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The West-American Scientist.

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A popular review and record for the Pacific Coast. { PUBLISHED MONTHLY BY C. R. ORCUTT. } Entered as second-class matter at San Diego Post-office

BEAUTY.

MRS. C. K. SMITH.

There's beauty in the virgin spring,
When in the wood she weaves her bowers;
There's beauty where the wild birds sing,
And echoes start among the flowers.

There's beauty in the pine-clad mount,
Where zephyrs sigh and tempests fall;
There's beauty in the gushing fount,
Where Heaven's arch is over all.

There's beauty in the humble flower,
In meadow, grove or green hill side;
A beauty of enticing power,
Wherever lovely flowers abide.

There's beauty in the silver moon,
The twinkling stars that shine by night;
That on our world look mildly down
And glad us with their mellow light.

There's a beauty which never dies,
A beauty of the rarest kind;
It claims its kindred in the skies,
It is the beauty of the mind.

When this in kindness, truth and love,
Beams forth upon mankind,
We own its source is from mankind.
And feel its power divine.

SAN DIEGO, February 13, 1885.

THE PERICUE INDIANS.

BY L. BELDING.

Probably these Indians were never numerous though the Victoria mountains would have supported a large population.

Father Baegut says there were 4,000 Indians in the southern part

of the peninsula of Lower California when the missions of Santiago and San Jose del Cabo were destroyed by them in the year 1734, but that they numbered only 400 in 1772 (Chas. Rau, Sm. Rp. 1864 p 384)

It was a prime object with my companion Dr. H. Ten Kate, of the society of anthropology of Paris, and myself as well, to find a living representative of the original Lower Californian, which we probably found on the Rancho San Jacinto, owned by the Vallerrino family. But we could get no positive or definite information concerning this Indian woman, who must have been about seventy-five years old, although from La Paz to Cape San Lucas she was universally reputed to be a pure blooded Indian. She differed widely from the Yaquis and other Indians from the east side of the Gulf, being of good stature, robust form and dark complexion, with a cranium which resembled those found in the caves.

Dr. H. Ten Kate offered to photograph the hacienda and its occupants, hoping by this means to get her photograph, but his diplomacy failed, although backed by our distinguished guide, Don Juan Dios Angoula, who had long been a friend of the family.

We saw three of her children who were good examples of the

better class of Mexicans, their father having been a Mexican or Spaniard. This woman is probably the only living pure blooded native south of 24 degrees 30 minutes.

The Indians of Lower California south of 24 degrees 30 minutes buried their dead in caves below shelving rocks, without regard to the points of the compass, usually painting the bones, but how they made the bones clean and ready to be painted is still unknown. At Zorillo we were shown a small cave in a granite rock by our local guide, who said that an Italian collector, several years before, had found bones of a "gentile," the Mexican name for an Indian or heathen.

The sand in the cave was dry, coarse disintegrated granite, about a foot deep. By digging in it I found the well preserved skeleton of an adult male Indian, who was perhaps the last of the Pericues. This skeleton was wrapped in cloth made from the bark of the palm and bound with three ply cord which had been plaited as sailors make sennit, the material being fiber of the agave. Dr. W. H. Dall mentions in the Smithsonian contributions to knowledge, number 318, that the mummies of the Aleutian Islands, were bound with cord quite similarly braided in square sennit.

The package, which was about twenty inches long, did not appear to have been disturbed since burial, although a femur and some small bones were missing, and nearly all of the bones had been unjointed. The bones of the hand

were inside of the skull, which was full of small bones and sand. Meanwhile Dr. Ten Kate found the skeleton of a girl about twelve years old. This was also in excellent condition, although differing from those found elsewhere, in not having been painted, a rare exception. For the skeletons found by Dr. Ten Kate on Espiritu Santo Island, at Encenada and Los Martires, which he kindly allowed me to inspect, had all been painted the usual brick red, with the exception of one the Doctor found at Los Martires which had a skull of very inferior, almost idiotic form.

The few bones we afterwards found in a cave near Candelario and several skeletons found at San Pedro by Dr. H. Ten Kate had also been painted. All of the skulls were of one general form, namely, the pyramidal—high, long narrow, with wide, prominent cheek bones.

The only ornaments, or other objects of aboriginal handiwork found with the skeletons, were two small, neatly worked, pearl oyster shells, which were in the package with the boues of the young girl found at Zorillo. These shells had been polished on the convex side, the edges finely serrated and pierced at the apex as if to be suspended about the person for ornament.

Our readers are presented this month with a very valuable table computed from thirteen years observation at the signal service of this place, and for which we are indebted to the kindness of J. C. Sprigg, Jr., Sergt. S. S.

Meteorological Data compiled from 13 years observations at San Diego, Cal. including the year 1884.

