

THE

Desert

M A G A Z I N E



FEBRUARY, 1950

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JUST PUBLISHED: "THE STORY OF JADE" by Herbert P. Whitlock and Martin L. Ehrmann at \$12.50 per copy.



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DESERT CALENDAR

- Feb. 2—Ceremonial dances at three Indian pueblos: San Felipe, Cochiti and Santo Domingo, north of Albuquerque, New Mexico.
- Feb. 4-5—Sierra club weekend camping trip to Corn Springs in the Chuckawalla mountains.
- Feb. 4-5—Tenth annual Palm Springs Rodeo—parade and rodeo events, Palm Springs, California.
- Feb. 4-5—Ilano Indian dances at Taos pueblo, New Mexico.
- Feb. 5—Don's Club Travelcade to Miami mines, from Phoenix, Arizona.
- Feb. 11-12—Fifth Annual Silver Spur Rodeo, sponsored by Junior Chamber of commerce, Yuma, Arizona.
- Feb. 11-12—Arizona Snow Bowl carnival, Flagstaff, Arizona.
- Feb. 11-12—Paradise Valley Horse Rodeo, Scottsdale, Arizona.
- Feb. 11-13—Annual ski carnival, Williams, Arizona.
- Feb. 14-15—Missionary district of Arizona of Episcopal church, Flagstaff, Arizona.
- Feb. 15—Turtle dance at Taos pueblo, New Mexico.
- Feb. 15-16—Mobilgas Grand Canyon economy run, starting from Los Angeles, California.
- Feb. 17-22—Riverside County Fair and National Date Festival. Arabian Nights Pageant free every night. Horse show each afternoon. At fairgrounds, Indio, California.
- Feb. 18-19—Rodeo and Gila Monster derby, Glendale, Arizona.
- Feb. 18-26—Maricopa County Fair and Citrus show, Mesa, Arizona.
- Feb. 19—Bandollero trek to Wellton-Mohawk project. Starting from Yuma, Arizona.
- Feb. 23-25—Arizona Cattle Growers convention, Globe.
- Feb. 23-26—La Fiesta de los Vaqueros, annual Rodeo, parade morning of February 23, Tucson, Arizona.
- Feb. 25-26—Sierra club weekend camping trip to Cat Canyon in Santa Rosa mountains.
- Feb. 25-Mar. 5—California Mid-Winter fair, at Imperial fairgrounds, four miles north of El Centro, California.
- Feb. 26—Rodeo at Remuda, Wickenburg, Arizona.
- Feb. 26—Thunderbird Meet, Arizona Snow Bowl, Flagstaff.
- February—Oil portraits of Nez Perce Indians, by Mrs. Rowena Lung Alcorn, will be exhibited at Southwest Museum, Los Angeles, daily from 1:00 to 5:00 p. m. during month.



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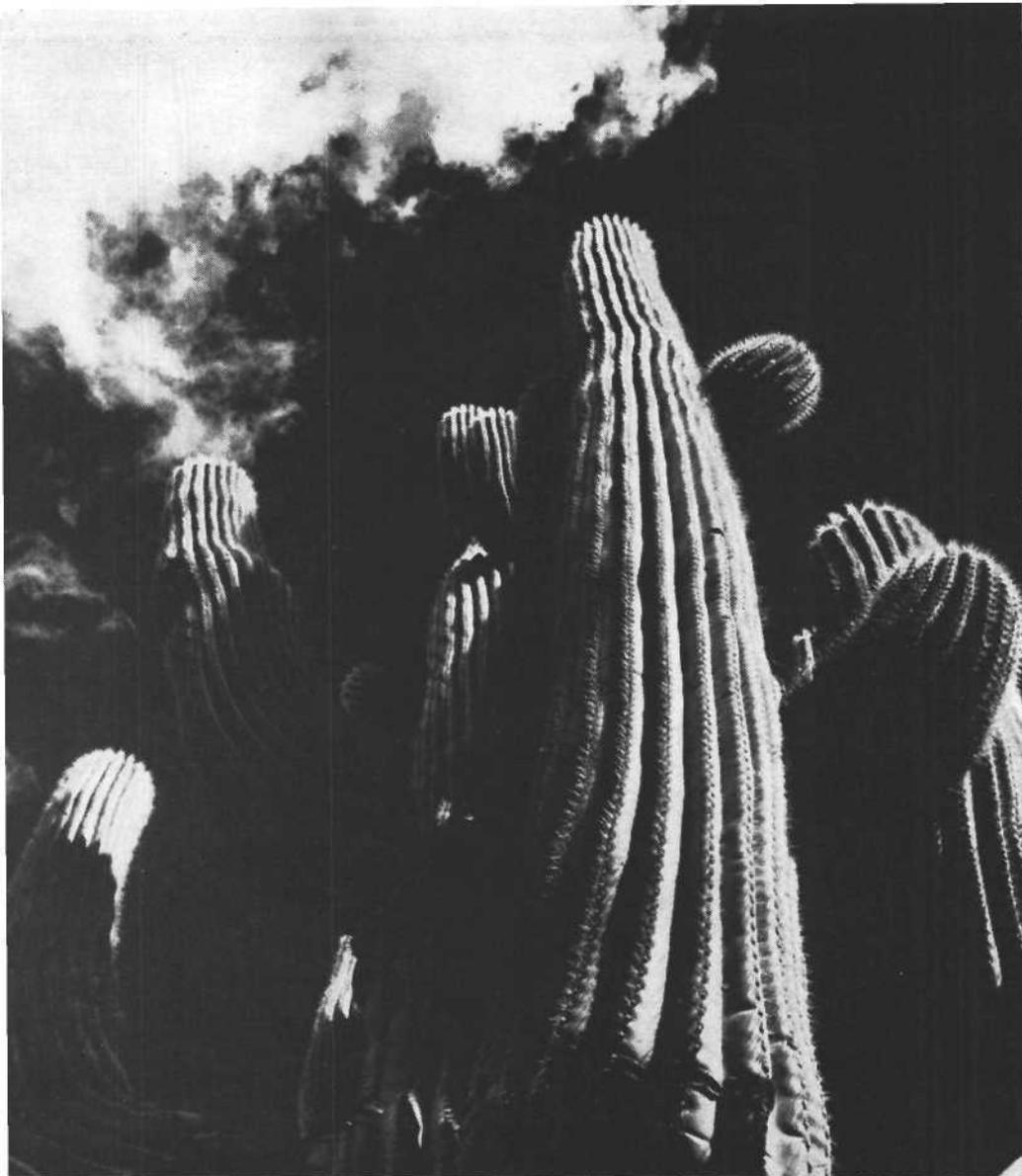
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Saguaro —Photograph by S. Paul Lindau

SOURDOUGH'S LAST CAMP

By HAROLD RAMSLIE
Los Angeles, California

The snows are a-restin', fair and frail,
This night on the Great Divide,
And I'll take the long, long trail,
To camp on the other side.

There I will meet the friends I knew
In the years that are past and gone:
Stray Dog Smith and Faro Sue,
And Casey, the widow's son;

Timberline Bob will sure be there
And the boys from Bonanza Hill;
Alongside my pardner, Rawhide Bill,
I'll look for the Parson, St. Clair;

And with Johnson, who struck it rich—
Carried nuggets around in his purse—
The Homestake Twins, you couldn't tell
which,
And lovely Jennie, the nurse.

Aye, tonight, while the flowers smell sweet
In the dells by the moon-white road,
I'll leave my camp, all snug and neat,
And track to my new abode.

There, in a heavenly, better clime,
My friends they'll welcome me
For to wash the sands of the stream of
time—
And camp for eternity.

I REACH A STAR

By BESSIE GLEN BUCHANAN
Los Angeles, California

You cannot hurt me—it is strange you try.
I think, perhaps, you do not even know
The blessedness of living clean—
Beyond small meanness.

Once I came upon a hill—high reaching
Into white fleeced clouds—
Sharp jutted rocks—precarious the climb,
Yet there, I found serenity
Among the forest pines.
Look up, oh heart, seek beauty in the hills,
And peace of mind in stones and running
rills.

The Step Ahead

By TANYA SOUTH

How dim the faring! Oh, we see
So briefly and so sparingly.
Seldom the full, close step ahead,
So frailly is our spirit bred
In good intentions. Let us then
Be ever wary of our going.
Our every thought or joy or pain
Should be for uplift. Thus bestowing
All strength and purpose, and all ruth
For righteousness, we shall gain Truth.

Awesome Sentinels

By ORA KEHN
Arvada, Colorado

Could it be, they're living tombstones
Of a race that's long been gone,
Guarding with sharp thorns the buried
People of an ancient throng?

Queer, grotesque, these living markers
With their upraised suppliant arms,
Weave their weird and mystic shadows,
In this place of witchcraft charms.

Seen in noontime sun they're brazen,
Warning all to keep away;
In the eerie dawn, they're specters
In a cemetery grey!

Through the moonlight haze they're ghostly
Awesome watchers, strangely cast,
Sentinels well armed for duty,
Keeping secrets of their past!

Like some prehistoric monsters—
Yet, they live and bloom instead;
And they bear such gorgeous blossoms,
Royal crown for royal head!

THE PLACE FOR A LIZARD

By HENRY C. MORRIS
Washington, D. C.

If I were a lizard, I tell you what,
I'd go to Nevada and there I'd squat.
Under the sage-brush—fine and hot
I'd lay out a nice little garden spot.
I'd sell to the horn-toads, blue-bottle flies
With sagebrush dressing and cactus pies.
Also, the bones of tenderfeet,
Who migrated there and died from the
heat.

For the burning sun is a friend of mine,
And the scorching wind is to me sublime.
Alkali dust I fondly love.
Better than ought in heaven above.
So, Ho! for Nevada! And a home in the dust,
It's the place for a lizard, who is strong
and robust,
To build up a fortune and live in ease,
Under the shade of the Joshua trees.

A DESERT RETURNING!

By GRACE PARSONS HARMON
Desert Hot Springs, California

I'm back again! The hills take up the
song!
The length'ning shadows carry it along!
The desert, my own desert, has me back—
Back from the busy mart, the madd'ning
pack!

The mesquite nods a welcome from the
trail;
I hear the lonely whistle of the quail;
The glory of the sunset gleams for me;
The wind across the desert rushes free!

This paean in my heart has one refrain:
O, desert, I am back! I'm back again!

LOST IN THE DESERT

By EMILY I. ALLEMAN
Santa Ana, California

The buzzards circle in the sky—
I see the shadows of their wings,
Passing passing, passing by;
On my brow a damp chill clings,
As they go passing, passing by.
Oh, God, it's hard for a man to die.
With buzzards circling in the sky,
Passing, passing, passing by!



The Park service has provided ample beach and bathing facilities for summer vacation visitors.

Desert Playground . . .

Folks come from all over the world to boat and fish and play in the great recreational area which Uncle Sam maintains on and around the shores of Lake Mead in Nevada and Arizona. The Lake Mead playground has become a popular rendezvous for campers and trailer vacationists—for those who cannot afford or do not care for the luxury of expensive resort hotels. Here is a glimpse of some of the recreational facilities of the area—and of the problems of the Park rangers who are in charge.

By GENE SEGERBLOM

Photos by William Belknap, Jr., and Cliff Segerblom

RECENTLY three young men attempted to row their old leaky boat across Lake Mead to its source in lower Grand Canyon. They brought their boat to the lake by a back road—knowing that the Park rangers would not permit such a craft to attempt the journey, if they were aware of it.

A wind came up and the waves ran high—and the boat began to take in water faster than it could be bailed out. Somehow, the boys made shore—a rocky isolated place, where they abandoned the boat and tried to make their way to the nearest habitation. Some

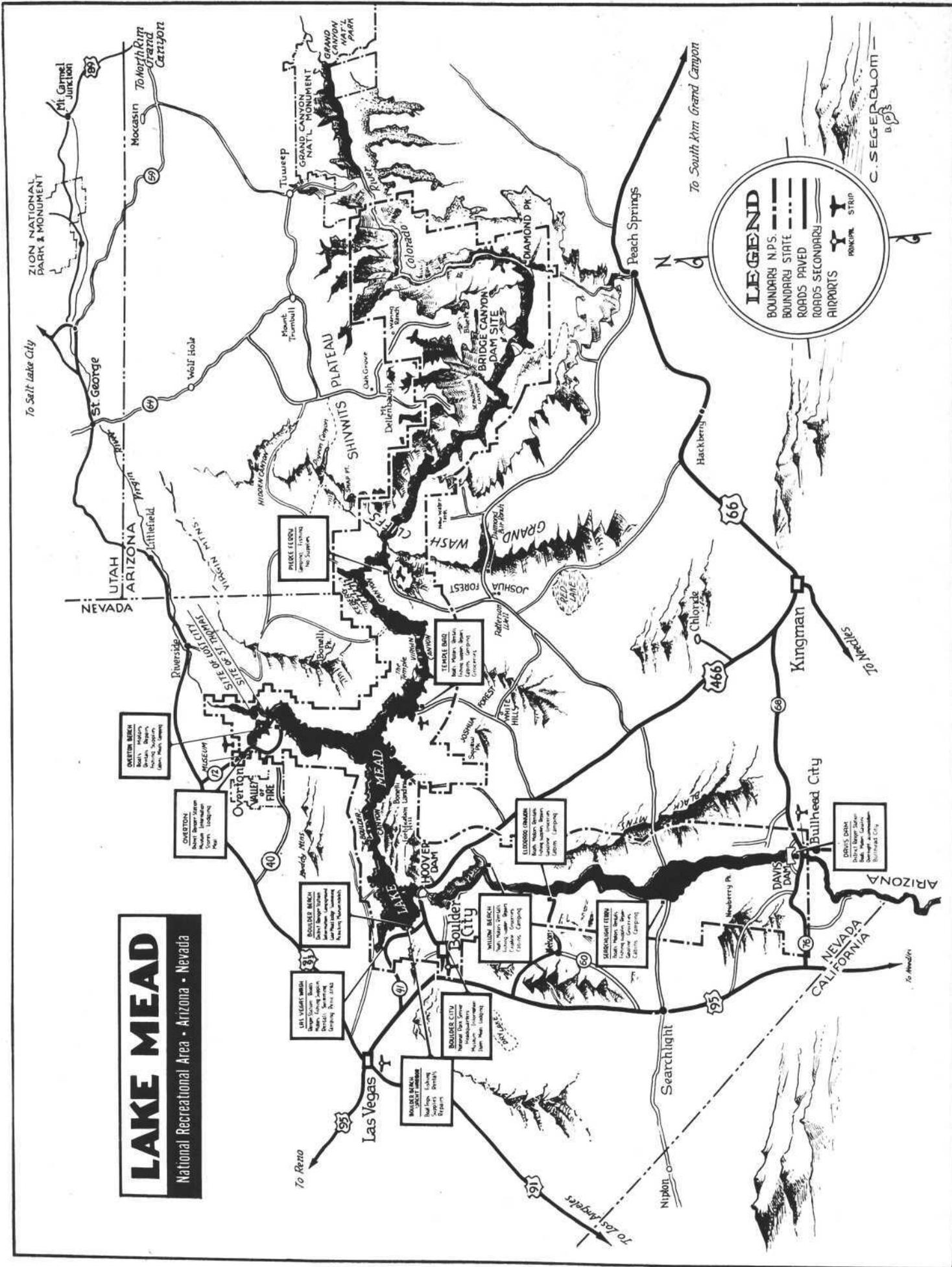
hours later the Park rangers found them, wet and chilled, hovering around a little fire trying to keep warm in almost freezing weather. It was near midnight when the rangers reached them, and three hours later the boys were back in their car and headed for home.

Such rescues are all part of the day's work in the Lake Mead Recreational area where Superintendent George Bagley and a small crew of rangers have the responsibility for protecting both wildlife and thoughtless human beings in a domain that spreads over 2,655 square miles of land and water.

The Park service was assigned the task of administering recreational activities in the Lake Mead desert playground soon after the dam was completed in 1935. Thousands of American tourists and sportsmen flocked to the area to see Hoover dam and enjoy the boating and fishing opportunities provided by the new lake.

The Reclamation bureau, which built the dam, is an engineering and construction organization, with neither the time nor the facilities to entertain such great numbers of visiting tourists.

Since both the Reclamation bureau and the Park service are under the jur-



LAKE MEAD
National Recreational Area • Arizona • Nevada

LEGEND

- BOUNDARY N.P.S. [Symbol]
- BOUNDARY STATE [Symbol]
- ROADS PAVED [Symbol]
- ROADS SECONDARY [Symbol]
- AIRPORTS [Symbol]
- PRINCIPAL STRIP [Symbol]



Boat dock in the lower basin of Lake Mead. Here craft may be rented or chartered for fishing or pleasure cruising.

isdiction of the Department of Interior, it was a comparatively simple matter to bring the two services together and assign to the Park office the supervision of all recreational facilities in the area.

Above the dam, the water backs up 115 miles into the lower gorges of Grand Canyon. The entire 550-mile shoreline for a distance of several miles inland was withdrawn from public entry to protect the purity of the water and provide space for roads and structural work which may become necessary in future years. It is this area, plus the lake itself, that has been designated as the Lake Mead Recreational area and hundreds of thousands of visitors boat, swim, fish, camp and otherwise enjoy this playground annually.

Superintendent Baggle's desk is in a deserted army hospital which serves as the Park administration's headquarters, but he spends much of his time in the field with Chief Ranger Donal Jolley and his 41 rangers, naturalists and workmen.

Three kinds of travelers find their way to the area. First there are those who are migrating to or emigrating from California and choose Highway 466 which crosses over the top of the dam connecting Nevada and Arizona.

Next are the tourists who come here to see the dam and take a fleeting look at the lake and surrounding country.

Then comes the motor gypsy with his trailer or tent. He settles down on the shores of Lake Mead at the Park service's free public campground to stay indefinitely.

The camp has the only shade trees on the entire lake shoreline. Just get-

ting the trees and shrubs to grow was a project. The soil is salty. Water had to be piped from the lake to irrigate the trees and plants daily to keep the 115-degree summer temperature from burning up the transplanted vegetation.

Rest rooms, electric stoves, garbage cans, etc., have to be kept clean. Many campers are not concerned over leaving a place as clean as it was found.

Optimistically, the Park service asks their cooperation with this lyrical reminder:

"Let no one say, and say it to your shame,

That all was beauty here until you came."

The big problem is not keeping the camper happy so he'll come back, but taking care of the crowds that do come. The camp is full almost all year. At times, overflow campers in trailers and tents spread out in the brush on the edge of the camp trying to get close enough to avail themselves of the camp facilities.

"At one time last year," Baggle said, "there were 120 families at the campground which has sanitary facilities for only 75."

In order that a few people may not monopolize the camp, the Park service has put a 30-day limit on camping in one season.

The swimming beaches at Boulder beach, Las Vegas wash and Overton present a difficult problem. They have to be movable. The lake fluctuates in height with the spring runoff and the dry summer. The water's edge is never in the same place. All spring and summer the rangers must pull up the diving rafts, buoys, lifeguard chairs and rest

rooms. Then as the water goes down they have to pull them out into the lake again.

The lifeguards, also Park service employees, have plenty of business. The diving rafts always look closer to shore than they are and about once a day some over-eager swimmer has to be pulled out. Besides saving lives, they help with swimming campaigns, keep one eye on stray youngsters, and act as caretakers of the beach.

Many picnic-swimmers ignore the garbage cans placed every 100 feet on the beach. To keep the beach clean, one man would have to work 24 hours a day picking up the picnic scraps, cans, bottles and gum wrappers. It is not unusual to find broken pop bottles thrown into the swimming water.

According to Chief Ranger Donal Jolley, who has had 30 years of practical experience with the Park service, the visitors even run off with the trash cans occasionally.

Fishing! The rangers work in conjunction with Arizona and Nevada state fish and game wardens enforcing laws. Two of the rangers are deputy wardens. Fishing is not overplayed in publicity given the area. It is good! And it is open season on hapless largemouth bass, crappies, catfish, bluegill, perch and carp 12 months of the year. The same fishing regulations apply to the trout found in abundance in the river below the dam.

The fisherman also gets into trouble. Although the lake is calm most of the time, winds come up quickly bringing whitecaps. Sportsmen are forced to seek shelter wherever they happen to be. If they are out too long, the Park serv-



Motor launches take visitors up the lake and into the lower gorge of Grand Canyon.

ice sends a boat to the rescue. It is a cheering sight to a wet chilled angler huddled in a cove to see the Park service cruiser *Major J. W. Powell* coming his way. A ranger, at that moment, is man's best friend.

"Boating is our biggest headache," confirmed Chief Ranger Jolley. "People won't even inspect their own boats moored on the lake. They insist on putting six into boats meant for two. And they never worry about the leaks even though there isn't a life preserver on board."

Rental of small craft and charter boat trips are well handled by the Lake Mead Boat company, a concession

owned and operated by A. L. "Doc" Deatrick and Edi Juan. They run five trips daily to the upstream face of the dam and charter fishing or sight-seeing trips to any spot on the lake. Three times a week there is a cruiser trip up the lake as far as the entrance to Grand Canyon.

Deatrick and Juan have inaugurated a fisherman's shuttle service. At 7:00 in the morning a large cruiser takes anglers to Boulder canyon where they transfer to row boats to spend the day fishing. At 5:00 they are picked up and returned to the boat dock.

All rescue work on the water is done by the rangers, usually in the *Major*

J. W. Powell, a converted navy craft. The lake is patrolled regularly. To keep everything under close surveillance, the rangers sometimes are forced to take to the air. They usually fly to inspect outlying fishing camps, to Davis dam and to Eldorado canyon on the river below Hoover dam.

On May 18 Superintendent Baggley had been with the National Park service 21 years. He came to Lake Mead in November, 1946, from Isle Royale in Michigan. Isle Royale, a National Park, is the farthest north you can go and still be in the United States.

"It was quite a contrast to come from an area of dense forest and snow-bound winters," Baggley said, "to the barren shores of Lake Mead. The only resemblance between the two is the volume of water. But I do feel that this is one of the most important places in the Park system. Its accessibility, if developed, could make it the most important."

Even the natural features here are above par. There are more than 200 varieties of birds in the wild life refuge with its closed game reserve. More mountain sheep inhabit the area than any other reserve except Mt. McKinley. Desert kit foxes, deer, cougars, coyotes and wild burros are plentiful.

