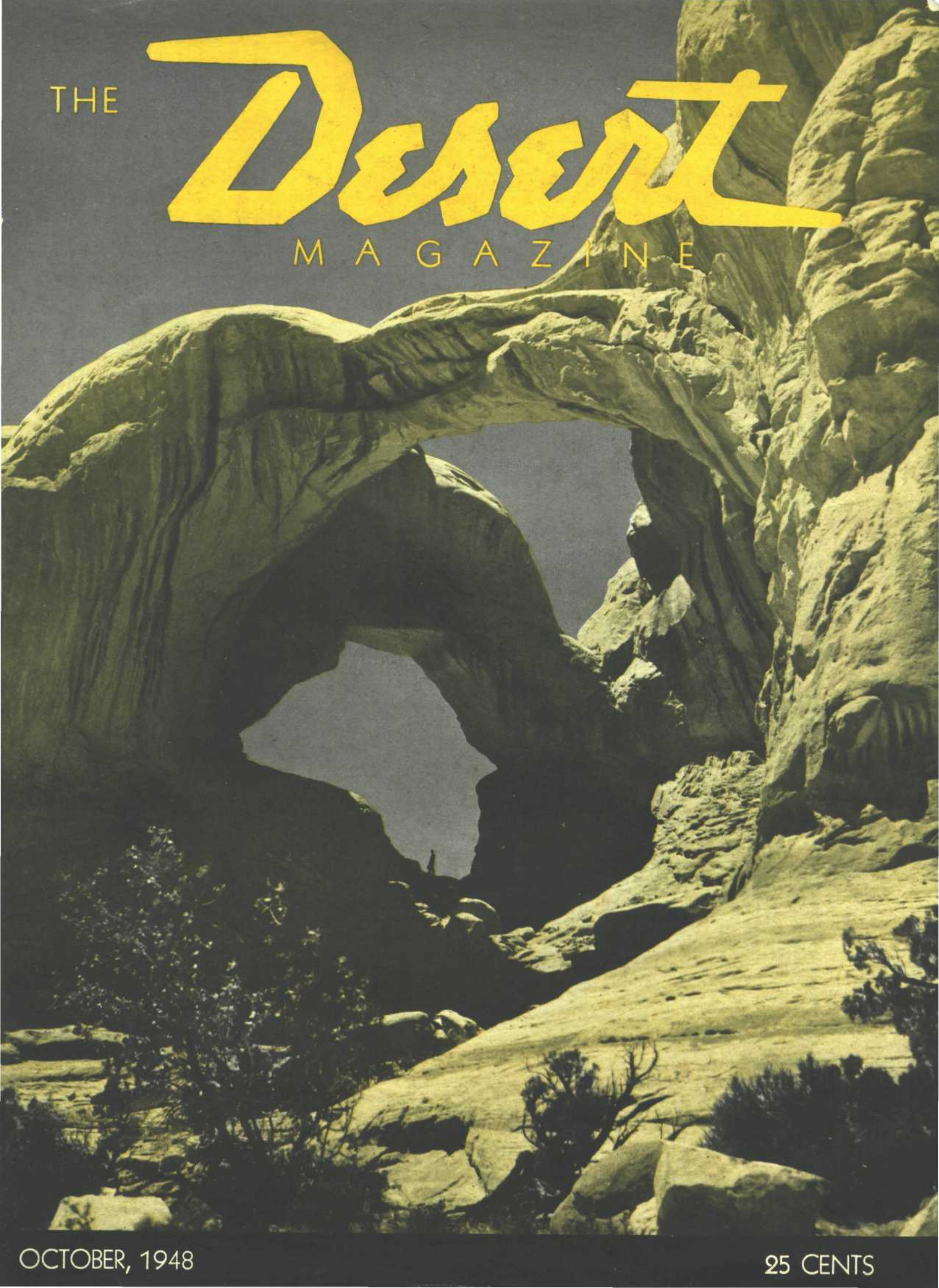


THE

Desert

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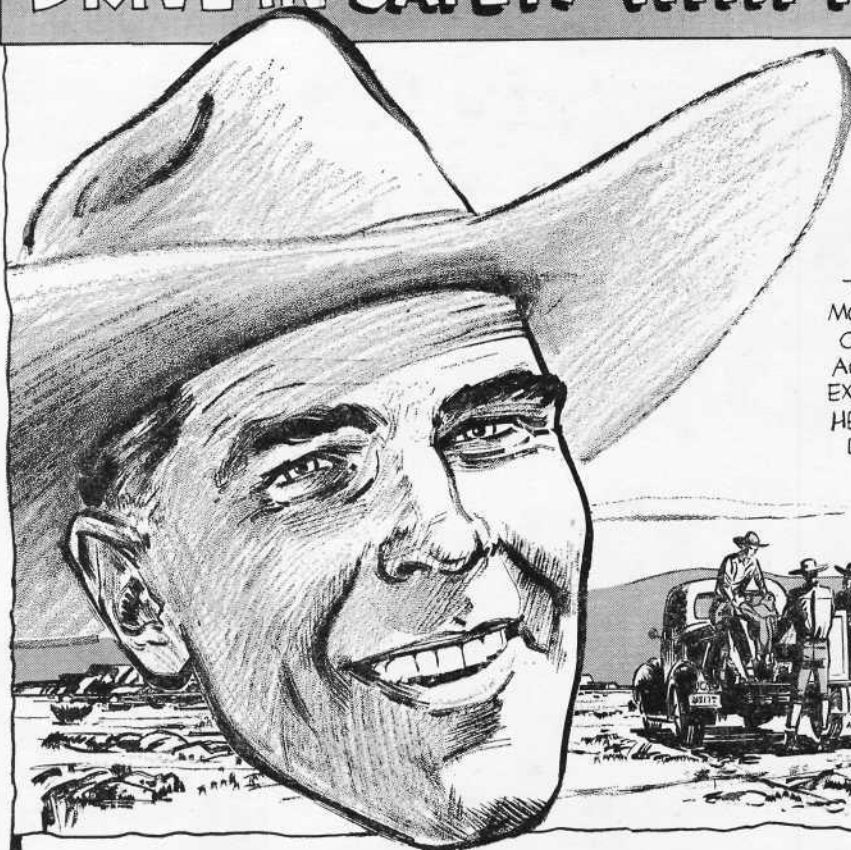


OCTOBER, 1948

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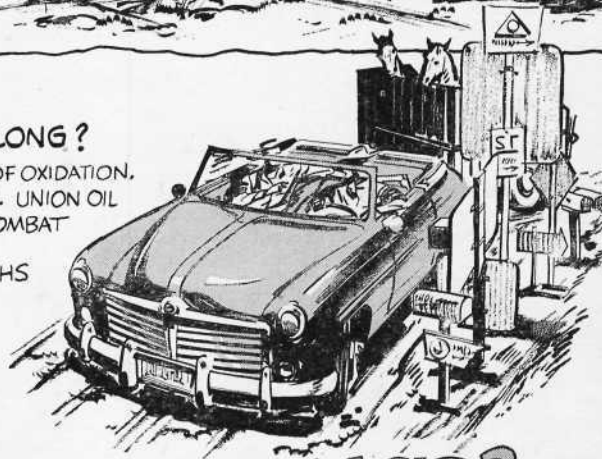


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UNION OIL COMPANY
OF CALIFORNIA

DESERT CALENDAR

- Sept. 30-Oct. 2—Annual Navajo Indian fair, Shiprock Navajo agency, Shiprock, New Mexico.
- Sept. 30-Oct. 3—Yavapai county fair, Prescott, Arizona.
- Oct. 2-3—Lake Mead regatta, sponsored by Boulder City, Nevada, junior chamber of commerce.
- Oct. 3—Eve of St. Francis day procession from the Cathedral of St. Francis, Santa Fe, New Mexico.
- Oct. 3—Horse show, rodeo grounds, Douglas, Arizona.
- Oct. 4—Feast day of St. Francis of Assisi, patron saint of Santa Fe, Santa Fe, New Mexico.
- Oct. 4—Annual fiesta, Rancho de Taos, New Mexico.
- Oct. 4—Annual fiesta and dance, Nambe Pueblo, New Mexico.
- Oct. 9-10—Sierra club, Desert Peaks section, climb of the two highest peaks in the Ord mountains. Campfire Saturday night at Aztec springs, 10.5 miles south of Daggett, California.
- Oct. 13—Seventh annual New Mexico ranch day conference, sponsored by the New Mexico College of Agriculture and Southwestern Forest and Range experiment station, Las Cruces, New Mexico.
- Oct. 15-17—Luna county fair and Sheriff's Posse rodeo, Deming, New Mexico.
- Oct. 15-17—Greenlee county fair and rodeo, Duncan, Arizona.
- Oct. 15-18—Salton Sea international power boat regatta, Desert Beach, California.
- Oct. 16-17—Formal opening of Desert Magazine's new home at Palm Desert. Open house—everybody welcome. Palm Desert, California.
- Oct. 16-17—Eleventh annual Pioneer days and California Centennial celebration, square dance, parade. Twentynine Palms, California.
- Oct. 16-17—Sixth annual Mojave Gold Rush days, rodeo, drilling contest, grand ball, Mojave, California.
- Oct. 16-17—Gem and mineral show, Hollywood Lapidary society, Plummer Park, Hollywood, Calif.
- Oct. 16-17—Sierra club, Desert Peaks section, climb of Lost Horse mountain, Joshua Tree national monument.
- Oct. 16-17—Gem and mineral show, San Diego Mineral and Gem society, Federal Building, Balboa Park, San Diego, California.
- Oct. 22-23—Fourth annual air meet, Prescott, Arizona.
- Oct. 22-24—Tombstone Helldorado, western show, barbecue, street dancing, Tombstone, Arizona.
- Oct. 23-24—Gem and mineral show, Searles Lake Gem and Mineral society, Trona, California.
- Oct. 28-30—Graham county fair, Saford, Arizona.
- Oct. 30-31—Papago rodeo, arts and crafts show, Sells, Arizona.
- October—Desert Rat Circus—museum of desert rat oddities, music of the '90s—staged by Harry Oliver and Vernon Peck, Jr., Fort Oliver, Thousand Palms, California.



