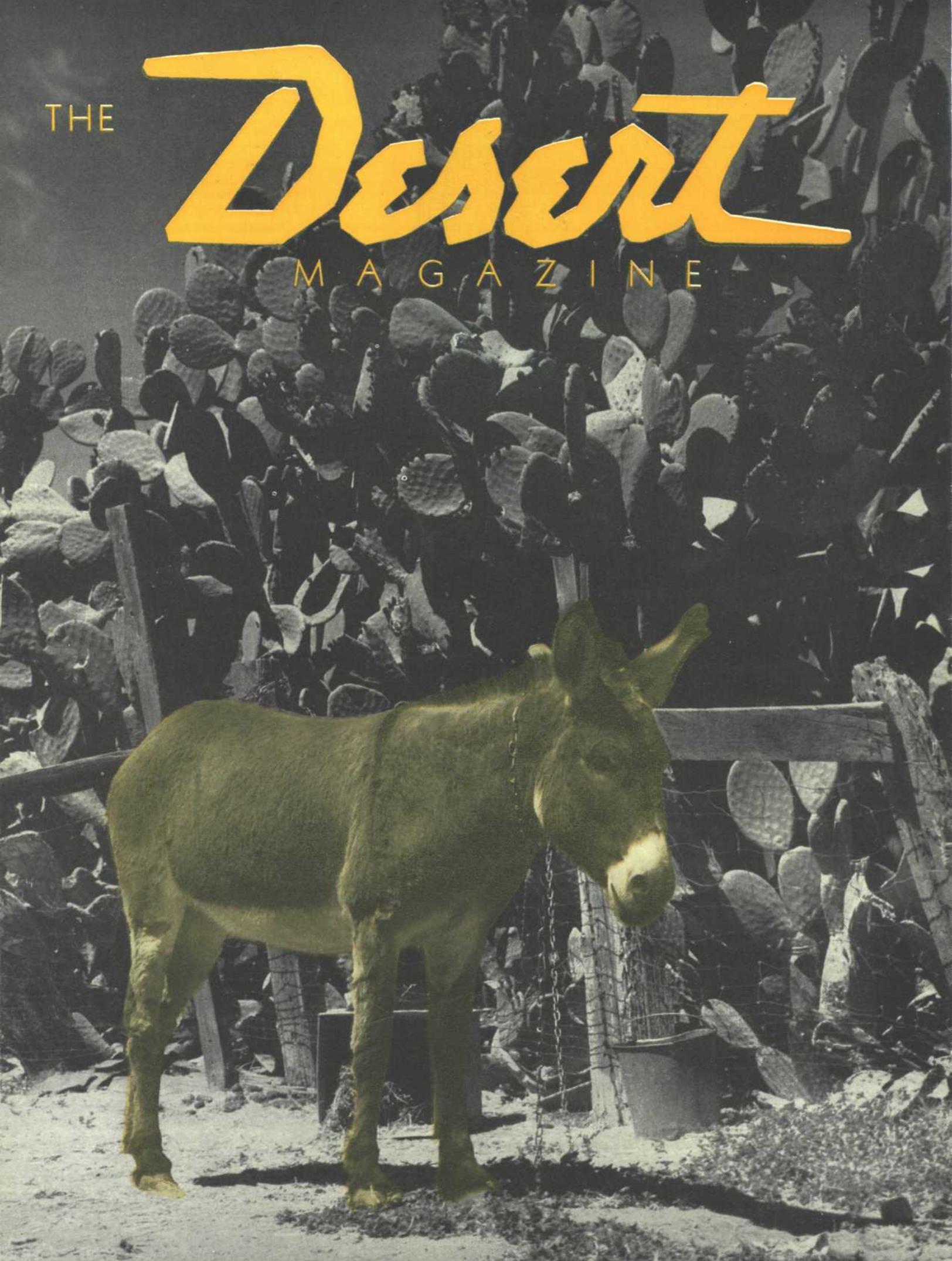


THE

Desert

M A G A Z I N E



JUNE, 1951

35 CENTS



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Mobilgas akwah!*"

"bus uncha ah!"**

* "wonderful trip
if you're using Mobilgas!"

** "you bet!"



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DEATH VALLEY PROGRAM TO BE STAGED IN NOVEMBER

Next November 10-11-12 have been set as the tentative dates for the 1951 Encampment of the Death Valley 49ers, as planned at a recent meeting of the board of directors held at Trona, California.

No effort will be made to repeat the elaborate pageant which drew 35,000 people to Death Valley in the centennial year of 1949. Rather, the program this year, as tentatively outlined by the directors will include a huge campfire program supplemented by exhibits of historical weapons, Death Valley minerals, and a square dance carnival. John Anson Ford, president of the '49ers, stated that the purpose of the Encampment will be threefold:

- (1) To provide an opportunity for a simple outdoor encampment in one of America's most scenic and dramatic settings.
- (2) To honor the heroism and achievements of the early pioneers.
- (3) To make the charm and majesty of Death Valley known to all the world.

President Ford was authorized to name a committee of five members to have charge of producing the program. The pageant part of the Encampment is to be staged by individual communities in the desert area.

It was agreed that the cost of the Encampment be limited to such funds as are provided by popular subscription and by the communities adjacent to Death Valley.

SKELETONS OF FIRST CAMELS ARE DISCOVERED . . .

When, through the efforts of Edward Fitzgerald Beale, the United States government landed 33 camels from Egypt at Indianola, Texas, in 1856 for use in transportation, it was generally believed America had its first camels. The Civil war cut short Beale's experiment. Some of the camels were sold, others, uncared for, slipped away into the desert to become nomadic outcasts.

Recently fossil beds in the vicinity of Barstow have yielded skeletons of tiny camels about the size of yearling calves with a small hump. According to Ray S. Langworthy, science teacher at the Barstow high school, the scientist in charge of the excavation, Ted Golusha, working for the New York Museum of Natural History, believes the camels are the forebears of the present near-east Asiatic camels; that the camel family originated in North America, migrating across the Bering Straits to disappear from America.

DESERT CALENDAR

- June 1-2—Pioneer Days Celebration, Clovis, New Mexico.
- June 3—Sports Day, fly and bait casting. Trap shooting. Storrie Lake, Las Vegas, New Mexico.
- June 3—Procession of La Conquistadora from St. Francis Cathedral to Rosaria Chapel, commemorating reconquest of New Mexico from Indians by de Vargas in 1692. Santa Fe, New Mexico.
- June 3-6—State Future Homemaker's Conference, Arizona State College, Flagstaff, Arizona.
- June 7-9 — State wide meet 20-30 Club, Prescott, Arizona.
- June 7-9—Rocky Mountain Federation of Mineral societies convention, Phoenix, Arizona.
- June 10—Return of De Vargas memorial procession to St. Francis Cathedral, Santa Fe, New Mexico.
- June 13—Corn Dance, San Antonio Day, Taos pueblo, Taos, New Mexico.
- June 13—Indian fiesta and ceremonials, Sandia, New Mexico.
- June 14-16 — Veterans of Foreign Wars state wide convention, Prescott, Arizona.
- June 15-16—State Press Association Convention, Santa Fe, New Mexico.
- June 20-23—American Legion State Convention, Santa Fe, New Mexico.
- June 22-24—Future Farmer's Rodeo (youngsters only), Santa Rosa, New Mexico.
- June 22-24—California Federation of Mineralogical societies holds its annual convention at Oakland, California. Harold C. and Nathalie F. Mahoney are co-chairmen of the committee in charge.
- June 24—Annual ceremonials including Corn Dances, San Juan Day, Taos pueblo, Taos; and Acoma pueblo, New Mexico.
- June 24—Saddle Club Rodeo and Racing, Farmington, New Mexico.
- June—Exhibit of paintings by Paul Coze, illustrating artist's conception of life in now ruined cliff dwellings and pueblos of Colorado, Arizona and New Mexico 1000 years ago. Southwest Museum, Marmion Way and Museum Drive, Highland Park, California.



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Trail of the 57 Shrines...

On April 1 many readers of Desert Magazine gathered in front of Desert's pueblo in the Coachella Valley to dedicate the starting of a Shrine for those who follow the desert trails. For those who would like to know more about such Shrines, and their Indian origin, here is a story that will answer most of the questions, written by Paul Wilhelm, poet of 1000 Palms Oasis.

By PAUL WILHELM
Map by Norton Allen



Although perhaps hundreds of years old, the ancient Indian trail across Bee Rock Mesa is still easy to follow.

ALTHOUGH I have lived in my little cabin at California's 1000 Palm Oasis 18 years, it was not until a few months ago that I discovered on Bee Rock Mesa not far from my home what I believe is a record number of rock mounds—Trail Shrines of the ancient Indians who once camped at my spring. There are 57 of them along an old Indian trail within a distance of one mile.

Bee Rock Mesa is in the heart of the Indio Mud Hills, the "most prosaically named hills in the desert" according to Harry Oliver whose "Fort Oliver" home lies on the floor of Coachella valley just south of them. We residents of the area prefer to call them Phantom Hills—because we think they are worthy of a prettier name than "mud."

Actually, these sienna-hued clay banks have much to interest the Nature lover and photographer, as well as the geologist and archeologist. In this great up-lifted sedimentary deposit are found beds of marine fossils, and along their 26-mile length are many oases of the native Washingtonia palm. Indians once chanted their songs among these palms, and cremated their dead on the nearby mesas. We are quite certain of this for the mesas and ridges are zig-zagged with ancient trails.

Phantom Hills have a forbidding appearance to those who view them from paved Highways 60, 70 and 99—all three of these U. S. highways follow the same route at this point. But those of us who live among these hills have learned that in the solitary places behind and beyond their drab exterior are vistas of indescribable beauty. The whole story of creation is written in these hills—for those who have the interest to explore them at leisure and study the strange phenomena of their formation.

In the heart of these hills, for untold centuries 1000 Palms Canyon was one of the more important old Indian campsites. This was due to an unfailing supply of spring water forced to the surface through fissures formed by the San Andreas fault. This continuous 80-inch flow to this day makes the canyon green with palm, willow, mesquite, cottonwood and grasses. Here can still be found artifacts of a by-gone day: clay ollas, stone implements and obsidian spear and arrowheads, mementos left by the most recent Phantom Hills dwellers, the Shoshoneans.



Paul Wilhelm and Cyria Henderson deposit their stones on one of the largest of the shrines found along the Bee Rock Mesa trail.

Less than a mile south of this natural watering place, I came upon 57 Trail Shrines. They were located on either side of an ancient trail on Bee Rock Mesa between 1000 Palms and Hidden Palms Oases.

Excursions had often taken me into the Bee Rock Mesa area during my years at 1000 Palms Oasis. It was high country—and there was adventure tracking hill ridges, or searching for ollas hidden in caves a century ago by the Wildcat and Coyote clans of the late Mara tribe.

This particular Sunday afternoon the excursion led up a boulder-strewn box canyon. Adjacent, and high to my left, arose Bee Rock Mesa. From my shoulder hung a canteen, and a camera. I was intent on taking a photograph of a rare cacti grouping. I had happened on it some weeks before—seven large bisnagas growing in a cluster on a gravel slope.

The photo taken, I climbed the mesa—and there was this ancient trail! It meandered leisurely in a northwest, southeast direction.

At first glance, it appeared older than the two trails I was familiar with in the foothills a mile east between Pushawalla and 1000 Palms Canyons.

I decided to hike its entire length. So I tracked northwest, keeping well apart from the trail. I wanted to follow it across the mesa from beginning to end.

The flat desert pavement over which I picked my way was bone-dry, with scant vegetation. Creosote bushes, spaced farther apart than is their habit, were grotesquely stunted, the leaves folded desperately inward to retain every precious bit of moisture. Occasionally I walked over round smooth clearings, from five to eight feet in diameter. But the aridity of Bee Rock Mesa was compensated by the view it afforded, old landmarks of the Phantom Hills familiar from years of association: Squaw Hill, Cragg Bluff, Elephant Butte and Gaunt Ridge. Far west arose the two-mile-high blue summit of San Jacinto Mountain. And I realized the peaceful charm of this mesa. It was an isolated little world of its own.

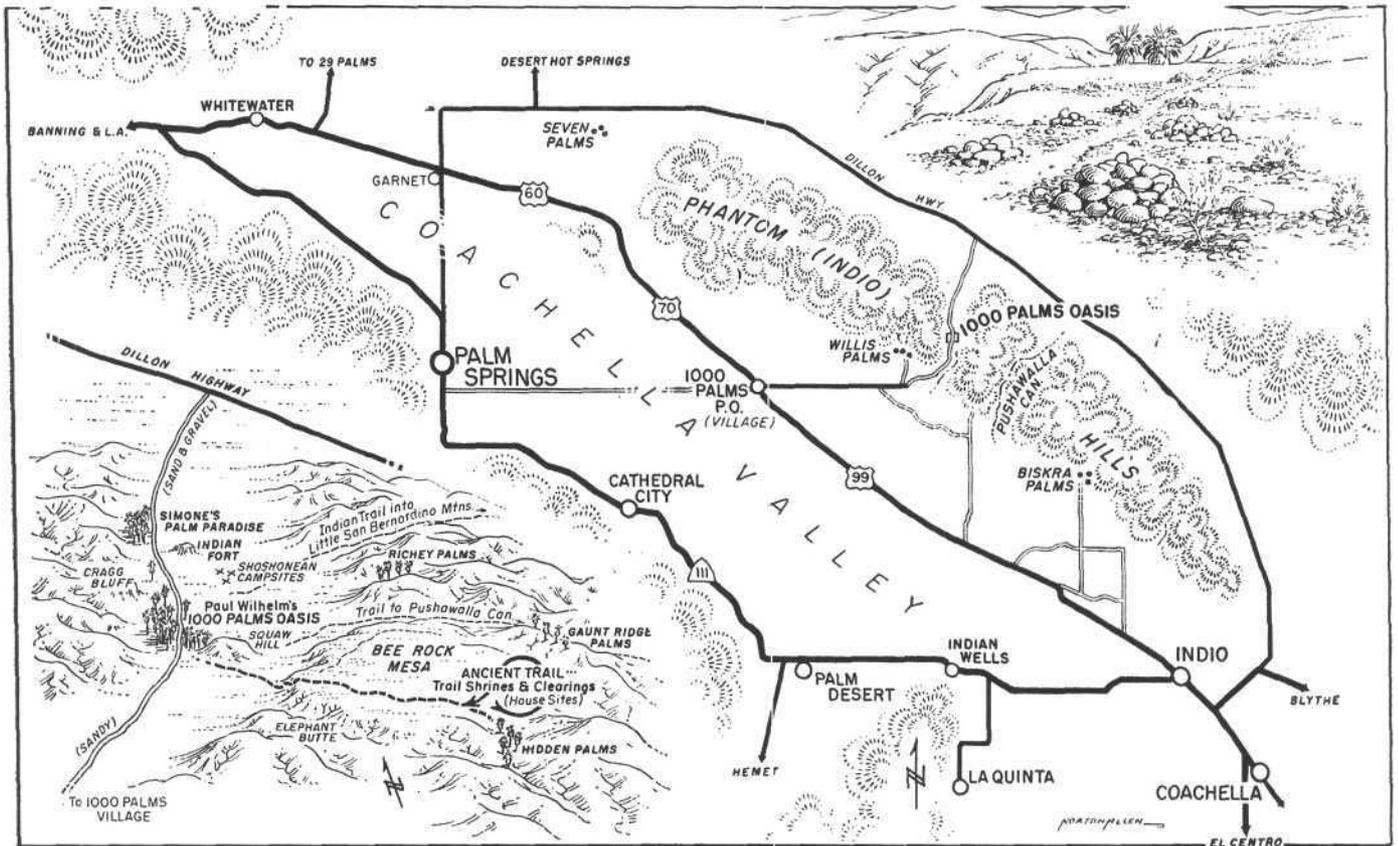
At last I stood on the edge of a sand and rock-strewn slope. The trail zig-zagged down in sharp switchbacks. Below, on a flat of land, markings of the trail were barely evident. Those faint stretches still discernable made a bee-line for my home Oasis one mile

northwest—the first of three luxuriant palm groves in 1000 Palms Canyon. Viewed from Bee Rock Mesa, that green oasis in its dramatic situation, flanked by ochre-colored hills, was a painting in deep pastels. At the base of those palms were the Indians' un-failing springs. Vivid in my mind was the picture of a time when dusky figures roamed the Phantom Hills. It wasn't difficult to imagine a party of them on the old trail carrying ollas filled with spring water.

I turned about and began following the trail. It was then that I first beheld many low rock mounds on either side of the trail—good luck shrines as white men call them, apparently erected by some pre-historic people.

Under the slant of a hot sun, I was held there in that moment of discovery. Perhaps it was the recognition of a residue of living left by a people in a place once frequented and loved.

The moment did not pass quickly. I continued studying those small heaps of loosely piled stones recalling, like it was yesterday, a summer afternoon three years before as I plodded up the trail toward the summit of San Jacinto Peak behind my Santa Rosa Indian guide, Pablo Arroz. Nearing the summit the Indian turned aside from the



trail. He picked up a stone, placed it on a low mound of rocks, and then continued silently ahead up trail. On the peak, he walked to a large mound and placed a flat stone thereon. I stood quietly beside him. His face lighted and his lips moved as if in prayer. On our way down the mountain, Pablo revealed the purpose behind his acts. Shrine offerings had been made that we might be worthy to ascend the peak which his tribe considered sacred.

These piles of rocks are familiar to most of us who follow Indian trails throughout the desert Southwest. In the Navajo and Hopi country sprigs of juniper, sticks and wood fragments are to be found lining crevices of Trail Shrines. In the Pima country of southern Arizona a large boulder surrounded with stone and ringed with a circle of smaller stones has been for centuries considered strong medicine.

Malcolm J. Rogers of the San Diego Museum, authority on Southwestern Indians, discovered 17 separate stone piles along a California-Arizona Indian trade trail. Each contained shells and broken pottery. Concerning this great east-west trade route, Rogers has this to say:

"Along such main trails, desert Indians practiced the peculiar custom of depositing small stones in piles to indicate that they had made one of these long treks. In time many of the piles

grew to considerable size. The piles usually occur in groups, a fact that may be explained by assuming that each clan constructed a separate pile. There is also evidence that not all such structures were merely for the purpose of recording journeys but were the outgrowth of ritual practice. In such piles the travelers seem to have sacrificed a portion of whatever they were carrying in an effort to effect a successful journey by appeasing some spirit or deity. They were particular either to break or burn all offerings before depositing them."

Among the Indians of Mexico, mounds of stone can still be seen along trails and in villages. Offerings are of a specific nature: small vessels, glass trinkets, and pottery images of animals and birds. Some mounds, if properly supplicated, are believed to attract rain, protect fields and assure an abundant harvest. Others secure a village from lightning, and protect livestock and household belongings. There is one shrine of the Huichol Indians of mountainous north central Mexico that, if properly propitiated, is believed to make hens prolific egg layers.

Continuing along the ancient trail across Bee Rock Mesa, the markers became so numerous that I was prompted to count them. So I backtracked. From the beginning I began checking them off one by one in my field notebook.

It is difficult to describe the peace and quiet brooding over Bee Rock Mesa. I think it can best be explained as a response to other lives lived long ago. It is as if there had never been any quarrelling or wrangling among those primitives that had passed this way. Surely they had been humble, loving one another. You cannot experience the mesa and have any ill will toward anyone. Along the trail you want to share this sense of peace and love. And share it you do!

Ahead of me now, shrines became prominent on either side of the winding pathway. My steps hardly broke the silence and my slow progress gave ample time to study the mesa's contour.

Bee Rock Mesa was approximately one mile across and two miles in length. It ended abruptly in the east at Gaunt Ridge and in the southwest on the slope of Elephant Butte. In the immediate vicinity of the trail, its terrain varied. Miniature arroyos and rocky hummocks gave way to broad levels of desert pavement, or mosaic, a surface paved with pebbles and weathered down to flatness. From the centers of a few trail markers, creosote and encelia raised brittle branches.

I paused momentarily at one of the larger mounds. Among the loose stones I made a painstaking search for signs of broken pottery, stone implements and arrowheads. Unlike the two routes



Hidden Palms Oasis is at one end of the trail . . .

