

Members of the exploring party reached the bottom of Elegante crater without use of rope by the route indicated by dotted lines. The alternative route of the ascent was selected to avoid the fine pea gravel encountered on the descent. The author believes there are other possible routes to the bottom. The depth of the crater is 610 feet.

We Found a Way into Elegante

Many American fishermen already have discovered the recently paved road which gives them easy access to the Gulf of California 65 miles south of the international line—but few of them realize that the great black range which extends along the west side of the new highway looks down on a desert pitted with over 500 craters—relics of a day when this area was a seething inferno of volcanic eruption. Here is a story of a trip into the heart of this land of extinct volcanos, and of descent to the floor of its largest crater.

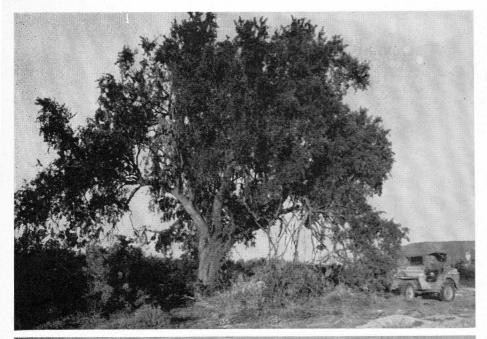
By RANDALL HENDERSON Map by Norton Allen

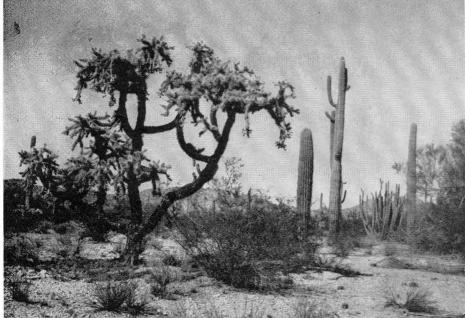
N A JANUARY day in 1910, Carl Lumholtz, explorer and writer employed to make an economic survey of the region around the headwaters of the Gulf of California in Sonora, Mexico, stood on the rim of a great crater which he had spotted previously from a nearby peak. He was so impressed by the beauty of this volcanic cavity he gave it the name Crater Elegante.

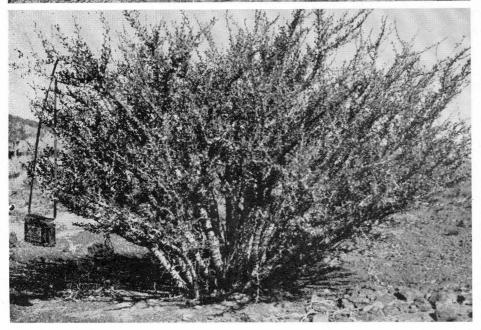
In his book about this region, New Trails in Mexico, long out of print, Lumholtz wrote: "I do not know how deep it is, for I had no opportunity to make a descent, which is said to be feasible though difficult, and it looks very difficult too, for the walls have

crumbled less than the other craters I saw later in the region."

If Carl Lumholtz were still living I could answer the question in his mind on that January morning as to the depth of Crater Elegante. Last October 9 I stood on the rim of the same crater and my altimeter showed an elevation of 975 feet. Four hours later,







after a hand and toe scramble down those precipitous walls the instrument registered 365 feet. Depth 610 feet. '

Arles Adams and I had long planned a trip into the Pinacate country. We had read Lumholtz' book, and also *Campfires on Desert and Lava*, another out-of-print book written by William T. Hornaday in 1908 about the same area.

Our trip was arranged for the second week in October this year. Our party included William A. (Bill) Sherrill of the U.S. Immigration border patrol, and Wilson McKenney, my former associate on the *Desert Magazine* staff.

Lumholtz explored the Pinacates with a wagon and saddle horses. But he had all winter to do his job. Since our time was limited to a week we used more modern transportation—two jeeps. The Pinacate country is a weird mixture of sandhills and lava beds—inaccessible to a paved-road automobile.

Pinacate is Spanish for a black beetle that in some parts of the United States is known as a tumble bug. When disturbed it sticks its head in the ground and rears its hind end in the air like a clown standing on his head. The Papago Indians who once camped in the dunes and at the tinajas in this area called the Pinacate range *Tjuktoak*, meaning black mountain.

But life here was very hard, even for Indians, and as the threat of raiding Apaches diminished before the firearms of American soldiers, the Pinacate Papagos drifted north to more fruitful lands in southern Arizona.

