

THE

Desert

M A G A Z I N E



SEPTEMBER, 1948

25 CENTS

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DESERT CALENDAR

- Sep. 1-3—Southern Utah junior livestock show, Richfield, Utah.
 Sep. 1-3—Morgan county fair, Morgan, Utah.
 Sep. 1-31—Beehive Midway, fairgrounds, Salt Lake City, Utah.
 Sep. 2—Harvest dance, St. Stephen's Day, Acoma Pueblo, New Mex.
 Sep. 3-6—\$25,000 P. G. A. Open Golf tournament, Reno, Nevada.
 Sep. 3-6—Elko county fair and state livestock show, Elko, Nev.
 Sep. 4—St. Augustine Day dances, Isleta pueblo, New Mexico.
 Sep. 4-5—Lucerne Valley Days, Box S ranch, Lucerne Valley, Calif.
 Sep. 4-5—Second annual gem and mineral show, Junior Rockhounds of Prescott, Arizona.
 Sep. 4-6—236th Annual Santa Fe Fiesta, "America's oldest community celebration," Santa Fe, New Mexico.
 Sep. 4-6—Nevada state fair, Fallon, Nevada.
 Sep. 4-6—Annual Labor Day rodeo, Williams, Arizona.
 Sep. 4-6—Annual rodeo, Magdalena, New Mexico.
 Sep. 4-6—Labor Day homecoming celebration, with parade and rodeo, Bishop, California.
 Sep. 4-6—Nevada rodeo, Winnemucca, Nevada.
 Sep. 4-6—Sierra Club of Southern California, Desert Peaks section, to climb Montgomery and Boundary peaks, White Mts., California and Nevada.
 Sep. 5-6—Quarter horse show and rodeo, Benson, Arizona.
 Sep. 6—Annual flower show, Williams, Arizona.
 Sep. 6-8—St. Augustine Day dances, San Ildefonso, New Mexico.
 Sep. 9-11—Juab county fair, Nephi, Utah.
 Sep. 9-11—Southern Utah livestock show, Cedar City, Utah.
 Sep. 9-11—Iron county fair, Parowan, Utah.
 Sep. 9-12—Antelope Valley fair, Lancaster, Calif.
 Sep. 10-11—Peach Days, Brigham, Utah.
 Sep. 11—Dick Wick Hall Day, Salome, Arizona. Sponsored by Lions club.
 Sep. 15—Ceremonial races and dances. Horse Lake and Stone lake, Jicarilla Apache reservation, New Mexico.
 Sep. 15-16—Tooele county fair, Tooele, Utah.
 Sep. 15-18—Roosevelt county fair and rodeo, Portales, New Mexico.
 Sep. 16-19—San Bernardino county fair, Victorville, California.
 Sep. 18-25—Utah state fair, fairgrounds, Salt Lake City.
 Sep. 19—Annual fiesta and dance. Laguna Pueblo, New Mexico.
 Sep. 20-30—Sunset dance, eve of San Geronimo day at Taos, New Mexico, followed by Feast Day of San Geronimo, with fiesta and dance.
 Sep. 25-26—Second annual open show rodeo, Barstow, California. Parade and dance.
 Sep. 30-Oct. 3—Yavapai county fair, Prescott, Arizona.



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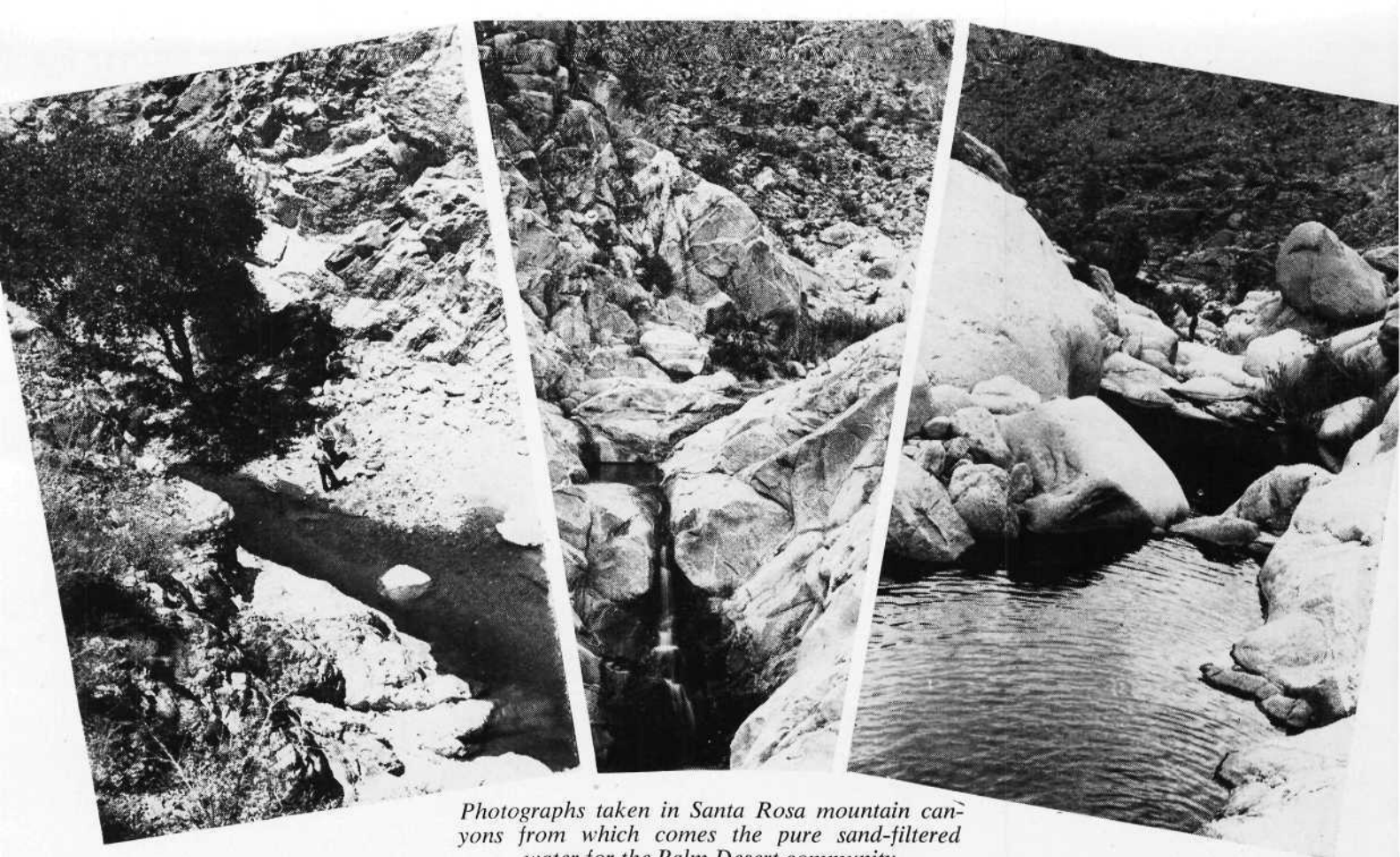
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Photographs taken in Santa Rosa mountain canyons from which comes the pure sand-filtered water for the Palm Desert community.

Why Make Your Home in PALM DESERT?

Because Palm Desert has in a generous measure all those elements essential to the full enjoyment of the freedom, the peace, and the healthful environment of a satisfying home community. On the desert, the first consideration always is water, and so this first in a series of little stories about the assets with which Nature has endowed the Palm Desert community is devoted to the subject of

... WATER ...

PALM DESERT'S WATER SUPPLY comes from underground. It is pumped from a well more than 600 feet deep in the clean bajada which has been forming at the base of the Santa Rosa mountains for thousands, perhaps millions of years.

It is water from the melting snow of the Santa Rosa and San Jacinto ranges. During the winter months millions of tons of snow accumulates on these ranges at elevations from 6,000 to 10,000 feet.

When warm days come the water from these melting snow banks, sometimes 10 or 12 feet deep, trickles into the sand and crevices and finds its way to underground channels, gradually

flowing to the lower levels. Sometimes these underground streams find their way to the surface as springs. There are many springs on the slopes which surround the Palm Desert cove on three sides. But even the spring water seeps into the sand again and continues its course to the great underground reservoir of the desert below.

That is why Palm Desert has pure water. It has been filtered through many miles of clean granite sand and gravel. It remains in its great underground storage reservoir beyond all possibility of contamination until it is pumped to the surface to serve the needs of the home-makers and visitors in the Palm Desert community.

SO LONG AS THE SNOW FALLS ON SANTA ROSA AND SAN JACINTO
PALM DESERT WILL HAVE CLEAN WATER — AND PLENTY OF IT.

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Pictures of the Month

Wildlife . . .

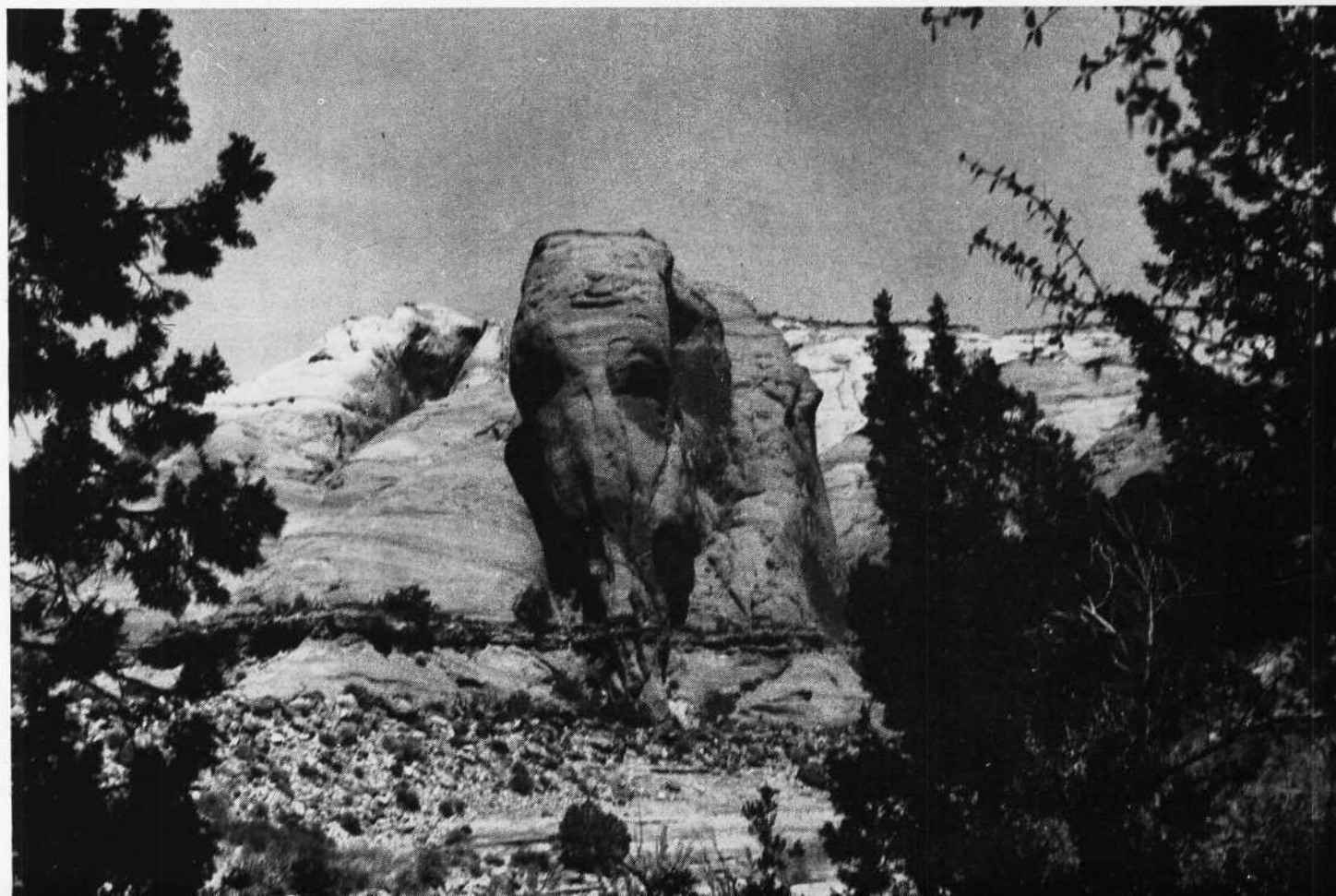
First prize in Desert's July photographic contest was won by Jack J. Zehrt of St. Louis, Mo., with the accompanying late evening picture of a deer in northern Arizona. The photographer saw the animal from the highway and followed it until he got the right composition and snapped it with a flash bulb from a distance of 15 feet. A Speed Graphic was used.

Guardian of Rainbow Trail . . .

George H. Kuhl of Glen Ellyn, Ill., won second place in the July contest with his Busch Pressman camera picture of the famous sandstone "elephant" along the trail to Rainbow bridge near the Utah-Arizona state line.

Special Merit . . .

A Desert Sparrow Hawk photo entered by Robert Leatherman of San Bernardino, California was of such merit it was purchased for a future Desert Magazine cover.

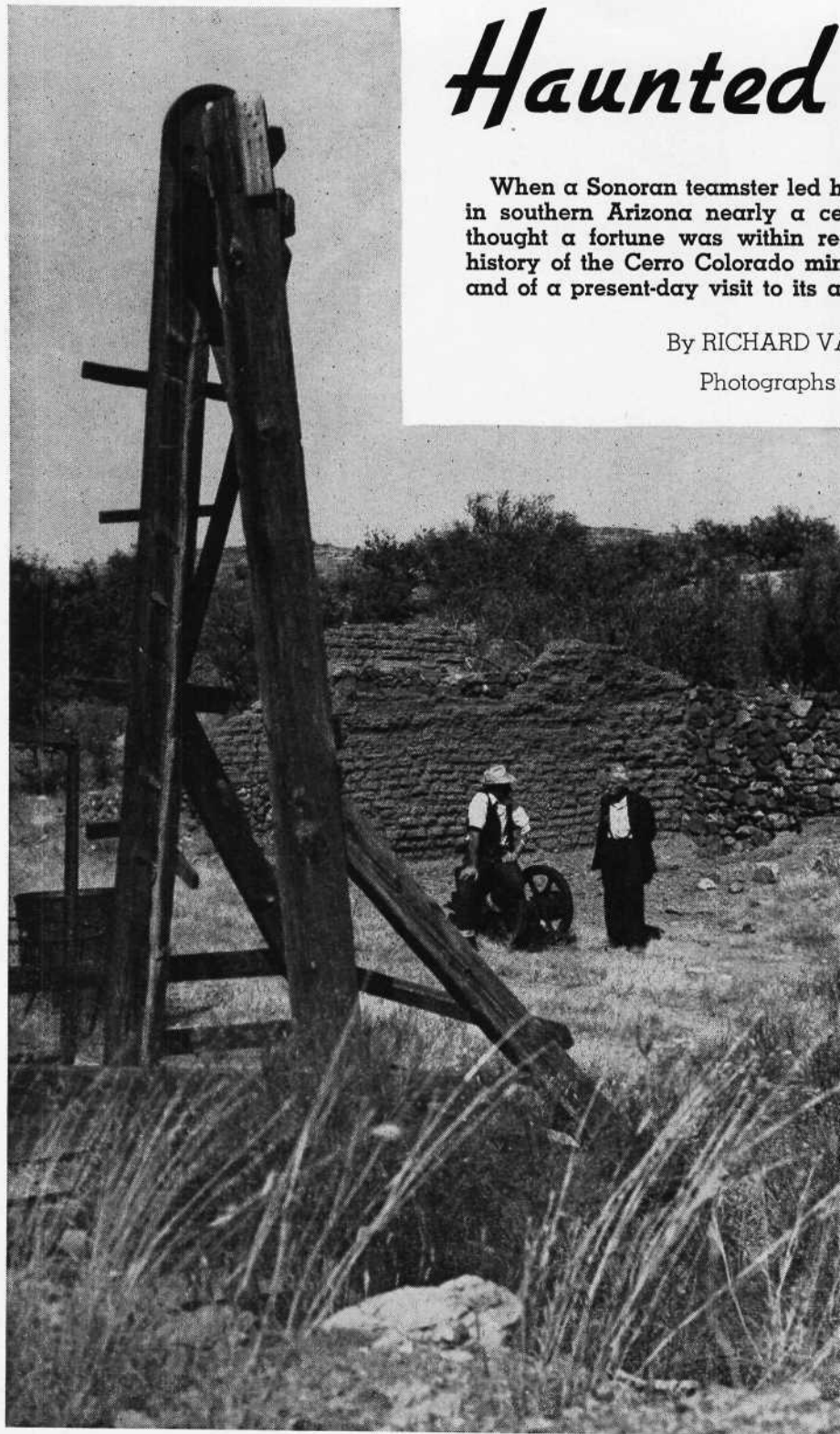


Haunted Silver

When a Sonoran teamster led him to a rich outcropping of silver ore in southern Arizona nearly a century ago, Major Sam Heintzelman thought a fortune was within reach. But bad luck has dogged the history of the Cerro Colorado mine. Here is the story of its discovery and of a present-day visit to its almost forgotten ruins.

By RICHARD VAN VALKENBURGH

Photographs by Ray Edwards



All that remains today of the historic Cerro Colorado mine shaft where \$3,000,000 in silver is said to have been produced between 1856 and 1861. The adobe walls were built to protect the miners from Apache raiders.

NINETY years ago Major Sam Heintzelman of the U. S. army picked up a piece of lustrous grey ore from the counter of Solomon Warner's general emporium in Tucson, Arizona territory. Balancing it in his hand, he questioned the clerk, "Where did this come from, muchacho?"

"Quien sabe?" evaded the clerk, not yet accustomed to the brisk ways of the *Yanqui* intruders. "Probably it will please Don Solomon to tell the patron. You will find him about the pueblo."

As he picked his way through the narrow, crooked lanes of the Old

Pueblo, Heintzelman's suave expression did not mirror the excitement stirring within him. The army officer had received mineralogical training in Germany and he recognized the ore as stromeyerite—silver-copper glance, as the miners called it.

Heintzelman located Warner and made clear his interest in the high grade silver ore. Possibly with an eye to future amiable relations with the military, the shrewd merchant told him the specimen had been brought in by a Sonoran teamster named Ouidican.

Heintzelman located Ouidican in a house on *La Calle de India Trieste*, but the teamster was suspicious of the *Yanqui* army officer and denied knowledge of the ore. And it was not until considerable palaver had taken place that the Sonoran agreed to guide the major to the location for \$500 in gold and a half interest in the mine.

Striking south at sunup, the partners pushed their fast-gaited Spanish mules down the west side of the Santa Cruz valley, past the old mission of San Xavier, and onward until they reached the region of Twin Buttes in the Serrita mountains. Here Ouidican stalled. While they were jogging across the desert he had been thinking of tales he had heard about sharp dealings by the *Yanquis*. How could he be sure he would receive the \$500 in gold?

And despite Heintzelman's loud threats and honeyed promises, the Sonoran turned his mule and headed back toward Tucson.

The next day Heintzelman hunted out Ouidican again. He would guarantee payment of the \$500 in gold at the store of Solomon Warner upon absolute proof of the existence of the lode. Ouidican agreed and they went to the store where Heintzelman committed himself before witnesses.

On the second trip Ouidican did not tarry by the Serritas. Alert to the menace of the Apache, he avoided the rutted tracks of the Sonora road. When evening came he said to Heintzelman, as they looked to the west toward a

great rounded mountain with towers that gleamed ruby-silver red in the sunset, " 'Tis Cerro Colorado, the Red Mountain."

Skirting the slopes of the mountain, the riders pushed their mules through the velvet blackness of the desert night until they dropped to the mesquite groves of the upper Sopori Creek. For both the trail-wise Sonoran and the veteran of many an Indian melee knew the Apache never attacked at night.

Just as the moon began to rise from behind the long shadow in the east that was the Sierra Santa Rita, Ouidican guided Heintzelman to the base of a small red mountain which he called El Cerro Chiquito. When the major looked northward to orientate himself he could see by the moonlight lighting the hills, that their camp was just south of the Cerro Colorado.

With the first rosy streaks of dawn Heintzelman followed Ouidican down a rock littered slope toward a *motte* of scrub mesquite. When the Sonoran stopped, Heintzelman hurried to his side. Looking down he saw a crude shaft filled almost to the grass roots with a litter of rubble and debris.

Climbing down, Ouidican began to pitch out the fill. The deeper he gophered the more tense the major became. Suddenly the Sonoran stopped. Taking out his knife he pried something loose. And as he handed out a chunk of the same lustrous ore Heintzelman had seen in Warner's store he said, " 'Tis *petanque*, almost pure silver!"

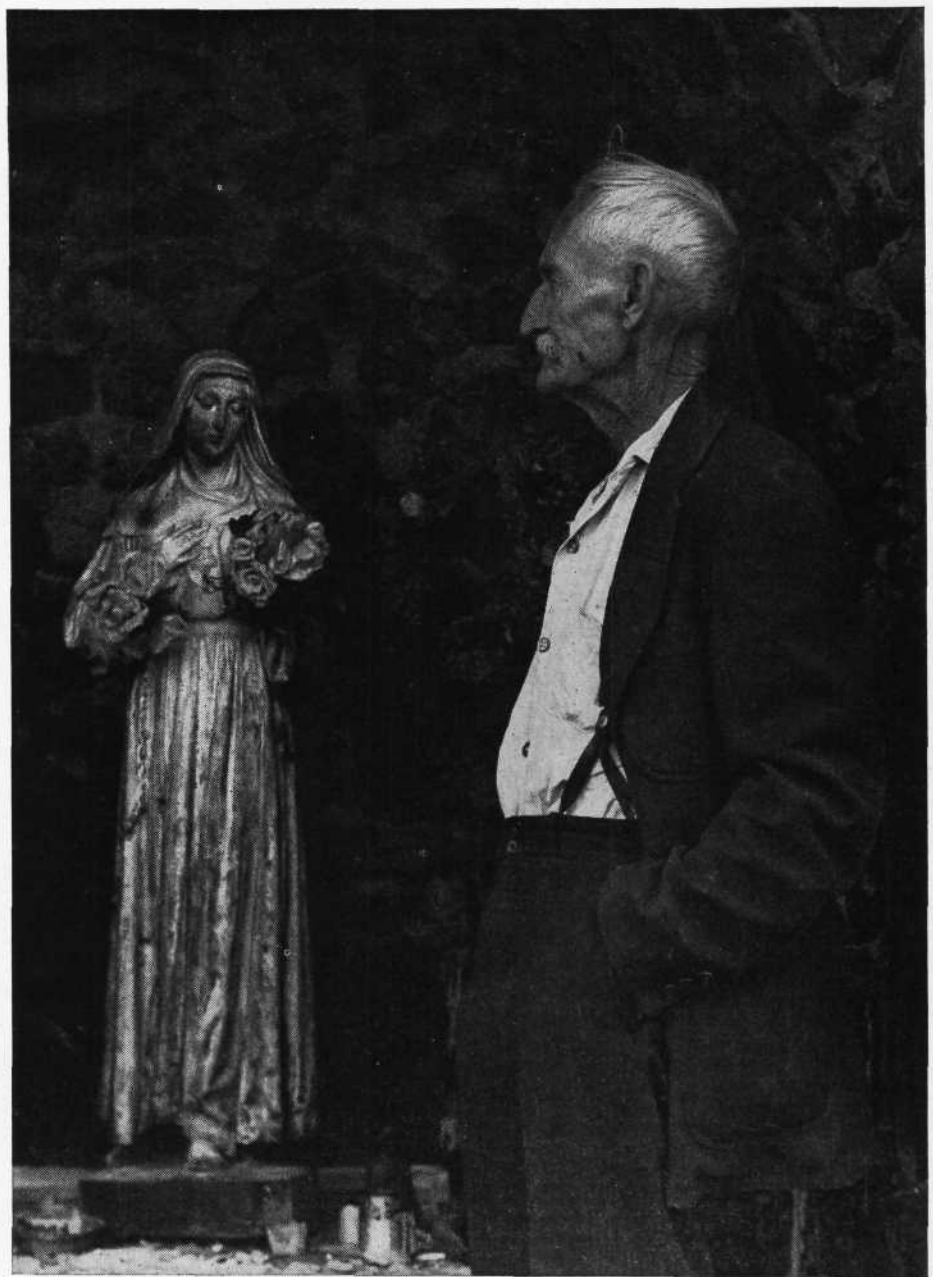
After stuffing their saddle bags with the *petanque* and refilling the shaft, the partners struck out for Tucson at a high lope. Upon reaching the Old Pueblo, Ouidican insisted they go immediately to Warner's store for the \$500 in gold promised him by Heintzelman.

When they stood before the counter, Heintzelman was deliberate as he dug into his pocket. After some moments he pulled his hand out. Then he laid on the counter a *boleta* of Tubac paper money, upon which was engraved a rooster designating its value at 50 cents.

"This is enough to pay a d--- Mexican," he said.

This story, for the most part, was excavated years ago from the memory of old Curro Lopez of Saric, Sonora, who sickened and died before it was finished. I was intrigued and curious as to what might be the ending, but it was not until early last winter that a chance mention of the story stirred up an answer from Fred Wright, my 79-year-old prospector friend.

"Seems to me that somewhere down around Caborca, Sonora, I've heard



Fred Wright, veteran lost-treasure hunter of the Arizona desert pauses to visit the shrine of Santa Rita, patron saint of all miners. The sacred figure is in a grotto on the historic Sopori ranch.

tell of the discovery of *petanque* in a mine called El Cerro Colorado in the Arivaca country. Also — something about a lost treasure. What's holding us? Let's get going. There's more to that story—"

The frost was still silver on the leaves of the mesquites lining the Twin Buttes road when we went southward from Tucson on approximately the same route traveled by Ouidican and Major Heintzelman. Once beyond the serrated basaltic slopes of Black mountain, we hit the graded road and started up the long slope cutting through the dusty green desert towards the Serrita mountains.