. . . Thousand Palms Oasis is at the other end

a mile east, not a single artifact was evident.

There were signs of vandalism in some shrines, holes dug down through the center to the ground surface. But those who thought buried relics might be found could have saved themselves much labor. In the Southwest, no marker was ever placed over an Indian burial. "When we go, we leave no trace" was as true in primitive times as it is with the Indians of today.

This wanton vandalism reminded me of the wishing wells so prevalent in southern California. They are the white man's counterpart of the Indian shrines. How many of them have now been converted from a thing of traditional charm to a money-maker for unscrupulous Yankee tradesmen!

Still coursing southeast, it was apparent that the mounds were arranged in definite series, spaced from a few yards to 100 feet apart. Far ahead, the trail ascended a gentle rise. Situated on its summit against the skyline was by far the largest marker. I quickened my steps up the slope.

Simultaneously, I became aware of

cleared spaces on the broad levels of desert pavement. The clearings were from 20 to 100 feet off the trail. One such area, in close proximity to the trail, was ringed with small red stones. Before reaching the summit I placed my canteen on a marker that I would not lose count, and struck off to investigate.

Though it was true that a few clearings paralleled the trail, the majority were widely scattered over the surface. They may have been primitive dwelling sites, since native camps generally were located apart from—and usually above—important watering points as security against enemies. A thorough investigation of the campsite revealed not a trace of an artifact.

Eventually I arrived at the large summit marker. It was eight feet in diameter and three feet tall. Its composition was entirely of loose red stones. Vandals had been busy here, too. The marker's center was gouged clean. A careful search gave up nothing but clay, and more stones.

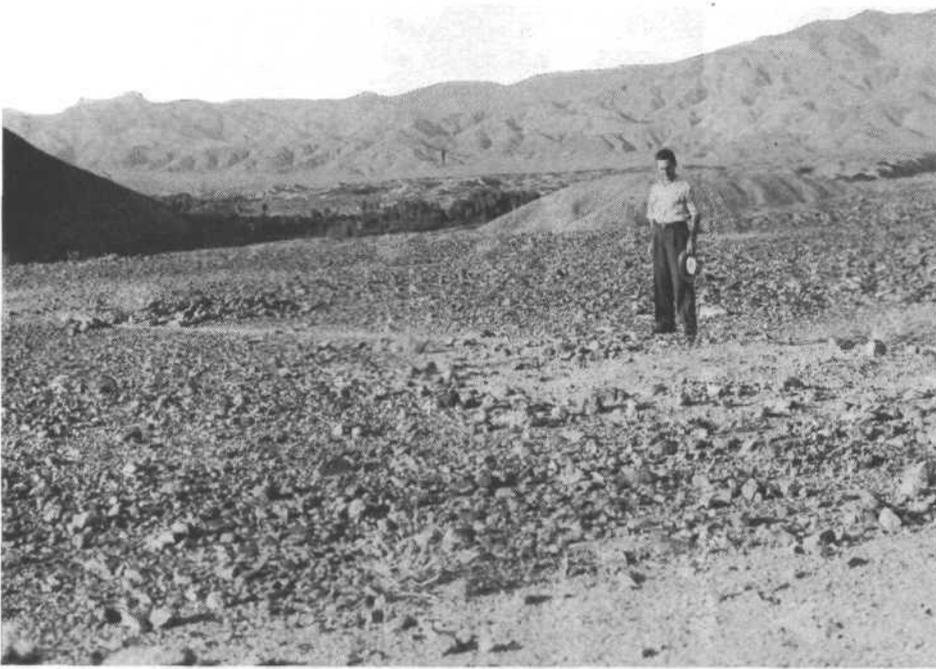
Significant was this complete lack of artifacts in both the markers and the

dwelling sites. There was a possibility that I had stumbled upon signs of a primitive Indian Culture, predating those people of pottery and pressure-flaked instruments. At least it added a scientific thrill to my adventure. With a sense of discovery, I progressed southeast, counting markers meanwhile, and analyzing the over-all picture of my findings on Bee Rock Mesa.

From Kroeber's "American Ethnology, Bulletin No. 78," I had learned something of the Indians that had lived most recently on the extreme north border of the Coachella Valley. Their history was brief:

Out of the fourth and fifth Shoshonean tribes (the Alliklik and Kitane-muk) inside the Sierra Mountains of California, there had developed a new division of Shoshonean, the Southern California branch. Since the dialect of the Kitane-muk was similar to that of the people of the San Bernardino Mountains, "Serrano," meaning "Mountaineer," was used in the wider sense as the name of this division.

The Serrano, then, was the last of two bodies of people who united, be-



On Bee Rock Mesa Paul Wilhelm examines on the circular clearings, possibly the site of an ancient Indian Wickiup. 1000 Palms Oasis is in the background.

cause of a dialect similarity, into a "Serrano division" of the Shoshonean stock. Their territory was, first, the long San Bernardino Range culminating in the peak of that name. Next, they held a tract of unknown extent north and east of San Bernardino Mountain. In the east and southeast, their domain was pure desert, and existing oases.

These people of the most southeast Shoshonean area were of the Mara tribe. Communal life was centered at widely separated points: Twentynine Palms, Thousand Palms and Pushawalla Canyons and adjoining oases. They were divided into two clans, the Wildcat and Coyote.

Acorns were fairly abundant in the western part of the Serrano territory. However, in the desert the Mara tribe had to procure its food in part from western bands, substituting with roots, cactus meat, yucca stalks when young, beans of the mesquite and wild palm, and plant seeds. They hunted wild animals and birds with crudely fashioned weapons. In the Journal of Father Garces is an observation made on his travels through the desert in 1776: "The desert people use a stick shaped like a boomerang with which they ferret out lizards and rodents from rocks and sand."

Symmetrically wrought pottery was made by both the Coyote and Wildcat clans, but was rarely decorated. Arrowheads were hewn from obsidian obtained from wandering traders. Stone hammers and pressure-flaked implements were widely used.

Mementos of these Shoshoneans were to be found in camps and burials at nearby 1000 Palms and Pushawalla Canyons and other water points throughout the Phantom Hills. Arrowheads could be picked up every day. On old trails between these water points, pottery shards and arrow chips were numerous in scattered markers. On the trail across the San Bernardino Mountains to Twentynine Palms Oasis, shards and arrowheads could be picked up after heavy winds uncovered them beneath fine sand.

On Bee Rock Mesa there was no such evidence.

Who, then, were these primitives who had left undisputed manifestations of a prior people?

Malcolm J. Rogers states that the oldest type of human occupancy in the Colorado Desert of Southern California—even ante-dating Pinto Man—was the little-known Malpais Culture. Its chief characteristics, in the words of Roger, were "the small circular dwelling sites on stony mesas, and the complete lack of stone hammers, pottery or pressure flaked implements. In fact nothing but the crudest stone scrapers are associated with these house sites."

As an amateur archeologist on a field trip across Bee Rock Mesa, I drew no conclusions. But in my fieldbook I made this notation: "It appears that the mesa's lack of artifacts, and the circular clearings of wickiup sites points toward a prior habitation by a more primitive group than, surely the Shoshoneans, possibly Pinto Man."

Against this deduction were strong arguments: the trail seemed too well defined, the stone shrines too recent—even remembering that erosion worked slowly in the desert, the attrition of centuries in such a dry land being almost imperceptible.

Be that as it may, until the clearing areas were proved dwelling locations, and a single crude stone scraper found as evidence of Roger's "prior people," the possible site of a prehistoric race on Bee Rock Mesa would remain tentative, the ancient trail and its markers simply an easy pass through the hills from one water point to another by many clans of various periods.

Whatever conclusions are finally drawn, it is an established fact that the desert Indians never walked in sand if they could help it. Thus the old trails kept to the stony mesas whenever feasible. To prove this, go out into the desert Southwest. You'll find trail sections still intact. Some are as fresh as in the days when they were used constantly. All are enduring records of ancient travel. Narrow, cleared pathways winding their tortuous ways from campsite to spring, from spring to uplands where were sheep and deer, and forests of pinyons for November harvest.

Now the trail across Bee Rock Mesa descended down a long hill slope. It ended abruptly on the bank of a deep arroyo. A quarter of a mile below, appeared green heads of the palms in Hidden Palms Canyon. At their base, water was certain to be, cool and abundant.

As I retraced my steps up the hill, I glanced at my field notebook. The count was "57." On the spur of the moment I named it "The Trail of the 57 Markers." The name conjured up a brown-skinned, dark-eyed people living an earthy, enviable way of life on their isolated mesa.

As I approached the large marker on the highest trail point, I picked up a round stone with a lustrous dark patina. I placed it on the shrine and faced northwest toward 1000 Palms Canyon like many an Indian had done before me. There it lay in the friendly embrace of the Phantom Hills, a palm-filled refuge of peace and quiet. A sanctuary for those who love the desert unspoiled.

And then I breathed the prayer the Navajo men sing as they go toward their sacred mountain:

*Lo, yonder the holy place,
Swift and far I journey,
To life unending, and beyond it.
To joy unchanging, and beyond it.
Yea, swift and far I journey.*

I heard it echo again on ghostly lips as I made my way homeward along that ancient Bee Rock Mesa trail.

Geronimo, Apache or Greek?

By ELEANOR HODGSON

DURING THE several months of research which preceded the completion of my painting of Geronimo I chanced upon the English translation of a chapter from the book *The Charming Tropics*, written in Greek and published in 1945 by the Korydalos Printing Company of Athens.

Angelo Doxa, the author of the book, is a native of the Island of Kefalonia, Greece. Her book is not published in English, and only a small part of it is devoted to the story of Geronimo, the major part of the volume covering travel in the tropical and semi-tropical areas of the western hemisphere, including the Hawaiian Islands.

When I showed this translation to Fred Wilson, Indian trader at Phoenix, he suggested that it be sent to *Desert Magazine* because of its interest to historians of the Southwest. This is the translation, and I am passing it along with the thought that the reader can make his own appraisal of its merit:

By ANGELO DOXA

I, Angelo Doxa came to the Grand Canyon from Greece in 1936, while on a tour of America. I registered at the El Tovar Hotel where I stayed for several days.

One day while spending some time in the Gift Shop there, I saw a painting of Geronimo done by L. Peterson of Denver, in 1908.

"Heronimos," I said to the proprietor; "How is it that this Indian has a Greek name? Heronimos is a common Greek name."

The man replied that it was Spanish and pronounced Heronimo—no "S."

I then told him that even the features of Geronimo were Greek. He looked like a Greek dressed up as an Apache!

The proprietor then showed me another painting of White Swan with a papoose on her back. White Swan was Geronimo's daughter who had married Eagle Feather, Chief of the



Geronimo—latest painting of the Apache chieftain, by Eleanor Hodgson.

Hopi tribe nearby. The features of White Swan were unmistakably the classic Greek and not Indian — this was clear even to the proprietor himself.

"White Swan lives on the Hopi reservation near here, but was very old the last time I saw her several years ago," he said.

I was intrigued. I had to find out more of this savage with the near-Greek name.

Early next day I started for the Hopi reservation. There, I learned White Swan had been dead a few years. The papoose of the painting? He was alive and 35 years old. I met him—talked with him, but found him uncooperative. He refused to be photographed. Refused to give any information, whatsoever.

I offered an American \$5.00 bill and this seemed to help his memory. He went into his hut and returned with a silver locket about the size of a silver dollar, hung on a length of leather, for wearing around the neck.

It had belonged to his grandfather Geronimo, he said. Geronimo always wore it and had treasured it as a good luck piece given to him by his father.

I asked this grandson if he might open the locket. But he looked puzzled and didn't seem to understand that it could be opened. It was badly battered and almost like a solid piece, but there was just barely visible the tiny line of separation running clear around the piece.

I pried it open with the aid of my penknife. There inside was an old lithographed picture of the Virgin Mary with the inscription hardly readable—Virgin of Tinos. The locket had come from the Island of Tinos in the Aegean Sea.

This to me was proof that Geronimo was really a Greek. Possibly Greek father — Apache mother. Or was stolen by the Apaches when very young and raised as one of the tribe. He was never without the Greek locket and treasured it, even if he was not fully aware of its significance.



Corn Spring in the Chuckawalla Mountains.

THE FAITHFUL

By R. WAYNE CHATTERTON
Caldwell, Idaho

You see that grave up on the bluff? It's all
There is of Jane, and all I have. A fall
From that high cliff took her away and put
Her there to wait for me. Now, stranger,
root
And all, I'm here to stay. You city folk
Won't understand why I remain—you'll joke
About Old Crazy Jones who lives alone
At Echo Falls and slowly turns to stone
Among the empty streets and rotten walls
Of that old desert town. Don't smile! It calls
To mind the smiles of some whose ghosts
look out
At me from vacant windows hereabout,
And I won't have them mocked! The town
is old
And dying; so am I. We'll gather mold
And dust together, it and me. I'm last
To go, as I was first to come; the past
And future are the same to me. A man
Belongs where he belongs, and if I can,
I'll end where I began. Don't go! for when
You're gone the life is gone from here, and
then
The wind is all that moves or makes a sound,
And desert dust blows deeper in around
The graves. The cactus flowers are out, you
know.
They don't spend long in bloom until they
go.
Sit here a spell and watch them fade, and
try
To see that, slowly, as they fade, I die.

MOONLIGHT ON THE DESERT

By KATHRYN ALLEN COEUR
Glendale, California

The mellow, valley moon is ripe tonight,
Her luminous glow veils off each satellite.
Desert-holly snow conceals the ground
And all is still . . . there is no sound
Save echoes from dove-purple mountain
walls,
And crunch of sand beneath our own foot-
falls.

DESERT COMPANION

By CONSTANCE WALKER
Los Angeles, California

The wind is a murmur,
A voice without form,
The sigh of another,
A whisper to charm
The solitude's favor.

THE VOICE OF THE DESERT

By GLADYS L. SAVAGE
Denver, Colorado

The voice of the desert calls softly at twi-
light,
To the shy doe and fawn
The rabbit and lynx,
To come to the spring in the hidden arroyo,
While each thirsty creature quietly drinks.

The voice of the desert whispers at night,
Of a promise to keep
With the first rays of light,
When the turquoise and amber,
And rubies and gold
Shine in the sunrise when mists unfold.

The voice of the desert can shriek like a
banshee.
When anger and temper
Upset her calm way,
Then regretfully croons to each of her
children
To love her again at the end of the day.

THE STAMPEDE

By ADELAIDE COKER
Los Angeles, California

The white clouds graze in the sky's blue
meadow,
While the wind stands guard, like a Shep-
herd pup;
Below the thirsty desert is waiting
To catch the rain in its golden cup.

But all at once the wind grows angry,
And nips and cuffs the strays into line—
Until—the frightened clouds, stampeding,
Leave only mist-silvered trails behind.

To Grow

By TANYA SOUTH

Whatever Fate upon you brought
You still have room for trying.
Each kindly impulse, upright thought
Are efforts all undying.

And though you stand upon a crest
Or grovel far below,
You still can do your level best,
And grow, and grow, and grow.

Oasis

By MARY PERDEW
Santa Ana, California

A wind, a seed, and a hidden spring,
An oasis has begun,
With a tiny tree, growing strong and free,
A welcome shade from the sun.
In a barren land of gray rock and sand,
The green glows glad and bright
To a weary man and a laden beast,
Who find peace and rest for the night,
And dream of a story that they will bring:
The wonderful tale of a new-found spring.

AN OLD MINER'S SHACK

By JOHN A. STEBBINS
Hi Vista, California

The wind blows sand through my open door,
Pack rats hide under what's left of my floor.
A rusty stove with embers long dead
Stands beside an old miner's bed.

A broken table crazily sags
By a box and a coat that's gone to rags.
A chair of rough hewn lumber built
Has part of a cushion made of a quilt.

An old felt hat tattered and worn
In a corner by a letter faded and torn,
Where dust and dirt now thickly cover
The tender words from an old-time lover.

By a fluttering candle in a bottle near,
These words he read and hid a tear:
"Jim dear, when luck has come your way
You'll return some happy day."

Outside where sand piles up in heaps,
Beneath piled stones a miner sleeps.
Sleeps, while waiting that happy day
When Lady Luck shall come his way.

TO THE NEW OWNER

By HELEN VOGEL MOOG
Laguna Beach, California

They who first coaxed billowed sand to
yield to loamy soil
These stately date palms brought to bear
which now reward all toil.
Though those who loved and worked have
gone on to another field,
The row on row of palms they grew still
bear their princely yield.

So—if you hear a murm'ring stir the palms
when stars are bright,
Your garden is not haunted. Just their
thoughts return at night
To wander once again among date palms
where peace is sweet;
Where strength of all eternity and restless
present meet.

And—if you hear a murm'ring stir the
palms when nights are black,
Your garden is not haunted. Just their love
is drifting back
To bless the trees that fruitfulness hang
high above the sand;
To whisper, though the deed is yours, these
acres are God's land.

NIGHT-BLOOMING CERUEUS

By RALPH A. FISHER, SR.
Phoenix, Arizona

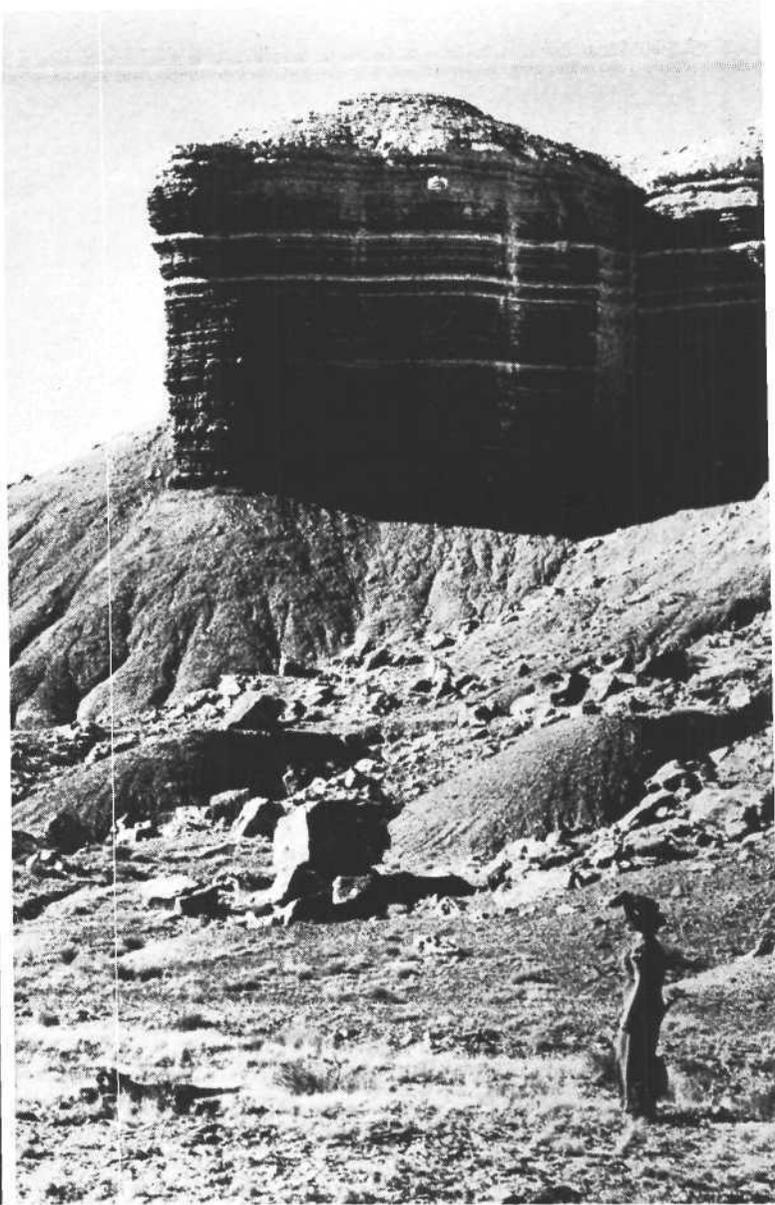
What is your fear once each year,
Reina de Noche, Queen of the Night?

With your crown of waxlike beauty,
What makes you hide by night?

Why, to close at break of dawn
Your flower, forever, from our sight?



One of the magnificent chocolate and white Summerville formation buttes which make the Woodside Anticline scenery so spectacular.