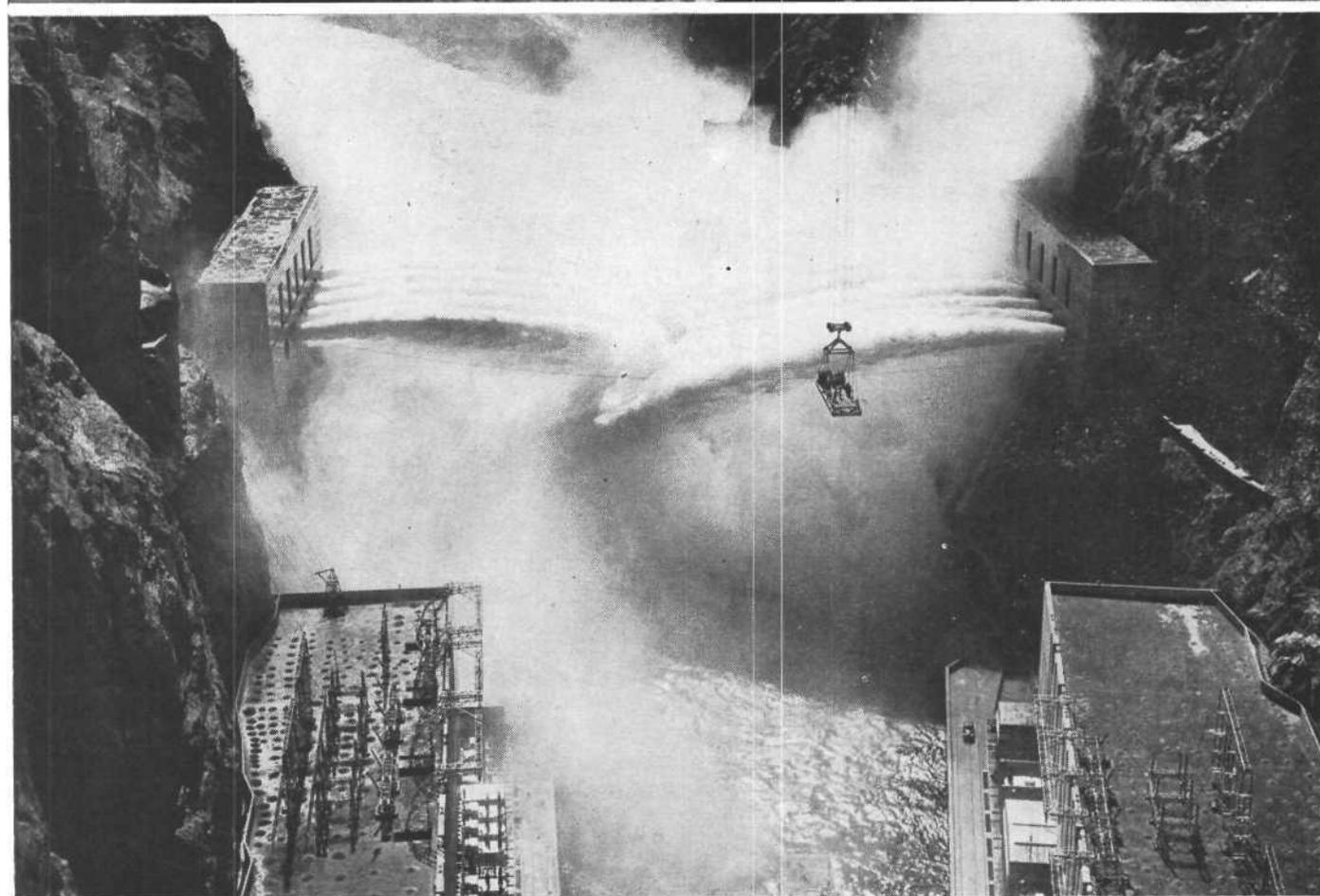
"The animals don't give us any trouble," Chief Ranger Jolley said, "although there are too many wild burros at the moment. We do have to watch for bird poachers on the reserve, however."

Although the flowering season is short, blossoms take over the desert from February until June. Naturalists have a never-ending job of seeking and classifying the highly specialized plant life and protecting the lovely blooms, which may not be picked.

"It wouldn't be so serious," Jolley explained, "if flower lovers would just pick the flowers, but they insist on going off with the whole plant. When I first came here in 1943, there was plenty of desert holly. Now it's almost extinct. If we didn't restrict the picking of flowers, there wouldn't be a bush left along the highways at the end of a year."

Baggley has several pet projects he'd like to get enough money to push. First there's the proposed public campground at Overton, on the north arm of the lake.

At one time last year, rangers counted 80 families camped on the shore despite the lack of camping facilities. They have a museum and keep a ranger there, but judging from the number of tourists—1806 cars in April of last year—they could use more help and a campground.



Above—Five-passenger Cessna plane flying over the area gives the passengers a fine view of the dam and the lower lake.—Mark Swain photo.

Below—Hoover dam puts on a water display for a little group of visitors suspended below the dam from an overhead cable.



It is open season for fishermen the year 'round in Lake Mead. Here is a morning's catch of bass.

Near Overton is Valley of Fire, a lost world of unusual shapes carved in the bright red sandstone by wind and water. It is an area that could be the Palm Springs of Nevada, if there was water. But, as Bagglely pointed out, there isn't "enough water there for one horse." Eventually they hope to dig wells or pipe water from the lake. If water can be obtained, there is no limit to the possibilities of the place as a vacation spot.

Another unpublicized spot is Shivwits plateau. Only a jeep or a pickup truck could make the trip and very few of the thousands of sightseers ever visit the plateau.

Shivwits plateau is in the northeastern portion of the Recreational area, bordering on the Grand Canyon. It is a level plain covering 133,000 acres, approximately 6,500 feet above sea level. About half of the area is for-

ested with ponderosa and pinyon pines, junipers, mountain mahogany and other shrubs and trees. The rest is sagebrush, manzanita and similar chaparral growth and grass. It is acclaimed as a scenic wonderland by those who have been there.

"One thing is certain," Jolley warned, "if you try to get out there and something happens to your car, nobody's coming along very soon to help you out—you're on your own."

He also suggested that persons attempting to reach Shivwits carry plenty of water and food for their own protection.

Bagglely places this lonely spot high on his list of desirable areas for improvement. The only road is now little more than a trail.

The Park service has to maintain 200 miles of desert road and 60 miles of

major highway. Because of limited funds, there has been no new road construction since 1943.

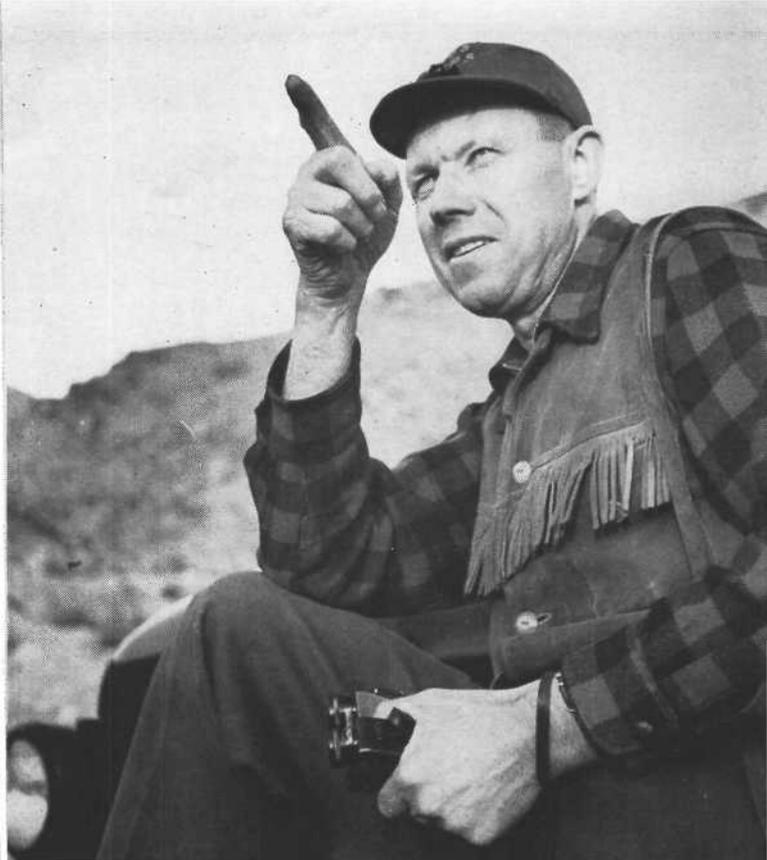
Just outside of the recreational area, five miles off the road to Kingman, Arizona, is the ghost mining camp of White Hills. (*Desert Magazine, Jan. '47.*) Once a boom settlement of 1500 claim-stakers, little remains at the old camp today except crumbling shacks, a neglected cemetery and deserted streets.

Some of the richest ore mined in Arizona is said to have come from here. Twenty-seven miles of tunnels honeycombed the area. It is reported that more than \$12,000,000 in silver and gold was mined here.

Today there are no restrictions on prospecting on public lands, but before ore can be mined from the recreational area permission must be granted by the Park service. The Park administration merely is interested in protecting



This cormorant from Lake Mead bit off more than it could chew. The bony-tail carp proved too big to be swallowed and too spiny to be disgorged. Bird and fish were found floating on Lake Mead by a party of fishermen and turned over to Maurice Sullivan, park naturalist.



George Bagglely, superintendent of the Lake Mead Recreational area for the National Park service. With a staff of 41 rangers, naturalists and workmen he is the Park custodian of 2,655 square miles of land and water providing a wide range of recreational facilities.

the beauty of the landscape against needless destruction.

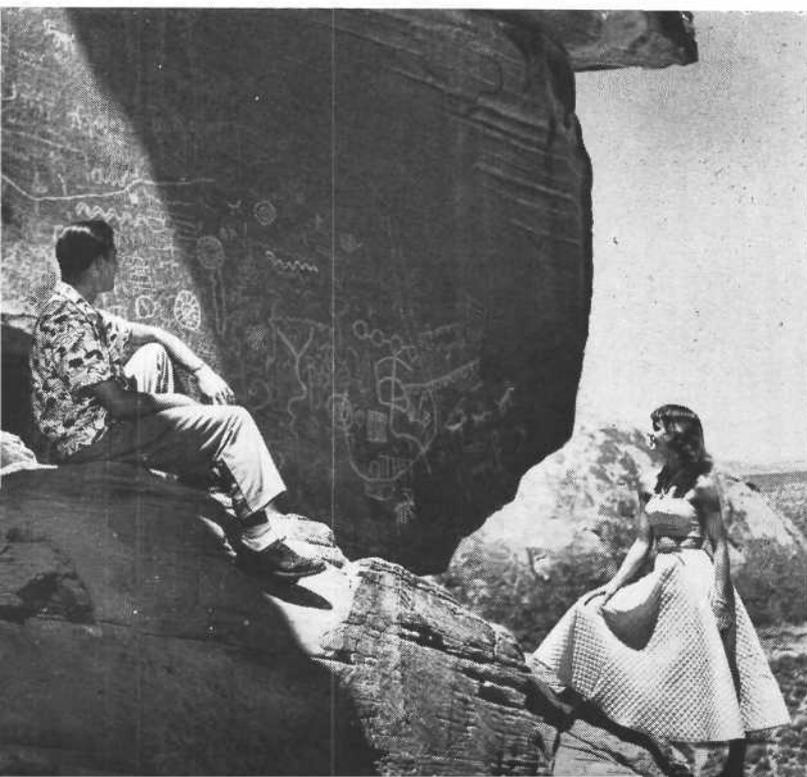
Superintendent Bagglely likes people—but there are times when he wishes fewer of them would come to his playground. "I wish we had facilities for unlimited numbers," he said, "but un-

til such facilities are provided we are reluctant to urge that the numbers be increased."

Bagglely is a Rotarian and a member of the Boulder City chamber of commerce. He works untiringly for his playground. His responsibilities will

be increased in the near future, for water is now backing up behind Davis dam and when it is filled the new lake will almost reach the tow of Hoover dam—and then there will be more water to lure more boatmen and fishermen and sight-seers.

Ancient Indian petroglyphs on Atlatl Rock in the Valley of Fire state park near the shores of Lake Mead.



Visitors often leave the beaten paths to camp among the Joshua trees found near the lake shore.



By JAY ELLIS RANSOM

Photos by the Author

EARLY IN AUGUST my father, Jay G. Ransom, and I decided to take off in our jeep station wagon for a two-week trip through the uranium boom country to secure the highly-prized ore specimens of carnotite, metahuatite, corasite and covellite.

We especially wanted to obtain the rare petrified wood known as carnotite wood, streaked with bright yellow uranium oxide. Usually carnotite is a brilliant canary although it may be discolored by iron and organic matter. Essentially it is a hydrous potassium-uranium vanadate with a hardness ranging from 2 to 2½.

In the last few months the quest for uranium has mounted to boom proportions in western Colorado and eastern Utah. Here lies a great red-ochre belt of sandstone known as the Morrison formation. Trapped in a vast series of rolls or lenses are heretofore unknown sources of atomically strategic uranium occurring in canary-yellow clay lumps and veins of carnotite, usually associated with considerable quantities of vanadium. These lenses frequently show on the surface of the Morrison formation which outcrops all over the Utah-Colorado border region.

Along much of the 2700-mile journey the landscape was arid and unproductive and yet this region has a rugged beauty of great fascination for those who like to explore the remote areas.

Starting in Los Angeles, our route took us into Arizona by way of the north rim of Grand Canyon, thence to Kayenta in the heart of the Navajo country, Monument Valley and along the famous Navajo trail through Monticello and Moab in Utah to the rich Morrison formation and Dakota sandstone country northeast of the Arches National Monument on the central Utah-Colorado border. Here the richest outcrops of carnotite are being mined today. Thence back over atrocious dirt roads across the states of Utah, Nevada and California to San Francisco and home to Los Angeles.

We did not attempt to prospect virgin territory. We knew that carnotite is found in a number of localities in the United States outside the well-known deposits of Colorado and Utah. We wanted to visit the latter region because the mines there have been commercially worked since radium came into prominence shortly after the turn of the century. Prior to the discovery of rich radio-active ores elsewhere, these deposits in 1913 had yielded about 2,700 tons of carnotite



Charlie Cato (right) and son Owen Cato at the Yellow Cat uranium mine in Utah, five miles west of the Cactus Rat mine.

We Followed the Lure of Carnotite

Along the Navajo Trail of northeastern Arizona and eastern Utah a confirmed rockhound and his scientist-author son went in search of the highly-prized carnotite ore specimens. They obtained the cabinet specimens they sought—and more—but in addition explored some of the most wild and remote country in the Southwest as they went from uranium mine to uranium mine in a region that is now experiencing a great new mining and prospecting boom.



Here is a carnotite mine 15 miles north of Kayenta, Arizona. Because of newness of the industry and remoteness of the region, methods are still crude. Location of this mine is a few miles south of Harry Goulding's famed Trading Post in the Navajo country.

ore with a value of more than \$1,000,000 in radium alone. Over 4,000 tons of the ore were mined in 1914.

Dusty from days of travel, our jeep splattered with cloudburst-mud and battered with storm and hail over the Kaibab plateau and the Grand Canyon, we pulled at last into the Navajo trading center of Kayenta.

A score of gaily decked Navajo women loitered about the trading post. Inside a dozen Indian men palavered with the trader. Several children gazed unwinking at us. Presently the trader approached and we asked him if he knew anything about the uranium mines to the north.

"Know anything about it!" he laughed. "I should say I do. There's nothing secret around here about the mining activities of the Atomic Energy commission and the Vanadium Corporation of America. A new mine's just been opened 15-18 miles north of here on the road to Mexican Hat. They've been operating about 30 days now with Navajos doing the mining,

and shipping the ore to Naturita, Colorado."

He described the route to this mine. His directions, he admitted, were vague. "I know that country," he said, "but darned if I can draw you a map of it. There's a ridge of low bluffs running northwestward a mile back of the road. At the junction where a dirt road swings sharply back and then around in a big U is a Geodetic Survey marker. You won't miss it."

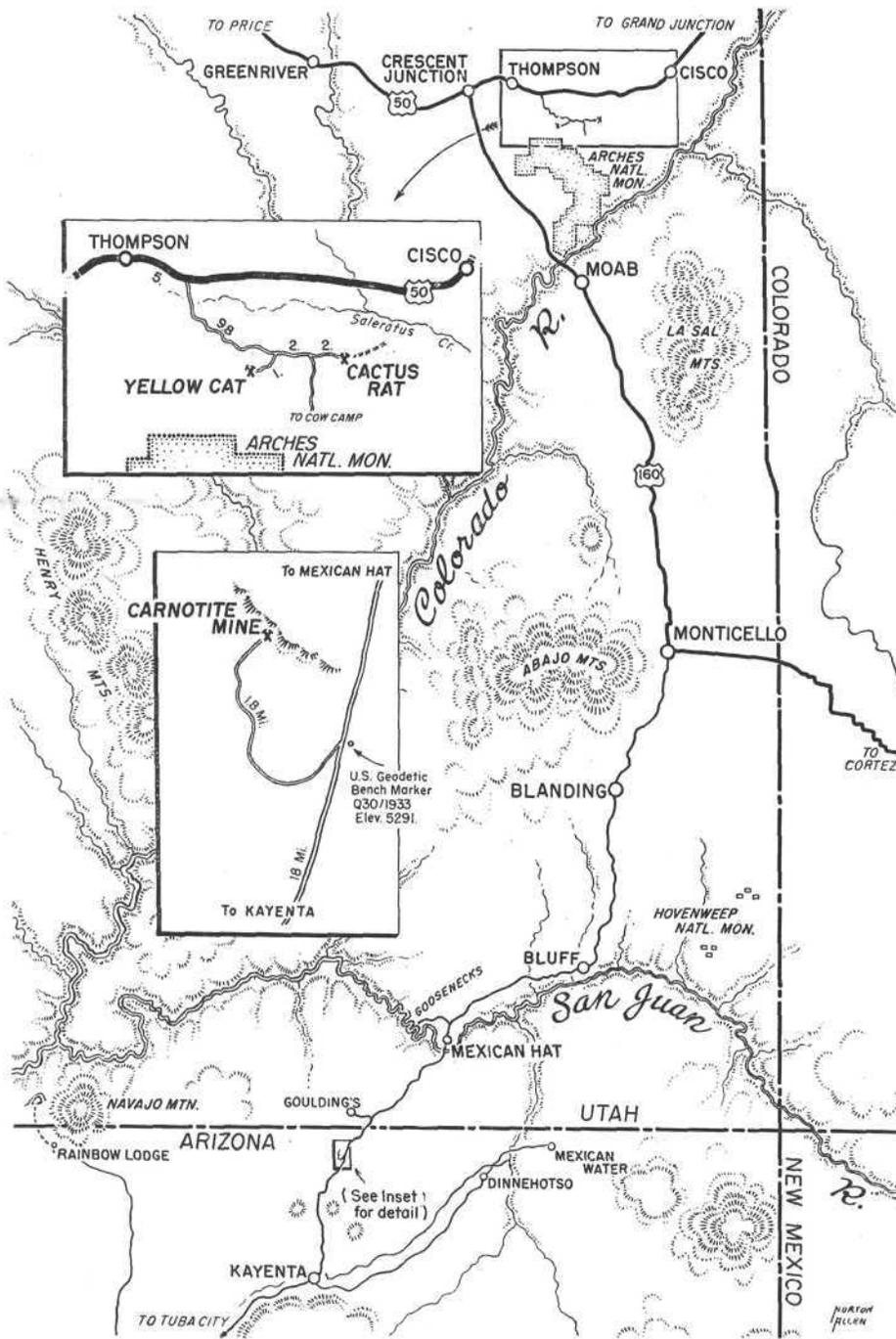
It was no wonder then that we took the wrong road at a junction a few miles east of Kayenta. For two hours we ground ahead in second and low gears over the worst road ever traversed by modern machines until we reached the Indian trading post of Dinnehotso. There were so many washouts following the cloudburst of the day before that we spent most of our time bulldozing ourselves around them through cab-high sagebrush.

At this remote outpost where Navajos come for trading, we purchased two pounds of fine garnets gathered on

ant hills in that region. These semi-precious gems formerly were a source of private income to the Indians but since the tribal authority had issued a decree that all natural resources could be sold only in behalf of the tribal fund, the Indians had ceased gathering them.

"The Indians won't work if they can't realize anything on it," the trader explained a bit sadly. "I used to be able to sell all the garnets they could bring in and get a good price too. I could pay the Indians enough to satisfy them. But now all the money has to be turned over to the tribal treasury."

The sun was nearing the western mountains when we pulled out of Dinnehotso. We crawled around the same washouts in the same low gear and eventually reached our junction. The last rays of the descending sun were highlighting the tall monoliths of Monument Valley with an unearthly glow when we turned north on the flood-damaged road to Mexican Hat. Darkness had fallen save for the luminous



twilight that touched the red-ochre mesas all about us when we reached the carnotite mine described by the Kayenta trader. There we made camp for the night.

Early in the morning we explored the open-cut workings before the seven Navajo Indian miners arrived to begin operations. Later, from Harry Goulding at his trading post on the nearby Utah border, we learned that these deposits had been discovered by the late John Wetherill, famous trader and guide who led the first white party to Rainbow bridge and is credited with the discovery of the Mesa Verde prehistoric Indian ruins. Since the strike lay on the Navajo reservation, Wetherill made no attempt to stake it out or claim title to it. But high on the

top of the bluff to the north he set an iron stake and built a low cairn of stones, both of which are still there.

We made several interesting discoveries incidental to our picking over the mine dump. Although the length of the bluff is scarcely 200 yards and its summit barely 200 feet wide, we found a small petrified forest of whole tree trunks and innumerable sections on its top. Brief explorations to the east showed that the forest did not extend beyond the bluff. The wood is dull and not of gem quality, but the find has interesting implications. Also on top of the sandstone bluff were many natural bathtubs, or potholes, filled with water. These ranged from three feet in diameter and a few inches deep to the largest which was easily

20 feet long by 15 wide with enough water in it to permit a shallow swim. All were filled with fresh rain water.

These natural rain-catchers serve the desert-wise Navajos as a source of water during dry periods. Later, when the Indians came up to the mine from their nearby hogans, one of them filled a five-gallon water can from one of the basins.

With the sun well up in the sky and the purple shadows of Monument Valley giving way to red sandstone reality we pushed on past the base of one of the monoliths that constitute the "monuments" until we reached the Utah state line. The road was rough, dusty and washed out. At Goulding's trading post we stopped to refresh ourselves and make inquiries. Goulding was very busy with a movie company on location shooting Indian scenes, but in his generous way he took time out to talk about uranium mining and the old-timers who first opened up the southwestern Indian country.

His trading post is not on the main road, but his hospitality has become so well known that few motorists ever come this way without stopping for a few hours or days at Gouldings. A few miles away in Monument Valley stands the movie set of Old Tombstone. I inquired about the strange city in the desert that is not on my map of northern Arizona.

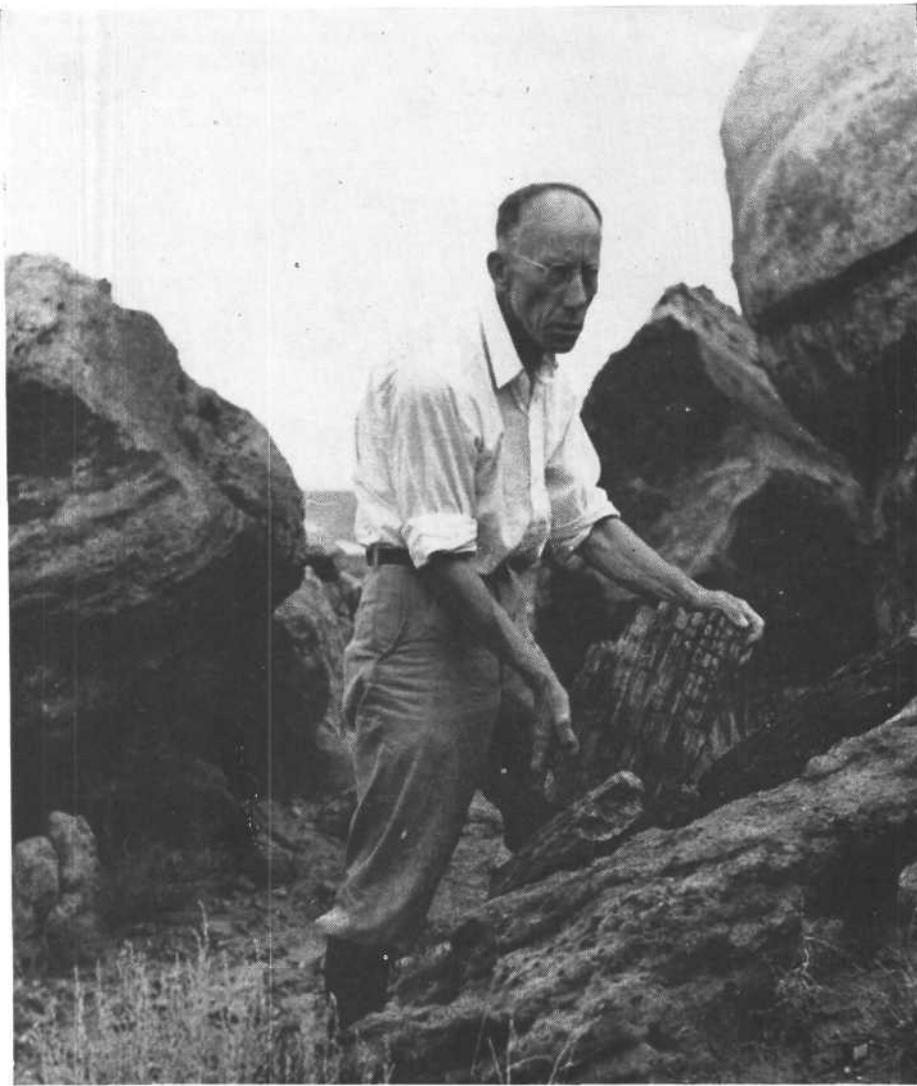
Harry laughed. "That's the setting where Fort Apache was filmed, followed by Clementine. You'll find it boarded up with maybe a few Navajos living in the unused shacks."

