

Gardner Pinnacles—A Barren Isle of Hawaii

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CERTAINLY the most barren and probably the hardest to land on of all the Hawaiian islands are the Gardner Pinnacles, located 588 miles northwest by north of Honolulu, and 108 miles northwest of French Frigate Shoal, the nearest island neighbor. The position is N. 25°01', 167°59' W.

These isolated, barren rocks were discovered June 2, 1820, by the American whaler *Maro* of Nantucket, in command of Captain Joseph Allen. Incidentally this vessel has the distinction of being the first of the many whalers to enter Honolulu harbor. Apparently Captain Allen did not make a landing on Gardner Pinnacles, for he greatly overestimates the size of the island, reporting it as being a mile in circumference and 900 feet high, with two large rocks at its southwest point.

In 1857 Captain John Paty visited Gardner in the Hawaiian exploring vessel *Manuokawai*. He reports that the island lies 607 miles west-northwest from Honolulu, and that it "is merely two almost inaccessible rocks, 200 feet high, extending north and south about one-sixth of a mile. A bank extends off to the southwest some 15 or 20 miles. The bottom seemed to be detached rocks, with sandy spaces between; I had 17 fathoms of water 10 miles south of the island. I think fish are plentiful on the bank."

A number of other vessels sighted the pinnacles during the middle part of the 19th century, reporting the island by various names, such as Man-of-War Rock, Pollard Rock, and Pollard Island. There are also various spellings of Gardner, but the U. S. Board of Geographic Names has decided that Gardner Pinnacles is official. Positions were given for the island by Captain Stanikowitch and by Lieutenant Brooke, U. S. Navy. The latter describes the island as an inaccessible rock 170 feet high, with a base about 600 feet long, and a smaller rock close to its southwest extremity, from which a reef makes out one-half mile. He notes the bank as having 17 to 20 fathoms of water and extending out from the island on all sides, to the westward about 5 miles and southwest more than 8 miles.

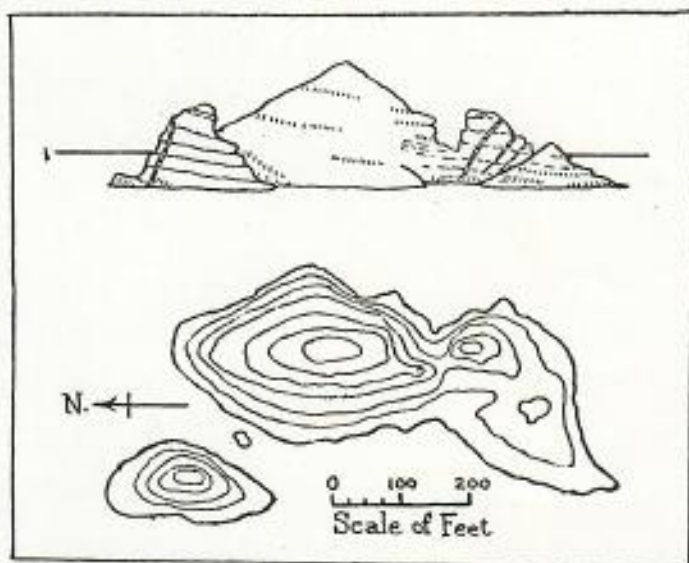
Captain F. D. Walker visited Gardner in the *Kaolokai*, June 9, 1891. In his entertaining "Log" (published in 1909) he writes as follows:

"At noon we sighted Gardiner Island, and at 2:30 were up to it.

"Gardiner Island is simply a rock one hundred and seventy feet high, or thereabouts, densely covered with birds. Hundreds of frigate birds were sailing majestically around it, watching with keen interest the results of the tropic birds' labors . . ." He goes on to describe at length the manner in which these "highway robbers" of the bird islands harass the smaller birds as they return from fishing, and make them drop their hard-earned food, which they immediately swoop down and catch in mid-air.

"We fired a gun and the reverberation was like distant hunder. The whole colony of birds arose, and the air was louded with them.

"There is no anchorage. The swell of the ocean breaks



View of Gardner From West (Upper); Gardner (After Palmer)

heavily even when the sea is calm. On the island's precipitous sides, the backwash or reflux rushes out a long way, making an experiment to land a very dangerous undertaking. To the westward there are a few detached rocks about seventy feet high. I could find no outlying dangers in our cruise around it, and as we could find nothing interesting or instructive to be gained, we took our departure at dusk and shaped our course for Maro Reef."