Volume 11

OCTOBER, 1948

Number 12

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RANDALL HENDERSON, Editor BESS STACY, Business Manager
HAROLD and LUCILE WEIGHT, Associate Editors.

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Address correspondence to Desert Magazine, Palm Desert, California.



Glimpses of the wild palm oases to be found in more than a score of the lovely canyons within 20 miles of Palm Desert community.

Why Make Your Home in *Palm Desert* ?

Last month we told you about the melting snow on the Santa Rosa mountains—and the pure snow water which filters through many miles of clean granite sand and eventually is brought to the surface from a deep well to serve the domestic needs and grow flowers and trees for Palm Desert dwellers. This month, in the second of a series of stories featuring the assets Nature has given this new desert community, we want to tell you about another of Palm Desert's assets. This is about the

CANYONS

Down through the ages when the forces of Nature have been fashioning the lovely desert cove where Palm Desert community is growing, the erosive forces of water have chiseled into the rocky slopes of the bordering mountain ranges a score or more of secluded canyons where crystal pools and splashing waterfalls are fringed with the majestic forms of wild palm trees.

Nearly every one has heard of famous Palm Canyon—but not every one knows of the many other palm canyons found within a 20-mile radius of Palm Desert—of Hidden Palms canyon, Deep canyon, Carrizo creek, Ebbens creek, Cat canyon, Grapevine,

Dead Indian, Bear creek, Fern canyon, Murray and Andreas canyons—and across the floor of Coachella valley on the opposite side are Thousand Palms and Pushawalla canyons. Palm Desert is in the heart of a land of beautiful palm canyons—and where the wild palms grow there is always water close to the surface.

For those who love the beauty and majesty of peaceful canyons, no spot in the Southwest is more favored than the Palm Desert area. Folks who dwell in the Palm Desert community have these lovely canyons at their doorstep. They are part of your investment when you buy and build in Palm Desert.

For information regarding home or business property in Palm Desert community write to

PALM DESERT CORPORATION

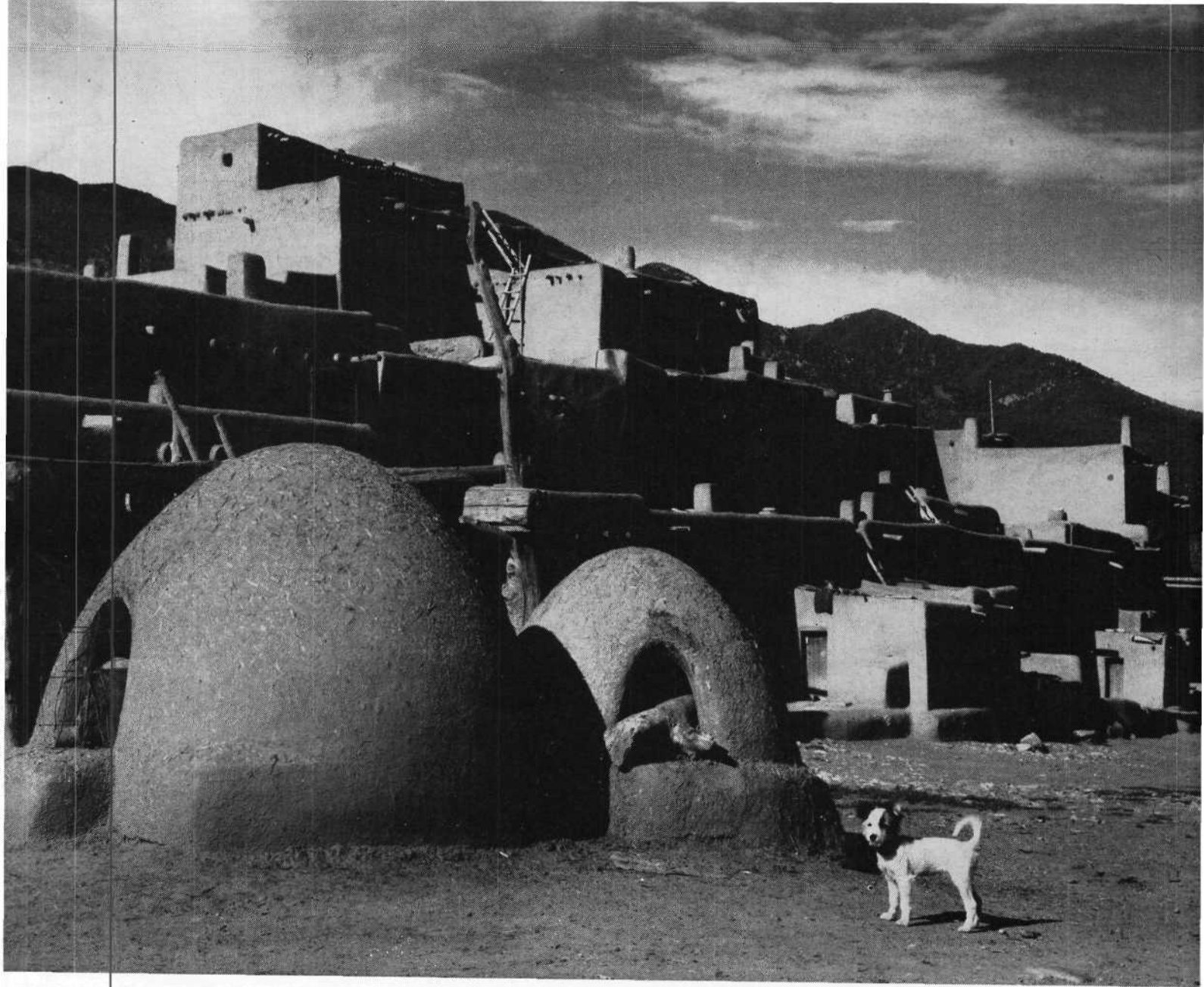
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Pictures of the Month

Taos Pueblo . . .

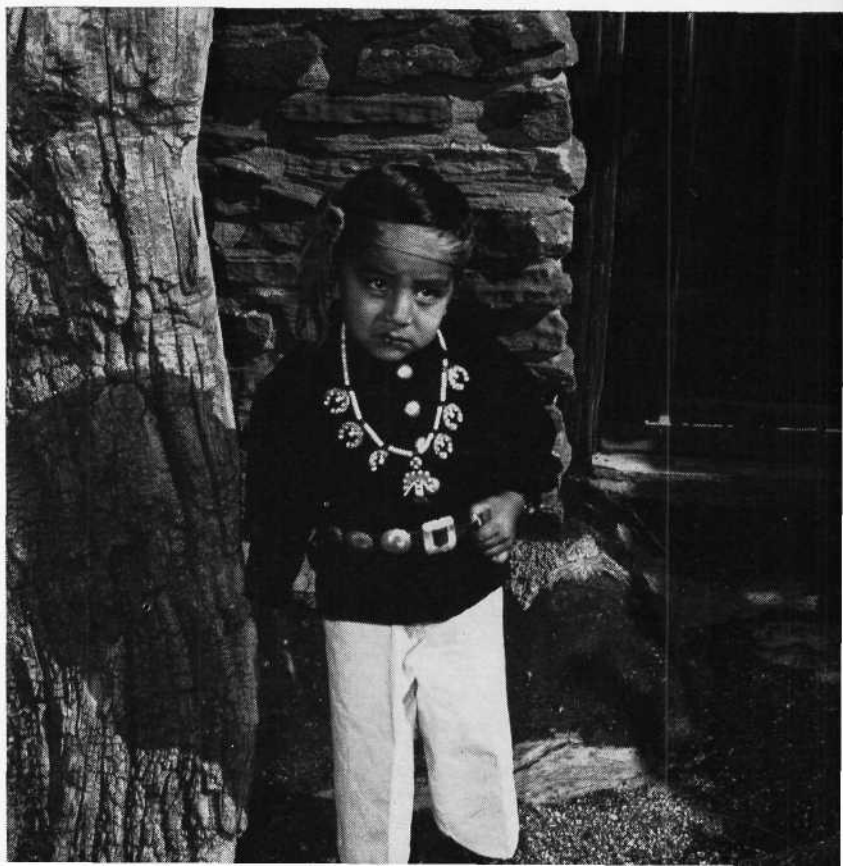
Fred H. Ragsdale of Los Angeles took first place in Desert's August contest with the photo (above) of Taos Indian pueblo, New Mexico.