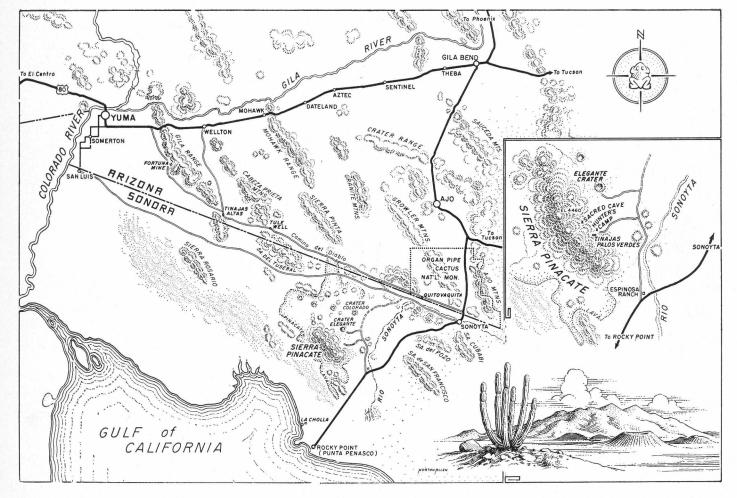
The four of us left El Centro the morning of October 7. Because we had good cars for the purpose, we followed the Devil's Highway, Camino del Diablo, the old Mexican '49er trail east from Yuma, Arizona. The route took us past the old Fortuna mine in the lower end of the Gila range. Fortuna was once a rich gold

Top—The giant Ironwood tree on the Lechuguilla desert along Camino del Diablo east of Tinajas Altas. Lumholtz commented on the size of this tree forty years

Center—Tree cholla is one of the most conspicuous plants on the Pinacate desert. In the right background between the Saguaro cacti

is an Organ Pipe cactus.

Bottom—With bark and red sap like the Elephant tree, and leaves like an Ocotillo, this is Jatropha cuneata, called by the Mexicans "Sangre-de-drago", blood of the dragon. Grows along the border.



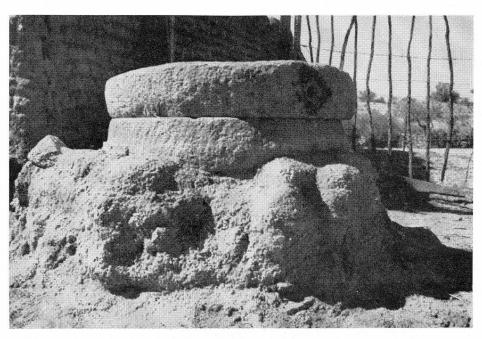
producer, but the ore pinched out and now even the caretaker has left and the camp is a litter of debris.

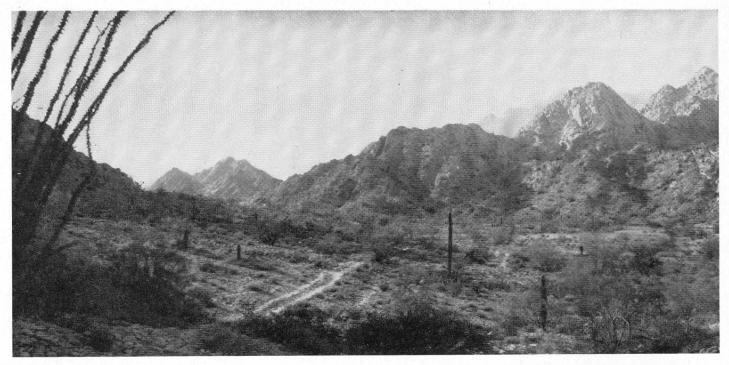
Continuing south from Fortuna the little-used road became rough and sandy. Eventually the old trail swung east through a pass between the lower end of the Gila range and the north end of the Tinajas Altas mountains—Surveyor's Pass it is called. Here we were in a luxurious garden of Sonoran vegetation—along the arroyos a dense growth of Palo Verde and Ironwood, and on the plain the giant Saguaro and many less imposing species of cacti, ocotillo, incense bush and creosote in profusion.

Beyond the pass we turned south along the base of the mountains to the historic High Tanks, *Tinajas Altas*. Mexican prospectors, following the discovery of gold in California in 1849, struggled across the old trail to reach the natural tanks of water at this point, and stories have been told that some of them perished at the base of the precipitous trough in which the water is found because they lacked the strength to climb the steep walls.

There are glyphs and pictographs on the rock walls in this vicinity to indicate it was a popular watering place for pre-historic Indians. There are also many grinding holes in the rocks. When I first visited Tinajas Altas 15 years ago there was a little cemetery on the gravel mesa near the tanks. It was a fascinating retreat for a day's outing. But the seclusion of this spot is gone. The American border patrolmen charged with the duty of preventing Mexico's hoof and mouth epidemic from spreading across the border to the United States, have erected sheet-iron huts on ground once occupied by the cemetery and cars bustle in and out of the camp all day.

Old stone grinding mill at Quitovaquita. The top stone is turned with handpikes. Grain poured in a small hole in the top stone is ground as it works toward the outer edge where it is caught in a blanket.





