African and the American as complete as possible, it is highly desirable that attention should be paid to the obtaining of information regarding (1) the results of the intermarriage of Indian and negro, the physiology of the offspring of such unions; (2) the social status of the negro among the various Indian tribes, the Indian as a slave-holder, the opinion the negro has of the Indian; (3) the influence of the Indian upon negro, and of the negro upon Indian, mythology and folk-lore.

While there seems little probability of data existing, to any great extent, regarding the linguistic relations of the Indian and the negro, it is reasonable to expect that much relating to their physical anthropology, their social conditions, and their folk lore, may yet be made known.

HEALTH MATTERS.

Bone Grafting.

MR. A. G. Miller, in the Lancet for Sept. 20, reports the history of a case in which he used decalcified-bone chips successfully to fill up a large cavity in the head of the tibia. In the New York Medical Journal it is stated that a piece of the rib of an ox was used, being first scraped and then decalcified in a weak solution of hydrochloric acid. After cleansing by pressure, it was placed for forty-eight hours in a carbolic-acid solution, one to twenty, then removed, and cut into small pieces. During the scraping-out of the cavity in the knee, preparatory to the grafting, a number of small pieces of bone were removed. These were placed in a solution of boric acid for use later in the operation. The cavity was then stuffed with the decalcified-bone shavings, the pieces of fresh bone being added last. The cavity thus filled was about two inches in diameter. Granulation and healing took place rapidly : the only pieces of bone that became necrosed were from the patient's own body. Mr. Miller is convinced, from his observation of this case, that the healing of large bone cavities, the result of injury or disease, is greatly facilitated by stuffing them with decalcified-bone chips; that these are superior to fresh bone; and that fresh bone not only is of no use, but actually hinders the process of granulation.

Recent Saving of Life in Michigan.

In a carefully prepared paper read before the Sanitary Convention at Vicksburg, the proceedings of which are published, Dr. Baker gave official statistics and evidence, which he summarized as follows : —

"The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over one hundred lives per year from small-pox, four hundred lives per year saved from death by scarlet-fever, and nearly six hundred lives per year saved from death by diphtheria,— an aggregate of eleven hundred lives per year, or three lives per day, saved from these three diseases. This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

To relieve an Overworked Brain.

A Swiss doctor says that many persons who extend their mental work well into the night, who during the evening follow attentively the programme of a theatre or concert, or who engage evenings in the proceedings of societies or clubs, are awaked in the morning or in the night with headache (*The Sanitary Inspector*). He is particular to say that he does not refer to that headache which our Teutonic brethren designate *Katzenjammen*, that follows certain convivial indulgences. This headache affects many persons who are quite well otherwise, and is due in part to the previous excessive work of the brain, whereby an abnormal flow of blood to that organ is caused, in part to other causes, for example, too great heat of rooms, contamination of the air with

carbonic acid, exhalations from human bodies, and tobacco-smoke.

For a long while the doctor was himself a sufferer from headache of this kind, but of late years has wholly protected himself from it by simple means. When he is obliged to continue his brain work into the evening, or to be out late nights in rooms not well ventilated, instead of going directly to bed, he takes a brisk walk for half an hour or an hour. While taking this tramp he stops now and then and practises lung gymnastics by breathing in and out deeply a few times. When he then goes to bed, he sleeps soundly. Notwithstanding the shortening of the hours of sleep, he awakes with no trace of headache. There exists a clear and well-known physiological reason why this treatment should be effective.

NOTES AND NEWS.

THE Lecture Association of the University of Pennsylvania announces a special course of illustrated public lectures by Mr. Barr Ferree of New York, on Feb. 12, 17, and 19, on "The Influence of Christianity on the Development of Architecture." These lectures, which will be three in number, will treat of (1) the basilica, the formative period of Christian architecture; (2) the cathedral, the perfected form of Christian architecture; and (3) the monastic orders, the greatest Christian builders.

— The Snow-Shoe Section of the Appalachian Mountain Club, Boston, has arranged a winter excursion to Waterville, N.H., to which members of the club and their friends are invited. The main party will leave Boston, Monday, Feb. 16, by the nine o'clock train from the Lowell Station. Others will leave Boston Thursday evening, spend the night at Plymouth, and join the party at Waterville Friday morning. The return will be on Monday or Tuesday, Feb. 23 or 24. The expense will not exceed \$15. Comfortable rooms with stoves will be provided.

