

avian, in no wise mammalian, though poorly developed. Prof. Huxley considers them to show a fundamental resemblance to those of crocodiles. The introduction of so many new terms is to be regretted. — (*Proc. zool. soc. Lond.*, 1882, 560.) J. A. J.

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ANTHROPOLOGY.

Indian courtship.—Mrs. H. S. Baird recites a bit of her own observation respecting Indian courtship half a century ago in Wisconsin. When a youth falls in love, he places himself a little way from the maiden's wigwam, wearing one blue and one red legging. He then plays in a minor strain an air upon the flute, *pih-pi-gwan*. If he is permitted to proceed, he knows that there are no objections to his addressing the loved one. If the parents have objections to him, he is informed that he is too noisy, etc. In the latter case he discontinues his serenades: in the former the flute-playing gives place to visits, the father saluting, and saying, 'Come in, friend: there is room for you;' upon which all the family give a sort of hitch up, to make room for one more around the fire. The young man seats himself by the door, and next to the daughter; as the eldest son and daughter always sit nearest the door, on each side of it. The lover then produces a few small pine sticks, one of which he lights at the fire, and hands to the maiden. If she takes it, he is accepted: if she does not, but lets him hold it until it goes out, he is rejected. When the time arrives for them to be united, the parents of the young man bring valuable presents, such as furs, while the parents of the bride bring ornamental work. These are distributed among the friends. The bride is dressed by her sister-in-law, and conducted to her place in the wigwam to await alone the coming of her husband. In other cases, when father-right prevails, she goes to his home. A man can have as many wives as may be required to dress his game and carry it home. — (*Wisc. hist. soc.*, ix, 311.) J. W. P.

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The mounds of Wisconsin.—If one wishes to keep himself informed upon archeology, he must not neglect the volumes of the state historical societies. The Rev. Stephen D. Peet has done a good service, with reference to the emblematical mounds in Wisconsin, by presenting in a condensed form not only the description of the structures, but also the names of the most important works in which references to them may be found. Mr. Peet is well acquainted with the effigy mounds, and therefore adds many original observations, which are in the main extremely cautious. Attention is directed to the difficulty of determining the shape of the mounds, by reason of deformations due to the plough, the tramping of cattle, the wear of the elements, the avarice of relic-hunters, and the encroachments of the modern architect. Again: many of the animals once common have departed from this region, such as the buffalo, moose, elk, antelope, bear, lynx, and wild turkey. If the mounds represented in shape the badges, weapons, and symbols of the natives, they, also, are unfamiliar.

The author ascribes to all these mounds a religious

significance, in which opinion he is not warranted by what is known. His reflections upon the cross-symbol, however, are very just. As to the shapes of these structures, we have the mace, double bow, groups of cones, triangular enclosures, besides every variety of animal supposed to have lived in this region. Mr. Peet dismisses the 'elephant mound' with a modest introduction to its sponsor. — (*Wisc. hist. coll.*, ix, 40.) J. W. P.

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Chinese not homogeneous.—Mr. E. Colborne Baber, secretary to H. M. legation, Peking, makes the following interesting statement: "The population of China is far from being so homogeneous as is generally supposed. I have often heard English people assert their inability to distinguish one Chinaman from another; but it may surprise you to hear that a Chinaman, on first coming into contact with Europeans, makes precisely the same remark of ourselves. At first they have some difficulty in even distinguishing a woman from a man. In spite of a general persistence of type, there is at least as much variation among the natives of the eighteen provinces as there is among the inhabitants of Europe. A thousand years before Christ the Chinese nation occupied a mere fraction of the territory which they now possess. Even then they were not homogeneous in manners or speech, and they were environed by many non-Chinese indigenous peoples. Since then the Chinese have spread, not by ousting or exterminating their neighbors, but by a process of absorption: in other words, they migrated among them, and intermarried with them; and their superior energy and comparative civilization gradually effaced the national characteristics of the surrounding tribes. The same process is going on in Tibet, in Burma, in the Shan country, in Tonquin, and in the Straits Settlements. The Chinese blood has been mingled with such diverse stocks as the Tatar, Turki, Tibetan, Burmese, Mon-annan, Tai, and Polynesian." The discussion of this paper by Sir Rutherford Alcock, Sir Thomas Wade, Col. Yule, and Mr. Colquhoun, is a valuable contribution to Chinese sociology. — (*Proc. geogr. soc. Lond.*, Aug.) J. W. P.

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NOTES AND NEWS.