East of the Lechuguilla Desert the Devil's Highway winds among the buttes of the Cabeza Prieta range.

East from Tinajas Altas there are now two trails—the winding ruts left by the '49ers, and a new road bull-dozed across the creosote plain for the use of the patrolmen. The old camino is being abandoned, and for lack of use will soon become impassable. However, it could still be followed by jeeps, and we chose to take the historic trail.

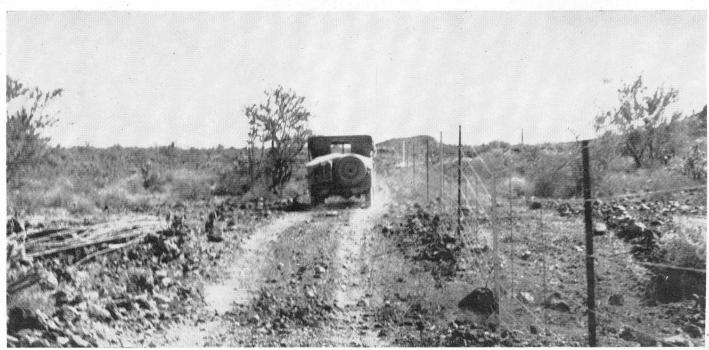
Seven miles beyond Tinajas Altas we saw a gigantic Ironwood tree on the horizon ahead. This is said to be one of the finest specimens found in the Southwest, and I photographed it for comparison with the picture taken by Lumholtz 40 years ago. The tree has grown a little during the 40 years, and today is a more conspicuous landmark even than when he was there.

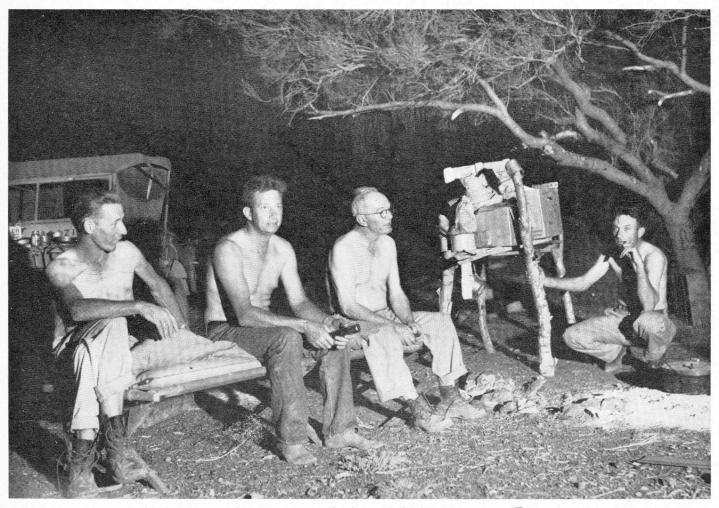
The Ironwood, olneya tesota or Palo fierro as the Mexicans call it, is the most useful of all trees to one who travels the desert, according to Lumholtz. He wrote: "Although there was considerable galleta grass growing here

and there, all the mules, donkeys and horses gathered at once around a lone but very large palo fierro tree to eat its bark and green juicy leaves, which they much preferred . . . Usually some of its branches are dry, and they furnish the very best campfire, especially for cooking purposes."

Three and a half miles beyond the giant Ironwood we came to a circle of rocks on the ground, perhaps 25 feet in diameter. According to Tom Childs who has spent a long lifetime in this

East of Quitovaquita the road parallels the new boundary fence erected by the United States to keep diseased cattle from crossing from Mexico.





Flashlight picture taken in camp at the base of the Pinacate range. Even after the sun had gone down the temperature ranged around the 100-degree mark. Left to right: Wilson McKenney, Bill Sherrill, Randall Henderson and Arles Adams.

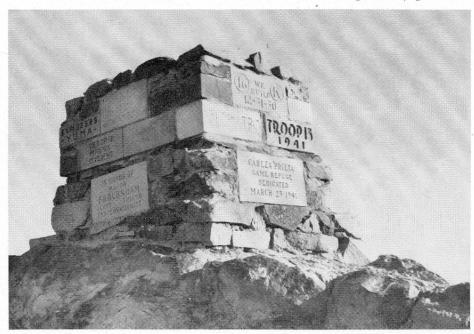
part of the desert, the circle marks one of the tragedies of the Devil's Highway. Nearly 100 years ago Papago Indians killed Mexican prospectors en route to the California gold fields on this spot. Some of the Papagos told Childs about it many years later. They said they had killed for loot.

Harold Weight found good collecting material for the rockhounds northeast of the rock circle and mapped the trip for *Desert* readers (September '49). The new patrol road misses the rock circle about 100 yards.

