tention, and that the case was not fully covered by the regular international rules on nomenclature, it is clear that it might be settled in one of two ways: either by making a special ruling with regard to it, or by inserting a paragraph in the general set of rules, which would cover it.

Both ways have been used: the first is the ruling given in opinion 11; the other is the second paragraph in Art. 30, II. (g), in the "International Rules of Zoological Nomenclature," as published in the Proceedings of the Seventh International Zoological Congress, 1912, p. 46. This says:

The meaning of the expression "select the type" is to be rigidly construed. Mention of a species as an illustration or example of a genus does not constitute a selection of a type.

Every one familiar with the case knows that this paragraph was added to the rules with the special purpose of disposing of the doubt as to the meaning of Latreille's word *type*. At any rate, I know of no other case where it might be applied.

The two decisions are contrary to each other. The ruling made in opinion 11 accepts Latreille's "types" as genotypes in the modern sense. The paragraph under Art. 30, quoted above, forbids it to accept them as genotypes. For there is not the slightest question that Latreille meant the word type in the sense of illustration or example, for the other sense did not exist at that time. The argument (opinion 11, p. 18) that the use of the definite article (l'espècè) indicates that it was meant in the latter sense, is simply preposterous, since by substituting "une espècè" for "l'espècè" the sense of the sentence would not be changed at all.

It is much to be regretted that such an absurd situation has been created. Of course, this might be excused, since the opinion 11 was published two years ahead (in 1910), while the amendment to Art. 30 of the rules did not appear in print till 1912. Yet it might have been expected, for obvious reasons, that the latter should have been known to all members of the International Commission on nomenclature as early as 1907.

Of course the paragraph of the regular rules should prevail. But in order to remove all doubt in the minds of zoologists not familiar with the facts, and in order to avoid that the rulings of the commission might become a farce, one of the next "opinions" to be published should reverse opinion 11. But whether it is expressly repealed or not, opinion 11 can not stand any more, and zoologists not conforming to it should not be criticized for it.

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SCIENTIFIC BOOKS

The Omaha Tribe. By ALICE C. FLETCHER, holder of the Thaw fellowship, Peabody Museum, Harvard University, and FRANCIS LA FLESCHE, a member of the Omaha tribe. Twenty-seventh Annual Report of the Bureau of American Ethnology, 1905-06. Washington, Government Printing Office. 1911. Pp. 672, plates 65, Figs. 132.

The most obvious thing about this monograph is the authors' well-nigh complete neglect of the work of their predecessors. It is their avowed purpose (p. 30) to borrow nothing from other observers and to present "only original material gathered directly from the native people." Apart from any considerations of historical justice, this principle is unjustifiable from the standpoint of the student. A work so ambitious will naturally be regarded by almost every reader as definitive, as embodying everything that is known concerning the ancient life of the Omaha and as taking cognizance of all additional and contradictory testimony. In both hopes he will be disappointed. There are subjects on which other observers have collected information not furnished by Miss Fletcher and Mr. La Flesche. The parent-in-law taboo, for instance, is treated more fully in Say's notes' and in J. O. Dorsey's classical work² than in the brief

¹In James's "Account of an Expedition from Pittsburgh to the Rocky Mountains" (London, 1823), I., pp. 232-234.

² ''Omaha Sociology,'' Third Ann. Rept. Bur. Eth., pp. 262-263. paragraph of the volume before us (p. 335). Say, indeed, furnishes admirably illustrative concrete data. Why should these be withheld from the reader? Even where no additional information is given by an older writer, it is often very important to know the earliest time at which the mere existence of some custom has been recorded. This is especially true of the Plains area where so much diffusion has demonstrably occurred. Yet the authors feel at liberty to ignore the fact that the office of "crow"-wearing policemen for the buffalo hunt was noted by Say³ as early as 1820. Again, few subjects have aroused more interest among American ethnologists than agesocieties and military organizations. J. O. Dorsey's data⁴ on these are meager enough, but the authors have practically not a word on either.