THE Maryland oyster commission, which has in view the invention of some plan which should check the depreciation of beds belonging to the state without unduly interfering with trade, met in Baltimore recently. It was suggested that dredging be restricted in various ways, and the available grounds increased by sowing the bottom with dead oyster-shells where none now exist. In 1879 Lieut. Winslow found the average in Tangier Sound to be one oyster to 2.4 square yards. In their recent examination of the oyster area of the state, the commission found that the average of sixty-one beds examined was one living oyster to each 3.7 square yards, showing a rapid and important decrease since 1879. The commission finds, as the result of the examination of forty-six oyster-beds, that there are only 1.35 living oysters to every bushel of dredged shells. While the oysters are

growing scarcer, more labor is required to get them, and the amount of dead material which has to be handled is largely increased.

— The Pons comet, now approaching the sun, may be expected to be visible to the naked eye about the first of December; but it is not likely to attain a brightness comparable with that of the conspicuous comets of the last decade, unless it shall have undergone material change since its last reappearance, in 1812. The intensity of its light will be three times greater on Nov. 21 than it was on Oct. 16; and it will increase until about the middle of January, when it may be anticipated that its light will be about equal to that of a star of the third magnitude.

— The announcement of the publication of the Berlin catalogue of zonal stars will have, according to *Nature*, the effect of postponing the publication of the French catalogue, for which a credit of four hundred thousand francs had been asked from the budget commission.

— Dr. B. A. Gould passed through London early in October, *en route* for South America. The printing of the second volume of the Cordoba zones is nearly completed (in London); and Dr. Gould's attention will soon be turned to the publication of another great work undertaken by him at the Argentine national observatory, viz., the Cordoba general catalogue of stars.

— Ensigns H. G. Dresel and A. A. Ackerman, who were detached from the National museum for duty in connection with the recent Greeley relief expedition, in spite of unfavorable circumstances, succeeded in collecting some interesting zoölogical and mineralogical specimens. Among them are some of the so-called meteorites of Ovifax.

— Regarding Flamsteed and Morin, Mr. W. T. Lynn writes to the editor of the *Observatory* (August, 1883): "Probably few anecdotes in the history of astronomy are better known to general readers than that related by Flamsteed, respecting the foundation of the Royal observatory being hastened, if not occasioned, by the application of the *Sieur de St. Pierre* to Charles II. (through the Duchess of Portsmouth) for a reward for discovering a method of finding the longitude at sea, and Flamsteed's own decision on its impracticability until the motions of the moon and the places of the fixed stars had been determined with much greater accuracy than was then possible. But it is not easy to understand the exact meaning of one of Flamsteed's expressions to *St. Pierre*. He says that he told him, after first proving to him how incompetent a calculator he was, and pointing out, that, independently of this, his method was inapplicable in practice, to go to his own countryman Morin, who would instruct him in a better method than his own, and not to return to the king of England until he had done so. Of course, the general force of this recommendation was, in vulgar English, to bid him go to Jericho. But surely Flamsteed could hardly have been ignorant (though he does not refer to it) that Morin had, in 1634 (forty-one years before the application of *St. Pierre* to Charles II.), submitted a plan

similar in principle to Cardinal Richelieu, and that a committee appointed by the latter came to the same decision as Flamsteed concerning *St. Pierre's* proposal; that such a method was of no practical use in the existing state of astronomical knowledge. To me, it seems exceedingly likely that *St. Pierre* was aware of what had taken place with regard to Morin; that, in fact, he had stolen the principle from the latter (who, although he deserves all the contempt that *Mädler* pours upon him for prostituting astronomy to the purposes of that mass of imposture and delusion which has robbed our science of its more appropriate name of astrology, was a good mathematician for those times), and interpreted Flamsteed's last remark into the imputation that he was in point of fact found out. Flamsteed says that he heard no more of him afterwards; but he certainly did *not* go to Morin, for the best of all reasons, — Morin having died more than eighteen years before, on the 6th of November, 1656."

— In a paper on the germ-theory of disease from a natural history point of view, before the British association, Dr. Carpenter stated that many of the existing genera and species of animals and plants were altogether uncertain; that as fresh knowledge was gained, so it was found necessary to modify our accepted views — this especially holds good with genera which have great power of adapting themselves to various circumstances, and which consequently produce numerous variations. This power of modification, the author stated, was much more marked in the lower than in the higher forms of either kingdom, and was especially found in bacteria. The author then cited the case of the germ producing small-pox, in which he stated the germ had undergone such a modification, that whereas two centuries ago the disease was very severe, and known as 'black-pox,' it now existed only as a mild disease. During the last siege of Paris, however, the conditions were such that the germ reverted to its original form, and produced the same severe disease as two centuries ago. Many facts were brought forward to confirm this view.