At dusk we arrived at Tule well, one of the few watering places along Camino del Diablo. Border patrolmen have a camp here also. They are employed by the U.S. Department of Agriculture, Bureau of Animal Husbandry. Generally they work in pairs, covering a beat of 35 miles along the border daily in motor vehicles. Their orders are to shoot and burn the carcass of any livestock which they have reason to believe has wandered across the unfenced border from Sonora. During the previous three months they had killed nine animals.

There is a windmill and crude shower at Tule well. It was a refreshing stop after traveling all afternoon across the Lechuguilla desert with the temperature well over 100 degrees. Lechuguilla is Spanish and this desert was named for an edible lettuce-like plant which grows here.

On a hill overlooking Tule well several of the Boy Scout troops of Arizona erected this monument to mark the Cabeza Prieta game refuge.



We camped on the bank of an arroyo near the windmill and had barbecued steaks for dinner. Tule well is in a game refuge, and covies of quail were running through the thickets that surrounded our bedrolls early in the morning.

Going east from Tule well we again had our choice of two roads, the old camino, or the newly-graded road used by the patrolmen. We followed the old trail. The gravel along the roadside for a mile east of the well is sprinkled with chalcedony roses. We did not have time to trace them to their source, but this probably is good hunting grounds for the rock collectors.

Fifteen miles out, we came to the first tongue of the great lava field which covers much of the area south of the border here. Thirty or forty miles to the south we could see dark brown Pinacate range, in the heart of a region which at some time in the distant past was an inferno of volcanic action.

The late Godfrey Sykes, formerly connected with the Carnegie Desert Laboratory at Tucson, estimated there were 500 extinct volcanic craters within a radius of 50 miles of Pinacate

peak. Lava flows extend over the landscape in all directions, making much of the area impenetrable except on foot or with burros. The main volcanic vent evidently was at the top of the range. Pinacate peak and nearby Carnegie peak, 200 feet lower, are the high points on the rim of what was once a huge boiling cauldron of liquid stone. So great was the pressure of gas beneath the surface that smaller vents opened up all over the area, each spewing out its own stream of molten rock.

The road parallels close to the boundary all the way, and later in the morning we caught our first glimpse of the new 7-strand barbed wire fence Uncle Sam is in process of building along the entire border from El Paso to the Pacific.

At noon we arrived at Gray's well. Bob Gray is a cattleman who runs stock in this desert. His camp is occupied only part of the time and we found no one at home, but the windmill was pumping water.

In mid-afternoon we arrived at another of the old watering places on Camino del Diablo — Quitovaquita. The word is the Mexican translation of a Papago word which I am told

means many springs. A fine flow of water gushes from the rocks in an arroyo above the town.

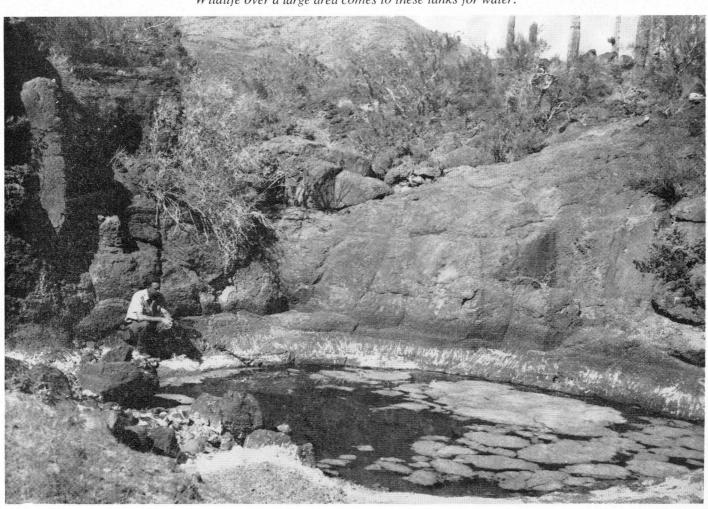
Here we met Mr. and Mrs. George W. Cleveland. He is a border patrolman who covers part of his beat on horseback and part in a pickup truck. They live in a comfortable tenthouse. The temperature was 110 degrees that afternoon, but the Clevelands are hardy folks who prefer the frontier, even when it is very hot. They bring in tank gas for their Servel-and we appreciated the ice water they served us after drinking hot water from our canteens for two days. Title to the land and water here remains in the hands of a Mexican family which has owned it for many generations.

Just outside the crumbling walls of one of the settlement's first adobe buildings I found a primitive grinding mill — two huge disks of stone, the lower one in fixed position and the upper one turned by hand-pikes or possibly by a burro. It has not been used for many years. The Arizona museum should acquire this old mill before it falls into less worthy hands.

The Sonoyta river, sometimes with water and more often dry, is just across the boundary on the Mexican

Palos Verdes tinajas—one of the natural tanks at the base of the Pinacate range.

