THE Desert MAGAZINE

DECEMBER, 1949

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DESERT CALENDAR

Dec. 2—San Antonio day at La Loma, New Mexico.

Dec. 3—Death Valley Pageant, centennial observance sponsored by Death Valley '49ers, Inc., presented in Desolation canyon, cast of 1,000 people, commemorating trek of the Manly-Jayhawker parties through Death Valley 100 years ago.

Dec. 4—Lecture by Dr. George W. Brainerd: *The Ancient Maya Cities of Palenque and Uxmal,* Southwest Museum, Los Angeles, California.

Dec. 5-11 — Borrego Aviation week, featuring treasure hunt by pilots in private planes December 10, and glider soaring and spot-landing contests Sunday, December 11. Borrego Valley, California.

Dec. 6-7 — Northern district, New Mexico Cattle Growers association, Santa Fe.

Dec. 10—Imperial Highway association monthly meeting at De Anza hotel, Calexico, California.

Dec. 11—Don's Club Travelcade to Goldfield mine and King's ranch, Phoenix, Arizona.

Dec. 12—Feast day of Nuestra Senora de Guadalupe, Santa Fe, New Mexico.

Dec. 17—Opening party at Arizona Snow Bowl, Flagstaff, Arizona.

Dec. 24—La Posada, Mexican Christmas observance, Armory park, Tucson, Arizona.

Dec. 24—Midnight mass for Papago Indian people, San Xavier mission.

Dec. 24—Christmas eve procession with cedar torches, Taos Indian pueblo, New Mexico.

Dec. 24—Dances after midnight mass at Indian pueblos: San Felipe, Laguna, Isleta and others in New Mexico.

Dec. 25—Indian dances at pueblos Christmas day and three days following. At Jemez, Santo Domingo, Tesuque, Santa Clara and others. Deer dance or Matachines at Taos pueblo in the afternoon.

Dec. 26 — Turtle dance, San Juan Pueblo, New Mexico.

Dec. 28-29—American Astronomical society meets at University of Arizona, Tucson, Arizona.

December—Clarence Ellsworth's paintings of western scenes and early Indian days will be displayed daily. Southwest museum, Los Angeles.

Volume 13 **December, 1949** **Number 2**

The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1949 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

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Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

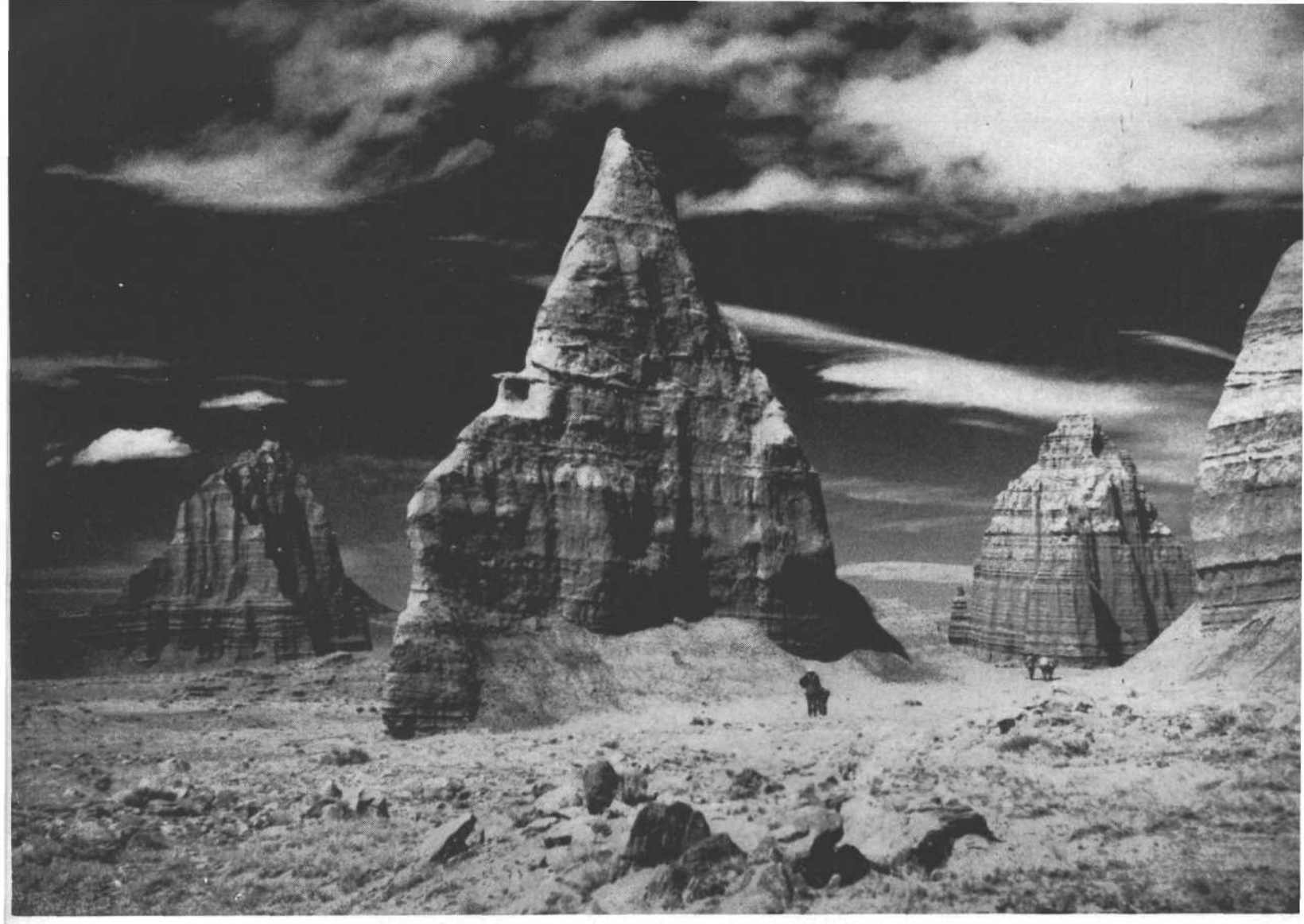
SUBSCRIPTION RATES

One Year.....$3.50 **Two Years.....$6.00**

Canadian Subscriptions 25c Extra, Foreign 50c Extra

Subscription to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With P. O. D. Order No. 19687

Address Correspondence to Desert Magazine, Palm Desert, California



These cathedral-like pinnacles have been carved in sandstone through thousands of years of erosion

Valley of the Cathedrals . . .

By CHARLES KELLY

Photos courtesy of Dr. Wayne Smith and Worthen Jackson

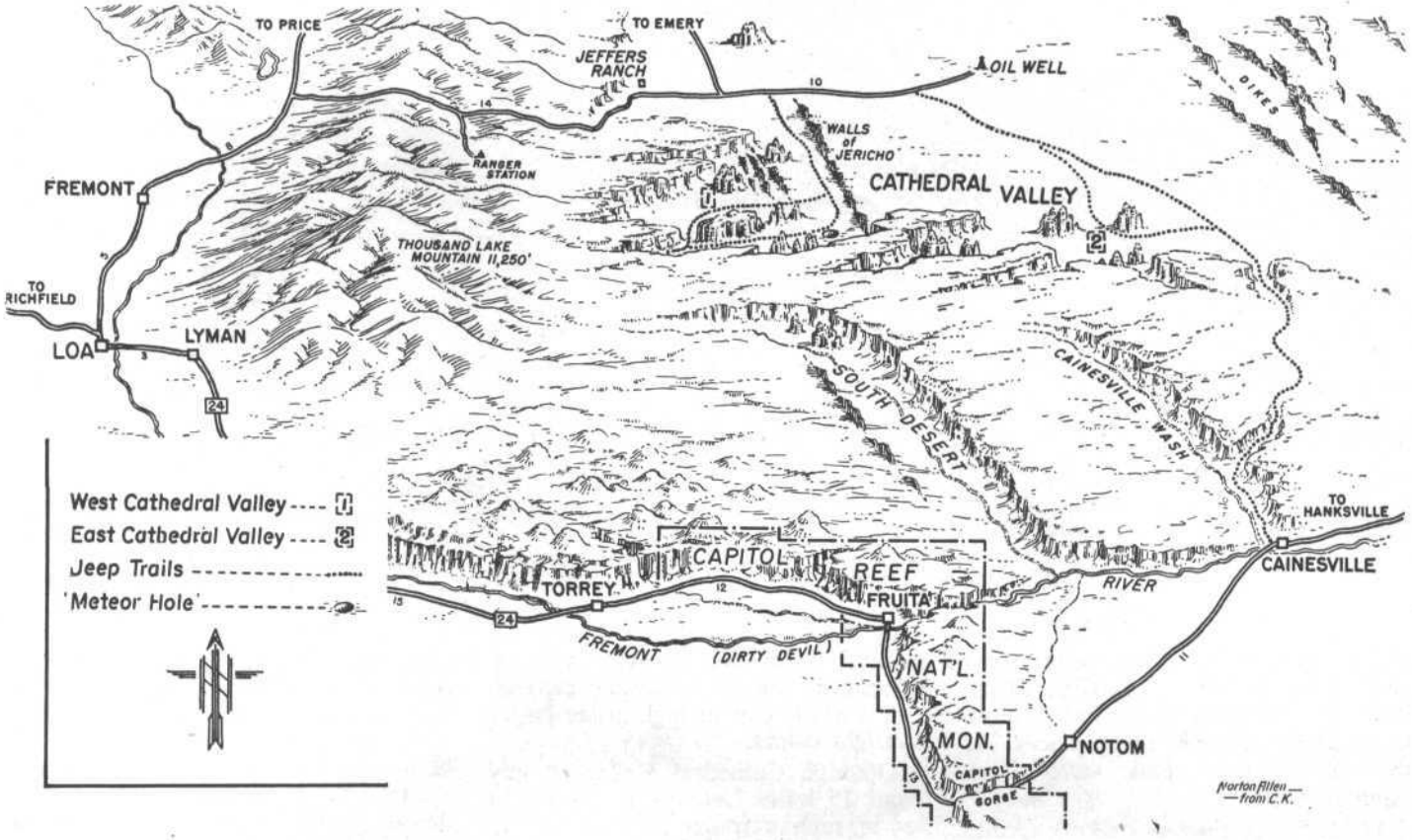
IN 1944 a northbound military plane was reported missing somewhere between Bryce canyon and Price, Utah. It was not found until nearly a year later when two men hunting cattle came upon the wreckage in a wild section of Wayne county west of Factory Buttes.

Soldiers in jeeps were sent to recover the bodies. They were guided to the spot by Worthen Jackson of Fremont, Utah. Later, on a return visit to the site of the tragedy, Jackson was accompanied by Dr. A. L. Inglesby of Fruita, Utah. On his return the doctor reported that he seen in the distance a group of isolated buttes or monuments which resembled temples and cathedrals.

Dr. Inglesby had a further opportunity to become acquainted with the area a year later when he accompanied an expedition into this wild section of Utah to investigate the report that a peculiar hole, believed to have been made by a falling meteor, was located there. The mysterious hole showed no evidence of meteoric action, but the party passed through another group of fantastic formations not far from those previously reported.

To the cowboys it is just "a bad place to hunt for cows," but for the explorer, the photographer and the rock collector this recently discovered scenic landscape in the southern Utah wilderness promises to open a great field for new adventure. Here is Charles Kelly's story of some of the most fantastic rock formations in the Southwest — and some of the least known.

Following Dr. Inglesby's directions, Frank Beckwith and I visited the eastern section of this area in September, 1945. Leaving a rough desert road we drove 7½ miles down a dry wash floored with gypsum, arriving on the brink of a deep gully we could not cross. About two miles distant was a pink cliff running several miles east and west, beautifully sculptured into what appeared to be architectural forms — pillars, columns, spires and decorative statuary — resembling the ruins of a thousand Greek temples. On the flat sandy desert half a mile from



this cliff stood two large natural structures and two smaller ones, eroded to architectural forms resembling great cathedrals.

Leaving our car we hiked across the sand to photograph them and found that on close inspection the likeness to man-made structures was even more pronounced. We estimated their height at between 500 and 600 feet. Since they stand isolated and some distance apart, they can be photographed from any angle, depending on light conditions.

Returning to the car after an all-day tramp, Frank and I sat on the running board to rest. A late afternoon sun illuminated the two distant buttes.

"What do they call this place?" Frank asked.

"The whole area is called Middle Desert," I replied, "but this valley has no special name."

"The buttes certainly look like great cathedrals," Frank said. "The smaller one looks like Canterbury and the larger one like Notre Dame."

"Yes," I agreed, "they do. Why wouldn't that be a good name—Cathedral Valley?"

"Cathedral Valley? Yes, that's good. Let's call it that."

So we did and the name is used because nothing else seems quite appropriate.

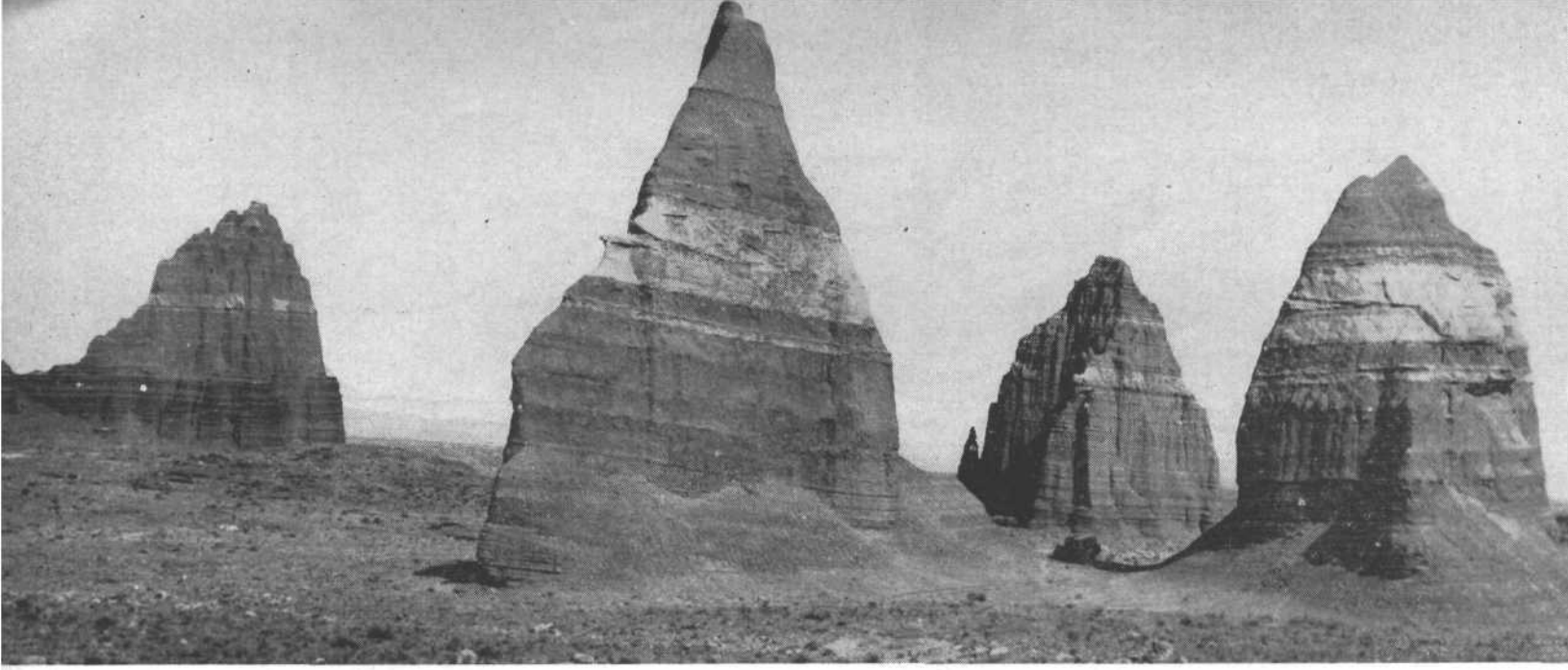
The western section, which we visited the following year, is more difficult to reach. Perry Jackson pioneered a jeep trail into it, but it cannot be reached by ordinary passenger cars. This section, near Thousand Lake mountain, is even larger and more spectacular than the east end, containing more beautifully eroded cliffs and more cathedrals, spires and pinnacles. Besides these interesting formations, the area is crossed at right angles by narrow dikes of volcanic material known as the "Walls of Jericho." Near one of these dikes is the "meteor hole," 60 feet across the top and about 100 feet deep, the origin of which remains to be explained.

The two sections of Cathedral Valley, of course, have been known to cowboys and sheepherders for many years, and a cabin and corrals were once built in the western end. But no one ever mentioned the scenic values of the place. To stockmen it was just a bad place to hunt for cows. So the original discovery so far as the visiting public is concerned, goes to Dr. Inglesby, and the first color photographs were taken by Herman Waters. Beckwith and I took the first black and white pictures.

The cliffs of Capitol Reef are composed of Moenkopi, Chinle, and Wingate formations, capped by white Navajo sandstone. The Reef dips toward the east into South Desert where the Navajo is overlaid by Carmel. This in turn is overlaid by Entrada sandstone, extending north into Cathedral Valley, about 15 air miles north of Capitol Reef National Monument. Where walls of Entrada are exposed by faulting it has been eroded into fantastic forms. Being soft and cemented with gypsum it is dissolved by rain into long, flowing lines, often extending from top to bottom, giving the impression of architectural ruins. Unlike many formations, there are no talus slopes, the cliffs rising from a flat desert. The color is a light salmon pink, with horizontal stripes of darker color, in places capped with a stratum of white. Where this capstone has disappeared the softer rock below has been cut into towers, spires, buttresses and intricate natural carvings.

Since this wild area has never been thoroughly explored, new discoveries are constantly being made. On a subsequent visit to east Cathedral Valley I found two more large structures in a beautiful hidden canyon, and Worthen Jackson has found others in the west end. In a flight over the valley last November with Bill Lane we saw still more cathedrals which have not yet been located from the ground.

On the road to Emery, north of Jeffers ranch, is another isolated structure locally called Solomon's Temple, well worth a visit, and in Jasper canyon, a short distance further north is another immense hidden cathedral. As time goes by still others will be found. About eight miles east of an aban-



Pillars of Hercules in West Cathedral Valley

doned oil well is a large area criss-crossed by hundreds of black dikes, with narrow walls standing two or three hundred feet high in some places. At this writing these have never been photographed.

While this section is primarily scenic, rock hunters will be interested in a large mound of selenite crystals just north of the largest cathedral in east Cathedral Valley, where good specimens can be obtained. In this vicinity also are found agate nodules up to six inches in diameter, some of very good quality. North and a little west of Solomon's Temple is Jasper canyon, with a whole cliff of high grade jasper in bright colors.

Although Cathedral Valley is only about 15 miles from Fruita by air, it lies in such a rough country that in order to reach it one must travel 70 miles by one route, and 50 miles by another.

The long route is by way of Loa and Fremont, over Thousand Lake mountain, turning right at Forsythe reservoir to Jeffer's ranch east of the mountain, then five miles on the oil well road. This much can be negotiated in an ordinary car, but the remaining distance into west Cathedral Valley can be made only in a jeep. Turning south the trail winds through a rough, sandy desert, passing several igneous dikes, then drops into a wash, and turns west to the cathedrals.

To reach the eastern section it is necessary to return to the road and follow it almost to the oil well, then turn right down a dry wash 7½ miles. Eventually a shorter trail will be lo-

These salmon-pink formations can be reached only by jeep

Wall Street in West Cathedral Valley

cated between the two sections, which lie only a few miles apart.

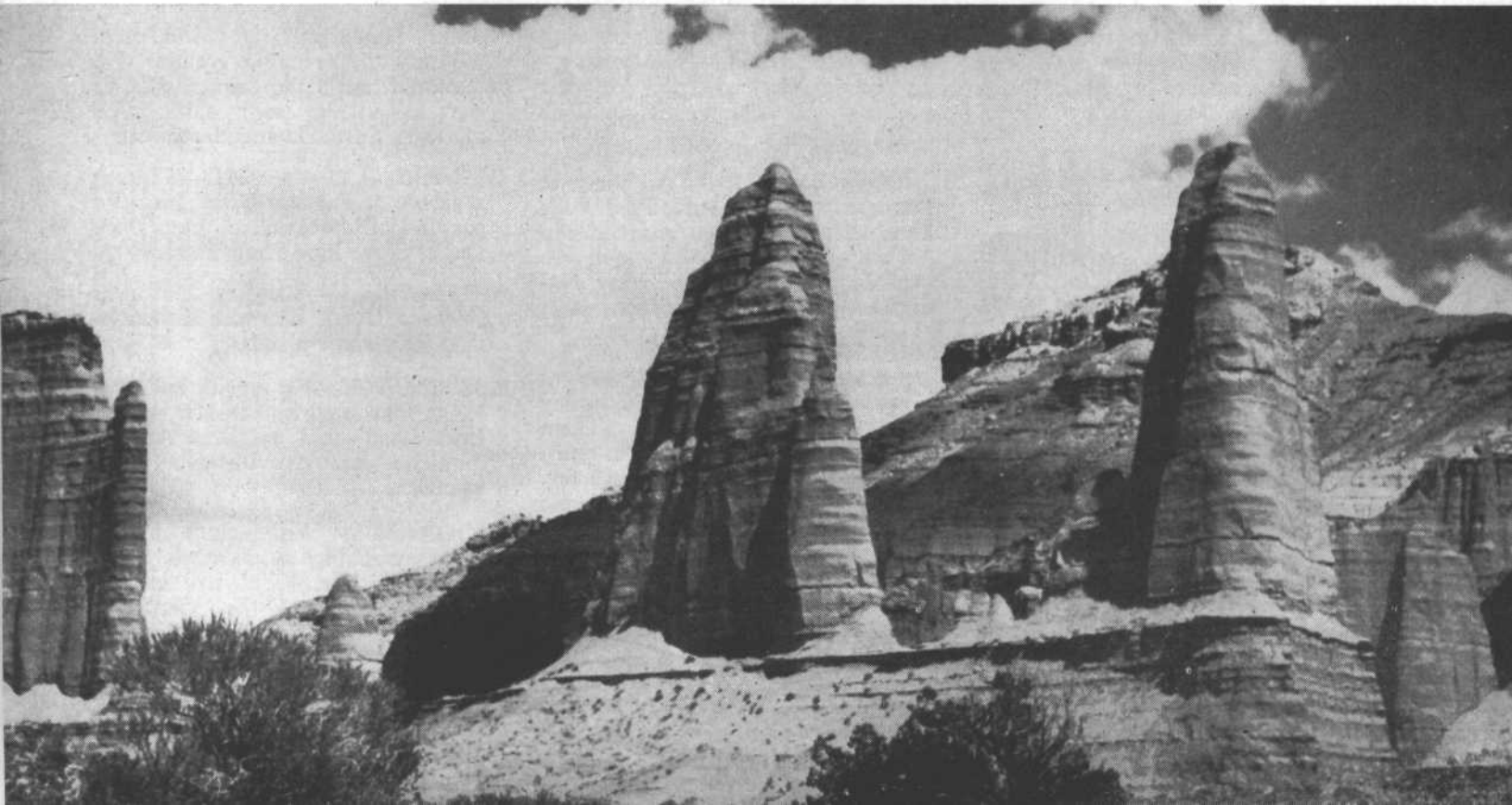
The shorter road is from Fruita to Cainesville, up Cainesville Wash 3½ miles, then up a steep dugway on the right and through a very broken country above, continuing about 25 miles from Cainesville. This road can only be negotiated in a jeep but it passes through some very wild country, well worth seeing. This rough road eventually connects with the oil well road. Whichever trail one travels it is almost imperative to have a guide. There are only two springs in the valley. Either way is a long day's trip; two days would be much more satisfactory. At present Perry Jackson, of Fremont, is the only one conducting jeep trips to this area.