On our way out we stopped to visit the town. Even today this solidly built set looks like an early-day town. The Bird Cage theater is an exact replica of the original Old Tombstone opera house.

Two miles south of Mexican Hat, where a suspension bridge crosses the muddy waters of the San Juan river, a dirt road beaten and battered to bedrock by ore trucks leads southeastward 28 miles to what is becoming the greatest uranium deposit ever located in the United States. Harry Goulding found it on his two-month search of Wetherill's original discovery when the Atomic Energy commission advertised its need for the bomb-blast element.

Mexican Hat has a trading post with canned goods for Navajos and the men who work the uranium mine down on the San Juan. Navajo blankets were for sale at prices that varied according to weave and texture. We bought soft drinks and pushed on, climbing a steep grade to the summit of the plateau above the river.

That night we camped 7,500 feet



Jay G. Ransom, father of the author, is here shown holding a piece of petrified wood found near the Kayenta, Arizona, carnotite deposit.

high on the wooded flanks of the Abajo mountains a few miles south of Monticello, Utah. Here in this little Mormon town that faces 200 miles into western Colorado, 200 miles across rugged terrain into northwestern New Mexico, and 150 miles south into Arizona is a war-spawned vanadium processing plant. It is now being converted into a uranium plant for handling the Utah and Arizona ores of uranium and vanadium. At present nearly all the ore mined in the region has to be trucked to distant Naturita, Colorado, where the Vanadium Corporation of America has its headquarters.

From Monticello we followed the paved highway to Moab and thence to its junction with U. S. Highway 50 and turned east to a point five miles beyond Thompson where unmapped roads lead into another area where rich uranium claims are being worked. We lost our way in the wilderness of breaks and faults and finally arrived at a remote cow camp.

Eventually we reached the Cactus Rat uranium mine and were invited to dinner by George Gallent, the foreman, who proved to be as fine and hospitable a host as one would encounter anywhere.

Gallent showed us over the open-pit workings. "The uranium is found in the Morrison formation," he explained, a wave of his hand indicating all the broken and faulted sandstone bluffs and cliffs that stretched toward the Colorado mountains to the east. "About 40 mines in this district were worked all through the war for vanadium. That's the lightweight metal used in alloying steel into armor plate. Uranium wasn't worth ten cents a ton then, but when the government began to buy it after Hiroshima, the old mine dumps began to pay off. Take the Cactus Rat, for example. We came here several months ago and the Minerals Engineering company under the presidency of Blair Burwell—he's one of the most prominent mining engin-

eers in the West—bought the Cactus Rat."

Six men help George operate the mine. He told us about the work. "The Cactus Rat produces mainly corasite, metahuatite and carnotite, and covellite. The ore bodies are found in the form of rolls, or lenses, scattered all through the top layer of the Morrison formation where they frequently break through the surface. I know just about where to drill to hit good ore. We're shipping 25 tons a day—it'll soon be 50 tons—to the Naturita, Colorado, plant 140 miles from here."

He went on to explain that although the present boom is for uranium, the vanadium was not being tossed aside in the new mad scramble for atomic energy. Under the impetus of the Uranium Incentive Plan the workings of the old mines are becoming doubly productive, although the emphasis is placed on uranium oxide.

"High grade ore runs about 1 percent U_3O_8 ," he went on to say as he helped us pick out some colorful specimens from ore piles being made ready for shipment. "The low grade scarcely reaches 0.2 percent vanadium, in the oxide V_2O_5 , runs from a high of 15 percent to a low of 2 percent."

After a fine dinner prepared and served in the semi-underground cook house, we roamed over the adjacent hills. The Cactus Rat mine is situated in a flat bowl surrounded by steep bluffs immediately to the north and east. From the talus slopes petrified dinosaur bone fragments continually weather loose to be scattered over the flats by rain storms. We gathered numerous samples of the deep red, jasperized bone and noted the countless fragments of fine jasper float that littered the gravels. Although we did not find any jasper large enough to be worth keeping, we discovered that all over the hills and nearby flats were quantities of moss agate and pseudomorphs after wood containing red crystallizations.

We had at last almost everything we had come for. Only carnotite wood remained somewhere in the region to complete our collection. We asked George Gallent about it.

"Carnotite wood?" he repeated. "Sure. There's plenty of it down at the Yellow Cat mine about four miles west of here. Charlie Cato and his son, Owen, are shacked up there, prospecting around for the owners. They'll probably have a crew in there mining before long when the Monticello plant gets started."

We thanked our host and in the bright morning sunlight headed for the Yellow Cat. There we found the Catos busy sacking up ore samples.

"Sure, there's carnotite wood around here," Charlie told us with a wide grin. "Out there in the breaks." He indicated by a wave of his hand the reddish sandstone of the eroded and fractured Morrison formation. Owen, tall and rugged, with eyes and mouth forever creasing themselves in quick smiles, nodded.

"You won't find it yourselves," he said. "Come on with us. We'll take you to whole trees of carnotite wood. It's noon anyway, and we could use a rest ourselves." That's how we got our carnotite wood.

On the way Charlie showed us a six-foot lizard tail he had found in a ledge. "Must have been lots of queer dinosaurs around here once," he said. As a token of our appreciation, I suggested we help him carry the broken sections of the 500-pound stone tail back to the car.

"Why not lay it out in front of your cabin?" I suggested. "Other visitors can see it, then, and save you a trip way out here to show it." Both Catos thought that a good idea and we all buckled down to lug the pieces back to the pick-up.

"You never know what you'll find next out in these hills," Owen laughed. "And they haven't all been prospected yet." Charlie, who's been roaming the West since he was a boy, chipped in: "Gold and silver in those La Sal mountains, and no doubt plenty of uranium deposits, too. Nobody's been up there, really, to find out."

At last we had everything we came for: uranium ore in big gleaming yellow chunks of the raw oxide; slate black vanadium ore streaked with the canary yellow traces of associated uranium; and now a gunny sack full of carnotite wood. One chunk, thanks to Charlie's generosity, weighed more than 30 pounds.

We headed west toward our California home. Had more time been available we surely would have done some prospecting on our own. The La Sal mountains looked inviting. And the Uranium Plan, as drawn up by the Atomic Energy commission, is designed to make prospecting for this vital element profitable.

The commission guarantees for ten years a minimum price of \$3.50 per pound for uranium oxide, U_3O_8 . In addition to the minimum price guarantee, the commission will pay for the same period a bonus of \$10,000 for delivery of the first 20 short tons of uranium-bearing ores or mechanical concentrates assaying 0.20 percent or more of uranium oxide by weight from any single mining location, lode or placer which has not previously been worked for uranium.

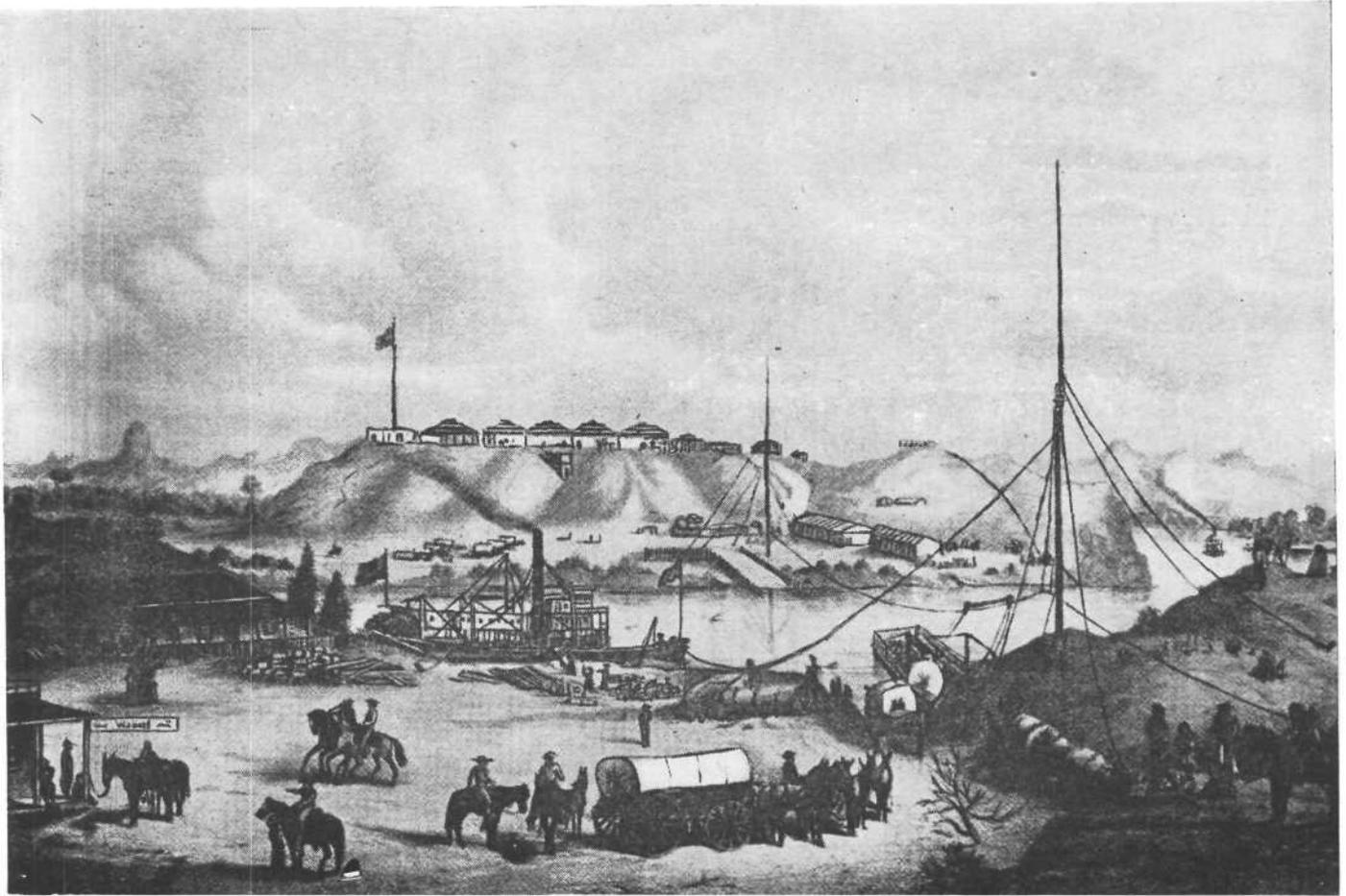
Here's a hint to those who might wish to follow the uranium trail after cabinet specimens. In general, the owners of the carnotite deposits do not like collectors to remove the rich canary yellow ore. The Atomic Energy commission raised many restrictions during and following the war, most of which are not today enforced, but do not expect to be able to go in with a truck and cart away this high-value mineral. Nevertheless, there are scores of abandoned mine dumps scattered over the lonely hills waiting for the collector who has time to pick them over. In the frenzy for vanadium, the carnotite ore was thrown away and nearly every abandoned mine has a dump rich in carnotite.

Roads to the carnotite mines are not improved. We traversed hundreds of miles of desert trails in second and low gear. It is no place for a shiny new passenger car. But it has become a very important region not only to the United States but to the whole world, for the energy locked in these sandstone hills, now that men have learned how to release it, may play a critical role in human affairs in the years ahead.

TRUE OR FALSE

Here are 20 new headaches for the desert fans who like to test their knowledge of the Southwest—its history, geography, botany, geology, Indians and general lore of the arid country. Even those who do not know anything about the desert should get 10 of these right. A score of 15 is good, 16 to 18 is exceptional, and if you score more than 18 you are either very smart or very lucky. The answers are on page 30.

- 1—It is easier to drive your car over sandy roads when they are wet than when they are dry. True..... False.....
- 2—Furnace Creek Inn in Death valley is operated by Death Valley Scotty. True..... False.....
- 3—It is against the law to use dead ironwood for campfires on the desert. True..... False.....
- 4—The ghost mining camp of Rhyolite is in Nevada. True..... False.....
- 5—Navajo Indians were breaking and riding wild horses before the white man discovered America. True..... False.....
- 6—According to geologists there are three general types of rocks: igneous, sedimentary and metamorphis. Sandstone belongs to the igneous group. True..... False.....
- 7—Historian who contributed most to present day knowledge of Juan Bautista de Anza and his historic trek to California in 1775 and 1776 is Herbert E. Bolton. True..... False.....
- 8—Juniper, growing in its natural habitat, is never found growing below sea level. True..... False.....
- 9—The Indians were mining turquoise in New Mexico and Nevada before Columbus discovered America. True..... False.....
- 10—Elephant Butte dam is in Arizona. True..... False.....
- 11—Joshua trees are believed to have been given their name by the early Mormon settlers who came to California. True..... False.....
- 12—Kaiparowitz is the name of a plateau in Utah. True..... False.....
- 13—Ubehebe, one of the most famous craters in the Southwest, was active when the Jayhawkers crossed Death valley in the winter of 1849-50. True..... False.....
- 14—Carlsbad caverns in New Mexico are maintained and supervised by the U. S. Park Service. True..... False.....
- 15—Indians generally used a bone tool for the flaking of obsidian to make arrowheads. True..... False.....
- 16—Smoke trees on the desert often live to be 250 or 300 years old. True..... False.....
- 17—The flower of the wild desert Datura is white. True..... False.....
- 18—The state university of Arizona is at Phoenix. True..... False.....
- 19—The Bill Williams river in Arizona is a tributary of the Colorado. True..... False.....
- 20—Desert Indians still use the roots of certain species of Yucca for soap. True..... False.....



Fort Yuma in the 1850s. Photographic reproduction from the C. C. Pierce collection, taken from an old lithograph.

He Explored the Unknown Colorado

Here is concluding instalment of the story of Lieut. Joseph C. Ives' adventurous steamboat trip up the unexplored Colorado river in 1857-58, under orders from the U. S. secretary of war to "determine navigability of the Colorado." After assembling their boat under difficult conditions near mouth of the river, the explorers made their way to Fort Yuma, then on into unknown country above. They left behind the valleys occupied by the Yuma Indians, and each day their difficulties increased as the river became wilder and their supplies began to run short. But Ives would not give up. And he finally did reach what he had to admit was the head of navigation.

By AL HAWORTH

AS the explorers proceeded laboriously upstream, each successive range of mountains presented more striking varieties and combinations of color. The men were beginning to believe there might be some truth in the wild tales told by trappers about the fantastic Grand Canyon said to be many miles above, which was already a legend.

Many of the mountains examined by Dr. Newberry showed the presence of gold, silver, lead, iron and copper ore. And the amazing fact that Lieutenant Ives still considered the Colorado a navigable stream—even after all the difficulties encountered—is proven by this entry in his report:

"A careful search might develop ample stores of treasure, which the close

proximity of water transportation would greatly enhance in value." The lieutenant never did change his mind.

Passing through Monument canyon, the most colorful yet discovered, with its fantastic shapes and outlines, the little party came out into an open valley and began to look for the mouth of the Bill Williams tributary. In 1853 Ives had accompanied the Whipple expedition, exploring for a railroad route along the 35th parallel, and had descended the Bill Williams to its confluence with the Colorado. Mouth of the stream had been at that time—in the month of February—about 30 feet wide and several feet deep.

But now there was no Bill Williams. Ives was "confounded", and his companions accused him of making a great topographical blunder. He was sure of his location, however, ordered the boat to head for the left bank, and close examination revealed "a very narrow gulley, through which a feeble stream was trickling. This was all that was left of Bill Williams Fork." The former mouth had been filled up and overgrown. The explorers had been introduced to a western river.

They learned, too, how the Southwest desert can erase signs of man's invasion. Lieutenant Whipple's party had

been composed of 100 men, 200 mules and four wagons. But the trail was entirely obliterated, not a trace, even of the wagons, remained.

It was on February 1 that Ives and Captain Robinson had their first sight of the famed Mojave Indians. While out for an evening stroll, the white men discovered two warriors lying on the bank. The watchers doubtless had been sent down from the valley above to report on the expedition. We must believe Ives' description of them to be accurate, for he was not given to exaggeration and had not added romantic glamor to other Indians he saw. He wrote:

"I at once knew them to be Mojaves. One of them must have been nearly six feet and a half in height, and his proportions were herculean. He was entirely naked, excepting the ordinary piece of cotton about his loins, and his chest and limbs were enormously developed. A more scowling, sinister face than that which surmounted this noble frame I have seldom seen. His companion was smaller, though a large man."

What has happened to these magnificent specimens? Perhaps, as Ives pointed out early in his report, "as is always the case, they have deteriorated since the whites have come among them."

Just after leaving the vicinity of the Bill Williams river, the party hit rough going on the river and, adding intense discomfort to their difficulties, lived through a three-day desert sand storm. Scarcely 24 miles was made in the three days. Those who have been caught out in a real sand storm will recognize this description: "We were nearly blinded, and choked by drifts of fine sand that darkened the air and penetrated into the luggage, bedding, provisions, fire-arms, and the very pores of one's skin."

A month out of Fort Yuma Lieutenant Ives awoke to the fact that the ship carried rations for only two weeks more. Should the pack train scheduled to be sent from the fort be detained, supplies would be exhausted. So he determined to begin trading with the Indians. The boat was still in the Chemehuevis valley, although approaching the Mojave range and "The Needles," a cluster of slender and prominent pinnacles aptly named by Lieutenant Whipple. By a fortunate occurrence a Chemehuevis chief, who had been in Whipple's camp for some time, hailed the steamer from the shore and Ives took him aboard. Negotiations were opened for beans and corn. Camp was made the night of February 6 near headquarters of the Chemehuevis nation, and in response to word spread by the chief "about a dozen Indians brought baskets and earthen

bowls of corn and beans" to trade for manta and beads.

They came prepared for long haggling. But Ives did not settle into the pattern. His account of the incident is a classic:

"I made them place their burdens in a row on some boards laid out for the purpose. Asking each in turn whether he preferred beads or manta, I placed what I thought a fair amount of the desired article opposite the proper heap of provisions. The whole tribe had crowded around to look on, and their amusement during this performance was extreme. Every sharp face expanded into a grin as I weighed the different piles in succession in my hand, and gravely estimated their contents; and when, the apportionment being over, I directed two of my men to bag the corn and beans, and coolly walked away, the delight of the bystanders at the summary method of completing the bargain, reached its climax and they fairly screamed with laughter."

On final day of the sand storm the steamer was able to make only three miles, but this brought the explorers to the entrance of Mojave canyon. Following the storm the weather was serene, "the atmosphere indescribably soft and limpid." With the aid of lines, the boat was taken over a roaring rapid near entrance to the canyon, then as an abrupt turn was rounded the men glimpsed the cavern-like approach to "the profound chasm beyond."

It was a sight such as they had never before witnessed. Ives called it a scene of imposing grandeur. "On either side," he wrote, "majestic cliffs hundreds of feet in height rose perpendicularly from the water. As the river wound through the narrow enclosure every turn developed some sublime effect or startling novelty in the view." Present-day travelers are still awed by the majesty of the Colorado canyons.

Night almost caught the explorers in the defile, but they emerged into the Mojave valley beyond the range just in time to make camp for the night.

That their every move was under the close scrutiny of unseen eyes became evident soon after the *Explorer* started up-river next morning. A column of smoke rising from a little peak near bank of the river was proof that a watcher had been stationed there to warn the Mojaves that the steamboat was approaching.

The Mojave valley presented a far pleasanter picture than the voyagers had previously seen. It was open country, with foliage and green trees, at its best in spring attire. The course of the river could be followed as far as the eye could see. On both sides was a belt of alluvial land from two to six

miles wide, "garnished with inviting meadows, broad groves of willow and mesquite, and promising fields of grain." What a sight this must have been to the weary men.

As soon as the steamer was well out of the hills, the Mojaves began to cluster upon banks of the stream. Ives noted—he took this as a dependable sign—the presence of women and children and knew the Indians had no immediate hostile intentions.

This tribe impressed the lieutenant greatly. He rated them much superior to any of the Indians who lived farther down the Colorado. He was amazed at the fine physiques of the men, reported that some were "gigantic." Their faces showed intelligence "and an agreeable expression." The women over the age of 18 or 20 were almost invariably short and stout, but the comparatively young army officer did not fail to observe that the younger girls "are very pretty and have slender, graceful figures." This was not a difficult observation to make, since the women wore only a short petticoat made of strips of bark, were bare from the waist up.

The Indians immediately opened trading with the exploring party. They brought corn and seven or eight varieties of beans. Ives also added to his provisions a small amount of wheat and a few pumpkins. He learned that the Indians raised watermelons, but it was too early for that delicacy. Everything he could acquire, the lieutenant took on board, for only a week's supply of his own stock remained.

It was the next day, February 11, that Lieutenant Ives had a significant and formal meeting with Chief Jose, one of the five principal chiefs of the Mojave Indians. As the *Explorer* steamed up the river a few miles from the previous night's camp, an immense throng of Indians was seen gathering in an open meadow. It was Chief Jose and his warriors. It would be policy, Ives decided, to stop for an interview—and besides, there was wood nearby for the steamer.

When the party had landed, the chief marched up with dignity. A crier walked a dozen paces in front to scatter the women, children and dogs from around the conference spot where Lieutenant Ives awaited the great man. An old man with noble bearing, the chief in honor of the occasion had painted his face entirely black except for a red stripe from his forehead down the bridge of his nose to the chin.

This was a crucial meeting for Ives. It could mean success or disaster to his expedition. He found it difficult to satisfy the Indians about the purpose of the trip. They could not understand why the white men should come up the



Before entering the country of the gigantic Mojaves, the exploring party for several days traveled through the valley of the Chemehuevis Indians, came to know them as "complete rogues." They were small, shrewd, inveterate thieves, but traded freely with the Ives party.

river in a steamboat and go directly back again, nor why they kept in communication with Yuma by runners.

Ives must have been a good and convincing actor and orator. Combining pantomime and the services of his interpreters, the lieutenant apparently succeeded, for the chief agreed to have his people bring in provisions and said he would send guides to conduct Lieutenant Tipton and his pack train up the river. He detailed an Indian to carry a package to Fort Yuma. He also accepted Ives' invariable ruling that no Indians should be about his camp after sunset.

Chief Jose was invited aboard the steamboat, but declined. "His friends," wrote Ives, "appeared to think that he had done a prudent thing."