Dinosaur bone which has been replaced with calcite, collected in the Woodside Anticline. Actual size of piece, $1\frac{3}{4}$ times $1\frac{1}{2}$ inches.

Rocks of the Ages - - in Utah

Following a clue contained in an old government geological report, Harold and Lucile Weight took the highway into eastern Utah in quest of dinosaur bones. They found the bones in limited quantity—but they also found a field rich in jasper, crystals, chalcedony and other minerals prized by the rockhounds. Here is a story that will interest all who would like to know about the geology of the Utah desert wilderness.

By HAROLD WEIGHT
Photographs by the author
Map by Norton Allen

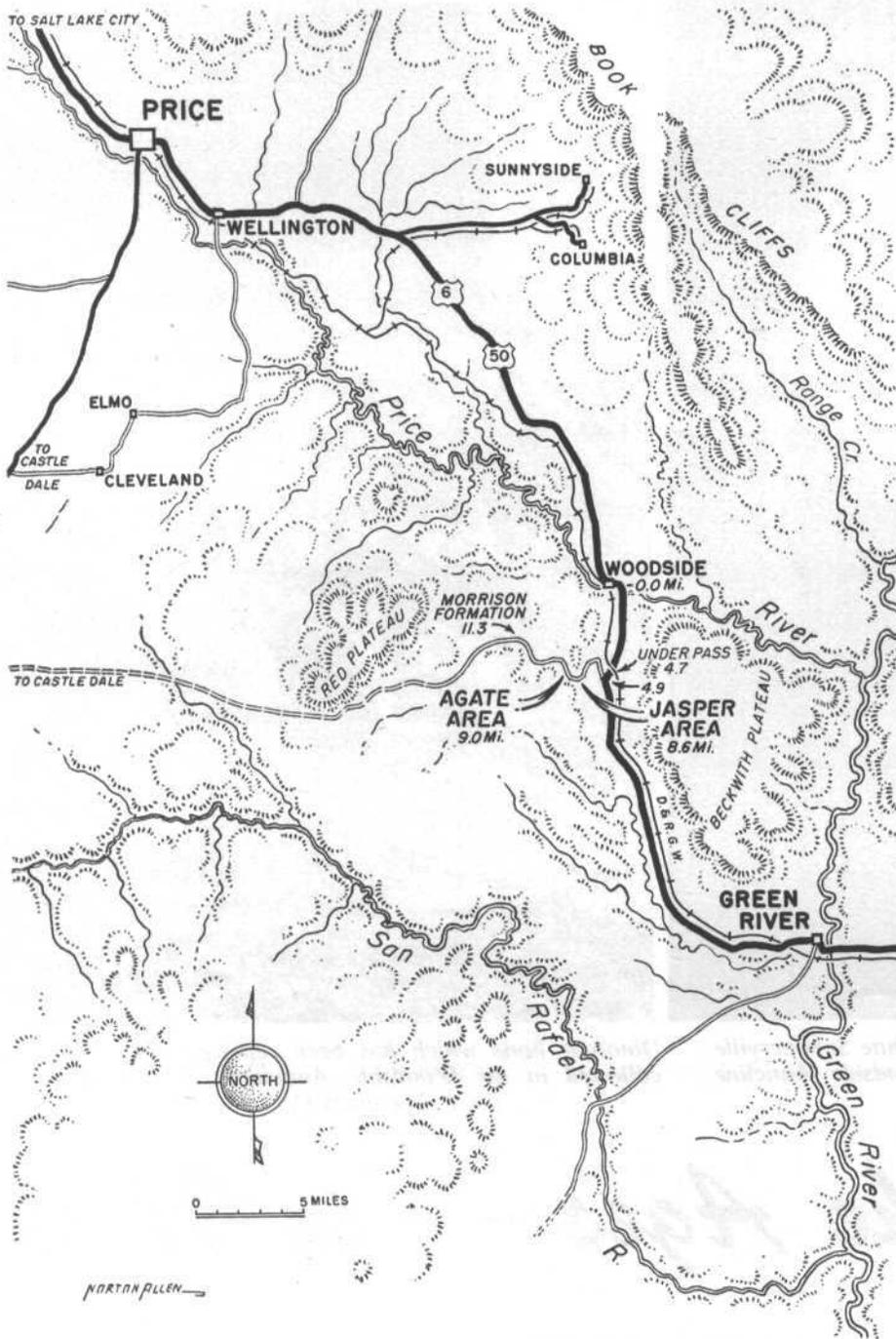
A NGLING BACK west from U. S. Highways 6 and 50 about 40 miles southeast of Price, Utah, Lucile and I followed a twisting dirt road into the vivid cliffs, buttes, canyons and valleys of the Woodside Anticline. Although its general appearance was similar to many another

beautiful rockhunting ground in Utah, we knew it was an anticline because the geology report said so. And we weren't surprised to find an anticline lying around loose since we had long concluded that the eastern half of the Beehive state is nothing less than a life-sized and living textbook of world-

making, written for our education and amazement by time, fire, water and wind.

Perhaps the term "anticline" dismays or bores you, it being scientific and therefore either obtuse or dull. You can't hold to such a notion long in eastern Utah. Other states may name their natural features after heroes, statesmen, animals, flowers or the oldest local inhabitant. But the geologists got there first in Utah. Besides the buttes, canyons, cliffs and mesas familiar in the nomenclature of the Southwest, you'll find many a place name coupled with pure geology: Waterpocket Fold, Upheaval Dome, Capitol Reef, San Rafael Swell—and Woodside Anticline.

At Woodside, some long-gone day, a stretch of the earth-crust was caught



beside the highway we planned to take to Green River and beyond. So Woodside Anticline was filed on the "To Be Investigated" list.

On our first trip into the area, we left Salt Lake City early in September, a period often subject to thunderstorms but which this time proved ideal for collecting and camping out. The Wasatch mountains were gaudy with the scarlet, gold and orange of the dwarf maples, box elders and aspen, a wonderland of changing leaves. Dropping from Soldier Summit through Helper and Price, we caught the first far view of tremendous Red Plateau, part of the San Rafael Swell. Near its eastern base, we knew, lay the Woodside Anticline.

As we continued south the spectacular Book Cliffs and their remarkable headland, the Beckwith Plateau, dominated the skyline to the left. Near the base of that plateau, about 38 miles from Price, we passed through the little farming settlement of Woodside. At 4.9 miles beyond Woodside, just after going through a railroad underpass, we turned back sharply to the right on the dirt road to Castle Dale. The road had been graded and for the most part, when dry, would be called in good shape. But almost immediately we had to detour a series of narrow break-neck trenches where wooden culverts had broken down or had been washed away.

We'd never been in the area before, but our mental picture of the geological formations there—obtained from the reports we had read—was so clear that it almost seemed a dream was taking third-dimensional form. That purple and green and dull red was a section of the Morrison mudstones, going back at least to Jurassic times when giant reptiles clumped over a forgotten landscape. Those elegant thin-banded chocolate and white layer-cake cliffs belonged to the still older Summerville. The peculiar greenish-gray sandstone weathering to a brown must be the Curtis formation.

We had gone about two miles from the highway when we stopped to investigate the polished pebbles of a conglomerate which formed a high, steep bank on our right, and encroached even upon the road. Most of the pebbles were quite small, many of them a poor grade of red or purple chert, others clear quartz. Less than a mile farther on we reached a pass area where this same conglomerate towered on both sides of the narrow way. Great boulders of it had tumbled across the road and lay weathering in the gulch to our left.

It was close to sunset, and we knew we shouldn't be scrambling up the bank among those pebbles. But we

in a big squeeze. Something had to give and the crust, being the weakest structure involved, buckled upward into waves or folds. The tops of the waves, where the formations arched up, geologists called anticlines since the strata were inclined or bent away from each other on either side of the arch. The lower parts, or troughs, they termed synclines as the formations inclined toward each other. These names, of course, describe conditions at the time the strata buckled. Erosion or other geologic happenings since then may have altered the surface so the syncline is a hill and the remnants of the anticline a valley.

There are a number of anticlines exposed in Utah, but Woodside held particular interest for us because the

arched formations have weathered back down in such a way as to expose rock strata which carry highly colored jasper, chalcedony, agate and small amounts of dinosaur bone and petrified wood. We first learned about Woodside prior to our Utah trip while browsing through likely publications of the United States Geological Survey. One paper, with magnificent disregard for boxoffice appeal, was titled *Sedimentary Rocks of the San Rafael Swell and Some Adjacent Areas in Eastern Utah*, by James Gilluly and John B. Reeside, Jr.

In the section devoted to Woodside Anticline, we came across casual references to chert, jasper, rock crystal, fossils, chalcedony, and nodules. Further, we found the anticline was right



Morrison conglomerate boulder, foreground, and cliff in background. It is in this formation that scattered pieces of dinosaur bone of cutting quality have been found.

were laboring under a subdued excitement. If that was Morrison conglomerate—as we judged it was—there might be jeweled bits of dinosaur bone among those pebbles. And at that time we had not located and collected any bone on our own.

But the disappearance of the sun behind the broken skyline ahead stopped these preliminary sorties. We had to find a campsite. As we emerged from the narrow winding canyon of conglomerate blocks, we found ourselves in an enchanted area. It was a circular open space surrounded on three sides by pink-gray cliffs—cliffs so tenuous and ethereal that we felt our three-dimensional anticline was slipping back into the dream state. Over the sloping floor of the circle, gnarled junipers made strange blocky patches of shadow.

We drove across the Pink Circle to its western edge, turned left through a narrow V of a valley, and discovered we were entering another pink-gray amphitheatre, still more ghostly in the fading light. In it we picked a campsite, somewhat protected against the cool evening breeze. It lay a few rods from the road, right against a huge flat boulder and near a large juniper. Before we crawled into our sleeping bags, the wind had dropped. The night was cold and calm and silver-black with starlight and shadow, and the sky a clear cloudless blue when morning came.

And when dawnlight gave way to the sun, we discovered our pink-gray cliffs were largely the Summerville formation, made up of layers and bandings of chocolates and dark reds and gleaming whites and sparkling

gypsum. Their unreal quality in the dusk had been enhanced by the pink clay talus at their bases and the debris washing down from the sedimentaries above.

Early in the morning two pickup trucks bounced past our camp, on the road toward Castle Dale. In a few minutes, one of them was back and its occupants, Finley Blackburn and a Mr. Bullock, both of Ogden, Utah, came over to introduce themselves.

“With your outfit and the California license, we knew you were rockhounds,” Mr. Blackburn explained, “so we wanted to say hello and see if we could be of any assistance.” Both were rockhounds—and dealers on the side—and members of the Golden Spike Gem and Mineral Society of Ogden.

We wanted to know whether there



Gnarled junipers of great age are scattered throughout this portion of Utah. This one has a trunk over four feet in diameter.

was any dinosaur bone to be collected in the anticline. There was, but not in quantity. Blackburn pointed out the dark Morrison conglomerate on down the road less than half a mile from where we had camped. Both of them had found dinosaur bone along that ridge.

"When you get acquainted with this country," he explained, "you can just about tell where they are lying dead. They're often as close as a mile apart. Once I found two together, in the conglomerate, and you could see they'd been fighting."

Finley Blackburn was well acquainted with the San Rafael country. Once he had owned a ranch at Caineville, and had punched cattle all over this part of Utah. Before the two of them, who were due in Ogden that night, left to do "a little jasper hunting" on the way out, Blackburn warned us against the weather. With 15 years' experience in the Swell, he still checks the weather forecast at the Salt Lake airport before coming in. October, he explained, was the ideal month for rock collecting in this area. In July and August, and sometimes September, you are subject to cloudbursts.

"Don't trust this country," he concluded. "Get out and get to a town as soon as you can if it starts raining. Even the short distance from the road that you camped here would be too far if the ground became soaked. I've seen the mud so bad you couldn't ride a saddle horse through here."

As he climbed into the long-bedded

black pickup, he hesitated, then called back a last warning. "Don't ever depend on the seep water in the Swell. It'll make a blue wave come on your coffee, and it's full of iron. It won't quite kill you, but it will come close to it."

With the jeep loaded, we left our campsite, rounded a little rise and headed west. At a little valley extending north, just under the ridge of conglomerate, we parked off the road and started hiking toward a dark brown, buff-topped circular little hill which was the landmark the Ogden rock-hounds had given us for the petrified bone. The dark ridge, towering above us crested with great broken blocks of the conglomerate looked like some tremendous defense wall.

When we examined some of the huge blocks, we found the individual pebbles cemented with something that looked like limestone, so hard our prospector's picks simply bounced from it. But, through the ages, enough of the cement had been dissolved or weathered away so that the edge of the valley below the ridge was carpeted with loose pebbles.

Most of these rounded stones were a cherty material in black, white and gray, much of it carrying some sort of fossil material. Lucile kept picking up what she called "jelly beans," colorful, polished little pebbles of pink, red, orange, yellow and white. Then, just through a little gap and in the clayey soil of the dark hill, I found bits of bone "casts," composed completely of

calcite, with calcite crystals growing inward to a hollow center.

But Lucile made the first find of cutting quality dinosaur bone—brown to yellow, with the cell structure replaced with clear chalcedony. At first she thought it might be coarse petrified bark. But closer examination proved it to be bone. And like many other collecting rocks—once we had seen what it actually looked like in the field, we were able to find it in areas we had just walked over and pronounced barren. That—the first bone of the ancient reptiles that we had found—was the high point of the hunt.

But there seemed to be very little of the bone in that area, and after a careful search, we moved on. This country was so new and strange and beautiful, that gradually we stopped looking at it as a collecting ground, enjoying it for itself. As we continued west on the Castle Dale road we entered other, smaller amphitheatres, some enclosed with cliffs and walls of red, others of pale gray, from time to time relieved by a brown capping or bands of green.

Within two miles after leaving our camp, we were through the anticline and in grassland, pricked here and there with cacti—the teddy bear and what appeared to be a small and very pretty species of *Echinocereus*. It was late for the flower season, but much rabbitbrush still trailed its gold, a white and a miniature rose-red buckwheat were blooming, and we often came upon little purple-lavender asters. Much locoweed and very tall desert plume had flowered recently.

Just under five miles from camp, we reached an old sign pointing north: "Saleratus reservoir, South Summerville." Hereford cattle were grazing near by. Looking back, the Woodside Anticline had dwindled until it looked like a low ridge. But beyond it we could see the endless battlements of the Book Cliffs. Ahead of us rose the mass of the Red Plateau. We were making directly toward a tremendous red butte—like a great tower rising from colorful badlands. As we drove farther, the junipers became bigger, more ancient and more gnarled. One of them, which we photographed, had a trunk more than four feet in diameter.

That night we camped near the base of the great red butte, driving as close as we could over the open country, across patches of cactus, sandy mounds and dried mud holes. Before dark we hiked the rest of the way to the base of the butte. From a collector's point of view the trip was a disappointment, since we found only tiny bits of chalcedony, opal and chert. Scenically, it was terrific. And about halfway be-

tween our camp on the edge of a wash and the butte, we entered the pinyon belt and had our first experience in gathering the ripe, succulent little nuts.

The next morning, we turned reluctantly back toward the Woodside Anticline. Our schedule — one of those foolish things you should never prepare for a desert trip — had allowed only two days for this sidetrip, and we were committed to meet friends a long way off a short time hence. But we were determined, if possible, to find enough rockhound stones in the anticline to please collectors who might not want to come in just to see geology.

Back at the first Pink Circle we had reached coming in from the highway, we made the first strike. Near the center of the amphitheatre, but more abundant to the south, we found beautiful red, pinkish and lavender markings in almost clear chalcedony. The material fractured too easily and we found most of it in small pieces, but it will cut into beautiful stones. In the same area, we found many pieces of vein and nodular material coated with quartz crystals. One outcropping south of the road, a red ledge, appeared to be made up of numerous imperfect geodes grown together.

Less than half a mile beyond this spot, toward the highway, we stopped to see if there was anything of interest in the abundant debris at the foot of the Summerville formation, and sloughing down over it. Also, I wanted to photograph as much of the amphitheatre as possible from the top of the slope. But I had hardly started to climb, when I knew we had found a "field." Washing down with the clay were specimens of just about the brightest jasper I had ever seen. Down below me, in the wash, Lucile had struck it too. I called to her to drop anything that she had there—after she saw what was up the slope, she wouldn't want any of those little pieces!

The higher we went up the talus, the more plentiful the jasper became, and the bigger the chunks were. We found it in red wine and gold and purple, sometimes with a little green and various moss patterns or red and yellow. The reds went through vermilion, orange, Chinese red. It was simply a case of picking up jasper until we couldn't carry any more, then sorting to retain only the finest pieces, then picking up more until we had all the high grade we felt we should carry away.

Then, of course, we weren't really satisfied. No rockhound is. We wondered what it was like on the other side of the hill. Probably it was even prettier over there somewhere. But there wasn't time to investigate. The



Camp in the heart of the Woodside Anticline. Cliff formation in the background is made up of Summerville clays and sandstones.

sun was low again, and the amphitheatre below was fading into a pink-grey mystery. It was a moving experience to see twilight and then dusk come to this strange and silent land, this unearthly land. I felt, as I have in a few other special places in the desert country, that here was a spot out of the ordinary stream of world-life. A place where time meant nothing—where the clock stood still.

But that wasn't quite true of our anticline. Instead of standing still,

here time had stood on its head! For that formation, just above us, was the Curtis, and the one just below us the Summerville and the one still lower the Morrison. Yet when those beds were laid down ages ago, their order was just the reverse. The Morrison should have been on top.

Of course it was just a trick — a sleight of hand stunt that Nature does with the aid of an anticline and erosion. But it's a clever trick that man, even with his atom-popping, hasn't been able to duplicate. First you arch your earth-crust up. Then you weather the high point down until the older formation is out on top. Then you weather the next step so the next oldest formation is the one exposed. Still farther down the slope, you leave the youngest formation showing. Then, with a little careful washing down of debris from one step to the next, you can make it look as if you've turned the whole scheme of time upside down.

The bowl below grew dark, the ages blending and vanishing in the gloom. We shouldered our sacks of bright jasper and carried them to the jeep. Then we drove out through the anticline—and out through the ages. From the Summerville to the younger Morrison and the still younger Dakota sandstone and Mancos shale and out at last to the youngest of them all—the thin layer of paving which man has spread in a network over America to mark his stratum in the book of time.

Woodside Anticline Road Log

- 00.0 Woodside, 38.9 miles southeast of Price, 25.3 miles northwest of Greenriver. Continue south on U. S. 6 and 50 through
- 04.7 Railroad underpass. Continue south on highway to
- 04.9 Turn back, north and west on bladed dirt road. Travel cautiously, checking for possible cuts in road and detours where small bridges have washed out.
- 06.9 Swing back S.W. and go through pass cut by stream. Warning: This portion of Utah is subject to flash floods during some seasons. Do not camp in washes or narrow valleys in the cliffs.
- 08.6 Road emerges in circular valley walled with pinkish cliffs. Highly colored jasper may be found on slopes and ridges to south and east of road.
- 09.0 Nodular and vein agate, some crystals, south and west of road on valley slopes.
- 11.3 Road cuts through ridge of Morrison conglomerate, where small amounts of dinosaur bone and gastroliths have been found.

MINES AND MINING . . .

Washington, D. C. . . .

The U. S. Public Health Service says no occupational deaths have been reported among the nation's 2000 uranium miners but that many have occurred among iron curtain miners. J. E. Flanagan, assistant chief of the health service's division of industrial hygiene says the Public Health service and the Atomic Energy Commission are working to protect American uranium miners from hazards of very severe exposure to radiation and deadly radon gas. Flanagan said eight public health service employees are working with the University of Utah, primarily on health problems of the uranium and milling industry. Preliminary samples, he said, show that exposure to ionizing radiation and radon gas are many thousand times higher than the currently accepted safe limit. Radon gas comes from radium as the element disintegrates. Flanagan indicated it also comes from uranium ore.—*Humboldt Star*.

Artesia, New Mexico . . .

Despite the general belief that there are no profitable ore deposits in this area, a reportedly rich deposit of gold, silver, copper and lead has been uncovered on Twelve Mile Hill east of Artesia. Charles Eaker is credited with making the discovery. Ten claims have already been staked at the old turquoise diggings on state land within sight of Highway 83. Prospecting has turned up free gold, silver, copper and lead in ore form, in addition to quantities of turquoise. It is estimated the ore and free metal, not including the gold and turquoise, is worth \$19.50 a ton.—*Mining Record*.