— In a paper by Professor Hull before the British association, upon the geological age of the North Atlantic Ocean, the author made use of three leading formations as factors in his inquiry; viz., the archæan (or Laurentian), the Silurian (chiefly the lower Silurian), and the carboniferous. He considers that throughout the archæan (or Laurentian), the lower Silurian, and the carboniferous epochs, the regions of North America, on the one hand, and of the British Isles and western Europe, were submerged, while a large part of the North Atlantic area existed as dry land, from the waste of which these great formations had been built up; and he urged, that, if such were the case, the doctrine of the permanency of oceans and continents, as tested by the case of the North Atlantic, falls to the ground.

— The meteorological observatory established upon the top of Ben Nevis by the Scottish meteorological society was formally opened on Oct. 17 with interesting ceremonies. A party of ninety, including many

ladies, climbed the mountain, in spite of unfavorable weather; and after their return to the base, where a second meteorological station is established, a dinner, with congratulatory speeches, was given. The funds for the establishment of these observatories, £5,000, have been raised by popular subscriptions, the subscribers numbering about two thousand.

—At the meeting of the German society of natural science at Halle, on Oct. 3, a paper was read by Dr. Assman of Magdeburg, on the advisability of establishing a meteorological station on the Brocken Mountain. 'What will become of the spectre?'

—Drs. Schuchardt and Krause, of the Volkmann clinical hospital at Halle, consider that they have placed the connection between scrofula and tuberculosis beyond a doubt. Following up Koch's line of research, they have discovered the peculiar bacilli of tuberculosis to be present in several distinct forms of scrofula.

—Joseph Antoine Ferdinand Plateau, professor of physics at the University of Ghent, died at that place, Sept. 15, at the age of eighty-two years.

—The U. S. hydrographic office has published a 'List of geographical positions for the use of navigators and others,' compiled by Lieut.-Commander F. M. Green. The list is divided into seventeen sections, according to the geographical position of the places, and is confined to points on the shore or on navigable rivers.

—Dr. J. Lawrence Smith died at Louisville, Ky., on Oct. 12, in his sixty-fifth year. He was born near Charleston, S. C., and was educated at the University of Virginia and the Charleston medical college. He afterwards spent some time abroad. His first paper was published while he was in Paris. A large part of his work was in meteorology, his collection of meteorites being especially famous.

—Among the exhibits at the New-Mexico territorial fair, held at Albuquerque, Oct. 1 to 5, was a collection of antiquities from the old pueblo ruins of Arizona, by Mr. Thomas V. Keam. This gentleman has long been engaged in trade in that region, is well known to the Indians and to our national surveying-parties, and has rendered very efficient service, both as an adviser and mediator, in our negotiations with the Navajos. His exhibit was highly spoken of by the Albuquerque press.

—Dr. D. G. Brinton of Philadelphia, who was one of the vice-presidents of the congress of Americanists held in Copenhagen, and the only delegate from the United States, makes a brief report of the proceedings. In 1875 the first meeting was held at Nancy; that of 1877, at Brussels; of 1879, at Luxembourg; of 1881, at Madrid. The meeting of this year was opened in the magnificent hall of the university, in the presence of the king, the royal family, the Princess of Wales, and other dignitaries. Professor Worsall presided, and delivered the address of welcome. The discussions and papers related to paleolithic man in America, Scandinavian discoveries, the history of Columbus, native American literature, ceramics, trephiny, etc. Dr. Brinton reports that the communications were very generally of a high order, though

there was enough of Prince Madoc and the pilgrimage of St. Thomas to remind the members of the humble origin of archeology.

—Messrs. Kegan Paul, Trench, & Co., of London, announce Mr. Everard im Thurm's 'Among the Indians of British Guiana,' sketches, chiefly anthropologic, from the interior.

—M. Berthelot has published the results of his researches into the nature of explosives, under the title of 'Sur la force des matières explosives d'après la thermochimie.' One portion of the book appeared as an article in the *Nouvelle revue*.

In presenting his work to the Paris académie des sciences, M. Berthelot explained that he was led to those researches by the events of 1870. The first book is on his theory of the phenomena of explosion, and especially the explosive wave, which he considers throws a new light on the subject. The second book is on the composition of explosives, and the third on their comparative power. The last is very comprehensive, and he gives numerous tables.

—Mr. William J. Fisher, U. S. signal-observer at Kadiak, has found time, in the prosecution of his duties, to collect for the National museum ethnological specimens from the following Alaskan tribes: Ugashagmint, of Ugashag River, Bristol Bay; Tanichnagmiute, of Lesnoi Island, near Kodiak Island; Nanuachpachmiute, of Aliaska peninsula, near Iliamna Bay; Keilichwimmiut, at Katmai settlement, Aliaska peninsula; Kiatichimynt, near Maltshatna River, Aliaska peninsula; Tshu-attshigmjnt, around Nuchek, Hinchinbrook Island, Prince William Sound.

