



Indoor Oases

**P**OTTED plants, that make little oases of green and bloom for us while winter desolation rules out of doors, must meet oasis conditions in our indoor ecology. Plants of desert oases are typically those that have moist, or even saturated, soil about their roots but exceedingly dry air about their leaves. Yet they are able to survive occasional soil droughts, too.

That is just about the kind of conditions we give our house plants. Habitually we over-water them, making the soil in their pots a swampy muck. Then once in a while we neglect them, letting them dry out. And all the while we keep the house air excessively dry, with temperature ranges from warm in the day to cool or even cold at night—just what desert plants get from desert air.

For this reason, plants that thrive best under average house conditions are either downright desert genera, like century plant, cactus, aloe, and other succulents; or they are plants of semi-desert habit, with thick, half-succulent stems, thick, leathery leaves, or other adaptations to intermittent water supply and incessant high evaporating power of the air.

Thus, the common geraniums store a good deal of water in their thick stems, and can reduce their evaporating surfaces on short notice by losing leaves, apparently without embarrassment, to grow new ones when conditions improve.

The leathery-leafed resistance to evaporation (sclerophylly, ecologists call it) is displayed by that old-time apartment favorite, the rubber tree, and by the oleander that our grandmothers loved. A little less pronounced, but still in the sclerophyll class, are the dwarf potted citrus plants now rather fashionable. Intermediate between this class and the succulents are the inevitable aspidistra of

British households and its American equivalent, the sanseveria.

Perhaps the most perfect example of the oasis plant growing in our houses is the umbrella plant. It thrives when its roots are kept continually soaked, even when it is used as a goldfish-bowl plant. This is because in its native habitat it is a plant of lake and river margins, with its toes in the oozy mud and its head in the sun-parched air. No wonder it is able to stand up in modern houses and apartments, and "take it!"

*Science News Letter, February 12, 1938*

## GEOLOGY

## River Took Hardest Way, Formed Yellowstone Canyon

**M**ILLIONS of years ago, a river in the Northwest took the "hard way." As a result, today millions of tourists stand in awe, every summer, gazing into the pastel-tinted Grand Canyon of the Yellowstone.

The tale is told by Prof. Arthur David Howard of New York University, in a newly published report to the Geological Society of America.

The Yellowstone river has its source in Lake Yellowstone, which lies right up against the Continental Divide, in the great national park of the same name. The river flows first north, then west, cutting deeply through a couple of mountain ranges, finally joining the Missouri at Ft. Union on the eastern boundary of Montana. Thence its waters continue their long journey toward the Gulf of Mexico.

At the southern end of Yellowstone lake, the Continental Divide is not at all the place of rocky steepness its name might suggest. There is a very wide pass—so wide and flat, indeed, that its floor is a wet meadow most of the spring and that eventually reach the Pacific, by a much easier route. Why did the river take the more difficult way?

The paradox is only apparent. Yellowstone waters also flow downhill; and downhill, in the early days of the river, was toward the north. The mountains were still a-making, and as they rose the river cut through and kept a way open.

During the pleistocene Ice Age, glaciers apparently blocked the northern drainage one or more times, and the lake did then overflow the divide and drain toward the Pacific. But when the age-long ice-jam went out, it resumed its northerly flow.

# ● RADIO

*Feb. 17, 4:00 p. m., E.S.T.*  
**OLDEST CITY IN THE WORLD—Prof. E. A. Speiser of the University of Pennsylvania.**

*Feb. 24, 4:00 p. m., E.S.T.*  
**NEWS ABOUT HELIUM—R. A. Cattell of the U. S. Bureau of Mines.**

**In the Science Service series of radio discussions led by Wadson Davis, Director, over the Columbia Broadcasting System.**

The river has not kept in the same channel all the time, Prof. Howard found. He confirmed the observations of other geologists who studied the terrain before him, that there is an old channel of pre-Ice Age date, high on the uplands above the present gorge bottom. He also describes a second channel, proved to be of Ice-Age date by sediments of that age found in it. The river now occupies a third, comparatively new channel.

*Science News Letter, February 12, 1938*

## FORESTRY

## Incendiary Forest Fires Outnumber Smokers' Blazes

**F**IRES purposely started in the forest by incendiaries outnumber even those caused by careless smokers throwing away lighted matches and cigarette stubs, the U. S. Forest Service reports. Incendiary origin accounted for 26 per cent. of all forest fires recorded in 1936, smokers for 24 per cent.

In total damage the incendiary fires ran far ahead of those caused by smokers: 41 per cent. as compared with 10. This is attributed to the fact that the smoker's blazes start in very casual fashion, usually near trails where they are easy to detect and put out. Incendiaries, on the other hand, operate cunningly and in secret as criminals usually do, setting their fires in such places and at such times as to cause maximum damage before they are detected.

*Science News Letter, February 12, 1938*

The earliest prehistoric artists drew pictures of animals mainly, and some of human figures, but rarely included plants in their art.