Gallup, New Mexico . . .

A record-breaking \$871,786 has been pledged to the Navajo tribe by successful bidders for oil and gas leases on 29 tracts of land in New Mexico, Arizona and Utah with top bid registered by W. J. Weaver of Fort Worth, Texas, who offered \$230,774.40 for rights to 4300 acres in the Cow Springs area in north central Arizona. While the total of the successful bidders was higher than any previous Navajo lease sale, lands director Marvin Long said the bids did not reflect record prices on an average basis. Reports of the high bids are sent to the geological bureau for certification, then passed upon by the Interior Department before contracts are signed. Money obtained is then deposited to the tribal account with the United States treasurer.—*Gallup Independent*.

Reno, Nevada . . .

Latest scientific devices will be employed in a new search for the legendary Lost Dutchman mine in Arizona's Superstition mountains. The Earnshaw-Tharp-Christensen corporation plans to use radar, movies and aerial photography along with geophysical instruments in a search for the purportedly rich mine that was lost many years ago. After aerial photographs have been made of the area where the mine is believed to have been, electronic devices from the laboratory at Verde will be used to locate ore deposits, the corporation announced.—*Humboldt Star*.

Reno, Nevada . . .

In handling approximately 1000 specimens a month over many years, the analytical laboratory at the University of Nevada has been of incalculable assistance to the miners of Nevada through free technical assistance. It is estimated this branch of the Mackay School of Mines has handled 559,000 specimens, Professor Walter S. Palmer, director of the laboratory, disclosed. In one instance, through the advise of technicians, who have provided as much advise and counsel as possible, a valuable talc mine was found and developed in Esmeralda county. The purpose of the laboratory as established by law in March, 1895, was to give prospectors of the state a place where they could secure an unbiased report on any mineral substance discovered in Nevada, and a limited number of free assays for those who couldn't afford to pay.—*Humboldt Star*.

Fallon, Nevada . . .

The Vet Baxter mine southeast of Fallon, now under lease and option, is listed as the largest producer of fluorspar in Nevada, with around half a million tons of milling and shipping grade ore on the dumps and blocked out. A survey, completed last fall by the U. S. bureau of mines, disclosed from diamond drillings that high grade ore extended downward 256 feet below the present workings at a depth of 250 feet. All of the 70,000 tons shipped since 1932 have been high-grade. One shipment to the DuPont people was 99.94 percent. A 250-ton mill is being planned by H. W. Gould and Company of San Francisco, which recently took a lease and option on the property from Baxter, who located the fluorspar claims in July, 1922.—*Tonopah Times Bonanza*.

Tonopah, Nevada . . .

A new mine operation under the direction of John B. Siri, former Goldfield and Tonopah mining man, is getting underway at the old Lucky Four mine, located some 16 miles southeast of Schurtz in the Gillis range. Although this operation is new, the mine was a heavy producer of tungsten during both World War I and II. Tungsten content of the ore ranges from two to three percent. Holders of a bond and option on the ground are George E. Miller of Reno and George B. Franklin, Jr., of Las Vegas. It is said shipments will soon be going out to the U. S. Vanadium mill at Pine Creek near Bishop, California.—*Tonopah Times Bonanza*.

Yucca Village, California . . .

Winding up its three day annual meeting in Yucca Village, the Western Mining Council passed a resolution asking the government to open up the rest of the Joshua Tree National Monument to mining, declaring there are 75 producing mines, most of them gold, in that portion of the Monument not now open. Last year congress OK'd a bill opening 289,500 acres, mostly in Riverside county. The council hotly denounced proposed mining law changes and renewed its demand for higher gold prices. Former county supervisor, Walter Pittman, presented a detailed history of tin mining operations in the Temescal area from the time tin was discovered in 1853. The council assured Riverside county men of help in their efforts to secure legislation that will make tin mining more attractive.—*Desert Sun*.

Trona, California . . .

Tin production on a major scale in the Trona region is planned by Donald F. McGrew and associates, if Defense Minerals Administration approves a \$2,500,000 loan to finance development and equipment. McGrew, President and business manager of Tintype Corporation of Oakland, California, states the property he owns in Shepherds canyon near Trona contains an extensive deposit of cassiterite with tests indicating ore running 78 percent tin. Preliminary investigation by mining engineers indicate it is probably the richest deposit of cassiterite in the nation, and McGrew reports that when in full operation the property should be able to produce 4800 to 7200 tons of ore daily. If the loan is obtained, a company to take over and operate the tin property, may be incorporated within three months. Virtually all the tin used by American industries is imported, no major deposit ever having been mined in the United States.—*California Mining Journal*.



In the foreground are young tamarisks planted for wind-breaking purposes around a Coachella Valley date garden.

'Miracle' Tree From the Sahara

By WILSON MCKENNEY

A WEARY DESERT prospector, desperately in need of water, found a cutting of evergreen tamarisk in his pack and poked the stick in the dry sand at his feet. After waiting ten minutes he dug down a few inches to see which way the roots were growing and hurried off in that direction. When he reached the unseen waterhole a half mile away the roots had arrived there first and sopped up all the water.

This story, told with proper solemnity, was Ernest Douglas' favorite illustration of the amazing adaptability of the desert's fastest growing shade tree.

Officially named *Tamarix aphylla*, the tree is known in its native Algeria in North Africa as *athel*. Although it first was brought to southwestern United States only 42 years ago, it is today seen more frequently in the desert regions of California, Utah, Nevada, Arizona and New Mexico than

Here is the story of an invader from Africa—a native tree of the Sahara desert which within 50 years has become one of the most conspicuous shrubs on the desert landscape. Planted originally for shade and wind protection, it is now spreading to the wilderness areas.

any other species of tree, including the native palo verde.

Planted mainly for windbreaks and shade trees, the spread of the tamarisk has been brought about almost entirely through the planting of cuttings. Its spread from seed has been confined mainly to the water courses of the Colorado, Gila and other southwestern streams. Along the valleys of the Colorado it has already outstripped the

native cottonwood in numbers, and has become a threat to the fast-growing willow.

A simple cutting from another tree will take root in moist soil without special attention. If the soil is saline or sterile, it matters not to the tamarisk. With ample water it will grow more than a foot a month for eight or nine months of the year.

Its dense foliage of lacey plumes makes it a fine shade tree. It has been found to serve effectively in controlling soil erosion. When dry it serves as slow-burning fuel wood, although not equal to mesquite or ironwood for this purpose. Treated with chemicals it makes long-lived fence posts. Its chief value, however, is as a windbreak.

The tamarisk has many virtues—but it also has its vices, as many a desert home owner, eager for quick shade, has learned. Planted too close to tile sewer and septic drains its roots penetrate the joints, multiply rapidly and



Tamarisks not only provide dense foliage for shade, but if there is ample water will reach a height of 40 or 50 feet.

soon clog up the lines. The only remedy is to remove and clean out the pipe line every few years, or remove the trees. Getting rid of the tree is not an easy procedure. It will live and grow as long as its root system remains intact.

The fine slender leaves of the tree have decorative value, but have no merit as a mulch. The shallow root system spreads over a large area, absorbing the moisture in the soil at the expense of other plants.

But the tamarisk's good points outweigh its disadvantages, and its phenomenal spread over the Southwest is no mere accident. Around desert service stations, railroad depots, along highways and streets and around farm yards and citrus orchards it is becoming more and more common.

In 1908 John James Thornber, botanist of the University of Arizona, read in a French publication about this wonder tree of the Mediterranean region. He wrote a noted French scientist in Algiers, Dr. Trabut, requesting a few cuttings. Six cuttings arrived in April, 1909, but three of them were dead. The three remaining twigs, about six inches long and a quarter inch in diameter, were wrapped in a wet cloth and the cut ends immersed in water for 24 hours. Thornber planted them in the university plant introduction garden and they started growth within a few days. At the end of the first growing season they were seven or eight feet tall.

In the summer of 1910 Dr. Walter T. Swingle and Novelist Harold Bell Wright visited the university and

Thornber took them to see the "miracle" trees. Dr. Swingle recognized the plants at once as the tamarisk he had tried to introduce to this country several years previously. He told Thornber that he had shipped some stumps and branches from northern Africa to Washington, D. C., for trials in the government garden in Maryland and also for the experiment station near

Indio in Coachella Valley, California. Several years later Swingle wrote Thornber that none of the specimens in the original shipment had grown, either in Maryland or Indio. Cuttings brought to Indio from Tucson, however, gave the tree its start in Coachella and Palo Verde Valleys of California.

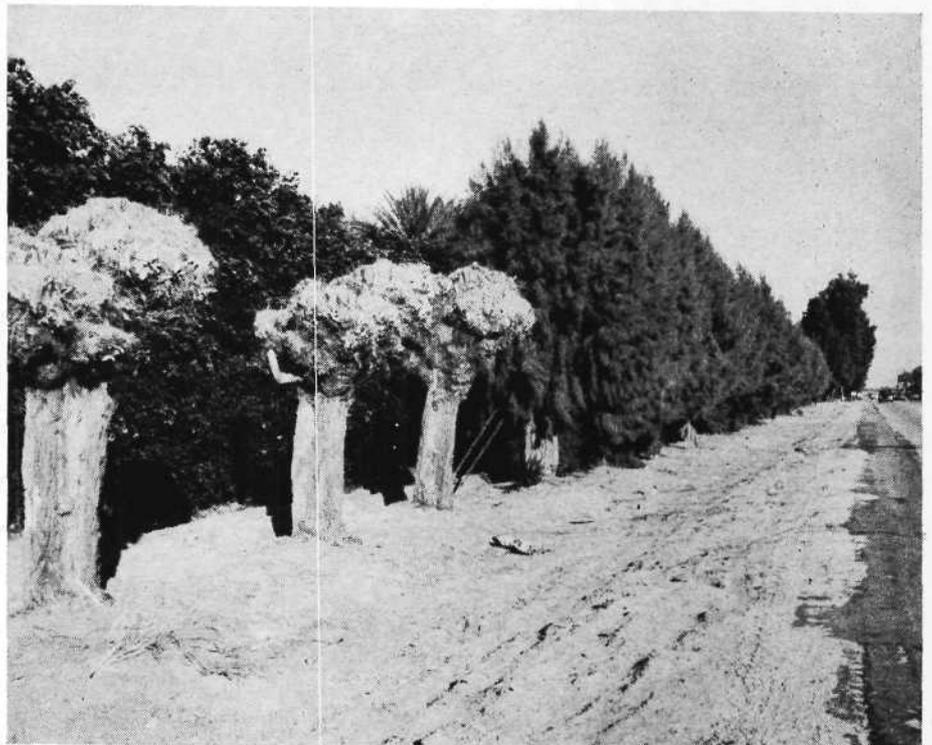
The introduction of evergreen tamarisk by Thornber was formally recognized in a Department of Agriculture plant introduction pamphlet. Government botanists named the plant *tamarix aphylla*, discarding the *T. articulata* and *T. gallica* which the French had attached to it, as the meanings were synonymous.

Thornber recalls that the French publication in which he had read the description said the evergreen tamarisk was one of the two most useful trees growing in the Sahara desert, the other being the date palm.

Thornber said the name *athel* has never been popular in this country, though in Imperial Valley it is rarely known by any other name. Dr. Swingle stated that *athel* is the name in common use in Algiers, Morocco, and northern Egypt, where it is native and widely used.

Evergreen tamarisk is the better and more popular name, the desert botanist believes, because it relates the tree to the large tamarisk group which grows in the Southwest deserts but distinguishes it from the salt cedar and other deciduous or shrub tamarisks.

These tamarisks are pruned back each year—but before the end of the season will grow a dense top of new foliage.



To clear up a confusing matter of names, it would be appropriate to point out that the genus has no connection with Tamarack (*Larix laricina*), which is an American larch, a lodgepole pine which grows on the Pacific coast. The name of this pine, which grows thickly in the foothills, is sometimes shortened to Tamrac.

During the winter of 1912-13 the Tucson temperature dropped to six degrees one night (most unusual weather, the chamber of commerce noted) and the trees which Thornber had placed in the university garden were killed. But Harold Bell Wright had taken cuttings on that visit in 1909 and had planted them at his ranch near Holtville in Imperial county, California. From there, shade-hungry pioneer ranchers quickly spread the tree through the Colorado and Mojave deserts. Prof. R. H. Forbes, at that time dean of the department of agriculture of the University of Arizona, planted cuttings at his home a block from the campus and these giant trees, with trunks over two feet in diameter, still live.

Like most other plants indigenous to warm dry climates, evergreen tamarisk has a root system which seeks and finds every available drop of moisture within its reach. But unlike true desert natives, it is rarely able to survive on scanty rainfall alone. It must live near a plentiful supply of water, often found by skilful robbery.

Dr. G. E. P. Smith of the university's department of agricultural engineering several years ago conducted extensive experiments to determine the tree's potential commercial value. He shipped some large logs to a Grand Rapids, Michigan, furniture manufacturing firm for trials in furniture or cabinet making. The experimenters found that when the logs were thoroughly dry they were too hard to be cut or hand-tooled. The wood tends to crack and check during the drying. The firm believed it would be necessary to have a supply of fresh-cut logs to be worked up in the green sappy condition. Since this alternative was impractical and expensive, the midwest experiment was dropped.

However, an experienced woodworker, E. F. Woodhouse, established an athel products factory in Indio under the firm name of Casa Madera Products. He developed his own secret process for curing and finishing the wood, which he handles from the cutting to the final highly-polished piece of furniture. For several years Woodhouse and his son, Dal, have been producing chairs, tables, bowls, serving trays, and other products of exquisite quality. Their work is exhibited at the *Desert Magazine* pueblo at Palm



At Trona, California, this desert dweller has pruned his tamarisks to insulate his home against the mid-summer sun. Photo by Ralph Cornell.

Desert, California.

The wood, when finished, has a blonde texture similar to ash but is much harder. It takes a finish as well as oak or mahogany.

Dr. Smith found that by using a simple process of creosoting tamarisk posts, he could make good range fence which would stand firm for 25 years or more. In order to make production economically feasible, however, Smith

suggested establishment of forests on inexpensive but easily irrigated land.

There is every evidence that evergreen tamarisk is here to stay. It adapted itself readily to the Southwest deserts. But like the attractive and talented guest who outlasts his welcome, this tree digs its hairy roots deep into its adopted land and refuses to leave, whether we like its bad traits or not.

Will Protect Parks, Says Chapman...

When Secretary of Interior Oscar L. Chapman several months ago approved the construction of the Reclamation Bureau's Echo Park and Split Mountain project on the Utah-Colorado line his decision caused widespread consternation among conservation groups, for the reason that this project is partly within the boundaries of the Dinosaur National Monument.

To allay the fears of those who have wondered if the Echo Park decision would establish a precedent for further encroachment on the national system of parks and monuments, the Secretary more recently has issued an order re-affirming the policy of the Interior Department as to the conservation of national park areas. The Secretary's order is as follows:

Sec. 1. *Purpose.* The purpose of this order is to reaffirm the long-established policies of the Department and the Congress, assuring the conservation of the national parks and monuments and their protection from adverse effects of power,

reclamation or other water developments, and to prescribe procedures therefor.

Sec. 2. *National Parks and Monuments.* In furtherance of this policy, no bureau, service or agency in this Department shall henceforth undertake or continue, within or affecting any national park or monument, without the written approval of the Secretary of the Interior, any investigations or studies, or undertake any drilling, surveys, or other exploratory work incident to the preparation of reports or plans relating to water development, or obligate any Federal funds therefor, except where the Congress has specifically authorized such a project in the reserved area concerned.

Sec. 3. *National wilderness areas and wildlife refuges.* This order is hereby extended to include established national wilderness areas and wildlife refuges.

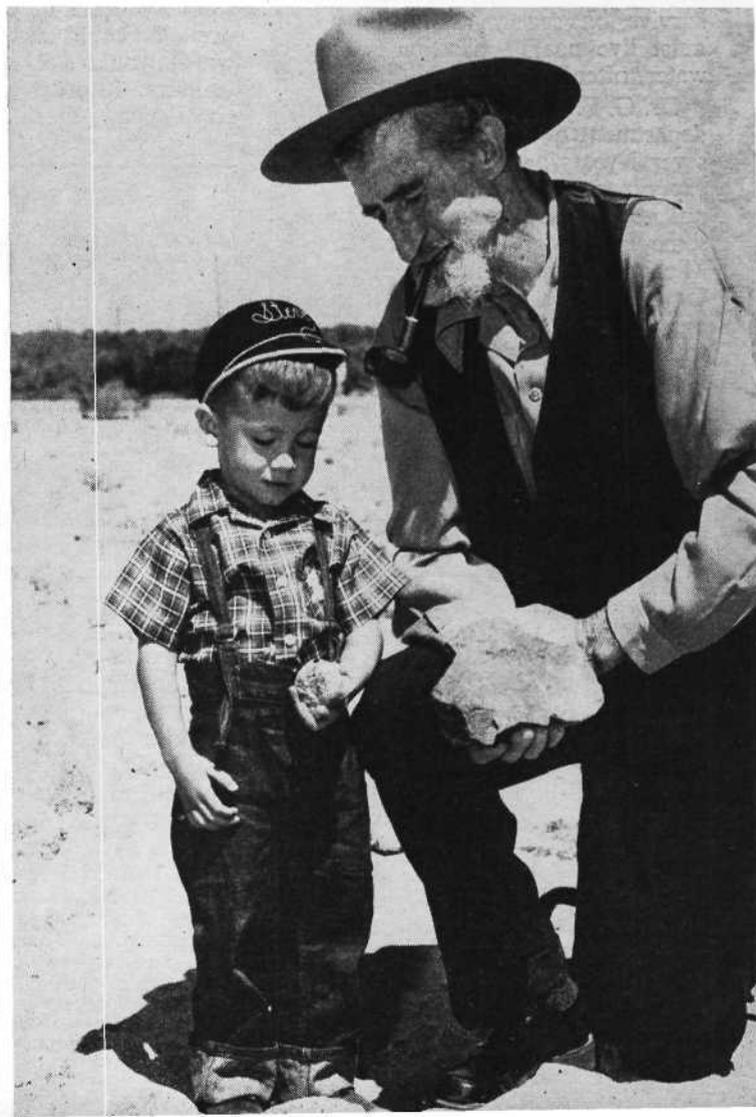
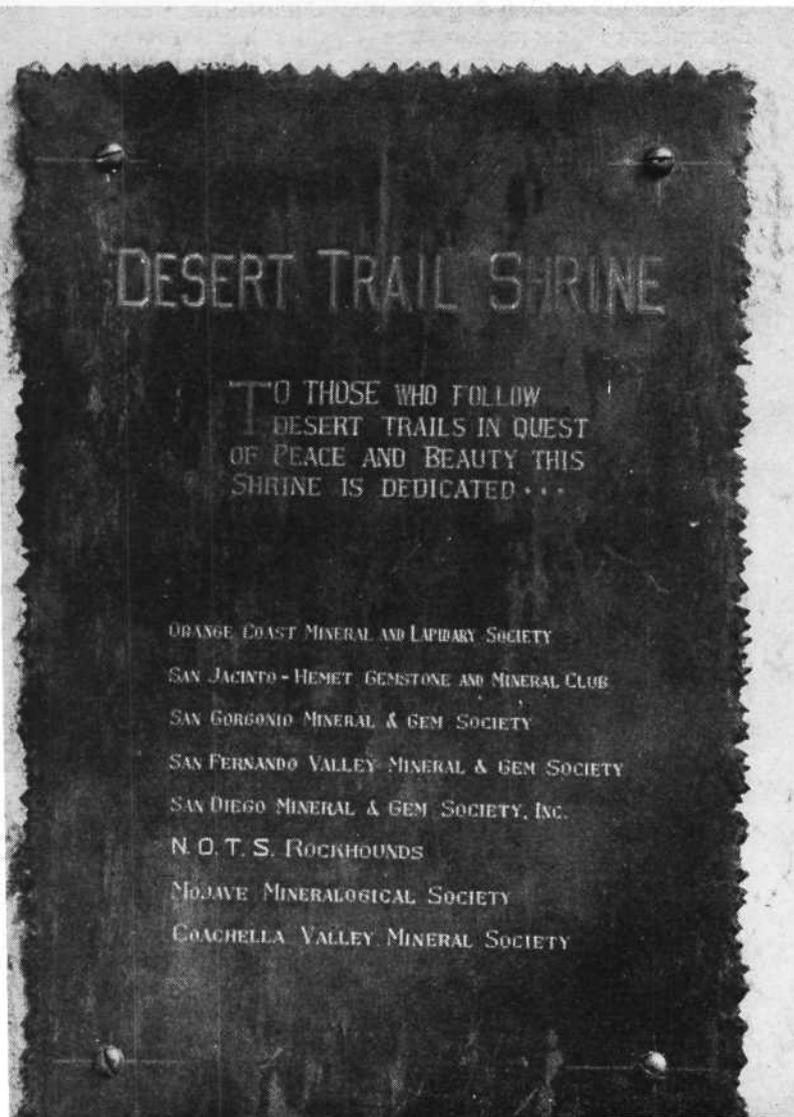
Sec. 4. *Reports.* In those cases where it appears that it is in the public interest to permit the investigation of proposed power and reclamation projects affecting areas specified in this order, the resulting reports, including preliminary drafts of project reports, shall contain comparable data on all alternate project possibilities, adequate for the Secretary to reach an informed decision as to which project, if any, should be selected.

