CURRENT NOTES ON ANTHROPOLOGY. — XIII.

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The Primitive Carib Tongue.

THE expedition led by Dr. Karl von den Steinen, which explored the head-waters of the Schingu River in Brazil, made some remarkable discoveries. Tribes were found who had never heard of a white man, and were utterly ignorant of his inventions. They were still wholly in the stone age, uncontaminated — the word is not misapplied — by any breath of civilization. In ethnography, the most interesting find was the identification of the Bacahiris with the Carib stem, and apparently its recognition as perhaps the nearest of any of the Carib tribes to the original stock.

Dr. von den Steinen has just issued his linguistic material obtained from this tribe in a neat octavo of 403 pages, "Die Bakairi-Sprache" (K. F. Koehler, Leipzig, 1892). It contains abundant sources for the study of the group, vocabularies, texts, narratives, grammatical observations, and, what is peculiarly valuable, a close study of the phonetic variations of the various Carib dialects as far as they have been ascertained. He shows that in all the associated idioms the same laws of verbal modification hold good, although each has developed under its own peculiar influences. The thoroughness which marks throughout this excellent study places it in the front rank of contributions to the growing science of American linguistics.

The Ethnic Distribution of Roofing Tiles.

As a floating leaf will indicate the current and eddies of a stream better than a floating log, so oftentimes a humble art will be a more accurate indication of the drift of civilization than the more ostentatious products of human ingenuity. This has been happily illustrated by Professor Edward S. Morse in a paper "On the Older Forms of Terra-Cotta Roofing Tiles," published in the Essex Institute Bulletin for March of this year.

He finds that the older roofing tiles of the world group themselves into three distinct types, the normal or Asiatic tile, the pan or Belgic tile, which is an outgrowth of the normal tile, and the flat or Germanic tile, which is an independent form. The geographic areas in which these various tiles are found and the history of their distribution are reliable indications of the conquest or peaceable advance of certain forms of civilization. Professor Morse's paper is abundantly illustrated, and an interesting map is added, showing the present distribution of the three types of tiles over Europe, northern Africa, and western Asia.

That his study may not remain one of archæology only, the author adds a number of practical hints on the use and value of terra-cotta tiles as roofing material, and suggests their wider introduction in the United States. They offer the best of all roofing material, durable, fire-proof, cheap, decorative, warm in winter, and cool in summer.

Celts and Kymri.

Professor Topinard is not satisfied with the result of the discussion of the Celts in *Science*, March 11, 25, etc. He takes it up in *L'Anthropologie* for June, and draws a distinction between the Celts of the "men of letters," among whom he classes the editor of these "Notes," and the anthropologists, represented — by himself.

"For the former," he says, "the Celts are blonds, they constructed the megalithic monuments, and spoke a language now unknown. For the latter they are the brachycephalic people of western Europe, who appeared at the neolithic epoch, and lived during the age of bronze side by side with those who later bore the name of Gauls. . . . For Broca, the term Celt designated the brachycephalic group of western Europe, and the term Kymri the blond group, with long and narrow face, etc. We retain the meaning he gives to Celtic, but to meet certain objections substitute for the word Kymri that of Gall or Gaulois."

As the opinion of Broca to this effect was quoted with approval in the discussion (see *Science*, April 22), it is difficult to perceive the grounds on which the learned Parisian professor makes his objections. But it is desirable that his own views, which are always worthy attentive consideration, should be presented.

Architecture as an Ethnic Trait.

The significance of architecture as an ethnic trait has been fully recognized — too fully at times — in reference to the domestic architecture of the American Indians. The views of Mr. Lewis A. Morgan, who could see nowhere on the continent other than "long houses" and "communal dwellings," contained a genuine discovery which has been pushed at times beyond its reasonable limits.

Some excellent articles on this subject have appeared from time to time from the pen of Mr. Barr Ferree, in the *American Naturalist* and the *American Anthropologist*. He treats such subjects as "The Sociological Influences of Primitive Architecture," and the climatic influences which have given rise to this or that peculiarity or style. His essays are thoughtful and well reasoned.

In the first fascicule of the Bibliothéque Internationale de l'Alliance Scientifique, M. César Daly pursues this train of thought to the point of announcing — "given a social condition, it will have such a religion and such an architecture." In regard to "styles," he discriminates between that of the architect, which is transient, and that demanded by the tastes and requirements of the community, which depends on it alone and will last as long as these remain. "A style in architecture is therefore something national, social, and religious, and not royal, as that of Louis XIV., nor that of an artist, had he all the genius in the world."

Types of Beauty among American Indians.

In a note published in this series (*Science*, June 3), attention was directed to the power of beauty in developing the race toward a certain standard of physical perfection. Some interesting facts bearing directly on this topic are presented by Dr. R. W. Shufeldt in a recent pamphlet on "Indian Types of Beauty."

He begins with the suggestive remark that men of the lower type of development cannot perceive the beauty in the women of the higher type nearly so readily as the men of the higher type can recognize the comeliness in the women of the lower. This is as we might expect, the education in the elements of the beautiful being principally a result of development.

Dr. Shufeldt inserts a number of photographs of Indian beauties, an inspection of which will satisfy any one that the opinion which in their own tribe awards them the palm for good-looks is justified by all standards. The same fact is borne out by Mr. Power in his work on the Indians of California. He calls attention to the attractive appearance of the maidens of several tribes reputed among their own people as beauties.

