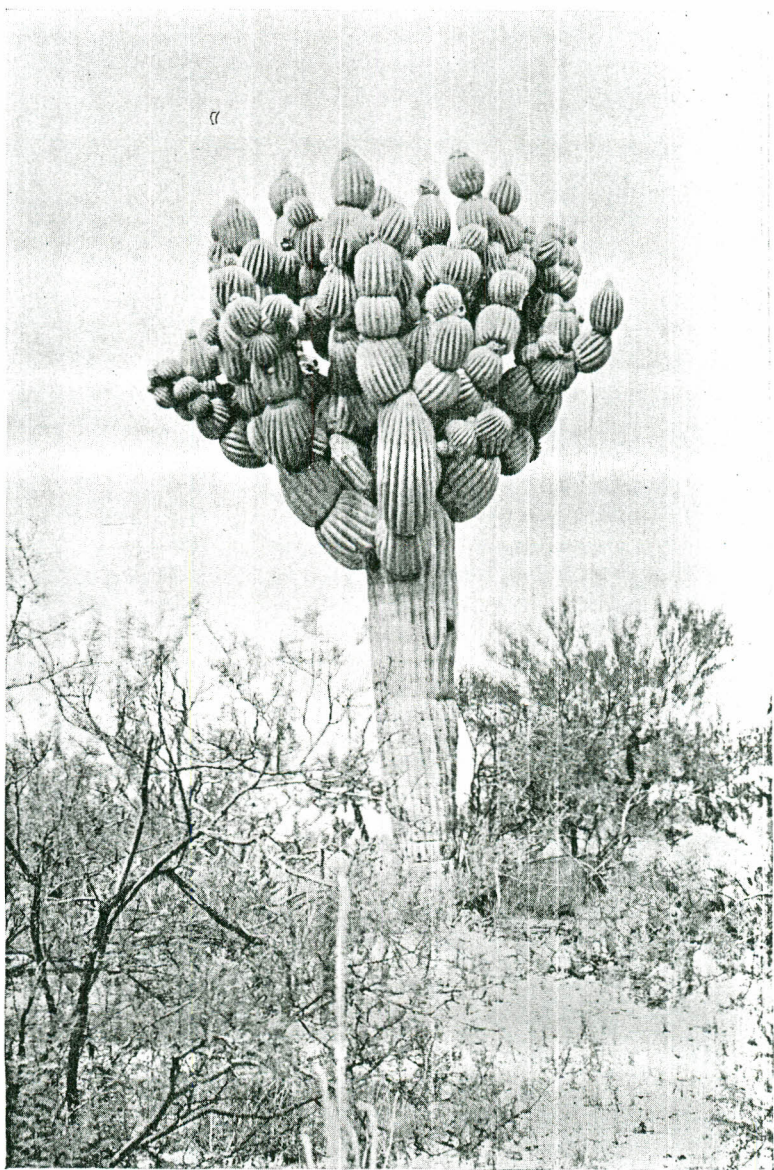




A MONSTROUS FORM OF THE SAGUARO

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SACRED TREE OF THE PAPAGO INDIANS

Some while back I saw a revival of the sparkling romance, "The Gay Desperado," which brought back memories of a camping trip in Arizona undertaken in the fall of 1935. The picture unfolds a story of a gay and glamorous Mexican bandido who sings his way out of a succession of difficulties, saving his own life and winning the girl by the magic of his voice. The locale of the story is Old Mexico, but actually the scenes were "shot" in the cactus country of southern Arizona, in the vicinity of San Xavier del Bac Mission.

As I followed the fast-moving scenes, especially those leading through groves of Brobdingnagian cacti, I had very little difficulty in recalling my treks through these same groves. Instead of gun-toting bandits, pretty girls and a host of other movie extras chasing back and forth across the desert, there were only the three of us, Dr. Shantz, Arthur Christ and I, driving, zigzagging and dodging the venerable giants that grow so profusely in the rocky valleys and foothills of this picturesque region.

The giant cactus, or saguaro, is the most curious vegetable growth in Arizona's landscape, and because it is so much in evidence there it is small wonder that Arizona has adopted it as the State flower. The plant reaches forty or fifty feet in height, two to four feet in diameter, and several tons in weight. It is only a few inches in height for many years, and by the time it is thirty years old its height has increased to about four feet. If conditions are ideal, from then on, the growth will average about four inches annually and will continue for about 150 to 200 years. The