The editor of the Smithsonian proceedings holds up this invoice of Mr. Fisher as an example to be followed by all collectors. The excellent features are the native names of the articles, the explanation of their functions, and the location of the tribe from which each comes. There is a very grave objection, however, to the spelling of the names and the identification of the tribes. Mr. Dall and others have located many little bands of Eskimo all along the Alaskan coast. Are these the same, or different ones? If the same, why another mode of spelling; and, what is worse, why is 'mut' spelled 'mint,' 'miute,' 'miut,' 'mynt,' 'mjnt,' 'mjut,' 'mjute,' 'mjitt,' 'mjent,' 'mjunt,' and 'mut'? Strenuous efforts are making to bring order out of chaos in the matter of tribes, but nothing will be accomplished if confusion is constantly introduced by observers.

—Prof. T. G. Bonney read a paper before the Geological society of London on Nov. 7, on the geology of the South Devon coast from Tor Cross to Hope Cove.

—The relation of the state to the medical profession was the prevailing topic in the recent inaugural addresses before the schools of the several hospitals of London. Until 1858 the English people had virtually no protection against unqualified practitioners. In that year the act was passed establishing the present system of medical licensing.

A royal commission was appointed in May, 1881, to inquire into the existing provision, and to recommend such additional action as might seem advisable. The

proposals of the commission were embodied in a bill which passed the House of Lords during the last session, but was lost in the House of Commons through the 'obstructive tactics of interested parties.' It is believed that the bill which will be presented during the next session will meet with better success. As pointed out by Professor Huxley in his address at the London hospital, 'three grave defects remain to be remedied: viz., the low standard of examination allowed by some of the licensing bodies; the granting of licenses which do not involve proof of the holder's acquaintance with all three of the great branches of medical practice (namely, medicine, surgery, and midwifery); and the present state of the law, which does not permit the medical council to enforce equality of minimum examination, and the threefold qualification, before admitting a medical practitioner to the register. All of these points are included in the proposed bill.

It is further urged by those interested in the improvement of the profession, that liberal education should be a more general characteristic of its members, and that the student should bring to his medical course a more thorough preparation in physics, chemistry, and biology. Both of these ends will be furthered by the provision recently made in the two great universities for the sciences specified.

Socially the medical profession does not compare favorably with the other professions in England. The fact is curiously illustrated by an extract from a recent book quoted by Mr. W. H. Bennet in his address at St. George's hospital. "This choice of a profession," says the author, "is not an easy matter, when, as a rule, the church, the army, the bar, and the diplomatic service are almost the only professions open to a young fellow." Evidently, as Mr. Bennet observes, "the thought of medicine had never for an instant entered the writer's mind."

— Mr. Henry Brooks has prepared a useful series of specimens of the wood of several of the important timber-trees of the eastern states, for the use of teachers and students of natural history.

Each species is represented by three thin transparent sections of wood framed together, and cut in the direction of the layers of annual growth, at right angles with the grain, so as to show a cross-section of the trunk. The specimens mounted between thin sheets of mica permit a satisfactory examination of the position and size of the different ducts, cells, medullary rays, etc., besides showing admirably the color and general character of different woods. Architects and builders, therefore, as well as teachers, will find Mr. Brooks's contribution to a knowledge of our trees of considerable practical value. Complete sets, representing seventeen species, or single sheets, can be obtained by addressing Mr. Henry Brooks, 35 Bedford Street, Boston.

RECENT BOOKS AND PAMPHLETS.

Aramburu, F. Examen microscópico del trigo y de la harina, con algunas indagaciones de procedimientos analíticos para determinar su composición química y la del pan. Madrid, 1883. 156 p., illustr. 4°.

Bacas, D., and Escadón, R. Teoría elemental de las determinantes, y sus aplicaciones al álgebra y á la trigonometría. Madrid, 1883. 196 p. 4°.

Berthelot, M. P. E. Explosive materials. Translated by M. Benjamin. With a short historical sketch of gunpowder, translated from the German of Karl Braun by Lieut. J. P. Wisser, U.S.A., and a bibliography of works on explosives. New York, *Van Nostrand*, 1883. (*Van Nostrand's sc. ser.*, no. 70.) 180 p. 24°.

Bottéro, E., and Magistrelli, C. Il telefono; con prefazione del Pietro Blaserna. Torino, *Loescher*, 1883. 82 p. 8°.