Skirting the gaunt gallows frames of the Twin Butte mines, we started to slope down from the Serritas. Below,

in the first shafts of the morning light, we could see the patchwork of the green and brown that marks the cotton fields around Continental in the fertile Santa Cruz river bottoms.

Thirty-six miles south of Tucson we dropped down from the washboard road through a cut to join black topped U. S. Highway 89. Traveling south on the pavement for 10 miles we turned to the right at Otho Kinsley's ranch and lake, and headed southwestward over the Arivaca-Ruby road.

In a few moments we came to the giant cottonwoods and green fields surrounding historic Sopori ranch. Rich in the tradition of Arizona's early mining days and scene of bloody Apache raids, this old ranch in recent years has been famed locally as the



HEINTZELMAN MINE (NEAR ARIBAC)
From the South Side.

An old lithograph of the Cerro Colorado mine in 1856. Courtesy Arizona Pioneer's Historical Society.

site of the *boveda*, or shrine, of Santa Rita.

At the *boveda* Fred called for a stop. He walked up the gentle slope for a closer look at the saint. And I was surprised, remembering Fred's profession of having no faith, when the old prospector made an offering to this patron saint of all miners!

Leaving Santa Rita, we traveled up the mesquite covered bottoms of the Sopori creek. Somewhere in the next 15 miles we must have cut the trail traveled by Ouidican and Major Heintzelman 90 years before. For rising in the west, with its towers and scarps glowing in the morning sun, lay the Cerro Colorado.

Seventeen twisting miles southwest of Kinsley ranch brought us to the juncture of the Arivaca road and the trail that climbs by the Cerro Chiquito to Las Guijus mines. And we located the ruins of the Cerro Colorado mine in the V made by the roads. One could easily pass by unaware of being close to one of Arizona's most historic sites.

With Fred setting the pace, we prowled the slopes south of the Cerro Chiquito all morning trying to connect the Ouidican-Heintzelman story with the mine shaft area south of a rocky slope cluttered with ruins of 'dobe buildings. Things seemed to jibe and we found one small specimen of silver ore on the mine dump.

Finally our wanderings brought us to an old cabin almost hidden in the mesquite west of the mine. There we were welcomed by 84-year-old Charles E. Udall. He not only had lived on the ground for 43 years, but at one time owned and operated the Cerro Colorado mine.

After making ourselves comfortable in Udall's living room, we talked about

the region in general. Finally, Fred switched the conversation to the Cerro Colorado. Then—from the lips of this old timer who had been a part of the later history of the mine, we learned the story of Heintzelman's mine.

After bilking Ouidican, Heintzelman let no grass grow under his military boots in cashing in on the silver. For a few months in 1856 he toiled at sink-



Sketch made in 1857 showing Mexican method of bailing water out of a mine shaft. Courtesy Arizona Pioneer's Historical Society

ing a 50 foot shaft in the rich ore. Then Thomas and Ignacio Ortiz, owners of the Rancho La Aribac upon which the mine was located, ran him off their property.

Soon afterward the Sonora Mining & Exploring company with headquarters at Tubac, Arizona, purchased the Cerro Colorado property and the Rancho La Aribac. To keep check on the \$7000 per ton silver ore coming from the mine, Charles D. Poston, the company manager, placed his brother John in charge of the Cerro Colorado workings.

Sometime after 1860 the good Santa Rita turned her face from the prospering Cerro Colorado. Deep in the candle lit depths of the mine 15 Mexican-Indian miners sweated as they filled their rawhide bags with the shining silver ore from under the hanging wall. Without warning the ceiling caved and buried the miners!

Owing to tons of fallen rock it was impossible to recover the bodies. Many surviving miners, believing the mine to be haunted by ghosts, left for their homes in Sonora. Today the "lost ones" still lie in their tomb 70 feet below the surface of the earth.

On the heels of this catastrophe came the Civil War and the removal of troops from Arizona territory. Cochise, the Chiricahua Apache chief, believing his warriors had scared away the blue clad soldiers of the *Bilakana* began to make good his threat to exterminate all whites in southern Arizona.

When Apache war arrows began to fly, Charles Poston made plans to leave Arizona. Leaving his brother John in charge of the Cerro Colorado, he and a mining engineer named Raphael Pumpelly, went on toward a fortified reduction works and town.

A few days before, John Poston had caught his Sonoran foreman, Juanito, heading south with a heavy load of silver bullion. Exasperated by desertions and stealing on every hand, Poston decided to make an example of Juanito. Taking his rifle he shot the Sonoran out of his saddle in cold blood.

With the killing of Juanito, all work stopped at the mine. The miners stole everything they could carry. Then they slipped away in the night to head for their homes in nearby Sonora. With them went this story: Somewhere on the slope between the shaft of the Cerro Colorado and the Cerro Chiquito to the north, Juanito had buried \$70,000 in stolen silver bullion!

Hearing the tale, a band of Sonoran outlaws, reinforced by former employees of the mine, headed north as fast as their horses would carry them. Reaching the Cerro Colorado soon

after the departure of Charles Poston and Pumpelly, they killed John Poston and two Germans. With all the *Yanquis* dead or fleeing the country, they tore up the whole mine and its works in their efforts to locate the treasure.

But their search was fruitless. And the tradition still persists, as proven by the occasional visits made to Udall by folks who ask to dig, that the \$70,000 in silver bullion still awaits the lucky *hombre* who digs in the right spot on the slope between the Cerro Colorado and the Cerro Chiquito.

Udall became interested in the Cerro Colorado before the turn of the century. Examination of the shallow diggings of Heintzelman and John Poston convinced him there was still rich ore to be mined. In 1900 he formed a company of which Diamond Jim Brady was a stockholder.

After 40 years Mexican-Indian *mineros* again came from Sonora to work in the Cerro Colorado. On the foundations of the building where John Poston met his death at the hands of the Sonoran bandits, Udall built a commissary, office, and an \$8000 residence.

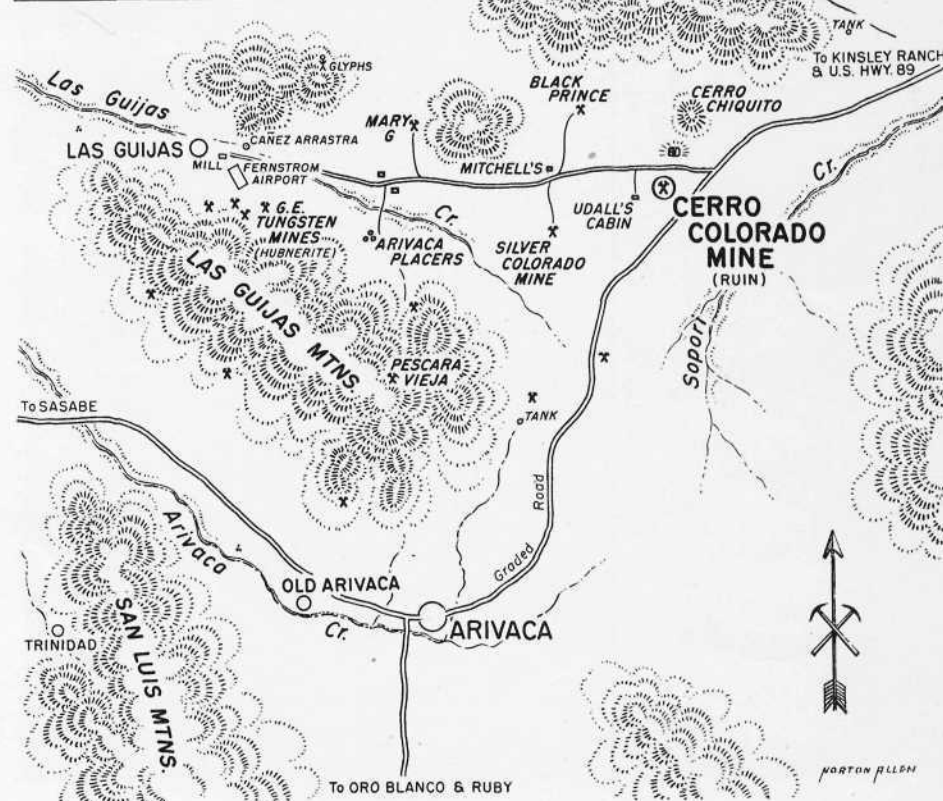
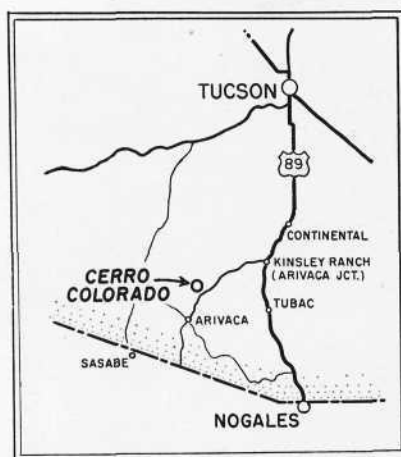
Back of these buildings, now in ruins, lies the old *campo santo* wherein rest the remains of 18 who have died by the Cerro Colorado since the day of Heintzelman. In one tiny grave reposes an \$800 parrot, the Udall family pet, which was shrouded in Chinese brocade and laid away in a coffin made from a jewel box.

Udall would not admit that he had searched for the lost treasure of Juanito. His only answer was: "The story checks and still is commonly told in northern Sonora. So when treasure hunters ask permission to dig, I tell them to go ahead on a fifty-fifty basis. Who knows?"

Not wishing to wear out our welcome we soon left Udall. Fred insisted that we go over the slope in which Juanito's treasure is supposed to be buried. So we spent the afternoon turning over rocks, poking a sharp iron in the ground, and looking for "treasure sign."

When the sun started to nudge the peaks of Las Guijas mountains, I suggested we defer our treasure hunt until another day. Fred grumbled something about "the lack of sticktuitiveness in these young fellers" as we headed for our car. But before we reached it we came upon an old Mexican making camp in one of the better preserved *'dobes*.

After identifying ourselves, Fred and the old Mexican, whose name turned out to be Jesus, swapped mining yarns.



When the talk reached the point where Fred felt sure of his ground he probed: "We been fossickin' around looking for 'sign' of a lost treasure said to have been buried around here by a feller named Juanito."

Jesus walked to where he could look down on the mine shaft below before he quietly answered, "Si. El Cerro Colorado, she may still have a treasure and be a rich one for the *petanque*. But what sane man would go down there and get mixed up with the ghosts that haunt the mine?"

"Si, *seguro*. The story of Juanito's treasure is true. With one exception. That poor fellow, he stole the silver from the *Yanquis* who got rich from the work of the *mineros* who sweated and died in that black hole in the ground. But it was to share with

widows and children of those who died, and not for his pockets alone.

"For this *viejo*, who has always been under the protection of the good Santa Rita, I would not place one foot in that mine or search for the buried treasure. I want nothing to do with El Cerro Colorado. Since the earliest days the mine has had bad luck—many say a curse."

And as Fred and I looked through the dusky twilight settling to shroud the old mine and its ghost town, we could not help speculate on the rationality of the Mexican's belief. For when the grim history of the place flashed back across our minds, it seemed possible indeed that something beyond the power of man made the Cerro Colorado the graveyard of men's hopes and bodies.



Cushing in full Zuni regalia. Photograph through courtesy American Bureau of Ethnology, Smithsonian Institute.

He Lived with the Zunis

Frank Cushing narrowly escaped death at the hands of angry tribesmen when he first went to live with the Zuni Indians in New Mexico. But his cool disregard of their threats soon won them over—and he became an honored member of the pueblo. Here is the story of a man who was one of the first to give Americans an intimate acquaintance with the life of the Pueblo Indians.

By MARY OTIS BLAKE

ON a hot September afternoon in 1879, a weary adventurer was making his way up a narrow valley of the Sierra Madre mountains of northwestern New Mexico. The sojourner was Frank Hamilton Cushing, direct from Washington, D. C. His objective was the pueblo of Zuni. Situated high up in the fastnesses of the Rocky Mountain plateau, Zuni had been sunning itself for untold centuries, not entirely unknown, but little understood by the intruders who had visited it from time to time.

However a party of investigators, under the leadership of Colonel James Stevenson, had been sent by the Smithsonian to collect data on the Pueblo Indians. Cushing, one of the party, decided to study Zuni while the others were visiting the Hopi villages in Arizona.

In due course the party arrived at Fort Wingate. After two weeks travel by camp wagon they were persuaded to rest there a few days. Cushing was in haste to reach Zuni. In spite of the remonstrance of the officers at the fort, he procured a government mule and set off alone to accomplish the 40 miles of uninhabited distance. He had never been in a saddle before and his beast required "much prodding."

Now the day was waning and he was uncertain as to the location of the village. Then the road, black with lava and rough, suddenly came down into a sandy plain through which flowed the Zuni river.

As he came in sight of the stream a boy herding sheep and goats came toward him. He extended a hand with the greeting "Hai, hai." Cushing took his hand and shook it heartily, saying "Zuni?" The boy answered "E," meaning yes, at the same time breathing on the stranger's hand. He returned the hand. Cushing's quick perception of the importance of this breath-taking act proved the key that unlocked the outer fortress of the Zuni reserve.

When a short time later he rode into town and tied his mule to a post the tribesmen were on the housetops watching a dance in one of the plazas below. At first the Zuni leader appeared unfriendly, but when Cushing used his newly acquired form of greeting the attitude of the Indians changed, a general breath-taking and giving ensued.

The sacrosanct character of the dances brought a serious crisis for Cushing. He was eager to make sketches of the ceremonies. The Indians kept remonstrating with him about making the "shadow" of them. Finally at the invitation of Pa-lo-wa-ti-wa, the chieftain or gobernador, he moved his belongings into the common living and sleeping room of the Chieftain and his wife. He slung his hammock opposite the fireplace where the cooking was done.

But the Indians continued to show resentment when he brought out his sketch book. When his book was seized and figuratively torn up he became angry and displayed his hunting knife. This brought matters to a head and he heard whispers of the Knife Dance in which two dancers pledge themselves to perpetrate the death of a Navajo—their ancient enemy.

The gobernador advised him not to

appear at the Knife Dance. He refused to stay away, whereupon his adviser said, "O, well, a fool always makes a fool of himself."

When the ceremony started Cushing took his station on the parapet with his hunting knife beside him.

Two masked and painted men, nude to the waist and carrying war clubs, mounted the ladder leading to Cushing's position on the parapet, shouting "Kill him, Kill him." The people began to crowd around so that escape would have been impossible. He drew his knife and waved it over his head. The sunshine caught it and its brilliancy was reflected on the crowds. This salute to the sun, unpremeditated on Cushing's part, gave pause to the dancers on the ladder, who said, "We've made a mistake." Leaving the plaza they soon came back dragging a yelping dog. In killing it, they accomplished the death of a Navajo and fulfilled their vow.

Cushing says, "That day had won for me the truest of friends and decided the fate of my mission to the Zunis."

He was given Zuni food exclusively and a complete Zuni costume was substituted for his American clothes. The effect was hailed with enthusiasm as he walked the streets of Zuni but his American friends felt sure he had lapsed into savagery!

Next he was installed in a newly whitewashed small room and given two sheep skins for his bed on the floor "to harden his meat." With two wool blankets for cover (handmade as was everything in Zuni) his sponsor said, "If you're cold, just say you're not; that's the way a Zuni does." With fine scorn the chief cut down his hammock, Cushing's last link with civilization!

Zuni pueblo in 1879. In the foreground is the Stevenson party with Cushing who came to Zuni as an ethnologist. Photo by Ben Wittick. Courtesy Arizona Highways Magazine.



Shalako dancer in costume.

As the winter in Zuni became more severe, Cushing suffered acutely. Emerging from a long ceremonial in an overheated kiva, a cold wind brought on a chill and he came down with pneumonia.

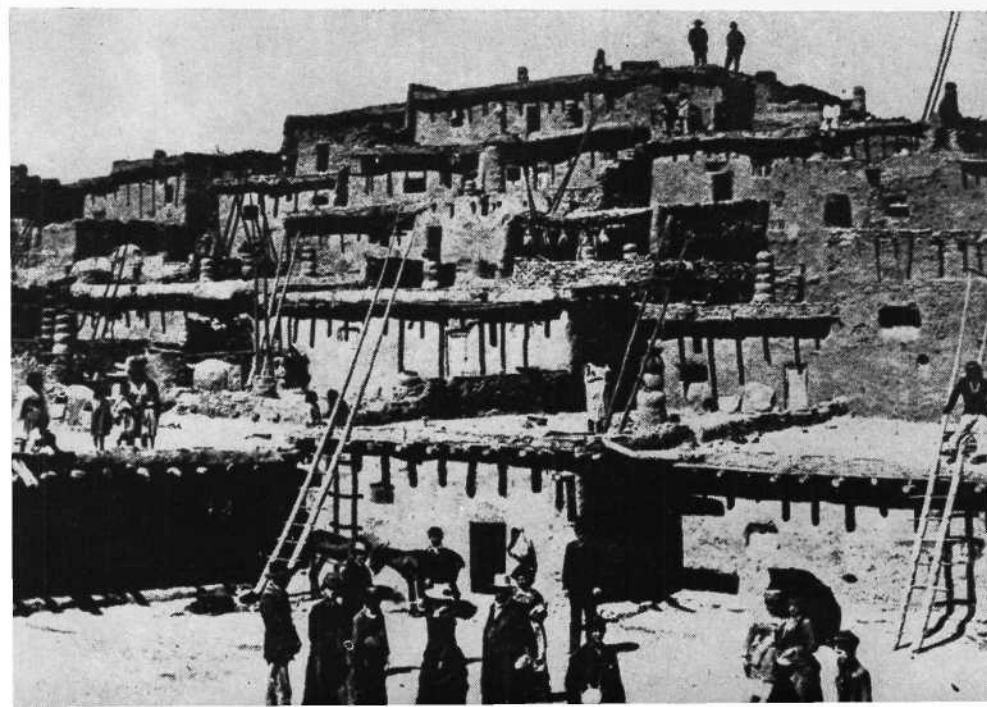
The chief instructed his slowly convalescing guest in the intricacies of the language. Before the end of the first year his pupil had become proficient in the Zuni tongue. Eventually, between intervals of ill-health, Cushing translated most of the long Zuni creation myth, very difficult because of its archaic terms but rooted deep in ancient traditions and rituals and awaited with interest by the scientific world.

Cushing was importuned by the

gobernador and other influential men of the town to have his ears pierced. He finally consented and found it was the symbol of his adoption into the Zuni fellowship as a Child of the Sun. He was made a member of the Macaw clan and christened *Ten-as-tas-li*, Medicine Flower, a rare bloom with magical properties—a name which could be borne by but one person in a generation.

Frank Cushing was born in 1857. Never a very strong child, he was allowed to roam at will in the woods surrounding his home in central New York where he came in contact with the remnants of the Indian tribes still living there. He developed an uncanny aptitude for unearthing Indian relics and great dexterity in the primitive Indian arts. At sixteen he was digging in rubbish heaps left by the Indians in their camp sites and finding a wealth of material, fast vanishing through the ignorance of the settlers. At 17 he wrote a paper on the antiquities of Orleans county which was published in the Smithsonian report for that year. At 22 he was put in charge of the newly created Bureau of American Ethnology of the Smithsonian. Soon after this he came to Zuni.

November and December were months of exciting discoveries for this sojourner in a strange environment. He discovered in the ceremonial life of this supposedly uncivilized people a highly organized system of social and religious culture. Intensely curious, Cushing obtained an invitation to the ceremonies connected with the secret installation of the newly elected Koyimachi (Guardians of the Sacred Dance or Delight Makers). Ten from among



the priesthood are elected yearly to perform their sacred office of jokesters. Going from plaza to plaza they enliven the intervals between the dances with quips and clownish acts.

The newly elected Koyimachi, with their warty masks and mud daubed bodies, perform their first offices of entertainment to usher in Shalako ceremonies which come on early in December as a salute to the waning sun and mark the departure of the old year.

Shalako is both a house warming and a harvest home festival. Zuni shows herself the bounteous host to all outsiders who come to partake of the gaiety and feasting.

At dusk, the immense whiterobed Shalako figures, at least 10 feet high, come in to perform the ceremony of blessing each new house built in Zuni during the past year. At dawn a salute to the waning sun is given and the New Year begins. After their 18-hour visit the Shalako leave and the sacred Kaka comes on. Then the crowd leaves, taking with them quantities of the beautiful Zuni handiwork.

The gobernador thought Cushing should become a member of the tribe by marriage and two of the most attractive girls in the pueblo were selected to make advances to him in



accordance with Zuni custom. The chief and members of the tribe were humiliated when Cushing rejected both offers, and relations were rather strained for a time. However, the visitor soon healed the breach with a suggestion that was mutually pleasing.

The specter of drouth hangs over

the pueblo lands each year. But according to Zuni legend a great body of water existed somewhere to the east, the Ocean of Sunrise. Cushing was informed, "Our fathers told their children about the Ocean of Sunrise. We have not seen it. We know it in the prayers they taught us and in the things they handed down to us which came from its waters." (Ground shells were used in their prayers for rain.)

When Cushing suggested a trip to this almost mythical ocean was possible they promised him entry into the Order of the Sacred Kaka.

After much discussion six were chosen to go: Nai-iu-chi, senior priest of the bow; Ki-a-si, junior priest of bow; Pa-lo-wa-ti-wa, the political head-chief of Zuni and Cushing's brother by adoption; Lai-iu-ai-tsai-lu, formerly gobernador of Zuni, now an old man nicknamed Pedro Pino; Lai-iu-ah-tsai-lun-k'ia, priest of the temple and Cushing's father by adoption, and Nana-he a good looking Hopi adopted into the tribe by marriage who made himself quite popular with the ladies.

All Zuni became intense with the preparations for the journey. Most important was the safe transference of the properties for the ceremonies at the ocean. This was accomplished even to the time-hallowed, fringed and net covered gourd which was to hold the first water dipped from the ocean.

February 22nd, 1882, was the day set for the departure. Not unlike the leave taking of other reverent Americans were the prayerful farewells of these simple wards of Uncle Sam. In the later afternoon there were parting embraces, heart to heart and breath to breath. Then Nai-iu-chi, senior priest of the bow, blessed the people from the housetops and the company started their journey, railroad transportation having been arranged.

The hand luggage was primitive. The most important was a bag of prayer-meal.

Each stream they crossed, however small, was saluted with prayers, the car windows were opened and the sacred meal was scattered reverentially.

Though it was late when they reached Washington, they were awake and ready to draw in the holy influence from the place they held in such reverence. Their most thrilling experience there was shaking hands with "Wasintona" in the person of President Chester Arthur. They ate American food and liked some of it but thought the Americans "dared their insides" too much. They left Pedro Pino, now between 80 and 90 and too old to take part in the ceremonies, with his friends, Col. and Mrs. Stevenson. On a trip down the Potomac he danced

Zuni women of today—dressed in the native costumes for the annual Tribal Ceremonial at Gallup. They learn to carry ollas of water on their heads in early childhood.



attendance on the ladies, caught cold, survived pneumonia, later climbed to the top of the Washington monument.

Boston was the place selected for the formal visit to the Atlantic ocean. At the time set for the ceremonies, Boston's chilly March weather had moderated. A steamer, chartered by the mayor, took the Zunis and their invited guests to Deer island, the point farthest east and most propitious for the rites. In a tent the six participants, included Cushing, costumed themselves in their elaborate insignia.

The priest of the bow bearing the ancient gourd, led the procession. The priest of the temple followed with a basket containing two vessels of spar and the sacred cane cigarettes whose smoke, investing prayer-plumes planted on the shore, would carry their messages to the gods of the ocean.

Prayer meal had been scattered abundantly and there had been prayers before and after a song sung in unison, and sacred whizzers carried by Cushing and Kiasi, were indispensable to the ceremonies.

Then the two master priests waded knee deep into the ocean, scattering the precious meal over the face of the waters. When they had sprinkled water to the six regions of the universe and upon the spectators they dipped the sacred vessels full. As they stood a moment in prayer, Cushing and Kiasi dipped their whizzers in the water and each uttered a prayer. Majestically the procession marched to the tent where several stanzas of a very old chant were sung with the refrain as translated by Cushing, "Over the road to the middle of the world, thou wilt go."

The ceremonies were concluded with an all-embracing prayer for the entire animate world, "even the creeping and most vile and insignificant beings."

That the tribe might be sure to have enough water to use in their future rain ceremonials, the city had presented them with seven demijohns. These were filled, but before the company left the shore a surprise was given Cushing. His baptism with ocean water was the first step in his initiation into the Kaka.

While in Washington Cushing was married to Miss Emily Magill. She accompanied him to Zuni in the fall and supervised his diet with the help of a Negro cook and supplies from Wingate. But his health had been so seriously impaired that in May, 1884, he was forced to leave. He never returned for any length of time. While in Zuni from '82 to '84 he was busy collecting and codifying his discoveries. Many magazine articles of literary charm as well as scientific value, came from his pen, as well as several



Waihusiwa, the famous story-teller of the Zuni. It is believed the silver-mounted cane was one given the tribe by President Lincoln.

books. Forced to return to Washington, his indomitable will kept him at his desk in the Smithsonian until 1886 when he gave up entirely for a time.

During the last years of his life he was sent to Florida for his health. Instead of resting, as the doctor had ordered, he gave five busy years to a study of the pre-Columbian sea-dwelling people of the Florida keys. He was preparing his discoveries for publication when a slight accident caused his death April 10, 1900.

UPPER BASIN STATES AGREE ON DIVISION OF WATER

Under the terms of an agreement reached by members of a special committee, the waters allotted to the upper basin states of the Colorado river watershed are to be pro-rated as follows:

The total amount available to the upper states under the Colorado River compact is 7,500,000 acre feet less 50,000 feet allotted to Arizona. The remaining 7,450,000 acre feet are to be divided as follows: 51.75 per cent to

Colorado, 11.25 per cent to New Mexico, 25 per cent to Utah and 14 per cent to Wyoming.