*For Those Who
Follow the
Desert Trails*



Pictures on this page were taken April 1 at the dedication of the Trail Shrine in front of Desert Magazine's Pueblo at Palm Desert. Above is H. M. (Barney) Barnes, master of ceremonies at the dedication, as he signs the register. He holds in his hand the rock which he will

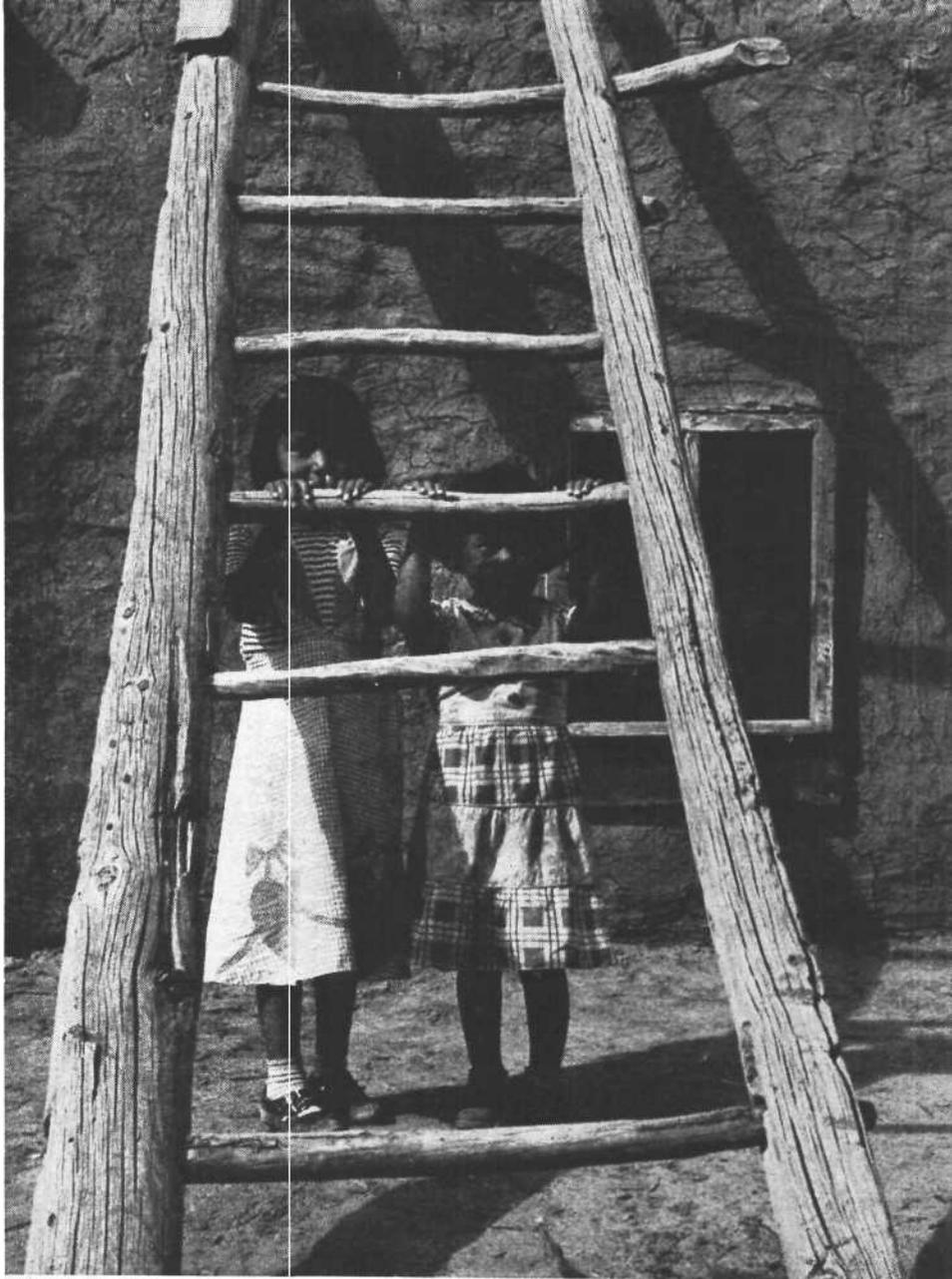
deposit on the Shrine as did ancient Indian tribesmen in accordance with their custom. Below is the bronze plaque which marks the Shrine, and Desert Steve Ragsdale and little Steve Willis as they deposit their rocks on the Shrine. Willis photographs.



PICTURES OF THE MONTH

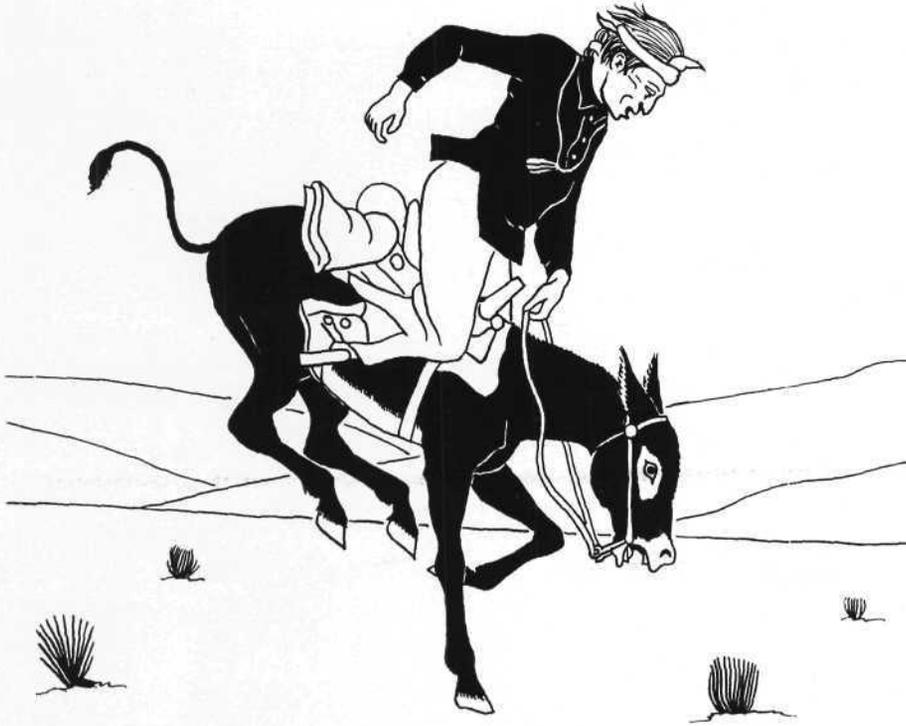
Zuni Girls . . .

This picture, taken at the Zuni Pueblo in New Mexico by Nell Murbarger of Costa Mesa, California, was awarded first place in Desert Magazine's photograph contest in April. Photo taken in September, 1950, with an Argoflex camera, Super XX film, 1/100 second at f.18.



Calico . . .

Second prize was awarded to A. La Vielle Lawbaugh of Downey, California, who entered the accompanying picture of the old mining camp at Calico, California. Picture was taken in December, 1950, with a Speed Graphic, one second at f.22 with Infra-red film.



Harrison Begay

The burro went into action and showed as good an exhibition of bucking as his age permitted.

When Little Whiskers' Pension Check Came

By SANDY HASSELL
Sketch by Harrison Begay
Navajo Artist

BEFORE DAYLIGHT there was a stir around Little Whiskers camp and smoke coming out of four hogans. Even Kellee the burro had sounded his call an hour earlier than usual. This was the day Little Whiskers' old scout pension check usually came from Washington and he must go to the Agency to receive it. But he couldn't understand how a burro could tell what day of the month it was. The burro had just noticed the activity around camp and had given his usual bray in recognition.

The mutton stew they had for breakfast went untouched this morning. He said what a man ate before noon was what made him fat. Being fat was not his idea of a real man. His own figure was slender and he was proud of it. He also liked to show the young folks how strong-willed he was — even to going without water for a couple of days at a time. Another reason was he might have a chance to eat with

some of his friends at the Agency. He wanted to be prepared to show them what a good eater he was and how much he enjoyed their food. He did drink a cup of weak coffee that had been boiled with lots of sugar. He didn't like the coffee that came in tin cans. He liked the kind that came in bags better. But since he had been getting his pension he decided the tin can kind was the best for its cost more.

Getting himself and the burro ready for the trip was a small chore. His big silver concho belt and turquoise and shell beads added to his everyday attire dressed him up for the occasion. All the burro needed was his hobbles taken off and the saddle put on.

If Little Whiskers had been young and active he would have ridden a horse but for a man of his age a burro was much more suitable. A horse was never around camp when wanted but a burro was never far away. When he mounted or dismounted he could al-

ways depend on the burro to stand still. He could have ridden in his new wagon but he didn't think it was proper for an old warrior to be mixed up with a whole bunch of women and children. He liked to be noticed, and who could see him in a crowd like that?

The trail to the Agency that Little Whiskers took led straight across sand hills and washes while the wagon had to go around by the road. Somehow they always managed to reach the Agency at the same time. Sometimes it took the wagon half an hour to make the last few hundred yards when Little Whiskers was late—but of course the horses were tired and had to stop often and rest.

Usually the burro made the six mile trip over the trail in about two hours. This was faster time than his usual speed but the burro enjoyed these trips and lost no time in getting there. He could always find bits of hay and grains of corn that some horse had overlooked. Also at this time of the year there would be watermelon rinds and apple cores laying around. He could eat almost anything—and did. He usually went home with the satisfied feeling of being well fed.

On these trips Little Whiskers made his first stop at the trading post. From there to the superintendent's office it was a short walk. He always left his family and the burro at the store and went to the office alone. He and the superintendent didn't want to be bothered with a lot of women and children while they talked over their private affairs.

Today there was the usual crowd that hung around the trading post. A young Navajo who was fond of jokes had been given a bottle of "highlife" by a white man. He was told that if he put it on a horse it would make him buck. He had his doubts about a burro but here was a good chance to try it. Unnoticed by Little Whiskers he poured a good portion on the burro's back behind the saddle. It was several moments before the "highlife" took effect. When it did the burro's tail took on the motion of a windmill and his ears started keeping time with his tail. An uninvited start and the motion of the burro's ears gave warning that something unusual was about to happen. Then it did happen. The burro went into action and gave as good an exhibition of bucking as his age permitted. Little Whiskers' long years of riding experiences were now put to use. He even tried yelling "whoa" like he had heard white men do when they wanted an animal to stop.

No rodeo performer ever had a more enthusiastic audience. Even his

LETTERS . . .

Big Snakes of the Apaches . . . Los Angeles, California

Desert:

Marjorie von Stadelman, who in 1901 or 1902 was being held by the Apache Indians in Arizona, told me following her release about some huge rattlesnakes she saw.

The snakes were approximately 6½ inches in diameter and 10 feet long. Their skins had the markings of the diamondback. The Indians, she said, thought these snakes came to them to bring them good fortune. They killed them, however, in self defense—talking to the snakes as they did so.

Miss Stadelman showed me three of the skins which measured over 11 feet in length. They had been stretched in the tanning process.

My husband and I prospected for many years in the Arizona deserts and mountains, and saw many rattlers, but none over six feet in length. The snakes killed by the Apaches were the biggest I have ever known.

LILLIAN G. DORAN

(Continued from previous page)

own family added their cheers. That the old man might get dumped off and hurt didn't bother them in the least. Not an Indian made an effort to help Little Whiskers.

Failing to get any relief by bucking the burro decided to lay down and roll. Nothing could have pleased Little Whiskers more for the old man was almost exhausted and it looked as if he was going to loose the contest. When the burro laid down it gave Little Whiskers a chance to dismount with all the dignity becoming to a man of his importance.

He first looked at the crowd and then at the burro. His first remarks were addressed to the burro. "Hah ah di sha bah nah al dih?" Which interprets something like, "now what in the hell is the matter, burro?"

He now turned to his audience. "Some people think a burro hasn't any sense but this one is smart. This morning he called me an hour earlier for he knew my pension check had come. Then he brought me here much faster than usual. He knew that I was in a hurry for when my check comes I am a very busy man. This burro generally is quiet and gentle but look what he is doing now. That is the way my women-folks have been acting ever since I got my pension check and he is trying to be like them. He wants to show off."

Invitation to Canada . . .

Vernon, British Columbia

Desert:

Received the April copy of your magazine and am much interested in the story "Geodes on an Old Silver Trail" by Harold Weight.

Perhaps it is coincidence that today I picked up a large and lovely geode, one third of it missing and the remainder in the shape of a man's skull. It weighs 15 pounds and would cover a whole page of *Desert Magazine*.

The entire geode is crystal, the outer part being clear crystals from one to two inches in thickness. Much of the center is a solid core of lovely clear mauve crystals.

If any of Desert's readers who are interested in rocks are up this way I would be only too glad to take them into a small petrified forest that is seldom visited by anyone.

STAN HUNT

. . .

Those Names in the Cave . . .

Berkeley, California

Desert:

Since you seek to make your magazine a source of authentic information, please let me pick a flea from your issue of February, 1951, where on page 21, William H. Behle says, "Neither Thompson nor Dellenbaugh make a specific mention in their journals of their activities on January 25, 1873, . . ."

This is in reference to the name of Dellenbaugh being cut in the rock at Cave Lakes.

Dellenbaugh's journal entry for Saturday, January 25, 1873, was, "Topographing as usual."

His entry for the following day was, "John and I took a ride up to the Cave Lake and the Three Lakes. They looked about same as last time. Carved our names in the cave. Got back to camp a little after 3, and also a little after dinner. Had a fine ride and enjoyed it."

One would draw the conclusion that he might have been there on some prior visit and the conclusion would be supported by his journal entry for Sunday, September 29, "Mrs. Thompson, Clem and I rode up the Kanab Canyon on an excursion today. Went up Tinney's Canyon to an alcove which Clem named 'Nellie's Grotto' in honor of Mrs. Thompson. Then rode on up to Lake Canyon and to Cave Lake where by appointment we found Prof. with a lunch . . . The distance from Kanab to the lakes is about five miles. . ."

It may please Mr. Behle to have this support for his theory on the carving of the Dellenbaugh name.

OTIS MARSTON

The Feud Still Goes on . . .

Costa Mesa, California

Desert:

In your April edition, page 28 under "Good News for Fishermen" by Desert Barnacle, nearly proved "bad news" for me, since it is not true that California license is good on Arizona side of the Colorado River. I found that out when getting ready to fish on Lake Havasu, this last week.

Am sure you know by this time and correction will appear in your May issue.

We enjoy your magazine and very proud to say, have every magazine beginning with your number one issue.

A. N. ENDELL

Thanks for your correction. We'll be glad when California and Arizona quit feudin' and give the fishermen a break.—R.H.

. . .

Two Ways to Spell It . . .

Los Angeles, California

Desert:

Clearing up confusion as to the spelling of a popular place name in California and Arizona, I wish to cite a footnote on page 6 of the U. S. government report titled *Mohave Desert Region*:

"By decision of the U. S. Geographic Committee board, the Indian name applied to the Desert and River in San Bernardino County is spelled 'Mohave'. The name of the postoffice in Kern County is spelled 'Mojave'."

MOHAVE JOE

. . .

Her Boss Likes Her Work . . .

Los Angeles, California

Desert:

On page 35 of the May issue I find "Miss Ruth Simpson, formerly connected with Southwest Museum." I am thankful to say that Miss Simpson is still very much "connected with the Southwest Museum," and I hope she remains so from now on. Her title is Assistant Curator.

M. R. HARRINGTON

Summer Announcement

During the summer months, from May until October 15, the *Desert Magazine* art gallery will remain open only 5½ days a week, closing at noon on Saturday. A fine display of art work will be on exhibit during the summer, however, and visitors will be welcome during the open hours. Harriett Day, director of the gallery during the past season, plans to return early in the fall to resume her duties as manager of both the art and crafts departments.

BOOKS OF THE SOUTHWEST . . .

STORY OF ARIZONA IS TOLD BY HISTORIAN

"Autumn brings to the tawney desert country of the southwest a refreshing coolness, a hint of frost in the uplands and a wine-like quality in the hazy air over brooding wrinkled mountains. It was on an autumn day more than two centuries ago that a Pima Indian guided a Spanish frontier trader to a small valley some 25 miles west of the border city of Nogales. There the trader was shown huge slabs or lumps of nearly pure silver, some of them weighing a thousand pounds. The news of this discovery brought a rush of Spanish prospectors to the region within a few months."

Thus Rufus K. Wyllys begins his *Arizona—The History of a Frontier State*, a tale of struggle and accomplishment in the high, dry desert country called Arizona by those Spaniards who coined the name from that of the little valley, Arizonac.

Through the days of the Spanish explorer, followed by the missionaries and on into the colorful era when gold and silver sparked the state with miners and prospectors, Dr. Wyllys carries the reader. He paints the cowboy with the clever touch of the natural story teller, yet never loses sight of the historical aspects of his subject. The Mexican, Civil and Apache wars, the struggle for statehood, follow one another in proper sequence, spiced with conflicts between the sheep and cattlemen and the coming of the railroad. Throughout the story runs the silvery thread of water, one of the most important factors in building the desert state. Bringing his history up to date, Dr. Wyllys places Arizona as a state still definitely western, yet sufficiently modern to have become one of the important winter tourist sections of the United States.

Dr. Rufus Kay Wyllys is head of the social studies department of Arizona State College at Tempe. Although not a native, under the tutelage of Dr. Herbert E. Bolton, dean of western historians, and because of his own 18 years spent in collecting, assessing, sorting and collating available data on his adopted state, he has been able to create an authentic historical story of Arizona that will appeal to the entertainment seeker as well as to the more serious reader.

Dr. Wyllys has a study of Mexican history in relation to the American west, on his agenda for the future.

Published by Hobson and Herr, Phoenix, Arizona. 362 pages. 9 maps and 14 illustrations. \$6.00.

FIRST TO TELL THE STORY OF THE DESERT SOUTHWEST

The year was 1846. General Kearny, under direction of the war department in Washington had assembled at Ft. Leavenworth, Kansas, an army of 2000 men and officers to invade the Mexican Southwest and annex it to the United States.

One of the officers in Gen. Kearny's command was Lieut. W. H. Emory of the topographic engineers. Emory's duties were many. He was to keep a record of the climate, topography, geology, botany and accessibility of the region between Fort Bent and the Pacific. In other words, he was to see whether the terrain seized and occupied by Kearny's army was worth keeping.

No officer ever fulfilled a difficult mission with greater precision than did this young lieutenant. Despite the weariness of long hours in the saddle he kept an accurate scientific record of what he observed each day—the plants, wildlife, mountains, streams and astronomical observations. Congress thought so highly of Emory's report, titled *Notes of a Military Reconnaissance*, it ordered 10,000 copies of it printed and bound.

These old reports, now a collector's item, have long been recognized among scholars as a gold mine of accurate, first-hand information. They were written in clear simple English as a day-by-day log, so complete it is still possible to follow the exact route of the Army of the West as it traversed the great American Desert.

