



"By Their Fruits"

"WHEREFORE by their fruits ye shall know them."

Oak trees are good trees, and therefore acorns are by Scriptural rule good fruits. There is plenty of natural testimony to this end, borne by animals so diverse as squirrels and swine. Even man is an acorn-eater in some parts of the world; before the padres brought grain to California the Indians there pounded the fruits of the oak to the meal which was their staff of life.

But acorns are not just acorns. Every oak differs from every other oak, and each oak species bears a quite distinctive acorn. In fact, the acorns are often more distinctive than the trees that bear them. Some nearly related oaks look so much alike in trunk and branch and leaf that even a botanist or a forester will be stumped at first to tell them apart, but if he can find a few of their acorns lying about his difficulties are over.

Some specimens of black oak, for example, look rather like red oak trees. But they always bear black-oak acorns; whereon the cups are deeper, more conical and more shaggy-scaled than are the red-oak acorn cups. The cup of the red oak is really more like a saucer. It is shallow, flat, close-scaled, and it just grips the base of the acorn. Strongly contrasted with this is the acorn of the bur oak, which is frequently buried almost to the tip in the shaggy coat of its cup.

In shape also the acorns are distinguishable. The acorn of the bur oak is usually big and round and plump, that of the white oak and the red oak middle-sized and bluntly pointed, while the acorn of the black oak is slender, almost bullet-shaped.

*Science News Letter, April 25, 1931*

## ARCHAEOLOGY

## Prehistoric Remains to be Sought by Engineers

COOPERATION between scientists and engineers, road builders and other professional men conducting large-scale digging operations, in a search for remains of early man in America, has been arranged at a conference held in Chicago under the auspices of the National Research Council.

Because some of the most important of the old-world finds of ancient man were made in quarries, gravel pits and other utilitarian excavations, it was believed by the organizers of the program that a well worked out plan, enlisting the assistance of interested engineers and contractors, might be productive of equally important results on this continent.

Prof. Fay-Cooper Cole of the University of Chicago introduced the general subject of early man in America, and Dr. W. C. Alden of the U. S. Geological Survey discussed the spread and movements of the great ice sheets in the Middle West.

What the engineer or roadbuilder may do, to be of the greatest service to science, was suggested by Dr. M. M. Leighton, chief of the Illinois State Geological Survey. He said, in part:

"Engineers and operators in charge of all kinds of excavation work such as road building, sewer construction, dredging ditches, quarrying and clay, sand, and gravel industries, are in position to make valuable contributions to science with regard to the geological history of man in America, by preserving in situ suggestive evidences of human occupation, whether it be skeletal remains or the relics of his activities, until the scientific evidence of the geological position and age can be determined by a geologist and notifying the State Geologist of that particular State regarding the potential discovery; such leads should be followed by prompt examination on the part of the State Geologist or some capable geologist whom he may designate.

"The whole procedure could be encouraged by the establishment of a geological minute-man service similar to the archeological minute-man supported by Science Service, whereby moderate sums covering the cost of the field examination may become instantly available. . ."

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## Chemical Music

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There has always been a close bond between mathematics and music in addition to that found in the study of harmony. It is the commonest thing for a mathematician to be a great lover of music. Mathematics is the most abstract of the sciences, music the most abstract of the arts.

Perhaps the mind uses similar abilities in these two activities. Despite the apparent gap between art and science they have much in common.

You have probably thought of the scientist as rather an insensitive person intent on achieving results of use to humanity and altogether lacking in playfulness or feeling for beauty.

Great world scientists have not agreed with this view. There is indeed much of the scientist's work which must be done in a chilly, unemotional atmosphere but unless a quality is present from time to time, similar to what we find in creative artists, great science does not arise or grow.

*Science News Letter, April 25, 1931*

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