The agreement has been reduced to writing and is to be formally ratified by the Upper Basin Compact commissioners at Santa Fe October 6. Also, it must be approved by congress and the legislatures of each of the states involved. Commenting on the agreement Secretary of Interior J. A. Krug said:

"I am delighted by a report from Harry W. Bashore, Federal Commissioner of the Colorado Upper Basin States Compact Commission, that firm agreement has been reached by the Upper Basin states — Colorado, New Mexico, Utah, Wyoming, and Arizona — with regard to the division of the waters allotted to them from the Colorado river. More than 25 years have elapsed since, in Santa Fe, New Mexico, the original 7-state agreement dividing the river between the upper and lower basins was initialed in 1922. The Upper Basin states agreement is a second great forward step in the development of the Colorado river which is the primary resource of its region."



Photograph by George Merrill Roy

Dripping Springs

(In California's Santa Rosa mountains)

By BEATRICE G. BOYCE
Pasadena, California

Once long ago some fairies
With prankish wanton mien
Thought to ape the humans
Whose customs they had seen.
So on the walls of canyons
In dark, secluded places
They carved their fairy names
And many times their faces.

But the Queen of all the fairies
When she heard what they had wrought
Ordered that these guilty ones
Before her throne be brought;
And she condemned them every one
To live forever barred
Behind those very walls
Whose beauty they had marred.

And to cover the unseemly scars
She bid them work for years
To make a veil of lacy ferns
And water it with tears.
Oh, that all earth's beauty spots
By human hands defaced
Could have their beauty thus restored
And the ugliness erased.

• • •

WHERE THE AIR IS CLEAR

By E. W. BARTLETT
Angel's Camp, California

Brothers of mine, who share with me
The land, the sea and the sky,
Choose a place to call your home
To live, and toil, and die.

And leave it a name, honored and clean
Give it the best that you've got
And don't let them tell you the desert land
Is the place that God forgot.

Live in the cities and towns if you will
And hobble your soul in a street
Or find a piece of land to till
And plow the sod with your feet.

But give me the land of cedar and sage
Of cacti, and sun and the sand
Let me dwell in a place where the air is clear
And the soul of man can expand.

Would We Had!

By TANYA SOUTH

We see too darkly now, alas!
Too dark the Way is set.
Too oft we walk the stormy pass.
Too often we forget
The track that inspiration lit,
Or Faith had pointed out.
Ah, would we had the strength and wit
To follow Truth—nor doubt!



Carl Eytel and the studio cabin at Palm Springs in which he lived and worked for many years.

Art in a Desert Cabin

Many artists have tried to convey to canvas the harmony of line and color found in the desert country, but probably none have worked more faithfully or effectively toward that end than did Carl Eytel who lived for many years in a little cabin studio at Palm Springs and got an average price of from \$10.00 to \$15.00 for his oils and watercolors. And his character was as true as the creations of his pen and brush. Edmund Jaeger, the writer, was friend, companion and neighbor of the artist for many years.

By EDMUND C. JAEGER

Pen and ink sketches accompanying text are from one of Eytel's notebooks reprinted through the courtesy of the author and the Desert Museum of Palm Springs.

ON the grey flat sands close beside the mountains and at some distance apart from the then tiny and delightful desert village of Palm Springs, there was in the long ago days a small one room abode made for the most part of finished but unpainted

redwood shakes; on its northern side was a single large window, on its eastern, a paneled door painted white.

On sunny days when the occupant was at home the door was always open and to that open door came men of learning, great artists, world travelers

and scientists. The attraction was the quiet and unassuming desert artist, Carl Eytel, whose pictures of desert scenes, whose knowledge of desert life had become known far beyond the borders of his small village.

Slight of build, blue-eyed and with skin tanned and leathery from constant exposure to the sun and winds, he seemed the kind of man one would expect to find on deserts. Austerity was everywhere apparent about him from his plain clothes and clean shaven face to the tiny unpainted house which was his home. His usual attire was a pair of khaki trousers, tan corduroy jacket and a brown broad brimmed stetson hat with band of rattlesnake skin.

Eytel seldom talked about himself, even to his friends. Sometimes he gave evasive answers to their queries. If he thought them too inquisitive he jokingly gave them misleading statements. Hence it is not surprising that little information as to his early life

ever appeared in the numerous articles written about him for the press.

According to the family records kept in his native Germany he was born September 12, 1862, in the vicarage of Maichingen in Wurttemberg. His father, a clergyman, had seven children of which Carl was the fifth. Upon his father's death, young Carl was sent to live and find schooling with his grandfather, rector of the Eberhard-Ludwig gymnasium at Stuttgart. Later he attended the Ober-gymnasium at Heilbronn where he passed his leaving examination in 1880. From 1880 to 1884 he studied forestry at Tubigen.

Upon graduation he was drafted for the usual year of military service. Loathing the soldier's life with its regimen and lack of freedom, he emigrated in 1885 to the United States, entering employment with a German farmer in Kansas. It was here he made his first series of drawings of cattle, studies in which he gained great proficiency in later years.

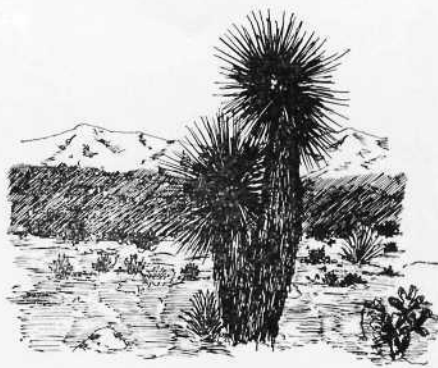
As soon as his savings would permit he came to California, lured by accounts of its wild mountains and deserts, and the chance it would give him for further study at the herds of stock on its spacious ranches. After a short sojourn at El Monte he came to Palm Springs. Charmed by what to him were idyllic surroundings, he set himself to the task of learning to represent in oils, water color and pencil the beautiful desert landscape he saw. At every opportunity he explored the canyons and dunes. He traveled extensively over much of the Southwest and few came to know its arid basins and mesas and its desert mountains more intimately than he.

When George Wharton James was gathering his material for the writing of his book, *The Wonders Of The Colorado Desert*, Eytel often traveled with him, doing the pen sketches which are an important part of that two-volume work. Eytel gave James much help in the preparation of the text of the book as well as the illustrations. For his contribution Eytel got little return.

Later it was J. Smeaton Chase writing his *Cone-Bearing Trees of California* and his *California Desert Trails* who sought out Eytel as the man to help him learn the desert's secrets.

Eytel sometimes travelled with a companionable horse or burro, using the beasts to carry either him or his pack of provisions. But he also took long journeys on foot, carrying his few belongings in a knapsack on his back. For every journey he spent many days of preparation and planning.

Although one of the gentlest of men,



Mojave yucca

Eytel once came near being hanged as a horsethief. He had spent the day in Santiago canyon of the Santa Ana mountains sketching the home and grounds of Modjeska, the famous Polish actress. When night came he hunted out a ranch house in the vicinity hoping to obtain lodging. As he approached in the darkness a pack of savage dogs came out, followed by several men and boys.

One of the men told him to hold up his hands. The rancher got a lantern and looked him over, demanding that he tell what his business was and why he was out in such a place at that time of night.

One man said he knew the stranger was Sylvester Morales, a much sought horsethief. Another said he recognized the horse Eytel rode as one driven off recently from the neighborhood. He suggested the only way to stop such thievery was to hang the culprit on the spot. The men relented when he showed them the beautiful drawings in his notebooks and convinced them of their error in identification.

During the late spring of 1918, against the advice of friends who feared for his health, Carl made a trip from Palm Springs to the Indian villages of northern Arizona traveling on his horse Billie. It was at a time when the war fever was at its height and the ignorant and hot tempered often were trying to prove their patriotism by acts of violence. As the artist was plodding along a lonely road on the Arizona range, he was met by a party of cowboys who accused him of being a German spy.

Eytel, remembering how his sketches had saved his life before, produced his notebook. But this only heightened suspicion. One cowboy suggested that they rope-tie him and take him to the authorities; a second cried bluntly, "Kill him an' be done with him."

"You kill me," cried Eytel, his eyes flashing sudden fire, "and Hubbell the trader whose guest I am, will learn of your deed and have you all strung up." The mention of the name of F. M.

Hubbell who they knew well, calmed them and after a few cursings they let him go.

One thing that stamped Carl Eytel as a man apart was his singleness of purpose. Art was his primary interest and he sought always to interpret sincerely and accurately the desert he loved. This inward urge to draw and paint well, drove him relentlessly to the time of death.

I never knew Carl Eytel to paint from imagination. "You must go out of doors," he would say, "and record accurately the details of what you really see." This made him an endless prowler in desert places and everywhere he carried his sketch books. At the time of his death he left hundreds of such books of record of the things he saw. Many of them are rain soiled, for often in bad weather the only protection they had was the covering of a coat pocket or the knapsack in which they were carried as the artist walked, alone or beside his horse Billy, over long desert trails. These notebooks with their sketches and accompanying notes comprise an invaluable pictorial record of historical interest, for they depict much of a desert that no longer exists. Especially valuable are pictures of old ranch buildings, Indian dwellings and scenes on the cattle ranges of the old Southwest. Exhibition of these beautifully kept notebooks in museums and libraries always creates interest.

Eytel's minor sketching journeys were usually in winter months. Summers were devoted to long trips—Yosemite and the High Sierra or to the Hopi or Navajo villages of Arizona and New Mexico. No land, no people fascinated him as much as the Southwest, its Indians and their colorful land of sandstone and lava. He liked the Indian way of life wherein serenity and love of out-of-door freedom and unhurried ways were cornerstones of happiness. He played with their children, painted and drew pictures for the elders, became part of their joys and sorrows. And the Indians liked him in return. He remained with them for long periods. They fed him and gave him shelter at night and nursed him when he was ill. This was as true of the Cahuilla people of California as it was of the Pueblo Indians.

As an artist Eytel was largely self-taught. Except for some drawing lessons in youth and a brief journey to Germany in 1897 to gain some additional technical assistance in art he had little help from the schools.

Writing of his work in the *Pacific Outlook*, J. Smeaton Chase said: "(Eytel) is before all an enthusiast for color, the perfect gift of which Ruskin



This rare photograph from the C. C. Pierce collection shows Carl Eytel (driving) and George Wharton James on one of their buckboard excursions out of Palm Springs when James' book "The Wonders of the Colorado Desert" was in preparation. Name of the passenger with the gun is not known.

declared to be 'the rarest and most precious power an artist can possess.' Colorists, no doubt are a numerous band in the world of modern art; but how few colorists are lawful! how few are sane! how few sincere!

"Mr. Eytel is all these, for in his equipment is a foundation rock of inflexible truthfulness; and so, his art is absolutely quiet and reverent which is as much as to say, true. The blanched sand wastes which the remorseless sun has drained almost color dry, and the long, lost canyons reverberating with color at its highest power, are equally known and equally loved by him, and knowledge working by love has given him a wonderful insight into the reality of deserts. There is no horror, there is no weirdness, there is nothing of the stereotyped in his understanding of it; but there is the infinite, ageless beauty of light, the solemnity of the slow moving sand ocean, the steadfastness of the skyward looking mountains, the innocence of the blue sky, and the lonely, wistful desert cloudlets; and he has the art, which is true art, of making us understand them, too."

Eytel's favorite subjects of art were cattle, the Colorado desert's native palms, the Arizona and New Mexico Indians and their dwellings. No one ever sketched palms more patiently and with greater persistence and no one ever drew or painted them better. He drew literally thousands of them in

pencil in order to learn to render more accurately their graceful form. Many a trip I have made with him, often to isolated palm groups in almost inaccessible canyons that we might study these noble trees in a truly unspoiled setting. "God never made a thing more beautiful," he would say, and when, after a long trudge over rocky trail we came into the presence of the palms, he would stand in amazed and reverent silence for moments contemplating their immense grandeur of form.

I remember a time when a pot-boiler sort of artist, ordinarily a painter of marine scenes, spent a week on the desert doing in that time a half dozen big canvases. He begged Eytel to come and see them, the expectation being of course that he would give him some words of commendation. One of the paintings, I recall, included about everything that ever grew on deserts, in addition to a desert storm—a monstrosity in color indeed. Eytel looked at it for full five minutes in utter silence. The suspense was really terrific. I knew he was in no mood to be untruthful in flattery. Then came the lone laconic and biting question: "How did you ever do it?" and he walked away. It was evidently a case in which he thought the less said, the better.

Eytel was a severe critic of his own work. There was never any vanity.

No one will ever know how many pieces of almost finished work he threw to the flames.

On Saturday morning there was always much activity in Eytel's studio. It was then that he cleaned and put his little house in order for week-end visitors, the possible buyers of his pictures. The money from the sale of these was his sole means of support. He sold his canvases at what seem to us now ridiculous prices—generally \$10.00 to \$15.00, occasionally \$50.00. Customers were never plentiful. It was usually the case of many admirers and few buyers. Eytel was never a good salesman. He was modest and shy, hence all his life he lived near the borderline of poverty.

Sometimes when sales were slow and Eytel was depressed and perhaps even hungry, old Dutch Frank (Debolt), his ever sympathetic prospector friend would try to comfort him: "Carl, done you ever worry. Ven you be dead your baintings vill sell for beeg, ya, for maybe grade beeg money. You bet, and den day all vill say, 'Carl Eydel, he vas a grade, voonderful bainter.' Vat I tell you Carl, is de real trut!"

Carl Eytel was unmarried. Perhaps it was as well for he possessed little ability to care properly even for himself. But narrowness of fortune he took kindly, repeating often and in jocular vein the old saying: "Poor folks have

poor ways." In a certain sense he was a man of many sorrows. Sincere and honest to a fault he was too often the victim of his belief in the sincerity and honesty of others. Simulating helpful friendliness and with effuse promises and compliments, people, some of them, I regret to say, of

national fame in the literary and art world, induced him to part with his pictures for a pittance under promise they would use them to bring him to the attention of publishers and get him paying work as an illustrator of books.

I knew one such man who took

the paintings away and never tried to make contact with a publisher. He carried them off to decorate the walls of his newly built western ranch house. The score or more of paintings he took represented weeks of patient work and had a value of several thousand dollars. But for them Eytel was paid

Of Such as These is the Spirit of the Desert...

By ELWOOD LLOYD

One time I asked Carl Eytel why he stayed so many years in the Palm Springs area. He replied: "Just so I may learn to paint, some time, one tiny bit of its spirit, its peace."

Almost 40 years have come and gone since Carl taught me the first of many important lessons. It was in Tahquitz canyon, where he wanted to show me the hidden waterfall. The floor of the canyon was, and still is, covered with great boulders.

In those days there were many wildlife denizens of the desert in the neighborhood of Palm Springs. The little spotted skunks were particularly plentiful. They were playing and frolics in and out around the boulders over which we climbed. Those were the days when I thought hunting of wild things was a prime sport, and considered a pistol as necessary equipment for a rural hike.

One of the little spotted skunks ran into a tiny opening between two great boulders. I crouched down, pulled my pistol from its holster, aimed carefully, and fired. Then I called, "Come here! Look! A clean hit! I got him!"

Carl slowly bent down on his knees and peered into the crevice. Then, over his shoulder, said to me, "Yes. You did. What will you do with it?"

"Nothing," I answered. "There isn't anything I can do. Those rocks are too big to move. I couldn't get at it, even if I wanted to try. I was shooting just for practice."

"So-o," mused Carl, "but what are you going to do about giving back that life you took from him? It was giving him joy but it gives you nothing. Alive he did no harm."

The holstering of my pistol was the only answer I could make, but Carl did not press for further reply.

Years later, when we had grown to know each other better, Carl invited me to accompany him on a little sojourn in Chino canyon, where we made our frugal camp beside the spring amid the palms. One day we were sitting on the ground with our backs against the same palm trunk—Carl making a sketch of the dunes and serrated mountains across the valley—I, a quarter way around the tree, making notes of local color for a story. We were both quiet for a long time, for we had reached a stage of acquaintance where conversation was not often necessary.

In his low, hesitating voice, Carl said to me, "Ach, Elwood, we have a visitor."

Following his gaze I looked, and there near us, close against the base of a palm, a coiled rattler was enjoying the morning sun and the beauty of the day. Quietly we continued our occupations. After a while Brother Diamondback uncoiled and lazily slithered away toward the cool shadows of the underbrush.

Carl's canvases fairly exuded the desert atmosphere and fragrance. They were more than pictures. They were bits of real desert. One day I remarked on the fidelity of his colorings, particularly the tinting of the sands.

At this Carl gave a whimsical chuckle and said, "Yes, the sand! Fourteen years I could not get the sand right, no matter how I try. Then one day a little breeze blew my canvas from the easel and it fell upon the sand—but not with the wet paint down, I am thankful to say. Instantly I discovered my trouble, when I saw the sand coloring of my painting lying flat upon the real sand. Such a simple thing. Always I had been seeing it from the wrong angle. Just like life, the wrong angles make wrong colors and spoil harmony."

One time—it was when Carl was very poor, financially—he received a commission to paint a desert mural in one of the new state buildings at Sacramento. Without explanation he declined the commission. Knowing his economic need, I questioned him about it, and twitted him about being afraid of the noise and crowds of the city.

"No," he remonstrated, in his gentle manner. "It is not that, although I should not enjoy being in a city so long. But if I took the commission I would want to do the best work I could possibly accomplish. If it was good, as I should like to have it be, it would, perhaps, make other people want to see the real desert here. Then, perhaps, they would come here and ask me to show them the scene from which I had painted. That would bother me. I am too happy here as I am, to have time for bother."

Not long before Carl went to his long rest in the Indian burial ground—where he had asked to be placed among its close friends—we were sitting, chatting, in the gloaming, and I questioned him, "What was the biggest moment of your life, Carl?"

"The biggest moment of my life? Ach, yes, Elwood. I will tell you.

"One day, just a while ago, I am at the edge of the desert painting, with the canvas on the easel before me. On my head I have my stiff brim hat to shade my eyes from the sun. In my left hand I have my palette, with my thumb stuck through the hole, holding my brushes.

"Not far is a creosote bush and in the bush a little bird is hopping from branch to branch. He flies from the bush and lights on the rim of my hat. He jumps down on my shoulder and my arm. He perches on my thumb stuck through the hole in the palette. Then he sings a song right in my face!

"Ach, yes, Elwood! That is the biggest moment in my life. I know I am in harmony with all things."

And of such as these is the Spirit of the Desert.

less than a hundred and that at a time when he was ill and almost destitute. Another so-called friend duped him out of a parcel of valuable land.

Among my most prized memories were the evenings I spent with him in camp. There seated before the flame of the little fire of creosote twigs we talked of men and events, of history and nature. Not widely schooled but widely read Eytel possessed a knowledge not only of the Greek and Roman classics but of the best literature of England, America and his native Germany. He was a voracious reader and had a retentive memory. His little petroleum lamp was lighted at early dusk and the flame often burned late at night. Above the screened window at the north end of his studio cabin was a shelf on which was an ever-changing selection of choice books loaned to him by friends or purchased by the artist himself from his meager earnings.

The name Eytel in the German means proud and in dignity Carl Eytel always carried himself. Because of a deep-seated pride, it was hard for him to accept help from others, even when in dire need. "I must stand on my own hind legs," he would say. "I must exert myself to get what I need, not depend on others." And so his many friends had to find the subtle ways necessary to get him to accept the help he so often needed. Some bought pictures, others hired him to make drawings, still others made him an honored guest in their homes. Mrs. Nellie Coffman of the Desert Inn, known for her perennial wisdom and kindness would have him make place cards for special holiday dinners. Many of the former guests of the Desert Inn still treasure Eytel's pen and water color sketches it was customary for Mrs. Coffman to present to her guests at Christmas time.

Except during bad weather I never knew Eytel to sleep indoors. Trying to inure himself to hardships in the belief it would toughen his constitution, he often slept through the winter nights without sufficient bedding. "By George," he would say, "it was cold last night. I shivered to the bone but never mind, that's good for me." He never had a stove to warm him and always cooked his pot of coffee and simple food over a flame rising from beneath a couple of irons placed astride two stones. In his later years he was afflicted with a pulmonary disease which doubtless was aggravated by the hardship and exposure of those strenuous walking and horseback journeys to reach his chosen wilderness places for painting and sketching.

It was this affliction which finally ended his valuable and picturesque



In Palm Canyon May 11th 1908

In Palm Canyon

career. He came to his end in his sixty-third year, dying in Banning where kind and thoughtful friends made it possible for him to have in his last hours such comforts as modern medical science can provide. Some of the funds were provided through a bequest left by his friend Frank Debolt (popularly known as Dutch Frank), an old prospector long known in Palm Springs and the Morongo country.

On a September afternoon in 1925 a few friends, including the Indians with whom he had always been on most intimate terms, gathered in the Fiesta House at the Desert Inn to hear a simple burial service supplied by a missionary of the Moravian church. At his own request and with the full desire of the Palm Springs Indians, Carl Eytel was buried in the Cahuilla cemetery, the only white man ever to have been accorded this honor. A great and touching tribute it was.

After his death an avenue in Palm Springs was given his name to perpetuate the memory of the beloved artist.

UNCLE SAM STARTS SALE OF JACKRABBIT HOMESTEADS

After more than 10 years of preliminaries, Uncle Sam is about ready to sell one of his 5-acre jackrabbit homesteads—the first sale of record under the Small Tract Act approved June 1, 1938.

The probable No. 1 buyer is Jack Strauss, television engineer and secretary of the Academy of Television Arts and Sciences. His home is in North Hollywood.

During the last week in July Strauss received a memorandum from the federal land office granting permission to buy for \$100 the five acres he has been holding under lease. The land is located in the sand dune area of California's Coachella valley three miles southeast of Cathedral City. Nearby land under private ownership has been sold in recent months for many times the price Strauss is paying.

The North Hollywood homesteader secured his jackrabbit lease on five acres in June, 1945. In October, 1947, he bought a Southern Pacific railroad utility shack. The building, partially dismantled, was dragged across the desert with a tractor. With a group of friends the 14x16 foot cabin was assembled and occupied within a few hours. Since then it has been rebuilt into a comfortable desert retreat. However, it is accessible only by a jeep trail and is still without water or electricity.

The Strauss memorandum is of interest to thousands of jackrabbit leasors in the Southwest who have been paying \$5.00 a year for the lease of their homesteads, and looking forward to the day when Uncle Sam would grant patents to the lands. Any leasor who has erected a cabin or other substantial improvements on his tract is eligible to apply for purchase. The sale is not authorized, however, until a federal inspector has appraised the land. Appraisals announced so far have been for \$10 or \$20 an acre, according to location and condition of the land.

Tree with Willow Leaves ---and Catalpa Flowers

By MARY BEAL

MANY who have lived in non-desert areas are familiar with the showy Catalpa as an ornamental garden or street tree. Few recognize its close relative which grows in a large area of the desert Southwest. This desert cousin commonly is called Desert Willow because of its willow-like leaves, but beyond this its resemblance to the willow ends. It is a member of the Bignonia family, along with the Catalpa and a few other cousins of decorative distinction, including that most spectacular tree, the Jacaranda and the Tecoma.

When not in bloom, a novice would never think of them as relatives, the foliage and general appearance are so different. The flowers, with their noticeable similarity, give the cue to the kinship. The Desert Willow, or Desert Catalpa as it sometimes is more suitably called, need not take a back seat as an ornamental. It too goes all-out in blooming, from mid-spring until far into the summer, and at the peak of its season is transformed into an immense bouquet of orchid-like loveliness, nearly every branchlet tipped by a raceme of a dozen to 3 dozen blossoms.

Its preferred situation is sandy soil and you may chance upon it from mountain washes and the neighborhood of springs to river-bottom dunes and flats.

It often consorts with the Smoke tree and in the southern part of its range you may find it associated with the Palo Verde. If it's blossom time and you are lucky enough to catch a group of these three interesting companions, you'll have a treat to delight your soul. It isn't an every-day affair, this special chromatic ensemble, but an extra largess to crown a flower lover's pilgrimage, an enchanting picture in delicate pink, blue-violet and radiant golden-yellow.

Variations in leafage (some leaves are curved and some not) and hairiness and stickiness of branchlets have led a few botanists to segregate two varieties from the original species, *arctuata* and *glutinosa*, but I think you would prefer to consider the species as a whole. Scientifically it is classed under the name,

Chilopsis linearis

Commonly a small tree 8 to 30 feet tall, or a large shrub, usually with a few branches from near the base spreading into a broad crown, the lower branches often arching to the ground. The main trunk and larger branches have rough, ridged, dark grey or blackish bark, the upper more slender branches having a lighter purplish hue, with somewhat scurfy, sparsely scattered glandular dots. Because of their graceful branches and the abundance of their beautiful flowers they are desirable for ornamental use and easily adapted to cultivation.

I have seen a few outstanding Desert Catalpas 35 to 40 feet tall but they are exceptional. One such blue ribbon tree in the eastern Mojave desert stood alone in a shallow wash, in sight of the main highway and not far from the road between Cima and Valley wells. Tall, for a desert tree, with a stout trunk and widespread branches, its shapely crown lavishly adorned with exquisite pink flowers, the air filled with their delicate fragrance. I haven't seen it for several years, at close range, but the recollection of it is as vivid as if I had hobnobbed with it only yesterday.