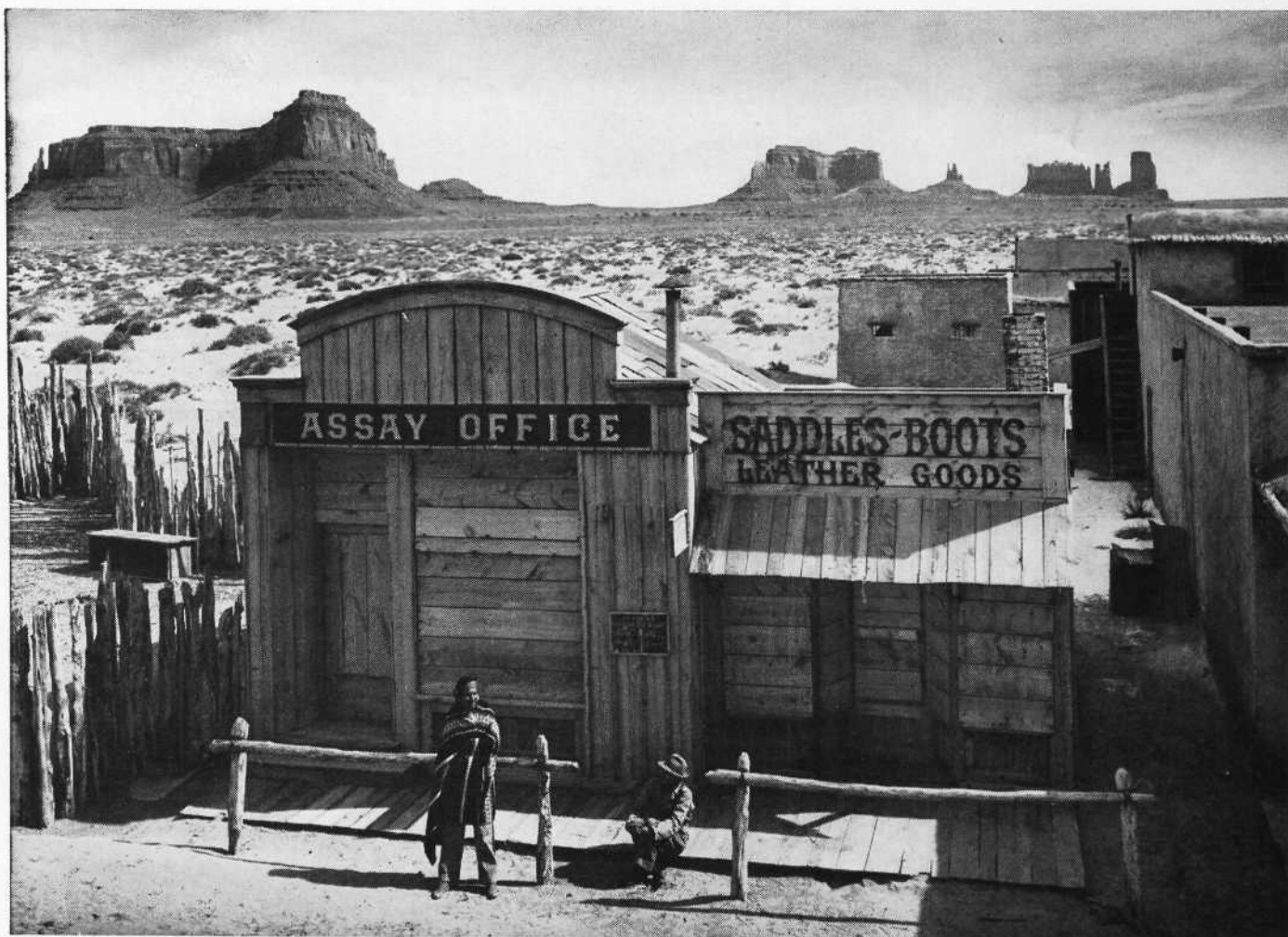
Indian Boy . . .

This young Indian (right) in his holiday finery made a picture which won second place for Russ Eckerstrom, Oakland, California. The shot was taken with a Speed Graphic on Super XX film, 1/200 at f.22.

Special Merit . . .

Among the many fine photos submitted, the judges considered the following of special merit: "Grand Canyon Vista," George H. Kuhl, Glen Ellyn, Illinois; "Taos Pueblo," Martha Burleigh, Los Angeles, California; and "Night Blooming Cereus," Gladys Diesing, Long Beach, California.





Built by 20th Century Fox for the staging of "My Darling Clementine" this modern version of the historic old mining town of Tombstone remains a ghost town of the Monument valley desert, with only a Navajo "mayor" and "sheriff" on duty as watchmen.

When Tombstone Came to Monument Valley

Queer things happen on the desert — but to Trader Harry Goulding and the Navajo Indians of Monument valley, Utah, the strangest of all was in 1945 when a horde of carpenters and masons and painters and actors suddenly appeared on the desert among the pinnacles which gave the valley its name and began preparations for the filming of "My Darling Clementine" with an improvised Tombstone as the stage setting. Here is Goulding's version of the way it happened — and its impact on the natives of the southern Utah desert.

As told by HARRY GOULDING
to Joyce R. Muench

Photographs by Josef Muench

LIVING out in the desert, the way I've done all my life, I've seen some strange things happen. You'd smile if I told you how once, when a storm was brewing, I saw a whole team of twenty mules and a borax wagon on a cloud! The ears of the mules were twitching and every so often one of the critters would stamp his foot—it was that clear! And, believe it or not, that little old outfit was actually 20 miles away, in Tonopah. You'd just call that a mirage and let it pass.

There've been stranger things yet, and not so easy to explain scientifically: desert rats, guided to lost mines by voices they couldn't have heard, and canyons changing their looks when a man wanted to go back for a find he'd staked out. I suppose those were hallucinations.

Perhaps you'll be interested too, in how Tombstone came to life again for two months in Utah. Utah, mind you, and not Arizona where the city really was. It still gives me a chilly feeling up my spine when I think how that place appeared out of nowhere. Men rode the streets packing guns (and shooting them, too); pretty women laughed under their parasols and Indians stalk-



Known to every one who visits Monument valley, Harry and "Mike" Goulding operate a trading post and lodge there and extend genuine western hospitality to white folks and Indians alike.

ed around in blankets, just as though they didn't know this was the 20th century, instead of in the 1870's.

Then, before you could quite take it all in—poof!—they were gone, everything but the buildings. Even the boards on them are weathering away in the sun and the desert is filling the streets again with sand.

I wasn't the only one who was surprised. A tourist came through one day when the town was at its roaring height. He stopped his car right in the middle of the street and came over to where I was leaning against the post of a saloon. In one hand was a map and the other was busy scratching his head.

"Say, can you tell me what this town is?" he growled at me. "This map of mine has a name for every dog-house for 300 miles and now when I come to the biggest place I've seen in days there isn't even a dot for it."

I smiled to myself, but not wanting to

let on that I knew just how he felt, I said,

"I don't know anything about your map, partner, but this is Tombstone, Utah."

He just looked at me, and then went back to his car and drove off. Not even stopping to take a picture of the biggest miracle that ever hit Monument Valley! Next time he drives that way, he'll wonder still more. If the buildings are still there, the only folks he'll see will be the Navajo "mayor" and "sheriff" who take care of the place. But they may be gone too, by then.

Think I'll wait a few years until the desert has come into its own again and then I'll get a scientist to bring an expedition in and have them dig down to a big bowl of concrete. They'll think they've found something prehistoric, some old-fangled kind of ball court that the ancients used. At least, they will until they get all the sand dug

off and read on one edge, "20th Century Fox." By that time I'll be away showing visitors around in Monument valley.

That's what I should have been doing in the first place, when I saw Tombstone pop up out of the desert like a rabbit from its hole. But I wanted to look up a Navajo who works for me sometimes, so I rode over toward the monuments.

It was March and the rains were over and the snow gone, what little there'd been that year. I could see the great tall figures of sandstone buttes on the skyline, all red and brooding in the warm sun. It looked pretty much the way it did any March, until I got down almost to Mitchell's wash. There, right in the middle of the driest spot on earth, were half a dozen big machines—bulldozers they were—ripping around through the soapweed and rabbitbrush.



*This is Hollywood's reproduction of the famous O. K. Corral near where the historic
Earp-Clanton feud came to a bloody climax.*

You can't blame me for thinking that maybe the sun, or old age, had hit me all of a sudden. I tried to figure it out. There's nothing to mine in that sand, and anyway, they were clearing the ground. Not even an Indian could raise corn way out there without a drop of water closer than five miles. We always say that the rabbits have to carry their lunch in the valley, and nothing else could hope to live there. Besides, this is all Indian land. But I knew better than to ask. Somebody would have told me that they were building a new marine base. Might be at that! You can't tell nowadays. So I just looked the other way and rode on over to see my friend, Grey Whiskers. Perhaps when I came back it would all be gone and then nobody could laugh at me for having seen a bulldozer clearing ground—acres of it—in Monument valley.

But it didn't work out that way. Next thing I knew, the place was humming with people. The bulldozers had gone but instead there were carpenters—one hundred and twelve head of them—with lumber coming in a steady stream, trucked in from Flagstaff.

By then, I knew it was a stage set

for a movie, but instead of putting up just fronts, they went right ahead and built real buildings. There were fancy names on the saloons and the "Mansion House" had a sign "Established in 1871!" There were 7000 cedar poles for corrals. I couldn't get over it.