SEASONS	TEMPERATURE						MONTHS	RELATIVE HUMIDITY		RAINFALL	
	AVERAGE FOR		MAXIMUM OF EACH		MINIMUM OF EACH			AVERAGE FOR	Av'rge	Total	
	M'nths	Seas'n.	M'nths	Seas'n.	M'nths	Seas'n.		M'nths	Seas'n.	Month	Seas'n.
Spring	55.7		99.0		38.0		March	75.5		1.38	
	57.7	58.1	87.0	*99.0	39.0	38.0	April	73.0	74.0	0.84	2.63
	61.0		94.0		45.4		May	73.6		0.41	
Summer	64.4		94.0		51.0		June	74.2		0.07	
	67.1	66.7	86.0	94.0	54.0	51.0	July	76.6	76.0	0.02	0.37
	68.7		91.5		54.0		August	77.2		0.28	
Autumn	66.8		101.0		49.5		September . .	76.3		0.04	
	62.9	62.7	92.0	101.0	44.0	38.0	October	72.0	71.8	0.49	1.14
	58.3		85.0		38.0		November . . .	67.1		0.61	
Winter	55.1		82.0		32.0		December . . .	69.2		2.41	
	53.7	54.4	78.0	82.6	32.0	32.0	January	70.6	71.3	1.81	6.83
	54.3		82.6		35.0		February	74.1		2.61	
Annual Average.	60.5		HIGHEST *101.0		LOWEST 32.0			73.3		10.97	

The Average Relative Humidity between sunrise and sunset is about 9 per cent. lower than recorded in above table. Prevailing direction of wind is West.

CASTOR OIL PLANT.

The castor oil plant of commerce is obtained from the nuts of *Ricinus communis*, a euphorbiaceous plant supposed to be a native of Barbary but now widely naturalized in Africa, the south of Europe and America. The oil is a mild purgative, but the entire plant possesses active properties. The ancients administered the seeds entire but their variable action, producing sometimes fatal effects, led to their disuse.

Castor oil is much used in oriental countries and the south of Europe for burning, as well as a medicine, and its manufacture is actively carried on at St. Louis the beans being produced in southern Illinois. The method of extracting

the oil is simple the product equals about one-third of the seeds employed, and when of a good quality is a thickish fluid of a very pale yellow color.

The castor plant is naturalized to a considerable extent in the vicinity of San Diego, where it forms a fair sized shrub equal to any of the indigenous plants and its cultivation in the future may furnish another profitable industry for southern California.

*An unusual degree of temperature continuing less than two hours, and due, no doubt, to forest fires, which were raging at the time in the vicinity of San Diego.

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SAN DIEGO, CAL., MARCH, 1885.

ERITRICHIMUM.

Dr. Asa Gray, in recent contributions to the botany of N. A., reduces *Eritrichium* to a subgenus of *Omphalodes*, distributing the species through several genera, the larger number falling to *Krynitzkia* and *Plagiobothrys*, two genera formerly suppressed which are now reestablished.

The check-list of our plants is changed as follows, the species of *Eritrichium* becoming;—

- Krynitzkia californica*, Gray.
var. *subglochidiata*, Gray.
oxycarya, Gray.
microstachys, Greene,
angustifolia, Gray.
barbigera, Gray.
intermedia, Gray.
muriculata, Gray.
Jonesii, Gray.
micrantha, Gray.
var. *lepada*, Gray
circumscissa, Gray, L. Cal.
pterocarya, Gray.
ramosissima, Gray, (E. *ramosum*.)
Jamesii, (S. Bernardino.)
leucophaea, S. E. Cal.

Echidiocarya urcina becomes *Plagiobothrys ursinus*, and *E. californica*, P. Cooperi.

ZOOLOGICAL NOTES.

W. H. Dall of Washington, D. C., finds upon the examination of the animals of *Nacella depicta* and *N. paleacea* that they belong to the genus *Acmaea* instead of *Nacella*.

J. J. Rivers of the University of California, has collected some small corals, *Balanophyllia elegans* (Verrill) on rocks a little below low water mark at Monterey. The animal is of a beautiful red color and might easily be taken for a small actinia.

A new work on the land shells of North America, by W. G. Binney, to be published by the Smithsonian Inst., is now in press.

A small slug, perhaps undescribed, has been found in this county and in Lower California, and is now in the hands of an eminent foreign scientist for determination.

Pearls are sometimes found in the common California mussle.

Mr. J. W. Huggins, of this city, discovered in his garden a small bird, evidently fastened in a tree which upon approaching was stimulated to a successful effort to escape. It was found that it had left several of its tail feathers which had been securely fastened to the tree by a strong spider's web.

The same observer noticed another bird in evident distress which also escaped upon his approach, leaving several feathers in the mouth of a scorpion's burrow.

OUR PENINSULA FLORA.

Visiting on the 4th instant, the low mesa of the peninsula in front of the city of San Diego, the shrubs of the southern portion were found to consist mainly of *Rhus integrifolia*, growing in dense clumps a few feet high. *Simmondsia Californica* of only a foot in height, forming thick mats several feet in diameter upon the earth, *Ephedra Californica*, *Artemisia Californica*, and tallest of all *Yucca baccata* with trunks six feet high, already budded to bloom while the other shrubs were all in full bloom, except the *Artemisia*. *Clematis pauciflora* was trailing over them with a profusion of flesh-colored flowers, and an occasional vine of *Megarrhiza Californica* in fruit and flower.