Since this new scenic section adjoins Capitol Reef National Monument on the north and east it should be added to the Monument. At present it is difficult to reach but a road could be built through South Desert and on east to Cainesville, making an outstanding scenic loop.

At present such a trip is only for seasoned desert rats and rabid color photographers who enjoy exploring a hidden land of spectacular formations and brilliant color. When a good road is built Cathedral Valley will become one of the well known scenic spots of Utah.

At this late date not many such areas have been left unexplored and unexploited. It is a privilege to have been among the first to visit Cathedral Valley and make it known to the traveling public.

East Cathedral Valley looking north from Sculptured Cliff



Photograph from C. C. Pierce collection—from painting by Andrew P. Hill about 1880.

DEATH VALLEY PAGEANT . . .

For those planning to witness the historical pageant in Death Valley December 3, the following information is furnished by Death Valley 49ers, Inc.:

TIME—Program is scheduled for 2:00 p. m. and will last approximately 2½ hours.

PLACE — Desolation canyon, 4½ miles from Furnace Creek Inn. Park Service will erect directional signs as a guide to visitors.

ADMISSION—Free!

PARKING—Well organized automobile parking facilities will be available near the pageant grounds.

SEATING — Steel grandstand seating will be available for 6,000 people. A crowd of 10,000 is expected. Seating will be on a basis of first come first served. Persons having camp stools may find them useful. A cushion and a blanket will provide added comfort.

CLOTHING—Warm outdoor clothing is recommended and visitors are urged to dress Western style. Weather probably will be fine. It could be cold and windy.

ACCOMMODATIONS—All space at Furnace Creek and Stove Pipe Wells hotel already has been reserved. No housing accommodations will be available in the Death Valley National Monument for visitors.

CAMPING—Elaborate plans are being made for those who will want to camp out Friday and Saturday nights, December 2 and 3. There will be free water and wood in limited supply, also sanitation facilities. Chuck wagon grub will be available at moderate cost. Campfire programs are planned, with group singing and square dancing. Campers should bring their bedrolls, with plenty of blankets. It is suggested they bring extra water and food and cook their own. Directional signs will point the way to the camp grounds. A flashlight and a tarpaulin should be included in the camp outfit. Air mattresses provide added comfort.

GARAGE, GAS AND OIL—There is a garage at Furnace Creek Inn, and gas and oil are available both there and at Stove Pipe Wells hotel.

AIRPLANES — Landing field near Furnace Creek Inn will accommodate light sport planes.

BUS SERVICE—No regular bus service is scheduled but charter service from Las Vegas and Los Angeles may be arranged through travel agencies.

PROGRAM — Will include an 86-piece symphony in a special suite "Death Valley 49er" written and directed by Ferde Grofe. Chorus of 200 voices is rehearsing for event. Production manager is Larry Shea.

Close-up of an ant hill showing tiny pebbles of feldspar and lava.

We Found Ant Hills Covered With Jewels

Probably the oldest miners in North America are the harvester ants. In northern Arizona the Navajo Indians gather tiny garnets from ant hills in certain parts of the reservation. And now comes this story of southern Oregon where the ant hills are piled high with bits of crystalline feldspar—known as sunstones or "Lakeview diamonds."'

By EDITH RUTENIC McLEOD

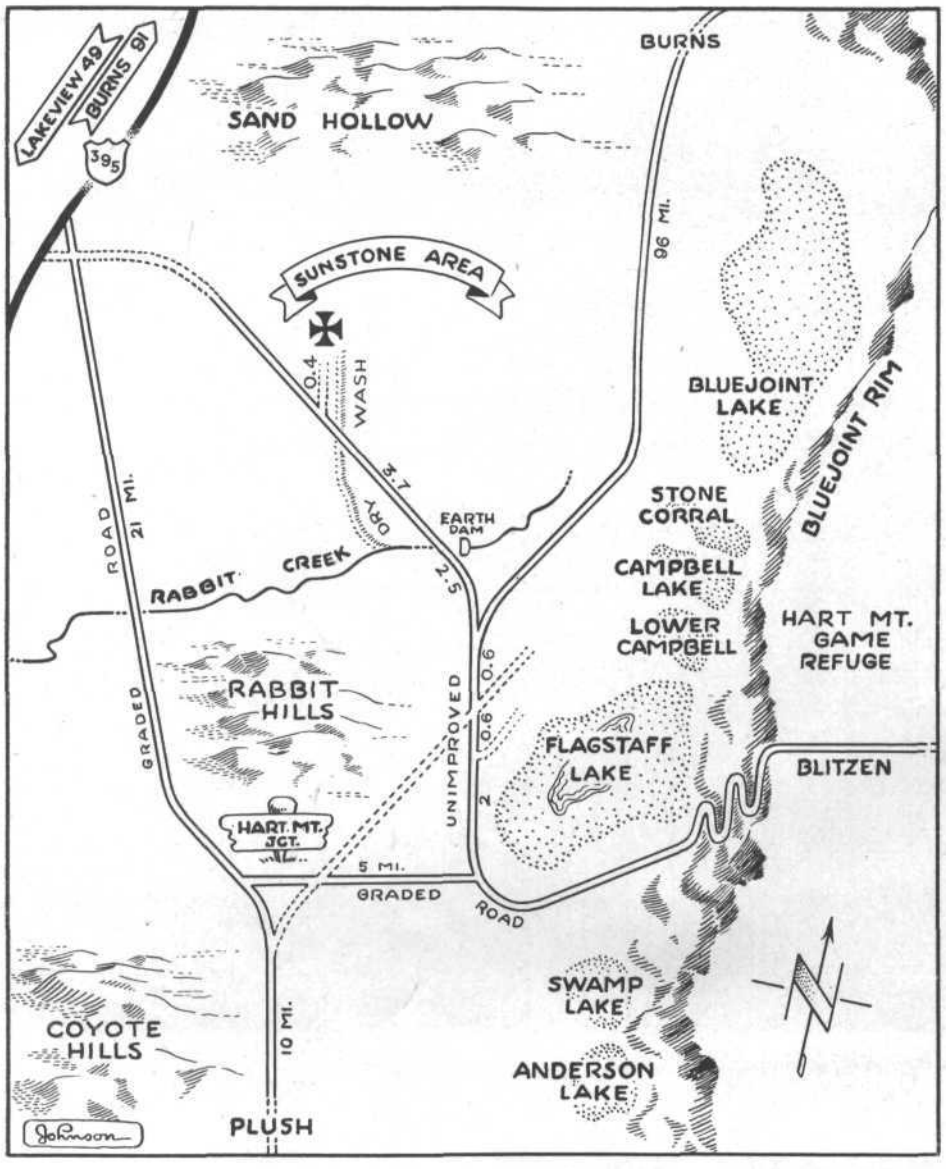
WE WERE returning from an agate-hunting trip in central Oregon when one member of our party suggested that we spend an extra day in the field and try to find the feldspar area where the ant hills were reported to be covered with tiny sunstones, known to some collectors as "Lakeview diamonds."

It is not an easy field to locate. I had made two previous attempts, without success. But I knew the stones were there for I had seen many of them.

They vary slightly in color and transparency, ranging from the true sunstone of yellowish hue with pink sheen to the brilliantly clear yellow and tan stones and an occasional one with a faint greenish tint. The clear stones are equal in beauty and brilliance to zircon. The name sunstone has been given to those of yellow-wine color with the faintest suggestion of milkiness.

In this third attempt to locate the field, we drove to the village of Plush in Lake county, not far from the California boundary. Plush is said to have gotten its name from the broken English of an old Indian who played poker with the cow hands in the early days of cattle raising in this region. He knew his cards better than his English, and when he got a full hand of diamonds or spades it was always a "plush."

In Plush we met a woman who had



visited the sunstone field the previous day, and from her we got explicit directions for reaching the area. We followed graded and unpaved roads in a northerly direction and eventually crossed a dam in Rabbit creek and from there it was less than four miles to our destination.

The glitter of little sunstone fragments around ant hills attracted our attention, and we spent the morning picking up these tiny pebbles one by one. But this was not the best part of the field. Later we continued along a dry wash to a point further north and eventually came to a place where we could scoop up sunstones by the handful. The ones on the hills were very small, but scattered over the area were larger stones suitable for cabochon cutting. Many of them are flawed, and nearly all of them dulled on the surface by weathering.

We had heard of pyrope, or precious garnet, found on the ant hills in the Navajo reservation in northern Arizona. The Indians gather them one by one and sell them in bottles to tourists.

But here many of the ant hills were 75 percent gems—too small for cabochons, but nevertheless of gem quality. They are collected by western harvester ants who live in large colonies. Their mounds, 4 to 12 inches high and from 2 to 3 feet in diameter, are easy to locate for they denude the immediate area. Within a radius of 3 to 6 feet around the hill the ground is devoid of vegetation and packed hard.

The ant hills in this part of Oregon

The author's companions on this collecting trip—Agnes and Ernest Thorp. Sunstone collecting area in the background.

Enlarged sunstones—labradorite feldspar.

are an excellent guide for prospectors. The pebbles on the surface disclose the character of the country rock. In this particular area some of the hills would assay as much as 75 percent feldspar crystals, the remainder being the native rock, lava. In other places volcanic cinder, pumice and sedimentary rock prevails.

In size the sunstones range from one quarter of an inch down. It is amazing that the tiny insects could carry a stone equal to its own size. It was noted that the larger pebbles were around the edge of the hill.

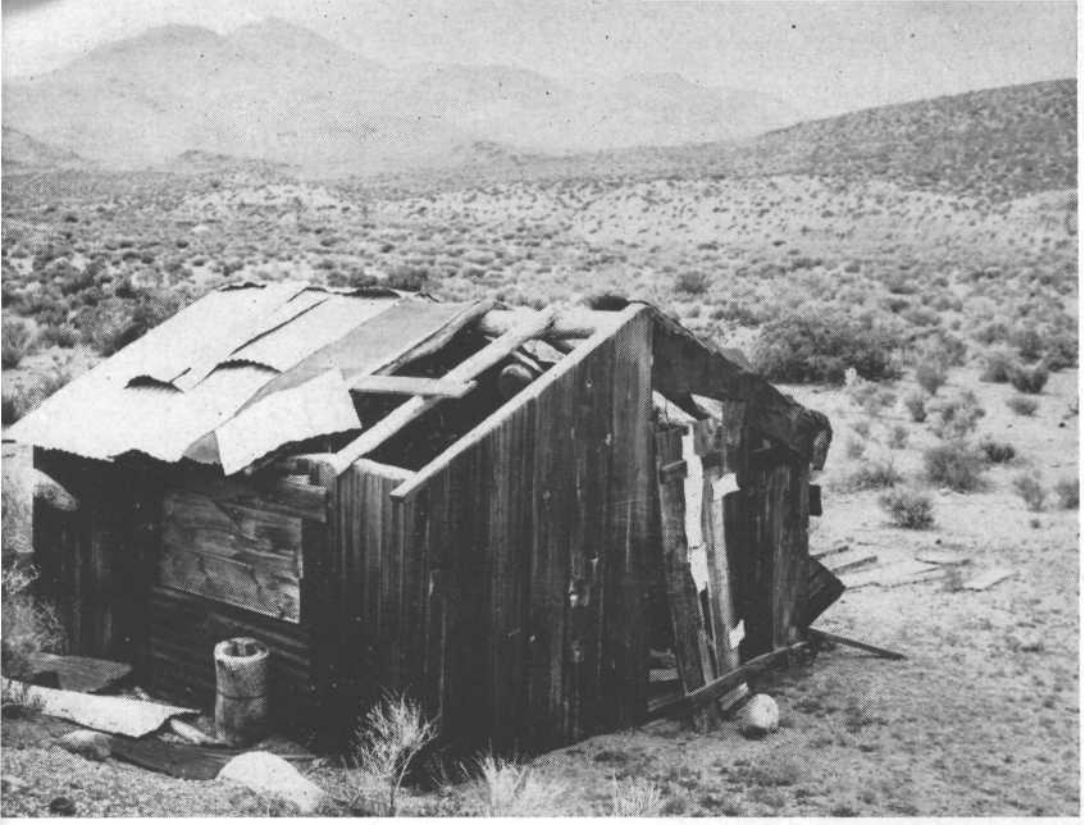
Evidently the feldspar has weathered out from ledges or outcrops of basalt. But these formations have long since been leveled and no indication of their existence remains in the sandy, brushy plains. Basaltic outcrops show, however, in the sides of the gully and there is evidence that men have at one time mined there. In fact they say this place was once well posted with mining claims, but "Lakeview diamonds" never made anyone rich and the country is abandoned to coyotes, jack-rabbits, lizards and an occasional band of wild horses. During World War II some of these horses were rounded up and sold. Range cattle graze in parts of the country.

The soil is soft and sandy, the only vegetation is sagebrush, greasewood and rabbit-bush—no trees, no water, no grass, no flowers. At least there were no blossoms at the time we were there but there undoubtedly are some flowers and grass beneath the bushes in the spring. Yet there are places in this desert country where one sees the lovely little evening primrose, its big white, pink-tinged petals open full to the heat of the sun, closing towards sunset.

To the west, very distant, is a long, blue-gray range of mountains; to the east, almost equally distant, is Hart Mountain and Bluejoint Rim, one of the four great faults that extend across southeastern Oregon. To the south is a low group of hills called the Rabbit Hills and farther south another group named Coyote Hills. The Coyote Hills are chasing the Rabbit Hills north.

According to Richard Joel Russell in his book *Basin Range Structure and Stratigraphy of the Warner Range, Northeastern California,* the rhyolitic center of the Coyote Hills is the older formation and younger basaltic lavas covered them and have since weathered away from the tops of the hills, leaving cuestas of basalt around the rhyolitic center dome, with basaltic lavas extending out over the plains (our sunstone locality).

The accompanying map is an accurate guide to the locality, but if collectors are in doubt they may always get accurate directions at Plush. The field is limited, but the ants are busy day after day mining new gems for those who come this way.



Death Valley

By JOHN WHITAKER
Menlo Park, California

Oh rock ribbed tresses of the earth
Once torn from this great deep declivity
Thrusting your serried peaks ahigh
As if to reach the blue infinity
Of that vast turquoise and azure dome
The home of man's Divinity

What did you skattle from, what turmoil deep
Within the breast of mother earth
Would cause you such unrest?
To wrest apart your agate flanks
Your marble shanks to twist in torment
Like the damned, or Heaven's thrice accursed.

What scalding torrents purged thy veins
To scorch the very tissues of your heart?
What great sobs shook your breast
And tore your body clear apart?

And then Hell's flame came up
To melt and cement thee
Into a skeletal flow'r
For man in awe to scan
Aghast, at thy great tortured majesty!

• • •

THE DESERT AT NIGHT

By KATHERINE BUOY KEENEY
Portland, Oregon

Out in the silence of the desert night,
Born of its solitude, the cacti stand
Arms lifted prayerfully. The granuled sand
Lies motionless beneath the stars' dim light.
The new moon's sickle gleams slim silver-white
As earthward falls a star—a shining brand
Cleft from a starry sheaf by Luna's hand.
The watching cacti eye its soundless flight.

Its radiance fades . . . is lost . . . it disappears
As desert heralds now proclaim the dawn:
A serpent swift uncoils its length and makes
Strange hieroglyphics on the sand. One hears
The chirp of sleepy birds' low antiphon.
A pale glow rims the hills . . . the desert wakes!

In Memoriam

NORMAN and DORIS NEVILLS
(Victims of an Airplane Crash September 19, 1949)

By HOLLIS T. GLEASON
Cohasset, Massachusetts

Mid the whirl of seething waters,
In the echoes of the canyons
Where the wren with notes descending
Fills the air with sparkling music,
We revere the lustrous manhood
Of our peerless Norman Nevills,
Boatman of the Colorado,
Rider of the San Juan Rapids.

We may view his face no longer,
Tawny sinews of his shoulders,
As he plies the heavy oar-blades
Down the surging rock-strewn torrent,
As he rides the wild white horses
With his "Yogi" shout of triumph,
Bringing in his boat to haven
Nestling safe beside the willows.

Nor will Doris Nevills greet us
At the ending of our journey
With her sunny smile of welcome
As the boats lodge in their cradles;
But the spirits of these true ones
Shall live on with us forever
In the days and years to follow
In the land of the hereafter.

Warp & Woof

By TANYA SOUTH

'Tis what is closest to your heart
That forms your warp and woof of Fate.
Not work alone, but, too, the part
That dreams and love can instigate.

No outer Influence can guide
Your soul to grasp the greater Laws,
Save you within are keeping stride,
For highest purpose, finest cause.

Abandoned Desert Home

By EDITH RUTENIC MCLEOD
Klamath Falls, Oregon

Somebody once lived in this wind-gutted house,
Surrounded by sagebrush and restless sand;
Somebody's dreams were built about
His home in this western desert land.

But the end of the cycle of green drew nigh,
And the summer sun blazed hot in the sky.
His life-giving well and springs dried up,
And he drained to the dregs a bitter cup.

Drought and demanding want defied,
He struggled on though hope had died;
As cattle grew gaunt and grain scorched in the sun
And the desert laughed aloud "I've won".

With twitching fingers the desert tore
At roof, foundation, window and door;
'Till in laughing fury it tore apart
Not only a home—but somebody's heart.

• • •

STRANGE LAND

By VALDA CAMMACK
Tecopa, California

Can you judge before you know?
Can you say before you go?
"There's nothing here but dying land,
Struggling brush, blinding sand."

Have you lived and loved as I,
Out on this desert where secrets lie?
Do you know of the beauty that comes with the years,
The little flowers' call for heaven's tears?

Do you know of the strangely colored rock?
Little trails where wild things walk?
Do you know the sunset's golden glow,
On the hidden spring where waters flow?

Have you seen the earth change with the rays of the sun,
From a rose-casted hill to a blue-purpled one?
Think before you say, "I like it not."
Remember the happiness to the knower it's brought.

• • •

DESERT RAINS

By HAZEL PHILIPS TREIBLE
Inglewood, California

The desert stretches past our view
With but a lonely bush or two
To act as shady bowers.
And on this far-flung sandy space
Of desert flowers, there's not a trace,
To cheer our passing hours.
But gentle falling winter rain
Will make the desert bloom again
With myriad, lovely flowers
That only once a year are found
Upon this dry and barren ground—
And freed by magic showers.

• • •

DESERT SPEAKS

By PAUL WILHELM
Thousand Palms, California

To you who find my door—from friend and home
Exiled from all but dreams—these sands to roam;
Then, Comrades, come! and find the unnamed thing
At edge of your immortal wanderings,
The quest forever unattained, your flame
Shall bare the essence of my lovely name—
White Beauty!—burning fire of my sand soul,
Itself your vision and itself your goal!

Left—Russell Johnson (left) and George Palmer Putnam along the old trail that leads up Cottonwood canyon.

Below—High up in the Panamints the riders found a valley with a fine forest of Joshua trees.

During the 100 years which have elapsed since the gold-seekers of '49 faced thirst and starvation in Death Valley many good roads have been constructed and facilities provided for the comfort of thousands of visitors annually. But much of the Death Valley Monument is still inaccessible to the motorist—and it is for the purpose of making Desert Magazine readers better acquainted with more remote areas of the Monument that this story is written.

Panamint Pack Trip . . .

By RANDALL HENDERSON

LATE in December, 1849, William B. Roods stopped beside a large lava boulder near the base of the Panamint mountains on the west side of Death Valley, California, and carved his name and the date.

Roods was a young member of a wagon-train of California bound gold-seekers who turned south at Salt Lake City to avoid the snows in the high Sierras, and tried to reach the gold fields by a more southerly route. They nearly perished in the sterile Amargosa, Death Valley and Panamint Valley region.

Roods and his companions were in desperate need of water and feed for their oxen. Some of the animals had died, and others had been killed to provide meat for the famished emigrants.