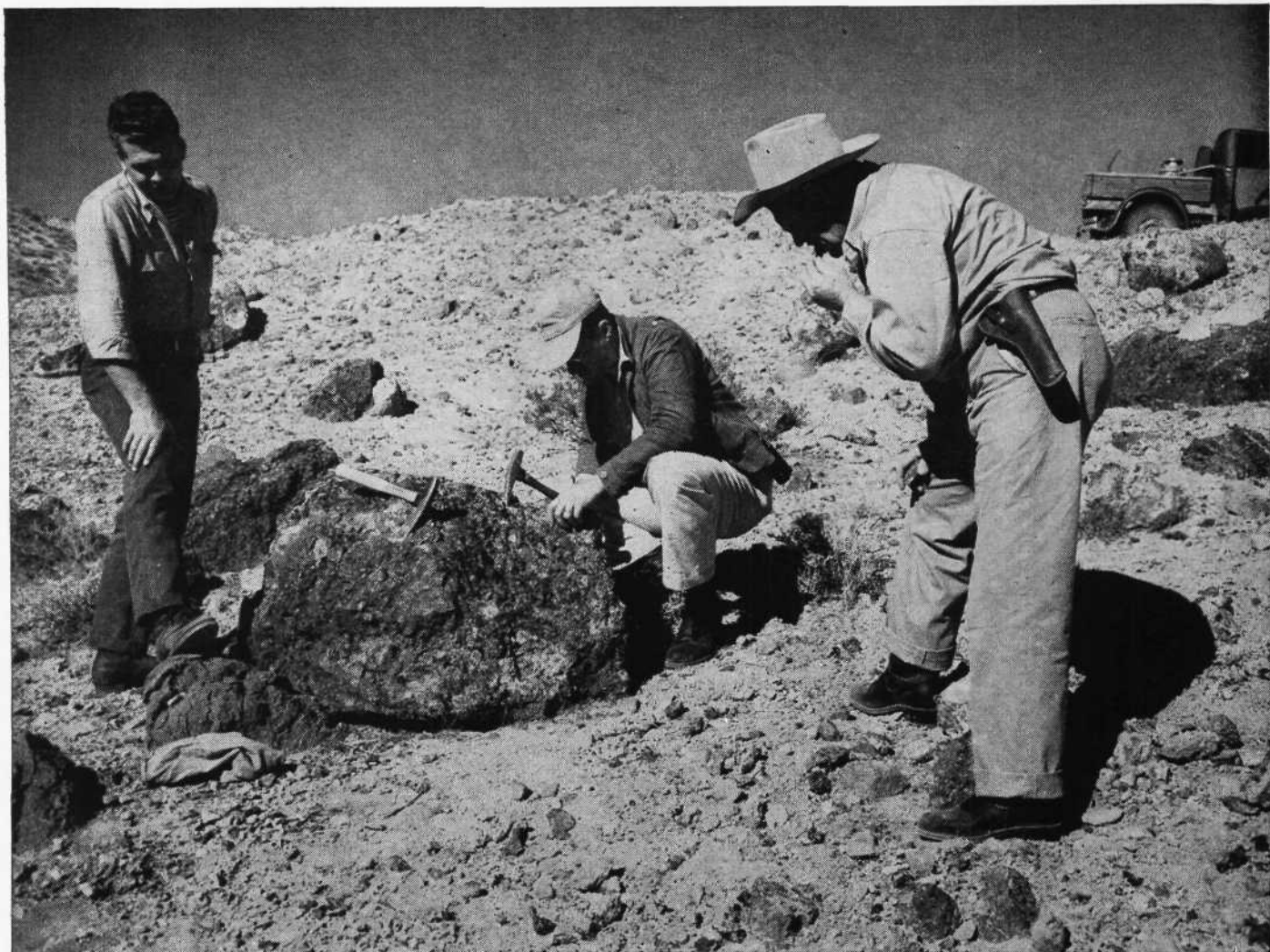
Because of its willow-like leaves this Catalpa is called Desert Willow. Beal photo.

For more definite points of identification notice the very narrow leaves, 2 to 7 inches long, tapering to a point at both ends, often curved, widely spreading or arching downward. The airy flowers are funnellform with two flaring lips and average an inch and a half in length but may measure 2 inches. From a distance the blossoms appear entirely white, but on closer inspection, the color varies from blush-pink to a deeper rosy-pink or occasionally orchid-pink, the spreading lips always paler than the throat, often whitish.

If you watch a corolla emerge from the opening calyx you'll find the long wide throat folded over double, with the crumpled lips crowded in between. The very short slender tube bends nearly at a right angle into the inflated throat, which flares abruptly into the lips, the upper lip having 2 erect lobes, the lower one with 3 much larger spreading lobes. The lower side of the throat is pleated into 2 hairy yellow ridges and marked by purple-red lines extending into the cylindrical lobes. The cylindrical capsule is very slender, 4 to 12 inches long, very flexible when young, and packed with many winged seeds, margined with fine silky hairs, extending 1/2 inch or more from each end.

The Desert Catalpa has useful qualities as well as beauty, at least the Indians so regarded it, and more recent desert dwellers have found its wood suitable for the building of fences and corrals. The Indians used it for similar purposes and as sheathing for shelters. The Indian women prized the long, slender, pliable young branches for basketmaking, and the pods, leaves and dried flowers are reported to have been used for medicinal purposes. In the long run, however, its contributions toward beautifying the desert landscape far outweigh its utilitarian endowments.

You'll find the Desert Catalpa in widespread areas, from the Colorado and Mojave deserts into southern Utah, through Arizona and southern New Mexico to western Texas, and across into northern Mexico and Baja California.



The author, left, and members of his party picking colorful specimens out of a block of conglomerate.

Field Trip to Bed Rock Spring

By DON INGALLS

I HAVE a special treat for your fluorescent lamp," Bill Lewis remarked as we bumped across the Trona railroad crossing, slightly more than four and a half miles south of the Wagon Wheel mine.

Bill and Bob Puthuff, photographers from Los Angeles, had accompanied me the previous day on a search over the southern slopes of Lava mountains on the Mojave desert, hunting new rock areas for Desert Magazine collectors. Our effort had gone unrewarded, but now another sunrise splashed the desert peaks with rose and gold, and the infant day was born to newer hopes and greater expectations.

The old Buick truck, our companion on many an adventure, slowed and came to a halt beside a shallow cut showing on either side of the road.

With cool weather approaching, the folks who like to camp and explore the desert country for rare minerals or colorful canyons will be making plans for their fall trips. Here is the story of a trail that leads into an old mining area where many interesting minerals are found. The road requires cautious driving—but the hiking is good even if the car balks at some of the grades.

The outcropping proved to be jasper shot through heavily with white opalite. The specimens we took from the west side of the road turned out to be the better. Under our fluorescent lamp, the drabness of the rock is replaced by a brilliant green.

There is plenty of material here for many, many collectors but the accessi-

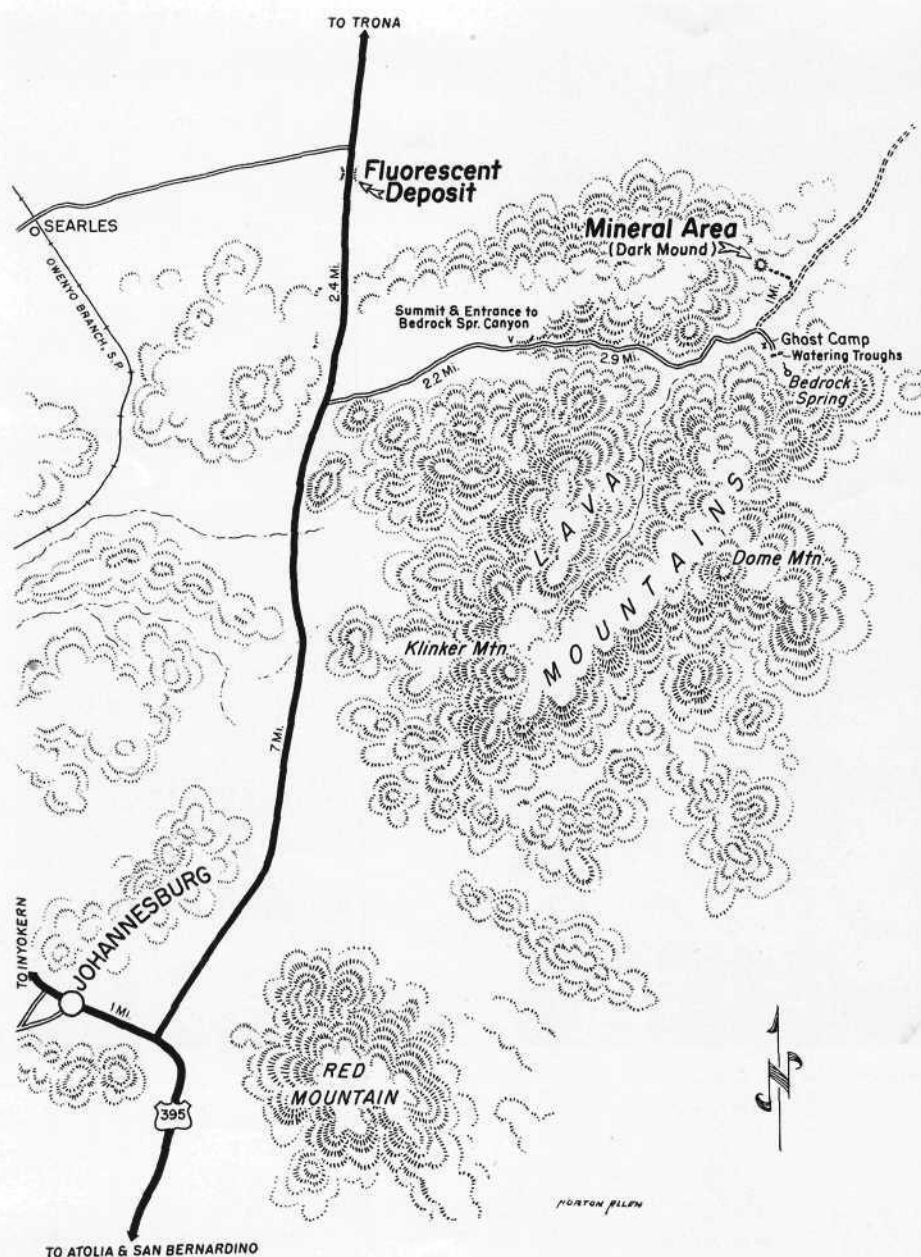
bility of the deposit can prove to be its own greatest enemy if consideration and unselfishness are not shown by those who seek it out.

A little exploration of the immediate vicinity and we discovered that the mound just east of the highway also provides jasper with fluorescent qualities as well as many small nodules.

Although our stop at this field was only an added feature of the day, it might well be a worthy venture in its own right. I know of few areas of this kind, as accessible and easy to find.

A few miles south of the fluorescent deposit we left the Trona highway and turned east onto the sandy trail leading across the northern slopes of the Lava mountains and finally into the grandeur of Bed Rock spring canyon.

To our right, Klinker mountain reared majestically over the chain of igneous formations that shape the



Lava range, while to our left, the sedimentary accumulation of the Sidewinders sprawled whitely against the blue sky.

The trail leading to the summit and to the entrance of the canyon, is well marked and in good condition. Joshua trees, junipers, and their smaller brethren, the tetradymias, rabbit brushes, and senecios, crowd together along the trail, and as the descent into the canyon is made, reluctantly give way to the familiar creosote bush and an occasional spiny hop sage.

The auto trail down Bed Rock canyon is one which will tax the ability of a desert driver and his car, as it dives in and out of small and large washes. Late, low-slung models might find themselves in trouble. Since usually the road dead-ends at Bed Rock, the collector should not take his car down a pitch where he would find trouble returning. At times, when the wash is

packed and there has been previous travel, it is possible to go on down the canyon and join a reasonably good sheep trail which can be followed to the Inyokern-Saratoga Springs road.

High on the slopes of this remote canyon, widely separated dumps mark the graves of diggings long abandoned.

When gold first was discovered in Goler wash, nine miles northeast of Randsburg in 1893, dry washing camps and diggings sprang into being throughout this area. Over the Lava range into Bed Rock spring canyon, at the spring itself, and over the flat wastes into Last Chance and Red Rock canyons spread the gold prospectors, leaving behind their trail of abandoned dumps and sometimes the bleached bones of the earth's acquisitive inhabitant, man.

It is said that prospector Hamp Williams took a short-cut through these very mountains in the winter of 1919,

trying to escape a snow storm swirling down upon him from the north. When finally overtaken by the storm, he had reached the southern slopes and in desperation took refuge in a pit dug years before by another prospector. After many uncomfortable hours the storm abated, and as Hamp crawled from the pit, his foot knocked loose a fragment of rock. Playing a hunch, he had it assayed and it proved to be horn silver of great richness. Williams staked out a claim, which later developed into the Big Kelly mine, now the Rand Silver mine. So was discovered one of the richest silver deposits in California.

By mid-afternoon we had explored most of the interesting spots in the canyon but with no luck. We had picked up many interesting specimens but for the most part they had been isolated float.

We decided to rest from our labors at Bed Rock spring and the old ghost camp on the flats below it. The truck was parked at the trail's end beside two cement water troughs. In the old days a mining camp covered the sandy flats, and weathered timbers still show mutely above the restless sands.

The troughs were used to store water piped out from the spring. A tunnel 400 hundred feet long was hewn into the mountainside to tap the waters—hence the name Bed Rock spring. At the time of our visit, the spring was a mere trickle and it is recommended that visitors bring their water with them.

Long shadows marching up the face of the contorted rock above the spring, warned of approaching darkness and camp was made near the remains of the ghost town. By the time we had a fire roaring, night had closed about the hills and only the sky reflected the sinking sun.

Dawn on the desert! The master Painter draws his brush across the heavens and the veil of night is replaced with the riotous colors of morning.

Nimbus clouds had pushed over the hills to the north during the night and now scudded overhead in an endless game of follow the leader. These clouds generally herald the approach of wind and rain in the desert country, so camp was broken quickly and we drove farther down the canyon and then up into the slopes of the Sidewinders. Here Bill parked the truck on a ridge and suggested we continue our search in this area.

As we worked our way around the foot of a ledge, Bob called our attention to several pieces of ore lying loose upon the sand. Bill identified them as "Copper City" specimens. He turned the pieces slowly in his hands.

"No doubt about it, fellows," he mused. "This is the exact type of ore



The road going down Bed Rock spring canyon. The motorist should drive cautiously for the condition of this road changes from season to season.

MILEAGE LOG

From Johannesburg to Cut-off:

- 00.0 Johannesburg (Mileage set in front of St. Charles Hotel). Take Highway south toward Red Mountain.
- 01.0 Turn left (north) on Trona Highway.
- 08.0 Take sandy trail to right (east). Klinker Mountain stands directly east of road.

From Wagon Wheel Mine to cut-off.

- 00.0 Wagon Wheel Mine. Go south on Trona Highway towards Johannesburg.
- 04.7 Trona R.R. crossing.
- 06.9 Searles road (sand) branches to right (west). Continue on paved highway.
- 07.0 Highway is cut through outcropping of jasper and white opalite that fluoresces a beautiful green. Good grade specimens are available in quantity. Deposit extends on both sides of road. Small agate nodules may be found on mound just east of road.
- 09.4 Turn left (east) off highway onto sandy trail.

From Cut-off to mineral grounds:

- 00.0 Leave cut-off going east.
- 02.2 Reach summit and entrance to Bed Rock Spring canyon. Wild scenery and rough road ahead. Drive carefully.
- 05.1 Sandy branch, left, to gem field. Follow trail straight ahead to Bed Rock Spring Ghost Camp and spring itself. (.4 mile) Rock-hounds are advised to camp or leave their cars at this point as the remaining trail to the collecting area is very badly weathered.
- 05.4 Trail branch. Follow one to left.
- 05.7 Follow trail to left up canyon. Blow-out (mineral field) can be seen as dark mound directly ahead.
- 06.1 Arrive at field of various agate, jasper, and mixtures. Bigger and better specimens can be obtained by digging but there are many fine samples exposed and lying loose on the surface.

From Johannesburg to fluorescent outcropping:

- 00.0 Johannesburg. St. Charles Hotel
- 10.4 Outcropping.

peculiar to the Copper City mine. If we could find a deposit of this stuff we'd really be doing all right."

We never did reach a conclusion as to how the rich green ore happened to be there. The inspiration furnished by this discovery lasted an hour or so and then we reverted to our normal slow pace. The mystery of the green copper ore remains unsolved. But if someone with a few days at his disposal should search very carefully, perhaps—

At noon, we turned into the mouth of a draw to the north, and there directly before us, about a mile up the slope, was the Sidewinders' surprise.

Bill was the first to notice the dark mound standing in direct contrast to the light colored sands.

Almost every step of the way to its foot, we picked up float that gave us good cutting specimens and the eternal promise of better things to come. This time, the promise was kept. We had found our collecting field.

Surrounded by sedimentary deposits, the mound is obviously a blow-out. The

main body consists of loose granular dirt, running black to various shades of grey. Scattered piecemeal about, and ranging from small chunks to huge boulders, is the cutting material. We uncovered samples of sardonyx,

jasper, translucent agate, banded and plain, and moss agate. There are many blends and contrasts of blue, red, yellow, white and black through most of the agate and jasper that will delight the hearts of collectors. Although much of the mineral lies on the surface, you must dig to obtain the prize specimens. This is an easy chore in the loose soil and the rewards more than compensate for the effort.

The cut-off down the wash from the Bed Rock spring trail is distinctly marked and easy to follow, but rock-hounds will do well to leave their cars in the vicinity of the spring and cover the remaining mile on foot.

The darkness of January was again creeping up from the canyon's floor when we finally turned the truck toward the west and home.

MAPS WRONG: WHEELER PEAK HIGHEST IN NEW MEXICO

After several months of measuring, computing, climbing, hiking and arguing, the U. S. Geological Survey has decided that Wheeler peak with an elevation of 13,151 feet is higher than the South Truchas, long recorded on the maps as New Mexico's highest mountain. South Truchas is 13,100 feet.

The question was reopened recently when Harold D. Walter, assistant state purchasing agent and longtime mountain climber, took a reading from the summit of the South Truchas and decided it was not as high as Wheeler peak.

The Geological Survey confirmed his conclusion, and now all the maps will have to be changed, and scores of climbers who have made it a hobby to climb the highest mountain in every state will have to return to New Mexico and scale the new champion peak of the state.

TO TEST FOUNDATION ROCK FOR TRAMWAY TOWERS

Exploratory drilling is to be started at the sites of the 10 steel towers designed to support the projected San Jacinto tramway, according to Earl Coffman, chairman of the Mt. San Jacinto Winter Park Authority sponsoring the project.

This work was authorized after steel companies declined to make a firm bid on the tower construction until more information was available as to the sub-surface rock structure.

When completed the tramway is to connect the floor of the desert in Chino canyon, near Palm Springs, with Long valley on the upper elevations of the mountains.

DESERT QUIZ

For those who wish to broaden their knowledge of the great fascinating desert region, this monthly quiz is an excellent school of instruction. It touches the fields of geography, history, mineralogy, Indian life, natural history and the general lore of the desert. The average reader will get 10 to 12 correct answers. From 13 to 15 is a good score, 16 to 18 excellent. Over 18 is very exceptional. Answers are on page 27.

1. The chuckawalla once formed part of the diet of the desert Indians. It is: A small rodent..... Fruit of the saguaro..... A lizard..... A cake made from mesquite bean flour.....
2. Much of the desert Southwest became part of the United States after the Mexican war through: The Treaty of Paris..... The Gadsden purchase..... The Treaty of Guadalupe Hidalgo..... The Lima Conference.....
3. The symbols which Indians cut or scratched into the desert rocks are known as: Pictographs..... Idiographs..... Sand Paintings..... Petroglyphs.....
4. Which of the following rivers does not have something in common with the others: Gila..... Green..... Little Colorado..... Mojave.....
5. General Lew Wallace wrote part of the famous novel *Ben Hur* in New Mexico while he was: Campaigning against the Pueblo Indians..... Military governor of the state..... Constructing Fort Wingate..... Editing the *Santa Fe New Mexican*.....
6. *Pah* is a Paiute Indian word meaning: Fire..... Water..... Earth..... Air.....
7. The name Breyfogle is associated with: The early fur-trappers..... Building the Central Pacific..... A famous lost mine of the Death Valley region..... Construction of Hoover dam.....
8. The national monument located in the Wasatch mountains near Provo, Utah, is: Capitol Reef..... Cedar Breaks..... Timpanogos Cave..... Natural Bridges.....
9. The village of Chimayo, in New Mexico, is noted for its: Pottery..... Woodworking..... Weaving..... Leather work.....
10. One city does not belong in the following list: El Centro..... Salt Lake City..... Phoenix..... Santa Fe.....
11. From the Mexican war to the Civil war, Arizona was part of the territory of: California..... Nevada..... Utah..... New Mexico.....
12. The book *Desert Country* was written by: Mary Austin..... Edwin Corle..... George Wharton James..... John C. Van Dyke.....
13. The state tree of Utah is: Joshua..... Box Elder..... Red Cedar..... Blue Spruce.....
14. The central agency of the Navajo reservation is located at: Keams Canyon, Arizona..... Kanab, Utah..... Window Rock, Arizona..... Aztec, New Mexico.....
15. The most satisfactory, long-burning wood available to campers on the Colorado desert of California is: Palo verde..... Creosote bush..... Ocotillo..... Ironwood.....
16. The best known mineral in the mining history of Death Valley is: Copper..... Lead..... Borax..... Silver.....
17. First European settlement on the Colorado river in the region of present-day Yuma was established by: Father Kino in 1701..... Father Garces in 1780..... The U. S. Army in 1850..... Charles D. Poston in 1854.....
18. The method of dating prehistoric ruins through tree rings in roof timbers was pioneered by: Charles Lummis..... Dr. Harold Colton..... A. E. Douglass..... M. R. Harrington.....
19. A dop stick would be used by an: Indian medicine man..... Miner..... Surveyor..... Lapidary.....
20. The Indians whose reservation is located at Sells in southern Arizona are: Papagos..... Mojaves..... Apaches..... Yaquis.....

Mystery Bird of the Salt Lake Desert

By WILLIAM H. BEHLE

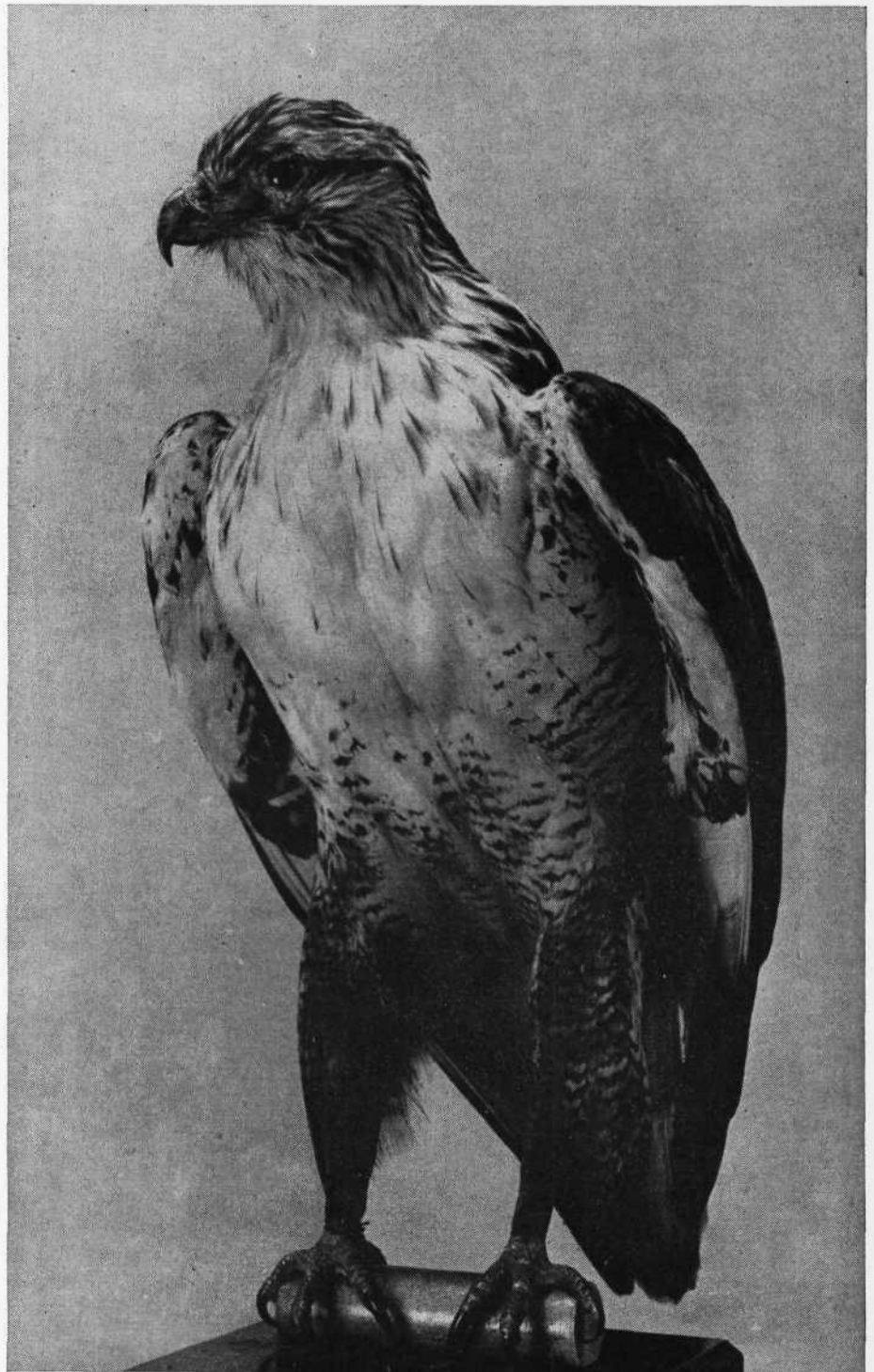
MANY years ago (1929) Charles Kelly, who is well known to readers of Desert Magazine, followed the trail of the ill-fated Donner party across the barren wastes of western Utah. Dropping down from a ridge known as Greyback, his party traversed a sand dune area and finally struck the flat level salt encrusted expanse that is the heart of the Great Salt Lake desert. Here is where the Donner party bogged down, abandoned some of its wagons and equipment and lost valuable time. Kelly's party in a light car continued nearly 10 miles in a straight line, finding little of interest until in the distance a grove of trees began to take form and in the midst of the grove were towers rising far above the trees. In another mile they came to a small sand bar where some time ago brush was growing. As they drew nearer the trees disappeared but the towers remained. From this point let us take up the narrative in Charles Kelly's own words as he relates the story in his book *Salt Desert Trails*.

