improbable. The manner in which fat is absorbed has been much discussed of late years, but the explanation given by Prof. Zawarykin appears to us the first satisfactory one which has been offered.) — (*Pflüger's arch. physiol.*, xxxi. 231.) C. S. M. [192

ANTHROPOLOGY.

Brain-weight of boys and girls. — In the final result of the comparison of the two sexes in the human race, anatomical researches will form an important factor. Many anatomists have recognized this fact, and have instituted comparisons between the sexes from various points of view. M. Gustave le Bon reviews the work of M. Manouvrier and that of M. Budin, both of whom aver that "sex has no influence on brain-weight. With them the influence of sex is nothing more than the influence of height; and if the females as a whole exceed the males in brain-weight, it is simply because the weight of the body in the females is much below that of the males." M. le Bon puts the theory of his adversaries to the test in a very ingenious manner by comparing the brains of males and females having about the same weight. By this investigation it is shown that in the great majority of cases the male children surpass the females of the same weight in their cranial circumference. At the same age, height, and weight of body, the female brain is notably smaller than that of the male. — (*Bull. soc. anthrop. Paris*, v. 524–531.) J. W. P. [193

The Galibis. — The tribe of Galibis lives on the borders of the Sinamari, and not far from Cayenne, in French Guiana, and it consists of only a few families. A group of fifteen of them were sent to Paris in 1882; and several gentlemen, among them Mr. Manouvrier, have undertaken to study their physique, customs, language, etc. The Galibis were domiciled in their native fashion in the *jardin d'acclimatation*, and passed their time in their ordinary pursuits. The skin is reddish brown, but differs with individuals, owing partly to mixed blood: the true color is also disguised by the use of paint. The hair and eyes are jet black. The other physical characters, as well as their language and occupations, are given with the greatest minuteness. A single observation will show the extreme caution with which fine theories should be spun. M. Capitan studied carefully the processes of making pottery among the Galibis. Hamy took occasion to remark upon this as upon the greater rudeness of ornamentation in other respects, and concluded that the Galibis had much degenerated since they were first studied. But Mortillet recalled the discussion to a sober view by remarking that the specimens in our museums are choice objects, selected by travellers for their great beauty, while those made by the Galibis in the jardin were by rude workmen for daily use. They show us the cabin of the poor, while the voyagers had despoiled the homes of the rich. Theories of degeneration based upon Hamy's facts were therefore unsubstantial. — (*Bull. soc. anthrop. Paris*, v. 602.) J. W. P. [194

African psychology. — Max Buchner, writing to *Ausland*, speaks rather encouragingly of the Bantu negro character. "The negro in his native condition is not apparently of a lower grade of natural intelligence than the European of the common class. He probably excels the European in a kind of selfish cunning, while the restraints of moral scruples and of the finer feelings operate less strongly upon him. Yet he is not destitute of a sort of moral instinct, a kind of taboo conscience, that causes him to hesitate to do wrong. For this reason the negro is never an open thief." Mr. Jefferson used to say that his slaves were all honest, but they could beat the world finding things. The negro, says Buchner, is above every thing positivist, practical, materialist, and is inaccessible to intangible considerations. The question 'Has the negro a religion?' cannot be answered at once, either affirmatively or negatively. It must first be made clear what is to be understood by religion. He has a confused mixture of vague wants and superstitious impulses. A system of computing time can hardly be predicated of such a people; but they have a kind of superficial calendar of the months, which they make to help regulate their agricultural operations. The negro undoubtedly possesses all the capacities for education and civilization to at least as great an extent as our primitive ancestors. The fact that the psychical and intellectual, as well as the physical, differences between particular races of men are really insignificant, is destined to be made plainer, the more the subject is impartially studied; and the efforts of certain men, learned in distinctions of types, to set up fixed marks of separation between them, will not succeed. — (*Pop. sc. monthly*, July.) J. W. P. [195

NOTES AND NEWS.

The unexampled recent increase in the membership of the American association for the advancement of science, from a little over one thousand just before the Boston meeting of 1880, to nearly two thousand now, implies a considerable increase in its funds, and should imply direct participation by the association in the endowment of research, which its means have not hitherto permitted. No other way is now open for the association to advance science so securely.

We desire, therefore, to call the attention of the executive board of the association to the direct advantage which would certainly result in following the example of the British association by making an annual grant to the Naples zoölogical station, whose claims and advantages have already been so well stated in our columns by Miss Nunn and Dr. Whitman. The board would find no lack of applicants for the table thus secured, the cost of which would be four hundred dollars annually.