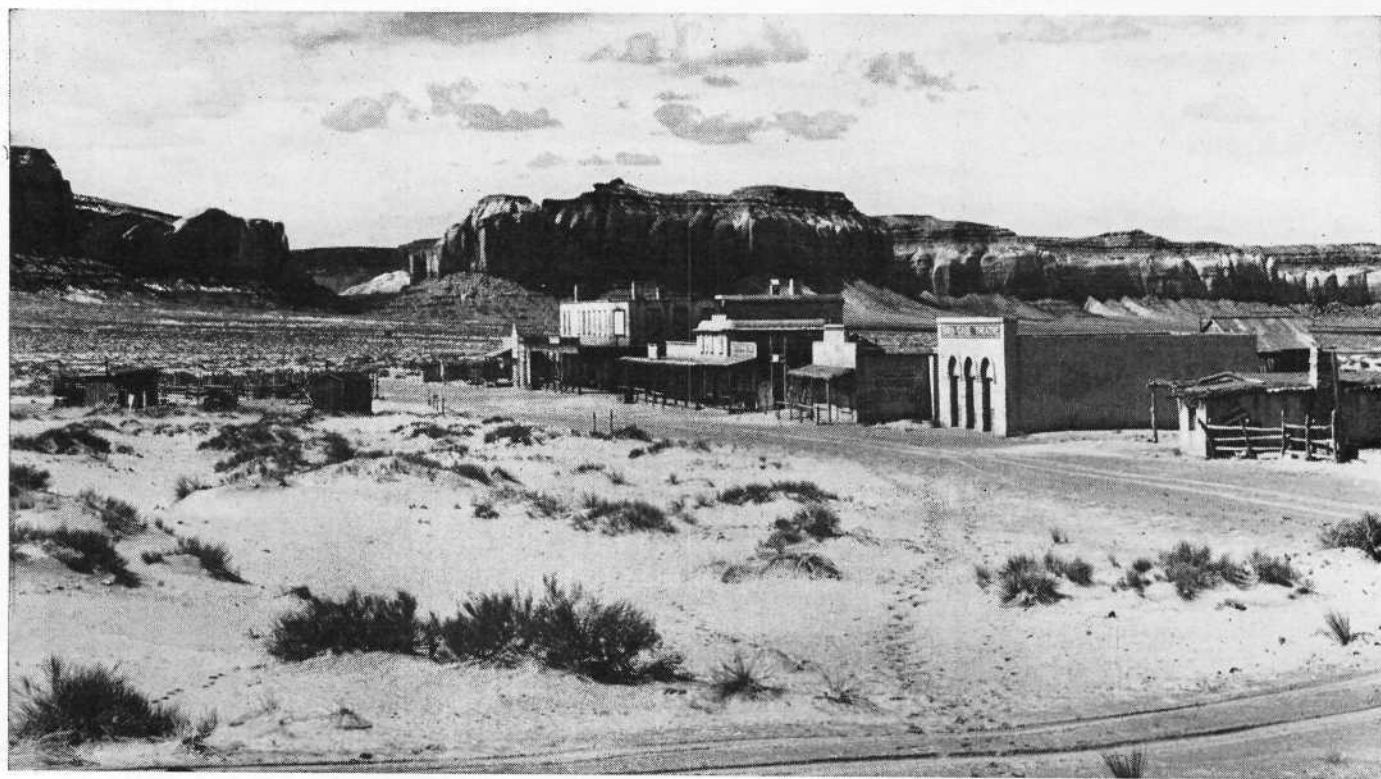
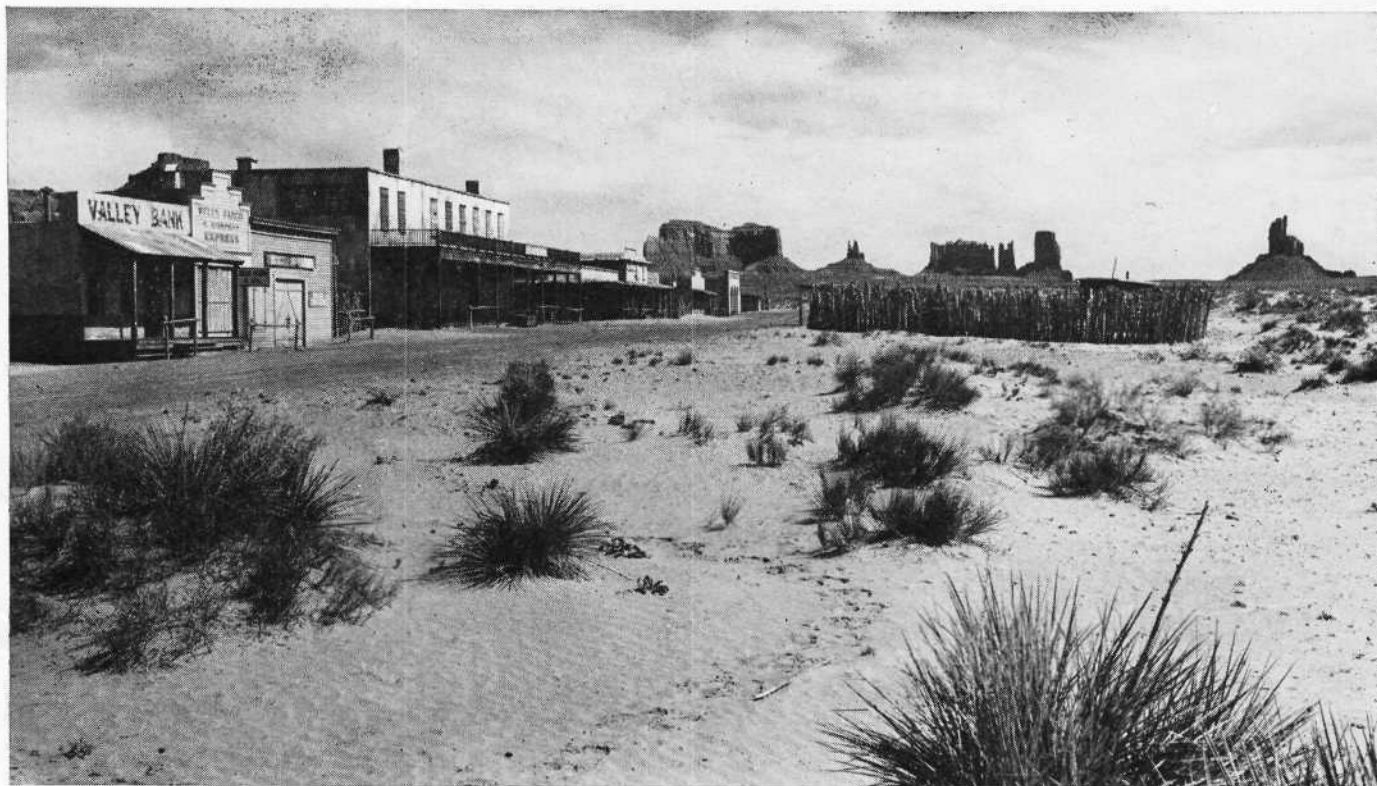
The Navajo know everything that goes on out here but they were keeping out of sight. I guess they felt kind of jittery. Just the same, when they were called on, the dust lifted from the desert in every direction as they rode in. They brought about 1500 head of cattle, bawling all the way. Forty-five prairie schooners came from somewhere and a couple of old stage coaches, not to mention the hundreds of Indian wagons and ponies and dogs and cats that go along with Indian camps. There must have been 400 Indians, setting up shelters all around the place. Most of them had left their flocks of sheep and goats at home, but some even brought those. Old timers said the noise and smell was like old times, the days before the army forced peace on the tribe.

I began to wonder how it would all turn out. I know lots of the Navajo, so I went around and talked with them. They'd come from 50 miles in every

direction; from over at Rough Rock and Chin Lee, from Tuba City and Navajo mountain. It was the biggest get-together they'd had in years. And they had a wonderful time. There was a Navajo Sing or a Squaw Dance every night till sunup. Maybe you've never seen or heard of a Squaw dance. It takes a lot of telling, but its better than a circus and polite as a Sunday school picnic, but not as quiet. When anybody got tired shuffling round the fire, he'd roll up in a blanket and drop down in a wagon, or under it, or near it, and you didn't dare step over him because that's bad luck. All the time the men's chorus that serves as orchestra, with a drum beating out the rhythm, was making a weird haunting kind of music. Hearing it a few times spoils you for the canned music in the juke boxes in town.

They danced all night and in the daytime the young fellows turned to and helped with the building. A Navajo can learn to do almost anything, once he's been shown, and soon some of them were doing carpentry, others helped with the wiring and concrete work, and of course they can set up posts better than a white man can.

The buildings looked fresh and raw when they were done, until painters



The desert has begun the long patient process of reclaiming its own. Sand has begun to drift in the streets of Monument valley's Tombstone, and only the caretaker and an occasional Indian visitor now walk the streets.

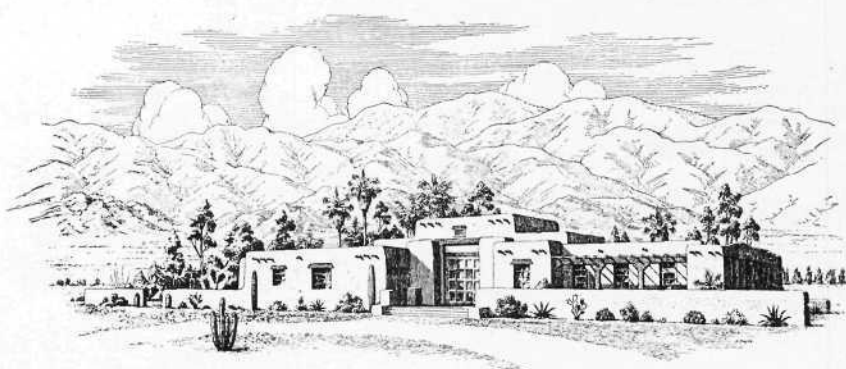
came swooping in. Then, in a few hours, you'd have sworn those houses were 80 years old. It was the darndest thing! Some of the old Navajo just wouldn't come near. Things move fast, nowadays, I know, but a week-old town shouldn't look rooted in the desert and as though a long stretch of Monument valley summers had beat down on it.

While we were getting adjusted to things, buses and station wagons and cars started piling down between Owl Butte and Algotla, bringing 700 actors from out on the coast. And then things did pop. They were warming up for their parts in *My Darling Clementine* and they worked at it 24 hours a day. I'd hesitate to tell you some of the jokes they played on each other. And to

hear them try to talk to the Navajo was really something.

The directors and leads and assistants, about 80 of them, stayed at night at Goulding's Trading post and lodge (that's my place) up alongside the cliff. The other 600 and some were fed and bedded down in an Anderson camp down on the flat near the air strip. Every so often a plane would come

Friend or Stranger, You Are Welcome Here



For more than two months the staff of Desert Magazine has been busy inside the closed doors of the spacious new publishing home at Palm Desert, putting business and editorial offices in order, getting the printing machinery in operation, arranging the book and desert stationery displays, and completing a thousand and one details for the day when visitors could be admitted.

And now the doors are open—and we extend a sincere invitation to our readers and to all who come this way to stop and browse through our pueblo. In this desert institution you will find an unusual combination of activities—a cultural center for the arts and crafts, a business and sales department, and a manufacturing plant.

ART GALLERY (To be opened October 15 with J. Marie Ropp as director). Here will be shown some of the best work done by desert artists in oil, crayons, water-colors, and sculpture. Many of the paintings will be available for purchase.

BOOK SHOP—now open, features books of the Southwest including history, biography, Indian life and customs, archeology, botany and wildlife, mines, minerals and gem cutting, geography, travel guides, arts and crafts—and here will be a special section for juvenile readers. This department also includes some distinctive stationery in color and a selection of gemstone bookends.

PRINTING—A very modern printing office is equipped for all types of letterpress printing—business and office forms, guest ranch and resort stationery and brochures, pamphlets and mail order catalogs and forms, and limited book publishing.

MAILING SERVICE—Includes multigraphing, addressograph plate making, addressing and mailing. A complete mailing service.

OPEN HOUSE—Formal opening of Desert's pueblo will be Saturday and Sunday, October 16 and 17, but visitors are welcome anytime—and there is ample parking space for your car or trailer.

LOCATION—Palm Desert is on Highway 111, 12 miles from Palm Springs and 11 miles from Indio. You will recognize the building from the sketch above, with the Santa Rosa mountains in the background.

This is an invitation to you from the

DESERT MAGAZINE STAFF

buzzing in and drop down with another big shot or special orders for something that had to be done right now. There never was a dull moment.