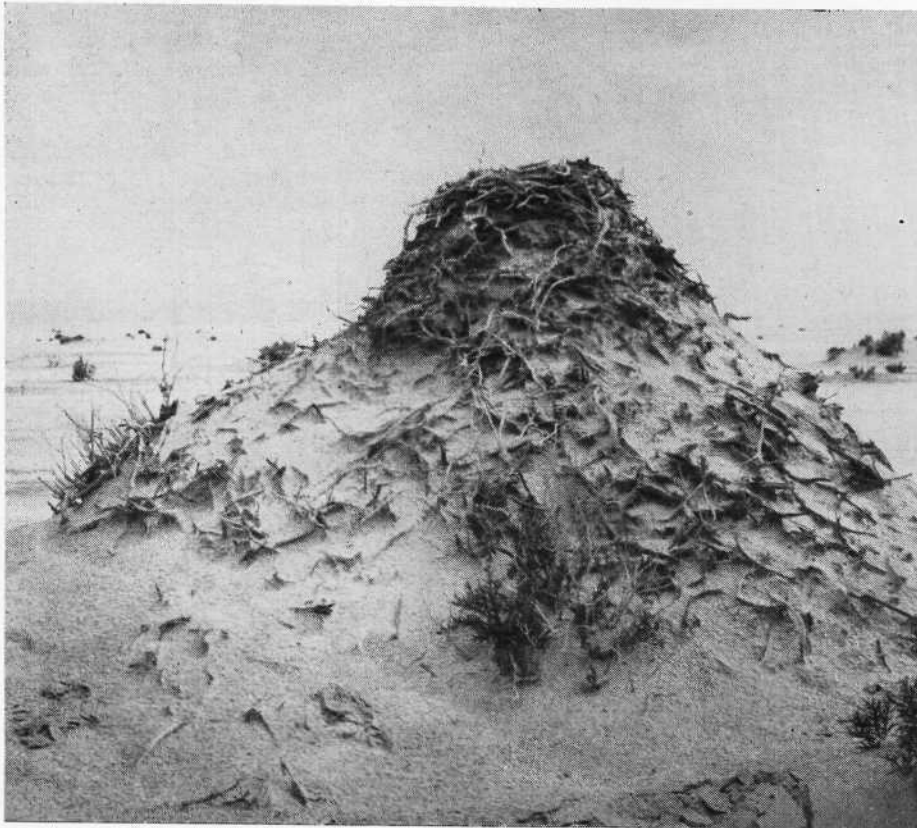
"Stopping here to investigate, we walked toward one of these towers, which disappeared as we approached, then reappeared near at hand. What we found was almost as strange as anything we could have imagined. Here was the nest of some kind of large bird, probably an eagle, which had been built up a little each year from pieces of sagebrush and greasewood, the wind filling the interstices with sand until the whole structure had grown to be more than 10 feet high. A few stray feathers in the deserted nest in the top of this pinnacle showed that it had recently been occupied. To the right and left were three or four similar structures, with some smaller ones which were not as old. Here, year after year, comes some bird to build her nest, finding both solitude and safety in this dreary waste. How she rears her young in such an environment, 35 miles from the nearest water, and nearly that far from any kind of food, is a riddle which must be solved by the ornithologist."

Charles Kelly was not the only one to marvel at this strange remnant of

Why should a hawk, with adequate weapons for both defense and offense, choose for its home the most arid region of the United States where food is scarce and the nearest water 35 miles away? The scientists have not figured out the answer to that one yet. Nevertheless such a bird is found on the Great Salt Lake desert of Utah, and here is the record of its strange existence.

Mounted specimen of the Ferruginous Rough-Leg hawk at the University of Utah.





Above—Year after year the desert hawk adds twigs to the mound as drifting sand fills the previous year's nest.

Below—Members of the university party study the construction of the strange bird nest of the desert.

bird life in the most barren section in America. Dr. Walter M. Stookey of Salt Lake City likewise became interested in following the Donner trail across the salt flats but employed a

tractor to negotiate the treacherous terrain. His quest of 1936 took him to the towers which Kelly had found to be bird nests.

Dr. Stookey took pictures and sent

the story to the editors of the *Pony Express Courier* of Placerville, California. Subsequently there appeared two articles based on his findings, one entitled "8th Wonder of Modern World," the other "Giant Bird Nests of Nevada-Utah."

The relics of the Donner party that Dr. Stookey retrieved had been given to the University of Utah and President LeRoy E. Cowles became interested in the mysterious bird nests. He directed that an expedition be sent out to ascertain the facts. The party consisted of Dr. Stookey and his friend Raleigh Johnson, who accompanied him on his tractor trip; Dr. Ralph V. Chamberlin, head of the zoology department; Dr. Walter P. Cottam, head of the botany department, and Dr. A. M. Woodbury, and the writer, ornithologists. Our conveyance was a university car driven by Kent Evans, superintendent of buildings and grounds. The trip was made October 3, 1943.

Beyond Knolls we left the main highway which continued on to Wendover and headed north across the barren white expanse. Not knowing the precise spot where the nests were located our plan was to continue in a northerly direction until we intercepted the tracks of the Donner party and then follow them back until we came to the nests. We had not gone far until we encountered the notorious mud beneath the seemingly dry surface crust. Apparently this grey, sticky mud never dries out. It has given trouble to every party attempting to traverse the region. The weight of seven men in a heavy car was too much. The tires did not sink down greatly but could not get any traction. By dint of much pushing the car finally gained momentum and we yelled for the driver to keep going. He took us literally and drove ahead for what seemed miles, leaving us to walk to the nests.

Coming upon the still clearly discernable tracks the Donner party had made 102 years earlier was a thrill indeed. The narrow wheels of their vehicles had cut through the surface and turned up some of the dark mud so the route of the wagons was revealed by the dark streaks in this otherwise white alkaline expanse.

The day was overcast. Then a wind of gale proportions blew up, bringing a few drops of rain. Conditions were unfavorable for taking pictures but we tried. To photograph the nests one of us had to hold down the tripod. The accompanying pictures were taken by Dr. Cottam.

Several nest mounds were found.

They showed considerable variation as to size. But in every case the mound structure indicated nest upon nest in the large, tapering piles of sand, salt, and vegetation, the latter *Allenrolfea* or pickleweed. The mounds evidently have been used as nesting sites for many years and have been formed by sand and salt blowing in and filling up the spaces between the nesting material gathered by the birds each year. The drift material also tends to accumulate around the base. Thus little by little the mounds have been built up to their present size.

The tallest mounds were roughly six feet in height and nine feet across at the base. The actual nests, however, were only about two feet across from rim to rim. They were constructed of dead *Allenrolfea* roots and stems. There was no special lining of the nest depression although paper, feathers and fur, the latter evidently from the bird's prey, had accumulated in some of them.

Some of the nests showed evidence of recent occupancy, and fragments of eggs and many feathers were collected. The environmental situation together with the size and construction of the actual nest structure suggested that the nests were the work of the Ferruginous rough-legged hawk, *Buteo regalis*. The egg shells and feathers corroborated this view. Many species of birds including these hawks do not require drinking water. They obtain enough for their needs through their "water of metabolism." As far as food is concerned, the hawks range widely and while the desert may seem devoid of food, actually it abounds in rodents. Many are nocturnal, however. Thus it would seem the mystery of the so called fossil



Tracks left by the Donner party over 100 years ago are still visible on the Great Salt Lake desert.

or giant nests is largely dispelled. Final proof would be the actual securing of a hawk from a nest.

The writer has not found any reference to the nests in the journals of

those men like Edwin Bryant and Captain Stansbury who traversed the Donner route a century or so ago so they may not be more than a few decades old.

DESERT QUIZ ANSWERS

Questions are on page 24

1. Lizard.
2. Guadalupe Hidalgo, 1848.
3. Petroglyphs.
4. The Mojave is not a tributary of the Colorado.
5. Military governor.
6. Water.
7. Lost mine.
8. Timpanogos.
9. Weaving.
10. El Centro is not a state capital.
11. New Mexico.
12. Corle.
13. Blue spruce.
14. Window Rock.
15. Ironwood.
16. Borax.
17. Garces.
18. Douglass.
19. Lapidary for holding stones being polished.
20. Papagos.

Your Photo May Win...

You needn't be a professional photographer to win in Desert Magazine's monthly contest. If you know the desert and can reproduce its sunlight and shadow, strange plant and animal life, its cliffs and ruins and native habitants, in strong blacks and whites—your chance of winning is excellent.

Entries for this month's contest must be in the Desert Magazine office, Palm Desert, California, by September 20 and winning prints will appear in the November issue. Pictures which arrive too late for one month's contest are entered in the next. First prize is \$10; second prize, \$5. For non-winning pictures accepted for publication, \$3 each will be paid.

HERE ARE THE RULES

1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.

2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.

3—PRINTS WILL BE RETURNED ONLY WHEN RETURN POSTAGE IS ENCLOSED.

4—All entries must be in the Desert Magazine office by the 20th of the contest month.

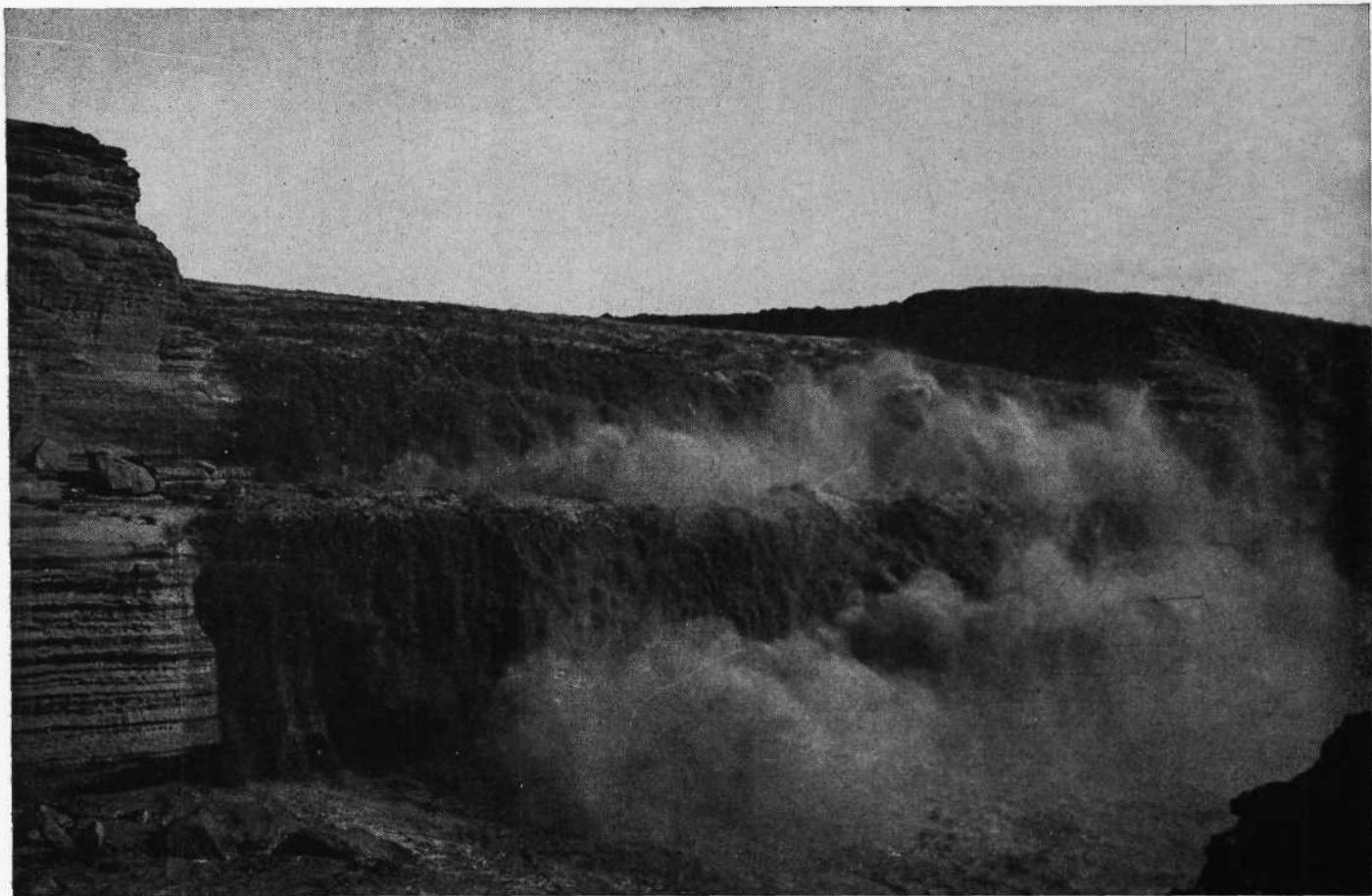
5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.

6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.

7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

ADDRESS ALL ENTRIES TO PHOTO EDITOR, DESERT MAGAZINE

THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA



Water splashing on the rocks beneath the falls breaks into a heavy spray the color of chocolate—and almost instantly turns to dust in the dry desert air.

Photo by Carson Studio, Flagstaff.

Where Water Turns to Dust

If Harry Oliver or Steve Ragsdale told a yarn about clouds of dust that rose from the surface of the river, one would know it was pure fiction. But such a thing does happen on the Great American Desert, and here is the experience of a writer who witnessed this strange transformation.

By THELMA BONNEY HALL

HOSTEEN Begay, a kindly old Navajo, had promised he would let me know if seasonal rains made the falls run. Now the rains had arrived. The Little Colorado river was a roaring torrent. Roads had washed out. Visitors to the Hopi snake dance had been trapped at the villages high on the northern Arizona mesas. In fact the rains this season had caused more excitement than usual. But still no word from Hosteen Begay.

He had given his promise and I knew he would keep it—but the passing years mean little to a Navajo and the fulfillment might come next year or the year after. While I, with the characteristic impatience of my race, wanted to see the falls this year—not *escongá* (that indefinite tomorrow of the Navajo).

So I started off to see if I could find the falls without benefit of a Navajo guide. My companion was George Huster, a member of the hiking club at Flagstaff, Arizona, on whose hikes I often had served as chaperone.

A good cinder road leaves the former route 66 between Flagstaff and Winona, headed for Leupp. From this we had a vague set of directions. Something involving "two cattleguards and an immediate left turn."

Half the day we spent in will-o'-the-wisp wanderings to the left of the second cattleguard (although there was no "immediate left turn") searching for some sign of river, canyon or falls.

It was all wide treeless plain, with sage-brush, rabbit weed, scattered prickly pear cactus, an occasional

wind whipped cedar. The sooty black domes of the Cinder hills, outriders of Sunset crater, were constant companions. One, which was Merriam crater, fascinated us. A shadowless repellant black, it reminded us that nature can be ugly and beautiful in the same breath. The colorings made our spirits sink, but its perfect shape held the eye and lifted the heart again.

Tremendous lava flows thrust long arms toward the rose and white cliffs of the Moenkopi plateau edge in the distance, and the river had to be somewhere this side of it.

Slowly we lost the high confidence with which we had started. The search deteriorated from the exasperating to the ridiculous and still no falls.

By early afternoon we'd wasted all the time we dared, so gave up our high resolves of finding the place without a guide and headed for the Sunrise trading post at Leupp where we hoped W. M. Kennedy, the trader, could provide us with a Navajo.

On the way we passed a third cattleguard and it did have an "immediate



The Falls are formed by a great lava dam thrown across the river during a pre-historic volcanic eruption. Photo by the L. L. Cook company.

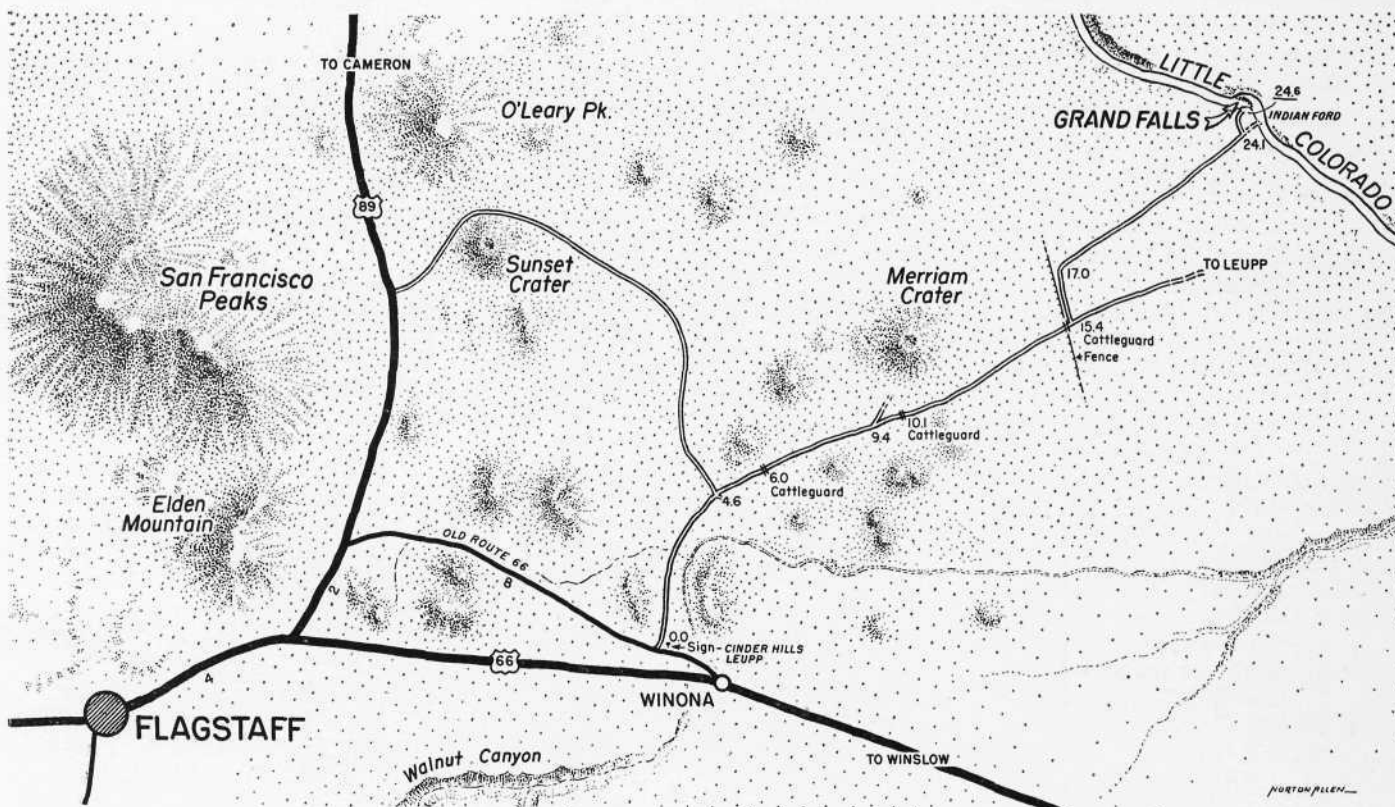
left turn." We surmised that was the road we'd been looking for, and it later proved to be.

Mr. Kennedy was full of sympathy. "I sure do wish they'd put a sign on that side road," he said. "Some days, much as three-four cars come in here hunting for the falls."

Our request for a guide was useless. Not a man was in sight. Indian wagons in plenty, with full-skirted women and dark eyed little papooses, but no men. "The road you want is one at the third cattleguard out from route 66," he comforted. "You won't have any trouble following it."

The little road follows the fence, drops off the side of one lava flow, swings away to follow the sandstone floor between two flows. Then we found ourselves on top of another basalt stream, with the Little Colorado just off it to our right.

Ahead of us a Navajo wagon, drawn



by the inevitable horse and mule combination, was trailed by a cloud of brown dust. They pulled out to let us pass, nodded as they returned our *yah tayhe*. It seemed more than the usual friendliness to visiting whites, so we stopped.

But only a closed, impassive look greeted our inquiry about the Grand falls. They were a young couple, and Navajo of that age generally speak some English.

Because neither George nor I smoke we had picked up a bag of hard candies for just such chance meetings. Now George passed the bag around, and the two men sat on a rock to munch. After a bit George made some casual remark. In due time it was matched by a few Navajo words from his dark-skinned companion. More silence, while I tried to worm a smile out of the black-eyed woman who was about my own age. Just before we drove on George extended the bag again with the remark, "Take one for the road." This was met by a sheepish grin, as much as to say, "You win," and in English, "You are almost there. Keep to the left." Then with another *yah tayhe* all around, we pushed on.

We were excited now, for we heard the thunder of the falls. In a half mile we passed beyond the side of the flow and looked straight across a box canyon to brown, thundering waters roaring and plunging over the opposite wall.

I find it hard to give you a word picture of the Grand falls of the Little Colorado because I know your every instinctive idea of a waterfall is working against me.

Here are no crisp green waters breaking into white spray, no purple shadows on the deep pool below, no quiet back waters with lush green foliage. Here is only one color—brown.

Brown everywhere! And at first sight one is nonplussed to divide the sameness of color into its elements. There is water and rock and sand, the sparse desert foliage, and sky. Yet only the sky has a color of its own. All the rest is brown. Even the air is brown.

For here the doom of the high plateau of the four corners country is sealed in silt by the Little Colorado with its heavy load of topsoil. The water is the color of rich coffee with cream. As it drops, hammering and banging, much spray is thrown up from repeated landings. And in the super-heated desert air, moisture dries out of that spray instantaneously, leaves the silt suspended in mid-air—so fine that it rises, reaches the rims, settles in a crusty brown coating over everything.

Dr. Harold S. Colton of the Museum of Northern Arizona in Flagstaff has called them a "chocolate Niagara" and that's a good description. One hundred and eighty-five feet high, spreading over a width of perhaps 300 or 400 feet, they pound over the northeast wall of the canyon, at first over thin ledges that make a running cascade of the upper part, then drop away in two perpendicular plunges.

For the rest—the canyon thrusting itself endlessly on through the featureless plain—there is nothing spectacular. But the falls themselves are staggering enough, and after that first view for which we'd been so unprepared, we found relief in human associations.

In what we had supposed would be an unfrequented section of the reservation, we found ourselves being watched (or ignored, we didn't know which) by a Navajo family of three.

They stood on the opposite rim, a husky man with a child on a cradleboard in his arms, and his wife. He walked ahead, she trailing a few feet behind with skirts swishing. Presently they were far enough downstream to look back upon the falls. The man handed the child to the woman, took off his hat, raised his arms above his head in what certainly looked like a gesture of prayer or supplication, repeated several times. It may have had some ceremonial meaning—or may not, I do not know. The roar of the falls made it a scene apart—a tableau in an empty theater, the second act of a drama which had no first and third acts.

Then the actors made their exit.

Later a Navajo wagon drove into the river above the falls. It was our friends of the road and this must be a customary fording place, dangerous as it may seem.

Both these parties flitted into the desert as silently as they had appeared from it, and we, with time ever shortening, turned our attention to the falls.

We began to feel this: that the Grand falls have more appeal to the intellect than to the eye, but lose nothing in the distinction. The lack of beautiful coloring is more than redeemed by knowledge of their turbulent history and by that beauty the mind finds in an exhibition of great power, both past and present.

Again it is Dr. Colton who is authority for the story of how the falls were formed.

It was not very long ago, somewhere between 7000 and 3000 B. C. The Little Colorado was even then a desert river, and had cut its canyon through the soft Moenkopi sandstone, the harder Kaibab limestone, and into the

yellow Coconino sandstone. Then one day there was one more volcanic eruption in the series that had been taking place in the San Francisco peaks area. A flow of basalt, which probably had its source under Merriam crater (the black cone we had seen on the way in and whose significance we now appreciated for the first time) flowed northeast for many miles. It reached the Little Colorado, tumbled from wall to wall completely damming the stream.

That would have been something to see! The fiery cataract of lava tumbling into the river must have sent water and steam sky high in hissing, explosive masses. Not a comfortable place to have been, that day!

Eventually the flow reached its amazing limits, and cooled. It filled the river bed for 20 miles downstream and a yet unknown distance upstream. The river probably backed up against this dam in the year after that, making a long lake of what remained of the canyon, dropping its yearly load of silt until it became a shallow stream bed again, and the waters found an outlet by lopping around the end of the flow and following natural drainage back to the river.

Though the lower canyon was partly filled with basalt, weak joints between lava and sandstone existed. The river searched these out and started its work; 20 miles of basalt to break out and carry away, with the falls ever deepening as the work goes on.

We had been told it was almost impossible to get good pictures of the falls. Misunderstanding the reason, we went prepared with heavy climbing boots and a rope. Reaching a good vantage point was not the problem, however, as one remnant of the old flow stuck a jagged thumb a few yards into the bowl below the falls, offering a sunken box seat for the show.

We quickly understood the nature of the photographic difficulty. There wasn't a particle of color contrast. The whole scene was a study in browns. The brown water had only slight variation in tone. Racing over the tip of the falls in its deeper channels, it looked like liquid cement, but immediately it broke into beaten, heavy spray the color of chocolate, bounced upon the rocks under the falls and splashed into the air in a fume of rising dust that made one think of dust devils on the desert.

And everywhere, over everything, lay the scum of that dust. The northeast canyon wall, that should have shown its varying shades, from red, through slight tints of rose, to grey, was coated with the dull brown stuff.



Grand Falls the day the accompanying story was written—the author in the foreground.

Upstream the glowering wall of the Merriam flow, plainly showing the power of its straight course across the canyon, instead of revealing blue-blacks, shading into fiery red, was hung with dust like the walls of a dirty storehouse. The southwest wall interested me most. Though it too was crusted, its surface was extremely rough and fractured. Here was the approaching end of the lava flow, and much of the fracturing lay at a 45 degree angle to the level of the rim. Thus, from the river bed we looked up at the broken ends of black columns, their clawing fingers like bogeys reaching for us tiny humans at the bottom of a great cave.

On that side, too, there was a slight beach of silt, washed in around the boulders. As we walked across the damp sand, dry footprints appeared behind us, light brown in the dark brown, and our feet became clumps of slippery mud. The spray from the falls had wet only a thin surface, which clung to itself and to our feet, but parted easily from the dry silt beneath.