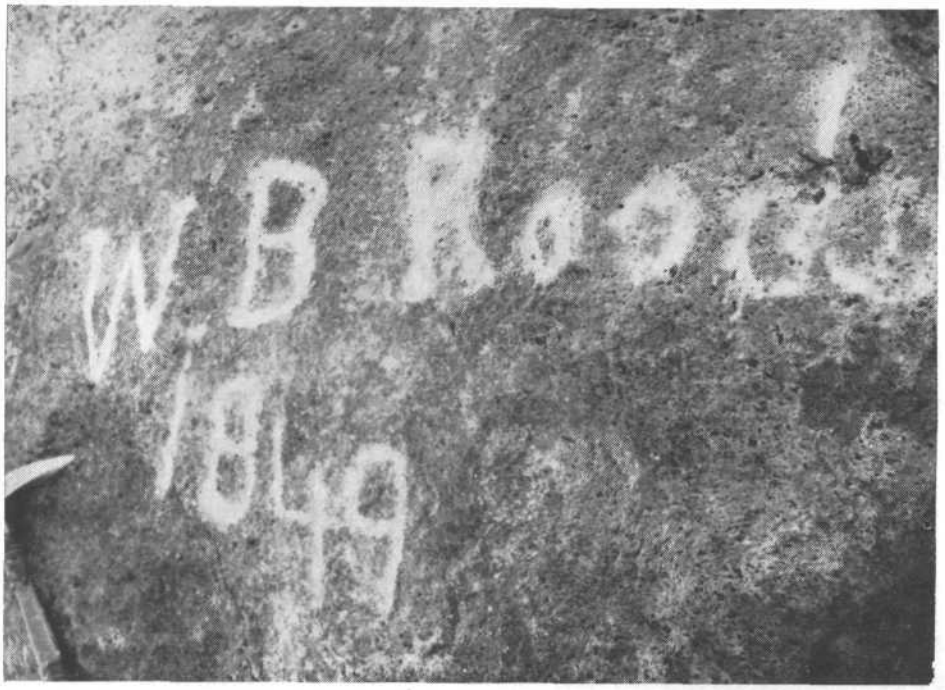
There are springs in the Panamint mountains, but in 1849 white men were totally ignorant of the region, and the straggling emigrants from east of the Rockies knew not where to look for them.

But the Jayhawkers, the Manly-Bennett party, the Georgians, the Mississippi boys, Captain Towne's company and the Wade party—these are the names given by historians to the separate groups which made up the band of more than 100 men and women and children who crossed Death Valley in 1849-50—finally won their way through in spite of the hardships.

I first saw Roods Rock in May this year when I accompanied George Palmer Putnam on a two-day ride from Stove Pipe Wells hotel up Cottonwood creek and then over the summit and down one of the forks of LeMoigne canyon.

The Putnams, George and Peg, with an associate, purchased Stove Pipe Wells hotel in the heart of Death Valley two years ago. It was while exploring in the Panamint range west of the hotel that George discovered the scenic beauty of the Cottonwood country, with its fine stream of water flowing from a spring near the head of the canyon. There he hopes to develop wintertime pack trips, using several alternative routes to and from the Cottonwood headwaters, a rarity in entertainment for Death Valley visitors.

George invited me to join him on a two-day reconnaissance that would in-



Inscription left on a lava rock on the west side of Death Valley by a member of the Jayhawker party 100 years ago.

clude not only Cottonwood but some of the other little-known canyons of the Panamint range. This ride—it turned out to be about forty miles—would take us above the 5000-foot level, and we arranged it in May when the wildflowers at the higher elevations would be at their best.

I drove to Death Valley by way of Trona and the new highway then under construction but now completed, by way of Wildrose canyon. When I told Ann and George Pipkin at Wildrose service station about our Cottonwood plans, Ann exclaimed:

"That's the canyon where the petrified snakes are found." Then she explained that one of the prospectors had assured her he had seen stone reptiles along Cottonwood.

"Sounds like one of Hard Rock Shorty's tales," George remarked when I arrived at Stove Pipe a few hours later and asked him about the fossilized reptiles. "We will probably see some rattlers—but I am not planning to add them to my rock collection."

The sun had not yet appeared over the Funeral Range to the east when we started our trek the next morning. We had a pack animal to carry light bedrolls and food for two days. Russell Johnson, our guide and packer, works for the Rock Creek Pack Train in the Sierras during the summer. In winter Herb London, who heads the outfit, keeps a string of horses at Stove Pipe Wells for guest horseback riding, with packing for adjacent mines on the side.

For an hour we rode across the level floor of Death Valley, and then began a gentle ascent of a rock-strewn bajada to the entrance of Cottonwood canyon 12 miles northwest of Stove Pipe Wells hotel.

At some point along that ride we crossed the route followed by the Jayhawker party 100 years ago this month. It was just a few miles to the southwest that William Roods had stopped to chisel his name in the lava boulder.

On the limestone north wall of the canyon shortly after we entered it, we saw the dim figures of some Indian petroglyphs. Being an exposed surface they were badly weathered and could be identified only at close range.

Cottonwood is a wide open type of canyon with a sandy floor and not much vegetation. A jeep could make the trip over much of the route we covered the first day. Occasionally the hills would close in and form a precipitous portal, but even in these rocky gateways there were no great accumulations of boulders such as are found in many of the desert barrancas.

Desert holly grows plentifully here, and we saw an occasional barrel and beavertail cactus. Other species in flower at the time of our trip were salmon mallow, phacelia, potato flower, Mojave aster and Indian paint brush. Higher up, indigo bush was a mass of purple blossom.

The hillsides were covered with boulders, browned by desert varnish, and many outcroppings of basalt were passed along the way. This is one of the few canyons in the Death Valley area where prospectors have found few minerals to interest them.

We were taking a short cut across a wide sweep of the canyon, following a trail over a boulder-covered bench, when we heard our first rattler. He was coiled beneath a bush and as we did not dismount we got only a partial view of him, but there was no mistaking the buzz that came from the shrub. Russell thought it was a side-winder, and I expressed the view that it was too big for that species. We agreed on one point—that it was not petrified.

Later we saw a 3-foot king snake

This stone house still stands in the ghost mining camp in LeMoigne canyon.

The spring in upper Cottonwood canyon has been a watering place for prospectors and cowboys for 75 years.

George Palmer Putnam, author and traveler, who with his wife Peg now operates Stove Pipe Wells hotel.

wriggling up the sandy slope to avoid being stepped on by the horses.

At noon we stopped in the shade of a basalt wall for lunch, and early in the afternoon came to the first trickle of water—three miles below the spring. From this point on we threaded our way among the cottonwoods which gave the canyon its name.

At three in the afternoon we came to a dense grove of cottonwoods and willows—and one of the finest springs in the Death Valley area. In years past this place has served both as a cattleman's camp and a miner's waterhole. Bev Hunter still runs some stock here although it is within the boundaries of the Monument. He was here before the Monument was established in 1933 and thereby acquired certain squatter's rights.

Two cabins in a bad state of repair were unoccupied. In a little cove near the spring is a well-concealed corral, said to have been used in years past by rustlers who found this remote spring a good hideout. A wagon road, said to be the first road through the Panamints, came this way in the 'seventies. Supplies were hauled through here to the Gold Belt mining district to the northwest. The road has not been used for many years and has all but disappeared.

Water comes to the surface here in seepages over an area of four or five acres, and we found excellent pasture for the stock along the creekbed.

The elevation at the springs is 3700 feet, and that night we found it necessary to crawl inside our sleeping bags for warmth, despite the fact that the temperature during the day had been above 90 degrees.

George Putnam as publisher-writer-explorer-soldier and world traveler has included many interesting assignments in his busy life, and as we relaxed by the campfire I asked him about some of his experiences.

"Everyone who is not shackled solidly to the city," said George, "at some time nurses a dream that he'll get away from the pavements. I contrived to put my dream into practice. A dozen years ago, with book publishing behind me, I came to California and found a unique home in the Sierra at 8300 feet altitude."

"And how about Death Valley?" I asked him.

George chuckled. "A friend of mine says that I read a book I had written and believed it."

Anyway, the Putnams ended up owning Stove Pipe Wells hotel.

"It seems," said George, "that the desert attracts a very high type of human beings. Most of our guests are eager, thoughtful people who are interested in many things—not the least of which is the art of living full and expanding lives. At the Stove Pipe we entertain camera clubs, mineral societies, artists, naturalists and just plain desert enthusiasts—and it is like a continuous house party."

In addition to his former book-publishing activities (as head of G. P. Putnam's Sons of New York and London), George is the author of ten volumes

of his own, as well as collaborating in the preparation of a score of other books. The best seller among his own titles was "Soaring Wings", the biography of his former wife, Amelia Earhart, who met death in a tragic flight around the world in 1936. "Hickory Shirt" is the title of a recently published novel, fiction backgrounded on the discovery of Death Valley 100 years ago.

The Putnam travels haven't been confined to deserts. George headed three major Arctic expeditions. He was identified with many famous flights (on his office wall hangs a picture of Lindbergh, below it a canceled cashed check for $100,000, first royalties on the book "We", and in the war he was with the first B-29s, with 16 crossings of the famous Hump between China and India. "That was at 23,000 feet altitude," he told me. "It sort of makes our Sierra seem insignificant."

This globe-trotting desert convert has had his share of tropic expeditioning as well, and with all that wealth of varied experience behind him, he has chosen for his home Death Valley for the winter and the Sierra for the summer!

Next morning we were up at daybreak, and by 6:45 Russell had the horses saddled and packed. We climbed out of Cottonwood canyon and gained altitude steadily, heading for a high ridge to the south. A few miles out of camp, as we crossed a plateau, we saw a lone Joshua tree, and then more and more of them appeared. Toward noon we passed through one of the finest Joshua forests I have seen. Although the season was late, some of them were still in blossom.

Russell, leading the way, selected easy grades for the horses but our course was always to higher elevations. Going up a sandy arroyo we heard the buzz of another rattlesnake. After 38 years on the desert, I still feel my pulse quicken when I hear that warning signal.

The snake was in a thicket and we could not see it. I wanted to find out what species of rattler we were meeting in the Panamints so we dismounted. We poked around in the thicket but got only a fleeting glimpse of the reptile until Russell got his lariat from the saddle and threw a loop over the bush and pulled it away. The markings were those of the prairie rattler, which is generally about three feet long. This one was about 2½ feet.

Toward noon we made a steep ascent to the top of the ridge which had been our goal all morning. The wind was blowing but we found shelter in a natural park of juniper trees and stopped for lunch. My altimeter showed an elevation of 6700 feet as we crossed the ridge.

Heat waves simmered on the floor of Death Valley far below—but on the rim of the bowl the air was dry and cool, and many species of wild flowers were at the peak of their blossoming.

From the ridge we zig-zagged down into a rocky canyon which has neither a trail nor an official name. The terrain was so rough we walked and led the horses much of the way. We were in one of the tributaries of LeMoigne canyon.

John LeMoigne, for whom it was named, is said to have been a Basque. His property in LeMoigne canyon ap-

TRUE OR FALSE

Here's the monthly I. Q. test for the desert fraternity. But you do not have to live among the dunes and cacti to make a passable score. The questions cover a wide range of subjects—history, geography, Indians, minerals, botany and the general lore of the desert country. These monthly lists of questions are designed both as a test of knowledge for the desert student, and as a course of instruction for those who would like to become better acquainted with the Southwest. 12 to 15 is a fair score. 16 to 18 is superior. Only super folks ever do better than 18. Answers on page 37.

1—The floor of Death Valley is below sea level. True..... False.....

2—Some of the richest placer gold strikes in the Southwest have been made in sand dunes. True..... False.....

3—Geronimo was a notorious Navajo war chief. True..... False.....

4—The Mormon leader Joseph Smith never saw the Great Salt Lake. True..... False.....

5—The largest city visible from the summit of Charleston, Nevada, is Las Vegas. True..... False.....

6—A rattlesnake held up by the tail cannot strike. True..... False.....

7—Papago Indians of Arizona harvest the fruit of the Saguaro cactus for food. True..... False.....

8—Salt River valley in Arizona gets its irrigation water from the Colorado river. True..... False.....

9—Ranchers along the shores of the Salton sea use the sea water for domestic purposes. True..... False.....

10—The University of New Mexico is at Santa Fe. True..... False.....

11—Pioche is the name of a historic mining town in Nevada. True..... False.....

12—Organ Pipe National Monument in Southern Arizona derives its name from the fluted rocks in that area. True..... False.....

13—The Jicarilla Indian reservation in New Mexico belongs to the Apaches. True..... False.....

14—The famous Palm Canyon near Palm Springs, California, is a National Monument. True..... False.....

15—Feldspar is a harder mineral than calcite. True..... False.....

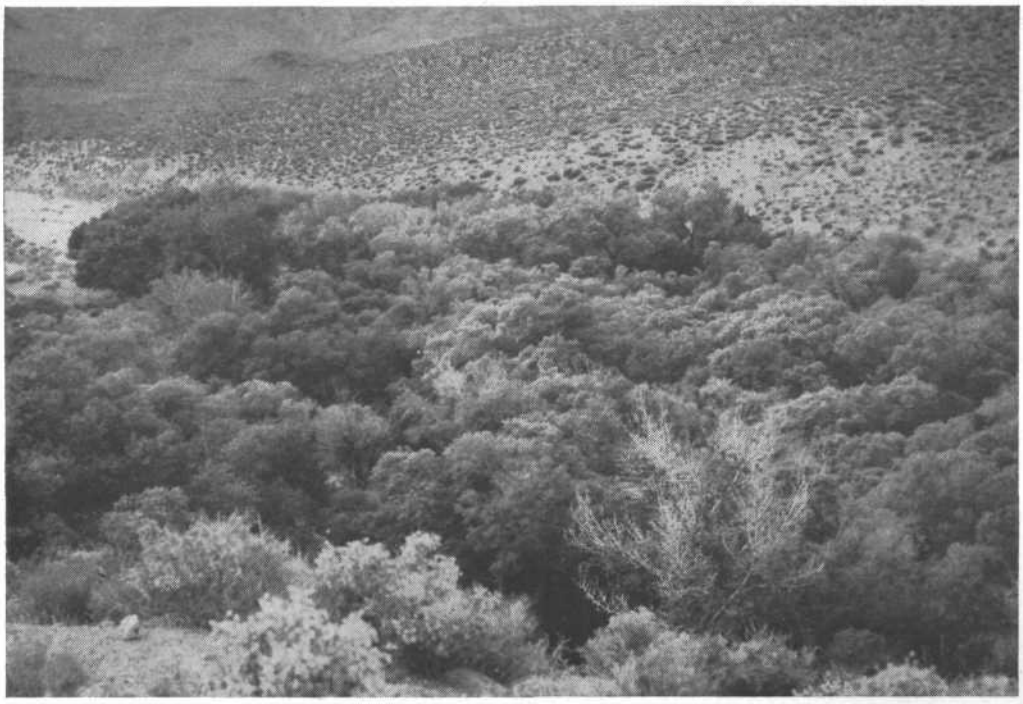
16—Ocotillo is a species of cactus. True..... False.....

17—Mark Twain once worked on a newspaper in Virginia City, Nevada. True..... False.....

18—The junction of the Green and Colorado rivers is in Utah. True..... False.....

19—Woodpeckers sometimes make their homes in Saguaro cactus. True..... False.....

20—The famous Lost Dutchman mine has been found and is now a large gold producer. True..... False.....



Cottonwood springs is a lovely oasis of cottonwood and willow trees at an elevation of 3700 feet.

One of the signs erected when Cottonwood canyon was used by freighters.

parently was in its heyday about 1900-1910. The top seems to have been about 1905-06, which was just about the time that Rhyolite reached its peak.

There is a story, not authenticated, that John was offered a certified check for $35,000 for his property. He would have none of it. He wanted cash or nothing. He didn't believe in banks.

John's life ended near a large bunch of mesquite where Salt Creek comes out of the hills into the floor of the Valley. That location is about the central part of the Valley, perhaps ten miles South of Stove Pipe Wells hotel. Near his body were the skeletons of his horses.

There are still many canyons and peaks in the Death Valley Monument which have no place names, but I understand the Park Service is filling in these blanks as they gain information, and eventually a good place-name map of the Monument will be published.

I was amazed at the dexterity with which our horses made their way over and among the boulders in the canyon. "My horse will go anywhere I can travel without using my hands or the seat of my pants," Russell told me.

The packer said he believed this gorge was known to some as Waterfall canyon. However, the name does not appear on any of the maps I have seen, and we found not a drop of water on the way down. Despite the aridity of Death Valley one of the prospectors has suggested that it be played up as a fishing resort. In his book *Death Valley and Its Country,* George Putnam quotes Charlie Walker as the daddy of the idea. Said Charlie:

"What you're most after when you go fishing is to have a rest and be away from worries. The valley's perfect for that. Your fly won't get caught in the willows. You won't get your feet wet, or tuckered out chasing along some danged stream to find a better pool. And there'll be no fish to clean."

This canyon was once the scene of a mining boom, and a lead property in one of the tributaries is still being worked. We saw many tunnels and shafts in the sidewalls of the lower canyon, with some old equipment still in place. Every niche and cove where a cabin could be built above the flood channel of the arroyo was cluttered with ruins of makeshift dwellings which once housed a considerable mining camp.

Here, buried in a little known canyon in the Panamints are the ghost ruins of camps unique in the Death Valley region. Because they are accessible only by jeep or horseback these ruins are seldom visited, and apparently unnamed. I was sorry we did not have time to explore the old mine dumps for the galena specimens which no doubt are to be found there.

Just below this camp we passed a third and last rattler. It was in a hurry to find a hiding place in the rocks, and we did not dismount.

Then we emerged on the great bajada that slopes from the toe of the Panamints down to the floor of Death Valley. Seven miles to the south we could see the checking station which the Park Service maintains at the Townes Pass entrance to the Monument. But we had one more interesting side trip to make before completing our trek.

George and Russell led the way over the rocky bajada to the place where W. B. Roods of the Jayhawkers left a permanent record of their historic journey 100 years ago. Erosion has dimmed the lettering, but it is still readable. History records that Roods reached the California goldfields, and many years later another quest for gold led him to the placer strike at La Paz on the Colorado river opposite the present Palo Verde valley intake. He was drowned in an accident at Ehrenberg, seven miles downstream from the gold camp, in 1871.

From Roods Rock we followed a straight course toward the checking station where the horses are corralled, and completed the journey back to Stove Pipe Wells by car.

Visitors in Death Valley today stay close to the hard road and very properly so, for the quest for mineral wealth has brought death to many who were lured off the established trails. But as the roads are extended in future years and the trails improved and riding stock more easily obtained, the Panamints and other ranges bordering Death Valley will assume increasing importance to those who come to this fascinating desert region for winter recreation.

Drums of Christmas

Pom Poms at Christmas . . .

By DOROTHY L. PILLSBURY

Photographs Courtesy New Mexico State Tourist Bureau

In the bleak wintry hills of northern New Mexico the Spanish-Indian villagers have their own unique rituals for the observance of Christmas—in which Santa Claus plays no part.

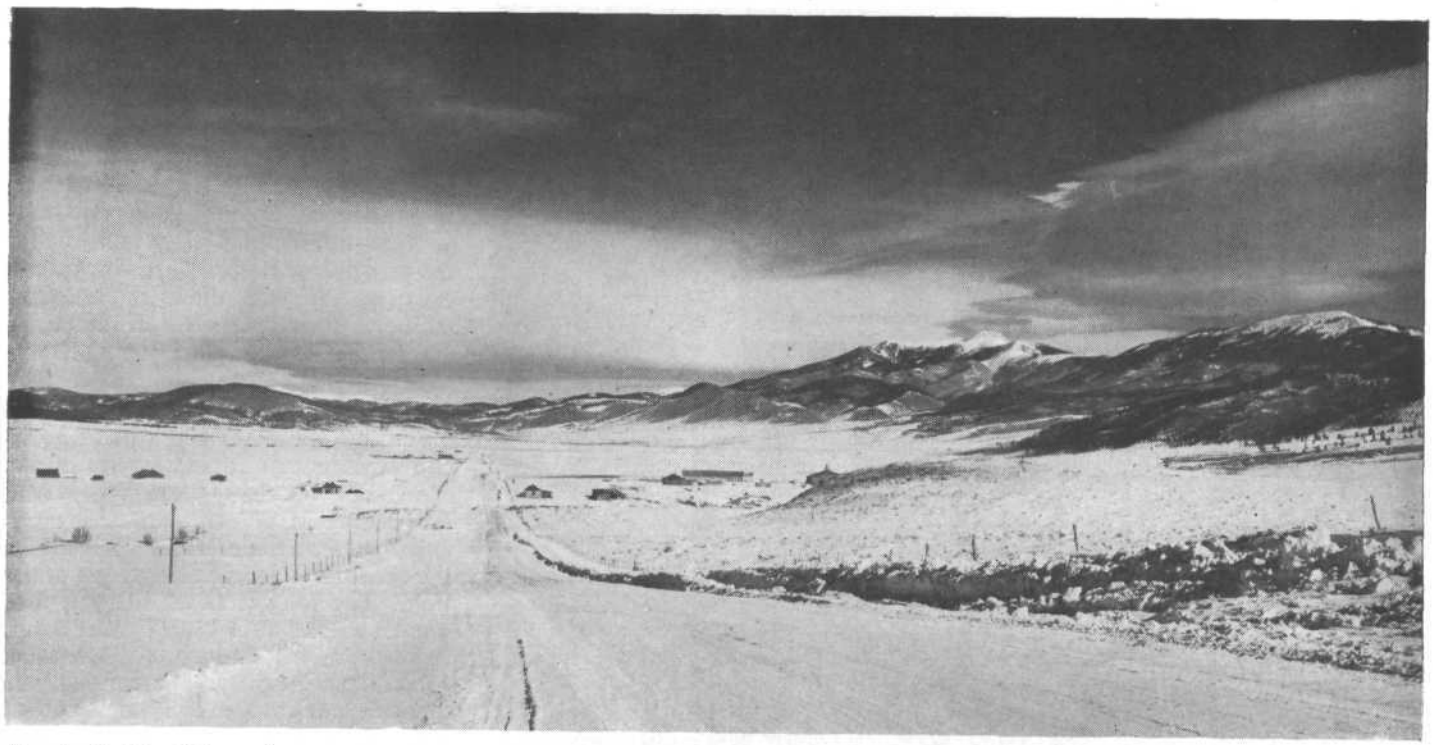
CHRISTMAS in northern New Mexico is like no other Christmas on earth. It comes in to the pom-pom of Indian drums and the wail of fiddles in remote Spanish villages. Every year I vow I will stay in my snug adobe house on the outskirts of Santa Fe and keep Christmas according to my own customs. There, pinyon logs blaze in a bee hive shaped corner fireplace. I have a good old fashioned Christmas tree and a mountain of tissue wrapped packages. I vow I will not get mixed up with a lot of Indians stamping their pagan rituals, nor will I give in to the attraction of Spanish medieval processions in snow swept mountain villages.

But I go almost every year. Someone hears in a round about way that they are giving *Los Pastores* in Trampas or Mora or some other village. It is rumored that half a dozen pueblos up and down the Rio Grande will start pounding the drums about midnight of Christmas Eve. The memory of those drums and fiddles works a kind of magic. It is irresistible.