The whole outfit was herded down to the set early in the morning. You'd see photographers perched on the balconies or else in trucks, following the actors and shooting at them with big fancy cameras.

I must say they didn't do things half way when the big director arrived. It was John Ford and he put everyone through their paces. The Clanton Gang got killed every day; they must have had more lives than a cat. Some of the shooting was done at the O. K. Corral, but they came clear up to my lodge to get a scene of Clanton's hang-out. Since then more than one woman guest has shuddered as I told her how Clanton shot a man through the back—right from my trading post door!

Folks talk about working like troopers. I never knew before what they meant, but I learned at Tombstone. It was fun watching what a swell time they had doing it.

I'd been hanging around, helping a little here and there, just so I could see things. It was all so almost real that I broke out my old six-shooter and took to wearing it (but without bullets) and I was actually getting used to seeing a boom-or-bust town in Monument valley, with swarms of everything from Hollywood actors to sheep. Any direction you looked from the streets of Tombstone, or Fordville, as they called it half the time, the monuments stared down at you. There never was and I'm willing to wager there never will be, another movie set with as grand a backdrop as this one had.

Then, one day, it was over. Just like that. The troopers climbed into cars and rolled away in a cloud of dust. The Indians rubbed out their fires and scattered with the wind. In another day or so the last cameras had been moved out and the windows were all boarded up.

The sand began to shift in, a little here and there. The big concrete reservoir that said "20th Century Fox" on it, was emptied for the last handful of cattle and sheep, and now the sand is filling it, too.

I've ridden over that way a time or two since, and it gives me a kind of lonesome feeling. If my Navajo friend, Frank Bradley (the mayor) wasn't living there in a little house across from the corner saloon, where I could chat with him now and then, I might even believe that it was all just a mirage or hallucination or something.

New Clues to the Pegleg Gold . . .

Willits, California

To Pisgah Bill,
Borrego Valley, California

Dear Bill:

Some months ago I opened the current issue of Desert Magazine and read about the group of Desert Rats who were going to build a monument to the memory of Pegleg Smith, and start an annual trek in search of his long lost deposit of gold, erroneously called the Pegleg mine.

Since my name was mentioned in connection with the story, and since the time is approaching when the second annual Pegleg Trek is to be held—I believe January 1 is the date—I have decided to reveal some inside information never before published which may help you-all locate the nuggets which Pegleg left behind.

You published a picture of some of the old-timers who've been more or less on the Pegleg trail for many years. Three of them, John Hilton, Eddie Duval and Doc Beatty I have known personally for many years. Harry Oliver I have not had the pleasure of meeting, but know him through the Desert Magazine, and from his own publication *The Desert Rat Scrapbook*, every copy of which I read with interest. My other two friends, the burros in the photograph took me back to the beginning of this century, when John Collins and I with six burros journeyed over some hundreds of miles of that desert country. The two shown in photo look quite a little like two of those.

I recognize the location of the photo as on the east side

of Coyote mountain, not far from Dry lake in Clark valley, which before Fred and Frank Clark drilled their well, was called North Coyote.

I thank you for inviting me to join the trek next year. I hope to be able to go and shall do my darndest to keep the date. In the meantime, as I wrote above, I shall divulge a few secrets.

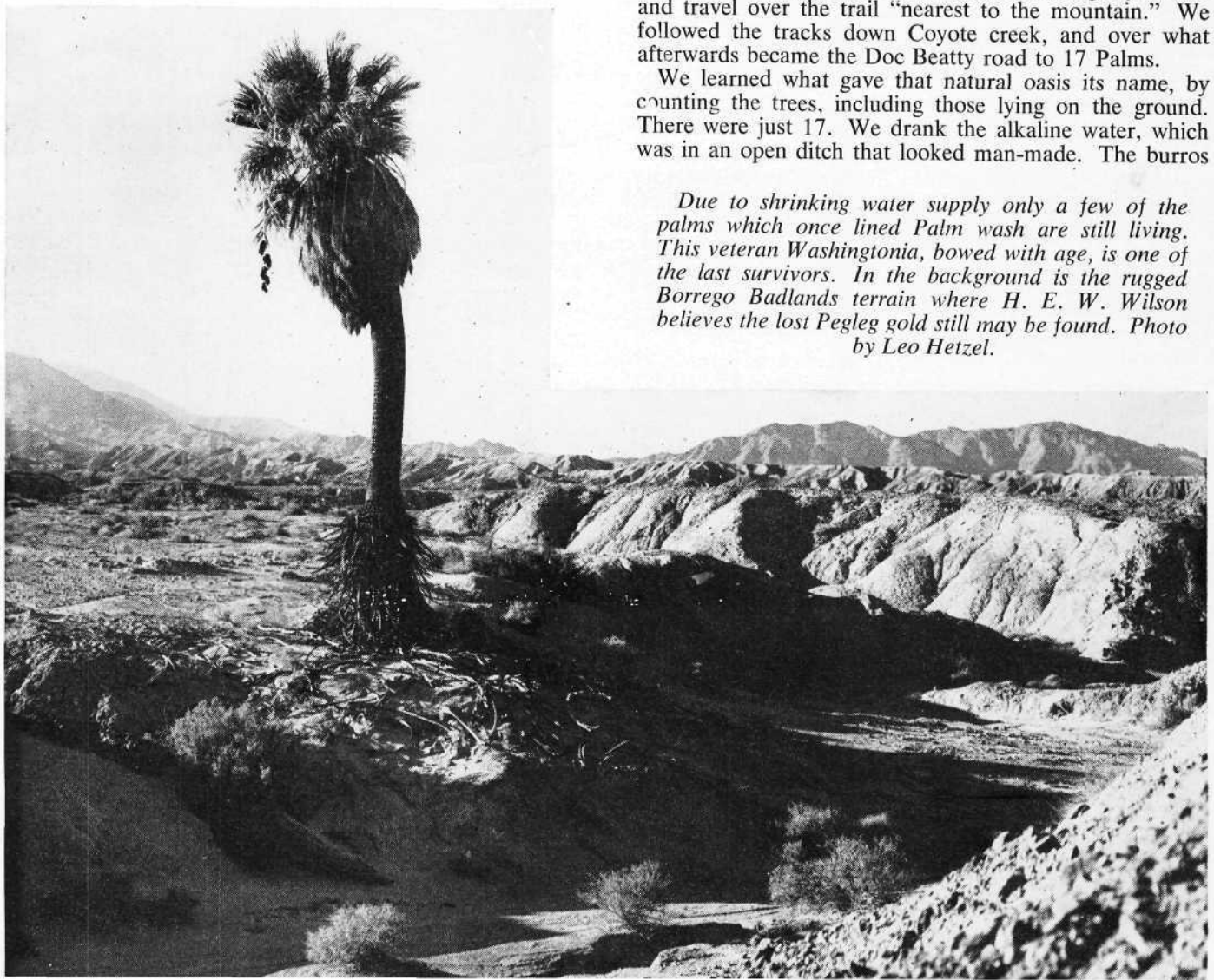
In October 1900 an Indian rode his pony from the Martinez reservation in the Coachella valley to San Ignacio reservation in the San Ysidro mountains. He stopped at Collin's house, and John, as was his custom, invited him in for something to eat. The Indian told John that he had ridden over the nearest trail, around the Santa Rosa mountains, and only diverged in order to water his pony at 17 Palms. To everyone who knows the Badlands it is quite obvious that the nearest trail would be the one around the end of the Santa Rosas. There are many trails through the Borrego Badlands which extend in the form of a fan—the mountain being the handle and the tips extending to the Salton sea on the east and San Felipe creek on the south.

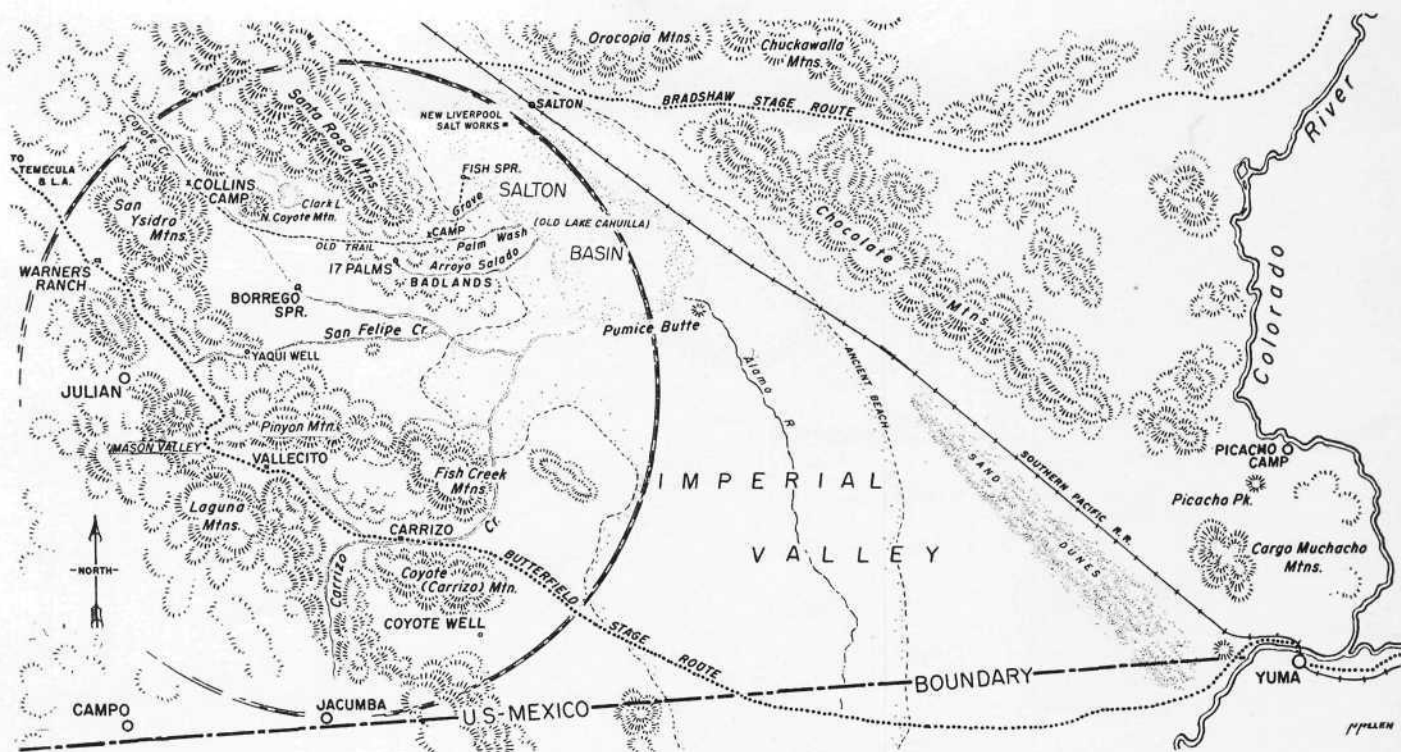
A week after the Indian had gone through Collin's valley, John and I were ready to venture forth in our quest for the territory traversed by the pioneer of the desert with the wooden leg.