Bourguignat, J. R. Aperçu sur les Unionidae de la péninsule Italique. Paris, 1883. 117 p. 8°.

Brelow, G., and Hoyer, E. Lexikon der mechanischen technologie. Leipzig, 1883. 824 p., illustr. 8°.

Carrara Zanotti, L. Influenza del clima sulla salute. Treviglio, *Stabilimento sociale*, 1883. 112 p. 16°.

Coote, W. The Western Pacific; being a description of the groups of islands to the north-east of the Australian continent. London, 1883. 200 p., map, illustr. 8°.

Dammer, O. Lexikon der chemischen technologie. Leipzig, 1883. 875 p., illustr. 8°.

Dragendorff, G. Plant-analysis, qualitative and quantitative. Translated by G. Greenish. London, *Baillière*, 1883. 8°.

Ermacora, G. B. Sopra un modo d'interpretare i fenomeni elettrostatici: saggio sulla teoria del potenziale. Padova, *Draghi*, 1883. 40+468 p. 8°.

Exposition d'électricité, Paris. Expériences faites par Alard, Le Blanc, Potier, et Tresca. Méthodes d'observation; machines et lampes à courant continu, à courants alternatifs; lampe à incandescence; accumulateur; transport électrique du travail; machines diverses. Paris, 1883. illustr. 12°.

Franck, L. Kleine vergleichende anatomie der hausthiere. Stuttgart, 1883. 400 p., illustr. 8°.

Girard, M. Histoire naturelle; deuxième année. t. I. Notions générales; anatomie et physiologie; mammifères; oiseaux. Paris, *Delagrave*, 1883. 11+708 p., illustr. 16°.

Gressent. Einträglicher obstbau. Neue anleitung, auf kleinem raum mit mässigen kosten regelmässig viele und schöne früchte in guten sorten zu erzielen. Berlin, 1883. illustr. 8°.

Hartmann, R. Die menschenähnlichen affen und ihre organisation im vergleich zur menschlichen. Leipzig, 1883. 313 p., illustr. 8°.

Huet, L. Nouvelles recherches sur les crustacées isopodes. Paris, 1883. 136 p., illustr. 8°.

Issel, A. Le oscillazioni lente del suolo o bradisismi. Saggio di geologia storica. Genova, 1883. 422 p., map, illustr. 8°.

Kroman, K. Unsere naturerkenntniss. Beiträge zu einer theorie der mathematik und physik. Ins deutsche übersetzt von R. v. Fischer-Benzon. Kopenhagen, 1883. 478 p. 8°.

Lewandowski, R. Die electro-technik in der praktischen heilkunde. Wien, 1883. (Elektro-techn. bibl., xviii.) 400 p., illustr. 8°.

Leydig, F. Ueber die einheimischen schlangen. Zoologische und anatomische bemerkungen. Frankfurt, 1883. 4°.

McCay, L. W. Beitrag zur kenntniss der kobalt-, nickel-, und eisenkiese. Inaug. diss. Freiberg, *Craz & Gerlach*, 1883. 46 p. 8°.

Morwood, V. S. Wonderful animals: working, domestic, and wild. Their structure, habits, homes, and uses; descriptive, anecdotal, and amusing. London, 1883. 288 p., illustr. 8°.

Nadailac, Marquis de. L'Amérique préhistorique. Paris, 1883. 596 p., illustr. 8°.

Pancic, J. Orthoptera in Serbia hucum detecta. (Serb. conscr.) Belgrad, 1883. 172 p. 8°.

Paolis, N. de. Questioni archeologiche, storiche, giuridiche, araldiche, a rifermare la sua 'Dissertazione sullo stemma di Marcanise' (Caserta, 1878) e ribattere le opinioni opposte. 2 vols. Catania, *tip. Nobile*, 1882. 8°.

Phipson, E. The animal lore of Shakspeare's time, including quadrupeds, birds, reptiles, fish, and insects. London, *Paul*, 1883. 492 p. 8°.

Richter, M. M. Tabellen der kohlenstoffverbindungen nach deren empirischer zusammensetzung geordnet. Berlin, 1884. 8+517 p. 8°.

Robustelli, G. Dalle statistiche dell' emigrazione. Roma *tip. Forzani*, 1883. 106 p. 8°.

Schneidemühl, G. Lage der eingeweihe bei der Hausgüthieren nebst anleitung zu exenteration für anatomische und patholog.-anatomische zwecke. Hannover, 1883. 173 p. 8°.

Wood, J. G. New illustrated natural history: with designs by Wolf, Zwecker, Weir, and others. London, 1883. 796 p. royal 8°.