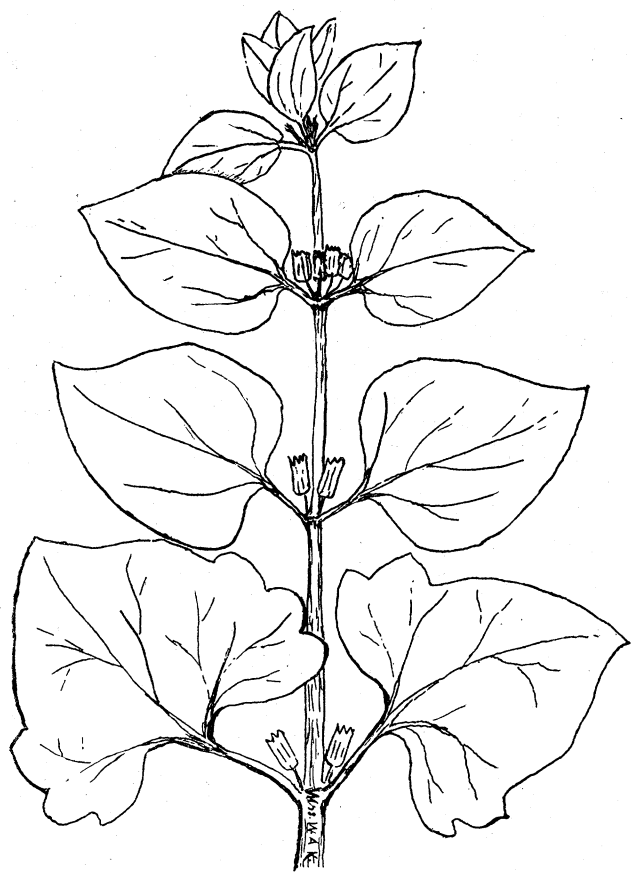


elaborate the modern catnip leaf, though we recognize its superiority over our own shape and appreciate the fact that the most advanced, progressive leaves are those most deeply notched. We are reversions to a more ancient, primitive type of leaf, like those borne by our ancestors. When our environment is such that we are starved, even at the threshold of life, we cannot adorn ourselves with the modern improvements, now so commonly worn." "You will notice," the leaves continued, "that we grew on branches of the summer's seed-stalk. The upper part of it was already dead, but the lower portion had still sufficient vitality to send out these feeble branches; they were only able to follow in the old, old rut, worn by preceding generations, and therefore we are simply what you might with propriety denominate very old-fashioned catnip leaves."

I was much impressed by this explanation, but, even though the leaves themselves had answered my query, like Thomas of old, I still doubted.



NEPETA CATARIA.

Scores and scores of plants were questioned in regard to the cause of this variation from the normal type, and in every case the same story was told. The leaves borne by the branches of the old seed-stalk were often wholly entire, or crenate only towards the base.

All the leaves which grow on the radical shoots are perfected in their crenate outline to the apex; and, while the leaves of the radical shoots are green, even at this season (January), these "old-fashion-leaved" branches have long been frozen and dead.

All things unfold according to their environment, directed by heredity. In geologic times the ancestral hereditary force pushed on the conditions; plants and animals responded by adaptation; or, where they could not adapt themselves to their ever changing environment, they were left behind, and became extinct. The law of evolution says: "Advance with me, or fall from the ranks!" Plants and animals, races, nations and tribes, are yet falling out of rank because they cannot comply with the requirements necessary to endure or cope with the constantly changing conditions.

It took the catnip we know not how long to overstep the entire

leaf; but, after studying the variation of leaves, who can doubt that the present crenate leaf is the result of evolution.

MRS. W. A. KELLERMAN.

Columbus, O., Jan. 18.

AMONG THE PUBLISHERS.

Outing readers will welcome back to its pages the now renowned world traveller and explorer, Thomas H. Stevens, who with his cycle girdled the world for *Outing*, and who has just achieved a successful expedition from the German Ocean to the Black Sea in a steam launch, despite the dangerous rapids of the Iron Gates. *Outing* for February opens with a charming description of "Cycling in Mid-Pacific," by Charles E. Trevathan, in which the author draws a pleasant picture of the natives, foliage, flowers, and the delights of wheeling over the snow-white coral roads of dreamy Tahiti.