— It is announced in the January "Proceedings of the Royal Geographical Society" that a competent observer, Mr. J. T. Bent, the explorer of Phœnician remains in the Bahrein Islands, has decided on undertaking an expedition to the mysterious ruins of Zimbabye or Zimbaoe, in Mashonaland, and other remains in the interior of South Africa, with the object of thoroughly examining the structures and the country in their neighborhood. The expedition has the active co-operation of the British East Africa Company and the Royal Geographical Society, and will be well equipped for geographical as well as archæological survey. It was to leave England at the end of last month.

— Mr. Robert Athelston Marr has resigned his position as assistant in the United States Coast and Geodetic Survey, to accept the professorship of civil engineering in the Virginia Military Institute. Mr. Marr was born in Tennessee in 1856, was graduated at the Virginia Military Institute, entered the Coast and Geodetic Survey in 1878, and since then has served with distinction in the triangulation and astronomical parties both on this coast and in California and Alaska. The coast survey service has lost an energetic and capable officer, and, while his colleagues will miss him, they wish him every success in his new duties. The vacancy caused by Mr. Marr's resignation has been filled by the promotion of Sub-Assistant Isaac Winston to the grade of assistant. Mr. Winston has for several years past had charge of one of the geodetic levelling parties of the survey.

— Among recent appointments of Johns Hopkins men, we note that of Felix Lengfeld (fellow 1887-88, Ph.D. 1888) as professor of chemistry and assaying in the South Dakota School of Mines; C. W. Emil Miller (A.B. 1882, fellow 1883-85, Ph.D. 1886) as professor of languages, Walther College, St. Louis, Mo.; Augustus T. Murray (fellow 1887-88, Ph.D. 1890) as Professor of Greek, Colorado College; Charles L. Smith (fellow 1887-88, Ph.D. 1889, instructor 1889-91) as professor of history, William Jewell College, Missouri; Edward L. Stevenson (graduate student 1887-88) as instructor in history, Rutgers College; Amos G. Warner (fellow 1886-87, Ph.D. 1888) as general superintendent of charities in the District of Columbia, as provided by the recent congressional appropriation for the district; and William K. Williams (Ph.D. 1889) as superintendent of classification and distribution in the Newberry Library, Chicago. Albert Shaw (Ph.D. 1884) has become the American editor of the *Review of Reviews*.

- M. Em. Deschamps transmitted from Mahé, on the Malabar coast, some interesting information respecting the Veddas, descendants of the first-known inhabitants of Ceylon. He says, according to the "Proceedings of the Royal Geographical Society," that they are probably the "Yakkas," or "demons," of whom the ancient works and legends speak,—an appellation derived from their demoniacal cult, and which was probably changed by the first conquerors of the island into that of "Veddas" ("hunters"). They inhabit a belt of forests lying on the eastern confines of the central province. As a race, they are rapidly disappearing, and now number only two hundred or three hundred. Their villages lie several miles apart, and consist of one or two huts, formed of the branches and bark of trees. Some, when the rains come on, find shelter in the rocks, and have received the name of "Galla-Veddas." Their weapons, consisting of bow, arrows, and hatchet, are their principal goods. They are great hunters. The Veddas never speak unless absolutely obliged, and do not know how to laugh. Their manner of speech is brusque, and their language is very poor, being deficient in whole series of words, i.e., trees, plants, colors, etc. Although living in the midst of a population which is at once polygamus and polyandrous, they remain monogamists. The baptism of children is the only ceremony to which they attach great importance. They have no chief or social organization. Their religion consists in fear of the demons, of which the jungle is supposed to be full. The dead are now buried in the forest. Not long ago it was the practice to simply abandon the corpses. The Vedda never betrays any sentiments: anger astonishes, and laughter exasperates him. Dancing is his favorite occupation. Doctors and medicines are unknown. The people meet to dance away the devil of a sick man. The men are rather small, strongly built; their lower limbs badly made, and not well proportioned; hair black and coarse; eyes black and sparkling, with a fierce look; forehead straight and broad; nose broad; the general appearance of the countenance not disagreeable; their body is maroon in color, and is repulsively dirty. The women are small, and possess few of the attractions of their sex. Their clothing, like that of the men, is of the scantiest.