Where should we go first? John had never been east of Clark valley and Borrego spring, and I had never been anywhere and knew nothing. The Indian's ride gave John a clue and he suggested that we backtrack the pony's route and travel over the trail "nearest to the mountain." We followed the tracks down Coyote creek, and over what afterwards became the Doc Beatty road to 17 Palms.

We learned what gave that natural oasis its name, by counting the trees, including those lying on the ground. There were just 17. We drank the alkaline water, which was in an open ditch that looked man-made. The burros

Due to shrinking water supply only a few of the palms which once lined Palm wash are still living. This veteran Washingtonia, bowed with age, is one of the last survivors. In the background is the rugged Borrego Badlands terrain where H. E. W. Wilson believes the lost Pegleg gold still may be found. Photo by Leo Hetzel.





Henry E. W. Wilson, who has been searching for the lost Pegleg gold off and on since 1900, believes it still will be found within the area marked by the circle.

were not thirsty enough to do more than smell it. We backtracked a little way up Arroyo Salada (which is well named), and traced the pony's track over a well marked trail to Palm wash. From there the trail led across Grave wash and three or four others to Fish spring, where the burros got a drink. There we camped that night in spite of Fig Tree John ordering us to vamoose.

Somewhere between 17 Palms and Fish spring, I saw the tops of three little hills, on the same level as the trail we were on. The top of the middle hill was covered with black rock. I walked out toward it—but did not climb it. Collins was disappearing with the burros. He had not seen the hills. It was my first trip and I was as green as grass and afraid of being lost, so I joined the burro train, saying nothing to John. Several years later I remembered this spot and ever since have been trying to relocate it. Maybe I found the Pegleg hill that day.

To return to the Pegleg Smith story: Smith's story merely locates the gold as being on one of three hills between Yuma and Warner's ranch. But two other persons are said to have located the gold also, and by dovetailing their stories with that of Pegleg it is possible to narrow the search down to a comparatively small area.

First, there was the Indian woman who, traveling eastward—the opposite direction from that taken by Pegleg Smith—stood on the hill where she found the black gold nuggets and saw the smoke of the construction camp at Salton on the line of the Southern Pacific. She was dying of thirst when she reached Salton. Her story would indicate she was in the Borrego Badlands, but close to the base of the mountains for she missed the water at 17 Palms and was dying of thirst when she reached Salton station.

The halfbreed at Warner's ranch also told of finding the gold. The three days required for him to visit the rich deposit would also locate the treasure somewhere in or near the Badlands.

I believe one reason why the Pegleg gold was never

found is that the searchers have been looking for large hills instead of low ones.

In the March issue of *Desert*, Marshal South told about the Yaqui Indian for whom Yaqui well was named. The mystery gold which he is reported to have found came from the Badlands. I suspect he and the halfbreed whom I have mentioned, were the same persons.

The last but not least important clue to this whole proposition is the fact that the Pegleg gold was black, not dark brown, but black. What made it black? Gold is naturally yellow, and exposure to the sun does not turn gold black in a million years. Let us consider petrified wood. Practically all petrified wood that I have found on the Colorado desert, and I have seen a lot, is a greyish-brown color, and—now mark this—the only black petrified wood I have ever seen comes from Grave wash. I have in my collection of desert specimens, a fine piece of black petrified wood. It is a part of the limb of a tree and as hard as iron. It came from the ridge on the south side of Grave wash. On the north side of the same wash there is a very indistinct trail leading to the next wash north of Grave, and on that trail is some black petrified wood, spread over the ground as if a tree had fallen and broken up, and petrified where it lay. This trail is very hard to find because it does not lead from Grave wash direct, but from a tributary—and there is very little of it left.

Grave is the next large wash north of Palm wash, and the bridge number on 99 Highway is 5848. That of Palm wash is 5846. The latter is the third wash north of Truck-haven—the first two being small ones.

To return to the petrified wood, is it not likely that the same mineral solution which caused the petrified wood to turn black also colored the gold? If this is true, then Grave wash is the key to the mystery of the Pegleg gold. The Indian trail crosses Grave wash, and if you can pick up this trail north of the wash you may have found the route to the lost Pegleg treasure.

H. E. W. WILSON



Beneath the topsoil of this Arizona mountain meadow students are finding many strange relics of three distinct Indian cultures.

Winning a Degree -- the Pick and Shovel Way

For more than 800 years the elements of Nature have been trying to conceal the evidence of a prehistoric Indian culture—a community of perhaps 5000 tribesmen—which once thrived in a lovely mountain setting on the Apache reservation in Arizona. Today, under the direction of the University of Arizona, student archeologists are seeking to reconstruct the story of those ancient dwellers. It is a strenuous way to win a college degree—as you will learn in reading Oren Arnold's story.

By OREN ARNOLD

Photographs by E. B. Sayles
Curator, Arizona State Museum at Tucson

ONE afternoon in the summer of 1947 a pretty graduate of Vassar and a handsome young man from Argentina were facing each other on their knees in a hole in Arizona. Nearly 30 of us stood as spectators on the rocky rim around them, like gamblers crowding a cockpit. A fragile bowl lay bottom up between them.

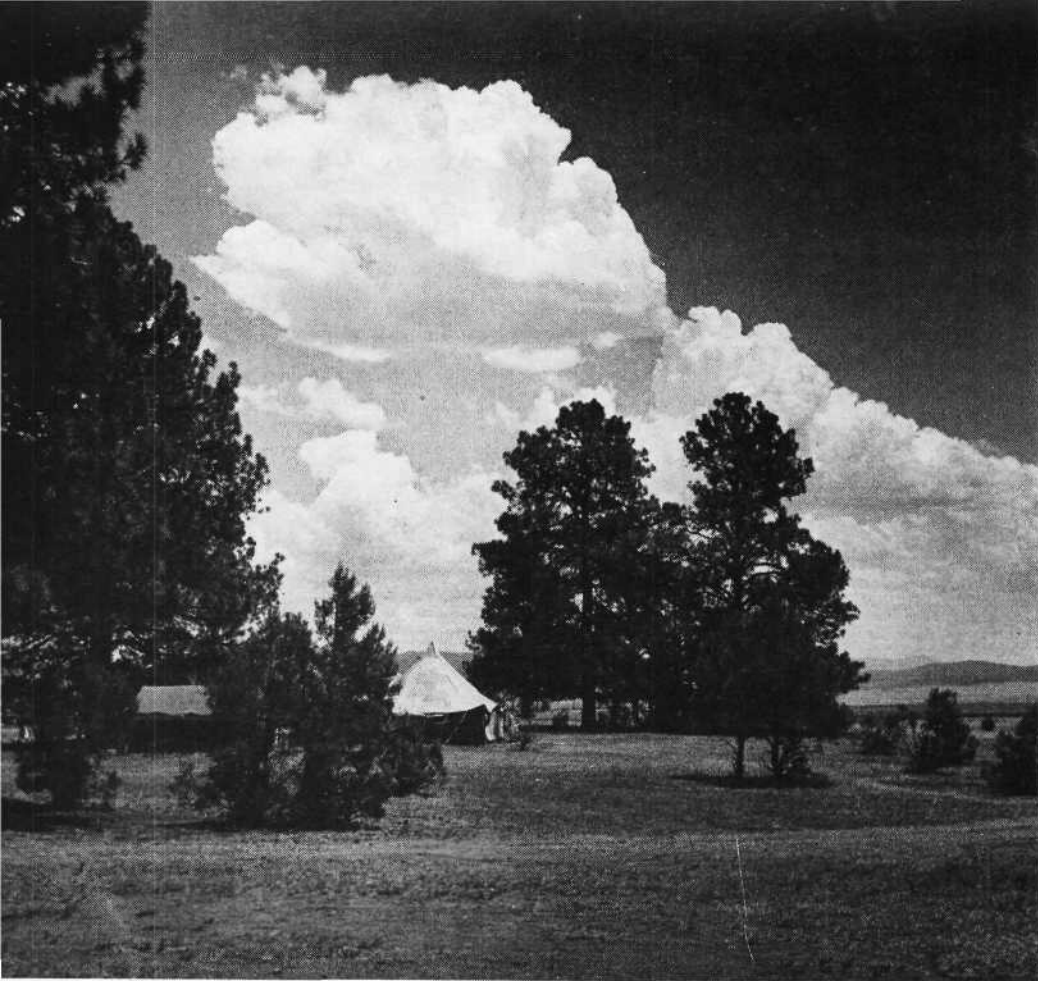
"You will lift it, senorita," the boy invited.

Gently she held it up—symbol of a civilization centuries old. With tools like those of a surgeon the two had labored here for days to expose that bowl. Under it now was revealed a human skull. Around it were arrow heads, spear points, small mortars for

grinding, many pottery sherds. We stared in silence until a kindly gentleman among us spoke the words for which the youths had been hoping.

"Well done," said he. "Chalk up an A grade. And come on out now for supper."

The spokesman was Emil W. Haury, professor of anthropology at the Uni-



University of Arizona's summer camp at the Point of Pines archeological site.

versity of Arizona, and one of America's foremost scientists. Here, he was director of a field school in archeology. Nineteen boys and girls were in his class. Each was a college graduate, working here for a higher degree. The school is a camp in the Arizona wilderness 90 miles from the nearest white village. A pine forest loomed black to the west of us. A green prairie stretched eastward 20 miles to end abruptly in a mountain range. We had not seen a newspaper or heard a radio in 10 days but any hour we might commune with coyotes, deer, panthers and bears.