How did the lieutenant carry on conversation with the Indians? It was a complicated process. Here's the way it went:

"I deliver my message to Mr. Bielawski, who puts it into indifferent Spanish for Mariano, whose knowledge of that language is slight; when Mariano has caught the idea he imparts it in the Yuma tongue, with which he is

not altogether conversant, to Capitan, who, in turn, puts it into the Mojave vernacular."

What changes his remarks underwent during these stages the lieutenant could never know, but he observed that they were "sometimes received by the Mojaves with an astonishment and bewilderment that the original sense does not at all warrant."

A near clash with the Mojaves was avoided on this first occasion only by the intervention of Capitan, who was highly respected as a warrior. Next day things had smoothed over and Ives was much relieved. As he well knew, the little party of 24 men in an open boat, half the time stuck upon a bar, would be virtually at the mercy of several hundred men concealed in the thickets that lined the banks of the Colorado. So a break in amicable relations had to be avoided if at all possible.

It was two days later when the lieutenant met an old friend. He was Ireteba, a sub-chief who had been a guide for Lieutenant Whipple when he passed through the valley in 1853, accompanying him through the country

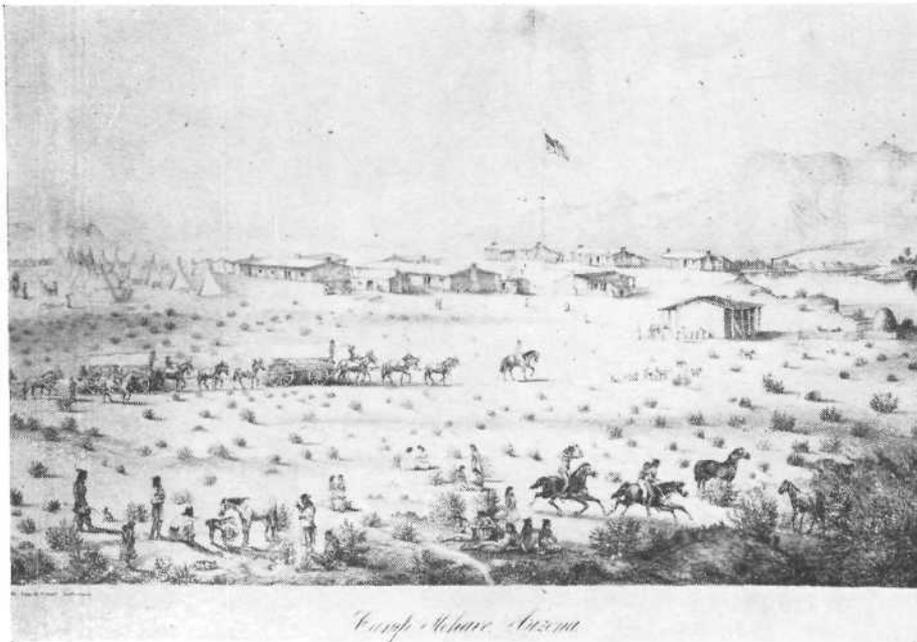
west of the Colorado as far as the Mormon road to Los Angeles. Ives immediately proposed that Ireteba come aboard and continue the trip, to act as guide on the overland journey eastward after leaving the river. Ireteba was willing, brought with him a 16-year-old lad named Nah-vah-roo-pa.

Friendly relations had now been established with the Mojaves, an adequate supply of beans and corn was on hand, and many zoological specimens had been added to the collection.

The Mojaves themselves greatly interested Ives and he regretted the lack of time to study their habits and customs. He made one observation which, although true of Indians to this day, is not generally understood by the whites.

"In most respects," he reported, "they think us their inferiors. I had a large crowd about me one day and exhibited a mariner's compass. They soon learned its use, and thought we must be very stupid to be obliged to have recourse to artificial aid in order to find our way."

Navigation through pleasant Mojave valley, where in February winter had given place to spring, had not been dif-



Fort Mojave in the 1860s. Photograph from the collection of Arthur Woodward, curator of history in the Los Angeles Museum.

ficult. Two rapids, several troublesome shoals, had impeded progress, but as a rule the going had been better than at any other place above Fort Yuma. Lieutenant Ives made his usual excuse for the river, declared that with a boat of lighter draft than the *Explorer* regular navigation "would present no difficulty."

By now the voyagers could see a range to the east of the Mojave valley that they called the Black mountains. The range crossed the Colorado. Where the river breaks through this chain "there is doubtless a stupendous canyon," Ives wrote on February 17.

Entering the foothills of the Black mountains, the *Explorer* was in trouble. Rapid followed rapid, each more vicious than the last. At one the boat was lightened, a line taken out ahead, and after hours of hard labor the steamer was pulled through. At this instant the line broke and the helpless *Explorer* swept back down through the rapid, bumping upon the rocks, and was in imminent danger of having her hull stove in. The day's work was undone, and it took half of the next day to extricate the boat from where she had wedged between some rocks. Half of another day was spent in a second attempt to surmount the rapid.

Top it off, another sand storm came up and throughout the following day the men "ate, drank, breathed and saw little but sand." By this time some of them, at least, must have repented their presence with the expedition.

And still Lieutenant Ives defended his river. "As has been the case at places in the lower portions of the Colorado, the bar that has here de-

tained us three days would not have stopped a boat of six inches less draught, with a smooth bottom, as many hours."

And again: "It is probable that there is not one season in 10 when even the *Explorer* would encounter one-fourth of the difficulty that she has during the present unprecedentedly low stage of water."

Success thus far in ascending the rapids raised hopes that the expedition might in some way actually reach the mouth of the Virgin river and the Great Bend of the Colorado. Already the party was in country seen by but few white men before. And the mysterious river beckoned them on.

Ireteba, the Mojave, was becoming infected with the enthusiasm. But his knowledge of the river tempered his hopes. There were yet four difficult rapids below the Great Bend, he knew. The last of these occurred in an immense canyon, where the channel was filled with huge rocks and the water rushed in a furious white-capped torrent. He passed his knowledge on to Lieutenant Ives, who recorded on February 24:

"Here, Ireteba informs me in emphatic pantomime, we shall come to a dead stop."

As the steamer progressed, walls of the entrance to the gorge through the Black mountains became plainly visible. Was this Black canyon to be, as Ireteba said, the head of navigation? The river flowed now for a short six miles through Cottonwood valley, surrounded by mountains not quite as high as those ahead, and entered a region that had never, as far as records

showed, been visited by whites. Tense-ness in the party increased as they approached the locality where some supposed that the famous "Big Canyon", reported by earliest Spanish explorers and later confirmed by infrequent trappers, commenced. Tales of this Big Canyon staggered the imagination, but there appeared to be enough evidence to indicate the reports were not exaggerated.

Whether the Black canyon ahead was the legendary Big Canyon was a question uppermost in the explorers' minds, but in any event they could already see that it far surpassed anything they had yet encountered.

Meanwhile word had been received by runner that Lieutenant Tipton had started with his pack train from Fort Yuma the middle of February. It wasn't a day too soon, and arrival of the train was looked forward to eagerly during the early days of March. Diet for the past two or three weeks had been limited to the corn and beans obtained from the Indians. "This diet," wrote Ives, "agrees wonderfully with the Mojaves; but either our stomachs are not sufficiently trained to it, or it is not wholesome fare for whites, for some of the men suffer a great deal." Lack of food combined with the hard physical labor involved in snaking the steamer up treacherous stretches of the river had reduced some of the men to actual weakness. The want of coffee and the absence of salt were severe privations.

Leaving Cottonwood valley on the last leg of the run to Black canyon, Ireteba showed increasing uneasiness. He had heard reports that the "bad Paiutes" were on the prowl, that some of them on a recent visit to the Mojaves said they intended to destroy the exploring party as soon as it entered their territory. So care was exercised in selecting camp sites that could be guarded against attack.

The last 20 miles before reaching the mouth of Black canyon required five full days. There were at least a dozen rapids. But still the stubborn Ives contended:

"The last 70 miles will, perhaps, be the best part of the Colorado to navigate when the water is not at so exceedingly low a stage."

Nearing the Black mountains the river flowed between gravel bluffs which cut off the view in all directions. Thus it was that as the *Explorer* negotiated a turn around the base of a conical peak, the southern portal of the Black canyon was suddenly directly in front.

"The Black mountains were piled overhead in grand confusion," Ives wrote, "and through a narrow gateway flanked by walls many hundreds of feet in height, rising perpendicularly out of

the water, the Colorado emerged from the bowels of the range."

This was the feared Black canyon. Negotiating a rapid just below its mouth, the *Explorer* glided swiftly into its mysterious depths on water that was smooth. Spirits were high and all attention was focused ahead when the steamer, with a stunning crash, "brought up abruptly and instantaneously against a sunken rock." The men thought walls of the canyon had fallen in. Those in bow of the boat were thrown overboard; the fireman, who was pitching a log into the fire, went half-way in with it; the boiler was torn out of place, the wheelhouse ripped loose, steam pipes doubled. Everyone thought the ship was doomed.

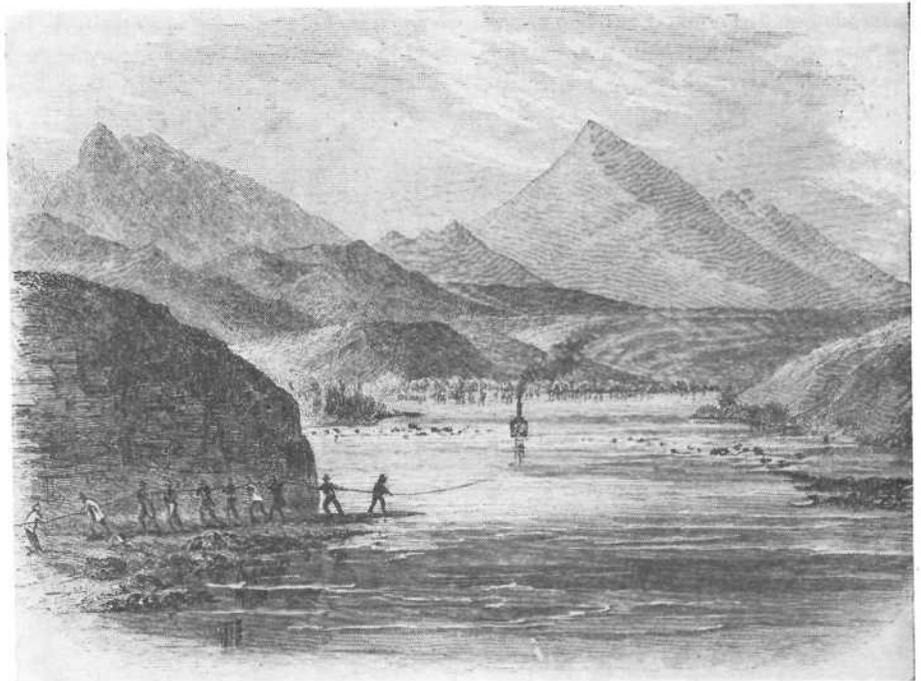
She was towed to shore, however, and examination disclosed the hull had no holes and that other damages could be repaired in probably two days. It took three.

During the delay scientific investigations were not neglected, and Dr. Newberry and Mr. Egloffstein had discovered that the region was a rock-hound's paradise. Along the bottom of ravines in the surrounding mountains, they reported, "are found crystals of quartz, in curiously grouped clusters, and great numbers of opals. Some of the latter are of considerable size, and promise to prove, when polished, valuable gems."

Deeming it imprudent to proceed with exploration of the canyon in the steamboat, for should the boat be sunk there would have been no way for the men aboard to escape—nothing to swim to except perpendicular walls 500 or 1000 feet high—Lieutenant Ives determined to make a reconnaissance of the canyon with Captain Robinson in the skiff. Taking a supply of corn and beans, blankets, a compass, sextant and chronometer, the captain, mate and the lieutenant started early on the morning of March 10.

It was well that they decided on this course. They threaded the mazes of a canyon awe-inspiring and almost terrifying. In place of the brilliant colors that tinted the sides of previous canyons, this one had walls of naked rock uniformly somber in hue. Rapids came one after the other, and even in the skiff the men were forced to get out and haul the little boat to quieter water.

Eight miles from mouth of the canyon they heard a loud sullen roaring, came soon to a rapid that Ives concluded must be the one Iretaba had warned would be impassable. The channel was filled with masses of rock, against which the torrent dashed with tremendous force. The doughty leader admitted it would be hazardous to



Progress was slow when the steamer hit rapids and shoals. Here the crew has gone ashore, taking a line to pull the boat over a sand bar. This was a frequent occurrence, afforded great amusement to watching Indians. Mount Davis in the background.

attempt to run that rapid with his steamer, but only because their ropes were nearly worn out. He still insisted that "during a higher stage of the river the difficulty of the place would be much diminished."

Darkness caught the trio in the forbidding gorge and they spent the night on a little gravel bar. Next morning they were on their way and late in the day emerged at last from Black canyon. Finding a camping place before dark, Lieutenant Ives and Captain Robinson climbed a 1000-foot hill from which they could survey the surrounding country. They could trace the course of the river as it wound toward the east, forming what was called the Great Bend.

Looking in the direction of the Mormon road to Utah they observed that the country was less mountainous and broken. They concluded that there would be no difficulty in opening a wagon communication between the road and the river.

After a night's rest Ives insisted on going upstream another two miles. There they finally located the mouth of a brackish stream, about the size of the defunct Bill Williams fork. Appearance of the bed and bank indicated that it was at times a large river, and its location led Lieutenant Ives to suppose that they had reached the mouth of the Virgin river.

There he made what must have been for him a hard decision. The young army officer had started out with spe-

cific instructions to "ascertain the navigability of the Colorado." Now, 500 miles upstream, 102 days and 57 camps later, after surviving roaring rapids, heat, cold, hunger, physical exhaustion, heart-breaking set-backs, Lieutenant Ives wrote almost laconically:

"I now determined not to try to ascend the Colorado any further. It appeared that the foot of Black canyon should be considered the practical head of navigation."

Next step would be a reconnaissance to locate a connection with the Mormon road.

It was long weary weeks before Lieutenant Ives and his men, after being joined by the pack train, reached civilization again. But the part of his mission on which his heart had been set had been accomplished. He had explored the unknown Colorado. And despite the buffeting he took at its hands, he still stood up for the river. His formal report to Capt. A. A. Humphreys, in charge of the office of explorations and surveys for the war department, was this confident statement:

"I would again state my belief that the Colorado would be found an economical avenue for the transportation of supplies to various military posts in New Mexico and Utah. The amount of land transportation saved by adopting this route would be: to the Great Salt Lake, 700 miles; to Fort Defiance, 600 miles; and to Fort Buchanan, 1100 miles."

LETTERS . . .

"And We're 2500 Miles Away . . . Milford Center, Ohio

Desert:

You and your Desert Magazine staff ought to be crucified for cruelty to dumb human beings. I've been reading all your back issues with the stories about the lost mines in the Southwest, and about that big pow-wow on New Year's eve when you all get together around a big campfire in Borrego valley and swap lies, and then go out looking for the Lost Pegleg—and here I am stranded in the prosaic prairies of Ohio 2500 miles away.

Sooner or later my partner and I are heading out that way—so please save a few of these lost gold nuggets for us to find.

L. CARL DAVIS

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Invaders of the Desert . . .

Fullerton, California

Desert:

I like the desert backroads, and recently made the trip from Niland, California, to Wiley's well near the famous Hauser geode beds. Along the way were many signs posting the area as a bombing range. The signs were old and some of them mutilated. But I met several motorists along the way. Is this still an active bombing range, or did some one forget to take down the signs when the war was ended?

My former home was New Jersey and I am a comparative newcomer in California. I am surprised, unpleasantly so, that so much of the California desert area has been swallowed up by the military.

The idea that these deserts belong to the people and are in constant use as a recreational area seems to be quite foreign to the thinking of the military authorities. I am especially interested in the Niland-Blythe road by way of Wiley's well. Isn't there something we can do to keep this road open?

CARL R. ENGLUND

Many of us who live on the desert share your resentment that so much of the desert has been marked off with warning signboards. You will find the answer to your question regarding the status of the Niland-Wiley's well road in the California news items in this issue of Desert. The compromise between the navy and Imperial county supervisors is only a tentative arrangement—we hope.

—R.H.

Lapidary for Convalescents . . .

Knight's Ferry, California

Desert:

Many months ago you published my request that rock collectors send cutting material for use of convalescent veterans at Livermore hospital. The response was fine. Material came in from all the western states.

I was released from the hospital nearly a year ago, but recently I returned there for a visit. Perhaps those who contributed minerals will be interested to know that the hospital lapidary now has all modern tools and recently installed a faceting machine. It is as fine a shop as I have seen and the men are getting both enjoyment and valuable training there.

CLAUDE E. NAPIER

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Forgotten Pioneer of Nevada . . .

Las Vegas, Nevada

Desert:

I am interested in learning the background history of Bonelli's Landing, formerly on the Colorado river, now a fishing camp on Lake Mead. Who was Bonelli? Where and what did he land, and why? There must be some history connected with the name as I have a map showing Bonelli peak also. I find nothing about him in the Nevada histories—apparently he is a forgotten man. But the place which bears his name is never to be forgotten. It is one of the most beautiful spots in this area, and easily accessible. I shall be grateful for any information you can give.

DORIS V. HANCOCK

Daniel Bonelli was a Mormon, and a leader in the colony which attempted to establish an agricultural industry in southern Nevada about 1863-64. He came from the Muddy, and built a home along the Colorado six miles from the mouth of the Virgin river. He established a ferry across the river with a flatboat pulled by manpower. The fee was \$10.00 for team and wagon and two persons. Each additional passenger was charged 50 cents. At low water the river could be forded but it was a dangerous undertaking. Later the crossing became known as Stone's ferry.—R.H.

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Discoverer of the Colorado . . .

Garden Grove, California

Desert:

In his excellent article "He Explored the Unknown Colorado" in the current issue of *Desert Magazine* the

author states the Rio Colorado was discovered "in 1540 by a detachment of 25 men who had left Vasques de Coronado's exploring party and followed the stream to its mouth."

I believe there is a slight discrepancy here. Hernando Cortez commissioned Francisco de Ulloa, who sailed with three ships in September, 1539, to the head of the Gulf of California. He reached the mouth of the river, but his three caravals were turned back by the tidal bores.

Hernando de Alarcon sailed from Acapulco on May 9th, 1540, with three ships, with supplies intended to reinforce Coronado, who was on his way seeking the fabled Cities of Cibola. Alarcon had difficulty navigating through the bores and shoals and sand bars, and left the sailing fleet at the delta, proceeding in small boats, each manned with ten men. They finally reached the point near where the present city of Yuma is located, where they received reports that Esteban the Negro had been killed. The expedition returned to the delta for reinforcements and pulled up the river a second time with three boats, but failed to contact Coronado or anyone connected with his expedition. After leaving a note in a tree, they returned to their ships.

His note was later found by Melchior Diaz, who with 25 soldiers had left Corazon in search of Alarcon. Diaz did some exploratory work of his own, and apparently reached Volcano Lake. On his return trip to Corazon Diaz was impaled on his own lance, dying later from his wounds.

FRANK SCHILLING

Reader Schilling is of course right. Use of the word "discovered" was an unfortunate choice on the part of the author. What he meant was that the detachment of 25 men, sent by Coronado under leadership of Diaz to scout for news of Alarcon, did find the river—coming to it after an overland journey from Sonora.

This was in the fall of 1540, only a short time after Alarcon arrived at head of the Gulf of California on August 26, 1540, with his three vessels. Alarcon sent small boats up the river, is entitled to be called the real discoverer of the Colorado. Ulloa in 1539 had reached head of the Gulf, but some historians doubt that he knew or realized he was at the mouth of a river.—R. H.



Jack Moore of Los Angeles, present owner of the old mine. His daughter, 12, was "acting superintendent" when photographed.

Lost Gold of Salt Spring . . .

By JOHN L. VON BLON

Photos by the Author

Life is an exorbitant price to pay for a chance in the lost gold lottery. But down through the years men have been willing to pay that price, and the fabulous Amargosa mine at the edge of California's Death Valley is no exception. How it was discovered a century ago, its colorful and sometimes bloody history since then, and the high hopes that still center around Amargosa are told here by the first man ever to piece together the famed mine's story.

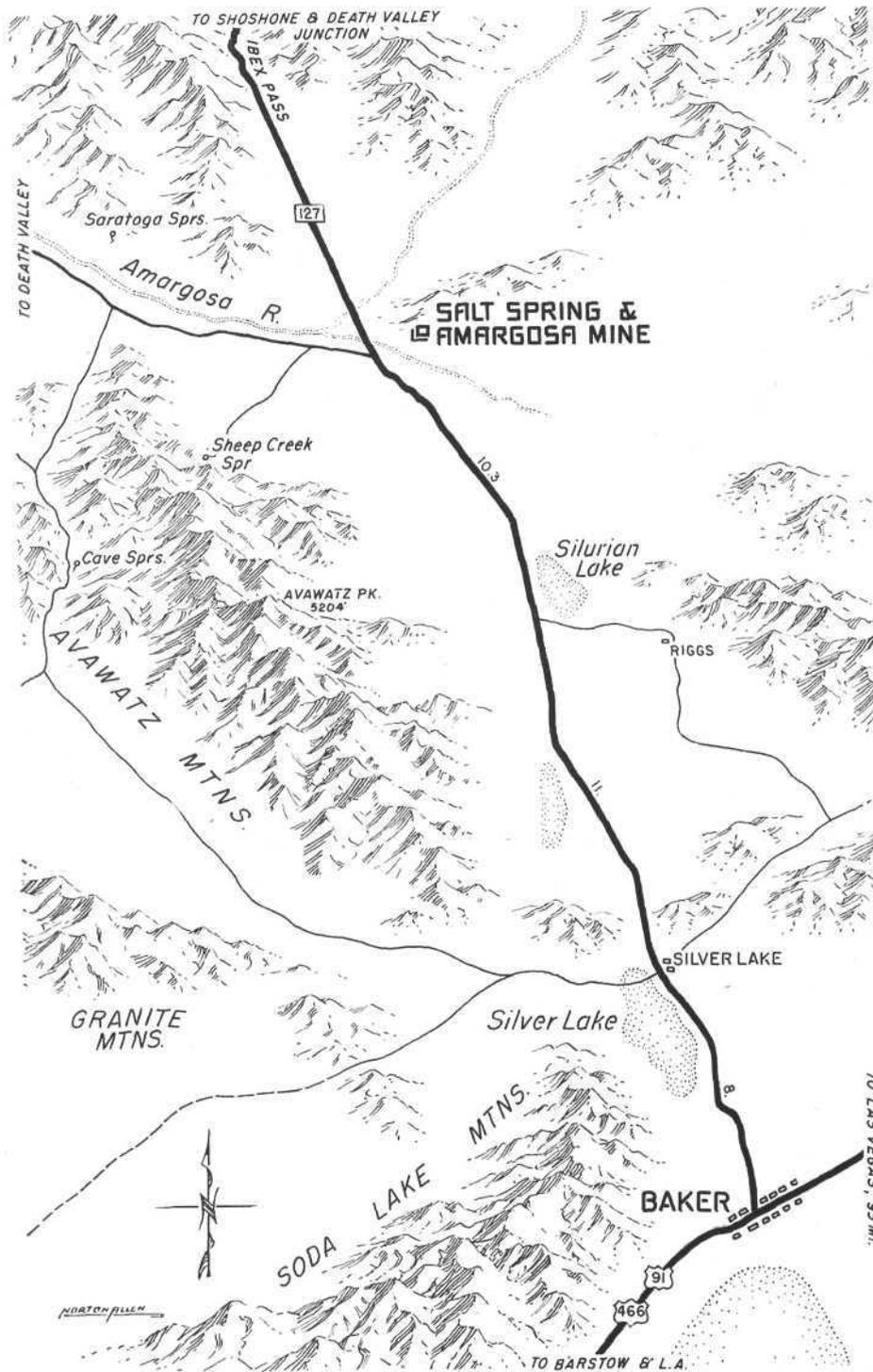
IN the faint blue light of a midsummer dawn, under myriad glistening stars, the solitary building loomed phantom-like on the mountain before us.