Nor did our persons escape the silt. Our clothes were spattered and smeared. Brown dust got down our necks, into our hair, our eyes, our mouths. Eyelashes and eyebrows were

festooned with the stuff, every pore and line on exposed flesh was highlighted. The steaming falls, confined in that canyon hole, made the air hot and muggy. We perspired, we mopped our brows—and added muddy smears to all the rest. It sounds grim, but though it was no place for a picnic lunch, it was worthy every smear.

There remained much to explore. The southwest wall with its lava overcap invited us downstream, while upstream the top of Merriam flow invited inspection, especially to follow the course of the river in its escape around the end. And it would be an adventure to try the Indian ford.

But time began to pinch. A storm was building. It seemed wise to leave before the road became slick. We did, and reached the Leupp road just as the first drops fell.

By the time we reached Merriam crater again the storm had passed. We wished we might hunt for the beginning of the flow that formed the falls, though Dr. Colton had told us that so far as has yet been discovered it may be buried under later flows.

The Grand falls had been a fine experience. It would have been fun to have a Navajo guide, but we forgave ourselves for feeling a little smug over having found them without one.

KAISER'S RAILROAD TO IRON DEPOSIT COMPLETED

Operation of Henry Kaiser's new 52-mile private railroad to tap the rich iron deposit in Eagle mountains north of Desert Center, California, is scheduled to start early in September. The railroad will be used to haul ore for the Kaiser mills at Fontana, California.

Officially the railroad was completed July 29, but rolling equipment for heavy ore hauling was not expected to arrive until later in the month.

The railroad, built at a cost of \$3,800,000, connects with the main line of the Southern Pacific at the new station of Ferrum, east of Mecca. The Eagle mountain deposit is said to have 25,000,000 tons of 54% iron ore.

According to the builders, this is the longest private standard gauge railroad to be built in United States since 1918. Several miles of the roadbed follow the route of the old Bradshaw stage coach road up Salt creek wash between the west end of the Chocolate mountain range and the Orocopia mountains, and the dry streambed is spanned with a 550-foot trestle. Some of the Lost Pledge gold legends place the site of the fabulous gold-covered hill in the area tapped by the new railroad.

LETTERS...

Lost Silver of Del Bac...

Van Nuys, California

Dear Desert:

Your story of the lost treasure of Del Bac recalled my own experience a year ago. An old friend was in possession of a crudely drawn map. The general direction was about four miles southwest of Tucson.

According to his story the map had been acquired from an old Papago Indian, over 90 years of age. In his youth he had found and returned to his home with a solid silver statue about two feet high. He had stated there were more of them, and also a large quantity of gold and silver, and had given my friend directions for reaching the place.

The instructions were to go to the base of three small hills, and about 200 varas from the center hill would be the ruins of an old lime kiln. The treasure was reported to be located 150 varas north of the kiln.

When we reached the place it was easy to recognize the landmarks. North of the kiln 150 varas was a rock wall built in front of a cave. But some one had been there ahead of us. The cave had been opened and was empty except for two small articles—the handle of an old Spanish chest and a small Spanish spur.

It is said there was a rich silver mine in the mountains to the south of Del Bac. This mine was the source of the silver which the padres are reported to have used in making their altar ornaments. Perhaps sooner or later some one will rediscover this old silver mine.

In the meantime I would like to see more lost treasure stories in Desert Magazine.

F. R. WINSLOW

Those Border Inspectors...

Pasadena, California

Dear Desert:

Mr. A. C. Sorenson asks in the July issue of Desert, if anyone else feels the same way that he does about the Plant Inspection Stations in California. I do, and more so.

It is my considered opinion that these places, whatever their original worth may have been, have now degenerated into public nuisances.

First, I can see no valid reason to inflict the alleged inspection on one mode of travel and disregard the others, unless the automobile owners cannot be organized in their own defense as can the railroads and airlines.

Second, if it is a border inspection, it should be at the border and not a hundred or more miles from it, as are the Daggett and Yermo stations. This would relieve the hundreds of rockhounds, who roam the Mojave, of the annoyance of submitting to a grilling each day on returning from a field trip.

Third, I personally resent the arrogant attitude of the so called inspectors in requiring at their fancy that everything be removed from the automobile to "be presented for inspection." It is my belief that if the inspectors are competent they could make an adequate and accurate inspection of any automobile themselves without any assistance.

Fourth, almost everyone who has suffered the nuisance of plant disease inspection is disgusted with and infuriated by it. I, like Mr. Sorenson, would be much interested in what other readers of Desert think about it. Last winter, one of my friends said that he wondered if it wasn't about time that California decided to join the Union with the other states and stop acting like a foreign country. Maybe now that we have a candidate for Vice-President, we should.

FREDERIC W. BURCKY

The Tragedy of Santa Fe...

New York, New York

Dear Desert:

Except for two visits to Santa Fe, New Mexico, in the past five years, Desert magazine has been the only thing which has helped me keep my sanity in this almost unbearable city. At present it looks as though two years more must pass before I can make a final and complete break and settle somewhere west of Pueblo, Colorado. I must confess that my patience gets a little tired at times with the articles on rocks and palms; there is so much to be written for and about the Pueblos, Navajos and their respective arts in silver, pottery and weaving, but no matter how disinterested I happen to be in rocks at present (there's always a chance I'll become engrossed too) no periodical within my reach is grabbed for so happily each month, and I may add, read so thoroughly.

The April 17 issue of *The New Yorker* contained the story of the great horde of people who are to be crowded into the environs of Santa Fe to work on the atomic project there. Frankly, it is inconceivable that no general protest has been raised. Certainly Utah and Nevada, not to mention southern Arizona and New Mexico are so sparsely settled as to provide room for this project without crowding these people into Santa Fe, whose charm is its narrow crooked streets and its colorful native population.

In the November 17, 1945 issue of Business Week, the photograph of an elder of Santa Clara Pueblo dressed in a cook's hat and apron may offer evidence of the money and opportunity given the Pueblos, but to me it was as disgusting as was the account given of the many Indian women acting as menials with the resulting economic unbalance within the family patterns of the clans. It seems a great infringement upon the culture and way of life of the Pueblo Indians. They had managed to retain a natural dignity, a self-sufficiency without too great a loss of their individual and collective standards, economic and personal. I feel that this action on the part of the atomic energy commission will cause a great and disastrous change in the entire pattern of culture and creative activity of both the Indians and Anglos there.

KATHRYN PROVENCHER

There's a Law...

Vidal, Calif.

Dear Desert:

I'm referring to Mr. Sorenson's letter, in the July issue of Desert Magazine, entitled "The Farce of Border Inspection." I think I understand how Mr. Sorenson feels about border inspection. My first experience with border inspectors caused me to put on the war paint and gird myself for battle. In my desire for revenge and to do battle, I became a convert to the cause of border inspection. I did this through research into the when, why, where, and how of border inspection.

Mr. Sorenson states in his letter, "Also while I am outside of the state there is nothing to prevent me from shipping in by freight, express, or by rail anything I may see fit." It is true that he may ship anything that the transportation officials will accept. The California law provides that all plants, fruits and plant products shipped into the state must bear on the outside of the package what it contains.

Inspectors are notified of all plant products shipped into the state. If the package contains materials under federal or state quarantine, or material that is infested or infected by insects or disease, then the inspectors handle the material according to the laws.

The Agricultural Code of California states, "It is a violation of California law to conceal any plants or plant products, or to fail to present the same for inspection." It doesn't matter how they are brought into the state, it is still a violation of the law not to present them for inspection.

F. B. REESE

HERE AND THERE . . . on the Desert

ARIZONA

Archeologists' Summer School . . .

GLOBE—Digging is under way at the third annual summer school of archeology sponsored by the University of Arizona at pre-Columbian sites at Point-of-Pines, 104 miles northeast of Globe on the Apache Indian reservation. Student-workers at the school, who come from universities all over the United States, disinter the skeletons and artifacts which are exposed by Apache Indian laborers. Dr. Emil W. Haury, director of the anthropological department, University of Arizona, is in charge of the school. According to Dr. Haury, the most revealing find of the 1947 session was a large altar stone with a facial mask painted on it in white, red and green. The altar stone was buried long before the Spaniards came to America, apparently disproving a long-held theory that the Indians adopted the ceremonial mask from the Spanish invaders.

Wellton-Mohawk Canal to Start . . .

YUMA—Work on the first 15 miles of canal for the Wellton-Mohawk division of the Gila project will start about the first of January, according to George Tank, acting district manager of the bureau of reclamation. The bureau plans to spend \$2,640,000 on the Gila project during the fiscal year which began July 1. Surveys for the Wellton-Mohawk division canal will continue during the year, and boundaries of the 75,000 acre division will be established.

Arizona Indians Can Vote . . .

PHOENIX—By unanimous decision the state supreme court has held that Arizona reservation Indians cannot be barred from voting on the contention that they are under guardianship of the federal government. The court, reversing a 20-year-old ruling held that Indians who meet the educational qualifications fixed by the state constitution have the right to register and vote. The constitution requires a person qualifying to vote be able to read the U. S. constitution printed in English and to be able to write his or her name. The Indian voting suit was brought by Representative Richard F. Harless on behalf of two residents of Fort McDowell reservation.

No Insurance for Them . . .

PHOENIX—Arizona does not have to insure high-salaried motion picture actors under its workmen's compensation law, the state supreme court has ruled. The state industrial commission argued that if an actor making thousands of dollars a week should be killed or injured while on location in Arizona, the compensation fund could be wiped out. Suit to test the commission's refusal to insure the stars was brought by Gene Autry Productions, Inc.

Survey Del Muerto Ruins . . .

CHINLE—David De Harport of the Peabody museum, Harvard university, is making a ruins survey in Canyon del Muerto, a branch of Canyon de Chelly. A survey of the ruins in Canyon de Chelly was made by Mendeliff in the 1880's, but no complete check has been made of those in Del Muerto. The project calls for mapping the location ruins, describing architecture and types of construction used, and pottery types found.

Will Expand Navajo Sawmill . . .

WINDOW ROCK — The Navajo tribal council has approved unanimously a \$380,000 expansion program for the tribal sawmill near Ft. Defiance. Besides modernizing the mill equipment, the funds will be used to construct 50 residences, a community center and combination mess and club. The program will be financed from \$691,000 on deposit from profits of the sawmill. According to James M. Stewart, general superintendent of the Navajo agency, the mill, which now employs 227 Navajo at peak times, will be able to employ 500 after improvements are completed. The council also passed a resolution making available \$104,000 from the sawmill funds for agricultural, industrial and educational loans to individual Navajo Indians.

Indian Ball Court Found . . .

COTTONWOOD—An 800-year-old Indian ball court, one of about 50 known in Arizona, has been discovered near Beaver creek ranger station and is being studied by A. H. Schroeder, national park service archeologist. The court is oval-shaped, 75 feet wide and 105 feet long. The ancient players are believed to have used them for a game in which a small ball was butted and kicked in attempts to put it through a hole smaller than a basketball hoop. Archeologists think the Arizona Indians got the game from Mexico.

Howard B. Stricklin has replaced Perry E. Brown as Grand Canyon national park chief ranger. Brown has been appointed assistant superintendent of Mesa Verde national park.

Henry B. Cordes, 82, one of the last members of the old army pack train service, was buried in Fort Huachuca in June.

Hacienda de Otero, a ranch near Tubac which dates from a grant by the King of Spain in 1810, has been sold to Mrs. Walter C. Davis of Richmond, Indiana. The ranch remained in the Otero family from 1810 until Teofilo Otero died in 1941. Since then it has had several owners.

Inspection of 120,108 automobiles and 7645 trucks during June by Arizona agricultural inspectors showed that one car in every 18 was found to be carrying material infected with insect pests or was considered potentially dangerous to the agriculture of Arizona.

A total of 6,900 Navajo have been employed this summer by western railroads. Most of them work on extra or section gangs.

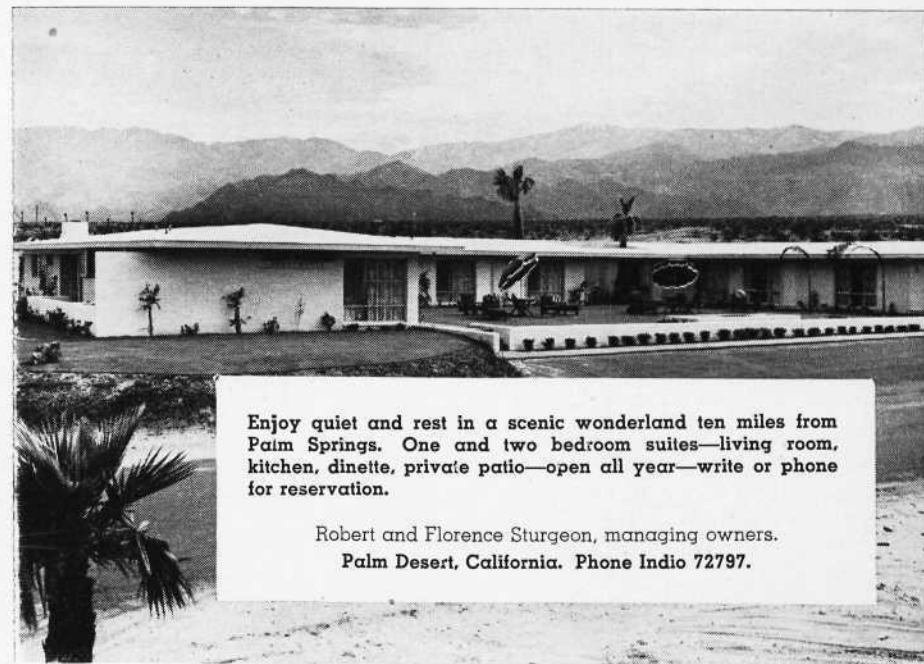
CALIFORNIA

Lost Mine Hunters Die . . .

NEEDLES—Search for the fabulous Lost Dutch Oven mine, supposed to be hidden in the Clipper mountains north of Danby, led two elderly Riverside county prospectors to their deaths early in July. When Thomas R. Duffee, 73, and William Schmidele, 76, did not return to Beaumont after a two-day trip searching for the lost mine, authorities were notified. A sheriff's posse from Needles, 50 miles east of the Clippers, found Duffee's body, face down, along the Yucca valley telephone line three miles west of Danby. An intensive search by airplanes and groups from Needles, San Bernardino and Barstow finally located Schmidele's body in a little canyon in the Clippers. Both men carried canteens which were found beside their bodies, empty.

A newly-formed political party in Baja California is demanding that the Mexican government make the territory a free state with the right to elect its own officials. Baja California reportedly now has 200,000 population and under the national constitution, it was said, any district with 80,000 population can be a free state.

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THE DESERT TRADING POST

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INDIAN GOODS

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WANTED TO BUY: Old Indian buttons, any number, from one button to an entire collection. Please write or bring them in. Also wanted abalone shell buttons with metal shank. Hall's Silver Button Shop, Agua Caliente Springs, Julian, Calif.

BUSINESS OPPORTUNITIES

FOR SALE—Six good Tungsten claims, four Wulfenite running heavy with Scheelite, two high grade Mica. Write C & H Mines, Box 63, Kingman, Ariz.

FOR SALE—New, all electric, 4 unit Motel, plus spacious living quarters. Mobil Gas Station, Curio Shop, Trailer Park. Stocked and Equipped. Write Box 6025, Yermo, Calif. Charles Wright, Owner.

FRIENDS THIS IS IT—Will rent you 90 feet of highway frontage, \$1.00 a month and supply you curios, antiques, mineral specimens for sale on half share. Or will sell the entire stock and business \$2000.00 down on very reasonable terms. Also have city lots and mountain desert homesites—some have lovely Pinyon pine and Juniper trees, some with cactus and Joshua trees at bargain prices, easy terms. Look—some are gold—silver—lead or copper mining claims with mineral rights included in the selling price. Mine for fun or rest in the sun. Cool nights, days are never very hot. Elevation 5650 ft. to 8000. Also have possibility to get you air-conditioned novelty 5-10-15c store. But hurry, won't last long. \$2000.00 or even a little less will swing the deal—a going store on main street highway and well located in town of about 4000 people. I will help stock it. Has some stock and very nice complete fixtures. Unequaled opportunity for widow with children or veteran, but must be sold at once. Also Gas Station and Auto Court for sale. Don't delay, write Hurry Back Trading Post, Goldfield, Nevada.

GEM ARTS—Lapidary equipment and rock and mineral shop for sale. Leaving town makes sale necessary. Reasonable price. Good location. Fully equipped and stocked. Contact G. N. De Vorss, 4286 Marlborough, San Diego 5, Calif.

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REAL ESTATE

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SCENIC GUIDES — Now our handy guides cover the entire "Southwest."—Southern California, Nevada, Arizona, Utah, New Mexico. Maps, descriptions and pictures are attractively combined in an alphabetic arrangement for quick reference. Price \$1.00 each. Also a special guide to California's Century Old Gold Camps—the Scenic Guide to the Mother Lode—Price 75c. Postpaid from Scenic Guides, Box 288, Susanville, Calif.

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FELT LAPEL PINS—Cute pony pins, sequin trimmed, black, red or white, \$1.50. Felt bees, yellow or black, \$1.00. Lillian Thrower, P. O. Box 305, Santa Cruz, California.

First American Home? . . .

LITTLE LAKE—What may be the oldest human habitation in North America reportedly has been located two miles from Little Lake, 180 miles northeast of Los Angeles. An expedition from the Southwest museum headed by Mark R. Harrington has found a series of post holes believed to mark the site of a Pinto culture house, 3000 to 10,000 years old. The holes mark a rectangle 7 by 12 feet, and Pinto artifacts—stone utensils, arrowpoints and tools—were found on the floor. The party has been investigating the site—only known deposit of sub-surface Pinto culture relics—since March, and thousands of implements, animal bones, weapons and a few human bones have been found.

Sea Food . . .

CALEXICO—A converted four-ton C-47 transport plane loaded with a cargo of lobsters and abalone landed at Calexico airport in July to clear the international port of entry. The cargo of frozen sea food was flown here from San Felipe and Ensenada, Baja California, and was destined for Arizona and Rocky Mountain markets.

New Plants for the Desert? . . .

EL CENTRO—Warren H. Brock, Imperial Valley rancher and agricultural experimenter is on a 22,000 mile air trip via TWA, searching for fruits and vegetables suitable for introduction into Imperial valley. Brock, with Dr. Harold P. Olmo of the University of California, will comb Iran, Iraq and Pakistan for plants alien to California which might thrive in the reclaimed

desert soil. The investigation is sponsored by the agriculture school of the University of California.

Atomic Experiments on the Salton . . .

WESTMORLAND—The Atomic Energy commission has taken over the former navy auxiliary air base at Sandy beach on the Salton sea for development of a testing and proving ground for atomic power there. The commission has acquired another 48,310 acres around the base, located 20 miles northwest of Westmorland, from the Imperial Irrigation district and the public domain, and contracts for \$2,500,000 for expansion and rehabilitation are being let. The navy used the Salton during the war years by landing seaplanes when the coast was fogbound.

Pickles Save Rock Hunters . . .

BLYTHE—A young San Diego couple who went on a rock hunting trip to the isolated Hauser geode beds spent 24 hours walking out to Highway 60-70 after their car became stuck in a sand wash several miles from Wiley's well. The amateur rockhounds went into the summer heat without extra water or food and without telling anyone of their destination. A jar of sliced pickles left over from a picnic lunch is credited by Lt. C. W. Johnson, USNR, with saving his life and that of his wife, Mary Ann. "They were awfully hard to eat," Johnson, a physician, declared. "But it was the salt in them that we needed badly." The Johnsons walked for five minutes and rested 10, walking all day until they reached Wiley's well at 2 a. m., and the highway at 10 a. m.

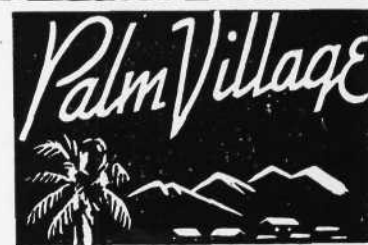
Rebuild Desert Shortcut . . .

TWENTYNINE PALMS—The Baseline Highway association has been organized in Twentynine Palms to campaign for rebuilding the shortcut from Twentynine Palms east to the junction of the Aqueduct road near Rice. To date more than \$5000 of an estimated \$12,500 needed to complete the route has been contributed, and grading work reportedly was starting at both ends, with 15 miles of the eastern end in shape for travel. A trail was opened through to the highway before the war, but it has been abandoned except for army maneuvers, it was said. From Dale the shortcut follows the northern boundary of the Joshua Tree national monument.

State action on the proposed recreational park on the northeastern shore of the Salton

sea awaits a report from the bureau of reclamation. The bureau, according to A. E. Henning of the division of beaches and parks, owns property which the state must acquire for the park.

Jay L. Larson, veteran Bishop miner, has found an old lead jug in the White mountains. The jug is only 13 inches high but it weighs 15 pounds. On the bottom is inscribed: "J. Burro Smith—1900." Larson believes the old jug may have contained acid, used by early Inyo-Mono assayers.



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GENUINE CALIFORNIA GOLD: One nice nugget \$1.00, four nuggets \$2.00. Desert Jim, 627 Lillian, Stockton, California.

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NEVADA

Colorado Moves Over . . .

DAVIS DAM — Bureau of reclamation engineers shifted the Colorado river to its new channel around the site of Davis dam on June 27, after a 55 hour battle with the swirling waters. The river shift started at 8 a. m. Saturday morning, when endless lines of dump trucks and carryalls, working from both ends of the bridge across the 800-foot river, gradually built an embankment around the trestle timbers. By

Sunday noon nearly one-third of the water had been forced into the new channel, and 1000 yards of fill an hour was being dumped into the stream. Velocities in the center of the stream increased as the river was narrowed, and the final closing was not accomplished until Monday afternoon at 3 p. m.

He Discovered Greenwater . . .

TONOPAH—W. E. Johnson, the man who discovered Greenwater, east of Death Valley, about 1904, visited Tonopah in June, still interested in mining. Johnson, now 83, is said to have sold his original Greenwater copper claims to Philadelphia capitalists for more than \$100,000 with the late Key Pitman acting as Johnson's attorney. One big shaft was sunk 1000 feet in the belief that commercial quantities of copper would be found at the water level, but water was not encountered. Greenwater received its name from a small spring so impregnated with copper that it was unfit for drinking. The entire district eventually was abandoned.

Davis Power Allocated . . .

DAVIS DAM — The interior department has announced a future allocation for power from Davis dam, which is expected to start

generating electricity in 1950. Capacity of the plant at that time will be 180,000 kilowatts, and California, Arizona and Nevada already have applied for 681,760 kilowatts from the dam, according to Interior Secretary Krug. The power available will be divided on the basis of 50 per cent for Arizona, 25 per cent for California and 25 per cent for Nevada. Temporarily, the 45,000 kilowatts slated for Nevada will go to the California cities of Los Angeles, Burbank, Glendale and Pasadena, but Nevada can claim any part of the power on one year's notice.

Mark Would Have Loved It . . .

VIRGINIA CITY—In the old days when Mark Twain wrote for the *Virginia City Enterprise*, he sometimes would concoct a fantastic description of the death of a widely-known Comstock figure, then leave town until the hubbub died. Recently a man came to Pete Burke, editor of the *Virginia City News*, successor to the *Enterprise*, and asked permission to write the account of the death of a Comstock figure, Bronco Lazzeri, which he had just witnessed. The story, a heartrending account of how a great mounted deer head with silver-tipped horns had fallen from the wall and pierced the unfortunate Lazzeri, was printed. Friends and relatives arrived at Virginia City to find Lazzeri alive and indignant. The volunteer journalist has not been found.

Water-powered Arrastra . . .

ROUND MOUNTAIN—The ruins of an arrastra once operated by a waterwheel, near the mouth of Boman creek in Smoky valley, 80 miles north of Tonopah, shows the inventiveness of early-day Nevada miners. Believed to be 70 to 80 years old, the arrastra was constructed of heavy squared pinyon trees from the nearby hills, put together with wooden pegs and square-cut nails. Pulleys were fashioned of hand-cut lumber and are reported as true and well-balanced as present machine-made ones. A 16-foot steel shaft, four inches in diameter, tipped with a 24-inch bevel gear extended into the pit of the arrastra. When the waterwheel turned, the ore was ground as great rocks, suspended from heavy beams, were dragged over it.

Plow up the T. and G. . . .

HAWTHORNE—Lloyd Mount and son are employing a tractor and one-tooth plow to turn over the railroad ties along the right-of-way of the old Tonopah and Goldfield railroad. The equipment pulls them out of the ground and rolls them over so prospective buyers can see what they are getting. Mount said that a portable sawmill will be set up in Hawthorne and good ties and bridge timbers will be cut into smaller stock. All chemically treated ties have been sold to naval authorities at Hawthorne, while the others are being shipped to Nevada and California points.

A new land office has been established at Reno to take over the functions of the present land office at Carson City, which will be discontinued, effective August 15.

Ike Guilac, 75, veteran stage driver and southern Nevada pioneer, died in Hawthorne recently. He is said to have purchased the first auto in Goldfield, was chief of the Goldfield fire department when most of that city was destroyed by fire. He drove stage from Tonopah to Manhattan, Goldfield and other mining camps.

Bing Crosby has purchased the 3000 acre Laing ranch, one of the oldest in Elko county. This brings his holdings in the county to 25,000 acres.

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NEW MEXICO

Ask Two Million More Acres . . .

LAS CRUCES—Opposition of four major state groups to further land withdrawals by the government was expected to be aired at a public hearing August 2 in Las Cruces. Latest proposal calls for withdrawal of over two million more acres of south central New Mexico for permanent use by department of defense. The land is in the same general area where the first atomic bomb was tested near Alamogordo in 1945, and would include parts of White Sands national monument, Jornada range reserve and Cibola national forest. It would increase government held acreage in the state from 1,250,000 to 3,263,619 acres. "If this bombing range extension goes through it will be the largest military reservation in the world," stated G. W. Evans, Magdalena, president of New Mexico Cattle Growers association, "and it seems unfair that the state of New

Mexico should have its heart cut out for this purpose. The war department should show cause to prove that it needs this vast amount of land for defense before the land is withdrawn for permanent military use." Besides New Mexico Cattle Growers, the New Mexico Wool Growers association, New Mexico Miners and Prospectors association and the Taxpayers' Association of New Mexico were expected to make a concerted drive to show reasons why the land should not be set aside for military use.