My companion on a trip to Dr. Haury's summer school was Fred Randolph, an insurance salesman. It was not a fertile field for selling insurance, but the region was by no means devoid of life. During the last 75 miles of our motor trip we met one five-foot rattlesnake, 12 does that flowed over boulders and logs in streamlined beauty, a giant stag who—bless him—was lord of all he surveyed and made it known by an indignant shaking of antlers and snorting, four flocks of wild turkeys, and one completely black Apache Indian man who spoke no English. It took us nearly five hours to travel those 75 mountain miles.

But when we reached there—a dot on the map called Point of Pines—we found Dr. Haury. At the edge of the

forest was his university "administration building" of rustic architecture, its walls partly built of rocks used in other walls 800 years ago. A mess hall and kitchen, baths with hot and exceedingly cold running water, a laboratory, an outdoor "stadium" for sports, a lecture circle which doubled for campfire fun, even a studio and darkroom for the school photographers, were grouped there. Dormitories were large wall tents electrically lighted, with beds that had good mattresses and springs. In short, every reasonable comfort had been provided; because in a school of archeology as in perhaps no other kind, good grades depend on being physically fit. These students were no bookworms. Five of their eight strenuous hours a day were devoted to plain pick-and-shovel digging. This applied equally to the boys, all of whom looked like football stars, and to the dainty co-eds among whom were representatives of Vassar, Stephens, Wellesley, Columbia, Chicago and Arizona U.

Other meritorious schools in archeology are in existence, but none exceeds this one in sheer picturesque quality or in opportunity. Coronado the great Spanish conquistador may have camped at Point of Pines four centuries ago. Since then only a few white men—ranchers, surveyors, occasional hunters—had seen it until

1945 when Dr. Haury with his friend and associate, E. B. Sayles, curator of the Arizona State Museum in Tucson, re-discovered it. The stranger approaching this site would be impressed only by a lovely landscape—rolling hills sprinkled with pine-fringed mountain meadows. But walk on these hills and lo—at every step, literally, you crush pieces of pottery. If you are alert, arrow heads await your discovery. Hundreds of metates and manos have been recovered on the surface or just under the top soil. Dig a foot or two and whole pots are disclosed, things of utility and usually of beauty, revealing the craftsmanship of folks who lived at Point of Pines long before Columbus sailed.

Haury and Sayles found nearly 200 separate ruins of great cultural diversity, with evidence that perhaps 5,000 people lived in this locality for about 1,000 years. Traces of old reservoirs were evident, and in the nearby forest were agricultural terraces like those built by our Civilian Conservation Corps. The two men tramped over the region for days, measuring, surveying, staking, studying. Each hour their excitement grew. This was a find by any standard, one of the Southwest's greatest ruin areas. Archeologists, for all their worship of exact science, are romanticists capable of a sophomore's enthusiasms. The climate, they observed, was perfect in summer; sunny days, with nights cold enough for four blankets and invigorating sleep. Altitude was 6,200. Good water was available. And there was a road, of a sort, within reasonable range. Only one major hurdle remained—this was on the reservation of the Apache Indians, once the most warlike of the Southwest's tribesmen.

"If you dig in the graves of the ancients," they solemnly warned, "trouble and danger will forever haunt you."

The Apaches were owners of this land, but Haury and Sayles were diplomats. They also had as much patience as the red men, which of itself is noteworthy. In the end they secured a permit to set up a paleface college and explore Point of Pines archeologically. They hired Apache boys to help with the camp labor. They arranged to supply their commissary with the fat Apache cattle that grazed in the meadows there.

Thus the University of Arizona summer school in archeology opened in 1946 in tents, and by 1947 had some permanent buildings. Financial aid came quickly. The Viking Foundation of New York, and the late Burrig D. Butler, radio executive of Phoenix and Chicago, helped pay for the buildings. Student loan assistance came this year from W. J. Schieffelin, Jr., president of

a New York drug manufacturing and importing firm. He visited the school last July and became chief yarn spinner for 10 days. He has a sentimental stake in Arizona anyway, for it was his uncle Ed Schieffelin who in 1879 found rich silver ore samples between two human skeletons and there established the historic mining camp of Tombstone.

Dr. Haury foresees at least 20 years of intense digging and study at Point of Pines for his students, during which may be expected important archeological discoveries.

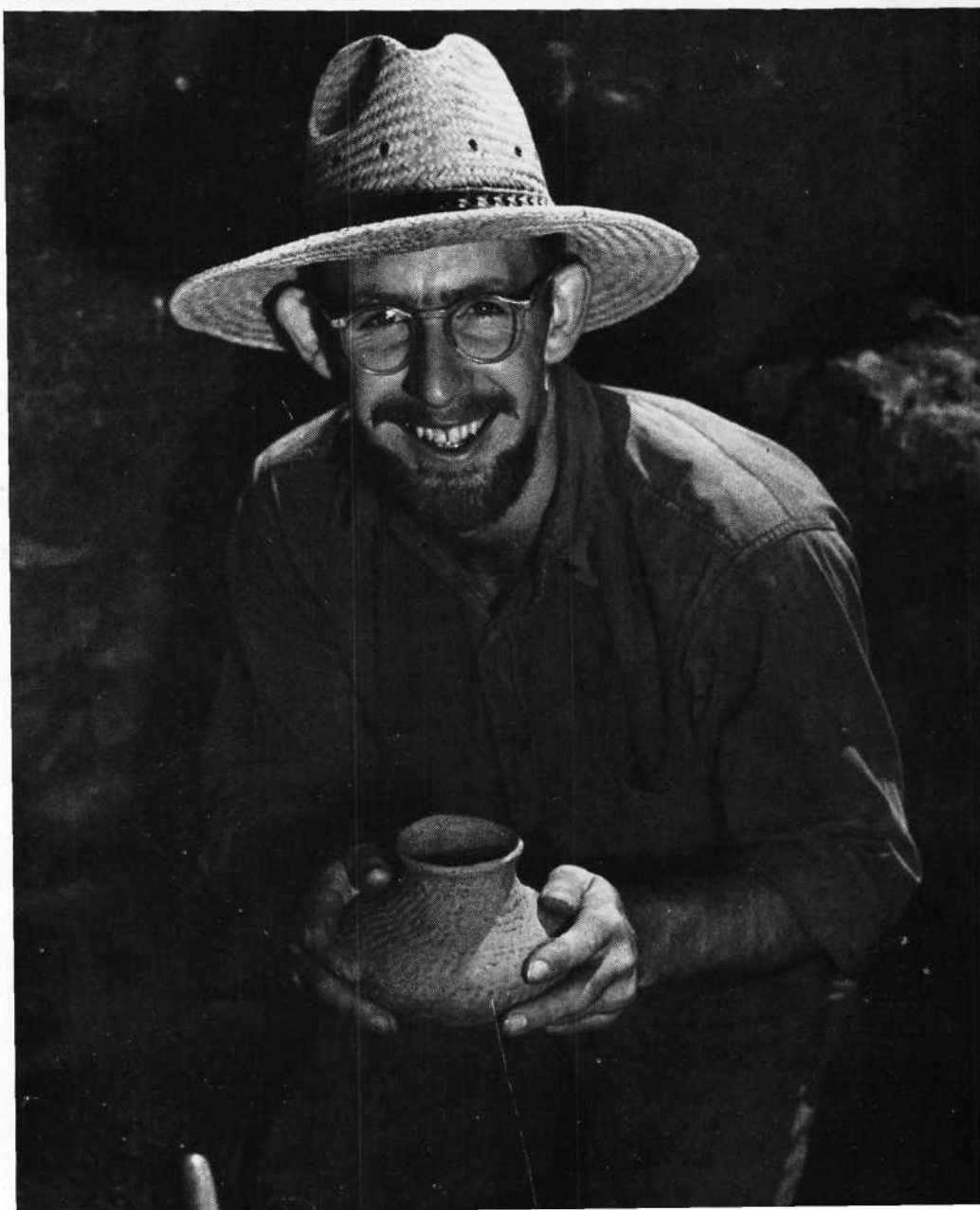
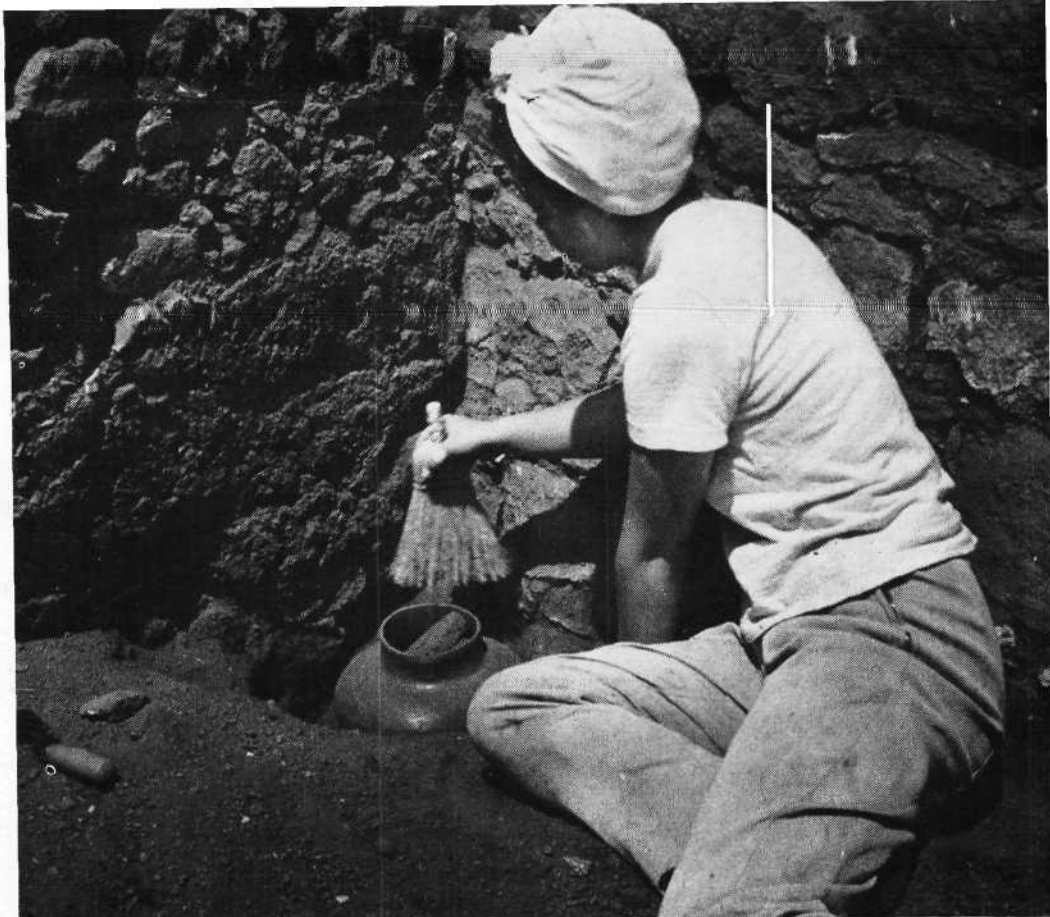
"Young people are eager, speculative, daring," the professor reminded us. "They take assorted bits of information and put them together in sane conjecture, then set out with digging tools to prove what they think they know. Often they find themselves wrong, but disappointment is no tragedy to youth. I love to work with them. And I am proud of what they are doing here."