- At a meeting of the Geographical Society of Paris held on Nov. 7, 1890, M. Cholet, the administrator of Brazzaville, gave some account of his recent ascent of the Sangha, an important and hitherto practically unexplored tributary of the Kongo. Sangha enters the Kongo at Bonga, a French station between the embouchures of the Alima and Mobangi. The "Proceedings of the Royal Geographical Society" (Jan.) states that the traveller, who was accompanied by M. Pottier, quitted Brazzaville in the little steamer "Ballay" on the 19th of February, and on the 30th of March commenced their voyage up the Sangha. The river varies in breadth from 1,000 yards to a mile and a half. Its course is encumbered with islands and sand-banks, the latter, when the waters are low, swarming with hippopotamuses. In the lower course the river-banks are low and marshy. The villages lie far from the stream, and are inhabited by the Afurus, a commercial people, who bring ivory from the Upper Sangha down to Bonga. The middle course is inhabited by the Busindes, whose villages are situated on the banks, which are more elevated here. The upper part of the river, up to the point reached by the party, is inhabited by the Bassangas, a rich and powerful tribe, whose villages are built on islands. At the village of Uoso the Sangha receives an important affluent, the N'goko, and itself takes the name of Masa. The latter arm is over 2,000 yards broad, but the sand-banks prevented an ascent being made for any considerable distance. The N'goko has, on the other hand, a narrow bed, never exceeding in breadth 220 yards. High wooded mountains lie on both sides of the stream. Elephants abound in this region. The people live at a distance from the river. A few miles above Uoso the N'goko receives a tributary, the Mangango (100 yards broad), and changes its name to Monba. Beyond this point the country seems quite uninhabited. Navigation becoming difficult and provisions failing, the return voyage was commenced on the 15th of May, and Bonga was reached on the 31st of May. The natives were friendly after their first fears had been overcome. They have no relations with the people of the Mobangi, and are not cannibals. Judging by their weapons, language, and dances, they seem to resemble the Pahuins and the Udumbos. The country is rich in ivory. India-rubber was also found.

- It is with much pleasure that Science reprints the following extract from the Congressional Record of Feb. 6, 1891, on the consideration of the Sundry Civil Appropriation Bill in Committee of the Whole House, Feb. 5, 1891: "Mr. Cannon. Mr. Chairman,-I desire, if I can have the attention of the gentleman from Texas [Mr. Sayers], to state that the next eleven pages of this bill cover items of appropriation for the Coast Survey. They are about the same as in the current year, with the exception of an increase of about \$13,000 for printing charts, etc., found to be absolutely necessary. Last year and this year the Committee on Appropriations gave a most exhaustive examination of this service, and I believe the committee is unanimously of the opinion that it is conducted in as economical, praiseworthy, and profitable a manner for the benefit of the government as any part of the public service; and that substantially, if not literally, we have given the amount that is estimated for. For the purpose of saving time, I ask the committee, with the approval of the gentleman from Texas, that we may pass over the Coast-Survey items." Such a speech is seldom made concerning a bureau of one of our departments, on the floor of our legislative halls; and it must be very gratifying to the superintendent, and to his subordinates, who several years ago felt that they were subjected to much criticism which was unjust. Recognition of this character serves to stimulate the zeal of those engaged in scientific pursuits as well as in other walks of life.

— The *El Diario*, July 3, of Buenos Ayres announces the return of M. Storm's expedition from the Pilcomayo, after an absence of over five months. Like other expeditions into this region, as quoted in the January "Proceedings of the Royal Geographical Society," the party encountered great difficulties, but escaped without loss of life. The river was navigated in the steamer for a long distance, and numerous obstacles were surmounted, but at last the leaders, with a few men, had to take to their canoes. Notwithstanding the hostility of the Indians, the party pushed on to the Bolivian frontier, and explored a large part of this little-known region. They have brought back important zoölogical and botanical collections. There seems to be no doubt that the western arm of the river is the true Pilcomayo.

- Further news of Capt. Page's unfortunate expedition up the Pilcomayo has been received by the Royal Geographical Society, London, in a letter from Mr. J. Graham Kerr, one of the English members of the party, who wrote from latitude 24° 58', longitude 58° 40', on the 4th of October last. He says that the expedition started with provisions for six months, and that they had then been nine months on the way, and were in a starving condition. Fortunately, however, they had been able to kill a good many deer. The relief party of twenty soldiers, sent up by the government, arrived on Oct. 4. The river Pilcomayo, he says, at that season is a mere brook, a few feet wide and only a few inches deep. Even in the season of higher water, when they ascended it, navigation was very difficult, owing to the shallowness and the numerous snags and tree-trunks that encumbered the passage. In April they resorted to the laborious method of constructing dams below the steamer, and waiting till the water rose to a sufficient height to move ahead for a short distance. They reached the position from which Mr. Kerr wrote, on June 14. Capt. Page died on his way down to obtain succor with three men in the only remaining boat. The remainder of the party, left to their own resources, were in daily fear of an attack from the hostile Indians of the Chaco; but, though watched continually, they received only one visit from them, on Sept. 18, and that passed off in a friendly manner. At the time of writing, preparations were being made for retreat down the river in the boat which brought up the relief party. If the boat should prove useless, they intended to burn it and march to the Paraguay, a journey of two months or thereabouts.