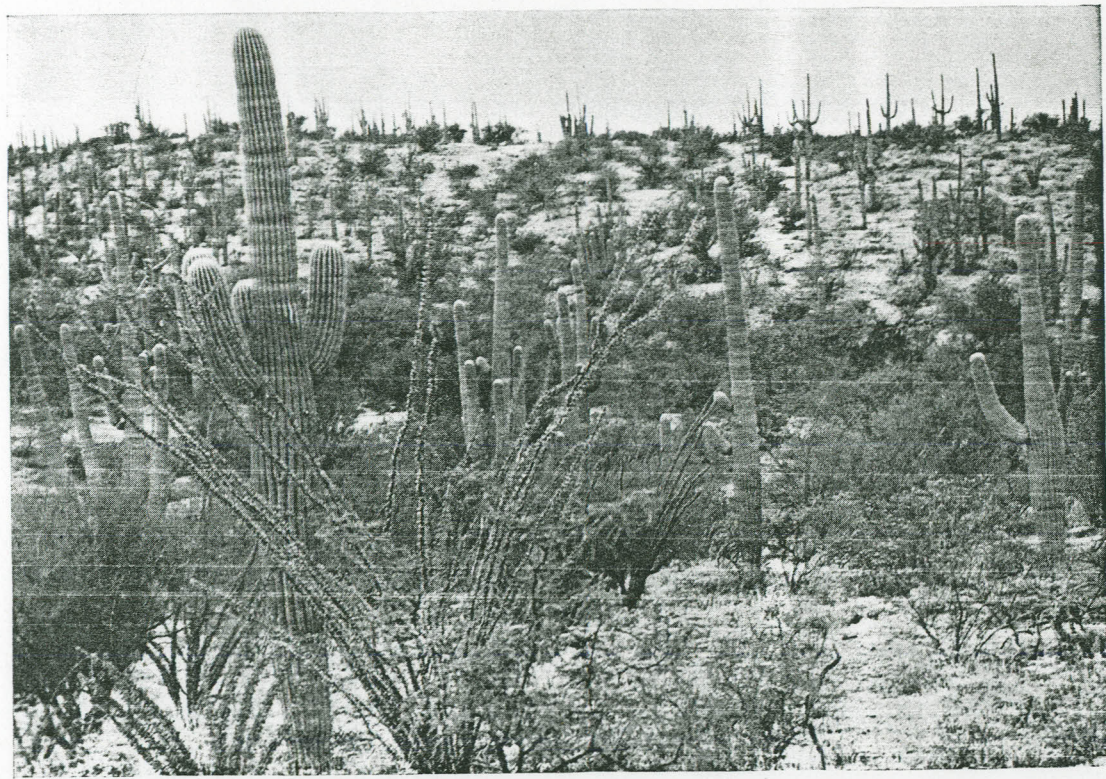
saguaro reaches its maturity on its fiftieth birthday, as previous to this time it very seldom flowers or produces fruit.

The saguaro makes its greatest display on rocky eroded slopes, its tremendous bulk anchored lightly by its roots which lie only a few inches under the surface and spread laterally for many feet in all directions. The wickedly-armed trunk rises straight for ten or more feet before it sends forth numerous branches in candelabra-like form, each branch terminating in a dense cluster of waxy white flowers.

The giant cactus was not botanically described until ninety-one years ago, although it had been known to the early explorers and missionaries as early as 1604. Originally called *Cereus giganteus* by Engelmann, it later was made the type of a new monotypic genus by Britton and Rose and named *Carnegiea gigantea*, in honor of Andrew Carnegie, the great industrialist and philanthropist, through whose generosity the famous Carnegie Institution owes its existence.

The peaceful Papago Indians, who had always made their home in the region of the saguaro, consider the *Carnegiea* a sacred tree. It plays an extremely important part in the life of these desert dwellers, and the ripening season (usually early July) is the cause of merriment and the beginning of their New Year. The fruit constitutes the most important crop, and no other tribe of Indians is more dependent upon it than they. The harvest lasts about two weeks. Each family moves to its accustomed camp among the fluted giants where they build a shelter for the duration of the harvest season. It is up to the women to go out twice a day, visiting each cactus plant every three or four days to gather the crimson fruit as it ripens. Since the fruit appears only at the extreme tip of the arms or at the top of the tall stems it is knocked down with long slender poles into bowl-shaped, water-tight baskets.

The fruit pulp is soaked over night to remove the black seeds, then boiled. After the juice is drained off, it is reboiled to make a syrup, and finally placed in hermetically sealed jars. The remaining pulp is made into cactus jam. The seeds are likewise saved, parched, sun-dried, stored in sealed jars, and ground for flour as needed. Each Papago family usually puts up from three



THE SACRED TREES IN PAPAGO LAND

to ten gallons of syrup and a smaller quantity of preserves. On the average about twenty-five to thirty pounds of fruit are required to make one gallon of syrup, so it can be seen that a very large quantity must be utilized by this tribe. An intoxicating beverage is also made from the boiled juice of saguaro fruits, but since it is impossible to keep for any length of time, it is usually consumed soon after fermenting. This beverage is brewed once a year with elaborate ceremony, during the saguaro season, and the brewing, drinking and intoxication are all considered a part of the ritual for bringing rain.

It is readily seen that the saguaro is an extremely useful plant to the Papagos. Not only food and drink are derived from it, but various minor disposals are made of its other parts.

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SILVER LACE-VINE, OR CHINA FLEECE-VINE

When the gardener's summer day is done he wants to be relieved from the cares of the garden and just sit and rest. Perhaps his place of leisure is a veranda or vine-embowered trellis. But alas, his peace of mind is disturbed by the many fallen leaves of the wisteria, and why? Because under city conditions in a dry year red spider takes its toll, and to complete the destruction leaf rollers wrap up the remaining leaves. That well-earned hour of leisure is changed into an hour of work manning the syringe and spray-gun. On another evening the leisure hour is again disturbed by the demands of the climbing roses for protection against red spider, caterpillars and mildew.

And so it goes until finally the gardener in sheer desperation decides to cover his veranda with a vine free from all troubles, so that he may gaze through the leafy branches with the assurance that the vine will thrive without the nightly ministrations. His prayer is answered when he selects the silver lace-vine, *Polygonum Auberti*. This is a vine that will thrive under normal conditions of soil and moisture and is free from any insect pests or diseases. Young nursery-grown plants set out in spring will quickly become established and in a few years will cover large areas. In mild winters some of the stems will remain alive but