The neglect of contradictory evidence gathered by others constitutes a still more serious defect, because the unwary reader thus obtains a one-sided, unduly simplified picture of the condition of affairs. According to Miss Fletcher and Mr. La Flesche, the Black Shoulder gens had two subgentes, one of which was still further subdivided. We get no suggestion that there was any conflict of opinion among their informants or that any change may have occurred in relatively recent times. Additional names, however, are given by J. O. Dorsey,⁵ who carefully recounts the contradictory statements of his native authorities and hints at recent changes in the subgentes. With reference to two gentes the authors state that lesser groups within these units "have been mistaken for subgentes" (pp. 172, 178). Had notice been taken of J. O. Dorsey's data, it would be possible to understand what may be meant by these words. As it is, we may assume with some plausibility that the phrase is a covert criticism of J. O. Dorsey, for that writer undoubtedly does speak of "subgentes" where his successors find only "groups." However, a reference to

* Op. cit., p. 189.

Dorsey's text⁶ and to the authors' definition of a "subgens" reduces the criticism to a verbal misunderstanding. Miss Fletcher and Mr. La Flesche (p. 137) understand by "subgens" a section of the gens that has a distinctive rite, while a "subdivision" or "group" has none, though it had a particular office in the rite belonging to the gens. Dorsey does not understand by "subgens" anything of the kind. He tells us that in his opinion two of his main informants always mean a classification for marriage purposes when they speak of divisions of a gens, and it is clear that this feature is uppermost in his own mind whenever he uses the term "subgens." If the authors' criticism is meant as an innuendo against Dorsey, it is not only disingenuous but incorrect.

It is very interesting to examine the solitary instance of open criticism directed by the authors against their great predecessor. They write (p. 589, footnote):

The statement has been made (11th Ann. Rep. Bur. Ethnol., 542), "In two of the buffalo gentes of the Omaha (the Iñke-sabě and Hañga) there is a belief that the spirits of deceased members of those gentes return to the buffaloes" and the buffalo is spoken of as "the eponymic ancestor." The writer here cited fell into the error of regarding the animal which furnished the peculiar symbol in the rites of these kinship groups as the progenitor of the members of the groups. No such confusion seems to have existed in the Omaha mind. Men were not believed to be descended If the expressions "Buffalo from animals. people," "Elk people," "Deer people" or "Thunder people" were used, these descriptive terms were not employed in a literal sense but as tropes.

A little farther (p. 601) we read a still more categorical denial:

Although, according to the Omaha view, man is so closely connected with the animals, he was not born of them; no trace has been found showing any confusion or mixture of forms; no Omaha believes that his ancestors were elk, or buffalo, or deer, or turtle, any more than that they were the wind, the thunder or the sky.

This criticism, whatever be its merits, is • Op. cit., pp. 242, 245, 258.

^{*} Op. cit., pp. 342, 352.

^{*} Ibid., pp. 230-231.

dishonest in selecting for its point of departure an incidental statement in a work not specially devoted to the Omaha, instead of taking the fuller accounts in the "Omaha Sociology."' In this paper there is given the translation of the words employed in addressing a dying Inke-sabe, and these words certainly imply a belief that the person addressed is going to rejoin his ancestors, the buffalo. On the same page Dorsey also cites a legend in which the Inke-sabe are said to have been at one time buffalo. If Dorsey's critics wish to say that he has mistranslated his informant's words, they should so state. If they wish to say that he has sucked his information out of his thumbs, they should so state. If they wish to say that his informants did not represent the consensus of Omaha opinion, they should so state. They should state further that Dorsey himself does not hesitate to tell us that the legend was unknown to two of his best informants. Dorsey was ahead of his generation and of some of the succeeding generation in not suppressing data that might interfere with the smoothness of his tale.

"The Omaha Tribe" must, however, be considered primarily as a field report. Judged from this point of view, it will be found wanting in several respects. In the first place, the tremendous wealth of concrete material is classified according to canons of aboriginal rather than of scientific logic. Thus, the Medicine Pipe ceremony is described under the heading of Music, apparently because its native name means "to sing for some one." Data on agriculture and hunting are assembled with those on the ritual of the maize and the ceremonial hunt. "Social Life" is made to include not only such legitimate topics as kinship terms, courtship and marriage, and etiquette, but also cooking and foods, dressing and tanning skins, quill work, weaving, personal adornment and clothing.