Thanks to the University of New Mexico Press, Lieut. Emory's daily log of the journey has now been republished under the title *Lieutenant Emory Reports*:

The present edition, with introduction and notes by Ross Calvin, contain only the day-by-day story of the journey. The many pages of scientific data in the appendix of the original report have been omitted because they are of interest to scientists only. This book is for the layman who would like to become better acquainted with the historical background of America's role in the Southwest.

No master stylist, Emory manages in simple sentences somehow to lend even to scientific data the underlying thrill of a young man's adventures. Colorful incident blends with shrewd observation of people, customs and political motives.

Emory was the first to chronicle the desert Southwest—and students of today can be grateful to him that he did his job so well.

University of New Mexico Press, Albuquerque. 208 pp. Maps. \$4.50.

*This book available from
Desert Crafts Shop
Palm Desert, California*

• • •
Jim Williams, cowboy cartoonist whose "Out Our Way" sketches of life on the range have amused millions of American newspaper readers, has just issued a new book, *Cowboys Out Our Way*, containing nearly 200 of his latest cartoons. An earlier edition of *Out Our Way* has been out of print for some time. With a foreword by J. Frank Dobie, the new edition is published by Charles Scribner's Sons. \$2.00.

Life in the Indian Country . . .

COWBOY AND INDIAN TRADER

By JOSEPH SCHMEDDING

Joe Schmedding was just an adventurous youth when he went to work for Richard Wetherill near Pueblo Bonita in 1903. He remained in the Indian country 23 years—seven on the range and the next 16 as trader in Keams Canyon. Out of this rich experience has come one of the most readable books yet written about the Indian country and life on the desert range.

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PALM DESERT, CALIFORNIA

HERE AND THERE . . . on the Desert

ARIZONA

Road Ordered Opened . . .

COTTONWOOD — According to county engineer, Dick Merritt, the northern district engineer, James Parker of Phoenix has ordered the Copper Canyon road opened so contractors can make inspection tours. Work on the once used route to old Fort Lincoln and Camp Verde is expected to begin immediately. The old road, now virtually impassable, leads up the canyon from a point south of the salt mine. The call for bids has not been announced but plans for the new section are under way in the state engineer's office.—*Verde Independent*.

Archeological Gift Moved . . .

TUCSON — The \$1,000,000 Gila Pueblo archeological collection, gift of Mr. and Mrs. Harold S. Gladwin of Santa Barbara, California to the Arizona state museum, has all been moved from Globe, Arizona. Dr. Emil W. Haury, director of the museum says it will be October before any can be placed on public display. Included in the 17 vanloads were approximately 10,000 pots, many of which had been mended and were extremely fragile. Pottery ranged from miniatures to those with a capacity of seven bushels.—*Tucson Daily Citizen*.

Tourist Bureau Requested . . .

PHOENIX — Governor Howard Pyle has indicated he will ask the State Highway Commission to establish the Arizona Tourist Development bureau on a working basis. He estimated the bureau might double Arizona's present \$100,000,000 annual tourist business. In the past the Highway Commission has been opposed to the expenditure of gas tax funds for anything but highway construction and repair. However, the legislature set up a bill calling for \$150,000 of the funds to be used by the tourist bureau.—*Yuma Daily Sun*.

Indians Engineer Loans . . .

WINDOW ROCK — The Navajo Indians are handling the tribal money with a loan committee just like Uncle Sam. This year the tribal council appropriated \$724,000 of the money received from oil and other resources to the revolving loan fund. Stockmen and farmers among the 60,000 Indians as well as co-op projects like the tribal trading posts, sawmills and small industries may borrow from the fund.—*Gallup Independent*.

Artificial Rain Held No Threat . . .

WASHINGTON—Irving P. Krick, who is conducting rainmaking experiments in the west, told a special Senate subcommittee it is "safe to say there is no real need for concern" lest artificial rain production in one section dry up another region. Krick said, "I don't think anyone has the idea yet that artificial rainmaking is a proven thing." He said his own efforts at Phoenix in 1949 and in Pasadena, California, in 1950, produced three and in some cases four times normal rainfall. Krick said his organization also claims part of the credit for wheat production of 20 to 27 bushels an acre in a southeast Washington area where the government had estimated production at 7½ bushels an acre. Krick told Senator Clinton P. Anderson that his proposal for a weather commission is "premature."—*Humboldt Star*.

New Meteoric Discovery . . .

WINSLOW—According to Dr. H. H. Nininger, foremost authority on meteorites, anthills near the 4,150 foot Meteor Crater contain a secret that may be worth billions of dollars. Tiny meteoric droplets of noncorrosive steel alloy have been found in the anthills. Dr. Nininger first found the globules with a magnet in 1948. He has since examined 127 samples of soil, some from the ant hill and some from other spots in the crater area and all contain steel globules. Meteor Crater, on U. S. 66 about 20 miles west of Winslow, near Dr. Nininger's museum, is the largest proven meteorite crater in the world.—*Tucson Daily Citizen*.

CALIFORNIA

Geologists Study Death Valley . . .

DEATH VALLEY—More than 60 geologists, some from as far away as West Africa, headquartered at Stove Pipe Wells hotel in Death Valley recently on a field expedition in connection with the annual convention of world geologists held at the University of Southern California. Chairman of the group was Dr. Thomas Clements, university geology department head, who discovered artifacts last year, indicating man's existence in Death Valley at least 15,000 years ago. Donald Curry, former park naturalist in Death Valley National Monument, attended the conclave, conducting geologists from California, Nevada, New Zealand, Austria, India and Portuguese



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WE SEARCH UNCEASINGLY for old and rare Indian Artifacts, but seldom accumulate a large assortment. Collectors seem as eager to possess them as their original owners. To those who like real Indian things, a hearty welcome. You too may find here something you have long desired. We are continually increasing our stock with the finest in Navajo rugs, Indian baskets, and hand-made jewelry. Daniels Trading Post, 401 W. Foothill Blvd., Fontana, California.

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BOOKS — MAGAZINES

PANNING GOLD — Another hobby for Rock Hounds and Desert Roamers. A new booklet, "What the Beginner Needs to Know," 36 pages of instructions; also catalogue of mining books and prospectors supplies, maps of where to go and blueprints of hand machines you can build. Mailed postpaid 25c, coin or stamps. Old Prospector, Box 729, Desk 5, Lodi, Calif.

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West Africa on exploratory investigations throughout the valley. In addition to the savants, the expedition was attended by student geologists from various California universities and from the University of Oregon.—*Inyo Independent*.

Scouts Find Indian Olla . . .

HEMET—Ten Scouts and leaders, exploring the eastern Santa Rosa mountains recently found an Indian olla, in perfect condition, sealed with a wad of leather. The boys and men saw the remains of rock houses in which the Indians used to live.—*Hemet News*.

Desert Garlic Profitable . . .

HARPER LAKE—Garlic is a new crop planted on the Lockhart ranch at Harper Lake, 26 miles northwest of Barstow. According to Lee Dolch, agricultural inspector for northern San Bernardino county, the field is the largest in southern California. Garlic is an annual crop, he said, and previous experiments have indicated it grows best on sandy soil if properly irrigated.—*Los Angeles Times*.

California Castor Bean Center . . .

IMPERIAL — Heavy acreages of castor beans have been planted throughout the nation under call of the government, with military needs as the chief urge. In California, the Imperial Valley is this year's castor bean center. Including the Yuma area, 16,000 acres are being planted, with an additional 500 acres in the Palo Verde valley. All the seed was grown on the Callahan Brothers ranch west of El Centro and the Bill Young ranch near Calipatria. According to L. G. Goar, agronomist for the Southwest Flaxseed association, early planting is well under way. The Imperial Valley and Yuma area will be finished June 1. The valley acreage is under contract to the Baker Castor Oil company. An average yield of 2500 pounds per acre is expected, with some sections going 3000 pounds to the acre.—*Imperial Valley Weekly*.

Historic Camp Cady Purchased . . .

BARSTOW — The historic Camp Cady ranch, consisting of 1500 acres, plus a government grazing lease for adjacent areas, has recently been purchased by William Boswell, owner of desert and Central California properties. Established as a government outpost in 1860, Camp Cady, located near Barstow, is one of the oldest historical landmarks in the area. All that now remains to mark the site of the old fort are an ancient cottonwood tree and a small pile of stones, once a part of the guard house. The fort was abandoned in the early 1870s.—*Los Angeles Times*.

New Caverns Discovered . . .

VICTORVILLE—Blasting for dolomite at the base of Silver peak in the Shadow mountain range 25 miles northwest of Victorville, has opened a series of underground caverns. Owners have started proceedings to postpone further blasts pending exploration. Norris H. Williams and Thomas Fernandez, two of the owners, and Bill Threath, a newspaper man, entered the cavern through a six foot opening, reporting a chamber, choked with stalactites and stalagmites, 150 feet long, 50 feet wide and about 50 feet high.—*San Bernardino Sun*.

Lake Mojave Culture Era Set . . .

BAKER—Verification of the existence of man on the shores of ancient Lake Mojave has been established by Dr. George W. Bainerd, associate professor of anthropology at the University of California in Los Angeles. This ancient lake, centered where Baker, California, now stands, was probably 15 miles long by three wide and fed by San Bernardino mountain drainage from Lake Arrowhead area.

Geological estimates have placed the age of culture from 1000 B.C. to 15000 B.C., with the latest evidence favoring a date midway between the two extremes. In 1937 archeologists from the Southwest museum reported the existence of this ancient Indian culture when they found flaked spear points and other artifacts on the shores of the former fresh water lake. According to Dr. Bainerd, comparing the location of the finds with former lake shores and outlet level, it appears culture existed before today's dry climate set in.—*Los Angeles Times*.

Bighorn Refuge To Be Abolished . . .

BANNING — On the theory that bighorn sheep in the Santa Rosa mountains would probably do better if the area is opened to hunters, the Fish and Game commission is planning to abolish the refuge. It has instructed O. T. Harvey, representing the Riverside county conservation commission, to take the case to the state legislature. Harvey says there is no justification for withholding the area from public use since state laws protect the bighorn from hunters, who, when the area is opened will reduce the number of such predatory animals as coyotes and bobcats which prey on each new batch of wild lambs. Refuge 4-D, the area in question, covering the east and south slopes of the Santa Rosas, is bounded on the north by Palm Canyon and runs from the Garner ranch to the desert floor, 108 square miles, about 70,000 acres.—*Banning Record*.

NEVADA

Low Lake Inflow Expected . . .

BOULDER CITY — This year's spring inflow to Lake Mead is expected to be the lowest since 1946, regional director E. A. Moritz of the Bureau of Reclamation has announced. Latest studies indicate the reservoir above Boulder Dam will rise 22 feet between now and the last of July. Last year's maximum elevation, reached on July 24, was 12.5 feet above this year's expected high. Despite the probability of below-normal inflow to Lake Mead this spring, irrigated areas along the lower Colorado river are assured adequate water in 1951 and sufficient hold-over storage is available to guarantee irrigation deliveries for years to come, Moritz says.—*Las Vegas Review*.

Spray Possible Trout Threat . . .

PIOCHE—Nevada Fish and Game commission officials recently urged extreme caution in the use of cattle sprays containing rotenone, after considerable investigation in California disclosed careless use had killed thousands of trout in Marin county. Ac-

ording to fishery technicians, rotenone has long been used to control trash fish in both lakes and reservoirs. Rotenone used in this manner contained only 5 percent active ingredients while sprays use the toxic agent in such concentrations as to cause immediate and widespread death among game fish.—*Pioche Record*.

Fish and Game Data Compiled . . .

CARSON CITY—The wildlife restoration division of the Nevada fish and game commission is mailing 1950 game report questionnaires to 3000 resident hunters in the state. This is the first questionnaire of its type to be used in Nevada. Names are systematically selected in order to have a fair sample of hunters throughout the state. Sportsmen are requested to list type of game hunted, bag limit and location covered. Information obtained will be used to arrive at a complete analysis of the 1950 season, thus furnishing a basis upon which future seasons, bag limits and management practices may be formulated.—*Independent News*.

Naturalist Talks To Be Resumed . . .

LAKE MEAD RECREATIONAL AREA — Evening campground talks were scheduled to be resumed April 2 at the Lake Mead recreational area, according to George Baggeley, park superintendent. Programs are planned for every night except Sunday, beginning at 7:30 p.m., with Russel Grater

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and Maurice Sullivan presiding, assisted by an occasional guest speaker. Kodachrome slides and colored movies will be shown at the outdoor amphitheater near the center of the Boulder Beach campground. It is planned to repeat programs on a two week rotation plan, continuing for at least two months. There is no admission charge. Residents of nearby communities are invited.—*Department of the Interior.*

• • •
Boulder Dam Mecca for Many . . .

BOULDER CITY—Representatives from eight foreign countries and six states made special trips through Boulder Dam during March, according to Bureau of Reclamation officials. Parties, varying greatly in interests and background, ranged in size from one person to 120. Numbered among the

visitors were Boy Scout troops, and German and Brazilian students. Spain, Japan, England, Austria, Mexico and Norway were represented, the latter country having two parties during the month. There were 20 special California groups, many of them college students, six Arizona and six Utah parties. Groups from Oregon, Illinois, Washington, D. C., and Nevada swelled total visitors to 29,365 for the month.—*Las Vegas Review Journal.*

• • •
Austin to Have Museum . . .

AUSTIN—The first museum ever to be established in Austin for the benefit of tourists is being made ready by Frank C. Tagert in the little house adjoining his residence in Upper Austin. Tagert, who has long been a collector of relics pertaining to the early

days of Austin and its boom mining era, has numerous articles not duplicated elsewhere. Among them is a portion of a telegraph pole with the original iron insulators still in place, from the telegraph line that crossed Nevada, replacing the Pony Express. The museum, which is to be available without cost to all who care to visit it, is being created by Tagert as a public service to the community.—*Reese River Review.*

• • •
Two Highways To Be Opened . . .

LAS VEGAS—The state highway department has announced that two highway projects in the Lake Mojave vicinity will soon be opened to travel. Otis M. Wright, division highway engineer, reported contractors have started black topping state Highway 60 from Nelson to the park service road in Eldorado canyon. The other project, blacktopping slightly over a mile leading from Searchlight across Davis dam will be started soon, but the road across the dam will not be opened until the Bureau of Reclamation gives the green light. At present, motorists to Kingman from Searchlight-Needles Highway have to detour south of the dam, crossing the Colorado on a temporary bridge.—*Las Vegas Review Journal.*

• • •
Deer Population Increases . . .

FALLON—Recent count in Smoky Valley and Reese River districts showed a continued increase in deer, according to Art Cusick, forest ranger and Steve Sutherland, big game biologist, who made the survey. They were assisted by Earl Crouch and Donald Schmidlein, members of the Toiyabe club. The deer count, which originated in Austin some years ago, is conducted every two years. Only one fawn that had been killed by a coyote near Reed's canyon, indicated predator control work had been successful.—*Fallon Standard.*

• • •
Washington, D. C. . . .

The government recently clamped controls on tungsten ore and tungsten concentrates and set a price ceiling of \$65 a short ton unit on concentrates. The supply of tungsten, a vital defense material, is low compared with the demand in steel making and other uses. Price director, Michael V. Disalle, who set the price ceiling far higher than pre-Korean levels, said his order is aimed at expanding domestic production to help make up for losses in imports, principally from China. Secretary of the Interior, Oscar L. Chapman, announced the control order, which supersedes a temporary order of February 15, applying to tungsten concentrates only.—*Salt Lake Tribune.*

TRUE OR FALSE

There's always something new to learn about the Great American Desert—its history, geography, mineralogy, geology and its people. This list of quiz questions is *Desert Magazine's* monthly school of instruction. You'll learn something here, even if you do not get a high score. From 12 to 14 correct answers is fair, 15 to 17 is good, 18 or over is exceptional. The answers are on page 37.

- 1—A coyote is strictly a vegetarian. True..... False.....
- 2—Census figures show the Navajo to be the largest Indian tribe in continental United States. True..... False.....
- 3—In his historic trek to California in 1775-76 Juan Bautista de Anza led his colonists to San Gabriel through San Gorgonio Pass. True..... False.....
- 4—The sidewinder derives its name from the manner in which it strikes. True..... False.....
- 5—Visitors to the Saguaro National Monument in Arizona occasionally see buffalo running at large. True..... False.....
- 6—The historic battle between the Earp faction and the Clantons took place at Tombstone, Arizona. True..... False.....
- 7—The original 29 palms are still to be seen at the oasis of Twentynine Palms, California. True..... False.....
- 8—Mineral produced in the mines at Bingham Canyon, Utah, is mainly copper. True..... False.....
- 9—Joshua trees grow as far north as Las Vegas, Nevada. True..... False.....
- 10—Papago Indians climb the saguaro cactus to gather ripe fruit. True..... False.....
- 11—Gold is never found in quartz seams. True..... False.....
- 12—Elephant Butte dam is on the Rio Grande River. True..... False.....
- 13—Mexican Hat, Utah, derives its name from an unusual rock formation. True..... False.....
- 14—Shivwits is the name of a plateau on the north rim of Grand Canyon. True..... False.....
- 15—The flower of the plant known as agave, maguey or mescal, is red. True..... False.....
- 16—Tourmaline crystals are always black. True..... False.....
- 17—*Camino* is a Spanish word meaning highway. True..... False.....
- 18—Coronado was the first governor of New Mexico. True..... False.....
- 19—San Ildefonso Indians are noted for making fine pottery. True..... False.....
- 20—The tallest cactus in the United States is the Saguaro. True..... False.....

Federal Funds to Fight Weed . . .

WASHINGTON — Nevada range-lands will benefit from a combined program to stamp out the poisonous halogeton weed — a thistle type of noxious weed—and at the same time reseed waste land to grass. The senate appropriations committee has authorized \$100,000 for an eradication and reseeding program, according to Senator Pat McCarran. Halogeton is prevalent in Elko County, has proved to be fatal to sheep and cattle.—*Battle Mountain Scout*.

NEW MEXICO

New Mexico Drouth Disaster Area

ALBUQUERQUE — New Mexico has been declared a drouth disaster area. According to Glen Grisham, state director of the farmers home administration, who received the announcement from Senator Dennis Chavez, farmers will be eligible for government loans to help them over drouth and insect damage. Authorization for loans was given to Dillard Lassiter, national administrator of the farmers home administration, by assistant agricultural department secretary McCormick. Grisham said the loans would help the ranchers replace stock they have sold because of lack of feed or help them buy feed for remaining stock or both. The production help, Grisham said, is tied in with government desires to boost production during the present war crisis. He said authorization for between \$300,000 and \$500,000 is expected. Farmers and stockmen should apply for loans through their county supervisors.—*Gallup Independent*.

Indians' Credit Record Good . . .

GALLUP—According to secretary of the interior, Oscar L. Chapman, Indians are a good credit risk. Commenting on the annual credit report of the Bureau of Indian Affairs, he said, "Of \$16,500,000 in loans made to Indians by the government, less than \$6,000 has been charged off. Potential losses are estimated at less than .5 percent." The government in 1934 authorized a revolving credit fund of \$12,000,000 for loans to Indians and their organizations.—*Salt Lake Tribune*.

Indian Agency Heads Promoted . . .

GALLUP—Commissioner of Indian affairs, Dillon S. Myer, has announced promotion of two Indian service education officials to head agencies at Mescalero, New Mexico and Hopi, Keams Canyon, Arizona. Lonnie Hardin, school principal at Mescalero, becomes superintendent of the Apache agency at Mescalero. Dow Carnal, who has been with the bureau for 23

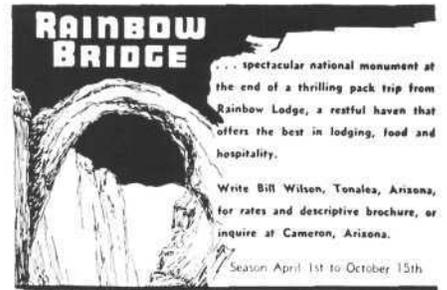
years, the past eight as principal at the Hopi agency, will now head the Hopi agency.—*Department of Interior*.

Petition to Secede . . .