Ask National Monument . . .

ESPANOLA—Efforts to establish a new national monument were intensified July 11 by the 350th anniversary celebration of the coming of Don Juan de Onate to the Espanola valley. Senator Chavez said he will ask the park service to investigate possibility of having the reported site of Onate's first seat of government, near here, made a national monument. Onate's capital, however, is predated by St. Augustine, Florida, founded by the Spanish in 1565.

He Says Billy is Dead . . .

ALBUQUERQUE—Reports that Billy the Kid was alive four years ago are just part of a "perennial pipedream," W. A. Keleher, author and New Mexico historian said in June, following declaration of 85-year-old J. W. Welday of Carlsbad that he saw the famed badman in a Las Cruces drygoods store four years ago.

Seek Indian Land Ruling . . .

SANTA FE—Officials of bureau of Indian affairs said July 2 they will seek supreme court ruling on question of setting aside lands for Indians' use in New Mexico outside their reservation. Judge Orrie L. Phillips in June refused to issue injunction to restrain a white rancher from grazing his cattle on lands set aside for use of the Acoma Indians. Lands involved were purchased by department of agriculture under its submarginal program and later turned over to interior department, which made them available to the Indians. Judge Phillips held this constituted enlargement of an Indian reservation without an act of congress, which is forbidden by federal law in New Mexico and Arizona.

Navajo-Chinese Language Alike? . . .

GALLUP—H. Carroll Whitner, who believes Navajo Indians are of Chinese descent, has presented more conclusive evidence. Whitner, now teaching Navajo at Rehoboth, has produced charts and a Chinese-American dictionary to demonstrate his theory. He states that more than half the Navajo language is almost identical with the Chinese as spoken along the coast between Shanghai and Tientsin.

When New Mexico gets a new state capitol it will have two paintings ready to hang. The paintings, depicting coming of the Spaniards to New Mexico, are by Gerald Cassidy of Santa Fe and were presented to the state by John Hardin of Oklahoma City.

Navajo and Hopi Indian coal miners in New Mexico and Arizona recently were trained in first aid by bureau of mines, according to interior department report.

Hard Rock Shorty of Death Valley



"Rain-makers, huh!" scoffed Hard Rock Shorty. He had been dozing on the bench in front of the Inferno store while the porch club discussed the latest scientific efforts to produce rain with dry ice.

"Ain't no use riskin' yer life in one o' them airplanes to git water," he added. "All the water yu need is right here on the ground in plain sight. I proved it once myself."

"Wasn't gittin' much gold outa my claim, so I decided to do a little dry farmin'. An' if yu ain't never tried it, dry farmin' on this Death Valley desert is purty dry business."

"But I figgered it out. I gotta lot o' watermelon seeds and crossed 'em up with barrel cactus. Funniest lookin' crop yu ever seen—fat juicy melons all covered with cactus thorns."

"Course nobody'd rob a melon patch like that, and I couldn't eat 'em all, so them melons just kept fillin' up with water 'til they busted. Them melons wuz spillin' water all over the landscape. An' that irrigated the ground for a new crop."

"But them naturalist fellers' up at the park headquarters say it is dangerous to fool with Nature — an' they're dead right. After a few seasons of crossin' and multiplyin' them spiney melons wuz spillin' so much juice the desert around there got water-logged. Then one extry hot day a whole batch of 'em got ripe and busted all at once and danged if it didn't send a regular cloudburst down the canyon and filled my minin' shaft with water."

"Well, that was no good. So I sent down to the border an' got a flock o' them cactus-eating goats from Sonora—an' they arrived just in time to keep this whole Death Valley from fillin' up with water and turnin' into an inland sea."

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San Diego, Mendocino, Humboldt—\$2.50.

Trinity, Shasta, Mono, San Luis Obispo, Monterey, Lassen—\$3.

Also Oregon, Idaho and Washington County Maps.

Fresno, Kern, Riverside—\$2.50 - \$5.

Los Angeles—\$1 and \$3.

Siskiyou—\$2 and \$4.

Inyo County, \$15; E or W 1/2 \$7.50; San Bernardino, 73x110, \$15; No. or So. 1/2 \$7.50; NW., SW., NE., or SE 1/4, \$3.75.

WORLD'S MINERALS

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UTAH

Withdraw Utah Land . . .

SALT LAKE CITY—The interior department, at the request of the atomic energy commission, has withdrawn from entry and reserved for exclusive use of AEC 115 square miles of public land in southeastern Utah and southwestern Colorado, supposedly containing uranium. Lands withdrawn are located in Grand county and in Mesa county, Colorado. Diamond drilling tests for uranium bearing ores will be carried on this summer, and lands found to contain no uranium will be released from the withdrawal orders to be opened again for entry. Lands found to contain uranium will become available for development and mining by private interests under arrangements with the government.

The Spires Saved Her . . .

BRYCE CANYON NATIONAL PARK—The spires and minarets of Bryce possibly saved the life of a 14-year-old girl in July when she hung to one of the spike-like pieces of sandstone at the edge of a 30-foot cliff until rescued by a park ranger. Nancy May Mabey, daughter of Dr. and Mrs. William Mabey, Buffalo, New York, slipped over the edge at a point about 200 feet west of Sunset point and slid more than 100 feet down the steep canyon wall before grabbing the projection. Her chief worry: "I thought I'd sure break my glasses when I went over the cliff."

They're Kept in Hot Water . . .

BENJAMIN—The handful of families in this southern Utah county town literally are kept in hot water, for their supply comes from a well of 98 degree temperature which hasn't varied within the memory of the inhabitants. They like it for bathing, and flowers thrive on it—but if you want a drink of cool water you'll have to walk to a neighbor's and drink from a cold well. In contrast to most hot springs, the water here is almost 100 per cent pure. Pioneers could locate the warm water section in winter time by the paths of melted snow across the sage and greasewood of the district.

Geologic Wonder Destroyed . . .

BLANDING—The "Goblet of Venus," 15 miles west of here on road to Natural Bridges, was toppled over late in June, apparently by unknown vandals, according to J. Wiley Redd, national park ranger. An outstanding example of wind erosion in the Southwest, it stood 16 feet high and was supported by a delicate stem only nine inches in diameter. It had been visited by thousands in the past 25 years and photographed numerous times.

St. Christopher's Title Clear . . .

MOAB—It took an act of congress to clear the title and sell to St. Christopher's Indian mission the land it now occupies, but Father H. Baxter Liebler after several years' fight at last has papers which assure the Episcopal mission ownership of the 165.50 acres of land for St. Christopher's mission to the Navajo Indians. The land, just off the Navajo reservation, originally was purchased from private individuals in 1942, but title was disputed when someone discovered the land was not patented and attempted to file for homesteading. Father Liebler's claim was based on an estimated \$10,000 in improvements on the land.

Ute Tribesmen Eager to Learn . . .

OURAY—Ute tribesmen on the Uintah Ouray reservation are a progressive group of Indians, in many instances further advanced than the better known tribes of the Southwest, according to the conclusion of Dr. Florence Hawley, noted anthropologist, under whose leadership a class of students from Albuquerque spent three weeks in July studying the culture of these people. They found the Ute society liberal, with its members eager to adapt themselves to a changing world. Dr. Hawley regards the Uintah basin as one of the best untapped archeological regions in the United States. However, she is critical of amateur archeologists who in their enthusiasm for exploration and artifacts damage historically valuable material.

Church is Mining Coal . . .

ORANGEVILLE — Sponsored by the Emory, Carbon and North Carbon stakes, the coal mine owned and operated by the Latter Day Saints church near Castle Dale expects to be producing 200 tons of coal daily. Sheril McArthur, mine superintendent, is building a new road for the use of 60-foot trucks, has installed a new loader and is equipping the mine with electric power.

Sweeter Music for Salt Lake . . .

SALT LAKE CITY—Fourteen hundred new pipes are being installed in the rebuilding of the famous Tabernacle pipe organ here. The rebuilding of the huge musical instrument is being done by the Aeolian-Skinner Organ company of Boston.

Air Carnivals are Banned . . .

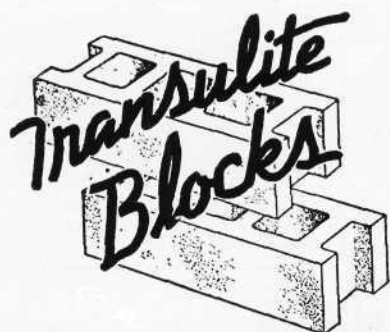
SALT LAKE CITY—All air shows in Utah have been banned by the State Aeronautics commission until "ways and means are found for adequate protection of life and property." The announcement followed a private plane accident in which two flyers were killed in a Salt Lake air show. The attitude of commission members is that such aerial programs as have been staged during the last two years contribute nothing to the advancement of aviation, while jeopardizing life and property to a serious extent.

Utes Hold Annual Sun Dance . . .

ROOSEVELT—Under the discipline of a religious belief that impells them to dance three days without water, the Ute Indians of the Uintah Ouray reservation completed their annual Sun dance late in July. For 24 hours each day the dancers shuffle forward and backward under a canopy of poles that give little shelter from the desert sun. As they dance they blow high shrill notes on their eagle bone whistles. After three days of exhaustive dancing a great feast was held—all a part of their ritual in homage to the source of all life on this earth—the sun.

Better Roads to Indian Glyphs . . .

VERNAL—Better roads are to be provided for visitors to see what Utahans claim are the best preserved set of Indian petroglyphs in the United States. The glyphs are on the cliffs around Merkley park, one group of them covering a rock face 80 feet long. Vernal Junior chamber of commerce has taken the initiative in providing better road approaches to the area.



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MINES AND MINING . . .

Goldfield, Nevada . . .

The famous old Klondyke mine, first discovered in 1886 and a nearly continuous producer of gold, silver and lead until 1942, is making a comeback, according to Harold Lankford of Goldfield, manager of the mine. For the past year Lankford and others have been assaying, testing and blocking ore. In recent months, erection of a double ball mill was started, and within a month the company will begin shipping 15 tons of concentrates a day to the smelter, it was reported. Old timers assert that it was while Jim Butler was on the way to obtain a lease on the Klondyke in 1900 that the first Tonopah discovery was made.

Bishop, California . . .

Gold ore assaying more than \$1000 a ton was discovered in the Sarita mine at Masonic, according to C. H. Whinery, president of the operating company. The high grade, found in surface workings, has been exposed for more than 10 feet. It averages eight inches wide and contains veinlets of metal. It is an offshot of the main vein which the company is preparing to mine by open-pit methods. The main ore body, about 60 feet wide, is said to contain ore that can be profitably mined and milled, and installation of a large reduction plant in the near future is planned.

Goldfield, Nevada . . .

John Slavens, 86-year-old prospector is displaying ore from his Paradise claims, five miles south of Goldfield, which he contends run heavy with uranium. Slavens says that a friend recently had a piece of the ore assayed and it averaged \$1000 a ton uranium. Slavens said that he had known there was uranium in his holdings. "I have my own method of spiritual analysis which is very accurate," he declared. "In over 25 years of consulting the spirits concerning the value of various ores, their opinion has never differed more than \$4 a ton from those of our earthly assayers."

Round Mountain, Nevada . . .

A United States mining engineer has examined the property of the Henebergh brothers at Round mountain, where Jay Carpenter, director of the Mackay school of mines, several years ago discovered what appears to be an immense deposit of uranium ore. Samples of the Henebergh ore, exposed to the testing apparatus carried by the government engineer, showed quantities of uranium, according to report of those who saw the tests at Tonopah. The ore was uncovered in a long tunnel which the brothers drove searching for gold, and the ore carries values in gold and silver.

Tonopah, Nevada . . .

On June 7, Wells Cargo, truckers, began hauling barite from the Nye county deposit 35 miles east of Tonopah to the railroad at Luning. The barite is going to the Chemical and Pigment company, Alameda, California, where it will be refined. Three thousand tons will be shipped under the present contract. The Nye deposit is said to be one of the largest in the west. A gasoline shovel is used to load the trucks at the mine.

Winnemucca, Nevada . . .

Getchell Mine, Inc., in the Potosi district, Humboldt county, is expected to resume full scale operation within the next two or three months, it was reported. The company's pilot test mill has been treating 200 tons of gold ore a day while added equipment was being installed in the 1500-ton-per-day cyanide mill. New construction includes a wide conveyor belt which will transport ore from the North shaft to the bins at the mill, by which a daily supply can be delivered to the mill in a single shift. Mine development reportedly has shown the presence of large ore-bodies assuring capacity supply for years. Before the war the mine, it is said, was Nevada's foremost gold producer.

Salt Lake City, Utah . . .

San Juan Pipeline company has asked the federal power commission for authority to build a 451-mile pipeline from the Four Corners area to a point near Needles, Calif. The proposed 26-inch line would cost about \$28,000,000 and would gather natural gas from Utah, Colorado, Arizona and New Mexico for final distribution in the San Francisco bay region. The company also proposed to build 100 miles of feeder and gathering lines, a compressor station, a natural gasoline extraction plant and a gas dehydration plant. Deliveries through the plant were planned to begin not later than January 1, 1951.

San Francisco, California . . .

The program of the 1948 Metal Mining convention and exposition, to be held in San Francisco the week of September 20, will cover problems of labor relations, manpower, taxes, outlook for metals, effect of the rearmament programs and foreign aid on the mining industry, exploration and development, tariffs, stockpiling of strategic materials, marginal mines, public lands and many phases of mine and mill operation. Celebrating the golden anniversary of the American Mining congress and the centennial of discovery of gold in California, the convention and exhibits will be held in San Francisco's civic auditorium.

Beatty, Nevada . . .

George Ainsa, San Francisco man who planned to equip the Yellowgold property, 25 miles north of Beatty, with a 100-ton mill if water could be developed at reasonable depth, reportedly has abandoned the project. The drill was pulled at 550 feet after indications of water had been cut but not enough to warrant development. It was said, however, that Carly Carr, owner of the property, is continuing with his development work and has drilled into ore which indicated values to \$500 a ton. Three separate veinlets which did not crop on the surface, all of milling grade, reportedly were cut in the well hole.

Vernal, Utah . . .

A heavy showing of gas and good showing of oil reportedly were being studied by experts at the Carter Oil company's Ruth Nelson No. 1 well, five miles southwest of Vernal. Tests on the well indicated 5,500,000 cubic feet per day of natural gas be-

tween 7060 and 7077 feet in depth and 3,700,000 cubic feet between 7077 and 7089 feet. During the first test a 20-foot column of oil accumulated in the well, and 156 feet was found during the second test. Reports indicate the well may produce 600 barrels of 27 gravity oil per day.

Twentynine Palms, California . . .

Search is being made for thieves who broke into the Virginia Dale mine, dynamited an 11-ton compressor and hauled away the metal scrap after burning the building in which it was installed. Damage of \$4000 was reported by the owner, Harry M. Hess of Morongo valley. During the absence of a guard, thieves again entered the property and carted away groceries, tools, bedding and a barrel of water. Constable Jack Cones, working on the case, reports finding several parties who heard the blast and who say they can identify the truck used to haul the plunder.

Chloride, Arizona . . .

Tennessee Schuylkill corporation, owners of the Tennessee mine, have announced acquisition of an additional 2000 feet of the Tennessee vein through lease and option of the Johnny Ball-Silver Knight group which immediately adjoins the Tennessee on the south. The company is extending its 1000 foot south level toward the new property with 100 feet to go before reaching the Johnny Bull claim. The face of the drift is said to be showing a good grade of lead and zinc. For many years the Tennessee has been the largest producer of lead and zinc in the district with a gross production estimated at \$25,000,000 since its discovery in 1894.

Independence, California . . .

An old hand-drawn hose cart was out of commission, and the only hose available would not fit the town hydrants, so the 25 citizens of the old mining camp of Tuscarora formed a bucket brigade and put out flames which threatened to destroy the community late in July. The express office, fire station and three other buildings were destroyed.

Beatty, Nevada . . .

With a 24-hour capacity of 25 tons, the Quinn mill south of here started operation early this month. Using both amalgamation and cyanide treatment the mill is rated to recover 92 per cent of the gold in ore.

James Boyd has decided to stay on as director of the bureau of mines, although he hasn't received a government paycheck for seven months. Boyd, who has not gained senate confirmation, is serving his third interim appointment. By law, he could only be paid during the first. Appointment of Boyd, former dean of the Colorado school of mines, has been opposed by John L. Lewis and Senator Eugene D. Millikin, Republican of Colorado.

William H. Worthington, 72, pioneer Douglas, Arizona, mining engineer and assayer, died June 20 at Douglas. Worthington became chief chemist for the Calumet and Arizona—later Phelps Dodge—copper smelter at Douglas in 1903. He worked at the smelter until 1910 when he set up an assaying engineering office. For a few years he operated the Monte Cristo gold mine near Prescott.

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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

The day dawned bright and beautiful on July 16th at Long Beach. During the next three days the city had the most perfect climate in the country. The weather man said the highest temperature was 78 and the lowest 61. Inside the big auditorium the temperature was just right too for the doors were open all around and although the expected crowds were there no one seemed uncomfortable and a fan was never seen during the "world's greatest mineral and gem show."

Chairman Roy Wagoner beamed at the success of his show. It was all that the publicity said it would be and Victor Gundersen had been successful in having plenty in the press all over the state. The member societies had been publicizing the show all year, for there was a lot of convincing to do after the bad taste left the previous year.

Chang Wen Ti had his marvellous exhibition of carved jade ready for the public's inspection. THUNDER had not arrived because it was stored in some dark baggage car on its way from New York. But the world's most beautiful gem was there. The makers of the new synthetic rutile had a faceted stone of the new material on display for the first time—and maybe the last. All that has been said about it seemed to be true—that "it makes the diamond look like a doorknob and the opal look anemic." No one will ever get any of it. Indeed few will ever see it again. For if the "interests" are smart the rutile will never come on the market to replace the diamond in popular favor—and the "interests" are smart.

The Los Angeles Lapidary society had a marvellous display of its lapidary work, although it did not measure up to previous showings. What there was of it was of a higher quality than they have ever shown. They were sandwiched between the mineral society exhibits and the commercial displays.

Displays of the member societies of the federation were spread around the wall. Many of the cases were overcrowded. This is the result of including in a society exhibit a specimen from each member's collection with the resultant sprinkling of mediocre stuff and far too much of everything. To the surprise of everyone one of the best cases of minerals was displayed by Rolland Willis in the exhibit of the invited guest. He had a case of copper minerals the like of which has not been seen in a long time.

People were interested in the silver rutiled quartz sphere of Elmer Horner of the Glendale Lapidary and Gem society but very disappointed because there was no light on it to show its magnificence. With so much jade talk this last year we were constantly badgered with questions about where folks could see some of it. It was hardly in evidence at all for Horse Canyon agate predominated in many of the lapidary displays, just as Montana agate and Nipomo agate have predominated in previous shows. We know of one case where a woman carried a beautiful cabochon of white jade with green streaks for years trying to identify it. When she saw the profusion of Horse Canyon agate she was glad to sell the piece for a trifling sum, thinking that was the material

she had. The wise man who bought the piece offered it for sale at 30 times the price he paid for it.

The public kept pouring through the doors. Easily five out of every six had never attended such an event before; had never heard the words "lapidary" or "cabochon." Everyone, we suppose, assumed that only rockhounds would attend. Upstairs somewhere we conducted a lapidary round table every day which very few attended because it was held in the morning before the crowds arrived. The gem cutting pictures of Dr. Willems and beautiful slides of Al Hake were shown but the public was indifferent. Folks didn't want to tear themselves away from the wonderful displays in the main room.

The experienced lapidaries themselves who were looking for ideas managed to find a few. There was the Chittendens' sketch book with well drawn jewelry designs in which various cabochons could be tried out. There was the idea of the common ring binder notebook in which gem slabs were glued instead of the paper filler. These could be filed in a library; were handy to get down and display to friends. This is an inexpensive way of following out the same idea Herbert Monlux had in beautiful home-made "books" of cabochons he displayed.

O. C. Barnes had his table all set for dinner with his now famed dinner service of onyx and all the accessories, such as lamps, etc. There were cases of beautiful faceted materials but they didn't draw the attention that cabochons do for cabochons always have an interest that cold faceted stones lack. Faceted stones are entrancing when displayed singly but they seem to cancel one another when they are put together in a display.

As usual there was too much "boughten" stuff in the lapidary displays but our prediction was borne out that lapidary items would outnumber mineral specimens at least four to one. If it was possible to analyze sales, lapidary equipment, supplies and gem materials were in about the same proportion to mineral sales.

Somewhere behind the scenes they replaced Orlin Bell, who has done so much tactful managing of the federation through the years and so splendidly filled the job of federation president. The new president, Jack Streeter, is also a member of the Los Angeles Lapidary society. Jack does business every day with the lapidary and mineral dealers. Jack has an unparalleled opportunity this next year to bring all factions together—the dealers, the mineral collectors and the gem cutters. We feel that Jack will do well.

In the last paragraph here last month we said that the attendance at Denver was 1100 and that we would be chagrined if the attendance at Long Beach did not exceed that per hour. "More of his wild dreaming" said many people, we are sure. During the convention the exhibits were open but 32 hours in three days. Our prediction needed 35,200 attendance to be true. At 5:15 p. m. on Sunday, July 18, the attendance at the California federation show hit the 36,000 mark!!! And so—it was "the world's largest mineral and gem show."

GEMS AND MINERALS

LONG BEACH CONVENTION DRAWS RECORD CROWD

Annual convention of California federation of mineralogical societies, held in Municipal auditorium, Long Beach, July 16-18, and advertised as the "world's largest mineral and gem show," was far larger in point of attendance than any had anticipated. It was estimated about 36,000 persons saw the exceptionally high quality exhibit. No event before had drawn such crowds to the auditorium, building personnel stated. Exhibitors included 17 member clubs, over 70 commercial dealers and three visiting clubs. Los Angeles Lapidary society, Oregon Mineral society, Gem Cutters Guild and Division of Mines with its gold display, exhibited as separate units. Pacific Mineral society, Los Angeles, won the annual plaque for its mineral case. It is planned to add a lapidary award for the next convention, according to Roy Wagoner, Long Beach, chairman of the show.

New federation officers elected at the convention are: Jack Streeter, Mineralogical Society of Southern California, president; Robert O. Deidrick, East Bay Mineral society, vice-president; Dorothy Craig, Southwest Mineralogists, secretary; Modesto Leonardi, N.O.T.S. Rockhounds, treasurer.

Sacramento was chosen as site of 1949 state convention, to be held in conjunction with the national mineralogical convention and the California state fair and Gold Rush celebration. It will be housed, at the state fairgrounds, in the "largest building available in the state, twice as large as the Long Beach auditorium."

FACTS AND FANCIES FOR THE ROCKHOUND DEALER

According to the July bulletin of Dona Ana County Rockhound club, edited by Don Alfredo de Casa de las Cruces, Las Cruces, New Mexico, approximately 846,000 tourist units go gem touring each year. A "tourist unit" is roughly comparable to a pleasure vehicle-load consisting of from one to nine persons. Of these, 31.6 per cent are completely sane and 27.8 per cent are completely insane. This leaves 40.6 per cent, says the "survey," who are slightly daffy, and of these approximately 21 per cent are interested in rocks and minerals to such a degree as to be purchase-minded. Thus 8.5 per cent of these tourist units are available as potential customers—a total of 71,910. Of these, about .5 of one per cent will pass any given point on a highway in a season, or 359.5 units. Of these 50 per cent or 179.7 units will see your sign and have time to stop. Of these, 11.5 per cent will have enough money left to make a purchase, and thus 20.67 units per year actually drop in and look around—or would, but for the sign on the door "Out Rockhounding." Half of these who get in, or perhaps five units, decide they were just looking or want to know why you haven't any stock of Annamese sphinkterite. On the sales made to the other units, perhaps eight, you figure

that your loss amounts to only about seven per cent, provided you make no allowance for interest, depreciation, or value of the time you spent and the energy you used up acquiring the 60-70 tons of stock which doesn't seem to sell.

L. A. COUNTY FAIR TO HAVE ROCKHOUND DIVISION

A division for cut and uncut stones will be part of the Los Angeles County fair, September 17-October 3, in Pomona. It will be housed in a magnificent new exhibit building, one of the largest of the kind in the country. Substantial cash awards will be made.

Classifications will include polished marble and granite, uncut gem materials mined in California, cut and polished gem materials, polished onyx specimens, polished petrified wood, placer gold, lode gold specimens and lode gold ores, gold bearing gravels and milled products, petroleum and petroleum products.

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AMONG THE ROCK HUNTERS

The Mineralogical Society of Utah planned a two-day field trip to the variscite locality seven miles north of Lucin, July 24-25. A side trip to the wulfenite and copper mines in the Pilot range was to be taken, providing these areas were found open for prospecting.

Victor Arciniega, consulting mining engineer and geologist, outlined geology of the Darwin district for Pacific Mineral society at their July meeting. A near record number of members attended, to learn geologic formation and minerals they expected to collect on field trip to that district in near future.

July meeting of Santa Monica Gemological society featured quartz, which was chosen as the theme for their exhibit at state convention in Long Beach. Their July "field trip" was a day at the convention, with picnic in Bixby park. The society has decided to buy a Mineralight. Design submitted by Miss T. Novinsky was selected as society's insignia.

Texas Mineral society, at its July meeting in Baker Hotel, Dallas, had round table discussion of the rock trips of members. J. D. Churchill told of his collecting in Arizona and New Mexico; W. H. LaDew reported on his trip to the Denver convention and to various Utah localities; Dr. Vernon Bryant told of his trip to Utah.

