



Family Traits

ISN'T IT ODD, how the same habits of life will be followed by all members of some plant families!

All oaks, for example, are trees. Nobody ever saw an oak vine, or picked an acorn off an herb. To be sure, many oaks in the Southwest and similar semi-arid regions are bushes, but they are bushes that tend to be trees. The commonest scrub liveoak of the Southwest, to choose a specific case, grows as a bush where conditions are hard, and develops into a tree where life is easier.

On the other hand, there are families—very large ones, too—which are almost without exception herbaceous in habit. The largest of all botanical families, the composites, including such familiar plants as sunflower, aster, lettuce, ragweed, and cocklebur, has only one representative in all North America that produces a genuinely woody stem. In the islands of the warm Pacific, from Hawaii to New Zealand, there are woody composites—which are gazed upon with wonder by visiting botanists.

The vine habit is a fixed habit with

a number of plant families. Gathering grapes from thorns would be no more of a rarity, to a botanist, than gathering grapes from trees or bushes.

Some families carry their traits to an almost fantastic length. Of the pineapple family, only the pineapple itself and a very few relatives live on the ground; all the rest roost on branches of trees, as tropical "air plants." The extreme is reached in the so-called Spanish moss of our own South, with its long, trailing, beardlike, growths.

Yet not all plant families are thus fixed in their ways of life. The very large legume family includes herbs like

clover and alfalfa, semi-woody growths like leadplant and false indigo, true shrubs like the flowering locust, herbaceous vines like sweetpea and pole bean, woody vines like wisteria, and trees like acacia and Kentucky coffee berry.

A like versatility may be found in plants that we do not at first think of as being so adaptable. Cacti and ferns, for example, run through the whole gamut of herb, shrub, vine, and tree, and in the tropics they also add the role of living perched on the branches of trees, along with the orchids and air plants.

Science News Letter, April 10, 1937

ARCHAEOLOGY

Oldest Bible Dictionary Explains Golden Calf

A BIBLE dictionary written 1,000 years ago, and now published for the first time, is expected to settle at last the mystery of how the Israelites made their Golden Calf, and many another puzzle in the Old Testament.

Lost completely for eight centuries, manuscript copies and fragments of this dictionary have been coming to light in recent years. This manuscript material, now deposited in European libraries, has been studied and edited by Dr. Solomon L. Skoss, professor of Arabic at Dropsie College, Philadelphia. One volume of the dictionary has just been published by Yale University and the second half will appear later.

The dictionary, pronounced the oldest comprehensive Bible dictionary known, was the work of a famous Jewish scholar named David ben Abraham al-Fasi. It was so important in its day

that scholars called it simply "The Book." When Arabic dropped out of use among Jewish scholars, books such as this, written in Hebrew characters, but in Arabic words, were laid aside to gather dust in synagogue basements.

The making of the Golden Calf out of earrings brought by Israelite wives, sons, and daughters, as told in Exodus, has puzzled students to know how a molten image could be fashioned with a "graving tool," according to the Revised Version of the Bible. The medieval dictionary writer takes the Hebrew expression to mean instead "a mould into which molten gold and silver are poured," and so it appears that Aaron simply cast the melted earrings into a mould to form the golden idol.

Another cryptic verse told of the prophet Jeremiah being commanded by Jehovah to hide his girdle in rocks by the Euphrates river. How Jeremiah could go from Palestine to the hostile land of Babylon for this mission has baffled commentators, some of whom decided the scene was a dream vision. The 1,000-year-old dictionary explains that the Hebrew word *Perat* in this story does not mean the Euphrates, but a place near Jerusalem called by Arabs of today *Farah*.

David ben Abraham, who wrote the dictionary, is identified as one of the Karaites, a Jewish sect starting in the eighth century, which devoted its entire attention to study of the Old Testament itself, ignoring the Talmud and later Rabbinic writings.

Science News Letter, April 10, 1937

This Handy Coupon

IS FOR NEW OR RENEWAL SUBSCRIPTIONS

To Science News Letter, 2101 Constitution Avenue, Washington, D. C.

Please start 1 year, \$5
 renew my subscription to SCIENCE NEWS LETTER for 2 years, \$7

Name _____

Street _____

Address _____

City and _____

State _____

Extra postage charges: 50c a year in Canada; 75c a year in foreign countries.