"Reminds me of an ancient lamasery in bleak Tibet that I've been reading about," my son Phil said.

Having seen it before I said nothing; but when the sun blazed over the ridge beyond and limned it in red fire it impressed me as a rare study for an artist. The setting at the fringe of Death Valley is bizarre.

The scene was the Amargosa mine, conspicuous landmark on the historic Old Spanish trail from Santa Fe to Los Angeles and first gold strike on the desert, perhaps in all California. It may, indeed, be the Breyfogle "lost bonanza" which countless eager souls have hunted since '67.

Its locale is Salt Spring, 30 miles north of Baker, on State Highway 127 and a mile off the pavement, with the unique Amargosa river intervening. The river is rated the world's longest underground stream and the most



I encountered a persistent tradition that precious dust was gleaned from the Salt creek sands by Mexicans as far back as 1830. This was told me in 1898 by an aged prospector named Sparkuhle, who was familiar with the region, and I heard it repeated recently.

"Spark," as we called him, was based at Mojave. When in the city he haunted the Los Angeles Times newsroom, where his fabulous tales served as legal tender for grubstakes. As canny and husky a character as ever roamed the wastelands, he often plodded far without burros, packing heavy burdens on his own back. Older desert rats will remember him.

The tradition cannot be given credence. In the vast, silent, distorted reaches of the Mojave fact and fiction may blend like liquids. Myths and mirages linger. Authentic record credits the Amargosa discovery to Sheldon Stoddard, Mormon and member of Captain Hunt's party, in March 1849; but it is established that Mexicans passed that way from 1826.

It was Stoddard's first glimpse of native unmined gold and he secreted the bits taken from a ledge until China ranch was reached and showed them to Colonel Williams. The latter fitted out a pack train and set Stoddard and others to work with arrastres. This paid well but Paiute Indians soon drove them out.

Then a San Francisco company transported a mill there at considerable cost but the Indians killed two crew members and the others fled for their lives. George Crismon had the machinery hauled to the San Bernardino mountains and sawed lumber for that valley.

Beale's west-bound expedition halted at Salt Spring August 15, 1853. He was greatly surprised to find the remains of houses and arrastres where "a fortune had been sunk by men sufficiently deluded or sanguine to abandon the rich mines of California, travel across 150 miles of desert, and live upwards of 12 months in a spot so desolate and forlorn that there is not enough vegetation to keep a goat from starvation." His mules would not drink from the sulphurous and nauseating spring.

In 1861 the Marysville Express announced that the mine, abandoned nine years previously, was currently operated by a Los Angeles concern with Mexican labor and arrastres. Again the Indians raided and expelled them.

The following year McFadden, Stuart and Bennett set up a mill and built some adobe houses and the granite-and-adobe cabin to which I have referred and which remains, though dou-

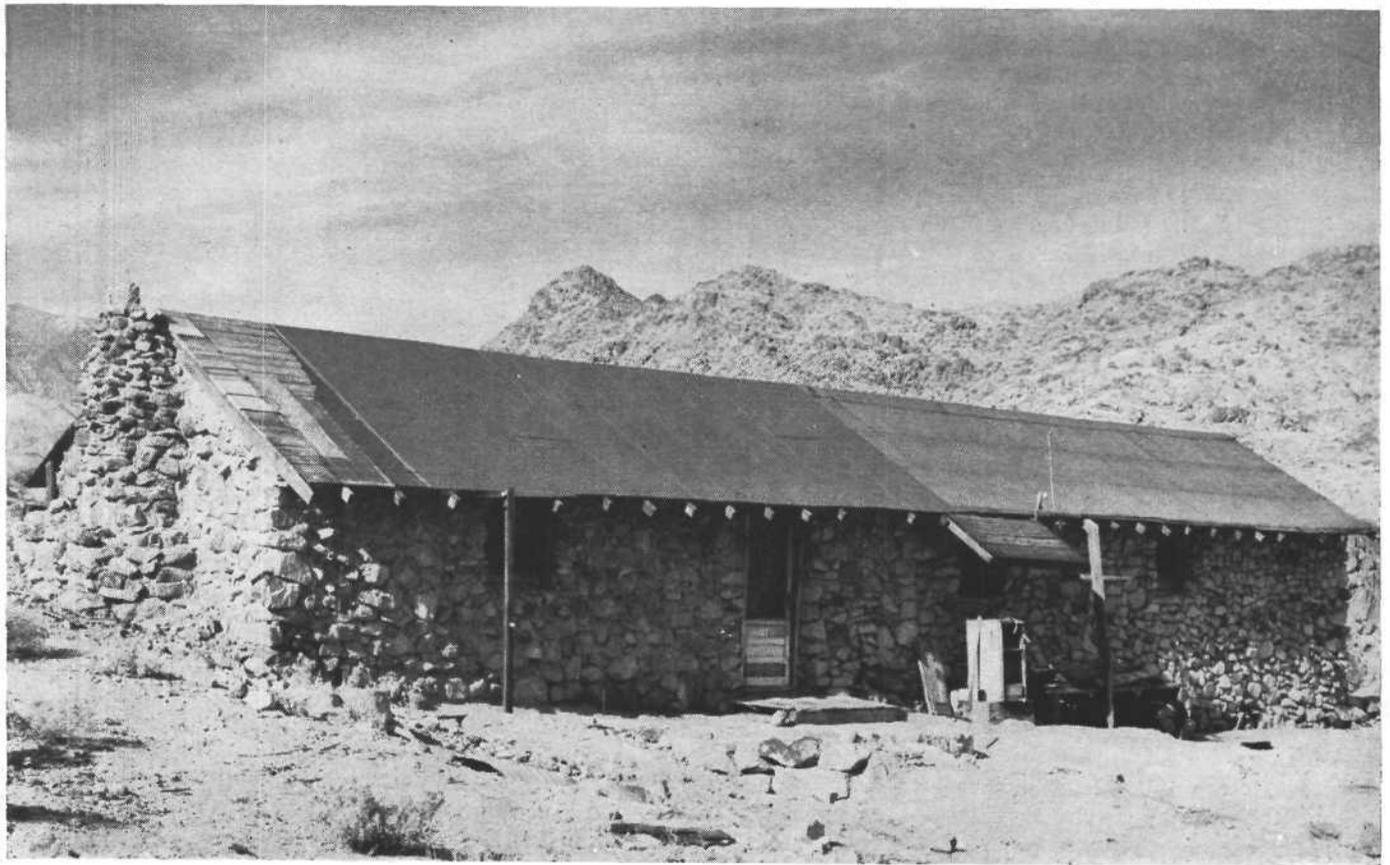
down-in-the-mouth in this hemisphere, flowing to Bad Water on the floor of Death Valley 279.8 feet below sea level.

Hemmed in by granite outposts of the Avawatz mountains, the mine centers about a narrow rocky canyon half a mile long, cut through ages ago by a former expansive lake. At its head is the bitter spring, an ugly stagnant pool four feet across and three deep, shaded by two scraggly mesquites. And there is Salt creek, seldom trickling.

The vicious water was a cruel disappointment to thousands of weary travelers over the most forbidding por-

tion of the desert, entailing awful sufferings for humans and the sacrifice of famished beasts. I saw no signs of its use by birds or wild animals.

Although worked intermittently a full century the mine's past is obscure. It has been strangely neglected by chroniclers and given space on few maps. Judge Dix Van Dyke of Daggett has taken pains through many years to assemble its fragmentary annals. Some are tragic, written in blood; nine or ten men perished there at the hands of merciless savages. Most of the basic data in this article are from the Van Dyke files.



Above—Perched high on the south brink of the canyon wall the rock cabin lends medieval aspect to the landscape.

Below—Built of granite and adobe over 80 years ago the mine headquarters cabin is well preserved and has just been reroofed.

bled in size since. Threatened by the Indians they improvised a rock fort, kept a barrel of water there and another in the longest tunnel, and posted guard day and night.

One morning when the workers were going on shift the crafty redskins attacked from ambush and massacred five of them, riddling their bodies with bullets. The survivors hid in the tunnel until night and escaped to make their way to Mojave. An armed posse was organized to bury the victims. Their graves and others were reported visible until 1900. My efforts to find them were not successful. Time has obliterated all traces. If the dead sleep in the canyon sands, as is plausible, it may well be that their lost sepulchers are lined with flecks of virgin gold.

Fremont, who had camped at the spring in 1844, arrived again in December, 1864, and saw the destruction wrought by the hostile Indians. The same month Mrs. Rousseau, diarist of Dr. J. A. Rousseau's party from Salt Lake City to San Bernardino, described the ruins as she saw them, stating that three men left to care for the property had been slain eight weeks before.

Undaunted, a new company, with the late George Rose as superintendent, took over in the middle '60s with adequate facilities and operated successfully a number of months. Extraordinary values were produced in pockets and attracted outside attention.

Just then Anton Breyfogle stirred the mining world with his alluring and sensational find. He had spent an afternoon and evening at the Amargosa, rambling all over the property, and Rose stoutly maintained during the remainder of his life that the stuff the eccentric adventurer carried came from there and nowhere else.

The late Frank Denning, an ore expert who lived at Demming Spring and operated the Ibx mine, saw the Breyfogle rock and declared himself willing to take oath that it was Amargosa highgrade. That free-milling quartz is a distinctive rose-pink color with occasional brown deposits such as Breyfogle had. These men knew minerals and could not readily have been deceived. This may shed new light on the Breyfogle puzzle.

Adrian Egbert of Daggett, which was the mining center of an immense territory, met an aged Mexican in Los Angeles in the late '90s who boasted of having taken "plenty gold" from the Amargosa in 1853 until the Indians ousted his group. Egbert became so enthused that he and associates went to the mine with a force of men and set up and operated a five-stamp mill.

The plant was transported from Crescent, east of the Vanderbilt camp near Ivanpah, by Adolph Nevares and James Christian with two eight-horse teams, the job requiring two months. Nevares recalls having been shown bullet holes in an Amargosa shack where a deadly brawl had been finished. He lives on his ranch in Death Valley and is among the very last of the pioneers—continuing active.

When Egbert converted his gold into bars, several thousand dollars worth, and started to drive to Daggett with the avowed intention of shipping it to the mint and meeting the payroll, the miners, left behind with scanty food, at once became panicky. John Tonnie, employed there, volunteered to walk the 80 or 90 miles to Daggett, his home town, and head off the boss. Egbert stopped overnight at Cave Springs and Tonnie beat him in. To avert attachment proceedings immediate settlement was arranged. It was an amazing foot feat. Both Egbert and Tonnie have passed on.

Egbert's last activities were unusual and beneficial mainly to others. He went to Cave Springs, between Barstow and Death Valley, in the middle 1920s, made the water available to the public, set up a small store of provisions, and provided overnight accommodations for travelers by hewing out several chambers in the canyon wall. These sleeping rooms were used for a number of years. And to aid persons in possible need along lonely roads he maintained water supplies in glass demijohns under wooden shelters for a decade or longer. (*Desert Magazine*, Nov. '39.) A beautiful little spring annual plant growing in that region was named *egbertia* in his honor.

Interested also in that novel enterprise was Mrs. Ira Sweetman, former Daggett postmaster, and a beloved pioneer desert woman. She now resides in Barstow. Though on a paved highway Cave Springs is deserted, a favorite rendezvous of birds, especially doves.

Thirty years ago another outfit tackled the Amargosa and abandoned the enterprise after making heavy expenditures. Its mill was sold in 1939.

In my three explorations the picturesque cabin standing on the south rim of the gulch proved the most interesting relic. Weathered but well preserved after eight decades it supposedly is the oldest of all desert buildings. It is 60 x 12 feet, divided into three sections by low rock walls, and has two fireplaces. Several years ago the original thatch was shattered by a wild gale and has been replaced with a green composition roof barely visible from

the highway. Beneath the cliff is the spring.

Principal workings comprise a mile and a half of tunnels in solid rock, five shafts, two of them vertical and the others inclined. The deepest is 180 feet and half filled with water. In another, hot water was struck and boils noisily 30 feet below the surface. On wintry days a column of steam almost a hundred feet tall has been observed. Volcanic commotion down there!

Along the west wall there has been extensive stoping, and chambers suggesting cathedral interiors are the result. On the slope is a large mill foundation. Lying at its base is a huge bellows from a vanished blacksmith shop. Scattered throughout are endless impediments of former value—odds and ends eloquent of blasted ambitions, broken hearts and financial ruin. In the sand lies a heavy boiler and a ton flywheel carried 200 yards by a violent flash flood rises vertically half buried.

It appears that the original miners reaped rewards in the gulch which their successors have been unable to duplicate in the upper ledges; that much more capital has been poured in than has been returned.

My youthful companion passed tenderfoot snap judgment in this wise: "Mine's no good. I looked all around for gold a whole afternoon and didn't find a single nugget!"

But there remains a lot of unexploited ground. Jack Moore of Los Angeles, present owner, believes the property has a promising future and is preparing to go ahead with development. He and his daughter Maureen, 12, were taking ore from the glory hole on one of my visits. She informed me that she was acting superintendent and he concurred. They were comfortably quartered in the antiquated citadel.

My Amargosa mine research disclosed the discovery in that mysterious area 75 years ago of an apparent treasure that is lost to this day and of which no account ever has been published. It is a story of heroic courage and incredible endurance and hardship.

About 1872 Johnny McCloskey of Bishop went to his birthplace in Texas to be married. A few years later he and his wife, with their small daughter, decided to return to Owens Valley. With true western fortitude they set out on the far and hazardous journey in a light wagon drawn by two good horses.

In pleasant early springtime they drove into the Golden State via the old Government road, but at Marl Spring misfortune befell them, one of the horses died suddenly. Their only recourse was to abandon the vehicle with most of their possessions, pack abso-

lute essentials on the remaining horse, which also carried the child, and set out afoot. Fortunately McCloskey was sure of his bearings. They turned northwestward toward Ash Meadows, where he knew his friend Jim Butler—afterward discoverer of Tonopah—was prospecting and amply provisioned. The distance is 140 miles.

One evening they camped on the Amargosa river 30 or 40 miles above the mine. There was a natural embankment of black boulders, and clear water flowing from beneath on a broad, lengthy sand flat. Sensing gold the tired man took a milk pan, the only utensil available, and was astounded to extract an ounce and a half in an hour from various parts of the wash!

Supplies were critically low, the heat becoming intense, and they dared not tarry for anything. But Johnny would be back for their fortune. High hopes buoyed them henceforth.

Finally arrived at the Inyo home, McCloskey hastened to backtrack to begin placering operations and recover his wagon and contents.

George W. Golden, Daggett mining man who was born in Bishop, relates that his father, Steve Golden, accompanied the supposedly lucky Johnny on that and two other trips. They came upon different places strewn with black boulders but devoid of sand and never found the placer gold. Presumably devastating cloudbursts to which the region is subject had completely changed the river channel. Thieves had made away with the wagon at Marl Spring.

As a young man George Golden accompanied his father, George Rose and others, in futile quests for the placer and he plans to continue looking. Steve Golden died at the age of 90 five years ago in Kern county with his sights set to the end for that lost gold!

That's not a greenhorn country. None but seasoned desert men should venture in. It is perilous for amateur argonauts. Life is an exorbitant price to offer for a lost gold lottery chance.

Above—Salt Spring's bitter and undrinkable water was a cruel disappointment to early travelers on the Old Spanish trail.

Center—Foundation and timbers of the 5-stamp mill operated a half century ago by Egbert and associates.

Below—Phil Von Blon beside the huge bellows used in the mine blacksmith shop a half century ago.



MINES AND MINING . . .

Randsburg, California . . .

Reactivation of placer claims located near the Black Hawk mine two miles south of Randsburg was scheduled for early this year utilizing a new recovery method perfected by Virgil Murray of Van Nuys. Owner of the claims—the Balatine, Silverton and Blue Bird gold claims—is J. J. Neito, Los Angeles. An initial crew of four men was to start operations with a one-yard steam shovel. Murray is in charge.—*Randsburg Times-Herald*.

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Albuquerque, New Mexico . . .

High quality coal that may run to more than a billion tons has been discovered in the San Juan basin of New Mexico and Colorado. The new resources were reported to Interior Secretary Oscar L. Chapman by the U. S. geological survey after studies on north-western rim of the basin. The coal deposits are said to be less than 1000 feet below the surface, are estimated to be present in beds more than 28 inches thick. A considerable proportion of the coal in the area is of coking quality, the government report states. The coal is said to lie in the Menefee and Fruitland formations.—*Gallup Independent*.

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Tonopah, Nevada . . .

Tonopah again has an assay office. This famed Nevada town has for some time been without this service, but an office is now open at the former site of the West End Mining company's mill. Ore samples may now be handled locally.—*Tonopah Times-Bonanza*.

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Beatty, Nevada . . .

The copper prospect located several years ago by the Looney brothers of Beatty is reported to be developing good showings. Four men are now employed on the ground under direction of Tom Beard. Larger equipment is being moved in since ore running 17 percent copper has been found to be not unusual.—*Tonopah Times-Bonanza*.

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Battle Mountain, Nevada . . .

Construction of new facilities at the Getchell mine near Winnemucca has progressed rapidly and by first of this month the mill was scheduled to be in production. Equipment being added includes a new crushing plant, new 8 x 12 rod mill, new flotation section and new classifiers. An auxiliary well has been drilled to supply water for the mill and for domestic purposes.—*Battle Mountain Scout*.

Winnemucca, Nevada . . .

Ranked among the leading tungsten producers in the nation, the Nevada-Massachusetts company has resumed operations at its Tungsten property, Pershing county, with a full-scale mining and milling schedule. The company began operations at start of World War I and had never closed until last June when general economic conditions and low prices for tungsten forced a shut-down. From 150 to 160 men will be employed and more than 300 people will be living on the property when full-scale operation is reached, according to W. G. Emminger, general superintendent.—*Humboldt Star*.

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Salt Lake City, Utah . . .

The 1950 Metal Mining convention and exposition of the American Mining congress is to be held in Salt Lake City, Utah, August 28 to 31, it has been announced. Roy A. Hardy, consulting engineer in charge, Getchell Mine, Inc., Reno, has been named program chairman, according to D. D. Moffat, chairman of the western division of the American Mining congress. The exposition of mining equipment, to be held concurrently with the convention, is expected to be outstanding.—*Humboldt Star*.

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Los Angeles County, California . . .

Development and exploitation of the Don claim of the Hi-Grade gold mine in Mint canyon is reported progressing rapidly. Arthur Lueck, Hollywood, has a lease on a block which covers 300 feet along the strike of the vein and is 600 feet in width. Exposures of the gold-bearing vein in the shaft range in width from 12 to 22 inches. Ore will be treated in the Hi-Grade mill. Capacity is being increased to approximately 20 tons per day.—*California Mineral Information Service*.

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Randsburg, California . . .

A complete laboratory for the testing, assaying and quantitative analysis of mineral specimens has been opened in Randsburg for the convenience of miners and prospectors. The laboratory is located at the Big Gold and Tungsten mill operated by Mr. and Mrs. Jack Kreta. Chemist and assayer in charge is Don Duckworth, graduate of the Stevens Institute of Technology. The laboratory is equipped to do analysis on the rarer minerals, as well as gold, silver and tungsten.—*Trona Argonaut*.

Greenriver, Utah . . .

After lying dormant for nearly 30 years, mines on Temple mountain are again being worked. But this time it is uranium ore that is being sought. Cliffs along the old Spanish Trail echo to the blasts that gouge out the hard sandstone criss-crossed by veins of red or yellow ore that is said to run high in uranium content. Old dumps are also being assayed and hauled to mills equipped to salvage uranium from the low-grade ore. Mines on both South Temple and North Temple are active.—*Moab Times-Independent*.

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Goldfield, Nevada . . .

The long-awaited activation of another major company in the Goldfield mining district is expected to be realized probably this spring when the Goldfield Great Bend, Ltd., is scheduled to begin development of extensive holdings in the area. Liquidation of holdings in Panama has held up the program in Nevada, company officials say.—*Goldfield News*.

• • •

Winnemucca, Nevada . . .

Boasting a recorded production of a million dollars, but closed since 1943, the Pansy Lee mine—formerly known as the West Coast mine—is back in operation. The mine is about 10 miles from Winnemucca. Ore is being shipped to a Utah smelter because the mill at the mine was removed soon after the property shut down in 1943. The Pansy Lee was located about 25 years ago, is named for the daughter of Lee Case, in charge of operations.—*Humboldt Star*.

• • •

Goldfield, Nevada . . .

Mines in the Goldfield area have a mill close at hand now that the Deep Mines Operation of the Newmont Mining corporation is running custom ore. The mill is to treat ore from the Combination Fraction, under lease to George Metscher and associates; from the Clermont; from the Red Hill Florence lease; from Andy Anderson's lease, and other mines.—*Goldfield News*.

• • •

Miner, Nevada . . .

Lead ore averaging \$100 a ton with some of the richest assaying up to \$260 is reportedly being shipped from the Vogel property in Queen canyon where Edward Vogel discovered a vein of galena ore four feet wide in the vicinity of the old Queen mine. In the same area William Knight, Charles Morris and Bill Ryan are developing a ledge of galena ore 26 inches wide, said to carry high grade lead ore. Prospectors are working adjoining claims.—*Los Angeles Times*.

New Champions Selected at Annual Pegleg Liar's Contest

Strange things have been happening on this desert, if one is to believe the yarns told around the campfire in Borrego valley on New Year's eve when the annual Pegleg Smith Liar's contest was held.

The 500 visitors and contestants who sat around the big bonfire heard about cotton that grows on smoke trees, a burro that broke its legs and then turned over on its back and used its ears for propellers, horned toads as big as coyotes and petrified oysters that came to life and supplied food for starving prospectors. . .

The winners of the contest were Dorothy Vick of Gallatin Gateway, Montana, in the women's division, and Arthur Dorsey McCain of Barstow, California, in the men's section.

Dorothy Vick explained she and her husband came south from Montana when it got so cold up there that words came out of their mouths in the form of ice cubes, and they had to be put in a frying pan and thawed out before they knew what was being said. Then she went on to tell how she and her husband had gone down to the Borrego badlands and found the legendary Pegleg hill covered with black gold nuggets. They sat down on boulders of pure gold to make plans for spending their new-found wealth—and then the thought came to them that it would be cruel to disillusion the thousands of people who expect some day to find the fabulous treasure. In the end they decided to leave the gold there and keep its location a secret—and so there would be no living person who would know just how to reach the place they put blindfolds on each other when they left.

"Mac" McCain, who operates the former Pop Dillon rock and mineral stand just out of Barstow, and came to the annual Pegleg trek in Borrego in a motorized covered wagon decorated with hundreds of old desert relics, won the men's championship with a monologue that included a tortoise which reacted like a Geiger counter whenever it crawled over rock containing gold, a talking dog, and a score of other weird characters improvised for the occasion.

One contestant was disqualified from future participation for relating an off-color story.

The tall tales were one of many entertaining and hilarious features on the campfire program. Lon Chaney,

actor, stole the show with a clever one-man skit in which a barrel cactus played the role of saving him from death by thirst, supplying him with weapons with which to kill food, shoes for his feet, and finally pointing the way to the lost Pegleg mine. Chaney dramatized his story with so realistic an act he had the crowd in a continuous roar of laughter. He asked the judges to disqualify him from the contest, however, on professional grounds.