While in all stages of civilization there are false and abnormal standards of the beautiful — notably so among ourselves — there is also a gradual and certain tendency toward

that ideal of physical form which the keen artistic sense of the ancient Greeks recognized as the perfection of corporeal symmetry. Wherever it is present in any degree, it is sure to be recognized. As Novalis says in one of his apothegms, "Beauty alone is visible."

SOME POINTS IN THE NOMENCLATURE-PRIORITY QUESTION.

BY LUCIEN M. UNDERWOOD.

THERE are some of our younger botanists who see no possible merit in the nomenclature-priority discussion. That this is the case is naturally due to the fact that neither their age nor training have been sufficient to enable them to obtain a general view of botany as a science in which the relations of plants to each other and to other living things form the crowning summit of achievement. When we say *relations*, we mean the word in its deepest and widest sense — morphologic, embryologic, physiologic, geographic, and chronologic.

To those whose work involves the weighing, sifting, and correlating of all the truth concerning some group of plants that has been found out by patient workers in times past and present, as well as that brought to light in their own comparative research, the necessity of some uniform, authoritative, and permanent system of nomenclature needs no argument. If some have acute inflammation of the morphologic nerve so that their attention is largely drawn away from the general wants of the system to the nursing of their peculiar member, they are worthy of our sympathy, but they must reduce their hypertropy before they can expect the botanical world to regard their judgment as normal outside their special sphere.

While we thoroughly believe in Goethe's assertion that "species are the creation of text-books while Nature knows only individuals," we have not yet advanced sufficiently far to be able to discontinue the present method of grouping individuals into species and recognizing them by certain fixed names. This is a matter of convenience, and it is a present logical necessity. We believe, therefore, that the matter of nomenclature ought to be settled at once and permanently, and this we believe to be the opinion of all who look at systematic botany, not as a mere "battle of synonyms," but in its true position, representing as it does the ultimatum toward which every fact in the science tends, and into which the whole science will be ultimately crystallized. So far is this desirable that if a system can be agreed upon, it must and ought to be by the yielding of personal opinions to the will of the best and maturest judgment of the botanical world.

One phase of the question has not yet been sufficiently dwelt upon, and that is the one which involves the element of personal justice. There are some who say that there is no ethical side to the question, that it is a mere matter of expediency. If *justice* pertains to ethics then there *is* an ethical element in the problem. It has always been maintained that a man has the right to the product of his brain. If he invents a new mechanical contrivance he is awarded a patent. If he writes a book he is given a copyright. If he discovers a new principle or process in the natural world his name is inseparably connected with that principle. Otherwise why do we speak of the Bell telephone, of Marsh's test for arsenic, or of Newton's law of gravitation? The same is true of discoveries in botanical science, for we inseparably connect certain names with the earliest recognition of protoplasm, the announcement of its identity with sarcode, the discovery of fertilization by antherozoids, the continuity of protoplasm, and every other important addition to a knowledge of the plant world. In the same way the recognition of a natural group of plants, an order, a genus, or even a species is now regarded as of sufficient importance to be credited to the one who makes the discovery, not by any means on the ground of expediency (though it is doubtless in the highest degree expedient), but because of an innate feeling of justice due him who thus publishes the result of his work.

It is true that favored students or organizations may, for a time, regard themselves as the only rightly-appointed medium of description of species, but the multiplication of botanical centres, the specialization of workers, and the growing urbanity and cordiality in extending to specialists the privileges of public and private collections will all tend to prevent the growth of monopolies in a field which is not likely to become narrow enough for any to jostle offensively.

As a worker in one group of plants we present some questions that have suggested themselves in our work, drawing illustrations largely from the genera and species with which we are most interested, seeking not so much to offer dogmatic principles as to call to mind the feature of personal justice.

1. Shall there be an initial date in nomenclature?

What justice on the one hand, or advantage on the other, is there in accepting those of Micheli's genera that were adopted by Linnæus, and rejecting others equally valid that were not? What virtue did the great compiler add to an adopted name that should render it either sacred or immortal? We have *Anthoceros* and *Sphaerocarpus*, *Blasia*, *Riccia*, and *Lunularia*, all established by Micheli in 1729, and all accepted to-day without question, forsooth, because they have received the stamp of the immortal Linnæus, who could scarcely distinguish a hepatic from other Bryophytes. And yet Micheli, the founder of generic distinctions among Cryptogams, who knew and studied plants, adopted other generic names at the same time; these the great Linnæus did not accept because he could not get down to the study of plants and learn to distinguish genera among hepatics and other Cryptogams. Are we of this age so blinded that we must fall down and worship this popularizer of botany and accept his dictum as against that of a man whose shrewdness enabled him thus early to discriminate genera among Cryptogams?

But we must have a starting-point, some say. Why not then commence genera with the men who first originated them? Let us not award merit where merit is not due. Let us not assume for Linnæus a virtue that he did not possess. Micheli, Ruppius, and Dillenius were the originators of genera among hepatics. Why not recognize their genera that represent natural groups? If others are the progenitors of genera in other groups of plants, there is no reason why their work should not also stand, provided their names were not already preoccupied.

2. Shall names long used be laid aside when claimed for other plants on grounds of strict priority? Shall we recognize the principle of outlaw in nomenclature?

For example, *Marsilea* (Micheli, 1729) is a hepatic which since Raddi's time (1818) has been known as *Pellia*. *Marsilea* Linn. has since its establishment been used for a genus of quadrifoliate Pteridophytes. Shall the latter stand in the face of evident priority? While a compromise of this kind,