Led by the vaguest of whispers, I find myself on the afternoon before Christmas in some Spanish village tucked away in the mountains. It has been a wild ride to get there, over narrow icy roads with the wind screeching down from the snowy peaks. Nothing seems to be happening in the squat little houses huddled cheek by jowl around the wintry plaza. Sheep baa in wattled corrals. A boy brings in a load of cedar wood on the back of a protesting burro. The air is full of the fragrance of wood smoke from dozens of fat little chimneys.

I wait for hours sniffing the good smell of chile flavored cookery seeping out from village kitchens. Evidently, as has so often happened, the rumor was a false alarm. I am about to make a dash for home when I hear the wail of a couple of fiddles on the other side of the plaza. Down the village street, above the whistle of the wind and the bleating of the sheep, comes the sound I've been waiting for —fiddles, guitars and voices lifted in an old Spanish hymn.

A boy in worn overalls, sheepskin jacket and wide brimmed black felt hat leads a long-eared burro. So that you may know that he is St. Joseph, a carpenter's kit is fastened to his bony little shoulders. On the burro's back rides the prettiest girl in the village. She is wrapped in a bright blue shawl. On her head is a tinsel crown from which floats a veil made from a window curtain. What with the mile high winds howling around, she has to clutch it frantically to keep it from floating off into space.

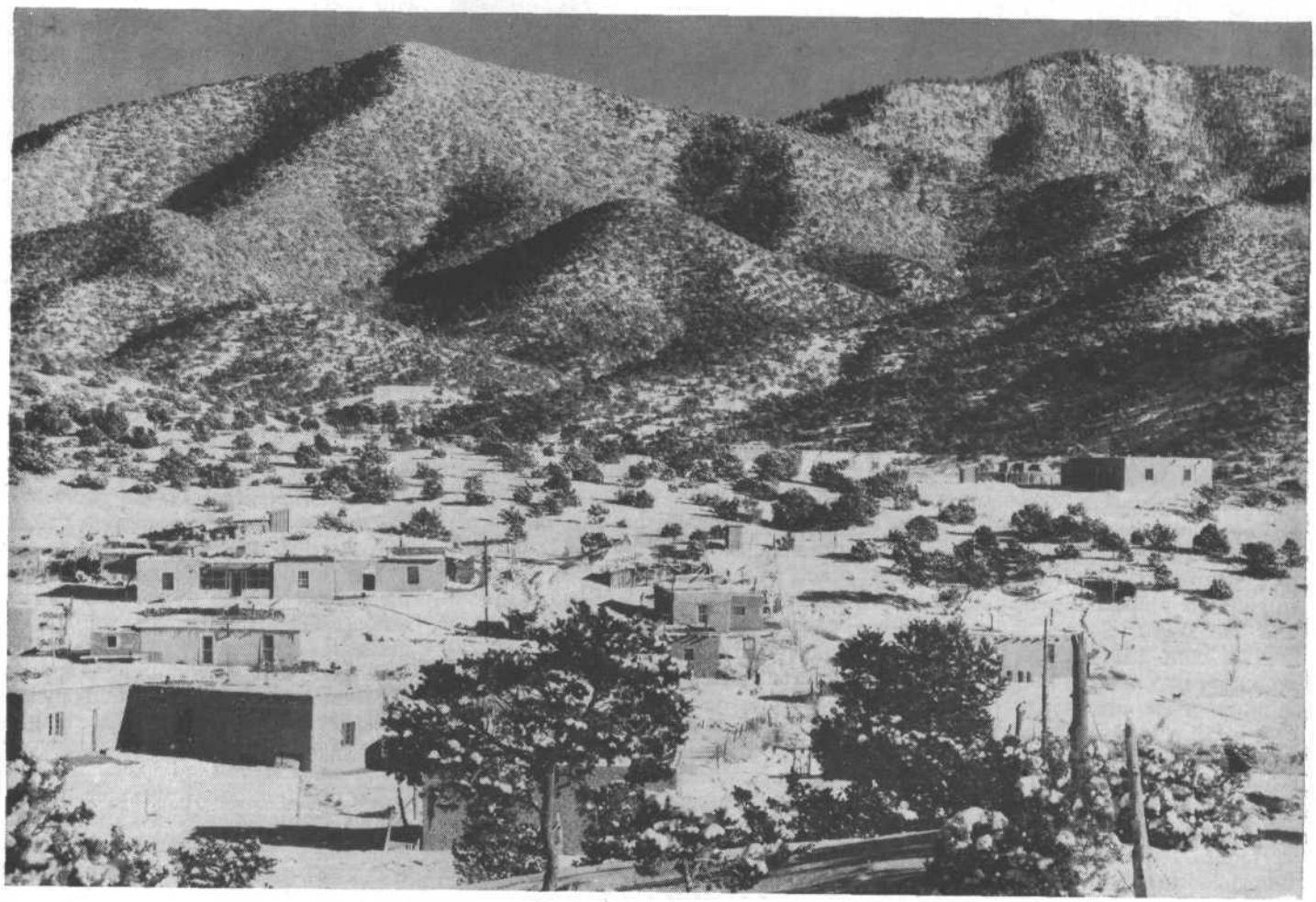


Roads that lead through snow to . . .

Behind the burro come many of the villagers—women swathed like sibyls in long black shawls, men eclipsed by big felt hats, youngsters in their mail order house togs. A few frayed banners snap in the wind.

The boy hammers on first one blue painted door and then another. "Is there any room for Mary and Joseph?" he asks in Spanish. Always the door is slammed in his face and the procession trudges on along the snow

. . . a remote Mexican village tucked away in the hills.



An Indian drummer heralds the arrival of Christmas.

heaped plaza. At last, almost at the end of the village, a hospitable door stays open. "Enter, enter," urges the owner, "my house is yours."

The whole procession takes him at his word and crowds into the low ceilinged, thick walled little room. A table with mountainous piles of blue corn tortillas, caldrons of red beans cooked with chile, and platters of little fried pies, invites a feast. Then there is singing of a decidedly secular nature and the swish of feet in old world dances with the fiddles and guitars humming like bumble bees.

When night sifts down, black as a crow's wing, every one shivers his way across the plaza to the one room adobe school house. Here is given Los Pastores—The Shepherds—a mystery play so old it has come down by word of mouth from father to son like a family heirloom.

The calico curtain parts to show shepherds sitting around a camp fire. As many of the villagers are shepherds in real life, they wear their working clothes. But to make sure no one misses the point of their calling, they carry shepherds' crooks twined with garlands of home-made paper flowers. Suddenly appears the Star of Bethlehem enacted by a coal oil lantern propelled in jerks along a wire overhead. No one minds if the Star gets stalled in its majestic course and a halt has to be called for the services of a villager with a pair of pliers. After a great deal of poetic conversation the shepherds decide to follow the Star.

From then on for hours, in resounding Spanish couplets, goes on the old struggle between good and evil. Everything gets in the way of the shepherds following the Star. This gives the village poet a good chance to get in some sly digs at the village drunk or the maiden too free with her charms.

As a climax, up pops the devil, himself. He wears black tights with a long black tail to which are fastened packs of firecrackers. They go off from time to time as a kind of emphasis to sonorous Spanish lines. No matter how many times they have heard the pop-pop of firecrackers, the youngsters squeal and duck under their mothers' black shawls. If an actor forgets his wordy part, the audience to a man can prompt him, which they do vociferously.

A holy hermit armed with a corncob cross comes to the rescue of the shepherds, but he gets nowhere with the devil. It is not until the archangels, Gabriel and Miguel, appear on the scene that the shepherds get under way. The warrior angel, Miguel, with a great spread of chicken feather wings finally runs his shining sword through his satanic majesty. Screaming vile Spanish curses the evil one plunges into a red calico hell and it serves him right. Guitars and fiddles break into hymns of victory as actors and audience and the archangels Gabriel and Miguel move on to a manger scene in the village church.

By all rights I should go home, but a glance at my watch shows me that with good luck I can make it across country to my favorite Indian pueblo. They usually get started a little before midnight. By now I am so completely bewitched that I don't even remember that I have a warm comfortable home with a deserted Christmas tree beside it.

I plunge again into a cold pitch black world. The roads are an indistinct spider web leading nowhere through snow drifts and faint tracks. Some way I make it and stumble shivering into an ancient church built by Franciscans for the Indians. I push open a massive hand carved door. Inside, it is colder and danker than it was outside and almost dark. A potbellied iron stove glows red in a dark corner, but seems to have no effect on the temperature of the room. A few candles in tin holders waver along the massive whitewashed walls.

The floor is hard packed adobe and there is no stool to sit on. I prop myself against a damp thick wall in the midst of other shadowy spectators. We wait and wait and nothing happens. My bones congeal along that ancient wall. My lungs choke with the mingled odor of dank air, candle grease, worm eaten timbers and stale incense.

Then faintly comes the pom-pom of drums from the direction of the kiva sunk in the bowels of the earth across the plaza. Slowly the deep rumble

of raw hide drums comes closer and closer. The great door swings open. Eight drummers abreast come pounding into the old church. I have heard that sound a dozen times but it always sends prickles up and down my spine.

Forty or fifty chanters bob around the drums and sing Indian chants that make the Spanish hymns I have just heard seem positively modern. A couple of hundred moccasined feet stamp the hard packed adobe in precise rhythm. The drums never stop. Gourds rattle out the tempo like the wash of tide along a pebbly shore.

Tawny fox skins fly out behind bronze hips. Green and yellow parrot feathers bob on blue-black top-knots. Candle gleam picks up the raw pigment of a blue shirt, a purple or cherry-red shawl. It sparkles on an abalone shell, it glints in silver belts and swaying turquoise necklaces.

My mind is in a state of confusion over pagan dances being given in a Christian church. This dance I know is being given to honor the change in solstice, to help the year on its way toward sunnier skies, longer days and seed planting time. I give the usual gasp when the great altar that has been but a blacker shadow in the gloom, suddenly flowers with scores of lighted candles. Indians who but a moment ago have been dancing their ancient ceremonials, drop to their knees. A priest intones the Mass. The transformation is sudden and breath taking. Toward morning I return to my own comfortable lodging.

Next day I turn up the thermostat and make endless cups of coffee. I am still dazed. My Christmas tree looks silly and I do not know whether Aunt Adelaide gave me that tissue wrapped package or Someone Important. I vow never again! But I know in the bottom of my heart that come another Christmas — come wind, come snow, come black of night—I will be out in it again. My ears hold the pom-pom of Indian drums and the wail of fiddles as a conch shell holds the roar of the sea.

Shine Smith, center, provided gift clothing and food for 900 Navajos at Shonto last year. McLaughin photo.

Shine Smith's Christmas Party . . .

In the early days of his ministry he was known as the Reverend Hugh Dickson Smith. But on the Navajo reservation where he has been a free lance missionary for the last 30 years he is known only as "Shine." To the Indians he is a brother, always ready and willing to do what he can to make their lot a little easier. He never preaches to them. His is a ministry of good deeds and kind words. The Indians love him and the Whites respect him.

Last year Shine gave a Christmas party at Shonto trading post in the heart of the western reservation. Nine hundred Navajos received gifts of clothing and food which Shine had collected from generous Americans.

This year Shine is planning another Christmas party—for the Navajo in Monument Valley. Its success will depend entirely on the generosity of those who can afford to make contributions. Used but serviceable clothing, food, fruit, candy for the children—anything that a Navajo child or adult can use or enjoy is acceptable.

Those who would contribute to the Monument Valley Christmas party may send their packages or money to Shine Smith, Flagstaff, Arizona. That is all the address needed, for Shine is the best known and loved citizen in northern Arizona.

MINES AND MINING . . .

Aguila, Arizona . . .

The new 200-ton mill being built by the Associated Mining Company at Aguila is expected to be in operation by the first of 1950, according to A. L. Poarch, general manager. The plant will mill copper, gold, silver and some lead and zinc—mostly from the Bullard mine 12 miles northeast of Aguila. Associated has the mine under lease.—*Wickenburg Sun.*

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Big Bear Valley, California . . .

Tanned and healthy at 98, Prospector Jim Erwin still hopes to find his pot of gold in the rugged San Bernardino mountain country. An old-time Indian fighter, Erwin came to Big Bear valley in 1884, is believed to be the oldest living resident of the area. He was a foreman at the old Lucky Baldwin mine. He still walks five miles to his mining property, has spent the last 65 years in San Bernardino county.—*Battle Mountain Scout.*

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Mariposa, California . . .

Discovery of radioactive ore of unknown quantities in the heart of the Mother Lode country famed in the 1849 gold rush has been reported by Dr. Frank Tiffany, atomic scientist. Dr. Tiffany said he found a uranium vein in the High Sierra country which is adjacent to Yosemite National Park. He said the ore would run as high as eight percent. The find was on government property. Samples of the ore have been sent to the Atomic Energy Commission.—*Battle Mountain Scout.*

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Winnemucca, Nevada . . .

Noted for its output of fire opals, the Rainbow Ridge opal mine in Virgin Valley, owned by Keith Hodson of Mina, is again in operation. The famous Roebling opal in the Smithsonian Institution at Washington, valued at $250,000 by collectors, was found at the Rainbow Ridge in 1919, was sold at that time for $1,500.—*Los Angeles Times.*

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Goldfield, Nevada . . .

Expansion in the Deep Mines operation, involving a seven-day week milling program and reopening of another shaft, has followed a recent visit to Goldfield of Fred Searls, president of the Newmont Mining Corporation. Activity in the Goldfield area is soon expected to be on a scale not seen for many years.—*Goldfield News.*

Eureka, Nevada . . .

Carrying out a recommendation of Ira B. Joralemon, one of the nation's leading geologists, the Eureka Corporation, Ltd., plans to seek ore above the 2,250 level of the ill-fated Fad shaft sunk by the company with disastrous results in property near Eureka. The geologist's report incorporated a four-stage development program plus an explanation of the factors that caused flooding of the original shaft.—*Eureka Sentinal.*

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Kelsey, California . . .

El Dorado county and Placerville, its leading city, are buzzing with news of another gold strike at the now famous Alhambra mine near Kelsey. The latest big strike has been estimated at $100,000. The Alhambra always has produced large quantities of high grade ore, in many cases almost pure gold. It is a shallow mine. The property is controlled by a Hollywood group, O. H. Griggs is manager.—*California Mining Journal.*

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Rifle, Colorado . . .

In an experimental run recently made by the bureau of mines 29,835 tons of oil shale were mined at a cost of 32.9 cents a ton at a test mine near here. In announcing results of the operation James Boyd, director of the bureau, stated that excellent progress is being made in the development of a low-cost method of extracting oil from the country's mammoth oil shale reserves.—*Vernal Express.*

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Reno, Nevada . . .

Nevada's old-time mining men are waiting with some skepticism for confirmation of a reported big new strike in Alaska. First news of the strike came in mid-October when a fisherman stated he had found pea-sized nuggets in his fish trap near Fishwheel. Prospectors and camp-followers already are flocking into the area, although only a small quantity of gold actually has been taken from the gravel so far.

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Goldfield, Nevada . . .

Dodge Construction company has taken a 10-year lease on 14 placer claims owned by Joe Andre and Tex Rodgers, located originally in 1936 and worked intermittently since then. Pay dirt goes down from four to 20 feet with no overburden, and assays have run from $1.50 to $28 a yard.—*Goldfield News.*

Goldfield, Nevada . . .

The old Jumbo mine, which back in 1914 produced $2,500,000 worth of gold but has been worked only intermittently since, may soon be back in operation. Work has already started to put the old Jumbo Extension into shape to be worked. Martin C. Duffy is owner of the property.—*Goldfield News.*

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Goldfield, Nevada . . .

Although approved earlier by the Senate, the O'Mahoney price incentive bill, designed to help small mines in the West, was killed at least until next session of congress when the house failed to pass the measure. Supporters of the bill in the house hope to bring it up for a vote early next year. The measure provides that the government shall match dollar for dollar with the mining operator in paying expenses of underground work.—*Goldfield News.*

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Aztec, New Mexico . . .

Bringing in of a new gas well west of Aztec has centered interest on an area that has long been neglected, but lease hunters are out in force now trying to tie up holdings. The big gasser was brought in by Southern Union at 5,280 feet. The company has two more tests underway. The producing well is said to have an extremely wet gas flow.—*Aztec Independent.*

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Hinkley, California . . .

A new perlite crushing plant is under construction near Hinkley, California, where perlite from nearby deposits is to be crushed before being shipped to ovens near Los Angeles for roasting. The plant is being built by Fred Santschi and associates.

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Silver City, Nevada . . .

Discovery of an important gold-silver vein on the 800-foot level of the Keystone mine near Silver City has been reported by W. J. Henley, president and manager of Dayton Consolidated Mines Company. Ore taken from the drift averages $34 a ton. The vein is directly below the ore body being mined on the 700-foot level.—*Humboldt Star.*

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Winnemucca, Nevada . . .

A mill with capacity of 50 tons of ore daily is to be installed next spring at property of the Winnemucca Mountain Mines, officials have revealed. This decision followed operation of a pilot mill for three months. The main Winnemucca Mountain property is said to contain a series of veins carrying gold, silver and copper.—*Los Angeles Times.*

Adobe Maker of Scottsdale

It is a back-breaking job, but no one has yet invented a machine which will make good adobe bricks of clay and straw and water — and as far as Juan Castillo is concerned he doesn't care if they never invent one. He is quite content to go along with the traditional methods — and he has raised a family of 12 children with the income of his trade.

By CHRISTINE B. MacKENZIE

"IN MY ADOBE HACIENDA, there's a touch of Mexico."

There'll be more than a touch of Mexico if you build your adobe hacienda in or near Scottsdale, Arizona. In all probability your adobes will have been made by Juan Castillo and his crew of Mexican brick makers.

They are the only 'dobe makers in that area and business always seems to be rushing. It is a time honored trade, for some of the earliest structures in the Southwest are built of these mud bricks.

Juan and his family live on the edge of his adobe pit just outside of Scottsdale. He has been making adobes in this community for 20 years. He is a good brick maker as the numerous structures in nearby communities, built from his blocks, can attest. And he must be a good business man, too, for he has a wife and twelve children to support.

Juan was a truck farmer in New Mexico before he migrated to Arizona. He cannot remember just why he got tired of truck farming. He shrugs his shoulders and say plaintively, "Maybe not 'nough money, don't know." It certainly wasn't because he was afraid of hard work, because adobe making is not a job for a lazy man.

In any case, he and his wife, Gregoria, travelled westward and settled on Indian School road, a few miles outside of Phoenix. The place, known as Old Man Lynn's ranch, had good clay for adobe making. He and his partners must have made a lot of adobes there, for when they finally moved on they left a wide pit into which excess irrigation water is now drained from the surrounding ranches. It is now a pretty little lake with cottonwood trees swaying along the ditches at its edge.

The Castillo family moved on, over to the other side of town where there was another good source of adobe clay and better still, an abundant supply of clear water to be pumped into the pit as needed. Their house, nondescript in shape, is built of course of adobe. The younger Castillos, their dogs and kittens spill out of it into the warm sunshine.

Juan Castillo and the tools of his trade — shovel, pickaxe, hoe and wooden mold for the bricks.

The pit itself is roughly a large circle, approximately 150 yards across. It slants down easily at the near edge so that a truck can drive into it for easier loading but the other three sides are almost perpendicular and show the shovel marks where the workmen have evened them off.

The floor of the pit is kept very smooth and hard for the bricks are molded on this surface and it must be even and level. The good clay goes down ten or twelve feet before the first layer of gravel. He worked over the whole area, so that it is about six feet deep and is now starting another excavating layer of three to four feet. The bricks are made on the upper level and the wet mud worked on the lower level.

Stacks of dried adobes run off at odd angles like walls with no place to go. Simple tools lie where they have been dropped the day before and the wheelbarrow, the only modern addition to this ancient job, sets rakishly on its side.

But shortly, the place takes on a more active look. Juan and his helpers, Jesus Murquiga and Eluterio Gonzales, have arrived. The night before they had piled loose earth along the bank of the second level and run a lot of water over it. It is now a mucky mass, evenly dampened and moist. One of the men starts chopping into it with a

grubbing hoe. Soon the other man wheels up a load of straw thickly and odoriferously laced with horse manure. The animal content in the straw is important and it must be produced by a horse, for the resulting product when dried into the bricks acts as a better binder.

"Not cow," says Juan briefly in his difficult English, and shaking his head disapprovingly, "No good!" He gets the needed straw and manure from a nearby horse stable, in never ending supply.

The amount of straw used in proportion to the clay is not large, about two or three wheelbarrows full for enough mud to make a couple of hundred blocks. Not that the Mexicans ever measure any of their amounts. Far from it, they just seem to know when it is right.

The whole pile is chopped through many times and then left to stand for awhile until some of the moisture drains out. Usually the actual molding goes on in the afternoon. One man acts as molder and another keeps him supplied with the moist mud mixture.

The painted mold is made of light lumber. Strips of surfaced lumber 4 inches wide by 1 inch thick are nailed into forms, 18 inches wide and 4 feet long. They are subdivided to make several adobes at a time. The bricks come in various sizes depending on their use in interior or exterior walls. They are all 18 inches long and 4 inches thick and can vary from 6 inches to 12 inches in width.

The helper wheels up a load of mud, enough to fill the mold once at each trip. He dumps it into the mold and his partner squeezes this hard into each compartment with his knuckles making sure that the mud fills the corners. He wets his hand and smooths over the top. Then he scrapes about the top edges with his fingers so that the mold is free to be lifted up. As one of the Mexicans said, this is an important operation that can also break your back, as the wet clay takes a lift of about 50 pounds each time in order to get the mold off.

By now, the man with the wheelbarrow is back with another load and the process is repeated, until row on

Top — Juan Castillo as the "mudder" is mixing clay, manure and straw to a thick consistency in the adobe mud pit.

Center — He dumps his load into the wet wood forms.

Bottom — He wets his hands and then finishes off the top of the bricks by hand.

row of adobes are laid out in the sun to dry. A crew of two men can turn out about 500 bricks a day and profits are shared equally.

But Juan will remind you, it's a little early in the story to be talking about profits. The adobes must dry in the sun for several days before they can be piled in great stacks to bake longer in the hot, searing rays. Then they are lifted again onto the truck to be delivered at someone's building site miles away. It is back breaking work.

