

future time, a comparison of the fauna of this region with that of the life of similar reefs in Samoa or Tahiti would be highly instructive.

Surely there can be no place on our Atlantic coast which would give handsomer returns for such an outlay. The only objection is the relative inaccessibility of the Tortugas.

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SHORTER ARTICLES.

SOME LITTLE-KNOWN BASKET MATERIALS.

BASKET collectors have been much puzzled over the identity of two materials which are extensively used by some of the California tribes. One of these forms the body surface of most of the coiled baskets made by the Indians inhabiting the lower slopes of the Sierra from Fresno River south to the Kern. These baskets are celebrated for excellence of workmanship, beauty of form, elegance of design and richness of material. The material differs in tone and texture from that used by the tribes north and south of the region indicated. When fresh its color is brownish-buff; with age it becomes darker and richer. By careful selection a handsome dappled effect is produced. The Indians told me it was the root of a marsh plant which they traveled long distances to procure. After some difficulty I succeeded in obtaining specimens, which were identified for me by Miss Alice Eastwood, botanist of the California Academy of Sciences, as *Cladium mariscus*. The coil, around which the split *Cladium* root is wound, consists of a bundle of stems of a yellow grass, *Epicampes rigens*. The black in the design is the beautiful root of the 'bracken' or 'brake fern,' *Pteridium aquilinum*. The red is usually split branches of the redbud, *Cercis occidentalis*, with the bark on, gathered after the fall rains when the bark is red. The tribes making the *Cladium* baskets are the Nims, Chukchancys, Cocahebas, Wuksaches, Wikthumnes, Tulares and perhaps one or two others. Besides these, the root is sometimes used by certain squaws of the Mewah tribe living north of the Fresno, and by the Pakanepull and Newooah tribes

living south of the Kern; but among these its use is exceptional.

Another material which has proved a stumbling block to collectors is the red of the design in the handsome baskets made by the Kern Valley, Neewooah, and Panamint Shoshone Indians. This material is often called 'cactus root,' but in my recent field work in the region where it is used I discovered that it is the unpeeled root of the tree yucca (*Yucca arborescens*). The tree yucca grows in the higher parts of the Mohave Desert, pushes over Walker Pass, and reaches down into the upper part of the valley of South Fork of Kern. The so-called Tejon Indians obtain it in Antelope Valley at the extreme west end of the Mohave Desert. The yucca root varies considerably in depth of color, so that by careful selection some of the Indian women produce beautiful shaded effects and definite pattern contrasts.

Some of the Panamint Shoshones inhabiting the desolate desert region between Owens Lake and Death Valley use, either in combination with the yucca root or independently, the bright red shafts of the wing and tail feathers of a woodpecker—the red-shafted flicker. These same Indians use two widely different materials for their black designs—the split seed pods of the devil's horn, *Martynia*, and the root of a marsh bulrush, *Scirpus*. The *Martynia* is a relatively coarse material and when properly selected yields a dead black. The *Scirpus* root is a fine delicate material which, by burying in wet ashes, is made to assume several shades or tones, from blackish-brown to purplish-black, or even lustrous black.

In parts of the Colorado Desert in southeastern California the Coahuila Indians use split strands from the leaf of the desert palm (*Neowashingtonia filamentosa*) as a surface material for their coiled baskets. The design is usually black or orange-brown and is a rush (*Juncus*).

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A NOTE ON PHRYNOSOMA.

IN 'The Cambridge Natural History,' Vol. VIII., on 'Amphibia and Reptiles,' by Hans Gadow (London, 1901), on p. 533, regarding

the genus *Phrynosoma*, the author says, 'All the species are viviparous, almost the only instance among Iguanidæ.'

This statement, which is as given in the older works on reptiles, does not apply to *Phrynosoma cornutum* of Texas, as I showed in my 'Notes on the Biology of *Phrynosoma cornutum* Harlan' in the *Zoologischer Anzeiger*, No. 498, 1896 (also *SCIENCE*, N. S., Vol. III., No. 73, pp. 763-5). In that paper I described the nest building and ovulation for the above species.

As pointed out by R. W. Shufeldt in *SCIENCE*, September 4, 1885, pp. 185-6, and later *SCIENCE*, N. S., Vol. III., No. 76, pp. 867-8, June 12, 1896, *Phrynosoma douglassii* is viviparous, so that the genus *Phrynosoma* contains both oviparous and viviparous species.

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A NOTE ON NOMENCLATURE.

Festuca spicata Pursh. Fl. Am. Sept. 83. 1814.

Agropyron divergens Nees in Steud. Syn. Pl. Glum. 347. 1855.

A. spicatum Rydb. Mem. N. Y. Bot. Gard. 1: 61. 1900 (Cat. Fl. Montana).

Agropyron glaucum occidentale Scribn. Trans. Kan. Acad. Sci. 9: 119. 1885.

Agropyron spicatum Scribn. & Smith, Bull. U. S. Dept. Agric. Div. Agrost. 4: 33. 1897.

Agropyron Smithii Rydb. Mem. N. Y. Bot. Gard. 1: 64. 1900 (Cat. Fl. Montana).

Agropyron occidentale Scribn. U. S. Dept. Agric. Div. Agrost. Circ. 27: 9. 1900.

Festuca spicata Pursh.

"F. spiculis alternis sessilibus erectis subquinquefloris, floribus subulatis glabriusculis, aristis longis scabris, foliis linearibus culmoque glabris.

"On the waters of Missouri and Columbia rivers. June. v. s. in Herb. Lewis."

Steudel published '*Triticum divergens* Nees. (mpt. sub. *Agropyrum*)' based on a plant collected by Douglas. This is the common wheat grass of the Northwest, usually with long-awned spikelets.

Another common species of the Great Plains, often called blue joint or blue stem, had for years been identified with *A. repens* Beauv. or *A. glaucum* R. & S. of Europe. In 1885 Professor Scribner made this a variety (*occidentale*) of the latter European species. Twelve years later Scribner and Smith, in their review of the genus *Agropyron*, raised this to specific rank, but with the name *A. spicatum*, as they believed it to be the same as Pursh's *Festuca spicata*.

Mr. Rydberg, having examined Lewis's specimen in the Herbarium of the Philadelphia Academy, decides that *Festuca spicata* Pursh is identical with *Agropyron divergens* Nees and, following the Rochester Code, re-names the plant *A. spicatum* Rydb. But there was already the *A. spicatum* S. & S., which must receive a new name, *A. Smithii* Rydb. Then Professor Scribner calls attention to the earlier varietal name *occidentale*, which must be taken up, and we have *A. occidentale* Scribn., or more consistently, if the parenthesis is used in citations, *A. occidentale* (Scribn.) Scribn.

If a later botanist examines the type and decides that it is *A. Vaseyi* Scribn. & Smith or some other species, another change must ensue. It seems to be a case of he laughs best who laughs last.

The object of reciting this piece of nomenclatorial history, which might be duplicated many times, is to point out the mischief which arises from allowing a specific name to have priority over a binomial. I am not sure that the Rochester Code compels this, but it seems to have been so interpreted by many botanists.

Rule 3, as given in Britton and Brown's 'Illustrated Flora,' states that: 'In the transfer of a species to a genus other than the one under which it was first published, the original specific name is to be retained.' This is unequivocal, as no exceptions are made. Rule 5 seems to prohibit the use of *Agropyron spicatum* for any species later than that to which it was first applied. (Rule 5: 'The publication of a generic name or binomial invalidates the use of the same name for any