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GIANT TREE CACTI OF MEXICO DEPICTED BY MURAL IN HALL OF PLANT LIFE

By B. E. DAHLGREN

Curator, Department of Botany

Five of the series of fifteen murals for the Hall of Plant Life (Hall 29) with which Mr. Charles A. Corwin, the Museum's Staff Artist, is currently occupied, have now been completed and are to be seen in the hall.

The one selected for illustration in this issue of FIELD MUSEUM NEWS is a scene from the mesa country near Tehuacán in a part of southern Mexico famous for its large tree cacti. Situated to the south of a line drawn from Mexico City to Vera Cruz, this region includes a large part of the states of Puebla and Oaxaca.

The painting shows a semi-arid, subtropical so-called bush-steppe with sparse and rather scraggly trees and shrubs, mostly leguminous, and yuccas and agaves, all of which appear secondary and insignificant in the landscape in comparison with two giant tree cacti which the mural was especially designed to represent. These are of two different species, both of the genus *Cereus* in its wide sense. *Cereus* is a Latin word (of Greek root) for a candle, and has long been used for these plants with reference to their candelabrum-like shape. The larger one, on the left, is dark bluish-green in color and of massive form with hundreds of erect secondary branches. The other is less spreading, and its fewer branches are covered at the tips by a coarse rusty-brown felt in which the flowers and fruits appear to be imbedded.

The cacti are a characteristically American group of plants in spite of the existence of a few species outside of the New World. They are generally associated with desert conditions and are especially abundant in the drier subtropics, although various species

are perfectly at home on sandy or poor rocky ground in the temperate zones, as for example the prickly pear which is found as far north as Alberta, and several species existing as far south as Patagonia.

Tree cacti are a well-known feature of the deserts of northern Mexico and Arizona, and other species exist as far south as the dry mountain valleys of Peru to the west,

are covered and the presence in their tissues of a gelatinous substance which does not readily part with its moisture.

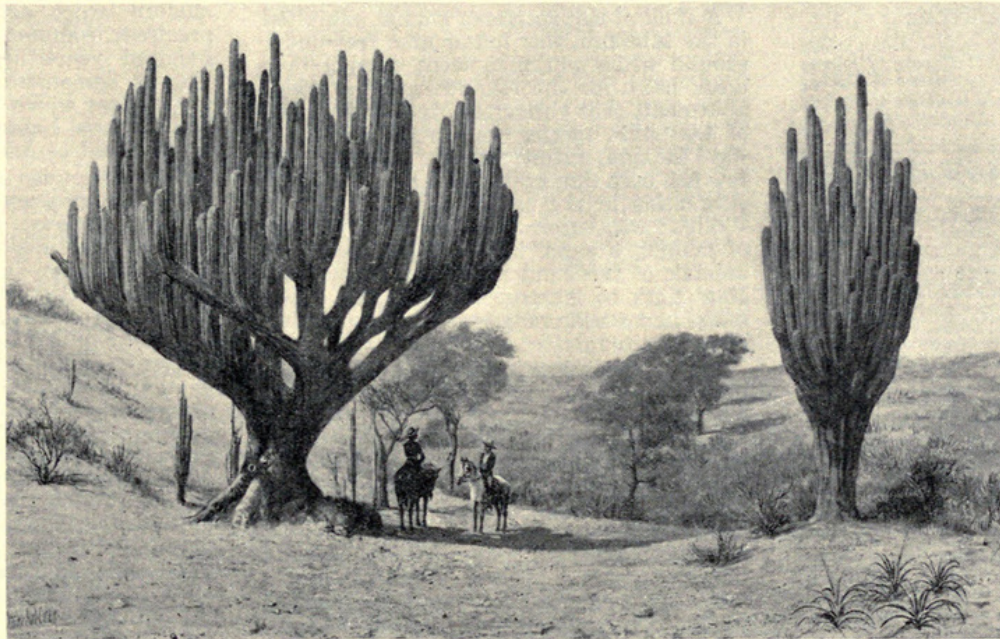
Some plants achieve a more or less effective adaptation to an arid environment by remaining leafless during a great part of the year. Others cope with drought conditions in different ways, as by a waxy covering that prevents evaporation from their

expanded fronds, by underground water storage, or by sending roots to tremendous depths. Still others survive through a high osmotic pressure increasing greatly their power of absorption of such slight amounts of moisture as may be available.

The cacti owe their preeminent fitness for existence in arid places to a combination of characteristics tending to restrict loss, coupled with the fullest possible utilization of their greatly reduced green surface for photo-synthesis. The largest and most flourishing of them, such as the two pictured in this mural, appear to be living monuments to the success of a consistently parsimonious habit in an environment of scarcity.

In this connection it may be interesting to note that the few cacti included in the flora of the moist tropics, where no water scarcity exists, are living there as epiphytes in the tree tops.

In the exhibition case directly below the new mural may be seen a smaller type of *Cereus*, and specimens showing the internal skeleton or structural framework of sturdy bundles of wood that serve to give rigidity to these plants and support for their huge weight. A photograph, made by Professor Charles J. Chamberlain, of the University of Chicago, shows the flowering tips of the giant cacti of Arizona.



Candelabrum Cacti of Southern Mexico

These great plants are a prominent feature of the vegetation in subtropical America. The photograph represents one of a series of mural paintings by Staff Artist Charles A. Corwin, five of which are now in the Hall of Plant Life. The species on the left is *Lemaireocereus Weberi*; on the right is *Pachycereus chrysomallus*.

and in the arid parts of the state of Bahia, Brazil, to the east on the southern continent. Smaller forms of *Cereus* are found still farther south.

A small section of the cactus family has well developed thick leaves, others have leaves in their juvenile stage; but the most obvious and striking characteristic of the cacti in general is their prevailing leafless condition, an extraordinary case of reduction of surface in proportion to bulk, which reaches its extreme in some of the larger globular and barrel-shaped species. Other notable characters of these plants are the dense and impervious cuticle by which they

MRS. OSCAR STRAUS TO SEEK RARE BIRDS FOR MUSEUM

On her way to Australia and New Zealand, Mrs. Oscar Straus, of New York, stopped in Chicago last month, and visited Field Museum to confer regarding material desired for the institution from those countries. Arrangements were made whereby Mrs. Straus will endeavor to obtain specimens of the lyre bird in Australia, and of the kiwi in New Zealand, together with accessory material required for the preparation of proposed habitat groups of these for the

projected new Hall of Birds. Both are extremely rare species. Mrs. Straus will arrange with local collectors to seek the required specimens and material.

Mrs. Straus, widow of a former American ambassador to Turkey who became Secretary of Commerce in the administration of President Theodore Roosevelt, was sponsor of the highly successful Straus West African Expedition of Field Museum which made important zoological collections in 1934. During several months of that expedition's work Mrs. Straus herself accompanied the party in the field.

Noted Berlin Ornithologist Here

Dr. Erwin Stresemann, Curator of Birds at the Zoological Museum of Berlin, and one of Germany's most distinguished ornithologists, who is making a series of studies of methods employed in leading American museums, spent the greater part of a week last month at Field Museum. He was especially interested in the habitat groups.

An example of the clay Josiah Wedgwood used for making Wedgwood ware is shown in the Museum's clay collection (Hall 36).



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