Wildlife over a large area comes to these tanks for water.



side of the fence. And back among the hills is an ancient cemetery—a burial place that dates back more than 100 years.

Camino del Diablo dips into Mexico and follows the course of the Sonoyta river east from Quitovaquita, and since there were no customs or immigration officers here to inspect our passes, we continued east along the new road north of the boundary fence to Sonoyta, 15 miles east.

Until four years ago when a paved road was completed from Gila Bend, Arizona, to Rocky Point on the Gulf of California, Sonoyta was a sleepy little settlement where visitors seldom came. But paved roads, especially when they lead to such fine fishing waters as are found in the Gulf of California, soon work miracles. Sonoyta is becoming a tourist town—with motor courts and modern gas stations and juke boxes.

Neat garitas have been erected on both sides of the international gate, and customs and immigration officers are on duty here to service the hundreds of American visitors who now cross the border with their fishing tackle bound for Rocky Point, or Punta Peñasco as it is known to the Mexicans. Tourist passes are issued without much delay for \$2.50 a person.

Carrying border permits issued by the chief of the immigration service in Mexicali, we got speedy clearance, and our dusty jeeps paraded through the gate and headed south. The original Sonoyta—old town—is three miles below the border. Here we stopped at the office of Alfredo Barillo, chief of police and wildlife commissioner for this area. He gave us detailed directions for reaching Crater Elegante, and some sidelights on wildlife in that area. He estimated there are 500 bighorn sheep in the Pinacate country.

For the next 33 miles we enjoyed the luxury of paved roads, for the new highway to the gulf passes near the base of the Pinacate range. We crossed the Sonoyta river where it heads off toward the gulf. All the maps show this river as emptying into the gulf. But that is only because the draftsmen who draw maps cannot conceive of a river which has no mouth. They do not know about this desert country where sizable rivers just evaporate in thin air—or disappear in the sand. The Mojave river of California is like that. And so is the Sonoyta. Its outlet is a playa somewhere out among the sand dunes which extend along the western shore of the gulf. In flood time the Sonoyta flows quite a stream of water—but none of it ever reaches the Sea of Cortez, as the Gulf of California is labeled on old maps.







Top—Tule well—one of the old waterholes along Camino del Diablo. Center—Quitovaquita where a generous spring of water supplies the little settlement.

Bottom—International port of entry at Sonoyta, looking toward the American customs house.

Beyond the Sonoyta bridge we came to the ranch of Sr. Rudolfo Espinosa, and he proved a very helpful guide. A former Californian, he speaks excellent English. There are many woodcutters' roads in the Pinacate area, and he carefully drew a sketch in the sand to show which ones we should take to reach Elegante.

The sun was near the horizon when

Bill Sherrill led the way out into the land of lava beds and black volcanic buttes. We dipped into an arroyo and went around the first butte on the right, passed through a little forest of tree cholla cactus, passed the next two buttes on the left, and nine miles from the Espinosa ranch turned west on a rough sandy trail. It wasn't much of a road—just two tracks that became very hard to follow when they led us out on a great bed of lava. It got dark and we lost the trail. So there we camped for the night—a warm desert night with no cloud nor haze to dim the sparkle of a billion stars overhead.

Sr. Espinosa had told us that the rim of Crater Elegante would appear as a low mesa in the distance. At daybreak Wilson McKenney was up and scanning the horizon for that low mesa. With mountains on the skyline all around us, and little buttes sticking their black heads above the plain in every direction, we were uncertain. But we continued along the trail, and stopped once to climb one of the little craters to see if we could spot the big one—for Elegante is said to be the daddy of all the craters in the Pinacate region.

Our climb yielded no information, so we continued in the direction of

what appeared to be a low gray hill in the distant northwest. When we came to the base of the hill the jeeps were blocked by a deep arroyo with vertical banks

We climbed the hill, not more than 100 feet in elevation above our parking space. And there in front and below us was the great chasm which we recognized at once as Elegante. It is a stupendous crater.

The rim sloped gently 150 or 200 feet to the top ledge of a ragged escarpment. The escarpment did not appear to average over 50 feet high and below it was a long talus slope which led to the bottom. But that 50-foot vertical drop obviously would be a difficult climbing problem. We had plenty of rope and it would not be hard to rappel down the rocky face. But how would we get to the top again?