Juan is thin and wiry, his dark skin leathery from the sun. His back muscles must be hard as granite from his years at his job. His older children, seven of the family are boys, help in the pit from time to time. The oldest boy, Joe, quit high school in Scottsdale a year ago to drive the pick-up truck which delivers the bricks. His brothers help with the stacking and sometimes in preparing the clay.

Folks who see this process for the first time invariably wonder why the job cannot be made easier with labor saving equipment and machinery.

Jesus Corrall, the local building contractor, and spokesman for the Mexican community in Scottsdale, explained it like this: "Every once in a while," he said, "a would-be adobe maker will venture forth with a sure fire method for making good adobe blocks. The most popular belief among newcomers with an inventive mind is that the present adobe makers stick too much to the old methods. These postwar enterprising young men arm themselves with makeshift machinery and start out to become adobe magnates. After long delays and a lot of hard work, they decide that perhaps they should try some other occupation.

"Adobe making," Corrall continued, "is strictly for men of brawn and patience, men who are satisfied with the simpler things in life. In this occupation there is the risk of rainy weather, floods, cattle walking over the fresh adobes, lack of custo-

Top — The mud is pounded into the forms with his fists, and any surplus removed.

Center — The wood forms are then removed and the bricks left to dry. After a few days they are turned on edge to complete the drying process.

Bottom — This partially completed home on East Camelback road near Scottsdale shows how adobes are used in construction. Peeled pine poles are used for lintels and ceiling beams, protruding through the wall.

mers, delay in payments. A man stays in business sometimes because he is left very much to himself."

Juan Castillo still works only when it pleases him, and if you order adobes from him, you'll get them when he gets around to it. He doesn't work in rainy weather because the adobes won't dry. He doesn't work in cold weather, because it's unpleasant to handle the cold clay. Sometimes he doesn't work in the heat of summer days, although he and his crews might work awhile in the cool of the nights during the hottest parts of the year. Usually, he doesn't labor on special Mexican fete days either. And best of all, it never seems to worry him whether he's working or not.

I asked him about his competition. Juan shook his head and hesitated before answering. Eventually he guessed there was another family of adobe makers "about 50 or 75 miles away." But obviously it doesn't bother him. There's more business than he can take care of in his own area, Phoenix, Scottsdale, Tempe and the surrounding communities.

He sells his brick in the 12 x 18 size for $66 a thousand, plus hauling charges figured by distance. A contractor gets $85 a thousand for laying them. At an average distance, the cost for adobe construction comes to about $180 a thousand. Twenty years ago, it was $30 a thousand.

Adobes are laid with a mortar of mud, frequently right out of the yard where the building is being erected, unless it happens to be too sandy. Heavy cross beams for doors and windows are installed as the brick laying progresses, the rest of the wood work being added later.

The exterior of the building is usually left as it is, or it can be stuccoed and painted. The interior walls can be left in their natural rough state, but are often smoothed down with slip, a mixture of clay and water. They can also be painted over with goat's milk or skim milk, which helps to keep them from sifting dust down on the floor. Some people even plaster and paint them.

In any case, adobes provide their own insulation, and if you change your mind about the shape of a window, for instance, it's easy enough to knock out a few more, muddy up the chinks and proceed with your building.

Visitors to the West who see these picturesque adobe homes dotting desert landscapes, invariably wonder how they will stand up to weather and changing seasons, particularly the short periods of heavy rain.

They stand up very well, as numerous buildings in the Southwest can testify. Even a heavy driving rain doesn't bother well-dried adobe, particularly if it is protected with wide cornices and eaves. To be sure, a badly built drain which releases a little rivulet of water may cut a trench in the bricks. But you don't have to call in an expensive expert to repair it. Just dig a little mud out of the garden and start patching.

The ultimate proof of the durability of adobe structures is the most famous one of them all, Casa Grande in the Casa Grande National Monument, maintained by the National Park Service. This massive structure, 32 feet in height, was originally thought to have been built by the Hohokam tribe, the primitive residents of Arizona. Later research has proved that it was actually the work of a tribe of Pueblo Indians called the Salados who lived formerly in the upper stretches of the Salt River valley. They were forced by drouth and enemy attacks to move onward. They eventually settled, built a fortified village, and constructed the Casa Grande adobe.

It is four stories high, and despite the fact that it was built about 1350 A.D., enough of the structure still stands today to recognize its original shape. Even the original plaster, a fine, evenly applied caliche, is still clinging to the interior walls, although it has long since been washed away from the roof, floors and outer walls.

The still sturdy Casa Grande should convince even the most skeptical of the permanence of adobe as a building material.

Actually, however, its history can be traced even farther back than this. The Egyptians and Babylonians knew how to make mud bricks dried in the sun. Spanish invaders of the New World, and the missionaries who followed them, brought the art of brick-making to the Americans — and learned later that primitive Indians had been using adobe construction long before Columbus crossed the Atlantic. The word adobe is from Spanish, meaning "to plaster."

Juan Castillo's method of brick making differs very little from those early days. It suits him and his customers. But it should be mentioned that there are modern improvements even for adobe bricks.

For instance, instead of using straw and manure as a binder, the bricks can be made with a mulsified oil binder, manufactured commercially. Made in this fashion, adobes are waterproof and can stand any amount of rain and sun. They get harder all the time. This block is used in the damper parts of the Southwest.

One excellent example of this type of construction is the Vivian Webb chapel recently completed after ten years of work on the campus of Webb School for Boys near Claremont, California. This beautiful building clinging to the hillside from which the mud for the bricks was dug, was a school project.

Every boy attending the school, laid one brick in it for sentiment's sake, and many of the students worked on the building just for the fun of it in their off hours. It was designed and supervised by Mr. Webb, the headmaster of the school. Here again, a Scottsdale man had a hand in helping, for Henry Robertson, a former pupil and later teacher at the school, assisted Webb greatly in the project.

No doubt Mr. Robertson has watched Juan and his crew working in their adobe pit many times. And well he might, for they are producing a building material which is truly typical of the Southwest. Adobes cannot stand the expansion and cracking of northern frosts, but in the warm desert sunshine they bake harder and become more durable as the years pass.

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FRANCISCANS OBSERVE 50TH ANNIVERSARY AT MISSION

Franciscans monks at St. Michaels mission on the Navajo reservation near Fort Defiance recently observed the 50th anniversary of the founding of the missionary outpost.

Fr. Berard Haile, who came to St. Michaels soon after it was founded, told the history of the mission to the 1,000 visitors who were present to take part in the Golden Jubilee celebration. The venerated padre is a leading authority on the Navajo language, having perfected an alphabet to meet the unique requirements of the language.

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CATFISH FARM NEW INDUSTRY ON INDIAN RESERVATION

What is said to be the world's largest catfish farm is being installed along the Colorado river near the old placer mining camp of La Paz, according to P. H. Hill, president of the Arizona Fish Farms, Inc.

Sixty 10-acre rearing ponds, of which 38 are completed, are being excavated with bulldozers on land leased from the Colorado River Indian agency.

Already 150,000 baby catfish have been planted in the ponds, which are designed to provide fish for the market. According to Hill the best size for marketable fish is one and one-half pounds. Under normal conditions Hill said the fish would grow a pound a year after they are hatched.

Death Valley in '49 . . .

By J. WILSON McKENNEY
Art sketch by Grim Natwick

TWO LEAN WEARY MEN stood in ragged travel-soiled buckskins, staring breathlessly at a distant group of wagons on the floor of Death Valley. They could see no movement around the wagons. Thoughts which had plagued the men for endless days crowded this moment of suspense. Were their friends dead? Had the Indians massacred the entire party? Had they tired of waiting and struggled on afoot? One of the men fired a warning shot.

Lewis Manly and John Rogers stood still, too faint from anxiety and emotion to step forward. Had their arduous mercy mission been in vain? Their unspoken question was soon answered. Suddenly a man came from under one of the wagons, stood up and looked around, then threw his hands over his head and shouted "The boys are here! The boys have come!" The suspense was over.

Out of the stories of tragic misadventure in Death Valley during the winter of 1849, the account of the Manly-Bennett party's selfless chivalry and honor stands dominantly above the record of smaller men who fled in panic before the spectre of thirst and hunger in an unknown desert.

It would have been enough for brave men and women to struggle on through the weary days, tortured by need for food and water, uncertain of their route, and deserted by those who were able to travel faster. But this tiny group waited patiently for five painful weeks, confident that "our boys" would return to deliver them from death

How five men, two women, and four children spent over four months in an unguided journey across deserts and mountains from southern Utah to Los Angeles is dramatically recounted in William Lewis Manly's book *"Death Valley in '49"*, written in 1893. Manly's narrative is modest and his basic facts remained unchallenged by his contemporaries.

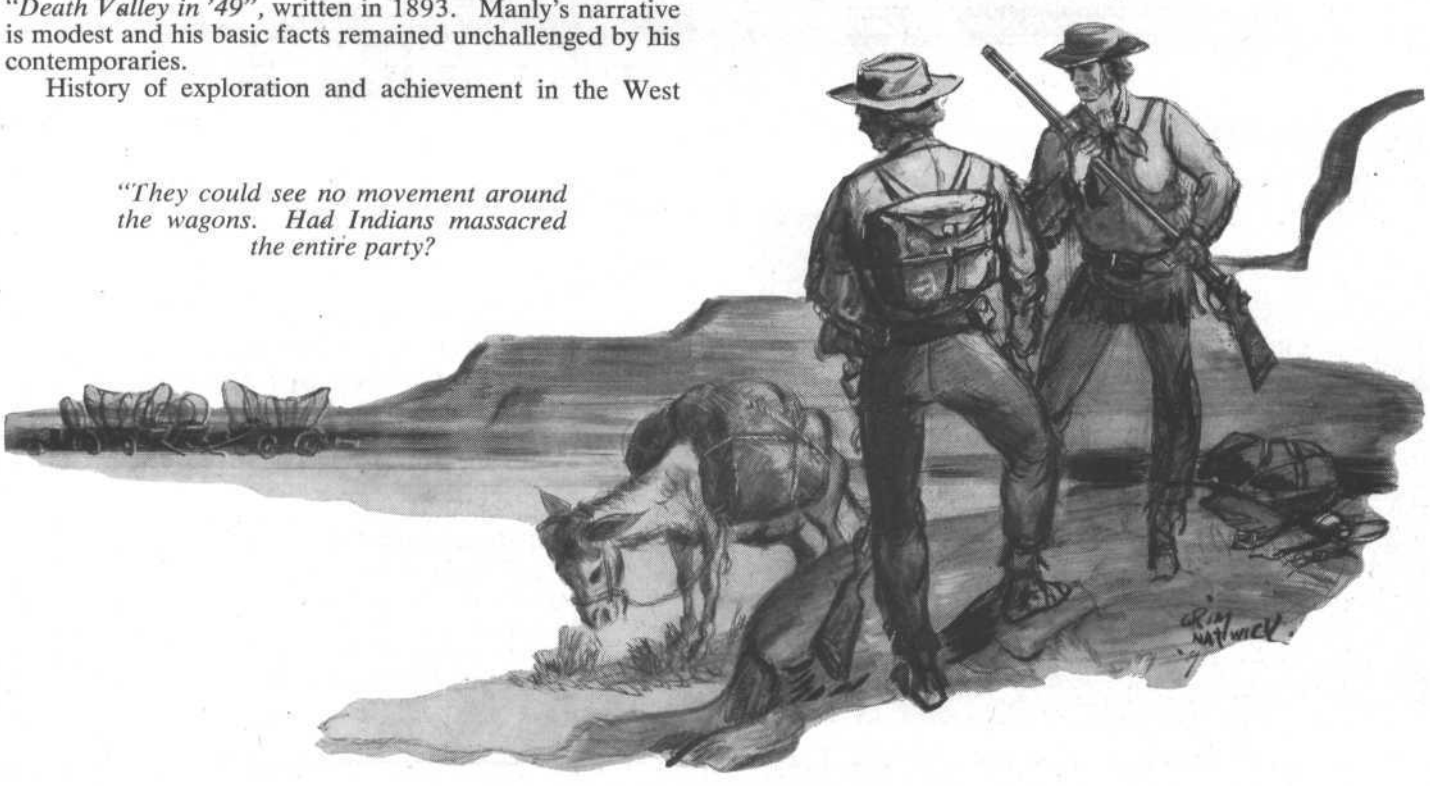
History of exploration and achievement in the West is studded with accounts of men who won their struggles with animalism to emerge serenely with the stature of noblemen. Such is the magnificent story of Death Valley in '49. Among records which came out of the epic migration of gold-seekers to California, the chronicle of the Manly-Bennett party looms large with the heroism of two unselfish men: Manly and Rogers.

All accounts which came from the lips of pioneers many years later dwelt on the hardships, the privations, the struggle and fear and ugly desperation of men caught undefended in torture. While Manly did not exclude these elements, he expressed a triumphant optimism, confidence in the triumph of will, and a tenacity of purpose which rose above the forces clutching at him. He rose as majestically as Telescope Peak rises above the sink of Bad Water.

A great train of 107 wagons, 350 people, and 500 head of livestock had started southwestward from Salt Lake City, bound for the California gold fields. Greed and impatience led to rapid cleavage as parties broke away to push forward eagerly. The Manly-Bennett party, led by Asabel Bennett, was one of the smaller groups left far behind.

Manly had served as a scout for the main party, had traveled on foot most of the time to scale mountains, had located water holes and watched for Indians. Toughened by a life on the frontier, he was an experienced hunter and guide. He had fallen in with Mr. and Mrs. Bennett probably because he was attracted by their three courageous little youngsters.

Christmas 1849 had passed and the new year was approaching when the party crossed Death Valley and



"They could see no movement around the wagons. Had Indians massacred the entire party?

reached the base of "the great snow-capped mountain." There, in an exhausted group, it was decided that help must be brought from "the settlements".

Guidance was needed even more than food. They were lost but instinct drove them constantly westward. It was this urge which caused the numerous splits and added toil and misery. They scaled a half-dozen ranges rather than turn to north or south. Not a wagon that entered the Valley was brought out, yet every one could have been saved if they had gone south far enough.

It was decided that the two strongest men would go forward on foot while the rest waited "not over ten days". The selection was natural. Manly was 29 years old, the most fit. John Rogers was a large strong boy from Tennessee, steady and taciturn. They quickly packed most of the dried meat from a lean ox in their back bags and walked out of sight, waving back to their friends.

How they nearly died of thirst but came at last into green valleys near where Newhall now stands is a tale as exciting as the wildest fiction. The warm-hearted Californians whom they met provided them with beans, bread, beef, and horses. They turned back to the desert without rest.

Manly and Rogers might have chosen to remain in the green Paradise they had found. Probably there would have been no survivor of the little party they had left behind, to accuse them of cowardice. They had no blood bonds which drew them back to the helpless people marooned in the wastes. They were single men who had ridden with Bennett by accident. But their code would not admit desertion for a moment; their only concern was that they had already consumed 16 days to cover the 250 miles which still separated them from completion of their mission.

The four horses died on the return trip but a little desert burro carried its great pack almost gaily to the desert camp and back to the green valleys. Manly repeatedly wrote his praise of the sturdy animal, calling it a mule. To the tear-brimming eyes of the Bennetts and Arcanes, it was the most beautiful creature in the world.

With the children loaded into grotesque pocket bags on the back of Old Crump, a steady ox, the party started soon after Manly and Rogers returned. The guides voiced constant encouragement as they climbed a southern toe of the Panamints. Pausing on the highest ridge, they looked back over the long narrow valley they had crossed and the wisp of smoke which marked the remains of their wagon. In chorus they spoke the thought uppermost in their minds: "Good bye, Death Valley". Although history shows that only one man of the entire '49 party actually perished on the floor of the valley, the forbidding name stuck.

A century has passed . . . plans laid in March by Death Valley 49ers Inc., developed during the summer into a spectacular centennial celebration commemorating the achievements described by Lewis Manly. A pageant will be presented this month in Death Valley which will seek to reenact parts of the fantastic story.

If this year's glamorized pageant should escape total authenticity, it will at least be a reminder that Death Valley did not always boast paved highways, sign-posts, and luxury hotels.

The modern traveler who experiences the mystic veil of enchantment which broods over the Valley will gain a new appreciation of its mystery and beauty. Certainly Manly and Rogers a century ago had little mind or heart for the enjoyment of Nature's masterpiece, which the visitor today may explore without anxiety or danger.

Hard Rock Shorty of Death Valley

"Yep, that popcorn growin' experiment o' Pisgah Bill's made a lot o' trouble," Hard Rock Shorty was saying to the tourists who had sought shade under the porch at Inferno store.

"Billi had a Swede from Minnysota workin' fer him the summer he planted the corn. Name was Hanson. One day Bill sent him out to shuck a load o' that corn, up in Eight Ball crick where Bill had his patch o' garden.

"That was one o' them sizzlin' days in July, 132 degrees. On the way back the Swede decided to climb under the wagon and cool off a bit. He went t' sleep, and while he was there a hot blast hit that corn and it started poppin'.

"Guess he'd been dreamin' about them Minnysota blizzards, fer when he wope up he was buried seven feet deep in popcorn. He thought it was snow—an' froze to death before he got his senses back. We like to never got him thawed out enough to bury proper."

HERE AND THERE . . . *on the Desert*

ARIZONA

Indian Aid Measure Vetoed . . .

WASHINGTON—One of the most highly controversial Indian measures ever to come before congress — the $88,000,000 Navajo-Hopi rehabilitation bill—was vetoed by President Truman after long hearings in committee and extended debate in both houses.

The Navajo Tribal council itself opposed the bill, and President Truman admitted he had been "greatly influenced by the attitude of the Navajo Indians." Section 9 of the proposed bill, which would have brought the two tribes under jurisdiction of state laws, was the main point of contention. At present the Indians are governed by federal and tribal laws.

Broader aspects of the program, which authorized money for education, water and range development, irrigation projects, roads and hospitals, met with almost unanimous approval, but opponents claimed that the "many serious defects" of the bill as finally approved out-weighed the merits of remainder of the bill. Truman has indicated he will attempt to get money appropriated to start major features of the program next year pending the time that new legislation can be written.—*El Crepusculo.*

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Annual Stock Show . . .

PHOENIX—New dates, January 4 to 7, have been chosen for the annual Phoenix Stock show, which will fit in just ahead of the Denver show and is thus expected to attract a record number of Arizona and out-of-state exhibitors. Phoenix merchants will underwrite the show.—*Ajo Copper News.*

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Wage War on Coyotes . . .

SAFFORD—An attempt to exterminate coyotes in southeastern Arizona is underway because the wily desert dwellers are allegedly a menace to stock. State and federal agencies and the San Carlos Indian Agency will unite in a poisoning program. Extermination of coyotes was attempted three years ago, but they are back in even larger numbers now. — *Graham County Guardian.*

Navajos Facing Hardships . . .

HOLBROOK — Outlook for the Navajo Indians of Arizona and New Mexico this winter is not good, according to Navajo Assistance, Inc., with headquarters in Gallup, New Mexico. The organization cites these circumstances:

Educational opportunities are even less than last year's woefully-inadequate facilities. Another reservation school has been closed instead of reopening some of the eight previously closed. Navajos are allegedly denied the relief benefits to which they are entitled. Off reservation employment opportunities are not favorable. Indians are not permitted to increase their flocks of sheep although Navajoland had exceptionally heavy rainfall this summer and the grass is good.—*Holbrook Tribune-News.*

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May Build Katchina Village . . .

WINSLOW — Construction of a Katchina Indian village as a tourist attraction in Winslow is being planned. Articles of incorporation have been drawn up by a group backing the venture. First steps will be to obtain land and begin construction of the "village."—*Holbrook Tribune-News.*

THE DESERT TRADING POST

Classified Advertising in This Section Costs 8c a word, $1.00 Minimum Per Issue

INDIAN GOODS

DEAR CUSTOMERS: Sorry we have no catalog. Because we handle Indian Artifacts and each piece is distinctive, cost would be prohibitive. We have lots of old and new rugs, baskets, jewelry and ceremonial things. Plenty of rocks and minerals, gold specimens and nuggets. We also have Chimayo blankets, coats and purses. We will be glad to ship. Tell us what you want and send the money. Daniel's Trading Post, 401 W. Foothill Blvd., Fontana, California.

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.

BRAUN'S INDIAN TRADING POST: I wish to dispose of my entire stock of authentic Indian goods. Every piece desirable. Stock consists of concho belts, many pieces of pawn jewelry, rugs, old and new, baskets, pottery and bead work. Correspondence invited. Ivy F. Braun, 1318 No. Highland Ave., Hollywood 28, Calif.

HAND MADE MOCCASIN: Soft "Buck Tanned" leather trimmed with nickle silver conchas set with turquoise color stone, wool shearing insoles—for indoor or outdoor wear. Women's sizes 4 to 9, $5.95, Men's 6 to 12, $6.95, prepaid, cash with order. Satisfaction guaranteed. Make ideal Christmas gifts with name embossed in gold on sole if desired at no extra charge. Photos on request. Mohave Gem Shop, Kingman, Arizona.

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MAGAZINE SUBSCRIPTIONS for all publications at publishers' prices. Courteous, prompt service. F. G. Voltmer, 10211 Seabury Lane, Los Angeles 24, California.

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

BOOKFINDERS—Scarce, out of print, unusual books quickly supplied. Send wants. Clifton, Box 1377d, Beverly Hills, California.

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"GOLD PANNING FOR PROFIT." Healthy outdoor hobby. Beginners' big illustrated instruction book—$1.00. Miners' gold pans, $2.00. Prospectors' powerful magnifying glass, $1.00. Package black sand and real gold, $1.00. Desert Jim, 627 Lillian, Stockton, California.

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

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

GEOLOGIC & SCENIC COLOR SLIDES, 2 samples, catalog, $1.00. Heald-Robinson, 112d Lemon, Monrovia, California.

MISCELLANEOUS

THE NEWEST THING to come out of the desert. Graceful bowls made of Desert Ironwood, the most beautiful and hardest of woods. You will be amazed at the beauty of grain and color in this wood. Make excellent gift items. Special introductory offer: Approximate size; 8 in. wide by 1¼ in. deep only $4.50 postpaid. Satisfaction guaranteed. Stocks limited temporarily. Order early for prompt Xmas delivery. Desert Wood Crafts, Palm Desert, Calif.

FLUORESCENT TURITELLA and other type Paperweights, $2.50 each. Exclusive pattern. Letter Openers $2.50 to $3.50. Clay Ledbetter, 2126 McKenzie, Waco, Texas.