John Hilton, artist of Thermal, California, and Cliff Eaton of El Cajon, California, furnished guitar music and songs between stories, and as midnight approached John staged his annual ritual of burning some of the oil paintings made during the previous year. He explained they were his "mistakes" but there were exclamations of protest from the crowd as he tossed his canvases into the flames.

Henry E. W. Wilson of Los Angeles was introduced as the man who has

spent more time in quest of the Lost Pegleg than any other living person. He told of his experiences in his search for the gold, beginning in 1900, and explained that out of the many versions of the Pegleg legend he selected the one he regarded as most probable, and on 28 different expeditions during the last 50 years, has clung to his original theory. He is convinced the Pegleg gold is in the Borrego desert, and he presented his conclusions in convincing manner.

Although not a contestant, 84-year-old C. E. Utt was introduced by his friend John Hilton and told a rather amazing tale of coyotes in Baja California who with their tales catch crabs for food along the shores of lagoons. He insisted it was a true story.

Harry Oliver, editor of the Desert Rat Scrapbook, served as master of ceremonies, and Desert Steve Ragsdale, Guy O. Glazier and Joe Wright of Knott's Berry Farm at Buena Park, California, were judges. Walter Knott sent cases of berry preserves and old-time music records from his famous Ghost Town as prizes for the contest winners. These were presented by Ray Hetherington, member of the sponsoring committee.

Picture Contest Announcement . . .

Winter months are picture months on the desert—and the subject material is unlimited: Landscapes, strange rock formations, unusual botanical specimens, wildlife, prospectors, Indians, sunsets—all these and many more invite the camera owner. Remember, it takes the shadows to make the picture, but there are nearly always good shadows on the desert. The judges favor strong contrast—gray pictures do not make good halftone reproduction.

Entries for the February contest must be in the Desert Magazine office, Palm Desert, California, by February 20, and the winning prints will appear in the April issue. Pictures which arrive too late for one month's contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

Mild midwinter temperatures brought many campers to the annual Pegleg Trek and Liar's contest, and it was estimated that more than half of those present spread their bedrolls on the floor of the desert and remained there that night.

In accordance with tradition, each visitor was required to deposit ten rocks on the Pegleg monument which is slowly rising at the site of the annual program. During the past year a fine register, housed in a metal box, was placed there by Desert Steve Ragsdale as a visitor's guest book.

THE *Desert* MAGAZINE CLOSE-UPS

Among veteran journalists of United States few men have had a longer or more active writing and editing career than John L. Von Blon whose "Lost Gold of Salt Spring" is published by *Desert Magazine* this month.

John L. was born in Ohio 79 years ago. He went from university into active journalism in 1890 and after serving as city editor on eastern newspapers became a special writer for Warren Harding, then publisher of the *Marion Star* of Ohio. He and the man who was later to become president were close friends, and the letters written by Harding to Von Blon are now in the Library of Congress.

Later John came west at the request of General Otis to serve as city editor of the *Los Angeles Times* and was there from 1898 to 1916. For eight years he was publicity director for the *Los Angeles Athletic Club* and later became an associate editor of *Westways*. During World War II he was managing editor of *Basic Bombardier*, the official publication of the great *Basic Magnesium* plant near Las Vegas. More recently he has retired to a little desert cabin at Daggett, California, not far from the home of his friend Judge Dix Van Dyke, to do free lance writing.

During an active journalistic career of 60 years, he has written for nearly every leading magazine in the country, and his syndicated articles have been translated into a half dozen languages.

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His writings are better known in England than in United States.

John L. first crossed the American desert 51 years ago, and has been an ardent desert enthusiast ever since. With his camera he has tramped literally thousands of miles in the Southwest and Mexico gathering story material—and just enjoying the kind of life he likes best.

The one thing that annoys him more than anything else is to be mistaken for a tenderfoot.

• • •

Gene Segerblom, who wrote this month's "Desert Playground" feature for *Desert Magazine* is a native daughter of Nevada and the mother of two small children, Robin aged five, and Richard, 15 months.

Her interesting story about the Lake Mead recreational area is illustrated with pictures taken by two of the Southwest's best photographers, Cliff Segerblom, her husband, and William Belknap, Jr., of the Belknap Photographic Services.

They all make their home at Boulder City where Cliff is associated with the Belknap photo studios.

Gene was graduated from the University of Nevada in 1940 and following their marriage she and Cliff went to Panama canal zone in 1941. There he was in charge of a photo laboratory for the Army Air Corps' Panama depot. They returned to the United States in 1948 and came to Nevada because they like the desert country better than the jungles. Gene has written articles for *Popular Mechanics*, *Pacific Motor Boat*, *Outdoorsman* and the *Christian Science Monitor* in the last six months.

Bill Belknap was in the navy during the war and assigned to the White House as official photographer. He accompanied the Truman party to Potsdam and later came to Boulder City to establish his own photo service. He and Cliff have covered many of the least explored sections of the West on photographic assignments, and they supply many pictures for national magazines.

• • •

INDIAN BUREAU ACTIVITIES DECENTRALIZED BY NICHOLS

Reorganization of the field services of the Bureau of Indian Affairs, designed to decentralize many of the activities carried on by the bureau in Washington, has been completed under direction of Commissioner John R. Nichols. Eleven area directors have been named, and these will report directly to Commissioner Nichols in Washington, as will 10 superintendents of detached field offices. Formerly

there were 100 men in the field reporting directly to Nichols.

"I believe the maximum advancement of the welfare of the Indian will result from this decentralization and the successful local integration of various Indian Service activities," Nichols commented.

In the Southwest, area directors are:

Eric T. Hagberg, Albuquerque, New Mexico—The states of Colorado and New Mexico. He has been acting superintendent of the United Pueblos Agency since May, 1946. The all-Pueblo council urged that he be retained permanently.

Allan G. Harper, Window Rock, Arizona—The Navajo and Hopi reservations in Arizona. Since June of 1949 he had been general superintendent of the Navajo reservation. A separate superintendency will be maintained at Keams Canyon, Arizona, but will report directly to Harper's new area office.

James M. Stewart, Sacramento, California—All of the state of California. He has been state director since June, 1949.

Walter V. Woehlke, Phoenix, Arizona—Arizona (excepting the Navajo and Hopi reservations) and Utah (except the Intermountain school at Brigham City). He has had broad experience in the desert Southwest.

ANSWERS TO TRUE OR FALSE

Questions are on page 16.

- 1—True.
- 2—False. Furnace Creek Inn is operated by Death Valley Hotel Co., Ltd.
- 3—False. There is no law protecting dead ironwood.
- 4—True.
- 5—False. Horses were first brought to America by Europeans.
- 6—False. Sandstone is a sedimentary rock.
- 7—True.
- 8—True. Juniper is seldom found growing below 2,000 feet, never below sea level.
- 9—True.
- 10—False. Elephant Butte dam is in New Mexico.
- 11—True.
- 12—True.
- 13—False. Ubehebe crater in Death Valley has been extinct since long before America was discovered by Columbus.
- 14—True.
- 15—True.
- 16—False. Smoke trees are short-lived compared with other desert trees.
- 17—True.
- 18—False. State university of Arizona is at Tucson.
- 19—True.
- 20—True.

HERE AND THERE . . . on the Desert

ARIZONA

Tribes Asked to Submit Plans . . .

PHOENIX — All Southwest Indian tribes have been asked by Indian Commissioner John R. Nichols to draw up rehabilitation programs similar to the 88-million-dollar Navajo-Hopi plan pending in congress, and to submit the plans for consideration. "We will try to get them through congress," Nichols declared. He said the federal government should complete the task of rehabilitating reservation Indians before shifting the load to states. Roads, schools, medical facilities are most needed.—*Gallup Independent*.

• • •

Precautions to Avoid Tragedy . . .

WASHINGTON — In hopes of avoiding another tragedy such as occurred in last winter's blizzard, when thousands of Navajo Indians in Arizona suffered severely from lack of food and clothing, the bureau of Indian affairs has made extensive plans to prepare the Indians for a possible repetition of the record storms. Allen G. Harper, general superintendent of the Navajo reservation with headquarters at Window Rock, Arizona, said the problem of communications has been solved for this winter, warehouses have been stocked with clothing and as much in other commodities as the budget would permit.

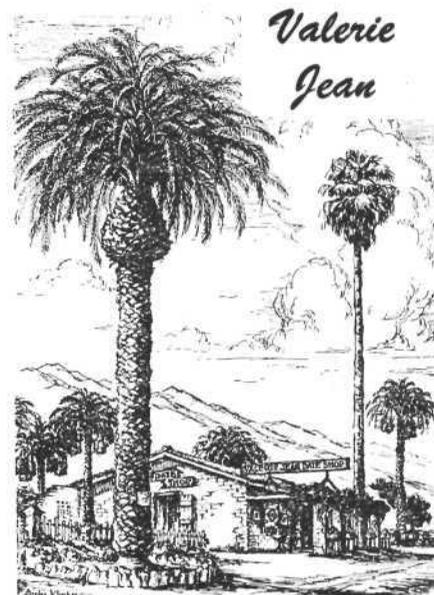
Indian Traders Adopt Code . . .

GANADO — Traders from the Indian country of Arizona, New Mexico, Utah, Colorado and California gathered at year's end in Gallup, New Mexico, and adopted a code of trading practices for the Navajo and Hopi Indian reservations. Adoption of a code, it was decided would be soundest method of regulating trading on the reservation and would help enhance the good reputation of traders in the eyes of the Indians, the public and the government.

Traders play an important role in the life of Indians, particularly on isolated reaches of the reservations. They buy the Indian's products, supply him with necessities, serve as his banker. Purpose of the code is to standardize business practices and eliminate practices by individual traders which damage the good name of all Indian traders, and to protect Indians from unscrupulous treatment or excessive prices. Traders also pledge themselves to help educate the Indians in sound business procedures.—*Gallup Independent*.

• • •

WINSLOW — Lawrence W. Pattison has assumed charge of the Chevalon ranger district in the Sitgreaves National forest, with headquarters in Winslow. He replaces District Ranger H. V. Allen, transferred to Flagstaff.—*Holbrook Tribune-News*.



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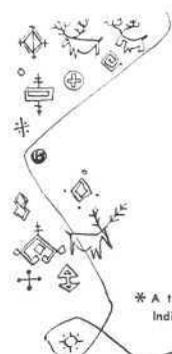
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* A term used by pioneer settlers for these Indian shoes, worn by men and women alike.



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FOUR VERY FINE ancient Indian Arrowheads, \$1.00; 4 tiny perfect bird arrowheads, \$1.00; 1 ancient stone tomahawk, \$1.00; 2 flint skinning knives, \$1.00; 1 large flint hoe, \$1.00; 2 spearheads, \$1.00; 10 arrowheads from 10 states, \$1.00; 20 damaged arrowheads, \$1.00; 10 fish scalers, \$1.00; 10 hide scrapers, \$1.00; 4 perfect saw edged arrowheads, \$1.00. The above 11 offers \$10.00, postpaid. List Free. Lears, Kirby, Arkansas.

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BOOKS — MAGAZINES

BOOK OF CACTI for the amateur collector. Describes and classifies over 500 varieties, over 200 photographs. Subjects on care, their culture, how to plant in rock gardens and pots. Sent postpaid \$1.00. Discount to dealers. Published by M. Nowotny, 1401 Broadway, San Antonio, Texas.

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PALM SPRINGS PICTORIAL: 21st Annual Issue, 45c by mail, or ask your newsdealer. Pictorial, 465 No. Palm Canyon Dr., Palm Springs, California.

URANIUM PROSPECTOR'S Handbook, \$1.00; non-technical, complete, Dept. T., Craft-Connor Publishing Co., 601 S. Vermont, Los Angeles 5, California.

REAL ESTATE

DESERT LOTS: \$129 to \$179. Why pay more? 60 cycle electricity and water available. Lots are ½ block south of Highways 60, 70, 80 on Main St. in Evelyn Subdivision, in fast growing Superstition Village. 14½ miles east of Mesa. (Trailers Welcome.) Wm. Hughes, Rt. 2, Box 594-A, Mesa, Arizona.

HOT MINERAL WATER. Enjoy your own Nature-heated swimming pool. Five acres with well—temperature 110 to 170 degrees—\$8500. Arthritics should investigate. R. H. McDonald, Box 21, Phone 143, Desert Hot Springs, Calif.

FOR SALE: 5 acres very fine warm grape land, level, canal water, piped, utilities, paved road. Near Valerie Jean Date Shop. Price \$5000. Ronald L. Johnson, Thermal, California.

HOME SITE near Borrego Springs for sale by owner. R. Lee Stowe, 1648 Cota Ave., Long Beach, California.

OCOTILLO: A fast developing desert resort 26 miles west of El Centro on Highway 80. Residential lots with water rights in mutual water Co., \$250. Abundance of high grade soft water. Business opportunities. Get in on ground floor. Send for circular. **ALPINE:** high class homesites, 1 acre or more with water already developed for irrigation garden, fruit trees, etc. All year delightful and healthful climate. Grand view of ocean. John C. Chalupnik, Ocotillo, via Plaster City, California.

MISCELLANEOUS

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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 21 B 334, Dutch Flat, California.

DESERT WOODCRAFT—Fine gift items made from Ironwood, Mesquite, Cactus. Bowls 8 x 1½, \$6.00. Beautiful color and grain. Other bowls of various sizes and design. Cactus book-ends \$6.00. Table lamps \$8.00 to \$12.00 including special matching shades, postpaid. Also coffee tables, end tables and floor lamps. First time offered anywhere—I have a special treatment which brings out the natural yellow color in the cactus. Finely finished in Lacquer. Anything made to order. See display in Palm Desert Book Shop or write to D. R. Jones, Craftsman, Palm Desert, California.

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LADY GODIVA "The World's Finest Beautifier." For women who wish to become beautiful, for women who wish to remain beautiful. An outstanding desert cream. For information, write or call Lola Barnes, 963 No. Oakland, Pasadena 6, Calif. or phone SYcamore 4-2378.

COLOR SLIDES—Travel, Nature, Geology, etc. Free list (with sample 30c, three for dollar). Kelly D. Choda, Box 5, Los Alamos, New Mexico.

THREE DIMENSION, Cactus framed desert landscape pictures, size 6 x 8 x 2, \$3.00; 8 x 13 x 2, \$5.00. The Special 10 x 20 x 2½, \$10.00. Diorama Studios, 1225 N. Anita, Tucson, Ariz.

KODACHROMES of Cathedral Valley, newly discovered scenic area in Utah; or colorful Capitol Reef National Monument. Sets of 10, \$5.00. Charles Kelly, Torrey, Utah.

PROSPECTORS AND ROCKHOUNDS WANTED. To join the newly incorporated United Prospectors Organization. If you are experienced or beginners the articles in our magazine are bound to help you enjoy your hobby and the outdoors. Send your name for our new brochure and literature. United Prospectors, Box 13, Dutch Flat, California.

BURIED METAL LOCATORS. Army SCR-625 mine (metallic) detectors, \$49.95 complete. Mayhall Appliance Co., Belmont, Mississippi.

OLD PHOTOGRAPHS WANTED—Desert Magazine staff is seeking pictures of the late Frank Coffee, veteran prospector who spent the latter years of his life at Dos Palmas spring east of Mecca, California. Loaned pictures or negatives will be returned after copies are made. Address Editor, Desert Magazine, Palm Desert, California.

DINOSAURIAN MATERIAL. Thumb-nail collection. Consists of one gastrolith (Dinosaur gizzard, or stomach, stone) and 15 thumb-nail size specimens of petrified dinosaur bone. These small, but select, specimens will average about ½ inch by ¼ inch in size and are a representative series of the various types and colors of petrified dinosaur bone found in this locality. All sixteen specimens postpaid for 25c. W. C. Minor, Box 62, Fruita, Colorado.

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FRED AND JESSIE PORTER welcome you to SHOOT!!! your pictures of "Ghost Town of Calico" and mountains in miniature, at the "POW-WOW" Trading Post, Hiway 91, Yermo, Calif. The hub of Rock-hounds Paradise. Crystals, cutting material in rough or slabbed. Uranium, highly fluorescent, and specimens. Miniature cactus, gifts and souvenirs.

Restoration Plans Advanced . . .

TOMBSTONE—A board of directors has been chosen, articles of incorporation have been filed and apparently the program to restore much of Tombstone to its 1880 appearance is well underway. Hope is to make the one-time rip-roaring mining camp "the show place of the West." Included in the proposed project is the replacing of modern signs with the type prevalent in the early '80s; putting the old style fronts back on buildings; laying wooden sidewalks; replacing side-walk overhangs which were in Tombstone in the early days.—*Tombstone Epitaph.*

Gila River Flood Dikes . . .

DUNCAN—Situated along the Gila river in eastern Arizona near the New Mexico border, the town of Duncan is at least doing something about flood protection. A control dike is to be built starting about a mile south of the main section of the town, will reach a height of 12 feet at its highest point. Besides protecting the town and its residents, the dike will remove flood hazards from U. S. Highway 70, it is believed.—*Lordsburg Liberal.*

Indians Good Loan Risks . . .

WASHINGTON—Records show the Indian is a good risk for federal loans. He has repaid so promptly that the Indian affairs office wants to make more money available to loan to tribes in several states. Theory is that loans may hasten the time when federal supervision over tribes can be reduced. Indian agency files show that losses on loans up to end of the last fiscal year were less than one-half of one percent. And 95.27 percent of all money due was paid on schedule.

Remembers Early Tombstone . . .

TOMBSTONE—A man who remembers when first cottonwood trees were planted in Tombstone in 1882 and who witnessed the lynching of John Heath visited the one-time Arizona boom town recently. He is Ray I. Swain, last member of one of Tombstone's first families. His father was an early-day lawyer in Tombstone. Swain now lives in San Francisco.—*Tombstone Epitaph.*

PALM SPRINGS and the desert. Articles, pictures, information. Sample 45c. Subscription \$3.50 a year. Villager Magazine, Palm Springs, California.

20 OLD WESTERN outlaw photos, \$1.00. 20 different Old West, Pioneer, etc., photos, \$1.00. 10 different battle of Wounded Knee 50c. 5 different Lincoln 25c. Lists 5c. Vernon Lemley Store, 302 Dallas Ave., Mena, Arkansas.

FOR SALE: Large Blue limestone deposit. Tests run 85 to 99%. Near rail and road. Inquire Harold V. Sims, P. O. Box 16, San Jacinto, California.

Fort Huachuca Gets Antelope . . .

TOMBSTONE—To reestablish the species in the southern part of Arizona, 60 antelope have been transferred from Anderson mesa to the 43,000-acre Fort Huachuca game management area. Buffalo, wild turkey, chukkar partridge and California mountain quail have also been released in the area. The region already has a good population of white tail deer and mule deer.—*Tombstone Epitaph*.

Cotton Big Cash Crop . . .

CHANDLER—Close to \$6,000,000 is the estimated value of the 1949 cotton crop in the Chandler area. When ginning is completed in March, the four Chandler gins expect to have ginned nearly 45,000 bales. This will be 17,000 bales more than the record crop ever harvested in the Chandler district.—*Chandler Arizonan*.

CALIFORNIA

Navy Wins First Round . . .

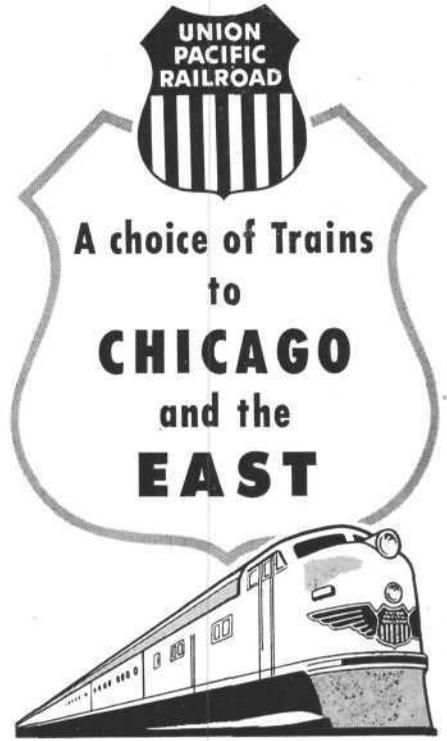
EL CENTRO — Supervisors of Im-

perial county had a hard decision to make recently when opposing groups appeared at a public hearing to consider the status of the desert road connecting Niland and Blythe.

This road is of considerable importance to the public, as it is a link in the Four States Highway connecting the Mexican and Canadian borders, and is of special interest to rock collectors and prospectors because it is an access route into the Chuckawalla geode field.

Naval officers appeared before the board to ask that the road be closed to travel as it crosses their jet plane fighter and machine gunning range. Residents of northern Imperial county protested the closing, stating that this road is too important to be blocked for

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naval training when other unoccupied desert areas can serve the navy equally well.

The supervisors finally reached a compromise agreement with the naval authorities and ordered the road closed from 6:00 a. m. to 1:00 p. m. four days a week, Monday through Thursday. Residents of the area affected have threatened to secede and form a new desert county if the supervisors do not rescind their action.

• • •

Range Cattle Fattened . . .

BLYTHE—Range cattle from Nevada, Utah, New Mexico, Arizona and other western states pour into California to spend the winter. By mid-winter 617 carloads of beef cattle and sheep had come by rail to Palo Verde valley along the Colorado river to be fattened for market. Some of the cattle go to feed yards, some are turned into irrigated pastures to eat their fill of green feed. Thousands of feeder beef cattle and sheep are also wintered in California's rich Imperial valley, where the livestock industry is big business too.—*Palo Verde Valley Times.*

• • •

Banning as "County Seat" . . .

BANNING—Riverside county supervisors have been invited by the Banning chamber of commerce to move the county seat from the City of Riverside to Banning in San Geronio pass. Supervisors and the county attorney have told the Banning boosters of legal difficulties involved, and that only way the matter can be brought up for a special election is by obtaining a petition with some 50,000 signatures.—*Indio Date Palm.*

Report on Gulf Highway . . .

CALEXICO — Recent motorists who have made the 140-mile trip from Calexico to San Felipe on the Gulf of California report that the rock fill across the great salt desert at the head of the gulf has been completed, but that the road is still corrugated along much of the way. They recommend against trying to take a trailer or a new car over the highway until further work is completed. Work is still being done on the road, but the engineers in charge have not yet announced a completion date.

• • •

Tramway Believed Assured . . .

PALM SPRINGS—Construction of the world's highest and longest aerial tramway, which will scale the towering slope of Mt. San Jacinto, is scheduled to start in February of this year with completion expected by December 1, 1951, according to Earl Coffman, heading the project. When finished, the tramway will take tourists and visitors from near Palm Springs, on the desert, to the wooded heights of the San Jacinto mountains in a matter of minutes. Opposition to the project has been expressed by individuals and groups who fear that one of the few remaining primitive areas will be exploited and spoiled if made too readily accessible.—*The Desert Sun.*

• • •

"Queen" Returns to Desert . . .

BARSTOW—Grace Finley Walker, nationally known as the Queen of Copper City, has returned to her home town of Barstow. The woman who prospected alone in the Mojave desert, finally struck rich ore, is back and is looking for someone to grubstake her for another venture into the desert. She says she knows where there are ore deposits "within 20 miles of Barstow."—*Barstow Printer-Review.*

• • •

Rodeo Head is Named . . .