FARMINGTON — One thousand San Juan county residents want to secede from New Mexico. They have signed petitions to Congress asking that the county be separated from the state and attached to neighboring Colorado. The petitions assert San Juan county residents are tired of being "pushed around" in the controversy over reclamation projects and that the county's rights are being ignored by New Mexico officials who advocate diversion of 250,000 acre feet of water from the San Juan to the Rio Grande.—*Gallup Independent*.

"Wetbacks" Southwest Problem . . .

TAOS — More than one million people a year illegally cross the thinly patrolled Mexican border between San Diego, California and Brownsville,



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Fresno, Kern, Riverside—\$2.50 — \$5.
 Los Angeles—\$1 and \$3.
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Inyo county, \$15; E or W ½ \$7.50; San Bernardino, 73x110, \$15; No. or So. ½ \$7.50; NW., SW., NE. or SE ¼, \$3.75.

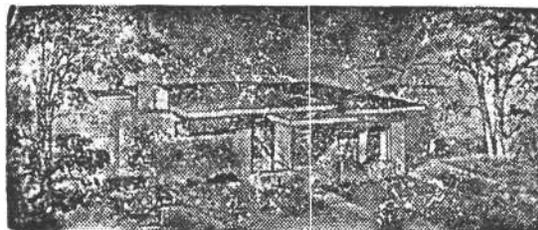
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Texas. Last year about 500,000 were caught and returned to Mexico. Many returned voluntarily when seasonal farm work ended. Others settled down in a state of semi-hiding, accepting any wages offered. Dr. Sanchez, head of the history department of the University of Texas, estimates this influx transforms the Spanish speaking people of the southwest from an ethnic group, which might be easily assimilated, into a culturally indigestible peninsula of Mexico. All studies on the question conclude these illegal entries are not only a hardship on the migrant but a definite threat to the living standard

of the Spanish-American population of the southwest. Realization of this might lead to steps being taken to curb illegal immigration, allowing a specific number of Mexican laborers to enter. Once the taint of illegality is removed they can demand current wages.—*El Crepusculo*.

UTAH

Record Party of River Voyagers . . .

MEXICAN HAT—Announced as the largest group of river voyagers ever to undertake the scenic trip down the San Juan and Colorado Rivers from Mexican Hat to Lees Ferry, a fleet of six river boats with 24 passengers and boatmen are scheduled to leave here June 12 with Frank Wright and Jim Riggs as leaders. Those booked for the trip are Edwin McKee, geologist, and Mrs. McKee of Tucson; Mr. and Mrs. Edward T. Nichols, photographers, of Tucson; Mrs. G. N. Lewis of Tucson; Mr. and Mrs. John Mull of Philadelphia; J. J. McKinny, banker, and two daughters of Brunswick, Missouri; Mr. and Mrs. Vernon

Barrett and son of Los Angeles; Frank M. Arnott of British Columbia; Svend A. Mogensen and son of Ogden, Utah; Owen F. Goodman of Los Angeles. The party will spend 10 days on the river and exploring the picturesque side canyons, including a day and night at Rainbow Bridge.

Seek Names of Indian War Vets . . .

SALT LAKE CITY—In order to properly mark the graves of those who fought in Utah's first Indian wars, Robert W. Inscore, Utah veterans graves registrar, is seeking information. A muster roll of Captain John Scott's company of cavalry, Nauvoo legion, dated February 28, 1849, is in Inscore's possession, but detailed information is lacking. According to the *History of Indian Depredations in Utah* by Peter Gottfredson, the Timpanogos Indians permitted the first settlement on the Provo river reluctantly, and shortly afterwards began to steal from the pioneers. Captain Scott, leading the men whose names appear on the muster roll, set out from Salt Lake City to pursue a party of Indians near Willow Creek. They rode to Utah Valley, where Little Chief directed them over the Provo bench toward Battle Creek where the cavalry opened fire. Although Scott was reprimanded for shedding blood when he returned to Salt Lake City, ill feeling between the whites and Indians mounted steadily, culminating in the Walker War in 1853. — *Salt Lake Tribune*.

Indian Ruins Discovered . . .

VERNAL — Recently discovered Indian ruins on the Brush Creek road will form a part of the tourist attraction for the scenic Red Cloud Loop drive being promoted by a committee sponsored by the Vernal Chamber of Commerce. The ruins has been fenced and the committee is awaiting a report by the archeological department of the University of Utah, in order to provide an informative background. An illustrated map of the drive will be completed shortly for distribution to hotels, motels and service stations. — *Vernal Express*.

Museum Lures Thousands . . .

SALT LAKE CITY—What began as a menagerie nearly 82 years ago is today one of the principal means of telling tourists of the history of Utah and the background of its people. Fundamentally it is a pioneer relic museum containing such interesting items as crude tools the Salt Lake valley immigrants used to build present day landmarks. The second floor of the museum, located on Temple square of the Church of Jesus Christ of the Latter-day Saints, is devoted to

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COVER PICTURES WANTED . . .

Prize Contest

June is the month when photographers all over the Southwest vie with each other for the honor of having their pictures selected for Desert Magazine covers during the months ahead. It not only is a high mark in photographic art to appear on Desert's covers, but there is a cash award to the winners—\$15.00 for first place, \$10.00 for second place. For acceptable cover pictures which do not win prizes Desert will pay \$5.00 each.

Entries in the cover contest should be approximately 9x12 inches—vertical shots. Photographers should keep in mind that the pictures should be so composed that the masthead to be printed across the top will not block out any important feature of the photograph. Any desert subject is acceptable including scenics, wildlife, rock formations, flowers, etc.

HERE ARE THE RULES

- 1—Prints must be black and white verticals, about 9x12 or larger, printed on glossy paper.
- 2—All prints must be in the Desert Magazine office by June 20, 1951.
- 3—Each photograph should be labeled as to subject, time and place.
- 4—PRINTS WILL BE RETURNED ONLY WHEN RETURN POSTAGE IS ENCLOSED.
- 5—Contest is open to both amateur and professional photographers. Desert Magazine requires first publication rights only of pictures accepted.
- 6—Time and place of picture are immaterial except that they must be from the desert Southwest.
- 7—Desert Magazine's editorial staff will serve as judges, and awards will be made immediately after the contest.

ADDRESS ALL ENTRIES TO PHOTO EDITOR.

THE *Desert* MAGAZINE
Palm Desert, California

Indian artifacts of ancient Utah, South America and Polynesia. According to Marion D. Hanks, assistant director of the bureau of information, the museum is open from 8 a.m. to 5 p.m. seven days weekly. During the summer it remains open until 9 p.m.—*Salt Lake Tribune.*

Water Conservation Important . . .

KANAB — Ancient tribes of the southwest built canals and laterals, irrigating many acres of land. Western irrigation, as we know it today, had its start with Mormon pioneers in Utah almost 100 years ago. Then only the most favorable land was irrigated, a canal seldom serving more than one or two farms. Through trial and error, a little was gradually learned about making the best use of the water.—*Kane County Standard.*

Educator Selected Mormon Head . . .

SALT LAKE CITY — David O. McKay, 77 year old former school

teacher, has been named head of the Mormon church, succeeding George Albert Smith, who died recently on his 81st birthday. The new president selected Stephen L. Richards as his first counselor and J. Ruben Clark, Jr., as his second counselor. Elder Joseph Fielding Smith, senior ranking member of the Council of 12 Apostles, became the new president of the council. President McKay, a native of Utah, has lived all his life in the state except for times he served elsewhere on church business, having been a Mormon missionary in England besides spending more than a year traveling around the world inspecting missionary activities.

National Park Visitors Increase . . .

ZION NATIONAL PARK—March visitors to Zion National Park totaled 11,438, nearly a 60 percent increase over the same month in 1950, according to Superintendent Charles J. Smith. His monthly travel report showed 47

percent increase at Bryce canyon for the same period. Travelers came from 42 states, the district of Columbia, Alaska, Hawaii and Canada. Utah and California topped all other states in numbers of visitors. — *Salt Lake Tribune.*

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ROSS S. MUSSELMAN

Moab, Utah

Hard Rock Shorty

of
Death Valley



"No, huntin' ain't allowed in here since the government took over this place an' made a national monument outta it."

Hard Rock Shorty, seated on the much-whittled bench in front of Inferno store, was having a hard time getting his afternoon siesta. The tourists who stopped at the store, recognized him as one of the old-timers in that region, and insisted on asking questions — most of which, in the opinion of Hard Rock, were quite foolish.

The latest arrival was very inquisitive. He wanted to know about everything. Was there any gold in the Panamint mountains? How would a man make a livin' in this godforsaken country? Why did they call it Death Valley? etc., etc.

By the time the stranger got around to the subject of hunting, Shorty was out of patience.

"But was there good hunting in here before Uncle Sam took over?" the tenderfoot asked.

"Naw! exclaimed Shorty. "Too many mosquitoes!"

"Don't the ducks ever come into that pond of water down there where the sign says 'Bad-water'?"

"Sure they do," answered the exasperated Shorty. "But I'm tellin' ya, they's too many o' them big mosquitoes. Them skeeters had bills like a woodpecker, an' they wuz big as hawks. One night a couple o' them came into a hunter's camp and flew off with a can o' tomatoes. An' a little while after that they came back and got the canopener.

"But that wuzn't so bad. What really finished huntin' wuz when a load o' them city sportsmen came through headin' for Bad-water and promised Pisgah Bill they'd bring 'im a mess o' ducks fer supper. Told him to have the wood stove goin' an' the oven hot. Plenty o' ducks, they said.

"Pisgah believed 'em and that night he had everything ready fer a big feast, dressin' all made up, cranberries on the table 'n everything.

"Sure enough them hunters came in just before dark with their bags full o' game. They dumped it out on the floor an' told Bill to get busy. Bill took one look at the "birds" and let out a whoop that'd curdle your blood. Them hunters'd been shootin' skeeters fer ducks.

"Next day Pisgah put a sign up by the pond..

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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

When we went back to New York a year or so ago we got into a long conversation with Jimmy Conselman that lasted most of the night on the Twentieth Century Limited journey between Chicago and the bigger town.

Jim was one of the greatest football coaches in history and he was almost sobbing over the defeat of his former Chicago Bears that day. "They lost their perfectionism, the thing that kept them unbeatable when I coached the team," said Jim.

And then this nationally known speaker pointed his remarks with a story, which we have repeated in nearly every talk we have given since then. It offers a moral that an audience relishes.

"Perfectionism can be carried too far," he said. Then he told the story of Frank McGlynn, the actor who played the part of Abraham Lincoln on the stage for so many years. "He played Lincoln so much" said Jim, "that he became a perfectionist. He WAS Mr. Lincoln. He dressed like Lincoln, talked like Lincoln and practiced all of Lincoln's mannerisms when he was off the stage. One day a couple of his friends were entering his apartment house as McGlynn was coming out. He bowed very courtly to them and one of the friends said to the other, 'you sure have to hand it to that fellow, he's a perfectionist.' 'Yes,' replied the other, 'he'll never be satisfied until he's assassinated.'"

The story comes to us now and then in something we see or do. We see judges at mineral and gem shows looking for perfectionism among the amateurs' work and passing by some real imagination that perhaps does not display perfect lapidary work. In our early days of learning gem cutting we had a friend who said "if I show a stone to anyone and they hand it back and say it's 'pretty good' I never show it again. If it's only 'pretty good' I know it isn't finished and the person is tactfully telling me so."

An old Chinese proverb says: "It is my imperfections that endear me to my friends. It is my virtues that annoy them. Every Chinese artist always leaves some little imperfection in his work so that the connoisseur may find it and be pleased. The Navajos do the same in their rug weaving; always leaving a little hole in each rug for "spiders to get through."

Carl Glick, author of *Shake Hands with the Dragon*, refers to this in reporting a conversation with his friend Kung. He said to Glick "when I write a letter to a friend, if I have but one misspelled word, the recipient of my letter will be made happier. He will feel superior. He will say to himself, 'Kung has been to several colleges. I have not attended even one. In comparison I am supposed to be totally ignorant and uneducated—but look, I know when he misspells a word.' So he finds pleasure in discovering my mistake. It makes him feel important. I've had fun, too, for I knew all the time what I was doing, and I feel superior to him for feeling superior to me. I am happy. He is happy. My mistake has really pleased us both."

At times we wear a silver ring in which we have mounted a large carnelian cabo-

chon that is noticeably lopsided. It was one of our early attempts and we are very fond of it. It makes a striking ring that always gets attention. Many admire it but occasionally we meet a perfectionist type lapidary who looks at it and says nothing. We know what he thinks and it doesn't bother us at all. He probably thinks "here's this fellow Quick, trying to teach the whole world to be lapidaries, wearing a cabochon that my child could turn out. Man, I can do better than he can." And then he feels good, like Kung's friend. We continue to like the ring despite its imperfection and we prize it above any of the few really perfect cabs we've turned out. After all, we've met a lot of perfectionist lapidaries and few of them are happy any more because they no longer have any fun at the hobby for they are too good. Do you think the golf champion enjoys a game of golf as much as a duffer? We hope we never over-do perfectionism and we feel sorry for those who do so.

It should be just about at this point where several readers will pause and resolve to write us about how wrong it is for a person in our position to advise amateur gem cutters not to strive for perfection. We are offering no such advice. As our friend Conselman said, back in the first paragraph, "perfectionism can be carried too far."

It is recognized, even among professionals, that the amateur gem cutter turns out better gems on the average than the professional because he spends more time on them. He's only doing it for recreation and he doesn't have to worry about the economic importance of an extra hour. The thing we are trying to point out is that if you never attain perfection in gem cutting don't let it spoil your fun. If you do attain perfection don't be snobbish with those who cannot bring every cabochon to elliptical and polished perfection and every facet to geometrical Utopia. Take a lesson from Mother Nature herself for it is an axiom that nothing, absolutely nothing in nature is perfect.

The same advice applies to those who do silvercraft. James W. Anderson of Baltimore, who originated the idea of combined agate and silver tableware, says that the greatest compliment a friend can pay his efforts is to say that it looks handmade. If a piece looks too professional Anderson says he whacks it a few places with a hammer just to be sure it will not be mistaken for a machined piece. Silvercrafters can be fussier than gem cutters at times for they have design to consider. In conclusion we offer another story for them.

Our famous naval commander John Paul Jones was the son of the head gardener to the Earl of Selkirk in Scotland. In the gardens, which he attended with fanatical fussiness, there stood two summer houses. One day he caught a visitor stealing fruit and locked him in one of the houses. When the Earl came out to see about the matter he found John Paul Jones locked in the other summer house. "Was he stealing fruit also?" asked his lordship. "No sir," replied the gardener, "I just put him in for symmetry."

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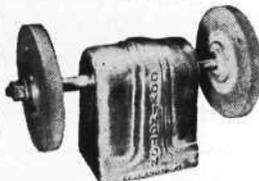
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Redlands, California

Gems and Minerals

Rare Minerals to be Feature of California Rock Exhibit

The gem and mineral show scheduled for June 22, 23, 24, 1951, at the Oakland Exposition Building in Oakland, California, promises to be the largest show of its kind ever held. This is because of the great number of famed gem exhibits of public spirited citizens who are not lapidaries or mineral collectors necessarily. The magnitude of the exhibit is indicated in part by the fact that the insurance premiums alone on the loan exhibits will run more than a thousand dollars in addition to bank vault expense, special armed guards and armored trucks to remove the exhibits to the vault each night.

As this is written it seems fairly certain that the famed Hope Diamond will be but one of the many exhibits. The two largest jade carvings in the world, THUNDER and LADY YANG, by Donal Hord will be on exhibit. Made of Wyoming jade these figures took two men more than three years to carve and they worked at least 40 hours every week. They weigh 104 pounds and 161 pounds and they are spinach green and apple green respectively. Anyone may take them home—for \$49,000 plus taxes.

Then there will be more than a million dollars worth of diamonds in all colors exhibited by Martin L. Ehrmann Co., Los Angeles diamond brokers. Mr. Ehrmann has been doing a lot of experimentation in the coloring of diamonds and has produced some beautiful grass-green diamonds in the cyclotron at the University of California at Berkeley.

The private gem collection of colored faceted stones of William E. Phillips, proprietor of Los Angeles' largest jewelry store, will be displayed. Among many items of special interest in this collection is a 149 carat white topaz in a square cushion antique style of more than 400 facets. During a recent trip to Ceylon, Mr. Phillips acquired a brilliant brown peridot weighing 158.55 carats. This was sold to him as a brown tourmaline and later identified as genuine olivine (peridot). Among other interesting items are a deep purple amethyst (101 carats), a peridot from the Red Sea that is 45.40 carats and reputed to be the largest and finest green peridot outside of the British Museum. The largest stone in the collection is a citrine weighing 944 carats. A delicate blue-green beryl weighing 84.80 carats will make the collector drool.

Lelande Quick, of the *Desert Magazine* staff, will exhibit one of the largest fire opals in private hands. It weighed 11½ ounces when Mr. Quick acquired it from the mines in Australia. Cut as a polished specimen only it now weighs exactly a half pound or 8 ounces.

Mineral collectors will be glad to see again the famed crystal and petrified wood collection of Mrs. Max (Jessie) Hirsch of Mariposa, California. This collection is one of the best in the west and is particularly

noted for its large specimens of magnificent materials.

The amateur lapidaries will be represented by the onyx dinnerware set of O. C. Barnes of Los Angeles and several large sphere collections. Raymond Addison, America's outstanding cameo artist, will exhibit his work which includes several new pieces.

Rare sulphates from the Leviathan mine will be shown in plastic. These always disintegrate when brought to the surface so they have been sealed in plastic at the bottom of the mine.

Kazanjian Brothers of Los Angeles will exhibit more than a half million dollars worth of star sapphires, including the famed Star of Queensland, the largest star sapphire in the world.

The foregoing are the special exhibits, designed particularly to draw the non-rock-hounding public and expose them to the virus of America's fastest growing hobby. The main exhibits of course will be the several hundred cases of great mineral and gem collections of the members of the societies in California. For this is the state convention of the California Federation of Mineralogical Societies and it is particularly sponsored by the East Bay Mineral Society of Oakland, with the American Gem and Mineral Suppliers Association handling the commercial exhibits of more than a hundred dealers from all over the country. There will be plenty of room for all this for the building housing the exhibition is 150 feet wide by 450 feet long.

Dona Ana county Rockhound club, Las Cruces, New Mexico, held its April meeting at the Mesilla Park school. After a short business session the usual program was dispensed with in favor of a rock auction. Each member brought an identified rock on which was placed a minimum value.

The Mineral and Gem society of Castro Valley, California, held its regular membership meeting April 13. Mr. and Mrs. H. C. Mahoney, of the East Bay Mineral

society, Oakland, talked on the selection and polishing of jade material. Mrs. Mahoney displayed jade specimens from the Orient, Alaska and California in connection with her talk. Plans were discussed regarding the society's participation in the state Federation Mineral Show scheduled for June 22-24 in Oakland. F. W. Buhn was appointed chairman of the nominating committee for the annual election of officers. It was agreed that a junior member be included on the society's board of directors this year. Election is scheduled for next membership meeting, May 11.

Minerals of Inyo County, was the title of a talk given by Richard M. Stewart, California division of Mines, at the April meeting of the San Fernando Valley Mineral and Gem Society, North Hollywood, California. Stewart and A. L. Norman, Jr., co-authored the report on mines and mineral resources of Inyo county in the January issue of the *California Journal of Mines and Geology*.



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AMONG THE ROCK HUNTERS

The Compton, California, Gem and Mineral society has set the date of its second annual show for September 29-30. Place, Veterans of Foreign Wars Building, 119 E. Magnolia Street, Compton.

The first field trip for 1951 took the Sequoia Mineral society, Parlier, California, to Shark Tooth Hill. Nearly everyone found one or more fossilized teeth, many digging out as many as thirty perfect specimens. At the April meeting George Smith contributed a pair of sawed onyx book ends, Asher Havenhill a specimen of copper, gold and galena and C. O. Sorensen a slab of green jade. An anonymous contributor sent in a group of quartz crystals.

Identification of minerals with a petrographic microscope was described by S. A. Jerome of the New Jersey Zinc Exploration company, at the April meeting of the Yavapai Gem and Mineral Society, Prescott, Arizona. After Jerome's talk society members had an opportunity to view a number of slides and thin polished sections of minerals. Door prizes were won by Eugene Neuman and Gary Purviance. Specimens of fluorescent rock were on sale.