THE IDEAL GIFT: Three dimension, cactus framed desert landscape, 6x8x2, $3.00; 8x13x2, $5.00. The "Special" 10x20x2½, $10.00. Christmas specials, cactus covered wagon, beautiful shade, regular $7.00, $4.95. Three dimension landscape, 5x6x1½, $2.00. Arizona minerals, high color, 12, $1.00. All postpaid. Diorama Studios, 1225 North Anita, Tucson, Ariz.

KARAKULS—Producers of Persian Lamb fur are easy to raise, adaptable to any climate or altitude. For further information write Addis Kelley, 4637 E. 52nd Place, Maywood, California.

CACTI AND SUCCULENTS—From the deserts of the world. Don-Rita brand. By appointment only. Write us your needs and we will try to help you. Michael Donnelly Cacti Gardens, 334 Lowell St., Daly City, California.

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.

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.

SILVERY DESERT HOLLY PLANTS. One dollar each postpaid. Greasewood Greenhouses, RFD, Barstow, California.

MINERAL KODACHROMES. Colorful pictures for sale or rent. Over 400 different. Show them at clubs. Informative script supplied. See rare minerals in full color. Catalog free. Scott Lewis, 2500 Beachwood, Hollywood 28, California.

GENUINE TURQUOISE NUGGET Bracelets, Necklaces, Earrings, with one nugget attached $1.20 each with federaal tax included. Postpaid. Average size of nuggets ¾ to 1 inch, excellent color. Extra nuggets 50c, 75c and $1.00 according to quality and color. They are all polished with eye and jump ring ready to use. Make ideal Christmas gifts — positive money back guarantee. Mohave Gem Shop, Kingman, Ariz.

ATTENTION URANIUM PROSPECTORS: "PAY DIRT" INFORMATION about Utah, Colorado, Arizona latest Uranium strike area. Send for informative, colorful non-technical prospectus about Uranium deposits and where to look. Geological and geographic data of those areas by a rancher-prospector who located and worked Uranium claims. Includes topographic sketches, directive maps, climatic information and other vital text pertinent to staking claims, field equipment with additional reference to mining regulations. "Pay Dirt" experience for only $1.50. Write: Knox Tracey, P. O. Box 1066, Vallejo, California.

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.

FOR SALE: or lease, Griffe mine on Clarke Creek, 3 claims along the south end, corners Malhure and corner line Mormon Basin which I think carries Granolite. Opportunities for someone with ability to develop and mill the output. A. O. Weatherman, 1603 Baker St., Baker, Oregon.

KODACHROME SLIDES ON APPROVAL. Glacier, Banff, Jasper. Mtn. Goats, Mtn. Sheep, Bears. Moose, Deer, Lakes, Mountains, Sunsets and many others to select from. Round out your series from our collection. Also other Western National Parks. Douglas Whiteside, Yosemite National Park, California.

REAL ESTATE

DESERT SUN HOME: At beautiful Palm Desert. Near the new Coachella Valley School. Deep well water, natural gas and electricity. This is a dream home with view windows, fireplace, car port and insulation. Priced to sell at $9,950. Carl Henderson, Realtor, Box 201, Palm Desert, California.

Tombstone May Be Restored . . .

TOMBSTONE — Seeking to recapture the appearance of the 1880's, legendary Tombstone may be restored to look like it did in the days when it was a booming mine town of the old West. Plan is to make the city a showplace, with emphasis on exteriors of buildings, many of them actually built before 1890.—*Tombstone Epitaph.*

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Tackling Big Problem . . .

WASHINGTON — Formation of a new organization to work for a "complete solution of the Indian problem" has been announced by Will Rogers, Jr., former California congressman. Rogers is part Cherokee. The organization is called American Restitution and Righting of Old Wrongs, Inc. It will be known as Arrow. Purpose is to avoid political controversies, work toward an overall program. — *Yuma Daily Sun.*

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Apaches Profit from Timber . . .

FLAGSTAFF — The White Mountain Apache Indian tribe is making good use of money it receives for timber cut on the reservation, according to R. D. Holtz, superintendent of the Fort Apache agency. During the past fiscal year the tribe was paid more than $20,000 per month for trees harvested on the reservation forest. Timber harvest is carried out under a sustained yield plan. Only mature trees are cut and the annual cut is based on the estimated annual growth. This assures a perpetual supply of trees from the tribal forest and perpetual income for the tribesmen. They are using the money to develop stock water on the reservation, for construction and maintenance of range fences, to maintain a tribal police force and for relief of indigent Indians who are not covered by social security.—*The Coconino Sun.*

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.

PALM SPRINGS: Good 2 bedroom house in Palm Springs close to stores and postoffice. Only $3,750.00. Write to W. J. Bauman, 4925 Axtell St., Los Angeles 32, California.

HURRY! WILL SACRIFICE 1 acre with beautiful 2 bedroom home, furnished. Large 2 car garage, all utilities, insulated walls and ceiling. Elevation 2650 feet. All year climate *perfect for arthritis, asthma, sinus* and T. B. 17 miles from Palm Springs on the 29 Palm's highway. First time advertised. $9,800. Write Carl Bable, Morongo, Calif., Box 95, or drive out.

ONE ACRE or more homesites with water to irrigate developed garden, etc. Grand view of ocean, healthiest climate in U. S. $850 per acre. Lots with water in Mutual Water Co. in Ocotillo Desert Resort, $250. Business opportunities on highway 80. Send for circular. John C. Chalupnik, Ocotillo, via Plaster City, Calif.

$100,000 WHITTIER, CALIFORNIA, home. High, scenic, privacy with gardens, grandeur. No fog or smog. Will trade for Palm Springs income. Owner: 735 Avalon Road, Whittier, phone 413446.

Search on for Meteorite . . .

WINSLOW—Dr. H. H. Nininger of the American Meterorite museum is seeking information on a reported meteor believed to have been seen by Mr. and Mrs. Roy Kilmer, Greenville, Texas, as they were driving west a few miles east of Holbrook recently. Kilmer is an experienced amateur astronomer. He judges the meteorite should be found in western Arizona or southern California. Any who may have sighted the meteor are asked to get in touch with Dr. Nininger.—*The Coconino Sun.*

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To Restore Historic Building . . .

PRESCOTT — Fort Misery, with a history as intriguing as its name, is to be restored and preserved on grounds of the Sharlot Hall museum in Prescott. It housed the first supreme court in the Arizona Territory. It is a chinked-log cabin, is to be furnished with all available relics — pictures, books, furniture, documents, seals, personal souvenirs—that can be gathered together. Residents are asked to volunteer donations.—*Holbrook Tribune-News.*

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Plans for Man-Made Lake . . .

PHOENIX — The National Park Service already has definite plans for development of a $200,000 picnic, bathing beach, boating and fishing resort on Lake Mojave, which will be created next year by construction of Davis dam on the Colorado river. The resort development is to be in the Katherine mine wash, about four miles by road from site of Davis dam. Overall plans include resort facilities at Willow beach below Hoover dam and at Eldorado canyon in Nevada, in addition to the major project at Lake Mojave.—*Mojave County Miner.*

Organ Pipe Controversy . . .

AJO—Proposed conversion of Organ Pipe National Monument into a national park, provided for in a bill introduced in the house of representatives by Congressman Harold A. Patten of Arizona, has raised a controversy. Size of the area to be included, effect upon grazing privileges which cattlemen now enjoy and the possibility of obtaining more funds to develop roads in the scenic region are points being considered by those on both sides of the issue.—*Ajo Copper News.*

CALIFORNIA

Park Officials Visit Salton Sea . . .

MECCA—While no official endorsement was given, members of the California State Park commission on a recent visit to this area indicated their interest in the plans of Coachella valley people for the establishment of a state park along the shore of Salton sea. At a dinner given the park commissioners at Desert Inn in Palm Springs, they were also urged to take steps for the protection of the native palm trees found in many of the California desert canyons.—*Indio News.*

Deer Know Season at End . . .

BRIDGEPORT—You can't tell outdoor people that deer don't know when the hunting season opens and closes. When the legal hunting season was on recently hunters swore there were very few of the elusive wild creatures in this region. But once the season closed the nimble beasts literally swarmed over U. S. Highway 395 in the Bridgeport area, causing two night accidents first week-end after they ceased to be legal game.—*Inyo Register.*

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Colorado River Flow Boosted . . .

BLYTHE—To meet increased demands for power, discharge of water at Hoover dam on the Colorado river has been increased and as a result flow through Parker dam is up more than 3,000 second feet a day. Low land in the river bottom has been flooded and water level at Blythe has been reported as about a foot higher. Work on strengthening the Palo Verde irrigation district weir is being carried on by the Bureau of Reclamation.—*Palo Verde Valley Times.*

Big Death Valley Season . . .

FURNACE CREEK RANCH — Prospects indicate a record season in Death Valley. Starting with the centennial pageant scheduled for December 3 in Desolation canyon, the valley is expected to be visited by more people than ever before during the winter season. Resorts, ranches and hotels in the unique desert valley, surrounded by towering mountains, are prepared for a host of guests.—*Beatty Bulletin.*

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Public Land Sale December 7 . . .

TRONA — First townsite sale in five years on public lands in the United States will be held December 7 at Trona, Interior Secretary J. A. Krug has announced. Approximately 225 lots in Pioneer Point and Argus will be offered at public auction. Any citizen over 21 years of age may bid on one of the lots at the auction. Preemption rights are given persons who have already settled on lots and made some permanent improvements. Lots average 50 by 140 feet, are appraised at minimum prices of from $50 to $450, depending on location and other factors.—*Trona Argonaut.*

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Duty-Free Limit Raised . . .

CALEXICO—Americans who visit Mexico may bring back $200 in foreign goods free of duty under a new customs regulation now in effect. The traveller who returns through a California port of entry must have stayed in Mexico 24 hours to qualify for the $200 exemption. If he returns through Texas, Arizona or New Mexico, no time limit is enforced. The $200 exemption is allowed only once every 31 days. The former limit was $100. Travellers out of the country 12 days or longer may bring back $500 instead of $400 previously allowed.—*Calexico Chronicle.*

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Built for Desert Bathers . . .

INDIO — Coachella valley's dream of a good highway to the beach at Oceanside—95 miles away—moved a step nearer realization in October when a 35-car caravan came over the route in celebration of recent improvements along the route. Plans for the road were launched many years ago by the Coachella Valley - to - Ocean Highway association, and a more recent organization, the Ocean-Desert Highway association has given added impetus to the project.—*Indio Date Palm.*

New Hard Rock Drilling Mark . . .

MOJAVE — John Lewis and Frank Parons of Boron are the new world's champion hard rock drillers. They won the honor in a drilling contest at the annual Gold Rush Days in Mojave. It took them just five minutes and one second to set up their jack hammer equipment, drill 36 inches into live rock, and completely dismantle the nine separate pieces of equipment. The operation normally takes 45 minutes under actual working conditions.—*Mojave County Miner.*

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Gasoline Mileage Test Run . . .

LOS ANGELES — Annual Grand Canyon test run for stock cars, sponsored by the General Petroleum corporation, has been scheduled to start at 3:00 a. m. Wednesday, February 15, from Flower street near the General Petroleum garage in Los Angeles. The route is from Los Angeles to south rim of the Grand Canyon via Death Valley, Las Vegas, Nevada, and Hoover dam — a distance of 751.3 miles. The run is sanctioned by the contest board of the American Automobile Association. Performance of stock cars will be measured in ton-miles per gallon.

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Indian Land Act is Law . . .

PALM SPRINGS — Legislation affecting land of the Agua Caliente band of Mission Indians, who hold a 31,000-acre reservation much of which is within the city limits of Palm Springs, has been signed by President Truman. It is legislation long sought by city officials of Palm Springs and civic leaders, since it will permit widening of Indian avenue in the desert resort city. At the same time the bill protects Indians in Palm Springs, as the deed for ownership of property involved remains with the government, land cannot be sold without consent of congress. A 60-foot easement for widening Indian avenue is principal item in the bill for which city officials worked. The measure was introduced by Congressman John Phillips, Banning.—*The Desert Sun.*

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Desert City Improvement . . .

BARSTOW — Residents of this desert city will vote January 6 on a proposed bond issue to help finance a $300,000 extension and improvement program for Barstow's sewer system. The bond issue would provide $150,000 of the total, $100,000 will be raised by special assessment districts, remainder is expected to come from the state.—*Barstow Printer-Review.*

NEVADA

Caves Closed for Season . . .

ELY — The Lehman Caves National Monument has been closed for the winter season, from November 1 to March 15, 1950, according to Supt. Max R. Wainwright. During the past travel year number of visitors to the caves increased 43 percent. — *Ely Record.*

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News for Philatelists . . .

VIRGINIA CITY—Paul Smith, nationally-known cachet director, is to create and sponsor a Death Valley Centennial cachet. The pictorial, historical cachets are to be cancelled and postmarked by Death Valley post office. Collectors who want this cachet should write to Paul Smith, Cachet Director, Virginia City, Nevada.

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Nevada Population Gains . . .

WINNEMUCCA—Showing a gain of nearly 50 percent since the 1940 census, Nevadans this month awoke to the fact that their state's population has increased from 110,247 in 1940 to 164,000—latest census bureau estimate. Only California and Oregon have surpassed that percentage increase.—*Humboldt Star.*

New Highway Boosted . . .

WINNEMUCCA—Plans for development of a new overland route from Nevada to the Shasta Cascade wonderland, the Redwood empire in California and the Pacific Northwest, are being pushed by an organization called the Winnemucca-to-the-Sea Highway association. Driving force is the Humboldt County chamber of commerce, members are being recruited all along the route.—*Humboldt Star.*

Pinyon Nuts Not Plentiful . . .

FALLON—If conditions in this area are typical, the supply of pinyon nuts is below normal in the Indian country this year, although reports from Arizona and New Mexico earlier indicated a bumper crop was expected. The Paiute and Shoshone Indians have not been bringing in many nuts yet, buyers report, but quality is high. Indians this year are getting from 50 to 55 cents a pound, in past seasons they have been as low as 10 cents. Indians gather the nuts for their own use also, nearly every family reserving 200 or 300 pounds for winter food. —*Fallon Standard.*

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Railroad Having Troubles . . .

CARSON CITY—The historic Virginia and Truckee railroad is having new troubles right in the midst of litigation which will determine whether or not its operators may abandon the famed road. While fate of the pioneer line was being weighed in a hearing before the Nevada Public Service commission, criminal complaints were filed against the V & T charging it ignited a brush fire which blackened an estimated 1,000 acres in Ormsby and Washoe counties. Lack of a modern spark arrester on an engine was cause of the fire, the complaint charges. The company's plea to abandon the railroad has met strong opposition.—*Inyo Independent.*

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"Camel-Horse" Yarn Revived . . .

FALLON—Courting the ridicule of scientists who might point out that mating of a camel and a horse would be impossible under the laws of nature, there are a few residents of this area who think Joe Hart has another camel-horse. Hart now has a second horse-with-a-hump, captured in a desolate section about 45 miles from Tonopah and not far from Death Valley, a region where man doubted any animal larger than a lizard could exist.

The horse has a definite hump, is about a foot higher at the shoulders than at the rump. Hart lost his first camel-horse, a two-year-old male. It drowned in a drain ditch. Wild horse hunters recently captured this second one, a four-year-old mare, reviving tales that the freaks are descendants of the Dromedaries and Bactrians loosed in the Nevada desert in the 1860's.—*Fallon Standard.*

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Concession Permits Expire . . .

LAKE MEAD — The concession permit for operation of the Eldorado Canyon fishing camp near Nelson, Nevada, will expire December 31 and the department of the interior is inviting proposals from persons interested in the business proposition. Forms for submitting a proposal are available from the superintendent, Lake Mead National Recreation Area, Boulder City, Nevada. — *Washington County News.*

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Can This Be True?

RENO—A "well organized plan" to seek repeal of legalized gambling in Nevada has reportedly been uncovered by the Reno Shopping News, a free-distribution weekly, which made the claim in a recent copyrighted story. The state made gambling legal in 1931, there has been no strong organized opposition to it since then.—*Humboldt Star.*

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The number of sheep raised in Nevada has been dropping steadily since 1920 when a peak figure of 1,340,000 was reached. In 1947 a low of 477,000 was reported. First change in the trend came in 1948 when the total went up to 487,000, and many observers are predicting that the sheep industry may be on its way back to a place of importance in the state.—*Eureka Sentinal.*

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Transfer of federally-owned land in the Railroad Valley Wildlife Refuge to the State of Nevada is expected to be approved by congress. Oil, gas and mineral rights will be retained by the government, but the state will own the land and the Nevada fish and game commission will control development of the valley as a game refuge. — *Tonopah Times-Bonanza.*

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NEW MEXICO

Navajo Corn Proved Hardy . . .

GALLUP—Farmers of the drier regions of the Southwest are interested in results of experiments completed at Fort Lewis A & M college, Hesper, Colorado, where a laboratory experiment in corn growing was conducted. Last spring Willard Frazier, a Navajo ex-serviceman from Toadlena, New Mexico, chose as his class project the reinvestigation of the ability of Navajo corn to grow when planted at a greater depth than that possible with the white man's varieties.

Willard proved the corn's ability to sprout, grow and yield thriftily in arid regions, and discovered it can be planted as much as two inches deeper than other corn. Many people are familiar with the ornamental uses of Navajo corn in the beautiful multi-colored ears which hang in bunches in many southwestern homes. To the Indians it figures importantly in their economy.—*Gallup Independent.*

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Hunters Bag Many Antelope . . .

SANTA FE—In a 16-day open season, October 7 to 23, hunters shot 613 buck antelope according to the report of State Game Warden Elliott Barker. Game department records showed that 879 hunters were in the field, and 53 percent of them got their bucks. The highest record was in the Lovelace area where 39 hunters took 38 antelope.—*Gallup Independent.*

New Ditch Lining Tested . . .

LAS CRUCES—To solve the problem of wasted irrigation water, stored at great expense in the arid Southwest but utilized very inefficiently, the U. S. bureau of reclamation has developed a new ditch lining which is reportedly proving to be satisfactory. Because cement lining is too costly, the new method is to spray sides and bottom of a canal with asphalt. When the asphalt cools and hardens, it is covered with about a foot of soil. This protects the flexible asphalt coating, three-year tests indicate it will endure. Cost of application runs from 35 to 50 cents a square yard.—*Las Cruces Citizen.*

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To Rebuild Irrigation Project . . .

SANTA ROSA — Working under the direction of the Bureau of Reclamation, the old Fort Sumner irrigation project along the Pecos river is to be rehabilitated with funds provided by Congress. First contract for earthwork, concrete lining for canals, gates and a turbine to pump water from the main canal to the highline canal was let to Pecos Valley Construction company of Carlsbad for $274,060.54. Private owners of the 8,000 acres approved the contract with the Reclamation bureau by a vote of 212 to 6.—*Santa Rosa News.*

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Navajo Officer Victim of Cold . . .

GALLUP—One of the ablest Navajo police officers on the reservation died of cold and exhaustion, according to the report of Charles Ashcroft, special U. S. officer in the Indian service. Hoska Thompson, Navajo chief of police, left headquarters October 19 to serve some civil papers in Box canyon. His pickup truck bogged down in mud and after several hours in vain efforts to get it out, he started walking in a driving snow storm to seek shelter for the night. Exhausted after a 12-mile hike he laid down under a fallen pine tree and covered himself with pine needles to keep out the cold. His body was discovered two days later. Associates paid a high tribute to his loyalty and ability as an officer. He is survived by Nebah, the wife to whom he had been married 38 years, and four grown children.—*Gallup Independent.*

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The federal power commission is to open a rehearing January 4 to further consider a plan for building a 451-mile gas pipeline from the San Juan basin in New Mexico to the Arizona-California line. El Paso Natural Gas company seeks the permit.—*Aztec Independent.*

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UTAH

Culture in the Desert . . .

SALT LAKE CITY—A 1½-ton library on wheels with shelves carrying more than 2,000 books is this winter taking fresh reading material to rural areas of this county. Running on a regular schedule, the truck-library will stop at many rural churches and schools, in addition to smaller towns. Circulation is expected to be about 5,000 books per month.—*Salt Lake Tribune.*

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New Cash Crop Seen . . .

DELTA—Results of first test plantings of broom corn in Millard county indicate that farmers may have a profitable new cash crop. Broom corn seed was distributed to several farmers by a Salt Lake City broom company last spring to determine if the area would produce good yields of high commercial quality. Recent reports are that both quantity and quality have exceeded expectations. More extensive plantings are planned to further test the crop.—*Millard County Chronicle.*

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"Lost" Valley Rediscovered . . .

EMERY COUNTY — Seen by but few people since its discovery 30 years ago by A. L. Chaffin, the Lost Valley of the Goblins has been rediscovered by P. W. Tompkins, San Francisco chemical engineer, whose hobby for two decades has been exploring little-known corners of Utah. Chaffin told Tompkins of the valley, the story intrigued the engineer and recently he made a successful pack trip with Chaffin to the remote, desolate valley filled with grotesque rock formations.—*Salt Lake Tribune.*

Rains Aid Beet Crop . . .

SALT LAKE CITY — Late October rains—and even some snow—held up harvest of Utah's $5,000,000 sugar beet crop but probably increased total tonnage and in some instances boosted the sucrose content. Beets this year were planted on more than 38,000 acres. In Box Elder county the 4.6 inches of precipitation broke a 30-year record for rainfall at that time of the year.—*Salt Lake Tribune.*

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Homesteads Go Unclaimed . . .

SALT LAKE CITY — Some 200 homesteads in Utah, proved up by the original settlers, are still unclaimed, files in the land office reveal. The settlers fulfilled requirements of residence and improvements, but apparently forgot to ask for title to their property. Now the land office and bureau of land management would like to clear up the records, get the property into the hands of legal heirs if identity can be established.—*Salt Lake Tribune.*

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LOWER CALIFORNIA GIVES CLUES TO REMOTE PAST . . .