— Mr. George M. West of Escanaba, Mich., sends us a photograph of a hoe-shaped implement which is stated to have been made of native copper by hammering. The blade has a thin edge, and is said to be nearly nine inches long, about three inches wide, and one-half inch thick at the back where it joins the

shank. The shank is an inch square at its union with the blade, six inches long, and half an inch square at its distal end. This implement was found in Brown County, Wis., and is, we believe, unique among the many copper objects found in North America, of which Wisconsin has yielded so large a proportion. While we have no reason to doubt the statement that this implement is made of native copper, we should rather have it placed in our hands for careful examination before committing ourselves as to its character and use. Should it prove to be all that the photograph suggests, we should like to give a description, with figures.

— In the first part of an article on 'Zoölogy at the Fisheries exhibition,' *Nature* of July 26 gives unstinted praise to the collections, public and private, exhibited by the United States, and admires the beauty of the marine objects shown by the Naples zoölogical station. Speaking of the collections shown by the U. S. fish-commission, it says, "It is not an exaggeration to say that this collection, both on account of the range and variety of its objects and the instructive way in which they have been disposed and treated by the American commissioner, Mr. Brown Goode, has been the admiration of all visitors."

— According to *Nature*, the Berlin academy of sciences has granted the following amounts from its Humboldt fund: 5,000 marks ($1,250) to Dr. Otto Finch, for working at the collection he made during his journey in Polynesia; 6,000 marks ($1,500) to Dr. Ed. Arning (Breslau), for researches on the leprosy epidemic in the Hawaiian Islands; the same amount to Dr. Paul Güssfeldt, to enable him to continue and extend his exploring tour in the Andes of Chili.

— The *Société industrielle de Mulhouse* has awarded its silver medal (*médaille d'argent hors concours*) to Mr. C. J. H. Woodbury of the Boston manufacturers' mutual fire-insurance company for his book, 'Fire protection of mills.'

— Dr. J. W. Mallet has resigned the professorship of chemistry in the University of Virginia.

RECENT BOOKS AND PAMPHLETS.

**** *Continuations and brief papers extracted from serial literature without repagination are not included in this list. Exceptions are made for annual reports of American institutions, newly established periodicals, and memoirs of considerable extent.*

Adams, C. Francis, jun. A college fetich: address before the Harvard chapter of the fraternity of the Phi Beta Kappa in Sander's theatre, Cambridge, June 28, 1883. Boston, *Lee & Shepard*, 1883. 38 p. 8°.

Caspari, H. Beiträge zur kenntniss des hautgewebes der cacteen. Halle, *Fausch & Grosse*, 1883. 53 p. 8°.

Fletcher, R. Human proportion in art and anthropometry. A lecture delivered at the National museum, Washington, D.C. Cambridge, *King*, 1883. 37 p., illustr. 8°.

Greenwood, *Major*. Aids to zoölogy and comparative anatomy. London, *Baillière*, 1883. 120 p. 12°.

Hahn, G. Der pilz-sammler, oder anleitung zur kenntniss der wichtigsten pilze Deutschlands und der angrenzenden länder. Gera, *Kanitz*, 1883. 9+87 p., 23 col. pl. 8°.

Hale, H. The Iroquois book of rites. Philadelphia, *Brinton*, 1883. (Brinton's libr. aborig. Amer. lit., ii.) 222 p. 8°.

Hann, J. Handbuch der klimatologie. Stuttgart, *Engelhorn*, 1883. 10+764 p. 8°.

Hawkins, B. W. Comparative anatomy as applied to the purposes of the artists. Edited by George Wallis. London, *Winsor & Newton*, 1883. 90 p., illustr. 12°.

Hellmann, G. Repertorium der deutschen meteorologie. Leistungen der Deutschen in schriften, erfindungen, und beobachtungen auf dem gebiete der meteorologie und des erdmagnetismus von den ältesten zeiten bis zum schlusse des jahres 1881. Leipzig, *Engelmann*, 1883. 23+996 p., illustr. 8°.

Hofmann, J. Flora des Isargebietes von Wolfratshausen bis Deggendorf, enthaltend eine aufzählung und beschreibung der in diesem gebiete vorkommenden wildwachsenden und allgemein kultevierten gefässpflanzen. Landshut, *Krüll*, 1883. 64+377 p., 1 col. pl. 8°.

Jahn, H. Die electrolyse und ihre bedeutung für die theoretische und angewandte chemie. Wien, *Hölder*, 1883. 9+206 p. 8°.

