaps the most luxurious, if not the safest, traveling in the future may be through the air."

WE recently noted the transfer of the publication of the *Botanical Gazette* to the University of Chicago, where it is printed in an enlarged form and with the highest degree of typographical excellence. In the current number of the *American Naturalist* Dr. Bessey gives some interesting details in regard to the evolution of the journal. It first appeared twenty-one years ago, in November, 1875, under the name of the *Botanical Bulletin*, edited by John M. Coulter, then professor of Natural

science in Hanover College, Ind. It consisted of four pages and the first volume contained only 52 pages of short and mostly local notes. The name of the journal was changed to the *Botanical Gazette* at the end of the second volume, and M. S. Coulter became one of the editors. In 1883 the editorship was undertaken by the present editors, John M. Coulter, Charles R. Barnes and J. C. Arthur, under whose control the journal has steadily improved up to the present time, when the name of G. F. Atkinson, V. M. Spalding, Roland Thaxter and William Trelease have been added as associate editors. As Dr. Bessey says, the *Gazette* "has thus been a growth, and it represents to-day much more than so many pages of printed matter. It has grown and developed as the science of botany has grown and developed in this country. When we look over the earlier volumes with surprise at the little notes which fill the pages we must not forget that American botany had not then generally risen above such contributions. It is true that we had a few masters in the science, with Dr. Gray still in his prime, but these masters wrote little for general reading, and their technically systematic contributions were mostly published in the proceedings of learned societies. The one thing which stands out to-day in sharp contrast with the botany of two decades ago is the very great increase in the number of masters in the science who are making liberal contributions from many different departments. The many-paged *Gazette* of to-day, with its rich variety of matter, differs no more from the four-page *Bulletin* of 1876 than does the botany of the two periods."

UNIVERSITY AND EDUCATIONAL NEWS.

It is reported by cablegram that Alfred Nobel, the Swedish engineer and chemist, who died at San Remo, Italy, on December 9th, left a will bequeathing his entire fortune, amounting to about \$10,000,000, to the Stockholm University.

The will of the late Henry L. Pierce, distributes about three and a-quarter million dollars in public bequests, which include \$50,000 to Harvard University and \$50,000 to Massachusetts Institute of Technology.

DR. JOHN J. McNULTY has been appointed

professor of moral and intellectual philosophy in the College of the City of New York.

THE new catalogue of Harvard University shows a registration of 3,674 students, an increase of 74 over last year. There has been a slight decrease in the College, but a gain in the Lawrence Scientific School, in the Graduate School and in the Medical School. There has been an increase of 4 professors and 17 instructors.

At Cambridge University the report of the General Board of Studies, recommending that steps be taken for the immediate appointment of a professor of mental philosophy and logic, was opposed upon financial grounds and because the establishment of the professorship was not urgent. The report was, however, adopted, by 120 votes to 70. The offer of Prof. Sidgwick to reduce his stipend as professor of moral philosophy from £700 to £500 per annum from the time of the appointment of the professor of mental philosophy and logic until midsummer, 1902, or until his chair be vacated, if that should occur before midsummer, 1902, was accepted.

DISCUSSION AND CORRESPONDENCE.

VAN BENEDEEN AND THE ORIGIN OF THE CENTROSOME.—A CORRECTION.

I WISH to correct an error in my recent book on 'The Cell,' which misrepresents Van Beneden's early views regarding the origin of the centrosomes in the fertilized egg. At page 157 the view, or rather surmise, is attributed to him that, in the fertilization of *Ascaris*, one centrosome of the first cleavage-amphiaster is derived from the egg, the other from the spermatozoon. I am indebted to my friend, Prof. Conklin, for pointing out that through a misapprehension of Van Beneden's meaning I am in error on this point. Van Beneden did not, in fact, commit himself to any positive conclusion, but at page 272 of his paper of 1887 expressed the opinion that both attraction-spheres, and hence by implication both centrosomes, were derived from the egg, *i. e.*, from the second pseudo-karyokinetic (maturation) figure. Later researches, it is true, have almost conclusively shown that this opinion cannot be sustained;