—D. Appleton & Co. announce a new book by Arabella B. Buckley, author of "The Fairyland of Science," "Life and Her Children," etc. The title of this work will be "Moral Teachings of Science," which the author is said to have invested with special interest.

—Macmillan & Co. announce for publication early in February a practical work on electric lighting. The full title of the book is "A Guide to Electric Lighting for Householders and Amateurs," and the author is S. R. Bottone, well known by his previous books on electrical subjects. In order to make the book thoroughly serviceable to readers in this country the proofs have been read by an American scientist, for the purpose of supplying any needed explanation of merely local usage.

—Longmans, Green, & Co. have in press a work by the late Ferdinand Praeger, entitled "Wagner as I Knew Him." The book, which is the outcome of Dr. Praeger's life-long intimacy with Wagner, is a remarkably clear, sympathetic, and unprejudiced history of the man and the composer, especially valuable for its frank discussion of episodes in his life usually treated with hesitation by his biographers. Dr. Praeger had the privilege of reading Wagner's autobiography in manuscript, and thus verifying his own observations by Wagner's own statements.

—The latest publication of Professor Eben N. Horsford concerning the ancient settlements of the Norsemen in the territories of the New England States was published in large quarto size by Damrell & Upham, Boston, and bears the title, "The Landfall of Leif Erikson, A.D. 1000, and the Site of his Houses in Vineland, 1892." Leif's houses are placed on the Charles River, below the Fort Norumbega, and a short distance above Boston, Mass. The book is very profusely illustrated with photographic views and with the maps which have come down to us from the earliest explorers of the sixteenth century, and so on to the end of the nineteenth. This collection alone makes of the volume a thesaurus of cartographic information surpassed by no other recent publication. The amount of historic and topographic information gathered from all the earlier historians and other authorities on New England matters is enormous, and they are classed under appropriate headings, of which the principal are as follows: The Landfall, Expedition of Bjarni, Thorwald's Expedition to Vineland, and Sketch of the Thorfinn Expedition to Vineland. Then come a résumé, an appendix, and notes. This volume of 147 large quarto pages is printed with wide margins, holds 39 maps and illustrations, the typographic execution being of the most splendid. Simultaneously with the above was issued a pamphlet in a smaller quarto size, also provided with maps of the New England coast, entitled, "Sketch of the Norse Discovery of America at the Festival of the Scandinavian Societies, assembled May 18, 1891, in Boston, on the Occasion of presenting a Testimonial to Eben Norton Horsford in Recognition of the finding of the Landfall of Leif Erikson, the Site of his Vineland Home and of the Ancient Norse City of Norumbega, in Massachusetts, in the Forty-third Degree."

—The literature of South American ethnology has just been enriched by a fine pictorial publication in folio, being Nos. 1 and 2 of the second volume of the "Veröffentlichungen," issued from time to time by the direction of the Royal Museum of Ethnography

at Berlin (80 p. and 16 plates, Berlin, W. Spemann, 1891). The explorer, Dr. P. Ehrenreich, here presents his observations, studies, and experiences from July to November, 1888, among the tribes of the Araguaya River in the Brazilian province of Goyaz and those of the Puru River, a tributary of the middle Amazonas. These reports appear under the modest subtitle, "Beiträge zur Völkerkunde Brasiliens," and the illustrations in the text are just as instructive as those in the plates. Of the Goyaz tribes the Karaya were the chief object of the explorer's studies; among the Puru tribes, the Yamamadi, Ipurina, and Paumari. The accounts given of their customs and manners, implements, weapons, dances, and other merry makings are as interesting as the specimens of their folk-lore, of which many instances are inserted. The masks used in the dances cover the whole body, and are figured on pages 35 and 36.