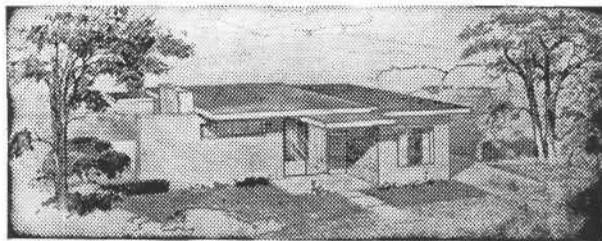
PALM SPRINGS—Trav Rogers has been named general chairman of the annual Palm Springs rodeo and dates of the event have been set for February 4 and 5. The western show has received the sanction of the International Rodeo association and the Rodeo Cowboys' association has approved the event. Thus top-notch riders and ropers and the wildest animals will be available.—*The Desert Sun.*

• • •

Noted Explorer-Publisher Dies . . .

DEATH VALLEY—George Palmer Putnam, 63, died at Trona hospital January 4 after being under treatment four weeks for uremic poisoning and internal hemorrhages. Owner and operator of Stovepipe Wells hotel, he has been well known as explorer, publisher and writer.

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Secession Move Still Alive . . .

BLYTHE—Agitation for formation of a new Desert county to include the desert area of Riverside county is apparently increasing instead of dying out. Newspapers from Banning eastward are reporting more interest in the plan, which was first offered by Desert Rat Harry Oliver and now has serious support of influential desert leaders. An idea of the size of Riverside county may be gained from the fact that the Blythe supervisor must travel 174 miles one way to attend meetings of the county board at the Riverside courthouse.—*Palo Verde Valley Times*.

Antelope Herd Planted . . .

INYO—Taken from Lassen county, 100 antelope have been planted in the Adobe meadows area of Mono county. The swift animals were herded by airplane, caught in a specially constructed rope trap, then lifted bodily into large trucks for the trip to Mono county.—*Inyo Independent*.

Culture on the Desert . . .

MORONGO VALLEY — A Little Theater project is helping round out the cultural life of colorful Morongo valley. Under leadership of Don Carter, former director of the Community Playhouse in Lincoln, Nebraska, first try-outs for local talent were held in January. The group has a place for its performances, the "desert room" of Morongo Lodge.—*The Desert Trail*.

A collection of portraits of Nez Perce Indians, by Mrs. Rowena Lung Alcorn, will be exhibited at the Southwest Museum, Los Angeles, during February. The museum is at Marmion Way and Museum drive in Highland Park.

NEVADA

People Still Want Land . . .

ESMERALDA COUNTY — Proof that the pioneering spirit is not dead may be found in the rush for desert land in the Fish Lake valley area of Esmeralda county where potentially rich agricultural land has been thrown open for desert entry. Desert land

entries are being filed rapidly, each for the maximum of 320 acres, with the bureau of land management, it is estimated the total may reach 200. A water company has already been formed and preliminary steps have been taken to lay out a townsite. Wells are being drilled and water resources closely investigated.—*Goldfield News*.

Cattlemen Choose Winnemucca . . .

WINNEMUCCA—An invitation extended by the Humboldt County chamber of commerce has been accepted by the Nevada Cattlemen's Association and that group will hold its 1950 convention in Winnemucca. The cattlemen's meeting will be early in November. Winnemucca is becoming quite a convention city, with the V. F. W. gathering scheduled to be held in Winnemucca in June. — *Humboldt Star*.

More Trees for Nevada . . .

ELY—Fifteen varieties of trees are now available to Nevada farmers for planting next spring. The trees are provided at cost under the federal farm forestry act through the University of Nevada agricultural extension service. All are suited to planting on farms and ranches for windbreak and shelter-break purposes or for wood lots.—*Ely Record*.

Pioneer Editor Dies . . .

RENO—R. L. (Dick) Richie, pioneer Nevada newspaperman and mining authority, died on Christmas night at the age of 80. Richie had been closely associated with Nevada's rich mining developments near the turn of the century, and had a hand in much of the state's early colorful history. He published the Nevada Mining Press until last spring.—*Salt Lake Tribune*.

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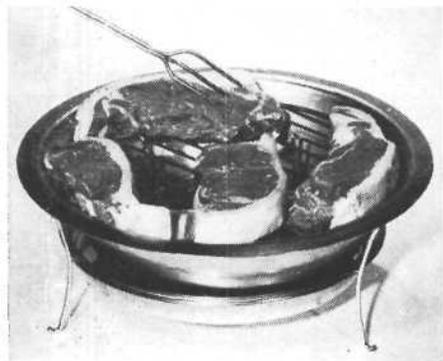
Ranges Being Improved . . .

AUSTIN—With the help of Uncle Sam, the trend on Nevada range lands is being reversed. Vast areas which had been damaged by overgrazing and other ill-advised practices are being improved by developing springs, drilling wells, protecting grazing regions and sowing forage seed. Cattle tend to stay close to water and are likely to overgraze the land near watering places. Development of additional watering places spreads livestock out for feed, helps prevent overgrazing. Grazing land is also being fenced and thousands of acres have been reseeded. Proper management is important too, cattle and sheep are grazed at the proper time and in reasonable numbers.—*Reese River Reveille.*

Safety First for Prospectors . . .

GOLDFIELD—Lone Wolf prospecting is at best a dangerous business. To prevent such tragedies as that which cost the life of Dan McCarty during last winter's blizzard, prospectors going into the hills are urged to

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register with the county clerk before they leave. County officials have on record time of departure, area where prospectors expect to work, length of time food supply will last and approximate date of scheduled return.—*Goldfield News.*

Newspaper Anniversary Marked . . .

PIOCHE—Founded in 1870 when Pioche was a roaring boom camp of the early West, the *Pioche Record* is now celebrating its 80th anniversary in a new building which has risen from ashes of a fire last August. It is the second oldest newspaper in Nevada, has seen history made from the administration of President Ulysses S. Grant up to the present administration of Harry S. Truman. Early copies of the paper report the last of the Indian wars in which era Custer's command was annihilated. The paper has existed through an eventful 80 years.

Mine Tailings Spoil Water . . .

FALLON—Dumping of mine tailings in the Carson river is raising serious problems, according to report of the state fish and game department. A study has disclosed that livestock won't drink the water unless forced to do so, and that cattle which do drink it suffer ill effects. Fish are reportedly dying, and vegetation in irrigation ditches has been killed, according to Fred Wright, state biologist. Ranchers along the river have complained to the state.—*Fallon Standard.*

NEW MEXICO

Santa Fe Trail Retraced . . .

SANTA FE—Unused for almost

70 years, the historic Santa Fe Trail is being retraced on foot by a man and a tiny mule. Edwin Gallinagh and his hardy companion started from Santa Fe on New Year's day, hope to reach Kansas City, Missouri, by June 3. On that date Kansas City will open its centennial celebration. It will be an 830-mile overland trek.

Accompanying Gallinagh will be Little Mo, said to be the smallest Missouri mule on record. Little Mo stands less than 36 inches high, is two years old. The travellers will not follow highways, but will go for the most part through foothills of the Rockies and over plains where vast herds of buffalo once grazed. Gallinagh plans to cover a maximum of 10 miles a day, camping along the route.

War Declared on Billboards . . .

TAOS—The war against highway billboards is spreading in New Mexico. Latest chapter of the New Mexico Roadside council has been formed in Taos, where 34 "undesirable" billboards were noted in a recent survey. The New Mexico Roadside council was organized by a group of sign-hating Santa Fe residents who don't want the state's scenic highways to become "billboard alleys."—*El Crepusculo.*

CARLSBAD—A new potash mine may be opened here, it is believed, following the visit of George Zoffman, president of Duval of Texas Sulfur company. If plans go ahead, it will be a multi-million-dollar project.—*Eddy County News.*

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Ceremonial Dates Announced . . .

GALLUP—Dates for the 29th annual Inter-Tribal Indian Ceremonial have been set. The famed festival of Indian dances is to be presented August 10-13, Thursday through Sunday, it has been decided by the board of directors. Improvements to the grounds are planned before this summer's show, an event which attracts thousands of visitors to the Gallup area each year.—*Gallup Independent*.

Quail Need Water Too . . .

LAS CRUCES—Five sites in Santa Fe county and eight in Bernalillo county have been selected and work has started on installation of quail watering units, the state wildlife restoration service reports. The work is part of a five-year quail and dove habitat improvement program, confined at present to the upper Rio Grande valley. Quail "guzzlers" have been developed in California's arid regions with highly satisfactory results.—*Las Cruces Citizen*.

The Law of the West . . .

HOPE—They still make it hard on cattle thieves in the West. Sixteen men have been sentenced to the state penitentiary in the past six months for stealing cattle from members of the New Mexico Cattle Growers association, according to President G. W. Evans.—*Penasco Valley News*.

SANTA ROSA—The new year started off for residents of Santa Rosa with first carrier delivery of mail in the town's history. The new service was inaugurated January 2.—*Santa Rosa News*.

Favorable weather conditions and above-average rainfall gives promise of more green feed in most sections of New Mexico. Range conditions last fall were good, should be good this spring and summer.—*Lordsburg Liberal*.

UTAH

Stay Off Bombing Ranges . . .

WENDOVER—Heed the "Danger, Keep Off" signs with which bombing ranges in the Utah desert are posted. This is the warning issued by air force officials to geologists, prospectors, ranchers and desert visitors who might chance to wander on to a desert target range. Bombing planes from the March Air Force base in California use the Utah desert for target practice. The huge ships fly at 26,000 feet and higher from where persons on the ground cannot be seen from the planes, nor can the planes usually be seen from the ground.—*Salt Lake Tribune*.

Quilts Instead of Blankets . . .

ST. GEORGE—Indian women on the Shivwit reservation are being helped to keep warm this winter. Mrs. Henry Graff, appointed by the state relief society, has been going each week to the reservation to teach the women how to piece and make quilts. The Shivwit women are reportedly highly pleased with their handiwork.—*Washington County News*.

Good Year for San Juan . . .

MONTICELLO—It was a good year in San Juan county. A review of 1949 shows above normal precipitation provided moisture for the largest wheat crop in history of the county. More than 40,000 acres of winter wheat had been planted, growers were blessed with an average yield of 33 bushels per acre. Ranges also produced abundantly. The county's 16,000 head of cattle and 63,000 head of sheep did exceptionally well. Other crops grown in the county were above average.—*San Juan Record*.



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PALM CANYON TRADING POST

situated on "The Bench" where you park your car at the head of the trail leading down into the park of stately Washingtonia palms. Visitors are always welcome.

Lehman Cave National Monument is closed until next March 15, according to Max R. Wainwright, superintendent. The Monument is to be open on a seven-day basis during the spring and summer travel season.—*Millard County Chronicle*.

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Hard Rock Shorty of Death Valley



"Must be some skunks around here," exclaimed the visitor who had just stopped at Hard Rock Shorty's cabin to ask about roads. He sniffed the air again, and evidently did not enjoy the odor.

"Yep, lot's o' skunks," answered Shorty. "Country's been overrun with 'em ever since Pisgah Bill got that crazy idea o' havin' a skunk farm."

"Skunk farm? What the devil would a man have a skunk farm for? Fur's no good in a hot climate like this."

"Didn't raise 'em fer furs!" grunted Shorty. "Bill was gonna sell 'em fer pets. But the scheme was no good—like all the rest o' Pisgah's get-rich-quick ideas."

The stranger was curious and began asking more questions.

Shorty wanted to get back to his game of solitaire, but it was evident there was no way of getting rid of the stranger without telling him the story.

"Bill'd been readin' in some o'

them books o' his'n about Musk Rose and some o' them sweet-smelling plants they use in making perfume. He got the idea that if he'd feed them scented flowers to skunks it'd turn that foul odor o' their'n into a sweet perfume. Then he'd take some o' them perfumed skunks down to Hollywood and start a fad. Everybody'd want a pet skunk around to make the house smell sweet. Bill had it all figured out. He'd sell a thousand skunks a year at ten bucks apiece. Then he could quit muckin' ore at that low grade mine o' his.

"He sent to the seed houses and got a lot o' seed to plant in his garden at Eight Ball crick, and ordered some traps from the mail order house to ketch the skunks with. Bill worked all summer packin' boxes out to the spring to make cages for the skunks, and growin' flowers. By the time the flowers was ready to blossom he had 47 skunks there ready to eat 'em. Cost him quite a lot bringin' in feed fer the skunks while the flowers was gettin' ready to bloom, but Bill's a patient cuss when he's workin' on one o' them big ideas o' his.

"But it didn't work. Bill couldn't get them skunks to eat them flowers. He'd put fresh blossoms in the cages every morning—and nothin' else. But the skunks wouldn't touch 'em. Finally when the pore skunks was nearly starved to death he turned 'em loose and went back to minin'."

RIVER VACATION 1950

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Glass Factory Proposed . . .

PAROWAN—Construction of a glass factory in Parowan may follow formation of the Western Glass corporation, approved by the State Securities commission. Huge silica deposits in Parowan canyon is reason for location of the glass factory here. Feldspar, lime and other ingredients are available within a reasonable distance, company official say. Engineers say the silica deposits are unlimited.—*Iron County Record*.

• • •

Sugar Beet Yield Higher . . .

OREM—An increase of more than four tons to the acre over 1948 was realized by sugar beet growers in the 1949 season. Average yield for the Orem district was nearly 17 tons to the acre. Better farming methods and favorable growing conditions contributed to the increase. Price for the crop was satisfactory.—*Orem-Geneva Times*.

Lupine Once Had a Bad Reputation

By MARY BEAL

Lupines are among the best known flowers in the world, and blue is the color most frequently associated with them. But there are many species, some of them amethyst, lilac and violet, and it is these lesser known members of the family that I want to present to *Desert Magazine* readers this month.

First, however, let's give a thought to the origin of the name Lupine, of world-wide usage. Farmers of ancient days thought this plant robbed the soil of fertility, perhaps because it is often found on waste lands. From this idea of the plant's ravenous or wolfish character came the name *Lupinus*, from the Latin for wolf, *lupus*. It has come down to us from the Romans but no longer are rapacious qualities attributed to it. Actually the plant is a legume, and is being planted in some southern states for soil fertilization.

Many Lupines are showy and handsome enough to be cultivated as favored ornamentals and it is not surprising that several species have an established place in gardens. Western species are among those in the front rank for popularity, even in Old World gardens where they were introduced by the early European botanical explorers sent to our pioneer West to seek new plants to beautify their gardens.

Lupine leaflets have the habit of folding up, usually during the heat of the day—you might call it taking a mid-day nap, though it's usually too long a sleep to be labeled a nap.

One handsome amethyst-flowered species is the Coulter Lupine, named for Dr. Thomas Coulter who first collected it about 1831. You may know it as Arizona Lupine or Loose-flowered Lupine. Botanically it is listed as

Lupinus sparsiflorus

An extremely unstable species, which has led to the segregation of several varieties, these are also inconstant. The species is generally larger than the varieties, usually a foot or two high, the stem rather slender, with few to many branches, the herbage clothed with soft hairs and also a scattering of stiff hairs. The palmate leaves have 5 to 9 leaflets, linear to oblanceolate, 1/3 to 1 inch long, on petioles 1 to 3 inches long. The slender racemes are 3 to 9 inches long and may be loosely flowered or occasionally densely so. The corollas are typical pea blossoms, about 1/2 inch long, a violet or lilac hue, the banner centered by a white spot which ages to a bright red-purple. The hairy oblong pods are about 1/2 inch long, constricted between the 4 to 6 seeds. It favors sandy soil of foothills, valleys and mesas, up to 4500 feet, in southern Nevada, Arizona, southern California and Lower California and should be found in bloom from March to May, often adding large sweeps of attractive color to the landscape. The commonest variety is *arizonicus*, sometimes classed as a separate species.

Var. arizonicus

Ordinarily 5 to 8 inches high, somewhat succulent, the flowers mostly smaller, the freshly opened corollas pale purplish-pink, lavender or lilac, often drying deep violet, the leaflets broadly oblanceolate. Usually found below



Chick Lupine — *Lupinus microcarpus*, var. *horizontalis*

3000 feet, preferring deep sand. Quite common in western Arizona, southeastern California from Death Valley to the Mexican border on down into Sonora and Lower California.

Var. barbatulus

Is identified by stout, hollow, very erect stems, larger leaves, and racemes up to 12 inches long, the corollas pale lilac or purplish with a more reddish tinge. Found in the Needles area of the Mojave desert, the Colorado desert and western Arizona. Another interesting species is the Wide-petaled or Chick Lupine.

Lupinus microcarpus var. *horizontalis*

or

Lupinus horizontalis var. *platypetalus*

A low trim plant 5 to 10 inches high, with somewhat succulent, stout hollow stems, branched from the base or a little above, the branches at an ascending angle. Except for the upper surface of the leaves, the herbage is soft-hairy, the long-petioled leaves with 5 to 9 leaflets 1/2 to 1 inch long. The clean-cut upstanding racemes measure 4 to 10 inches atop peduncles varying from short to long. The flowers are on very short pedicels, arranged in 3 to 8 close neat whorls, more or less remotely spaced. The corollas are lilac or lavender, fading to white and becoming papery in age. The ovate pods are covered with long soft hairs and sit erect in the whorl of calyxes, like so many baby birds in a nest.

Found in the northern, central, and eastern Mojave desert on sandy or gravelly flats and slopes at moderate to higher elevations.

Another wide-spread annual species of different habit of growth is the Bajada Lupine or

Lupinus concinnus

The specific name is interpreted as shapely, elegant or skillfully put together. Varying from the upright fashion of the preceding species, it follows a more diffuse pattern. From 4 to 8 inches high, the several branching stems from the stout base are inclined to spread out, the lower ones often decumbent. The herbage is densely clothed with soft hairs, which sometimes turn rusty or tawny in age, the many long-petioled leaves with 5 to 8 oblanceolate leaflets. The short racemes are rather dense and very short-stemmed, well scattered as a rule, and surpassed by the foliage. The corollas are lilac or violet, edged with a rich reddish-purple, the banner centered by a spot of yellow. It is an exquisite color scheme.

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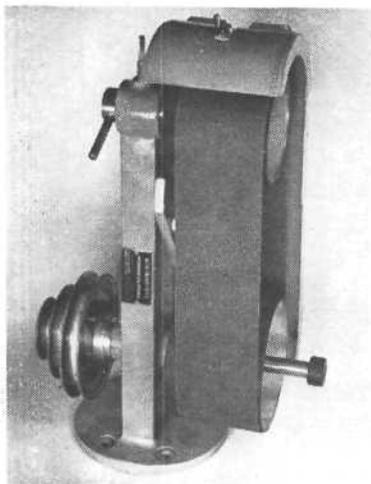
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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

While our column on the 20 percent excise tax situation on gems and gem materials was at press last month the President of the United States, vacationing in Florida, held a hasty press conference on the matter. This conference was so hasty that the President came to it in his pajamas. The gist of the matter was that Mr. Truman thought all excise taxes except those on beverages and tobacco should be repealed—when Congress meets again.

While we applaud his belief we deplore the action for nothing could have been so ill-timed. It had the effect of an atom bomb on the Christmas trade. Anyone who had any plans for giving gifts involving the tax immediately deferred them and switched their buying to other items. The result was that the sale of diamonds was reported in the press to be off more than 50 percent from the previous season. Stores were stacked high with luggage, jewelry, cosmetics, perfumes, etc., on which the tax is collected.

Business on these items will boom of course when the tax is repealed but it was a blow to merchants left with high inventories and to the gem and mineral dealers hoping for a little of the over-emphasized commercialism of Christmas. We hope the tax is repealed while this item is at press but if it isn't we suggest they quit talking about it. And if the tax is never repealed, or merely reduced, we hope some sensible interpretation of the law is made so that the hobby of mineral collecting and gem cutting is not the only hobby in the country penalized with taxes.

A further sidelight on the farcical interpretations of the excise law is revealed in a personal experience. We had thought of taking two diamond rings and having them made into one. Both rings were made of platinum and we consulted a jeweler about a new setting. After deciding on a design and fixing the price he said "and 20 percent tax." "What tax?" we asked. "There is no tax on labor and that is all you are supplying. The diamonds and platinum you are using to make the ring are not a new purchase. You are only reprocessing our own materials." "That is true," said the craftsman, "but the end result is that I will deliver a new ring to you and I must collect the tax under the law."

That ring can wait!

If the tax has not been repealed by the time this appears we urge you to write your Congressman about it so that the little dealer at the side of the road can again sell his agates and jewelry, which were never luxury items within the meaning of this law.

• • •

During our recent trip around the nation we visited many museums and we were dismayed to learn one thing. There are but two museums now in the whole country that have paid qualified curators for minerals and gems. Several have volunteer and honorary curators, but the number of paid authorities has dwindled because the mineral collections have dwindled. They are being broken up and sold for many museums are discontinuing the space assigned to minerals. The latest museum to do this is the Academy of Science in Philadelphia. Their great mineral collection is reported to be for sale because of public apathy and curator Dr. Samuel Gordon has left the mineral field entirely. The volunteer curator system re-

sults in many errors. An example of this is the wrong labelling of a fine large specimen of chrysocolla as chrysoprase in the Field Museum in Chicago.

"Why is this?" we asked a top authority. "Because of a reported lack of interest by the public in the minerals and because art is crowding them out," he said. He continued, "Art has a snob appeal that impresses prospective donors. Donation of art objects, or money for their purchase, gets one's name in the papers. News about donations of minerals goes to the newspaper editors' waste baskets. And so people offer no money to museums for the purchase of fine mineral specimens. Museum heads therefore cater to the art patrons, and as new Chinese screens and modernistic paintings are acquired the minerals and gems are usually given the gate. Wherever art and science is housed under one roof art takes over. I like the idea of the British Museum. They educate every Briton to believe that if he encounters anything in his foreign dealings in commerce, or in personal travel, of interest to the empire, it is his duty to acquire it and donate it to the museum. The result is that the people themselves, and not a handful of wealthy names, have made it, perhaps, the best educational museum in the world. Americans should be encouraged to do that for their museums."

The truth of our informant's opinions becomes apparent when one compares museums of Los Angeles and New York. In New York, where art and science have been separated, they have two of the greatest museums in the world in the Metropolitan Museum of Art and the American Museum of Natural History. But in Los Angeles, where the county maintains a "museum of history, science and art," art has crowded science right out into the famed rose gardens while the history continues as principally a collection of old autos and items of clothing worn by former motion picture idols of a time when acting was the worst the world has known.

In fairness we must report that a new mineral section has recently been opened and favored with a fine spot. It is well displayed and lighted but it is only a beginning. One looks in vain for any evidence that California is one of the greatest mineral areas in all the world or that neighboring San Diego county is one of the greatest gem bearing areas. Easterners visiting the museum will look in vain for the tourmalines and beryls and there is not a faceted gem or a cabochon under the roof.

But the mineral and gem collector and student can gather heart by crossing the park and entering the new California State Exposition building to be opened in March. There he will see the modernized mineral and gem display being assembled by Herbert Kornfeld with the help of a special committee headed by Howard McCornack and including Belle Rugg and ourself. This committee was appointed by Victor Gunderson, president of the Los Angeles Lapidary society. Through the cooperation of all the Los Angeles county mineral and gem societies there will be active demonstrations of lapidary technique every day in a glass enclosed lapidary complete in every detail. It is a thrilling story of the gem cutter coming to the people at last in a museum for the people. We shall report on it in detail next month.

Gems and Minerals

NEW MINERAL SOCIETY FORMED IN WHITTIER

Whittier, California, now has a society of rockhounds. The Whittier Gem and Mineral society held its first meeting in December and has announced that regular meetings will be held the first and third Tuesday evenings of each month at the high school. Officers of the new club are: Robert B. Myers, president; Ed Kantor, vice president; Miss Irene Thompson, secretary; Al Styerwalt, treasurer. Darold J. Henry, professor of geology at Mt. San Antonio college in Pomona, was instrumental in getting the new group organized.