We spread out and explored the rim foot by foot, hoping to find a crevice or chimney which not only would offer a way down, but much more important, would offer a feasible route for the return to the top. The floor of the crater appeared dry, with a scattering of Sonoran vegetation and many saguaro cacti. A little playa of white sand indicated the low point, where water remained for perhaps a few hours

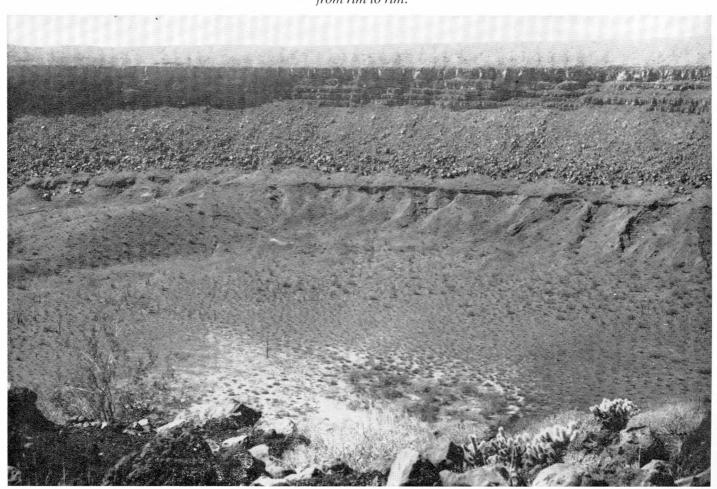
after a rainstorm. Obviously it was not a place to be marooned for long without food or water.

We were exploring the south rim. A mile across the chasm at the northwest side there appeared to be a streak of deep red talus which extended up to within a few feet of the top of the escarpment. Finally we agreed the south rim was not feasible for the descent, and followed a dim trail which led around the rim, perhaps a mile and a quarter to a point above the red streak of talus.

It was easy to work our way down to the top of the escarpment as we had done on the south side. There we found a rock ledge and made a traverse along the top of the cliff to our landmark—the red streak of talus. And there we found the route to the bottom. The talus was composed of fine gravel and every step started a small rock slide. Most of the way we slid with the rock. It was easy going downhill. We knew the return trip would be tough in that kind of rock—but it could be done.

Wilson McKenney was leading. I have been on many exploring trips with Wilson. When the going gets rough he is always out ahead, breaking trail. Arles Adams had received

Crater Elegante, viewed from the north rim. It is approximately one mile across from rim to rim.



explicit orders from the doctor before leaving home not to do any mountain climbing on this trip. He remained at the top—and it was a fortunate circumstance for the rest of us that he did not make the descent.

We reached the bottom at 1:00 p.m. We had been away from the cars nearly four hours, and our canteens were dry. It was hot down there, very hot. Shade and water were the two things we wanted most. There were a few Palo Verdes-but the Palo Verde isn't a good shade tree. Finally I found a cluster of three saguaros growing together through the branches of a Palo Verde—and the four of them gave us relief from the sun rays beating down into that pit. My thermometer registered 112 degrees in the

The weather gods of the desert got their dates mixed this year, and were giving us August temperatures in October. This crater has been dead so many thousands of years I am sure none of the heat was radiating from beneath the surface. It came from the direct rays of the sun overhead, and reflected rays from the rocks that surrounded us.

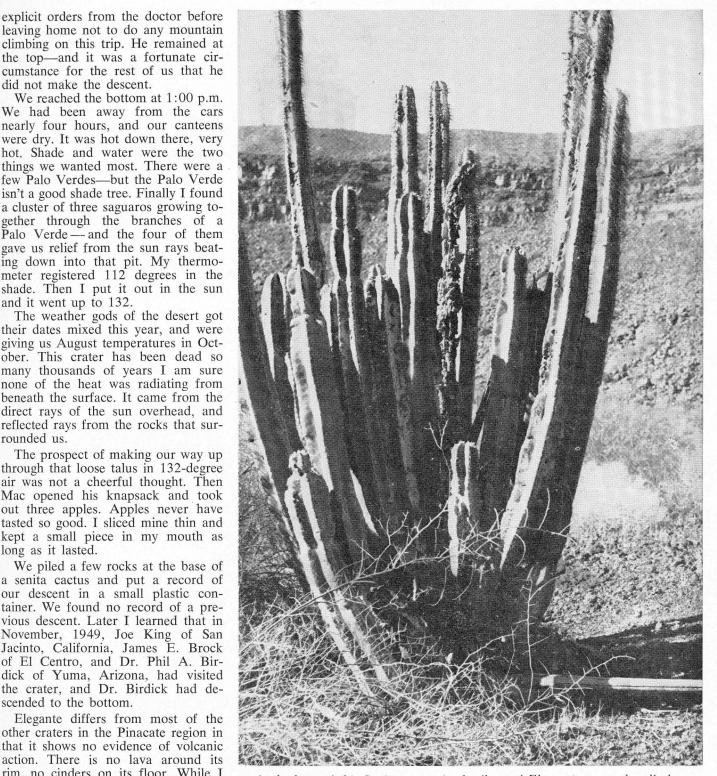
and it went up to 132.