— Warren K. Moorehead writes, in the *Illustrated American* for Jan. 30, a most remarkable and interesting story about "New Relics of the Mound Builders in Ross County, Ohio." One of these relics, he says, is the skeleton of a man with copper helmet with antlers, and the other is a Swastika cross, oriental in character, and is one of the first finds ever unearthed to show the origin of the Indians. He says in this connection: "The discovery of four crosses, which are peculiarly oriental in character, marks a new epoch in American archaeology. M. G. de Mortillet, the eminent French anthropologist, refers to the same style of cross

found by the survey, and gives numerous illustrations in his works of its occurrence on pottery, sepulchres, and monuments of Brittany, Italy, and particularly India. The Swastika was used as one of the emblems of Buddha worship before the Christian era, and may have spread later into Phœnicia. This symbol is occasionally found in Egypt and China, but, so far as the writer is aware, not in Yucatan or Mexico. A cross does occur on the Palestine tablet, but it is not the Swastika. No skeleton in the mound indicated a person of more importance than No. 248. Copper antlers, 22 x 23 inches, extended from the forehead upward. The breast and back were covered with copper plates, bear teeth, and other singular ornaments. Strings of beads lay about the ankles and wrists, while at the feet were traces of decayed sandals. The copper horns had been originally fastened to a helmet of copper, covering the skull from the upper jaw to the base of the occipital. A rough cloth skirt extended from the waist to the knees. Where the copper plates came in contact with the fabric it was well preserved. Beautiful pearl beads and large bear and panther tusks were interlaced or strung upon the front of the garment. The other skeletons were covered with shell beads, and a few copper plates and celts accompanied them."

— It is the design of the *Modern Science Series*, published by D. Appleton & Co., to provide brief untechnical treatises for the educated layman who has neither time nor inclination to become a specialist, but who feels the need of informing himself on the

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WANTED.—*Science*, No. 178, July 2, 1886, also Index and Title-page to Vol. VII. Address N. D. C. HODGES, 874 Broadway, New York.

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Wanted to buy or exchange a copy of Holbrook's North American Herpetology, by John Edwards, 5 vols. Philadelphia, 1842. G. BAUR, Clark University, Worcester, Mass.

For sale or exchange, LeConte, "Geology;" Quain, "Anatomy," 2 vols.; Foster, "Physiology," Eng. edition; Shepard, Appleton, Elliott, and Stern, "Chemistry;" Jordan, "Manual of Vertebrates;" "International Scientists' Directory;" Vol. I. *Journal of Morphology*; Balfour, "Embryology," 2 vols.; Leidy, "Rhizopods;" *Science*, 18 vols., unbound. C. T. MCCLINTOCK, Lexington, Ky.

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— "Evolution in Science, Philosophy, and Art" is the title of a book containing seventeen lectures by Professor John Fiske, Mr. Underwood, Dr. Abbott, Mr. Wakeman, and other able exponents of evolution, which is to be published immediately by D. Appleton & Co. The principle of evolution being universal, admits of a great diversity of applications and illustrations, and many which

appear in this volume are fresh and striking. The scientific lectures, as in the case of that by Dr. Alleman on Optics, are often of direct practical value. These lectures when delivered before the Brooklyn Ethical Association attracted general attention. In book form they are accompanied by a letter from Herbert Spencer, and by numerous illustrations.

— The title of Tyndall's forthcoming book is "New Fragments." Among the subjects which are treated in the five hundred pages are The Sabbath, Life in the Alps, The Rainbow and its Congeners, Common Water, and Atoms, Molecules, and Ether-Waves. In addition to the popular treatment of scientific themes, the author devotes several chapters to biographical studies of the utmost interest. Among the subjects of these studies are Count Rumford and Thomas Young, and there are also chapters on Louis Pasteur, his Life and Labors, and Personal Recollections of Thomas Carlyle. Tyndall's "New Fragments" will be published immediately by D. Appleton & Co.

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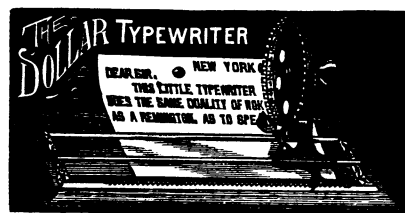
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