TUCSON GROUP STARTS YEAR WITH NEW OFFICERS

The Tucson, Arizona, Gem and Mineral society started off the new year with a slate of officers elected at the December meeting. Officers elected for the 1950 year are: Mrs. A. H. Murchison, president; George W. Baylor, vice president; Mrs. Lena Marvin, secretary-treasurer. Retiring officers were S. L. Wolfson, Mrs. A. H. Murchison and Mrs. Jean Serrano.

Walter Pilkington has been elected to head the Victor Valley Mineral and Gem club, Victorville, California, during 1950. Elected along with him were: Robert Pierce, vice president; Mrs. Helen Pratt, secretary; Miss Virginia Love, treasurer; Mrs. Martha Merrill, librarian and publicity.

High on the club's list of activities this year will be a bigger and better mineral and gem display at the 1950 San Bernardino County fair. The club is growing, had an active year in 1949 with several field trips.

Undaunted by snow the weekend of December 10 and 11, the Yavapai Gem and Mineral society, Prescott, Arizona, staged its third annual show as 1949 neared its end with several new features which attracted the interest of rockhounds. Visitors from over Arizona and from as far away as St. Louis, Missouri, came to see the exhibits.

Gem and Mineral clubs all over the nation made December a month for observance of Christmas, and the Mineral and Gem society of Castro Valley, California, was no exception. A potluck supper in the Hayward high school cafeteria started off the society's annual Christmas party with about 60 persons present. Mrs. Tom Robb was chairman, assisted by Mrs. B. E. Sledge and Mrs. May Myers. Gifts of mineral specimens were exchanged by members. Meeting place from now on will be at the high school instead of at the Community center.

Fifty-one members and guests gathered for a Christmas dinner December 14 which was the monthly get-together for the Santa Cruz, California, Mineral and Gem society. Sound movies obtained from the University of California at Berkeley by Mrs. R. E. Campbell provided entertainment. On the Sunday following the dinner members went on a field trip to Big Sur and San Simeon to look for jade and rhodonite. A talk on gem cutting was enjoyed at the January meeting.

BIG YEAR AHEAD FOR SEARLES LAKE SOCIETY

Following the traditional '49er Days community party in January, the Searles Lake Gem and Mineral society in the Searles valley area of California is busy now planning for the California Federation convention which will convene at Trona in June. With a membership of 85, the group is now in its eleventh year.

Perhaps because the locality is rich in mineral and gem deposits, the club has had a large enthusiastic membership since it started. It meets the third Wednesday of each month at the Trona club. Numerous field trips are made each year, an annual event is the trip to Telescope peak. Ralph Merrill is now president of the Searles Lake society.

EARTH SCIENCE CLUB FORMED IN ILLINOIS

With 30 enthusiastic people present, a new earth science club for people living in the suburban area between Chicago and Aurora, Illinois, was organized recently and a name was to be chosen at a January meeting. An invitation to join is extended to everyone interested in minerals, fossils, geologic formations, ancient man, gems or silver smithing. "Geological Features of the West" was title of an illustrated lecture by Stevens T. Norvell at the group's first meeting.

More than 100 members and guests enjoyed turkey and dressing at the annual Christmas party of the Mother Lode Mineral society, Modesto, California. Highlight of the program was the showing of colored mineral slides rented from W. Scott Lewis. Julian Smith was narrator. New officers were nominated. They are: Paul Rayfield, president; Lois Wemyss, secretary-treasurer; Helen Wittorff and Royal Brown, directors. Royal Brown is retiring president.

Officers now heading the San Diego Lapidary Society, Inc., were elected as 1949 neared its end. President is C. A. Dietrich while Mrs. Ada Harrison is secretary.

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The Sequoia Mineral society (California) has changed its name to the more descriptive "Sequoia Gem and Mineral society." The organization, after an active year, is now planning for its annual banquet in February. Ira Woolley, Mildred Wallace and Frank Paiva are on the committee to choose a location. Election of officers was scheduled to take place at the January meeting.

Presidents of many mineral and gem societies receive far too little recognition for the work they do, in the opinion of members of the Sacramento Mineral society, so this California group at its December meeting presented a past president's pin to each of the group's former leaders. Presentation was made by Mrs. Rita Downard who conceived and carried out the idea. At January meeting of the society there was to be election of officers for the 1950 year. George L. Hinsey was president during 1949.

Harrison Stamp, retiring president of the San Fernando Valley, California, Mineral and Gem society, was honored at the group's Christmas party when 115 members and guests gathered to celebrate. In appreciation of his two years of service, the club presented Stamp with a gold wrist watch. Ben Sisco made the presentation. A musical program was presented by members of the society, there was group singing and exchange of gifts.

January field trip for the Dona Ana County, New Mexico, Rockhound club was to the vicinity of Picacho peak, while the January meeting was held on Friday, the 13th—but both were successful. The club now has a permanent meeting place, in Saint Paul's Methodist church in Las Cruces. Meetings are on the second Friday of each month at 7:30 p. m., visitors are welcome.

A new section of the Georgia Mineral society, known as the Prospectors and Explorers section, has been organized. Purpose is to prospect for commercial minerals, the section has the active support of the Georgia Geological Survey. First field trip of the new section was taken December 4 to Stone mountain.

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FIELD TRIP TO DESERT PLANNED FOR FEBRUARY

One of the first acts of the new board of directors of the San Fernando Valley, California, Mineral and Gem society was to accept eagerly an invitation from the Coachella Valley Mineral society for a joint field trip in February. New president of the San Fernando group is Glen Craig. Action on the invitation was taken when the outgoing board of directors entertained the new board December 22 at the home of Mr. and Mrs. W. L. Cooper, Glendale.

It was decided that locations of all future field trips will be scouted. The scouting chore will be the job of Lester Cowan, new field trip chairman.

The nomenclature of Lake Superior agates was topic of a talk given by T. C. Vanasse, Spring Valley, Wisconsin, at December meeting of the Minnesota Mineral club, Minneapolis. His talk was a preview of a book he is writing. Arthur Anderson is president of the club, Mrs. Lydia Heumann is secretary.

Another group which enjoyed a Christmas party was the Kern County, California, Mineral Society. Members met in the Bertha P. Elliott hall in Oildale, exchanged gifts and listened to a program.

Election of officers at final business meeting of the 1949 year and a Christmas party for members ended an active 12 months for the Clark County Gem Collectors, Las Vegas, Nevada. New officers are: Bill Brown, Las Vegas, president; Cortez Cooper, Boulder City, vice president; Annette J. Drury, Las Vegas, secretary-treasurer. In recognition of his help to the society for the past several years, Paul Mercer, Boulder City, was named a director along with Paul O. Drury. December was not without its field trip: one to Keyhole canyon for Indian artifacts and another to the Searchlight area for petrified mountain mahogany.

A full turkey dinner for members and guests, followed by installation of officers, provided a pleasant evening for the Searles Lake, California, Gem and Mineral society. The meeting was in the Trona Club ballroom. Installed to lead the group during this year were: Ralph Merrill, president; Leo Briggs, vice president; Pat Sturtevant, recording secretary; Eddie Redenbach, treasurer; Oscar Walstrom and Newell Merritt, directors.

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COACHELLA VALLEY GROUP CELEBRATES CHRISTMAS

The Coachella Valley (California) Mineral society made a real Christmas celebration out of its annual banquet in December with the Junior Rockhounds as guests. A delicious ham dinner, entertainment, group singing of carols and an exchange of rock gifts made a complete evening. Dinner arrangements were made by Mrs. George Smith, Mrs. Neva Rush and Mrs. Floyd Hammer. Mrs. Rosa Thomas decorated, the program was handled by Florence B. Dutton.

Members of the Oklahoma Mineral and Gem society combined their December meeting and Christmas party, enjoying an evening affair at the home of Mr. and Mrs. Delbert H. Markwell, Oklahoma City. On November 8 a special meeting was called at the Oklahoma Historical society building to hear a lecture on diamonds by Gladys Babson Hannaford.

Santa Claus dropped in at the December meeting of the Los Angeles Mineralogical society, and with members of the group enjoyed a Christmas program. A paper on the geology of Palestine was read by Frank F. Larkin, immediate past president of the society. Herbert Fritts arranged a display of molybdenum ores and minerals associated with them.



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Games, contests, group singing and entertainment filled the evening when the Santa Monica Gemological society had its Christmas party at the December meeting. There was exchange of gifts, refreshments were served by Mrs. Lefa Warth's social committee. Six new members were welcomed by President C. E. Hamilton.

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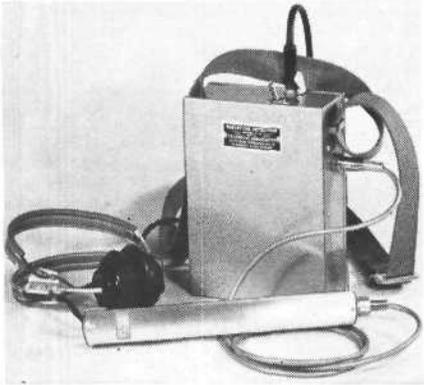
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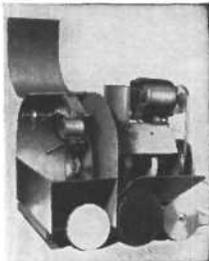
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GEM SHOW DATES SET FOR MARCH 10 TO 12

Second Mineral and Gem show to be staged by the Coachella Valley Mineral society, Indio, California, has been scheduled for March 10, 11 and 12 and the group will have the use of the main building of the Riverside County fairgrounds at Indio. The show will be open until 10:00 o'clock each night, there will be no admission charge. Those who wish to exhibit should write to O. A. Rush, P. O. Box 3362, Indio, California. Rush is show chairman. A field trip is planned for early Saturday morning, March 11, to the Kaiser iron mines at Eagle mountain.

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Materials best suited to faceting and techniques he finds most effective were discussed by Dr. J. R. Hudson, Dayton, Ohio, at December meeting of the Chicago Rocks and Minerals society. Regular meetings of the group are held the second Saturday of each month at 8:00 p. m. in the Green Briar Park field house, 2650 West Peterson avenue, Chicago. Visitors are welcome. President of the society is Herbert F. Grand-Girard.

Colored motion pictures of many mineral localities in the Southwest desert area, and scenic pictures taken over much of the western United States were shown at December meeting of the Pomona Valley, California, Mineral club. The films were shown by Mrs. A. F. Dossee, who took them herself.

The Dona Ana County, New Mexico, Rockhound club now is what they choose to call a double-barreled organization. One group of members takes a field trip on one scheduled date, another group goes on another official date. Although all aren't pleased with the arrangement, it does make it possible for more people to go on more field trips.

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**GEM SHOW SCHEDULED
IN APRIL AT SAN JOSE**

Fifth annual gem exhibition of the San Jose, California, Lapidary society is to be held in the San Jose Woman's club building on Saturday and Sunday, April 22 and 23, it has been announced. Displays this year will emphasize transformation of rough stones from many lands into jewels and mounted gems. The San Jose society is an amateur organization, each piece exhibited at the show will be the work of some member of the society. None of the exhibited pieces will be for sale. The show will be open to the public from 10:00 a. m. to 9:00 p. m. each day. There is to be no admission charge.

Edward L. Dowse is new president of the Wasatch Gem society, Salt Lake City, Utah, following election of officers which took place during the society's public exhibit of work in the Salt Lake City Civic center December 2. Serving with Dowse will be: Mrs. Geraldine Hamilton, vice president; Helmut Wachs, secretary; Mose Whitaker, treasurer. A great deal of public interest was shown in the society's displays.

Members and friends of the Mojave Desert Gem and Mineral society heard a nationally-known authority on the desert when Leroy Palmer spoke at the December meeting on "The Geology of the Mojave Desert."

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**FIRST SHOW FOR
BRAWLEY GEM CLUB**

Rockhounds of Brawley, California, staged their first rock and gem show in December with gratifying results. The Brawley Gem and Mineral society display was in basement of the Christian church with both Brawley and El Centro exhibitors showing cut and polished stones. There was also one display of fossils and Indian artifacts.

Interest in the hobby is growing in Brawley, and a group of high school students have formed the Brawley Junior Rock club. Members of the adult group help the beginners. Field trips to nearby mountains are on the society's schedule this season.

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11. Succor Creek Agate.
12. Petrified Palm.
13. Serpentine.
14. Onyx or Travertine.
15. Texas or Turitella Agate or Rhodonite.
16. Petrified Wood.
17. Pastelite.
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19. Variscite.
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Practically all of these pieces will be just as found or will have most of their outsides on them so that they may be used for identification in the field. I guarantee that they came from and are typical of these locations.

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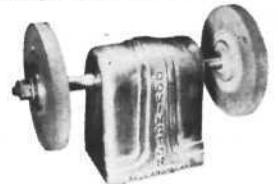
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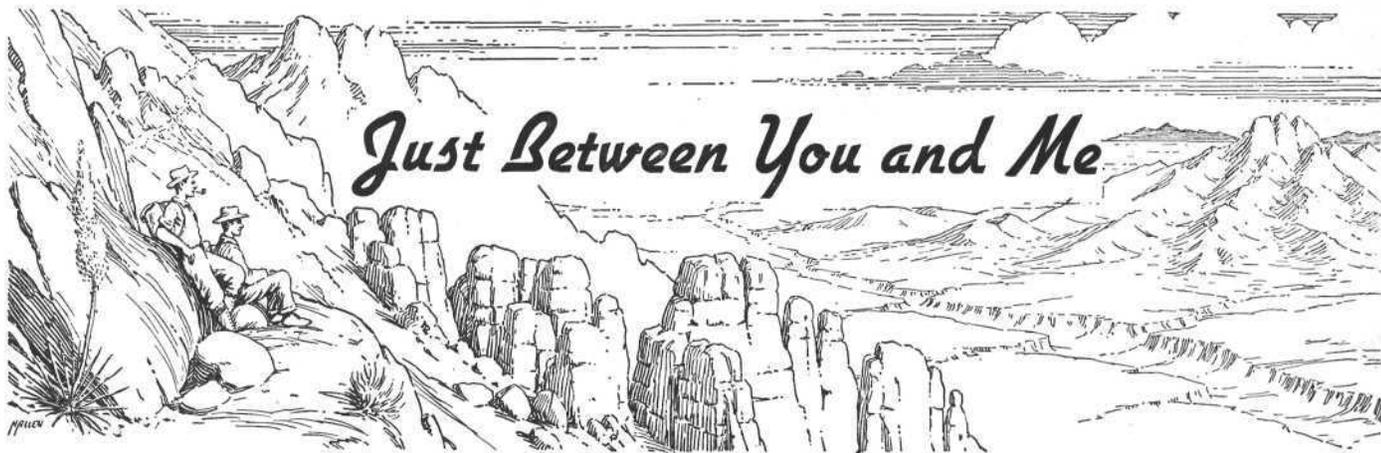
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by RANDALL HENDERSON

IT pleased me immensely a few weeks ago when a manuscript and letter came from John L. Von Blon—from Daggett, California. For John was an old friend. I knew him many years ago when he was city editor of the Los Angeles Times and I was starting my newspaper career as a cub reporter on his staff.

After 18 years on the Times he became associate editor of the Auto Club's magazine, *Westways*. Then I lost track of him, and it was gratifying to renew my association with a man for whom I always held a great admiration.

The pressure of a metropolitan city editor's desk is terrific. It eventually will break the strongest of men. But John had the good sense to retire before it was too late. And now at the age of 79 he is living in a little cabin on the desert doing the things he likes to do—exploring the ghost mining camps, and doing free lance writing.

Aside from my personal regard for my former boss, I am glad to be able to publish in *Desert Magazine* the work of a journalist who not only is a skilled reporter but also a master of clear concise English.



Motorists who have bumped along over the rocks and through the sand of the desert road which connects Blythe in California's Palo Verde valley with Niland in the Imperial valley, have often expressed amazement that so important a natural trade route should have been so long neglected.

It is an important road. It not only connects southern California's two largest irrigation projects, but it is the most direct route between the Mojave and Colorado deserts. More than that, it is a link in the Four States highway connecting the Canadian border with the Mexican border—a very bad link to be sure, but nevertheless a very necessary part of an important international highway project.

For many years the main obstacle to the improvement of this road has been the indifference of the Riverside county supervisors, a majority of whom reside on the coastal side of the mountains and, I suspect, know less about the desert which comprises three-fourths of their supervisorial domain than they do about the geography of Hindustan.

Since the road has not been improved, the U. S. Navy has very logically assumed that it was of no importance—and now wants to close it permanently by reserving the great plateau between the Chocolate and Chuckawalla ranges as an aerial gunnery range.

I want to join my protest with those of other desert folks who are fighting to keep this road open. I am sure the navy can find ample space on this big desert for the prac-

tice of its jet plane gunners without barricading as important a peace-time trade route as the Blythe-Niland road.

And while we are on the subject, I would like to suggest to the big brass and braid of the army and navy that while there was a time when the desert was regarded as an unfit place for human habitation, and they could have taken over the whole arid Southwest without a protest from anyone, those days have passed. Today a million and a half Americans are earning their livelihood on the Great American Desert, and millions more come here every winter season for rest and recreation.

Defense preparation is important, yes, but the generals and the admirals should not get the idea that because this region is called desert, they may come out here and fence in great areas without hurting anyone.

I am thinking not only of the target range that has been established on the Blythe-Niland road, but of numerous other military establishments which have been spread over the desert landscape apparently without regard for the peace-time values the terrain may have.

We would like to preserve as much of the desert as possible as a place without fences and without "No Trespass" signs. We would like to maintain it as a sanctuary for those seeking freedom and peace.



A patch of clean desert sand, a blazing campfire, and a warm sleeping bag spread on the ground—these are the accessories for the kind of a New Year's eve I enjoy most. This year Cyria and I camped with the Pegleg trekkers on the Borrego desert.

We spent the evening in the campfire circle listening to the tall tales of the contestants who had gathered for the annual liar's contest. This event has become a sort of annual reunion for the old-timers of the Colorado desert.

Desert Steve Ragsdale insists that Pegleg Smith was an old reprobate who got his gold by hijacking it from legitimate miners. Hank Wilson is convinced that Pegleg was an honest man and really found the gold he bragged about in later years—and Hank tells a very convincing story to bear out his theory.

As far as I am concerned it doesn't make much difference. Pegleg Smith has become a good desert legend—and I hope folks keep on looking for that mythical hill covered with black nuggets.

Early on New Year's morning Cyria and I resumed our standing feud as to which can flip flapjacks most skillfully. We have a system of scoring—so many points off for burning the flapjacks, more deductions for catching 'em on the rim of the frying pan, etc. She started the New Year by winning the family championship. But just wait!

BOOKS OF THE SOUTHWEST . . .

STORY OF A HIGHWAY THAT MADE HISTORY

The padres who built California's missions called it *El Camino Real*, but to motorists of today it is known as U. S. Highway 101. This north-south road across California has played an important role in the history and development of the state since 1769.

In his newest book, *The Royal Highway*, Edwin Corle has written something that he says he "very much wanted to write." He explains that "while I tell the story of El Camino Real it enables me to tell in popular guise a great deal of California history."

It should be pointed out that the book is written for the contemporary reader—long-past events are located in terms of today's landmarks. History professors may gnash their teeth, but the reader can readily locate the spot where insurgents lay in wait for Governor Victoria when Corle, in telling of the Battle of Cahuenga Pass, designates the place as "the southern end of the pass at what would be approximately Hollywood boulevard and Vine street today."

All the colorful characters in California's early history are given whatever treatment Corle believes they deserve—he will puncture a stuffed shirt no matter how well history may have starched it. *The Royal Highway* is both interesting and informative.

Published by The Bobbs-Merrill Company, Inc., 724 North Meridian street, Indianapolis 7, Indiana, 1949. 327 pp., appendix, biblio., index, 38 illus., 2 maps. \$4.00.

FRANCISCAN MISSION IN ANCIENT HOPI AWATOVI

Awatovi, a northern Arizona Hopi village long abandoned, flourished from about 1300 to 1700 A.D. During that interval from 1629 to 1680, the Franciscan Fathers maintained a mission there, known as *San Bernardo de Aguatubi*.

The story of this mission, based on such records as are available, but mostly on excavations at the site near Keams canyon prior to 1937, is told in *Franciscan Awatovi*, just published by the Peabody Museum of Harvard.

Authors are Dr. J. O. Brew, archeologist, now Director of the Peabody Museum, Ross Gordon Montgomery, Watson Smith, archeologist of the Peabody Museum, and J. Frankling Ewing, S. J.

Dr. Brew has written a very complete

Spanish history of the village from its discovery by Coronado's expedition in 1540, through the founding of the mission in 1629, the Pueblo Rebellion of 1680, the attempted reconquest, and the final destruction of the village in 1700.

Montgomery, an architect who specializes on church architecture, and who restored the Santa Barbara Mission after the earthquake of 1925, makes the most exciting contribution to the book. His splendid drawing reconstructing the church, his intimate knowledge of modern Franciscans, and a tremendous amount of historical research, bring the ancient mission to life as we read his account. He was able to direct the excavations and interpret the finds of the archeologists in a most interesting manner.

Smith has contributed a section on the mural decorations of the Awatovi church, where floral patterns and simple dados were found, and also designs simulating the glazed tiles and wrought iron grille work found in the churches of Mexico and Spain.

Published by the Peabody Museum of American Archeology and Ethnology, Cambridge 38, Mass. 360 pp., illus. \$5.85 paper, \$8.35 cloth.

—Katherine Bartlett.

BIGGEST RANCH IN AMERICA'S HISTORY

Besides being exciting reading, Lewis Nordyke's *Cattle Empire, The Fabulous Story of the 3,000,000 Acre XIT*, is a valuable contribution to America's frontier history. This is the first authoritative account of what was the biggest ranch in U. S. history, sprawling the length of the Texas Panhandle.

The story began in 1875, when Texans decided they must have a new state capitol building—the biggest and

the handsomest in the land—and offered 3,000,000 acres of raw land to any one who would build it. A Chicago syndicate accepted the deal sight unseen, and by that foolhardy gesture launched themselves on one of the most incredible and astonishing ventures in Southwestern history. On paper, they figured that the ranch should earn in five years four and a half million dollars raising beef cattle, but actually it was 30 years before the American and British investors got their money back. While the Capitol Freehold Land and Investment Company, Ltd., wrestled with blizzards, prairie fires, drouths, and the hostility of neighbors, rustlers and barbwire snippers, Texas enjoyed a beautiful granite state capitol free of charge!

William Morrow & Co., Inc., 1949. 273 pp., illustrated with maps, photographs and documents. \$4.00.

TREACHEROUS SHORT CUTS OF THE WESTWARD COURSE

Prairie Schooner Detours is a sequel to Irene D. Paden's *The Wake of the Prairie Schooner*. As in the previous volume, Mrs. Paden and her husband have retraced, step by step, the old and now almost obliterated trails of the pioneers on the way to California. This book treats of two of the alleged "short-cuts"—which were actually treacherous detours. Hastings' Cut-Off, named after the strange and ambitious promoter who once dreamed of ruling California, led ninety miles across the Great Salt desert south of Salt Lake City and so delayed the Donner party that they later perished in the now-famous pass.

The other cut-off was Lassen's which led the unsuspecting emigrant through the Sierras and was later referred to bitterly as the "Greenhorn Cut-Off." Both of them were an important part of the history of the 49'ers.

Macmillan, 1949. 295 pp., bibliography and index. \$3.75.

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