The prospect of making our way up through that loose talus in 132-degree air was not a cheerful thought. Then Mac opened his knapsack and took out three apples. Apples never have tasted so good. I sliced mine thin and kept a small piece in my mouth as long as it lasted.

We piled a few rocks at the base of a senita cactus and put a record of our descent in a small plastic container. We found no record of a previous descent. Later I learned that in November, 1949, Joe King of San Jacinto, California, James E. Brock of El Centro, and Dr. Phil A. Birdick of Yuma, Arizona, had visited the crater, and Dr. Birdick had descended to the bottom.

Elegante differs from most of the other craters in the Pinacate region in that it shows no evidence of volcanic action. There is no lava around its rim, no cinders on its floor. While I do not pose as an expert geologist, my guess is that it was caused by a great subterranean gas explosion—a blowout rather than a vent for the escape of molten rock. And what an explosion that must have been—to blow a hole a mile wide in the crust of the earth!

The fires which once turned the Pinacate region into a volcanic inferno have long since burned out. The reports of Lumholtz, W. T. Hornaday, Godfrey Sykes and others who explored this area nearly a half century ago indicate that no action has taken place here for thousands of years.



At the base of this Senita cactus in the floor of Elegante crater the climbers left a record of their descent in a plastic container covered with rocks.

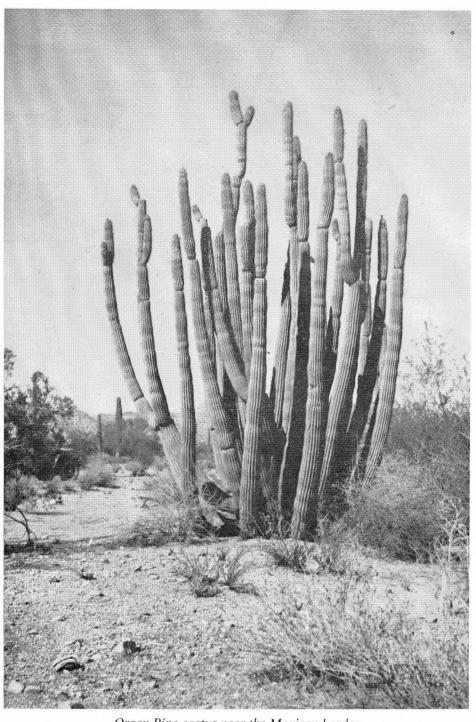
I counted more than 100 mature saguaros in the bottom of the crater. Most of the other well known members of the Sonoran plant family were there - Ironwood, Palo Verde, creosote, ocotillo, jumping cholla, tree cholla, encelia and senita cactus.

At 2:00 o'clock Mac announced he was heading for the top. "I would rather be on my way," he said, "than down here drying out."

Bill and I decided to wait until the

sun had dropped below the rim. We crossed to the south wall to explore the possibility of an easier route there -and when we found none we were sorry we had used up our energy in the attempt.

Our thirst had reached the point where we would have welcomed the rather bitter juice of a bisnaga cactus. But there was no bisnaga. I knew that saguaro is worse than useless as a thirst-quencher. I cut the stem of a



Organ Pipe cactus near the Mexican border.

senita—the "old man" cactus of the Sonora desert. It was like green cucumber. It soothed our parched lips—but our palates rebelled against this

vile tasting pulp.

The sun was sinking now and we moved up the slope with the shadow. We found a slope of talus that offered better footing than the place of our descent—and we made our way up hoping that it would be possible to scale the vertical cliff at the top. We could go only a few steps between rests. We reached the ledge above the escarpment just before dark—and there was Arles Adams with a flashlight and two canteens of water waiting for us. Good ol' Arles!

Further up the slope that leads to the top of the rim Mac was waiting with a rope to help us scale a steep pitch. We reached the top of the rim at 8:00 o'clock.

I know now that the descent into Elegante involves no great climbing difficulties—but I do not recommend it in 132-degree temperatures. On a cool day a quart canteen of water would be enough—but not in such temperatures as we encountered.

Our schedule permitted two more days in the Pinacates, and we decided to seek the natural tanks where Lumholtz had camped—the tanks he had named Las Tinajas de Emilia in honor

of his friend Miss Emily Beebe of Boston.

Following directions given us by Sr. Espinosa, we backtracked to the little forest of tree cholla and then took off on a faint road which led directly to the east base of the Pinacate range. He told us this was known as Hunters' camp because it was used by occasional parties who came here to hunt sheep. Near the camp, he said, were some tanks known as Tinajas Palos Verdes.

Mexicans come out here from Sonoyta to gather Ironwood for their cook stoves, and we got off on several false trails before we arrived finally at Hunters' camp late in the afternoon.

Palos Verdes tanks are located less than a mile from the camp near the base of the range. They contained water, but had not been replenished by storm floods for many months and the water was not inviting.