Among the bushes were the blue heads of *Brodiaea capitata*, the purple *Mirabilis californica*, *krynitzkias*, *Phacelia tanacetifolia*, *Nephila racemosa*, *mosackia glabra*, *Lupinus truncatus* and a few other flowers, while beneath them grow *Pterostegia*, *Tillæa minima* and other inconspicuous plants.

A few cacti grew along the edge of the mesa in company with *Lycium Californicum*, *Ergonum fasciculatum*, *Frankenia*, *Bigelovia*, etc., while the space between the clumps of bushes was occupied by *Enotheras*, *Euphorbia polycarpa*, *Senecio*, *alfillaria*, *Draba cuneifolia*, interspersed with small clusters of *astragalus* or crazy weed, cotyledons, ice plants and stones ornamented with bright colored lichens.

The peculiarities of the flora are still undeveloped at this season of

the year, though most of the plants were earlier than on the mainland. The *rhus* and *simmondsia*, which grow to be fair sized trees among the hills in sheltered places, here form only low, rounded clumps.

CONTEMPORARY JOURNALS.

Journal of the New York Microscopical Society. Issued in nine monthly numbers at \$1 per year. Benjamin Braman, editor.

The American Naturalist, a popular illustrated monthly magazine of natural history and travels, \$4 per year. McCally & Stavely publishers, 237-9 Dock st., Phil.

Tidings from Nature. For young naturalists. An excellent monthly published by H. M. Downes, Rutland, Vt., at 25c per year, (after April 1st, 40c.)

Canadian Science Monthly. Devoted to Canadian naturalists and popular science. \$1 per year. A. J. Pine, editor, Wolfville, N. S.

Hoosier Mineralogist and Archaeologist. A 25c monthly. Published by H. F. Thompson, 17 Butler st., Indianapolis.

National City Record. A weekly newspaper of Southern California. \$2.50 per year. Wm. Burgess, editor, National City, Cal.

Ladies Home Journal, Dewey & Co., San Francisco, Cal. A \$1 monthly devoted to literature, art, fashion, etc.

The Collectors' Companion. A new 50c monthly devoted to stamp collectors. Published by J. H. Raymond, 162 Center st., Chicago.

Pacific Science Monthly. A new 50c journal edited by S. Bowers, San Buenaventura, Cal.

PUBLICATIONS RECEIVED.

Memorial of George Bentham, by Asa Gray. From the American Journal of Science, February 1885.

American association for the advancement of science. Constitution, list of meetings, officers and members for the thirty-third meeting, in Philadelphia, September, 1884.

The Methods of Statistics. By Dr. Franklin B. Hough. Proc. Am. A. A. Sci., 1884.

Botanical Contributions. By Asa Gray. Proc. Amer. Acad. Arts and Sci., XX. Contains a revision of some Borragineous genera, and descriptions of thirty-nine new species of gamopetalæ, with remarks on others.

Contributions to American Botany, XII. By Sereno Watson. Proc. Am. Acad. Arts and Sci., XX. Contains a history and revision of the roses of North America and descriptions of some new species of plants, chiefly from our western territories.

GENERAL NOTES.

Only about 24,000 periodicals published in the world. Subscriptions taken at this office for any or all.

Dr. Parry is now in England, and intends visiting Paris and Geneva in May, returning to America in August.

L. Belding, Superintendent of the Pacific District of the Ornithologists Union, is intending to visit the mountains of Lower California again this spring.

Prof. Asa Gray, in company with his wife and Prof. W. G. Far-

low, visited the city of Mexico on their way to Southern California, reaching San Diego on the 19th inst.

The third lecture under the auspices of the Society of Natural History was delivered by Mr. Stuart Stanley on the evening of February 26. He gave an instructive account of the Soudan and of the present condition of affairs in that country.

BOTANICAL NOTES.

Isoetes of the check-list of Southern California plants is considered a new species.

Abutilon Streetsii, Watson, ined. of the same list proves identical with an Arizona species which Prof. Watson now publishes as A. Lemmoni.

California Erythrææ are wanted for which a liberal exchange will be given. Thirty-five specimens of every species except E. venusta and E. Douglasii are desired.

Deschampsia gracilis and Bromus Orcuttianus are described as new species from San Diego, by Dr. Geo. Vasey in the February number of the Botanical Gazette.

Many aquatic plants are making no appearance this spring, owing to the lack of rain, and 1885 is now likely to prove a botanical failure as regards the coast region of California. Many of the species that do make an appearance are stunted or rare and later than usual in blooming.

There are more than 250 botanical names in the Old Testament.—Littell's Living Age.

There are probably a million stamp collectors in the U. S. All the way from \$5,000 to \$200,000 have been spent by wealthy gentlemen in perfecting collections.—Canadian Science Monthly.

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