Secondly, there are large fields of ethnological interest that the authors either do not touch at all or treat in a very unsatisfactory manner. Foremost among these is mythology and folklore. Inconsistent as such a supposi-

⁷ L. c., pp. 229, 233.

tion is with the authors' general attitude, we are tempted to assume that their failure to enter into these subjects is an expression of their admiration for the thoroughness with which J. O. Dorsey has accomplished the task that was to be done in this field." Unfortunately the reader does not profit by this exhibition of tacit generosity. For all he could learn from Miss Fletcher and Mr. La Flesche, there has never been published any systematic collection of Omaha tales. Moreover, the fact that a splendid collection exists does not absolve monographers of a tribe from the duty of briefly characterizing the native mythology with reference to both substance and form and of showing its relations to other mythologies. The few paragraphs devoted to this matter in the volume before us (pp. 600, 601, 608) can not be regarded as even a serious attempt in this direction.

Another very remarkable deficiency appears in the discussion of material culture and art. The fact that these subjects are treated with disproportionate brevity is a venial fault, for there are few monographs in which all phases of culture are treated with uniform thoroughness, and some allowances must be made for individual interests. But every professional ethnologist may reasonably be expected to pay some attention to points that have come to be of theoretical interest to his fellow-students. Many questions of this sort relating to the material culture of the Plains Indians have been indicated by Dr. Wissler.' but very few of them are elucidated by the authors. We do not learn anything of the form of the travois mentioned on page 275; the description of the cradle-board (p. 327) is too vague for comparative purposes; no opinion is expressed as to the antiquity of the men's shirt among the Omaha (p. 355). As the distribution of painted and embroidered patterns has been diligently studied among the Plains Indians for at least ten years, and as Kroeber

""The Cegiha Language," Contributions to North American Ethnology, Vol. VI.

• "Material Culture of the Blackfoot Indians," Anthrop. Papers Amer. Mus. Nat. Hist., Vol. V., Pt. 1. and Wissler have attempted to characterize the art of several Plains tribes, the failure of the authors to furnish the data necessary for classifying the Omaha with reference to their decorative designs is even more surprising.

The subjects that have particularly appealed to the authors are sociology and ceremonial life. The chapter on Tribal Government constitutes a real contribution, giving a clear outline of the several grades of chiefs, the council of seven chiefs and the modes of election. The discussion of the Sacred Pole is also a creditable performance, though it adds rather details than anything fundamental to our previous knowledge. The analogies pointed out by J. O. Dorsey between the Hedewatci and the Sun Dance stand confirmed by the new evidence (p. 253). Unfortunately, in these chapters, as elsewhere, there appears the tendency, now definitely abandoned by ethnologists, of attaching historical value to the origin accounts of a primitive tribe, in spite of their naïvely rationalistic psychology. Though the authors seem to regard the establishment of the chiefs' council as "a development of earlier forms rather than an invention or arbitrary arrangement of the 'old men'" (p. 207), other passages clearly reveal the antiquated view just criticized. In the section on Tribal Organization (p. 134 ff.) we are actually asked to believe that the dual division of Omaha society was but the reflection of a mythological conception! This whole section adds very little to our comprehension of the subject. The specific marriage-regulating functions of the subgentes, touched upon but not clearly expounded by Dorsey, remain unilluminated. What is more important, the authors have not logically correlated their own data. We are told that the gens was exogamous (pp. 195, 325); that the subgens or subdivision of a gens was exogamous (p. 137); that there was a tradition as to the exogamous character of the two grand divisions and that "of the marriages in existence among the Omaha twenty-five years ago, a good majority represented the union between members of gentes belonging to the two rather than to one of these grand divisions" (p. 135). Do not the authors recognize the fact that if a gens is exogamous, any smaller group within the gens must be exogamous; that if an association of five gentes is exogamous, any one of the gentes must be exogamous? The problem is to determine which social group is primarily, and which derivatively, exogamous. This it may not be possible to do at present, but it is at least desirable that professional ethnologists should see the problem.