Early the next morning we headed up a canyon that appeared to lead directly toward the high peaks in the range. None of the Mexicans was familiar with Emily's tanks—and we were on a blind search. Three hours later we had climbed to the 2,000-foot level and my canteen was empty again. Mac decided to head on up toward the cinder cone that is Carnegie peak, but the rest of us turned back to camp. It was another hot day, and we knew the agony of climbing in 132-degree temperatures with dry canteens.

Two hours later Mac returned to camp. His water, too, had run out—but not before he reached the base of the cone. There, quite by accident, he had come upon the Sacred Cave of the Papago Indians, described at some length in Lumholtz' book.

Many years ago when the Papagos camped at the waterholes in this area, and on the sand dunes to the west, one of their gods was Iitoi. The Indians belived that the cave was the entrance to a long underground passage, the terminal of which was an island in the Gulf of California where Elder Brother's wife lived.

Periodically the Papagos made pilgrimages to his cave and deposited ceremonial objects—prayer sticks, eagle feathers, bunches of yucca fibre, beads, arrows and other items which might please the fancy of Iitoi, or his wife.

Mac reported that the cave actually extended 200 feet back into the lava flow, and that there were scores of prayer sticks on its floor, and in crevices. When Lumholtz visited the cave in 1910 his guide was an old Papago who brought his sacrificial offerings to the cave and sang his prayers to the

god. The cave probably has not been disturbed for many years as the Indians have long since ceased to come here.

We saw evidence of the bighorn sheep in many places but did not sight any of the animals. The Mexicans told us it had been a very dry year, and the animals probably were further west where the water supply is better.

Between Pinacate range and the gulf is a great expanse of sand dunes. Lumholtz reported that he had found the abandoned camps of members of the Indian tribe known as the Sand Papagos out in the dunes.

As soon as Mac came down the mountain, we packed our jeeps and headed for water—the great body of water known as the Gulf of California where there is found some of the finest deep-sea fishing in the world. We would have no time for fishing, but a dip in the surf would be refreshing after four days in that land of black lava and burning sun.

It was a pleasant 30-mile ride down the paved road from the Espinosa ranch to Punta Peñasco, and one of the Mexican police directed us to a sandy beach three miles from town where we would have a comfortable camp for the night.

Punta Peñasco is a boom town— Mexican style. The newly-paved road has brought many American visitors—mostly fishermen bringing their own boats on trailers, or in parties to charter boats from the Mexicans.

Shrimp, the main catch of the commercial fisherman here, have been bringing high prices, and the busiest place in town was the little shipyard where we saw 36 boats of various sizes under construction. The keels and framing of the boats are mesquite wood, sawed from a mesquite forest that lies along the Sonoyta river near the town. Hand labor is cheap here, and mesquite lends itself admirably to the timber work in boats.

We learned that the boat owners charter their craft to fishing parties on approximately the following terms: for the large boats the rate is \$6.50 a person with a minimum of \$50 a day. The 30-foot boats with 114 horse-power will carry eight people and the rate is \$5 a person with a minimum of \$30. Smaller boats with 45 horse-power are rented with crew for \$20 a day. They carry four passengers.

Motor court and hotel accommodations are now available at Rocky Point, once a primitive fishing village with only a few adobe houses and little contact with the outside world.

Mexican towns generally are well policed, and Rocky Point is no excep-





Above—On the beach at Rocky Point. The Mexican village of Punta Penasco is across the bay in the background.

Below—Thirty-six fishing boats are now under construction in the little shipyard at Punta Penasco. They are used mostly for charter trips of sports fishermen from the United States—and for catching shrimp.

tion. The police chief not only keeps his town in order, but he also serves as a sort of chamber of commerce. He is always the best source of information for visitors.

Rocky Point is handicapped by lack of domestic water. Its supply is trucked in tanks from a well at Papalote 14 miles away. Under the circumstances hotel rooms do not include bath facilities.

Our return trip was over the paved road by way of Ajo, Arizona, Gila Bend and thence over Highway 80 to Yuma. For the information of motorists who may sooner or later want to visit this lively little fishing town on the gulf my log showed 150 miles from the port to Gila Bend.

You will understand why Lumholtz and Hornaday came into this fascin-

ating region around the headwaters of the gulf-and how they found enough material to write books about it. The Pinacates are still practically a virgin field for archeologists and geologists and explorers—for a majority of the 500 craters in this region have been neither mapped nor named. It is a rugged country at best—but the new paved road to the gulf which extends along one side of the Pinacate range has opened the way for a better acquaintance with this land of black rock and white sand, of hidden tinajas and pre-historic Indian sites, of pagan gods and bighorn sheep—and spreading out at the western base of the Pinacates are the blue waters of the Gulf of California, a virgin playground for American sportsmen and those who prefer beaches which have not yet become too crowded.