Professor Harold S. Palmer, of the University of Hawaii, in Bernice P. Bishop Museum Bulletin 35, 1927, describes the topography and geology of the island. He was not a member of the *Tanager* Expedition party which landed in
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Smaller Gardner Islet—Maj. Chapman Grant Photo ("Tanager" Ex)
Courtesy Bishop Museum.

Gardner Pinnacles

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May, 1923, but bases his descriptions upon field notes, sketches, and collections made by Dr. Stanley C. Ball, of the Bishop Museum staff. He says:

"Gardner consists of two islands which from the west or east appear as a single island, flanked by smaller northern and southern peaks. The smaller, northern peak belongs to the lesser island, which lies some 50 yards west of the north end of the larger island. A small, jagged rock rises a few feet above sea level in the channel between the two islands. Landings were made on both islands. Though it was necessary to swim to the smaller island, it was possible to land directly from the surf boat onto the larger island, one or two men jumping ashore each time the waves

brought the boat in and before it was fended off . . ."

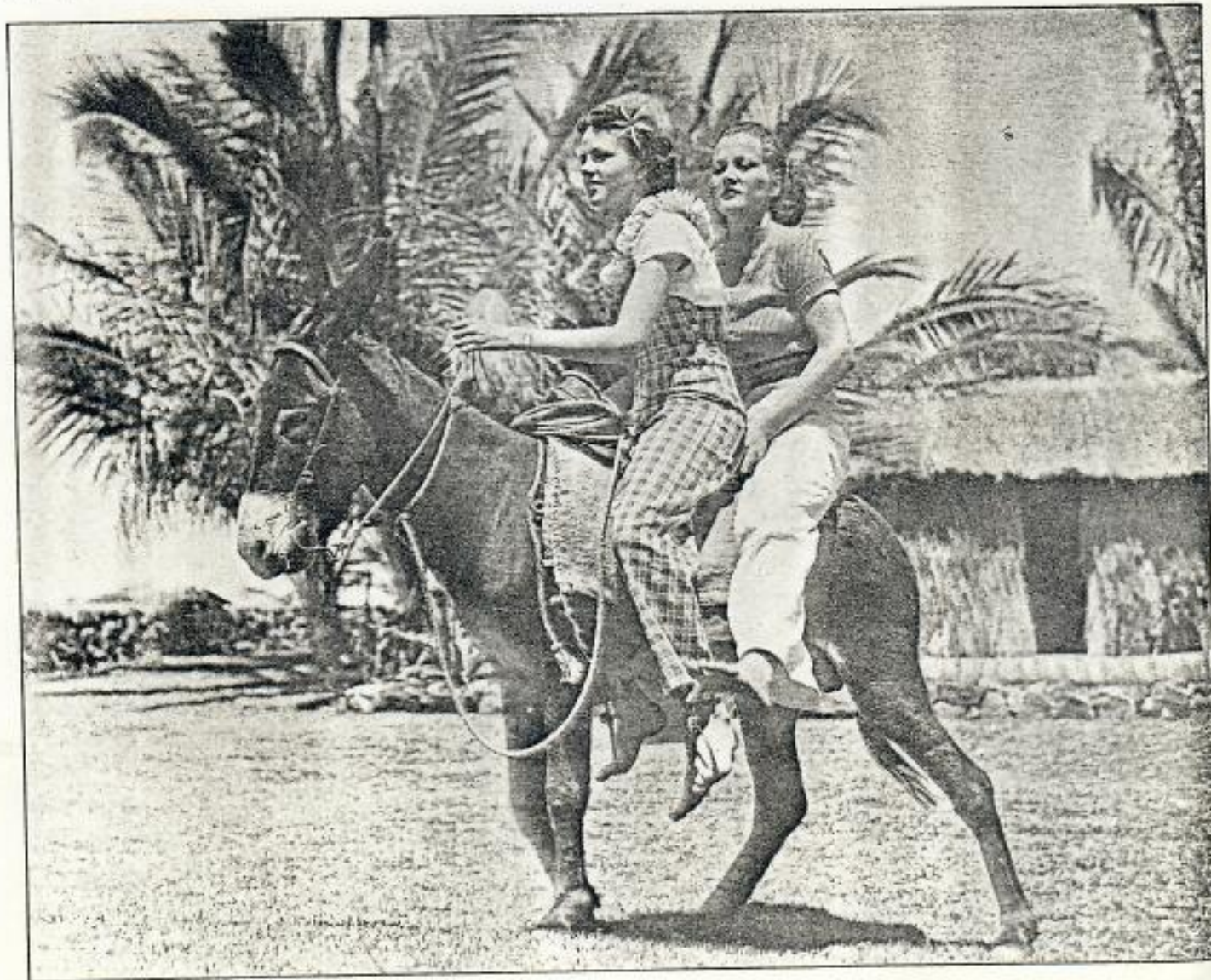
He goes on to describe the geologic formation of the island in some detail. All of the rocks observed on Gardner were fine-grained, dark basalt, except some weathered material thought to be tuff. All this was of volcanic origin. In cracks were found vein-like fillings of light-colored phosphate material; and there were crusts of lime. Bird droppings were everywhere.