The terms of relationship (pp. 315-17) are not presented in a satisfactory way, though it is true that the subject is an exceedingly difficult one. Here, where the entire psychological interest lies in the native point of view, the authors take for their starting-point the *English* classification of kin. The consequence is great clumsiness of arrangement and useless repetition of terms. Moreover, some interesting meanings of native terms given by Say are omitted in the present list.

By far the most valuable addition to our knowledge is to be found in the chapter on Societies (pp. 459-581), of which two classes are distinguished-the social and the secret societies. The former include the Hethushka (Grass Dance) organization, membership in which was dependent on the reception of public war honors. Our attention is called to the fact that, while the dance has spread over a wide area, only the Omaha observe the religious rites of the opening ceremony. Another (chiefs') society is said to have been the only one "in which headgear that approximated the character of a mask was used" (p. 481). It would be interesting to know whether these headgears resembled those worn by two officers of the Mandan Bull society,¹⁰ in which the face was covered and eyeslits were provided. According to Dorsey," mere buffalo-skin caps, with the horns standing up and the buffalo hair hanging down below the wearer's chest, were worn by four members of another Omaha organization, the Buffalo Dancers. It is curious that in mentioning the Tokalo (Tukala) performance neither Miss Fletcher

¹⁰ Maximilian Prinz zu Wied, "Reise in das innere Nord-America," II., p. 142.

¹¹ Op. cit., p. 348.

nor Dorsey should have recognized the name as the Dakota term for "fox" or "kit-fox."

Most of the secret societies were entered by virtue of a dream or vision, those having received a revelation from some particular supernatural power being united in the same organization. This does not, however, apply to the Shell society, into which persons were admitted by unanimous consent of the members. All the offices in the last-mentioned society were obtained by purchase; in the other organizations this element, which plays so important a part among several of the Plains tribes, does not seem to be pronounced. Societies composed exclusively of women have not been found among the Omaha (p. 459), but women were evidently prominent in the Shell society, and tradition states that in early times its principal leader was a woman (p. 516). The Shell and the Pebble societies perform shamanistic practises, of which a "shooting" ceremony common to both recalls the Midewiwin of the Central Algonkian, and the authors incline to the opinion that the two societies are historically related. From the fact that the Pebble rituals deal with "more fundamental conceptions" than the origin myth of the Shell society they infer that, granting the relationship, the Pebble society is the older of the two (p. 529). Indeed, there is evidence that at least one of the elements of the Shell performance, the use of a swan wing, has been borrowed from the Pebble society (p. 519); and the description of the "shell" as a round stone in one of the ritualistic songs (p. 529) is interpreted by the authors as pointing in the same direction. Nevertheless, it is quite possible for one society to have borrowed special features from another without being necessarily of later origin in the totality of its traits. As for the relatively more fundamental character of the Pebble society, the authors do not explain what may be their criterion of greater antiquity or primitiveness. One thing is clear: the comparison of the ritual of one organization with the origin myth of another is unjustifiable, though consistent with the authors' belief that the Shell society was founded upon the myth accounting

for its origin (p. 516). Such a view has become less and less tenable as proof has accumulated in different areas that ritual is primary and ritualistic myth secondary.

While the evidence for the greater antiquity of the Pebble society is thus inconclusive, the authors' opinion on the historical connection between the Pebble and Shell organizations seems to me correct. It has been challenged by Radin,¹² but apparently on the basis of **a** single loose and misleading statement by the authors, viz.,

As these two societies are the only ones in the tribe which observe shamanistic practises and as they both strongly emphasize magic, it is not impossible that at one time they may have been connected (p. 581).