Kalischer, S. Goethe als naturforscher und Herr du Bois-Reymond als sein kritiker. Eine antikritik. Berlin, *Hempel*, 1883. 90 p. 8°.

Kingston, W. H. G. Stories of the sagacity of animals. Cats and dogs. London, *Nelsons*, 1883. 162 p., illustr. 8°.

Leon, Néstor Ponce de. Diccionario tecnológico, Inglés-Español y Español-Inglés, de los terminos y frases usados en las ciencias aplicadas, artes industriales, bellas artes, mecánica, maquinaria, minas, metalurgia, agricultura, comercio, navegacion, manufacturas, arquitectura, ingenieria civil y militar, marina, arte militar, ferro-carriles, telégrafas, etc. pt. i., ii. N.Y., *de Leon*, 1883. 48, 49+96 p. 4°.

Mann, F. Abhandlungen aus dem gebiete der mathematik. Würzburg, *Stahel*, 1883. 5+43 p. 8°.

Maudsley, H. Body and will: being an essay concerning will in its metaphysical, physiological, and pathological aspects. London, *Paul*, 1883. 330 p. 8°.

Meyer, A. Das chlorophyllkorn in chemischer, morphologischer, und biologischer beziehung. Ein beitrag zur kenntniss des chlorophyllkornes der angiospermen und seiner metamorphosen. Leipzig, *Felix*, 1883. 7+91 p., 3 col. pl. 4°.

Miller-Hauenfels, A. von. Theoretische meteorologie. Ein versuch, die erscheinungen des luftkreises auf grundgesetze zurückzuführen. Mit einer begleitschreiben von Dr J. Hann. Wien, *Spielhagen*, 1883. 8+129 p., illustr. 8°.

Nichols, W. R. Water-supply considered mainly from a chemical and sanitary stand-point. N.Y., *Wiley*, 1883. 6+232 p., illustr. 8°.

Oborny, A. Flora von Mähren und Österreich-Schlesien, enthaltend die wildwachsenden, verwilderten und häufig angebauten gefässpflanzen. i theil: Die gefässkryptogamen, gymnospermen und monocotyledonen. Brünn, *Winiker*, 1882. 268 p. 8°.

Pfaff, F. Die entwickelung der welt auf atomistischer grundlage. Ein beitrag zur charakteristik des materialismus. Heidelberg, *Winter*, 1883. 10+241 p., illustr. 8°.

Salomon, C. Nomenclator der gefässkryptogamen oder alphabetische aufzählung der gattungen und arten der bekannten gefässkryptogamen mit ihren synonymen und ihrer geographischen verbreitung. Leipzig, *Voigt*, 1883. 10+385 p. 8°.

Schell, A. Die methoden der tachymetrie bei anwendung eines ocular-filar-schrauben-mikrometers. Wien, *Seidel*, 1883. 5+49 p., illustr. 8°.

Seebohm, F. The English village community, examined in its relations to the manorial and tribal systems, and to the common or open field system of husbandry. London, *Longmans*, 1883. 464 p., 13 maps and pl. 8°.

Sterne, C. Sommerblumen. Mit 77 abbildungen in farbendruck nach der natur gemalt von Jenny Schermaul und mit vielen holzschnitten. lief. i., ii. Leipzig, *Freytag*, 1883. 64 p. 8°.

Suess, E. Das antlitz der erde. Mit abbildungen und kartenskizzen. abth. i. Leipzig, *Freytag*, 1883. 310 p. 8°.

Thompson, Silvanus P. Dynamo-electric machinery: lectures, reprinted from the Journal of the society of arts, with an introduction by Frank L. Pope. N.Y., *Van Nostrand*, 1883. 218 p., illustr. 24°.

Villicus, F. Zur geschichte der rechenkunst mit besonderer rücksicht auf Deutschland und Oesterreich. Wien, *Pichler*, 1883. 6+100 p., illustr. 8°.

Wilson, E. The recent archaic discovery of ancient Egyptian mummies at Thebes: a lecture. London, *Paul*, 1883. 8°.

Wood, H. A season among the wild flowers. London, *Sonnenschein*, 1883. 256 p., illustr. 8°.

Zincken, C. F. Die geologischen horizonte der fossilen kohlen, oder die fundorte der geologisch bestimmten fossilen kohlen, nach deren relativem alter zusammengestellt. Leipzig, *Senf*, 1883. 7+90 p. 8°.

Zwackh-Holzhausen, W. von. Die lichenen Heidelbergs nach dem systeme und den bestimmungen Dr. W. Nylanders. Heidelberg, *Weiss*, 1883. 4+84 p. 8°.