Dr. Palmer suggests that Gardner Pinnacles are the remains of an island which was formerly larger, intermediate in size between Kahoolawe and Lanai, with an area of about 80 square miles. This island has been carved away by wind, rain, and waves until only the

hard core of its volcanic dome remains. The island is at present surrounded by submarine banks which extend off from it about 5 miles on the east, north, and west, and 10 to 12 miles on the south. This great oval has an area of about 125 square miles. The accompanying sketches are based upon those published by Dr. Palmer from Dr. Ball's field observations on the island.

The botanists of the *Tanager Expedition* were able to take the day off. The steep slopes of Gardner Pinnacles are bare of vegetation, except for small pockets of purslane (*Portulaca*), and algae on the lower, moist surfaces. The late Gerrit P. Wilder collected a small sample of *Portulaca*, but the specimens refused to dry, which is usual with this fleshy herb, and it is not positively known which of two species of purslane it is.

The insect collectors of the party



Duo of Hawaiian Pulchritude Aboard "Kona Nightingale" Going "To See"—Pan-Pacific Press Bureau Photo



Sailing Surfboard, Waikiki

Hermes Reef to the westward and Palmyra far away to the south, to make Honolulu the city of largest dimensions in the world. Administration is jointly divided between our City Fathers and the U. S. Department of Agriculture's Bureau of Biological Survey, who rule over a population of birds and little else.

Hawaiian Kona Coffee

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large tanks of water. Remaining in these tanks for about sixteen hours the glucose substance attached to the parchment becomes loosened and the process of washing, which is done by machinery, is much facilitated. After washing, the wet parchment is carried to the drying floors where it remains from four to six days, according to the weather, and the process of drying is then finished off in a gardiola dryer, thence by screw conveyor or elevator to storage bins.

The dry parchment is brought to the hullers by gravity where the hull or parchment is separated from the clean coffee bean. The clean bean then passes over shaker graders and thence conveyed to handpicking rooms where the culls and black beans are picked out of the good coffee by hand, either from small individual power driven belt machines or from sorting tables.

The coffee is then packed into jute bags—100 pounds to the bag—weighed and when a shipment is ready, conveyed by truck to the steamer port of Napoopoo or Kailua.

The economic situation at present in Kona leaves much to be desired. The cost of production exceeds the price obtained for the coffee, with the result that the last few years have been strenuous ones for the farmer and the coffee factor. Generous assistance has been

apparently also took a holiday, although Dr. Ball and Major Chapman Grant managed to collect two small flies, one moth, the case of another, and one earwig. They also reported mites, spiders, centipedes, and isopods among the loose rocks, but unfortunately did not catch any.

Of archaeological remains there were none. In fact, it is doubtful if many persons have set foot upon the steep, slippery slopes, which are so hard to approach.

The official estimates of the heights of the three conical pinnacles, two on one base and one on the other, are 90, 100, and 170 feet, with a water passage between the 90 and 170 foot pinnacles.

The island became an "integral part of the United States" on July 7, 1898, and a part of the Hawaiian Islands Bird Reservation February 3, 1909. It is officially a portion of the Territory of Hawaii and the City and County of Honolulu, helping, with Pearl and



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