At their June 28 meeting, the Southwest Mineralogists welcomed back John Akers, founder of the society who has been living the past four years in Lima, Peru, where he was connected with the Goodyear Rubber company. He gave an informal talk on Peru—the climate, customs and minerals. He said most minerals there are too difficult for the average rockhound to collect because of the jungle and mountains. He showed beautiful color slides of the country.

At Pomona Valley mineral club's annual picnic, held July 11 in Fairmount park, Riverside, members told of their vacation trips. Pauline Saylor spoke on Yellowstone and the surrounding area; Larry Boileau described a short trip to Grand Canyon;

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FROM ODD places come beautiful specimens. Amethyst colored crystals—rose banded and mottled chalcedony—tiny terminated crystals on chalcedony. Correspondence invited. "Tucson" Thompson, 1621 Niles Rd., West Phoenix, Arizona.

David Grover discussed Salton Sea; Glenn Weist spoke on his trip to Grand Canyon, Canyon Diablo and Sunset crater. After the meeting some of the members collected, in a nearby quarry, blue and green calcite, garnets and minute tourmaline crystals.

Annual mineral show and potluck picnic, sponsored by Feather River society of Oroville, was held June 13 and attended by more than 35 persons including presidents of the Cherokee Gem and Mineral club and the Golden Empire Mineral society of Chico. During the summer months, while meetings are in suspension, Mrs. Alma Hogge, public relations director, will be available at her home, 685 Pomona Av., Oroville. Permanent mailing address of the society is Box 1508, Oroville.

It has been reported there is now a dollar-a-car charge for entrance to Horse Canyon.

The six mineral societies of San Jose, Monterey, San Francisco, East Bay, Motherlode and Sequoia had such a successful and enjoyable barter-picnic in Modesto June 20 that they have set May 22, 1949 as the date for their next swapping party. It will be held in American Legion park, Modesto.

San Geronio Mineral and Gem society held its second annual campfire meeting at the Hendricks ranch, June 16. Jim Meadows spoke on lost gold mines, and there was a moonlight hunt for fluorescent specimens planted by Beauford Hansen. Guests of the society were Mayor C. K. Hendricks, Mr. and Mrs. W. E. R. Crawford, Mrs. Ed Bailiff, Mrs. Janetta Luna, Mrs. Alice E. Higbee, W. C. Bryant, Mr. and Mrs. H. Goellrich.

Junior Rockhounds of Prescott, Arizona, will hold their second annual show September 4-5 in showroom of Arizona Power company. Their window display during the show will be a store window dummy dressed as a rockhound on a field trip. Officers for the next six months, elected at July 9 meeting, are John Butcher, president; Pete Murdock, vice-president; Nancy Merwin, secretary-treasurer. Retiring President Chip Murdock handed over to the club the prize Vesuvianite specimen awarded to the Juniors at the Rocky Mountain-National convention at Denver in June. At the July 24 meeting Nancy Merwin spoke on anglesite, and new member Sheila Wishek won the quiz.

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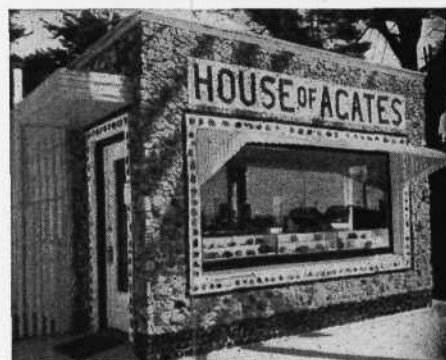
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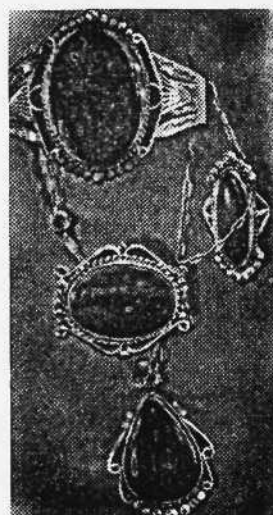
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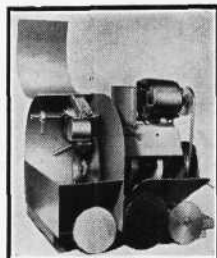
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June field trip of Dona Ana County Rock-
hound club of New Mexico turned out to
be more of a geologic study trip than a
rock hunt, when members explored Tier-
garten cave, high in the San Andres moun-
tains. Jesse A. Isaacs, Las Cruces city
manager, was guide. In the dust-free, cool
atmosphere of the cave, field trippers found
plentiful broken stalactite material on the
floor of the chambers and tunnels.

San Gorgonio Mineral and Gem society's
Pioneer Days exhibit was attracting atten-
tion at J. C. Penny store windows, Banning,
in July. Every member of the society con-
tributed at least one item to make up the
display. A second display of smaller type,
was shown in the Roberge building on North
San Gorgonio, Banning.

Gem Collectors of Seattle have a busy
summer schedule. Their first trip was to
Ellensburg-Yakima areas, July 3-5 for
woods, agate and minerals; July 18, picnic
at Saltwater state park to which Tacoma
Agate club was invited; July 31, one-day trip
to upper Snoqualmie valley for amethyst
crystals and garnet; August 1, lapidary
groups picnicking at home of A. Kietz; Au-
gust 28-29 to Monte Cristo, Silverton, for
minerals; Labor Day weekend to Tean-
away, Blewitt pass for minerals, jasper,
wood, agate, fossils (in time for conven-
tion at Bozeman, Montana); September 18-
19, to Bumping river and Morse creek for
minerals and crystals.

The 18th session of the International
Geological congress will be held August 25-
September 1 in London, England. More than
2500 geologists from 28 governments and
160 universities and scientific institutions are
expected to attend. The congress meets
every two years, each time in a different
country. Many field trips are on the pro-
gram.

The annual picnic meeting of the Orange
Coast Mineral and Lapidary society was
attended by 127 members and guests the
evening of July 19 in Irvine park. After
a brief business session in charge of Presi-
dent Bob Neece, Hospitality Chairman
Nancy Wyckoff presided over a dinner under
the trees. A square dance called by Brad-
ley Hughes followed. To make it a suc-
cessful rockhound picnic, Gene Benedict,
member of the junior rock club, found a
large specimen of fossil shells in the dry
wash near the picnic grounds. The Orange
Coast society is less than one year old and
has 129 members. Meetings are held the
third Monday evening in the month in the
grammar school auditorium, Corona Del
Mar, California.

Clark County Gem Collectors of south-
ern Nevada, according to E. C. Bell, Las
Vegas, were well represented at convention
of the California Federation of Mineralogi-
cal societies. Anna Parks and Dora Tucker
were delegates.

Columbia Geological society, Spokane,
Washington, took a July field trip to the
Old Look Lake copper mine, located 36
miles north of Spokane. Malachite, azurite
and pyrite of iron were found. There will be
no meetings during August and September.

Strategic minerals was the subject of A. B.
Meiklejohn's talk before San Fernando Val-
ley Mineral and Gem society, July 8. He
emphasized the lighter materials now being
used, with special reference to beryllium and
aluminum and the minerals common to
those groups.

NATIONAL AND REGIONAL OFFICERS CHOSEN AT DENVER

Twelve hundred rockhounds converged
on Denver, Colorado, June 13-16 for the
annual meeting of Rocky Mountain federa-
tion and first national convention of Amer-
ican Federation of Mineralogical societies.
Lincoln room of the Shirley-Savoy hotel
was packed with colorful gems and min-
erals from nearly every corner of the earth,
exhibited by both private collectors and
dealers. A 22-page program, arranged by
Dr. Richard M. Pearl, program chairman,
outlined the four days' activities, which in-
cluded some 30 talks by experts in their
fields, motion pictures, a barbecue, a ban-
quet, and four major field trips.

At the Rocky Mountain federation meet-
ing the delegates accepted the invitation
of the Albuquerque Gem and Mineral so-
ciety to meet in their city for the 1949
conclave. New federation officers are: Guy
M. Shockley, Albuquerque, New Mexico,
president; Chas. J. Hutchinson, El Paso,
Texas, vice-president; Jack Pierce, Albu-
querque, secretary-treasurer.

New officers of the American federation
are: Richard M. Pearl, Colorado Springs,
Colorado, president; Jack Streeter, Tujunga,
California, vice-president; Don Major, Ten-
ino, Washington, secretary; Chester R.
Howard, Denver, treasurer; Ben Hur Wilson,
Joliet, Illinois, historian.

HOLLYWOOD LAPIDARY SOCIETY TO HOLD SHOW IN OCTOBER

Walt Shirey will direct first annual lapi-
dary and gem exhibit of Hollywood Lapi-
dary society, to be held at Plummer Park,
7377 Santa Monica Blvd., Hollywood, Oc-
tober 16 and 17. Admission free.

Show plans were made at June meeting,
when following officers were elected:
Thomas Virgin, president; W. A. Stephenson,
vice-president; Russell E. Kephart, treas-
urer; Stuart Peck, Raymond Reese and
Arthur Tanner, directors. The following
appointments were made: Dorothy Van
Nostrand, recording secretary; Mary Lovett,
corresponding secretary; Jean Robinson,
editor.

George H. Needham was to deliver an
address on the preparation of micro-mounts
at the August 3 meeting of the San Jose
Lapidary society, to be held in the De Anza
hotel. Members of the society were to have
the opportunity to view specimens under
a binocular microscope, and 2x2 inch micro-
photographs in color were to be projected
on the screen. Field trip for August was
planned to New Years island on the coast
between Pescadero and Santa Cruz where
members expected to find petrified bone.
Twelve members of the society attended the
federation convention in Long Beach.

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NORTHWEST GEMS TO SHOW AT BOZEMAN SEPTEMBER 4-5

The free exhibition of Northwest gems and mineral specimens to be shown in Bozeman, Montana, September 4-5, as part of the program of the annual convention of the Northwest federation of mineralogical societies, promises to be the largest ever brought together, according to W. F. Brewer, Bozeman, publicity chairman. It will also be the best housed, he asserts. The main hall of the Bozeman armory will contain 125 uniform display cases, about 23x43 inches, each well lighted. These will be rented to commercial exhibitors, but free use will be allowed non-commercial exhibitors and to club displays. Day and night police protection will be provided.

Bozeman is a college town, seat of Montana state college. It is located on U. S. 10, which splits near Garrison in western Montana. One line, No. 1 North, comes east through Helena, state capital, and No. 10 South comes through Butte. The two unite again a little west of Bozeman.

ROCKS AND MINERALS TO PUBLISH BI-MONTHLY

Announcement is made in July 1948 issue of *Rocks and Minerals*, published by Peter Zodac at Peekskill, New York, that beginning with the September issue it is expected this magazine for mineralogists, geologists and collectors will be published bi-monthly. Reason given was the unsettled conditions in the printing industry. This was considered a temporary measure, "for a year or so, until conditions become normal." Price is to remain the same but there will be an increase in number of pages, it was stated.

James G. Manchester, one of America's most noted mineralogists, aged 76, died June 28 in Southampton, L. I., New York. He was a member of New York Mineralogical club, Mineralogical Society of America, New York Academy of Sciences, American Association for the Advancement of Science, and the Rocks and Minerals association.

Mineralogical Club of Hartford, Conn., has announced the following outings for the fall season: September 12—Upper Merriam quarry, Sept. 26—Chester and Blanford, Mass., October 10—Roxbury, Conn., October 24—Lincoln, Rhode Island. The society meets at 249 High Street, Hartford, Conn.

New officers of Georgia Mineral society, Atlanta, are: Captain Garland Peyton, president; Wm. Gussow, vice-president; Sam Cronheim, treasurer; Chas. Wilkins, recording secretary; Dr. Frank Daniel, historian; S. C. Knox, corresponding secretary. Officers will be installed at annual banquet in September.

Sponsorship of a movie production of the story of gold in California by California Centennial commission or other agency was urged in May by board of directors of San Francisco chamber of commerce. Production of proposed film could be financed by some \$30,000 to \$75,000 of the two million dollars provided for use of the commission, according to Bert C. Austin, chairman of the chamber's mining committee.

According to *Rocks and Minerals* magazine, smoke of a volcano actually is pumice, a greyish rock blown so fine by steam that when it settles it has the appearance of ashes. Masses of solid pumice are full of cavities and can float on water.

MINERAL, GEOLOGY CLASSES OFFERED LOS ANGELES ADULTS

Under direction of the adult education program of Los Angeles city schools, John Benkart, mineralogist, author and teacher, will instruct classes in mineralogy and geology at three evening high schools starting September 13. Classes will meet at North Hollywood high school Mondays, at Hollywood high school Tuesdays and Thursdays, and at Belmont high school, 1575 W. Second St., Wednesdays and Fridays between 7:00 p.m. and 10:00 p.m.

During the fall term, work will consist of a study of principles of geology, origin and occurrence of minerals, prospecting methods, and a study of the nature and properties of minerals, including laboratory work in identification of important types. Interested adults of the areas are invited to attend these classes.

Members of Mojave mineral society, at their June meeting, heard Vincent Morgan, chemist for Pacific Borax corporation of Boron, explain importance and usefulness of specific gravity in gem identification. He illustrated with gems and appliances the method of obtaining and using specific gravity in identifying minerals. On the same program, John (Buffalo Bill) G. Maxwell of Randsburg displayed Ultra-Violet Mineral-ight and its effects on fluorescent minerals.

Midwest Federation of Geological societies was to hold its annual convention in Chicago, August 21-23, with Chicago Rocks and Minerals society as host.

International Association of Crystallography was to hold its first annual convention at Harvard University, Cambridge, Mass., from July 28 to August 3. Display of all the latest scientific aids to the study of crystallography, including latest in X-ray and the newer microscopes, was scheduled. Burrlee Pottery was invited to show its crystal models, and Charles Knowlton of Fullerton, California, was to show them.

Northern Ohio guild of American Gem society in May elected the following officers for the coming term: Harold D. Myers, president; Harold H. Hubbard, vice-president; Elspeth Mackintosh, secretary-treasurer. At the meeting Dr. Glenn C. Tague gave an illustrated lecture, "Pearl, Coral, Amber and Jet."

Eastern gem fields are being described by Horace W. Slocum in a series of articles appearing in *Rocks and Minerals* magazine. June 1948 issue includes Diamond hill, Salisbury, New York (Herkimer diamonds) and Port Leyden, New York (tabular quartz and garnets). July issue includes notes on collecting at Whitestone farm, Natural Bridge area, New York (pyroxene, tremolite,

wernerite, calcite crystals, spinel, diopside, wollastonite); Reese farm, Richville, New York (brown tourmaline), and the Danburite location, Edwards, New York.

World's smallest brilliant cut diamond, as reported in *Pebbles*, bulletin of Snohomish County mineral society, Everett, Washington, was hand-cut in 1921 by an Amsterdam artisan. Although it has 58 facets, the stone must be examined through a microscope, as it weighs only 1-400th of a carat and is smaller than the head of a pin. It is in the collection of Pieter de Witt, New York diamond consultant.

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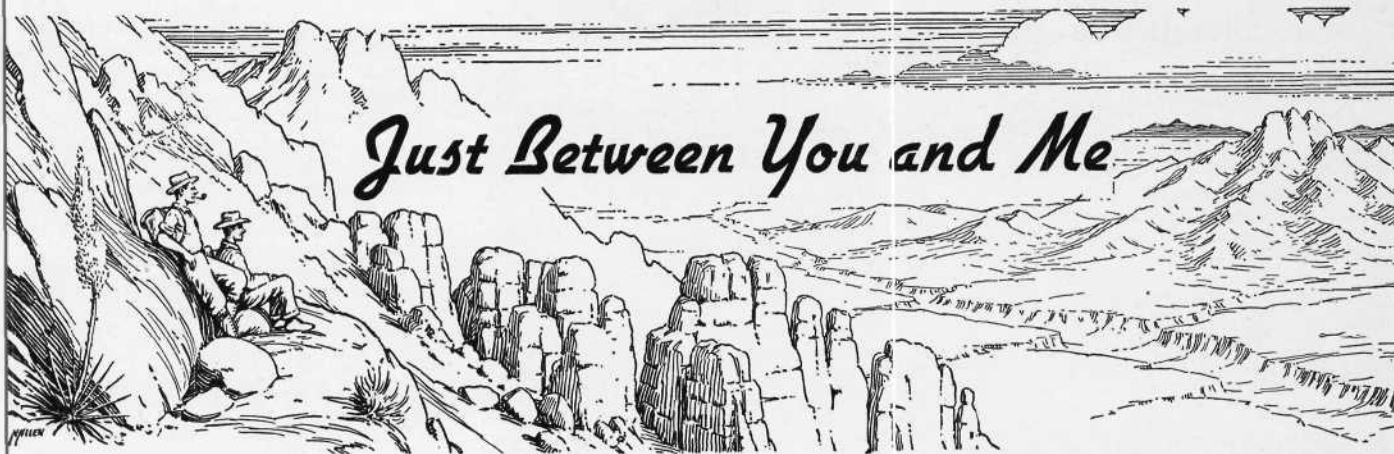
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Just Between You and Me

By RANDALL HENDERSON

JOHN C. Van Dyke in his classic essay *The Desert*, published in the early part of this century, wrote: "The deserts should never be reclaimed. They are the breathing spaces of the west and should be preserved forever.

"To speak about sparing anything because it is beautiful is to waste one's breath and incur ridicule in the bargain. The aesthetic sense—the power to enjoy through the eye, the ear and the imagination—is just as important a factor in the scheme of human happiness as the corporeal sense of eating and drinking, but there has never been a time when the world would admit it.

"The 'practical men,' who seem forever on the throne, know very well that Beauty is only meant for lovers and young persons—stuff to suckle fools withal. The main affair of life is to get the dollar, and if there is any money in cutting the throat of Beauty, why, by all means cut her throat. That is what the 'practical men' have been doing ever since the world began."

Men are still seeking to reclaim the desert country. Increasing population pressure seems to make it necessary that we do this. The only alternative is a rigid program of birth control—for which we are not yet ready.

But on the other side of the ledger it is gratifying to note that public sentiment for the preservation of parks and monuments and recreational reserves is slowly but surely gaining ground. Even the 'practical men' are learning that only animals can survive on food and shelter alone. Humans must have something more—some of those intangible values they find in the peace and beauty of the natural landscape. Commerce would not long thrive in the world in which there was no artistry, no imagination.

I can look out through the window of my new office in Palm Desert and see the 10,000-foot summits of Ol' Greyback and San Jacinto in the distance. Between these two mighty peaks is San Gorgonio pass, the gateway between the Southern California desert and the Los Angeles coastal plain.

During the last 100 years a motley procession has passed through this gateway — mountain men, trappers, gold-seekers, freighters and colonists seeking new homes. Traveling westward they counted the days and hours until they would reach San Gorgonio and be out of this damnable desert region.

Today, the descendants of those pioneers have a new concept of the desert. Throughout the winter months they head eastward through San Gorgonio pass—thousands of them every week—to get away from the damp gloomy days of the coast and the smog of the great city and into the clean sunny atmosphere of the same desert their forebears shunned.

One of the reasons we selected this site for the permanent new home of Desert Magazine is those mountains. Our homes and workshop are on the floor of the desert at an elevation of only 300 feet. But three miles away the Pines-to-Palms highway starts zig-zagging up the steep northern slope of the Santa Rosa range, and within a few minutes we reach an elevation of 4,000 feet.

At a distance, the lower slopes of the Santa Rosas appear utterly barren. For truly they are desert mountains. But a closer inspection as the road winds up the grade discloses an ever-changing panorama of sparse but virile plant life. As we start up the grade we see the vegetation of the Lower Sonoran zone—the creosote, burroweed, encelia, catsclaw, mesquite, palo verde and others. Before we reach the 2,000-foot level the first of the Upper Sonoran zone plants appear—first the agave or mescal, then as we round bend after bend we see wild apricot, juniper, nolina and yucca, and eventually we meet a scraggly pinyon pine.

Plant life is not as adaptable as human life. We humans range over the earth from the arctic circle to the equator—and while we do more or less complaining about drastic changes in temperature, our bodies soon adapt themselves, and eventually our minds become reconciled. But in the plant world each species has its own zone of life, and it will not survive too drastic a change in soil and climatic environment.

One evening recently I accompanied friends on an over-night camping trip to a little pinyon forest 4200 feet up on the Santa Rosa slopes. After a month on the floor of the mid-summer desert we wanted to enjoy the novelty of sleeping under blankets.

One learns more about the character of an associate on a single camping trip than in months of association in an office. Life in a primitive environment brings out traits not revealed in normal association.

We had flapjacks for breakfast. One of my camping rules is that each member of the party be given the option of making his or her own hotcakes. Making camp flapjacks is a fine art. It takes much practice and I have a chronic distrust of tenderfoot campers who volunteer to cook the hotcakes for the crowd. Generally they don't know the first rule—the proper regulation of the fire. I don't like burned flapjacks—and so I reserve the right to make my own—and grant the same privilege to the others.

After they've learned to cook 'em to a nice golden brown, the next lesson is flipping them over in the air. That takes courage, faith, good timing and perfect rhythm. Only folks with a little music or poetry in their genes ever learn to flip hotcakes gracefully.

But you don't have to be a poet or a musician to enjoy camping. It is good tonic for the ails of a jittery civilization—even if you have to eat burned flapjacks.



CALIFORNIA CELEBRATES HER GOLD RUSH CENTENNIAL

With California celebrating the centennial of the discovery of gold at Sutter's mill in 1848 and the gold rush of 1849, many guides to the gold region are being published. Beautifully printed and elaborately illustrated, *MOTHER LODE ALBUM* by Othello Weston has been issued by Stanford University Press. This primarily pictorial record of the buildings and relics of the camps as they appear today, contains more than 200 excellent full, half and quarter page photographs by the author, who has lived in the Mother Lode town of Columbia for many years.

There are brief descriptions of the history of the camps and their present circumstances, divided into sections on the Northern and Southern mines. Among the attractions of the book are the many vignettes of illustrations from early accounts of the gold rush and the early West, one reproduced with each page of text. Palo Alto, California, 1948. 178 pps., 8½x11½ inches, map and papers, \$5.00.

H. Cyril Johnson's *SCENIC GUIDE TO THE MOTHER LODE* follows the pattern of his other useful and compact Scenic Guide series. All subjects are listed alphabetically and information about population, altitude, history and present attractions is included. There are maps of the Northern and Southern diggings and 30 photographs. Susanville, California, 1948, 52 pps., 75 cents.

A motoring and historical guide to the principal early mining camps, *LOST AND LIVING CITIES OF THE CALIFORNIA GOLD RUSH* by Philip Johnston, has been issued by the touring bureau of the Automobile Club of Southern California. Johnston knows and has visited all the Mother Lode country and this 62 page booklet is excellent reading with many anecdotes and much local history. The volume is divided into 3 sections: The Mother Lode, The Northern Diggings and The Trinity Mines. There are maps but no illustrations. The booklet, printed two columns to the page, appears to be about the same material which Johnston published in *Westways* magazine years ago.

CHALFANT TELLS OF GOLD, GUNS AND GHOST TOWNS

All his life W. A. Chalfant of Inyo collected tall tales and pioneer lore of the desert and Sierra country he loved. *GOLD, GUNS AND GHOST TOWNS*, issued by Stanford University Press, is a compilation of some of his best work. The new volume is a selection of stories from two earlier books by Chalfant, *Outposts of Civilization* and *Tales of the Pioneers*, and they, in turn, were taken from columns and columns of material he ran during the 55 years he was editor of the *Inyo Register* of Bishop, California.

Chalfant was the historian of California east of the Sierra and adjacent Nevada.

The book contains the almost forgotten stories of the old mining camps: Monoville, Bennettville, Lundy, Aurora, Hamilton, Columbus, Mammoth, El Dorado canyon, Bodie, and others less well known. But Bill Chalfant's primary interest was in people and his book is crowded with tales of the characters, good and bad, who made the land. There are sections on Shorty Harris, famous desert rat, crime and punishment on the frontier, tall tales the miners told, and the story of the Lost Cement mines. One of the most interesting chapters is that titled: "A Boy in California in '49." It is the work of Bill Chalfant's father, P. A. Chalfant, pioneer editor who came west with the gold rush. It is not "written" in the usual sense, since P. A. Chalfant shaped it at the type case as he set it into type for his paper in 1886, from memory alone, without copy or notes.

Those who do not have the books from which *GOLD, GUNS AND GHOST TOWNS* was selected will find this volume fascinating reading and important source history, an almost necessary item in any library of Western Americana.

Stanford University Press, 1947. 175 pps., \$3.00.

LIFE WAS ROUGH IN THE FRONTIER ARMY

Life in the United States army during the rugged and brutal days of frontier

warfare is vividly described in *FORTS AND FORAYS*, the diary of James Augustus Bennett, just published by the University of New Mexico press. Bennett was 18 when he enlisted in the dragoons in New York in 1849. From 1850 to 1856 he served in territorial New Mexico. During that period he kept this diary which presents an amazingly realistic picture of the violence of the times.

Bennett knew Kit Carson who acted as guide on many dragoon forays. He fought Indians—and scalped one himself. He nearly froze to death in winter blizzards and roasted under the summer sun. He danced with the Mexican ladies at fandangos at Santa Fe and other communities, and fought with their escorts in the brawls which seemed inevitably to follow the dances.

What he saw he recorded in brief, expressive style—army life and punishment, Mexican villages, weather conditions, native inhabitants, ruins, gambling dens. He frequently was wrong in his dates and included a good deal of hearsay with personal observations, but as a picture of frontier army life by one participating in it, *FORTS AND FORAYS* is invaluable. The diary was transcribed for publication by Clinton E. Brooks, with Frank D. Reeve as co-editor.

University of New Mexico Press, Albuquerque, 1948. 85 pps., illustrations, index. \$1.75.

BOOK NOTE . . .

Carl Moon, 69, noted writer, artist and photographer who specialized in American Indian life, died in San Francisco, June 24. Moon began his collection of Indian prints and paintings as a photographer in Albuquerque in 1904. He was art director for the Fred Harvey restaurant chain throughout the Navajo country.

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