Radin quite properly objects that the observance of shamanistic tricks is too general a phenomenon to warrant the conclusion and that it is unnecessary to assume any historical connection "unless this has been shown to be the case." The authors certainly should have defined what they meant by "shamanistic," but it seems clear that they do not use the term in the accepted sense but with some specific connotation. For to nearly every one of their secret societies they ascribe what others might call "shamanistic practises," yet these are said to be confined to the two societies under The authors have obviously ardiscussion. rived at their view because common to both societies are several specific features, such as organization by lodges and the shooting ceremony. These features are not found in the Bear and Buffalo and Ghost societies; they are, therefore, not generally phenomena of Omaha life, and their double occurrence is not explained as a mere reflection of Omaha modes of thought. Whatever may be the origin of other elements of the two ceremonial complexes, the traits mentioned have had, in all probability, a common origin.

The foregoing paragraphs have pointed out with sufficient clearness the character of Miss Fletcher and Mr. La Flesche's book. The au-

²² "The Ritual of the Winnebago Medicine Dance," Journal of American Folk-Lore, XXIV. (1911), p. 191. thors have placed us under obligation by adding a considerable number of facts to our knowledge of the Omaha, notably on the subject of societies. They have not accomplished the task of giving us a definitive study of Omaha ethnology. We feel grateful for the new data presented by them, but we are also very grateful for the fact that they have had for their predecessor so sane, conscientious and competent an ethnographer as the late Rev. J. O. Dorsey.

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BOTANICAL NOTES

NOTES ON RECENT BOOKS AND PAMPHLETS

GEORGE F. ZIMMER'S "Popular Dictionary of Botanical Names and Terms" (Dutton) is intended mainly for botanists, horticulturists and others who have to deal much with plant names. The little book of 122 pages is a little different from the usual type of botanical dictionaries, more attention being given to the meanings of specific names, and this will commend it to many students who are somewhat deficient in their knowledge of Latin. For those it would have been well to have at least indicated the accent for each name.

The little books brought out by Dr. Gustav Lindau, of Berlin, under the general title of "Kryptogamenflora für Anfänger" promise to furnish models which might well be followed by American makers of similar books. Already three books have appeared, namely: "Die höheren Pilze"; "Die mikroskopischen Pilze"; and "Die Laubmoose." Bound in substantial cloth, and containing about 250 pages, these books commend themselves to us as admirably adapted for their purposenamely, that of helping beginners in the systematic botany of the lower plants.

Bergen and Caldwell's "Practical Botany" (Ginn) aims to relate the study of plants in the secondary schools to everyday life more "than is usually done." Accordingly the book is distinctly of the informational rather than the scientific type, and for this reason will appeal to many principals and boards of education. The present reviewer is not in sympathy with the notion that science must always be related to "everyday life" (whatever that may imply), but he finds much to commend in the book. The authors know the science. and pedagogics so well that they have made a useful book, whose faults are due to the underlying theory rather than to any shortcomings on their part. This theory is accountable for the chapters on Timber, Forestry, Plant Breeding, Plant Industries, Weeds, which contain much that is certainly interesting, but that is just as certainly not botany. It would be much better for the botanists to allow these applications and extensions of botany to be taken up by foresters, agronomists, horticulturists, agriculturists, etc., a task for which they are entirely competent. We should respect the boundary lines between a science and its applications.

Winkler's "Botanisches Hilfsbuch" (Hinstorff) gives interesting data regarding about twelve hundred plants (mainly tropical) that have economic value. Although primarily designed for tropical planters, merchants, officials and explorers, it will be found to be a useful book in every botanical library.

The Dudley Memorial Volume published by Stanford University contains papers, appreciations and contributions in memory of the late Professor William R. Dudley who died June 4, 1911. In addition to the memorial addresses and papers and lists of Professor Dudley's pupils (covering 32 pages), the volume includes eight scientific papers. The first of these-" The Vitality of the Sequoia gigantea"-was prepared by Professor Dudley himself. The others are "The Morphology and Systematic Position of Calycularia radiculosa," by D. H. Campbell; "Studies of Irritability in Plants," by G. J. Peirce; "The Gymnosperms growing on the Grounds of Stanford University," by LeRoy Abrams; "The Synchytria in the Vicinity of Stanford University," by James McMurphy: "The Law of Geminate Species," by D. S. Jordan; "Some Relations between Salt Plants and Salt Spots," by W. A. Cannon; "North American