The Orange Belt Mineral society held its April meeting in the social hall at Valley College, San Bernardino, California. Hugh R. Thorne showed colored slides of rocks and the scenic Indian cliff dwelling areas of Utah, Colorado and Arizona. Mrs. Thorne displayed specimens of pottery done by Rachele, aged Indian woman whose outstanding skill and artistry has been recognized throughout the western states.

At their April meeting, the Southwest Mineralogists of Los Angeles, enjoyed a picture of the recent eruption of Mauna Loa. This eruption was particularly interesting because the lava flowed from the three lower vents forming a slowly moving river half a mile wide with a temperature of around 5000 degrees. Loyd Larson talked on his trip through Mexico, via motorcycle, showing colored slides of rural flowering Mexico and the people, churches and ancient ruins.

The speaker at the April meeting of the Chicago Rocks and Mineral society, Professor Cole of the Northwestern University, talked on "Watch Cases of the Early 1800's." He illustrated with colored slides of the elaborately enameled and jewel encrusted cases from the collection of Leopold Metz- enberg. Stanley Ryba exhibited his collection of Pennsylvania fern fossils, cabochons and jewelry.

At a recent meeting of the East Bay Mineral society of California, Frank Wilcox demonstrated his method of polishing precious opal by hand. The method consists of securing the specimen or dopping it to the head of a large nail. It is then shaped by grinding with abrasive cloths, beginning with 120 grit, then 220 and finishing with 600. Polishing is then done on a piece of soft leather, dampened and spread with a small amount of tin oxide. It took Wilcox 9 minutes to finish a stone.

LAPIDARY HUT OPENED BY TRONA SOCIETY

Recent opening of a well equipped lapidary hut by the Searles Lake Gem and Mineral society at Trona, California, marks fulfillment of one of its foremost ambitions. Equipment installed includes a 16-inch slabbing saw, a trimming saw, four 10-inch grinding wheels, two 8-inch drum sanders, two 8-inch disc sanders, one 10-inch cloth buffer and one 10-inch felt buffer. The hut is open from 7 to 9 three nights a week for the use of members under the supervision of a committee member. Techniques of cabochon and flat specimen cutting as well as facet cutting are being taught. Dwight Sawyer is president of the society, replacing Nedra Merrill who resigned because of illness. George Grau is vice president, Celia Forgee, recording secretary, Alma Bliss, corresponding secretary and Eddie Redenbach, treasurer.

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At the regular meeting of the Western Nebraska Mineral society, Chappell, Nebraska, Walter Peck was elected president. Serving with Peck are: Emmett Soule, vice president; Freda Bergstrom, secretary-treasurer. E. P. Chipman spoke on the "Planetary Theory of Evolution of the Universe." Refreshments were served at the close of the meeting.

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The Santa Fe, New Mexico, Gem and Mineral club celebrated its first birthday March 20. New officers were elected. Those serving are: Walter H. Wright, president; James G. Gates, vice president; Justine Stehl, corresponding secretary; Bettie A. Morgan, recording secretary; Marie Almand, treasurer.

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At the annual meeting, April 6, new officers of the Washoe Gem and Mineral society were elected. Those who will serve are: Mrs. Henry Obermanns, president; Glen E. Drew, vice president and program director; Thelma Jordan, secretary-treasurer; Gladys Hamm, publicity director.

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Mrs. Clarence Chittenden, former teacher at Pasadena City College, spoke on jewelry making and design at the April 10 meeting of the San Gabriel Valley, California, Lapidary society. She illustrated her talk with blackboard sketches and an exhibit of finished pieces of modern jewelry. A recent field trip took 26 to the Crestmore quarry in Riverside county. Several varieties of fluorescent minerals rewarded those who went.

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Dr. and Mrs. Snook of Palmdale, California, entertained 36 members of the Mojave Mineralogical society April 4. Colored slides covering Yoho, Kootney and Jasper National parks in Canada were shown. Ted Purkheiser talked on the method of wet sanding, especially good for polishing jade. Hamburgers, ice cream, cake and coffee were served. The April 6 meeting at Homeland Park in Boron, was highlighted by the contest between Mojave and Boron for honors in having completed the most jewelry and lapidary work during the month. A special field trip April 8 took several to the Caliprma Dolomite mine a few miles north of Adelanto. By special permission several men were lowered into a newly discovered limestone cavern. A few stalactites and stalagmites as well as aragonite crystals, already broken off, were allowed but no destruction of others permitted since plans to develop the cavern into a commercial sight-seeing spot are under way.

LOS ANGELES LAPIDARY SOCIETY WINS AWARDS

At the April meeting, Norman Cupp, president of the Los Angeles Lapidary society, announced exhibits at the third annual California hobby show attracted crowds, the working demonstration of Charles Maples and Jack Deurmyers winning special award ribbons. The display of lapidary work, gems and jewelry took the blue ribbon for that division. Armand de Angelis, gem cutter for the Krueger stone house, gave an informative talk on the art of cutting stones. De Angelis has been a professional lapidary for 25 years and has cut stones for many famous people. S. P. Hansen, charter member of the society, was presented with a life membership. The society meets the first Monday of each month.

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The Atlanta, Georgia, Mineral society received a special invitation to attend the open house held in the new building of the Department of Geology at Emory University, March 9. Especially interesting were the minerals displayed in the halls, arranged to take full advantage of light and background. Regular meeting of the society was held March 12 when field trips were discussed and business taken care of. Dr. Frank Daniel, official historian, talked on minerals and past field trips, illustrating with Kodachrome slides.

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The Napa Valley Rock and Gem club sponsored its first Rock and Gem show March 31-April 1 at the Women's Club House in Napa, California. Nearly 1000 attended. Silversmithing was demonstrated. Rough rock, crystals, petrified wood, polished slabs and cabochons as well as mounted stones and work in both gold and silver were some of the items displayed. Santa Rosa, Benicia and Vallejo, neighboring cities, also had exhibits.

• • •

The Santa Monica, California, Gemological society has elected Florence G. Strong president, the first woman to serve the society in that capacity. First vice president, Vern Cadieux and second vice president, Professor W. R. B. Osterholt, were returned to office. Harold Higgins was elected treasurer; Doris Baur, recording secretary, Lefa Warth, corresponding secretary. James W. Riley, from Springfield, Ohio, spoke to the society, titling his talk "Reminiscing by a Buckeye Rockhound." The mineral display was arranged by retiring president and Mrs. C. E. Hamilton.

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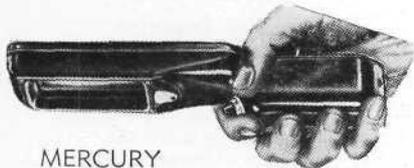
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Professor Richard M. Pearl will teach a series of courses covering various phases of the earth sciences this summer at the Colorado college, Colorado Springs. They are directed toward teachers of the earth sciences in high schools and junior colleges as well as those interested in advancing their knowledge of geology and mineralogy.

That precious stones are tears is a common mythological concept. According to the Buddhists, the rubies and sapphires of Ceylon are Buddha's tears, caused by man's sins. A Singhalese legend holds the gems of Ceylon are Adam's tears hardened. Chinese mythology attributes pearls to the tear of mermen and mermaids. On the island of Hawaii small spheres of aragonite resembling pearls are known locally as the tears of the goddess Pele who ruled the great volcano, Kilauea and wept when she thought the subterranean fires were dying.

The Tucson, Arizona, Gem and Mineral society, meeting in the University of Arizona library March 20, enjoyed a talk on copper minerals by J. J. Normart. A movie showing mining and smelting copper at the Inspiration mine at Miami and Globe, Arizona, illustrated the talk. On display was Normart's large collection of copper minerals representing many localities. At the April 3 meeting, Fred G. Hawley described the meteorite crater in Arizona, displaying specimens of various types of meteorites. Two movies were shown at the April 17 meeting, both on the natural resources of Chile and Columbia.

Mr. and Mrs. Linton T. Riggs entertained the Oklahoma Mineral society at their home in Oklahoma City on March 1. The usual business meeting was dispensed with in order to devote the entire evening to the program arranged by Professor E. E. Dale of the history department of the University of Oklahoma. He talked on Navajo, a frontier cow-trail town that flourished when Oklahoma was a territory. Professor

Dale described the early day prospecting of the Wichitas, much of which was prompted by legends of lost Spanish mines. Gold, lead, copper, silver and zircons were sought. Professor Dale said probably no area of similar size has ever been so thoroughly searched with such unprofitable results.

At the March 30 meeting of the Humboldt Gem and Mineral society Newton Steward, chief of the KIEM news staff, Eureka, California, told of his experiences in China and displayed Chinese art dating back 2000 years to the Han dynasty. Paul McMillan described a field trip to the Van Dusen river area for those who were unable to go. Refreshments concluded an entertaining evening. April 1 another field trip took 29 society members to the beaches of Dry Lagoon and Big Lagoon in northern Humboldt county. Agate, jasp-agate, petrified wood, jasper and californite were some of the minerals picked up.

The March issue of the Dona Ana County, New Mexico, Rock club Bulletin has four pages devoted to the club library. According to the Mineral and Gem News of the Rocky Mountain Federation, a society owned library for the benefit of its members is a worthwhile venture, involving some work, but paying large dividends. It also calls attention to the club's birthday box in which those having a birthday deposit a sum corresponding to their ages. This helps the treasurer, the Federation states, and is not burdensome on the rock-hounds.

The Monterey Bay Mineral society attended an impromptu field trip in its own back yard in Salinas April 1. Past president and Mrs. V. L. Fraser, who have collected so many rocks during past years it was impossible to move all to their new home, invited members of the society on a field trip in their back yard. A few specimens were presented to the society to use as it sees fit. The balance, both cutting and specimen material was available to members through a generous "share with friends" idea planned by the Frasers.

Professor Deidrick, president of the California Federation of Mineralogical societies, was speaker at the late March meeting of the San Diego Lapidary society. Professor Deidrick explained with chalk drawings, how minerals are formed by the hot magma and steam forced up through cracks in the earth's crust. He also showed colored slides of the Leviathan sulphur mine which is owned by the Texas Gulf Oil Company.

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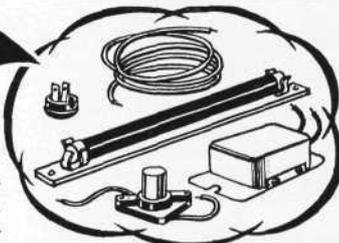
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Arthur and Lucille Sanger, co-authors of *Cabochon Jewelry Making* have been associated with lapidary work and silversmithing for many years, at one time conducting a studio in Chicago. Besides giving private lessons, they headed the lapidary and silversmith department in the *American Industrial Magazine* and contributed articles on making jewelry to various journals and magazines.

Cabochon and Jewelry Making is for those who have had some experience in the use of small tools of the trade. The Sangers have selected silver as the material for mounting various stones because it is easier for the beginner to work with and not too expensive for small projects.

"In making jewelry, the first thing to do is make a design for the stone mounting. Lay the stone on a sheet of paper and draw around it. Fill a whole sheet of paper with drawings of the stone, if you are fishing for an idea. This is not necessary where the design is already in mind. Around each of the drawings, sketch some simple design, or parts of designs, if it is to be a repeat motif. It is better to use curved lines, especially for the beginner, than angular ones, as the curved lines will arrange themselves in pleasing fashion."

Thus begin the general instructions in chapter one, indicating the easily comprehensible language in which the book is written.

More than a hundred articles, including buttons, necklaces, spring type bracelets and brooches with prongs and coils are explained. If you are interested in lapidary you will want to own this book.

Published by Charles A. Bennett Company, Inc., Peoria, Illinois. 127 pages. \$3.50.

Lawrence Oliver and Röss Philips of the Denver, Colorado, Mineral Society exhibited displays of their lapidary work at a Peoples Festival and International Exhibit sponsored by the Steele Center UNESCO group at Steele community center in March. An illustrated talk was given by Dr. J. Harlan Johnson at the Colorado School of Mines. Dr. Johnson spoke chiefly about geological formations on the island of Gotland, off the southeast coast of Sweden. His colored slides showed to good advantage the limestone reef formations along the coast. A dinner preceded the meeting which was followed by an inspection of mineral specimens in the college museum. Meetings are held the first Friday each month, October through May.

The Riverton, Wyoming Geological society has elected John Pitts its president; Norbert Ribble, vice president; Rose Hains, secretary treasurer; Harold Rinnan director for a three year term and A. D. Perkins director to fill the unexpired term of Robert Tresler, who is leaving Riverton. Plans are being formulated for the State Geological convention, to be held at the Riverton high school auditorium June 16 through 17.

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CASTRO VALLEY MINERAL SHOW RESULTS IN MANY AWARDS

The third annual mineral show of the Mineral and Gem society of Castro Valley, California, held April 7 and 8, resulted in many awards for outstanding exhibits in both the senior and junior divisions. In addition to beautifully arranged displays, the society had a table of radio-active minerals with a Geiger counter demonstration by Louis Camenzind. Mrs. Ward Lewis conducted the dark room, showing fluorescent minerals under ultra violet light. Frank Wilcox demonstrated his technique for faceting minerals and Gladys Luce the grinding and polishing of rock specimens. Wesley Gordon, leader of the paleontologists of Hayward, showed how rare fossil specimens are cleaned and prepared. Minnie Buhn supervised displays of over 50 floral dish gardens.

The South Bay Lapidary Society, holding meetings the first Monday of each month at Clark Stadium, Hermosa Beach, California, is entering its fourth year. The entire staff of officers has been reelected for another year. Those serving again are: Jane Hagar, president; S. P. Hughes, vice president; Gordon Bailey, secretary; Perry Williams, treasurer.



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TRUE OR FALSE ANSWERS

Questions are on page 28

- 1—False. The coyote is also a meat eater.
- 2—True.
- 3—False. De Anza followed Coyote Canyon to the top of the range many miles south of San Geronio Pass.
- 4—False. The sidewinder derives its name from its manner of travel.
- 5—False. There are no buffalo in Saguaro National Monument.
- 6—True.
- 7—False. Only 21 of the original 29 palms are still standing.
- 8—True.
- 9—True.
- 10—False. The Papagos use long poles to knock down the fruit.
- 11—False. Gold often occurs in quartz seams.
- 12—True.
- 13—True.
- 14—True.
- 15—False. The blossom of the agave is yellow.
- 16—False. Tourmaline crystals come in many colors.
- 17—True.
- 18—False. Coronado returned from his conquest in New Mexico disappointed and disgraced.
- 19—True.
- 20—True.

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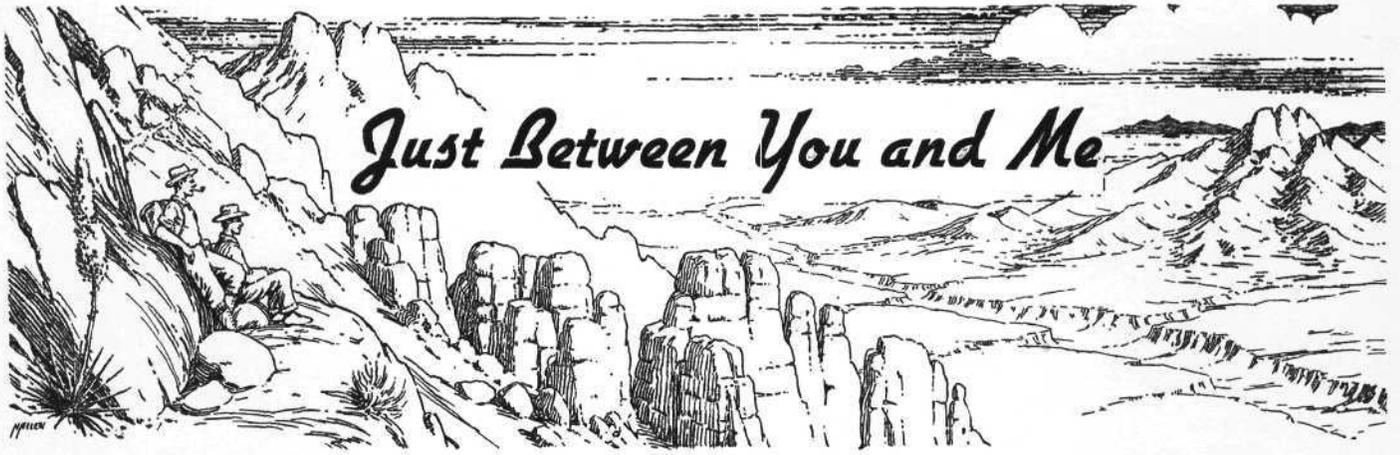
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Just Between You and Me

By RANDALL HENDERSON

TWO WEEKS ago, with my friends Arles Adams and Bill Sherrill, I spent a week-end in a remote canyon far down the peninsula of Lower California with a little band of Indians who told us that we were the first white men to visit their homes in 30 years.

Like other creatures of the wild, they were distrustful at first. But when they were assured that we bore neither firearms nor illwill their suspicions vanished, and they loitered about our camp and watched with curious interest as we prepared our meals with gadgets quite unfamiliar to them.

Among themselves they spoke their native dialect, but some of them also understood Spanish and we were able to learn much about their primitive way of life. I plan to write the story more in detail for a later issue of *Desert Magazine*—the story of a little group of people who know nothing about the conflicts of the so-called civilized world. Their needs are simple—food and shelter are all they require, and to a surprising extent they find both of these necessities in a desert which to you and me would seem quite barren.

These Indians not only have food and shelter, but they have something else which you and I regard as one of the most precious of human endowments—that is, complete personal freedom. There are no tax collectors, no policemen, no lawyers—and no laws, except those tribal customs which have been found to be mutually beneficial.

It is refreshing for a little while to have contact with such a way of living. But while you and I may dream about the peace and freedom of such a world we know that science and the increasing density of our population have made those things impossible for most of us. It is one thing to live in a communal village, at peace with a score of fellow tribesmen. It is something else to try to live a tranquil life in a society of 150 million people, each trying to amass more material wealth than his neighbor.

One of these days I hope the scientists will turn from their mad quest for more power and speed and miracle-working gadgets—and devote their talents and their skills to studies of the human mind and emotions. In the physical sciences we have become a race of super-men—while in the science of human relations we are still just children. Emotionally we are as primitive as those Indians in Arroyo Agua Caliente.

Fear, hate, avarice, intolerance, anger, arrogance, envy—these emotions that bring so much grief to the human race, run their course and leave no imprint on the world when they are confined to a little tribe of Indians in a remote desert canyon. But in the complex organization of a great nation where the peace and security of each

individual is dependent in a large measure on the emotional maturity of many, many other persons, undisciplined emotions—especially in leadership—become tragic. And that is the dilemma of our day.

• • •

Another article I am going to write for *Desert Magazine* before another winter season will be for architects and builders and those who plan new homes on the desert. I have watched a hundred new homes under construction in my neighborhood during the last two years—and only two or three of the entire number have been planned with any degree of preparation for comfortable living during the summer period of high temperatures.

A home on the desert, where electricity is available, may be just as comfortable as a summer home in the mountains—if those who do the planning will give proper attention to a few fundamental factors.

Those who plan to occupy their desert homes the year around should not start building until they have given careful study to such questions as glass exposure, direction and velocity of prevailing winds both day and night, soil, drainage and view.

Almost without exception, the homes I have seen go up since I have lived in Palm Desert have been very inadequate both as to insulation and air cooling. A good rule in setting up an evaporative air cooling system is to put in twice the capacity specified by the so-called experts. They get their figures out of a book—and the man who wrote the book never lived on the desert.

• • •

When I build another home on the desert I am going to have a rock pile—for the lizards. For a year we had a big pile of flagstone out in front of our apartment house, and under that pile lived a family of the prettiest lizards I have seen on the Colorado Desert. In the summertime they were almost white.

Some of my desert friends have lizards for household pets. They never become very chummy, neither do they ever become a nuisance. They sit on the window sills preying on flies and other insects.

Like most of the other creatures of the desert the lizards are rugged little individualists. They never run in packs. They are silent little denizens who attend to their own affairs and expect no thanks for the service they render humanity. Don't throw a rock at a lizard, any more than you would at a bird—for they have an important place in Nature's balance. May their numbers never grow less!

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