PALM SPRINGS—Cape San Lucas, southernmost tip of Lower California, is one of the last strongholds of the flora and fauna which characterized southern California thousands and thousands of years ago. Slowly retreating from aridity and other factors, the semi-tropical plant and animal life on the peninsula furnishes an important link with the past. An expedition sponsored by the Desert Museum, Palm Springs, and the University of California at Los Angeles has delved into the mysteries for which explanations are believed to exist. Zoologists Charles Lowe Jr. and Kenneth Norris headed the expedition. They report that distribution of animals alone may tell a rather complete story of the climatic changes that have taken place in southern California over the years. This they can judge from the way the animals express the physical factors of their environment. The fact that the same species exist in widely separated and isolated areas in various latitudes along the coast would indicate that the arid regions between have been (geologically speaking) only recently formed. Reptiles in this region will be particularly valuable for a study of evolutionary changes. There exists at Cape San Lucas a two-legged lizard, which is half-way between a lizard and a snake. It perhaps lost its other legs due to evolutionary changes involving selective processes as its need for legs decreased, the scientists explained.

BARREL CACTUS LEGEND DENIED BY BOTANIST . . .

The bisnaga or barrel cactus is not the life-saver of the desert that legend has pictured it, in the opinion of W. Taylor Marshall, director of the Desert Botanical Gardens at Phoenix, Arizona.

The juice of the cactus is "acrid and thirst producing." It will make a person sick. Availability of water in the barrel cactus pulp is less than 5 percent. These are some of the contentions advanced by Botanist Marshall, who recently staged a demonstration at the annual convention of the Cactus and Succulent Society of America to prove to other botanists that the juice of the bisnaga cannot be used in place of water.

The demonstration settled a verbal feud between Marshall and Ladislaus Cutak, director of the Missouri Botanical Gardens. Cutak announced he was convinced.

The Arizona botanist claims there are no substantiated instances of desert wanderers having saved their lives by drinking barrel cactus juice to quench their thirst. But despite Marshall's scientific data, there are many who will disagree with him and his findings.

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EXACAVATION WORK HALTED AT "YUMA MAN" SITE . . .

Excavation work which may uncover traces of a 12,000-year-old civilization has been halted for the winter at Sage creek, near Cody, Wyoming. In charge of the project is Dr. Glenn Jepson, Princeton University. He said digging will be resumed next summer. The work is being carried on jointly by Princeton and the University of Wyoming.

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FALSE DIAMOND WARNING . . .

Although legitimate dealers are advertising rutile for just what it is—a synthetic stone that out-dazzles diamonds—it was inevitable that before long unscrupulous persons would try to take advantage of the new gem's brilliance. So now prospective buyers are warned by the Gemological Institute of America to beware of the synthetic stone which may be passed as a diamond. The new sparkler is a synthesis of titanium dioxide, has a higher refractive index then diamonds.

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Five giant salamanders, 22 to 32 inches long, have been added to the salamander population at Salt Lake City's Hogle Zoological Gardens, coming by air from Nagoya, Japan. The zoo now has nine Japanese salamanders.

LETTERS...

The Effects of Peyote . . .

Freiburg, Baden, Germany

Desert:

In her article in *Desert Magazine* on the Peyote or Mescal Button, Claire Meyer Proctor mentioned unpleasant after effects. From what information I can gather, these unpleasant effects—nausea, indigestion and headache, come immediately after eating the Mescal Button. It is not until several hours later, when the period of nausea has passed, that the more pleasant reaction is experienced. The price for the intoxication which comes from this plant has to be paid in advance.

DETLEF WARNKE

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Lost Mine Is Still Lost . . .

White Pine, Colorado

Desert:

Will you please give me what information you can about the reported rediscovery of the old Peralta mine in the Superstition mountains in Arizona.

I just returned from a four-month prospecting trip in Idaho, and read the newspaper report that some one claimed to have found the old Mexican workings. I had planned to go to the Superstitions to look for that old mine, but if someone already has found it there is no use in my going.

A. M. IVERSON

So far no evidence has been produced to confirm the news reports that the old Peralta mine has been re-located. My prospector friends in the Superstition country tell me the hunting season is still open.—R. H.

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One Less Rattler . . .

Palm Springs, California

Desert:

Perhaps some your readers will be interested to know that hikers in Coachella valley will have one less rattlesnake to worry about.

While exploring last week Rolly Jones, Harold Sweet, Jr., and myself found the snake in the hills near the aqueduct line. We captured him with sticks and a tool box, then brought him back to Palm Springs in a very disturbed and rattling condition. He is about three feet long and has 14 rattles. Not liking visitors, he lets loose with a long loud buzz when some one approaches. Our only problem is to find the right food for him.

BOB KNAPP

"Fossil Horns" in Nevada . . .

Yerington, Nevada

Desert:

I have read with interest the article, "Fossil Shells from a Vanished Sea," by Harold O. Weight, in the October issue of the *Desert Magazine*. It reminded me of the fossil field at Wendover.

When I was teaching in Wendover, one of my boys kept telling us about finding petrified horns. My curiosity was aroused. So accordingly, on the first hike of the Spring, we decided to visit Donald's field of horns.

Near the base of the mountain was a small wash, and sure enough, there were the "petrified horns." At least, they certainly looked like that. But I happened to notice that some of them had white streaks through them. I thought: "surely these couldn't possibly be petrified horns even by the greatest stretch of one's imagination."

My curiosity became so great that I finally sent specimens to the Mackey museum at the University of Nevada, Reno. Their report was that they were fossils of horn coral. They were coral and called horn coral due to its resemblance to a horn. The museum curator seemed pleased to get the specimens for he said that they have so few Nevada fossils.

The horn coral is evidence of a salt sea which we know existed there, since Wendover is just off the western edge of the Great Salt desert. But I would like to know if it is equal evidence of a tropical sea. I am under the impression that coral is found only in tropical seas. I believe that at one time, ever so long ago, Nevada was supposed to be under a tropical sea.

Have you or any of the other *Desert Magazine* fans happened to visit the field at Wendover? If so, just what do you know about horn coral? For my part I found it rather interesting.

IRENE S. JULIAN

TRUE OR FALSE ANSWERS

Questions are on page 16.

1—True.
2—False. While traces of gold have been found in the heavier sands near the base of the dunes, drifting sand never carries pay gold.
3—False. Geronimo was an Apache war chief.
4—True. 5—True. 6—True. 7—True.
8—False. Salt River valley gets its irrigation water mostly from Roosevelt dam in the Salt River.
9—False. Salton sea water is too salty for domestic use.
10—False. The University of New Mexico is in Albuquerque.
11—True.
12—False. Organ Pipe Monument derives its name from the Organ Pipe cactus growing there.
13—True.
14—False. Much of Palm Canyon is Indian reservation land.
15—True.
16—False. Ocotillo belongs to the species of *Fouqueria.*
17—True. 18—True. 19—True.
20—False. There is no evidence that the Lost Dutchman mine has ever been found despite claims to the contrary.

AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

This is being written as we are about to leave Kansas City and look homeward across the miles to California after a month in the cities of the East. We have never been as hungry for anything as we are for the welcome sight of the deserts and mountains of our adopted state. The East never looks lovelier than it does in October and we have feasted our eyes upon the reds and yellows of the hills and valleys of a dozen states during the whole month. Now we look eagerly for the browns of the West to be followed soon by the earliest spring in America. It is all a good land and one could really be happy anywhere in it but no place looks as good as home.

We have had a good look at the amateur gem cutting movement in America and we mean a *good* look. Beginning in New York we had the satisfaction of speaking at a special meeting sponsored by the New York Mineral club (the oldest in the country) at which we organized a lapidary society that began with an initial roster of 46. We again visited the halls of the American Museum of Natural History, where we spoke, and refreshed our memory of the magnificent gems upon which we had gazed on many afternoons in our youth. Dr. Frederick Pough showed us many "behind the scenes" items and our afternoon with him was one of the most profitable we have ever spent.

The interest in lapidary work in the New York area has reached enormous proportions and is only held back by the lack of space for equipment. We told the apartment dwellers there that if they had room for a mixmaster or a portable sewing machine they had room for the new, small and efficient lapidary machines now available.

At Washington we had the pleasure of addressing the first meeting of the new lapidary society there. Our visit to the National Museum was something we had looked forward to and it was not disappointing except for the famous Roebling opal. Reputed to be the largest and best opal in the world we wouldn't trade it for a half dozen of the Mexican opals we saw later at the Cleveland museum. Indeed the National Museum itself has many stones we regard as finer than the Roebling opal.

While in Maryland we went to see James Anderson in Baltimore, now famous for his starting so many on the road to making silverware with agate handles. William Baxter, author of *Jewelry, Gem Cutting and Metalcraft,* drove us back to Washington. We had written the introduction to Mr. Baxter's new book on gem cutting to be published about February 1.

Business took us to Pittsburgh and south again to Huntington, W. Va., where inquiry revealed that the lapidary movement had never been heard of by anyone we visited. Arrival at Cleveland, after a short visit at Columbus, brought us to the real hot bed of the lapidary art in the East. The Cleveland Lapidary society had a very large turnout for our talk at the Case Institute of Technology, which followed a dinner tendered by their officers and Board. These people made our several-day stay highly enjoyable and in their museum was the best collection of Mexican opals we have ever seen.

At Detroit we spoke to a large group at the Cranbrook Institute of Science at Bloomfield Hills. Thirty-five of those attending signed the roster of a new lapidary society formed after the meeting. At Cranbrook we saw one of the finest groups of college buildings in the country and Dr. Hatt, the director, deserves great credit indeed for the mineral and gem display he has garnered in the museum and particularly for the way in which he has displayed the material. The highlight of the exhibit is the reputedly finest collection of opal in the country, made possible by generous contributions and loans of A. A. Goddard of Detroit and Nelson Whittemore of Santa Barbara.

At the Academy of Sciences in Chicago we faced our biggest throng; many hundreds in a joint meeting of all the societies there, attended by gem cutting enthusiasts from several nearby states. Both Minnesota and Wisconsin had large delegations present and we met many *Desert Magazine* subscribers with whom we have corresponded, such as Dr. Daniel Willems, author of *Gem Cutting.*

These folks were eager for a little advice on how to tackle their big responsibility of handling the national federation convention next June in Milwaukee. After talking to a number of them we are confident they have good leadership for the event and that they will present the best meeting and show yet held. The people in the midwest have many marvelous mineral and gem collections and, of course, they lead the rest of the nation in their fossil collections.

The large turnout at Kansas City agreeably surprised us. The society from Independence joined with the Heart of America Geology Club at the University of Kansas City to hear us and show their rocks. We visited Dr. Leland Jones' home to see his fine collection. Then we visited our great friend Dr. Ralph E. Mueller, who had flown with Mrs. Mueller to Chicago to hear our talk.

Many times we have stood in the presence of so much material that it was impossible to really see anything, but Dr. Mueller has more material than any human has ever gathered under one roof. An advertiser for many years in these pages, he has 14 diamond saws; almost one each of every make on the market. His prize is a Lane 36 bladed gang saw. Dr. Mueller has a huge collection of antique jewelry that fills many cases in his large home but the most impressive thing he has is the thousands upon thousands of thin slabs he is readying for the largest lapidary exhibit ever exhibited by one man. This will be shown at Milwaukee next June. The general idea all over the Midwest seems to be "we'll show those coast birds something." After our previews we are sure they will.

Talk to several thousand people through the years in your community and you are in danger of getting a biased view about a thing like gem cutting. It is therefore a great satisfaction to talk to several thousand others, and thousands of miles from the home scene, and find that things are no different; that man is interested in rocks because of a primordial instinct. For his very existence through the First Stone Age depended entirely upon what he did with rocks. The Second Stone Age exists as much in the East as in the West. The easterners are only about five years behind the West but the gap is narrowing fast. It was a marvelous month in our lives and we shall never forget the many courtesies and kindnesses extended us everywhere.

Gems and Minerals

DATES SET FOR NEXT CALIFORNIA CONVENTION

June 24 and 25 have been set as dates for the 1950 annual convention of the California Federation of Mineralogical societies. The convention next year will be held at Valley Wells, near Trona. This will be first big outdoor meeting of the federation.

Three host societies are the Searles Lake Gem and Mineral society, the N. O. T. S. Rockhounds and the Mojave Mineral society. Plenty of camping space will be provided, in addition to display and trading facilities.

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THREE NEW MINERALS FOUND IN ARIZONA

Three minerals hitherto unknown in Arizona have been recently identified by the U. S. Geological Survey, reports the Mineralogical Society of Arizona, Phoenix. They are andersonite, boyleyite and swartzite, all uranium bearing minerals which occur with schrockeringite on gypsum in Yavapai county. An active year is ahead for this Arizona group, following its first fall meeting in October when the 1949-50 program was discussed.

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EL PASO ROCKHOUNDS ENJOY FIELD TRIP

Late in September members of the El Paso Rock Hounds enjoyed what they termed one of their most productive field trips. They went to the agate deposits near Van Horn, Texas, located on a ranch managed by Mr. and Mrs. J. F. Morgan. Quantities of fine banded, fortification and colored agate were collected. Plans are already being made for the El Paso rock show next June.

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A Hallowe'en party October 22 and a trip to the Mother Lode country November 12 and 13 were highlights of recent activities of the Northern California Mineral society, Inc., which has headquarters in San Francisco. A bus was chartered for the trip and lodging arranged for members. The following weekend, on November 16, nomination of officers was scheduled. For December 14 a treat has been promised. Charles Hansen will display his prize-winning exhibit which took three ribbons and two gold cuts at the Sacramento national convention in June.

LONG BEACH GEM SHOW HELD NOVEMBER 12-13

Sixth annual show sponsored by the Long Beach, California, Mineral and Gem society was held November 12 and 13 at Sciots hall with exhibits of both mineral collections and lapidary work. On display also was the valuable collection of carved antique jade owned by Mr. and Mrs. Harvey Hardman.

Dealers exhibited lapidary equipment and work in various stages of completion, and mineral collections displayed were said to be some of the finest in Southern California.

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With summer vacations over, the Chicago Rocks and Minerals society began its winter program under leadership of Herbert Grand-Girard, new president. September and October meetings proved to be profitable, with instructive motion pictures and a talk on old silversmithing methods. Open-house sessions started by the society a year ago are to be continued since they have proved to be so enjoyable.

GEM MART

ADVERTISING RATE
8c a Word . . . Minimum $1.00

BEAUTIFUL SLABS of Arizona variegated Agates, $1.00 each postpaid. Arizona Agate Mines, Cave Creek, Arizona.

FOR SALE: Beautiful purple Petrified Wood with Uranium, Pyrolusite, Manganite. Nice sample $1.00. Maggie Baker, Cameron, Ariz.

PLUME, BANDED and Moss Agate for sale at Ranch. Write or come. J. A. Anderson, Box 182, Alpine, Texas.

ARIZONA ROYAL FLOWER AGATE, world's finest colors and designs. Newly mined native chunks of agate with ferns, flowers, feathers, plumes, blooms, blossoms, bushes or shrubbery with after frost effect on sumac, ferns, sycamore, oak, quaken aspen and many others. Colors are canary to golden yellows with bright and blood-red inlays, other colors sometimes mixed in. Chunk prices $1.00 to $5.00 per ounce. Slices priced $1.00 to $5.00 each depending on size and rarity. Moss agates of many colors now in stock, also deep red (ruby) garnets, amethyst crystals, petrified woods, malachite, blue agate (Chrysocolla) and others. We will slice, chunk, cut stones or sell in rough with a money back guarantee, a chip, chunk or slice of any rock for any price. Arizona Agate Mines, Cave Creek, Arizona.

MINERAL SETS—24 Colorful Minerals (identified) in 1x1 compartments — Postage paid, $3.50. Prospector's Set of 50 Minerals (identified) in 1x1 compartments in cloth reinforced sturdy cartons. Postage paid $5.75. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

BEAUTIFUL AUSTRALIAN Opal Cabs. 10x8—$3.00 to $7.20. 12x10—$4.80 to $9.00. Opal rough for cutting $1.20 and $2.00. Ace Lapidary, Box 67, Jamaica, New York.

BRAZILIAN AGATE, Specimen pieces, also good for coloring, $1.00 a pound. Pieces run from one to ten pounds each. Black Onyx Blanks, 16x12 and 14x12 size—$2.50 dozen. Mail orders filled promptly. JUCHEM BROTHERS, 315 W. Fifth St., Los Angeles 13, California.

FIRE OPAL—We are now specializing in all grades of Australian cutting fire opal. We stock this lovely opal in all price ranges. Also cutting material and specimens. No mail orders. West Coast Mineral Co., 1400 Hacienda Blvd. (State Highway 39), La Habra Heights, California.

MINERAL SPECIMENS and cutting material of all kinds. Gold and Silver jewelry made to order. Your stones or ours. 5 lbs. good cutting material $4.00. J. L. James, Box 117, Carson City, Nevada.

IF YOU ARE A ROCKHOUND you need the Lapidary Journal. Tells how to cut and polish rocks, gives news of all mineral-gem groups. Tells how to make jewelry, carries ads of dealers in supplies, equipment, gems, minerals from all over the world. Well illustrated, beautifully printed. Subscription $2.00 a year —back numbers 50c. Sample Copy 25c if you have never subscribed or been sampled. LELANDE QUICK, Editor, P.O. Box 1228, Hollywood 28, California..

TEXAS AGATES—Five pounds selected from all locations, including plume, iris, fortification, scenic, opal assortment, etc., postpaid, $5.00. Visit. 20 tons to select from at 25c per pound. El Paso Rock and Lapidary Supply, 2401 Pittsburg St., El Paso, Texas. Phone 5-8721.

GOLD NUGGETS! Beautiful, solid gold specimens, $1.00 each or 3 for $2.00. Special collection 12 nuggets from California, Oregon, Nevada and Alaska, $5.00. Desert Jim, 627 Lillian, Stockton, California.

LET'S TRADE: Utah clear terminated crystal specimens. Golden Labradorite, faceting quality. Will exchange for crystal specimens. Ed Dowse, 329 Reed Ave., Salt Lake City, Utah.

FLUORESCENT MINERAL, 0.005% Uranium; fluoresces beautiful yellowish green; 2" specimen, $1.00; larger $2.00, $3.00. Scheelite, fluoresces radiant bluish white; 2" $1.00. Postpaid in U. S. Mrs. Joe R. Rogers, 1024 Ninth Ave., Safford, Arizona.

ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 S. Franklin, Modesto, California.

MINERAL SPECIMENS, slabs or material by the pound for cutting and polishing, RX Units, Felker Di-Met and Carborundum Saw Blades, Carborundum wheels Cerium Oxide. Mountings. Approval selection sent upon request. You are welcome. A. L. Jarvis, Route 2, Box 350, Watsonville, California, on Salinas Highway.

MONTANA MOSS AGATES in the rough for gem cutting $1.50 per lb. plus postage. Also Slabbed Agate 25c per sq. in. (Minimum order $1.00). Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

EXPLODING ATOMS. Watch them flash. Spinthariscope uranium detector substitutes for Geiger counter. Price $6.00. Scott Lewis, 2500 Beachwood, Hollywood, 28, California.

PETOSKY STONES from Michigan make beautiful display material when polished. 50c, 75c, $1.00, $1.50 and $2.50. postpaid. Gritzner's Minerals, 441 Second Avenue, Yuma, Arizona.

SEND FOR FREE PRICE LIST of Utah Rocks and Minerals. Hubert's Rock Shop, Springdale, Utah.

MIXED HOBBY ROCKS, in rough $1.50 per lb., mixed slabs $2.50 per lb. Ira S. Cornwell, Box 101, Pima, Arizona.

DESERT SCENIC STONE: Nature's most beautiful gem and decorative material, a delightful stone to work with. Special holiday and introductory offer to Desert subscribers, slabs 25c sq. inch, rough, $1.50 pound. Good until January 1st. Top grade Richolite, $1.00 pound. All prices postpaid. New Mexico Minerals, Box 6156, Station B, Albuquerque, New Mexico.

BEAUTIFUL SPECIMEN of snow white Tremalite. These specimens are solid nodule and hair-like crystals blending into glistening sunburst-like structure. Also fluorescent, a light green intermingled with light and dark blue. Ask for list of many other fine specimens now in stock. Jack The Rockhound, P. O. Box 86, Carbondale, Colo.

EXCHANGE Eastern minerals for western, Showy XL groups as Amethyst, Smoky Quartz, Calcites, Quartz, Hibbinites, Anhydrites, Laumantites, Heulandites, Quartz Casts, Solids of Triphylite, Purple Lepidolite, Spodumene, Rose Quartz, Siderite, Hematites and others, Ted Schoen, 117 Orchard St., Mt. Vernon, New York.

FIFTY MINERAL SPECIMENS, ¾-in. or over, boxed, identified, described, mounted. Postpaid $4.00. Old Prospector, Box 21B362, Dutch Flat, California.

GEMS, GENUINE AND SYNTHETIC. Gorgeous quartz rock crystal stars mounted for earrings, pendants or unmounted. Opals, Tourmalines, Aquamarines, Alexandrites, Emeralds, Rubies, Sapphires, Topaz, Amethysts, Corundum (various colors), Spinel, Rutile (Titania), etc. Let us know what you want. Satisfaction guaranteed. H. Stillwell & Son, Rockville Centre, New York.

HERKIMER "DIAMONDS" (quartz crystals). These matchless natural gem-like crystals in various forms, also fine matrix specimens now available. Assortments $2.50, $5.00, $7.50, $10.00 postpaid in United States. H. Stillwell & Son, Rockville Centre, New York.

START a Rock Collection: For yourself or shut-in. No. 1 box for $1.00. No. 2 box for $2.00, No. 3 box for $5.00. Postage paid in U.S.A. Money refunded if not pleased. F. P. Townsend, Box 849, Twentynine Palms, California.

BRAZIL: Amethyst and Citrain, green Tourmaline, golden, green & white Beryl, Aquamarine, Chrysoberyl. Australian gems: Fine Opal, blue Sapphire, Zircon. Burma: Pigeon Blood Ruby, Balas Ruby, Zircon. Africa: Fine Tourmaline, spec. Emerald, Tigers Eye, black Star Sapphire. Ceylon: Fancy Sapphire, 7 carat average, Spinel. Moonstone. Local: Peridot, Montana Sapphire, Yogo Sapphire, Mexican Topaz. P. O. Box 1123, Encinitas, Calif. Visitors contact postoffice.

CONCRETIONS OF MARCACITE from Norwood, Michigan. We brought these very interesting concretions for your collection. $1.50, 25c and 10c postpaid. Gritzner's Minerals, 441 Second Ave., Yuma, Arizona.

LUST FOR GOLD? Sixteen years gathering information Lost Dutchman, many trips Superstitions. Clean partner wanted. Frank L. Alden, Gen. Del., Los Angeles, California.

MOJAVE MINERAL SHOW REPORTED BIG SUCCESS

With mining companies, rockhounds, gem cutters and mineral experts cooperating, the annual mineral exhibit of the Mojave, California, Mineralogical society proved to be a huge success, those attending report. An estimated 3200 people viewed the displays and the exhibits of gem cutting. Chairman of the show was W. J. Becktel. The Mojave society meets regularly the first Friday of each month in Boron or Mojave. New members and visitors are welcome.

It is believed that more mines and individuals in the area will be eager to arrange exhibits for next year's show.

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NEW GEM SOCIETY IN SAN MATEO COUNTY

Although only recently organized, the San Mateo County, California, Gem and Mineral society already has 60 paid members, and the charter was closed at its September meeting. C. W. Parsons was organization chairman. Members of the new club will center their interests around gem cutting and polishing, metal crafts and mineralogy. The group meets on the third Tuesday of each month, and already has conducted several field trips. First regular dinner meeting, with 50 attending, was held May 24 of this year.

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"STORY OF JADE" IS NOW AVAILABLE

Interesting to the lay reader as well as to the collector or lapidary, *The Story of Jade* has been published by Sheridan House. It was written by H. P. Whitlock, curator of the Morgan gem collection of the American Museum of Natural History and the Drummond jade collection, who had just completed the manuscript when he died. Martin L. Ehrmann, noted gemologist and consultant to museums, took over and saw the book through the press.

ORANGE BELT GROUP HAS NOVEMBER SHOW

More than 100 exhibitors were scheduled to participate in the third annual gem and mineral show of the Orange Belt Mineralogical society November 19 and 20 at the Orange Show grounds, San Bernardino, California.

A feature of the show was the offer to make free tests with a Geiger counter for anyone bringing in uranium ore. New president of the Orange Belt society is H. H. Brannon Jr., Redlands. He replaces Dr. Warren F. Fox, who resigned because of ill health.

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Motion pictures of Bryce and Zion National Parks in Utah and the Grand Canyon in Arizona were shown at October meeting of the Oklahoma Mineral and Gem society, Oklahoma City. New officers were scheduled to be elected at the meeting.

Plaque Placed Near Summit Of Famed Mineral Peak . . .

Famous since the 1880's as the highest mineral locality in North America and still unique among American mineralized areas for its inaccessibility, Mount Antero in the Sawatch range of central Colorado has at last received formal recognition.

The noted gem peak was proclaimed a Mineral Park by the Colorado Mineral society at ceremonies held on Colorado day, August 1, when a bronze tablet was set in a granite pinnacle just below summit of the 14,245-foot mountain. The plaque is not far from site of the highest mine in the United States.

This mine and much of the entire mountain has been a prolific producer of beautiful gem aquamarine and other rare minerals, located in hidden pockets of the coarse rock called pegmatite. Unusual minerals such as phenakite and bertrandite, and fine crystals of commoner minerals like smoky quartz, rock crystal, fluorite and feldspar come from Mount Antero. One of the largest spheres of rock crystal in existence was cut from Mount Antero quartz and displayed at the Chicago World's fair in 1893—is now in the Chicago Museum of Natural History.

Equipment for mining in the hard rock must be packed in over a trail that rises more than 5000 feet in seven miles.

The plaque was mounted by nine members of the Colorado Mineral society who climbed to top of the peak. James Hurlbut led the group. First to reach the summit was 14-year-old Tommy Hofer. Others in the party were Mr. and Mrs. Harold Hofer, Col. and Mrs. Olin Brown, Mrs. Alice M. Colburn, Muriel Colburn, Mrs. Mildred Newell, Betty Burwell, Donald Brown, LeRoy Brown, Robert Le Massena and C. W. Hayward.

AMONG THE ROCK HUNTERS

Demonstrating that it is easy to cut a sphere, Ernest Pauls, a member of the Gem Cutters Guild, Los Angeles, California, talked to the club recently on his experiences with spheres. He was assisted in his demonstration by R. W. Frohardt and A. C. Gustafson. The Guild meets the fourth Monday of each month at the Manchester playground, 7:30 p. m., visitors are welcome.

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H. A. Scott, instructor of geology at Santa Ana college was speaker at October meeting of the Searles Lake, California, Gem and Mineral society. Nomination of officers was also scheduled for the October meeting. The Searles Lake group has voted to back a movement asking the Death Valley Monument park service to establish a camp ground in Wildrose canyon for convenience of rockhounds and others who wish to explore the historic and scenic canyon.

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The first display ever entered in a competitive show won a blue ribbon for the San Jacinto-Hemet Rockhounds who had an exhibit at the Farmers Fair and Festival recently. Visitors marveled at what could be done to transform "ugly" rocks into lovely gem-stones. October field trip of the group was to Last Chance canyon. A trip to Horse canyon was scheduled for November, according to Thomas Harwell, chairman.

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Meeting jointly with the historical society, the Kern County, California, Mineral society in October heard Dr. Chester Stock talk on the tar pits at McKittrick. Regular meetings of the society are held in Bakersfield on the second Monday of the month.

Last field trip of the summer season for the Minneapolis, Minnesota, Mineral club was held October 9. Members went to Spring Valley, 20 miles south of Rochester, picked over new iron mines recently opened.

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Dr. Chang Wen Ti, Los Angeles importer and dealer in Chinese jade, gave an instructive talk to members of the Santa Monica Gemological society at their September meeting. Jade is China's most popular gem material, the speaker said, he told something of its history and legends. At the same meeting Vice President Vern Cadieux spoke on mineral collections and how to start and develop them. Early in October the society visited the Kaiser steel plant at Fontana, California.

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"The Cavalcade of Marble" was title of a colored motion picture shown by a representative of the Vermont Marble company at October meeting of the Mineralogical Society of Southern California. Meeting was in lecture room of the Pasadena public library. On October 22 and 23 the group had a field trip to Trona, camping at Valley Wells. After over-night camp, they explored the onyx mine north of Trona.

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A talk on "Pegmatite Dikes" was feature of the October meeting of the Yavapai Gem and Mineral Society, Prescott, Arizona, and on the last Sunday in October the club went on a fall field trip. Just to keep things moving, work has started on the society's annual rock and gem show which will be in December. Ernest E. Michael is new president of the society.

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Regular meeting October 11, a field trip to the Cady mountains October 16 and an open-house gathering October 23 at the home of W. E. Lasley helped keep members of the Pomona Valley, California, Mineral club busy as the fall season started. An auction of specimens donated by members netted $46.55 for the club treasury.

A talk on copper minerals, illustrated with many specimens, interested members of the Los Angeles Mineralogical society when they heard Dr. Homer P. King at their September meeting. He is a member of the society. The club's display chairman, Herbert L. Fritts, spoke on iron minerals, displayed a table of specimens. He is regarded as an authority on the nature of minerals and how they are formed.

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The Mineral and Gem Society of Castro Valley, Hayward, California, was privileged to hear Wesley Gordon speak on fossils at the club's September meeting. Gordon is a nationally-recognized authority, and brought to the meeting his famed collection of fossils. Also on display was Mrs. George Luce's collection of petrified wood from several states.

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Dr. Ian Campbell, associate chairman of the division of geological sciences at the California Institute of Technology, spoke to Pacific Mineral society members and guests at their October meeting. He told of the International Geological Congress held in England last year, and related history of the scientific gathering which was started in 1878. Dr. Campbell also described field trips he had taken in Scotland, illustrating his comments with colored slides.

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Members of the Chicago Rocks and Minerals society were privileged to hear Lelande Quick, editor of the Lapidary Journal, when he lectured October 22 at the Chicago Academy of Sciences. This followed the group's regular October meeting when L. C. Aldrich, Chicago silver smith, talked on history of the craft.

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Tired of the continual search for a place to meet, the Calaveras Gem and Mineral society finally has started building its own clubhouse. An acre of land was donated by Archie Mecham, and club members chipped in with cash donations to purchase building materials, are doing the work themselves. It will be a 40 x 60 building of concrete block construction, is located on highway 49 near Angel's Camp, California.

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An illustrated lecture on "The Lapidary Art and Artists of Ancient Times" was given to members of the San Jose, California, Lapidary society at their regular October meeting in the De Anza hotel. It was announced that exhibitors for the November meeting will be Adele Grube, Dewain Hagen, Dr. G. N. Harris, O. L. Heller and Dr. Gordon Helsley.

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Gem stones and commercial mineral products from the desert areas of San Bernardino and Kern counties, California, proved to be a popular feature of the San Bernardino County fair held recently near Victorville.

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Members of the Nebraska Mineral and Gem club brought specimens of calcite to their September meeting and after a talk by Tom Huddleston on the properties, occurrence and industrial uses of calcite, they all compared and discussed their different specimens. Aim: to learn more about one mineral by studying it exclusively for one session.

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New equipment now available to those interested in lapidary work was discussed at October meeting of the Sequoia Mineral society, California. Lowell and Florence Gordon were speakers, also demonstrated use of the Geiger counter. Mrs. Gordon talked on the history of diamonds. The meeting was at Parlier high school, near Fresno.

Scientific prospecting has replaced to a large extent the old guess-work methods, according to Walt Bilicke, Hollywood engineer, who spoke at a recent meeting of the Mineralogical Society of Southern California. The meeting was in lecture room of the Pasadena public library. Bilicke explained and demonstrated some late model Geiger counters, and displayed a cabinet of uranium ores. The meeting was attended by Jack Streeter, president of the American Federation of Mineralogical societies and also of the California Federation. He is a past president of the Southern California group.

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Summer activities of the N. O. T. S. Rockhounds (Naval Ordnance Test Station, China Lake, California) were brought to a close with a potluck supper in October at Bill Lewis' Wagon Wheel. Some 70 members attended this social gathering and inspected a display of fluorescent minerals. One summer feature was a climb to top of Telescope peak in the Panamint range, near Death Valley, made with members of the Trona rock group. Displays and visits at gem shows also kept members busy during the summer months.

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Annual fall mineral show of the Sacramento, California, Mineral society was held October 22 and 23, was open to the public both days and evenings without charge. Final plans for the show were made at the September meeting, when members heard a talk on methods used to quarry and process marble. Several new members were received into the society.

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"The Quartz Family Minerals" was the subject of a talk given by Bob Deidrick at October meeting of the East Bay Mineral Society, Inc., Oakland, California. He is a member of the group. He pointed out that many of the cutting and polishing materials belong to the quartz family, and that collectors usually have more quartz specimens than any other mineral. On October 8 and 9 members of the society went on an overnight field trip, last of the season, to the gem mine area in San Benito county. This is the only locality in the world where the gem stone benitoite has been found. At a later October meeting the society heard talks on lapidary methods by Bill Kane and R. E. Lamberson.

HEROIC HORSES OF THE CONQUISTADORES

Nearly 20 years after the appearance of the English edition, R. B. Cunninghame Graham's story of *The Horses of the Conquest* has been republished in this country. The author, who died in 1936 at the age of 84, was almost as fabulous a person as the conquistadores and their horses of which he writes so fondly.

A Spanish don and Scottish nobleman by birth, he roamed the frontiers of the world—North Africa, Texas, Argentine, Mexico, Venezuela, Paraguay and Brazil. He spoke Spanish, French, Arabic, Portuguese, English and Italian.

The conquests of Cortez and Desoto would have been impossible without horses which were valued more highly than men. The journals of Bernal Diaz, who accompanied Cortez, record the name, color and characteristic of each and devote more space to the incredible feats of courage and endurance of the horses than those of the men.

This edition is illustrated with two-color pen and ink drawings by J. Craig Sheppard, making it one of the handsomest books of the year.

Edited by Robert Moorman Denhardt, with illustrations by J. Craig Sheppard. University of Oklahoma Press, 1949. 145 pp. Bibliography. $5.00.

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UTAH SOCIETY COMPLETES RECORD OF POWELL VOYAGES

Completing one of the most ambitious publishing projects ever undertaken by the organization, the Utah State Historical Society has just issued the second volume of original records covering the boat expeditions of Major John Wesley Powell on the Colorado and Green rivers in 1869 and 1872.

The first volume, published early this year, contained Major Powell's own journal as well as those of other members of his exploring parties. The new volume completes the Powell record of exploration on and adjacent to the two great rivers.

The day-by-day records included in the second volume are those of Stephen Vandiver Jones, edited by Dr. Herbert E. Gregory; the Journal of John F. Steward, edited by William Culp Darrah; and the Journal of William Clement Powell, edited by Charles Kelly.

In addition to the daily records of these voyagers, there are biographical sketches of the three journalists and other members of the party: Hillers, Dellenbaugh, Beaman, Fennemore, and Johnson.

The diaries of Jones, Steward and W. C. Powell all cover the second Powell expedition which started at Greenriver, Utah, May 22, 1871, and ended at Kanab canyon 16 months later on September 7. Many side trips were made for exploration purposes,

and the expedition halted at the present site of Lee's ferry from October until the following August, and spent the intervening time exploring the canyon country.

While this work is the second and last volume devoted to the Powell expeditions, it actually is Volumes 16 and 17 of the Utah Historical Quarterly, the previous Powell book being Volume 15.

Utah State Historical Society, 337 State Capitol, Salt Lake City, Utah, 1948-49. Illustrations. Maps, Index. 540 pp.

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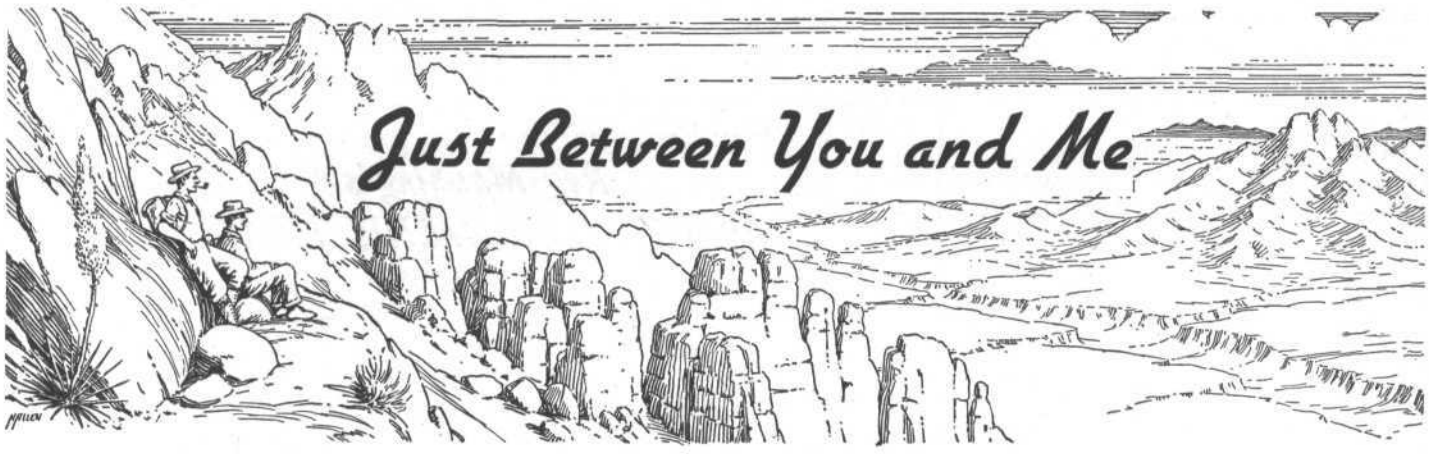
HANDBOOK FOR URANIUM PROSPECTORS PUBLISHED

Designed to answer virtually every question that might be asked, a handbook for uranium prospectors has been published jointly by the U.S. Atomic Energy commission and the U.S. Geological survey. The pocket-size book has 123 pages, is entitled "Prospecting for Uranium." It provides information on the occurrence, identification and sale of uranium-bearing ores. Material in the booklet includes the names and characteristics of uranium-bearing ores, types of deposits in which uranium occurs, various tests that can be applied to identify uranium minerals, techniques for using the Geiger counter, laws and regulations which affect uranium prospectors. The bandbook is available from: Superintendent of Documents, U.S. Government Printing Office. The price, 30 cents.



by RANDALL HENDERSON

RECENTLY one of the desert newspapers which come to my desk printed the speech of a civic leader who told the businessmen they should do two things to build a flourishing community: (1) Go after the tourist trade, and (2) provide industrial jobs for working people.

The speaker meant well, but he was guilty of a type of confused thinking not uncommon among the civic leaders of an older generation. More far-sighted businessmen of this generation have learned that tourists and industrial plants do not mix well. Tourists generally are traveling for recreation—and they do not seek it in places where the air is saturated with the odors and gases of power plants, and where the clatter of commercial traffic echoes from the pavements 24 hours a day.

I would not discount the importance of industry. Without it we would revert to the state of primitive man. But until such time as our industrialists become enlightened enough to build for beauty and human well-being no less than for cash dividends, civic leaders should dismiss the idea that they can have both tourist incomes and industrial payrolls in any sizable volume.

Palm Springs, California, is one of the communities with foresight enough to recognize this obvious truth. For months the Palm Spring community has been waging a vigorous fight to prevent the construction of a cement processing plant on the windward side of the city. The fight has not yet been won, but it will be in the long run. For the entire community is actively committed to the proposition that Palm Springs is to remain a mecca for tourists—and the way of the industrial transgressor who would upset this program will be very hard indeed.

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In 1912 I was learning my printing trade in Parker, Arizona. Those were boom days in Parker. Certain Arizonans were sponsoring a proposal that a major portion of the fertile Colorado river bottom lands in Parker valley be taken away from the Indians and allotted to white farmers. Parker was to become the trading center of a productive farming community, and the price of town lots was zooming.

Fortunately for the Indians, congress turned thumbs down on the proposition.

Having the memory of this historical incident clearly in mind, I was completely in accord with President Truman's action in vetoing the so-called Navajo-Hopi rehabilitation measure recently passed by congress. Part of the bill was fine. It would have appropriated $88,570,000 for a 10-year program of benefits for the Indians.

But certain congressmen had injected into the measure provisions which, with qualifications, would have taken the control of Indian affairs out of the hands of the federal government, and turned it over to the states. The Indians themselves sensed the dangers in the proposal. Both the Navajo tribal council and leaders on the Hopi reservation protested the passage of the measure.

The record of federal administration of Indian affairs is bad enough. I have a feeling it would be infinitely worse if left to the machinations of state politicians.

The 10-year plan is not dead. President Truman has promised to include funds for its initiation in his next budget message to congress.

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News that Arizona has completed a new bridge over the Big Sandy river and is improving a new highway from Kingman to Wickenburg may not have much signifiance to many of Desert's readers.

I just want to pass the word along that this newly-improved road taps one of the loveliest desert regions in the Southwest. Here Joshua tree and Saguaro cactus grow together in a great natural garden which will delight the heart of the botanist. Numerous "coyote holes" on the hillsides are evidence that it is a mineralized region. Also, there are fossil deposits and new fields for the rock and mineral collectors.

The Big Sandy is a tributary of the Bill Williams river, much of it a dry streambed most of the year, and a roaring torrent when there are rains in the highlands. This is a trip I can recommend for those who like to explore the new desert trails.

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As an old-timer on the desert I would suggest that those who plan to witness the Death Valley '49er pageant December 3 adopt the Boy Scout motto and "Be Prepared."

By that, I mean have some food and water and bedding stowed away in the car, even if you are not planning to remain overnight at the campfire party. There are no serious physical hazards involved in the trip. There are four paved roads into Death Valley, and any normal driver should be able to make the trip without difficulty.

But those who are staging the pageant have no basis for estimating the number of people who will be present. They are guessing 10,000—but it could be 15,000 or 5,000. It will be the biggest mass excursion in Death Valley history—and the Valley's normal food and housing and automobile service is set up for only a small fraction of that many visitors at one time.

Those in charge of arrangements, including the National Park Service, are trying to solve the problems of traffic, food, parking and seating without any previous experience exactly like this—and it is not to be expected that every detail will be perfect.

So, my advice: Take plenty of water, gasoline, food and blankets—and a good sense of humor—and accept what comes in the spirit of glorious adventure. Cyria an' I'll be seein' you at the campfire Saturday night.

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Extra select top grade, gift packed.
1 lb. - 1.20 3 lbs. - 3.00 5 lbs. - 4.65

Special Economy Family pack, in a "chewy" grade 3 lb. cellophane bag, or 15 lb. wood flat.
3 lbs. - 1.60 15 lb. flat - 6.85

Select grade, gift packed.
1 lb. - 1.00 3 lbs. - 2.40
5 lbs. - 3.65 10 lbs. - 6.15

EXTRA SELECT top grade. One pound size only in the California Centennial Souvenir Gold Can. **1 lb. - 1.45**

DATE-NUT CAKE

THE "CANDY CAKE"—our secret recipe, combining Natural Dates, Walnuts, Fresh Eggs, Pure Vanilla, Flour and other finest ingredients. This is not a fruit cake, but more like a candy.
1 lb. - 1.35 2 lbs. - 2.50 4 lbs. - 4.75

STUFFED DATES

Assorted Stuffed "Date Surprises"—with interiors of candied pineapple, cherries, tangerines and walnuts.
1 lb. - 1.60 3 lbs. - 4.25 5 lbs. - 7.00

BRANDIED DATES

Pitted Neglet Noors in rich Date Brandy Syrup. Delicious with meats, in punch and cocktails, ice cream topping, with grapefruit and fruit salads. Oak kegs are useful ornaments.
2½ lb. jar - 3.75 2½ lb. keg - 6.75 5 lb. keg - 9.75

DATE BUTTER

Creamed Dates and Date Syrup. Used as a spread, or for milk shakes, cake filling date ice cream or sundae topping. 8 recipes included.
2 lb. can - 1.50

DATE SYRUP

"ALLDATE" Syrup is a rich, heavy sweetener of unique caramel-like flavor for all syrup uses. Makes novel hot or cold milk drinks.
24 oz. - 1.50

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"THE ENSEMBLE" Gift Baskets are filled with a variety of separate smaller gift packs, including Confections, Cake, Olives, Preserves, Brandied Dates, Stuffed Dates, Natural Dates, etc. For Christmas they will include Desert Grapefruit. **From 7.50 to 22.50 by express**

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SELECTED HAND-PULLED jumbo Calimyrnas. Soft and very sweet light meats. **3 lbs. - 2.30**

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