The students dress, talk and act as young Americans do everywhere, so that a certain vacation atmosphere pervades the place. Yet this is no pampered society school. Day begins with a gong at 6:00 a. m. Breakfast is at 6:30. Meals were cooked last summer by Barbara McCoy, University of Arizona graduate student in archeology, who wanted to earn extra money. Food was abundant and delicious. At 7:00 a. m. the classes are on the "dig." There's an hour and a half for lunch, then an afternoon shift until 4:30 in the ruins, plus an hour for note study and laboratory work. Two hours for recreation are sandwiched in—barely time enough for cleanup and supper, a game of volleyball. Romances flower on this strange campus as they do on campuses everywhere. Guitars lend their enchantment. Most of the songs heard there were in Spanish, these being as much a part of the Southwest as is the students' Tucson tan.

Boys and girls are assigned by pairs to excavate specific areas of ruin mounds previously marked off. We watched a very young GI couple—Fred and Nancy Wendorf—go down six feet in one room with rock walls. The room was about 10 feet square. That meant plenty of dirt tossing—and Nancy, who looks like Shirley Temple and weighs 98 pounds, did most of it. Tactlessly, some of us visitors chided Fred for making his bride do the hard

Nancy Wendorf uncovers a jar hidden in the floor of the 14th century room.

The thrill of archeology—a pot is found by Raymond Thompson of Tufts college.





Above—A 14th century grinding mill—a row of metates lined up much as they are found in Hopi homes today. Below, a stone-lined fire-place.

Below—Storage room in an ancient Indian home. A roof caved in and damaged part of the pots, but the young archeologists have removed the earth in which they were encased particle by particle to preserve them as they were left hundreds of years ago.

labor, he sitting near her with only a small trowel in his hand. Both smiled at us.

"A piece of shell got Fred's shoulder in France," Nancy explained. "So his right arm is paralyzed. But his brain isn't. And I'm his right arm."

We wanted to hug them. Indeed we

guests reacted with sentimental fervor toward all the college kids there, for none was bluffing. They were the same youngsters who had won a war, and now they were showing the stamina necessary for serious career jobs.

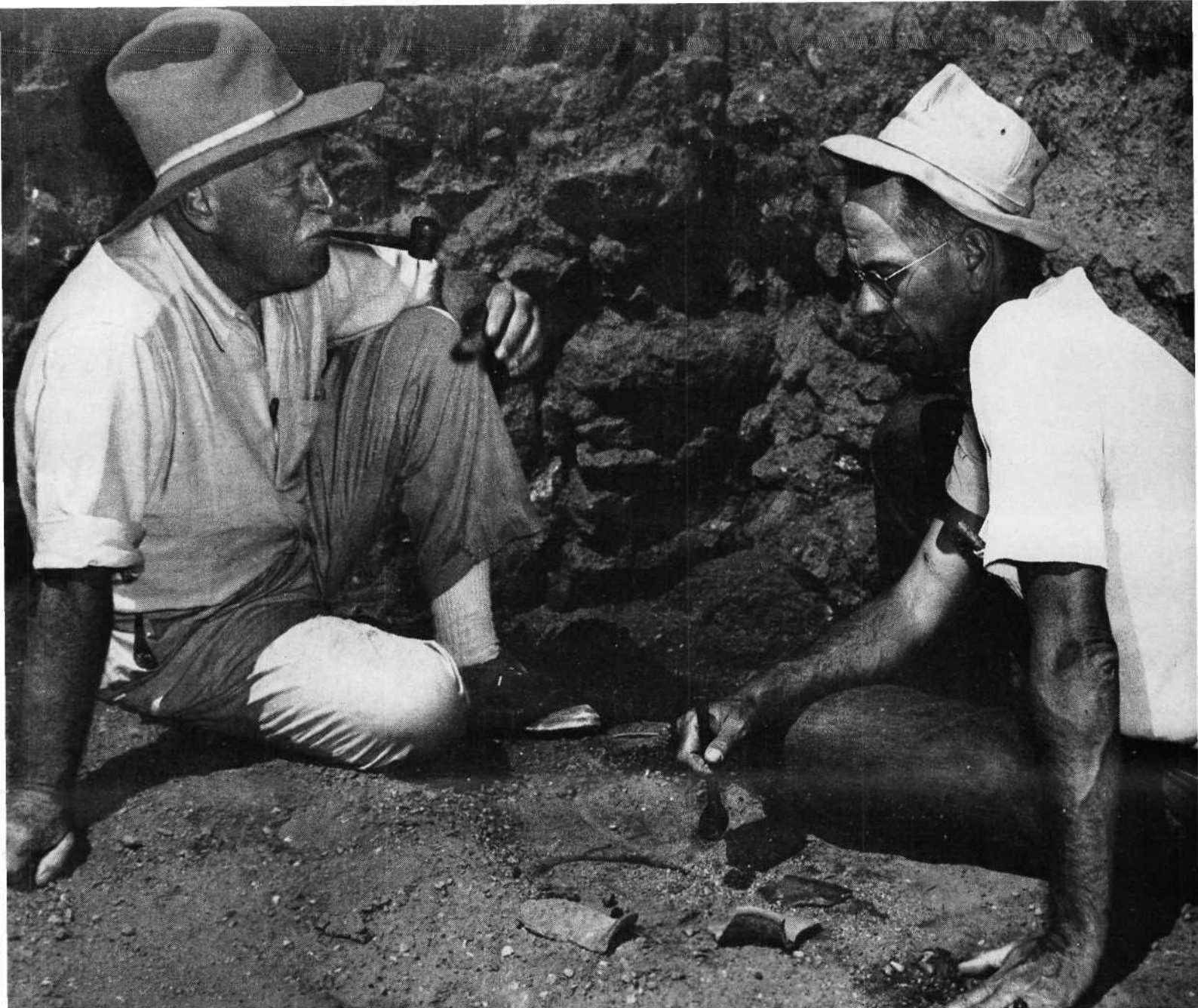
Nancy and Fred had made a find near the floor of the ancient clan

house they were excavating. They had come onto 12 rocks shaped like loaves of bread but twice as long, and laid side to side. Yet nobody, not even Dr. Haury, knew what they were. They may have been an altar—there are legends, unsubstantiated, of blood sacrifices among these ancients. Nothing comparable has been found elsewhere in contemporary ruins. The students thus have a new stimulus for conjecture. If one can ever make a guess about those rocks, then prove it true, he will achieve local distinction as well as a good school grade.

Student excavation already has revealed two distinct types of dwelling in this area. A Wellesley graduate and a Canadian boy schooled in Columbia were down to the pit-house level by late June. By August the school knew that the first inhabitants had simply dug holes in the ground here, covered them with roots and lived inside these pits. Their time ended about 100 A.D. But soon another group of people came and erected the rock wall pueblos on top of the pit ruins, and these were occupied until about 1300 A.D. In these "apartments," three distinct cultures seem to have overlapped: that of the Mogollon (pronounced mo-go-yone') or "first settlers," then of the Hohokam (ho-ho-kam') or sedentary agriculturists, and finally of the Anasazi (an-ah-sah'-ze) or conquerors.

Conceivably the Mogollon folk were the pit dwellers, then they and the Hohokam were driven out in their turn. But what happened to the last group, the conquerors? They left in the fourteenth century, despite an abundance of game, water, corn, all the things of life. The fierce Apaches that we know did not arrive until years later. Habitation ended at other communities in the Southwest because of prolonged drouth, but they were on the arid desert. What happened at Point of Pines is one of the mysteries Dr. Haury hopes his students eventually can explain.

A red-haired young giant with "Tufts College" on his T shirt labored in a square excavation with six skeletons showing. He had already moved tons of dirt—the fill-in from centuries of erosion, on top of the original grave soil. We watched him strain with tiny scraper, tea spoon, artist's brushes, and a little hand syringe. He dared not shovel, once a hint of bone was revealed, lest irreparable damage to a skeleton be done, hence the dirt was lifted away almost literally grain by grain until the six forms stood out in full bas-relief. With other students' help, he took every conceivable measurement, in millimeters. Sketches were made, directions noted, minute descrip-



Dr. A. V. Kidder, Carnegie Institution of Washington, and Dr. Emil W. Haury, director of the University of Arizona archeological field school.

tions written in notebooks, and photographs taken. All of this constitutes fact, which later is correlated with other students' findings in other graves. Together it becomes public property, at the University of Arizona, for any reputable scientist or student who wants to have access to it there.

After supper that night we saw "Red" with the Argentinian lad and the girl from Vassar in a serious huddle. Dr. Haury sat listening. All were absorbed in trying to piece together the day's facts as gathered from two separate burials. What could be said about the ancients after this intimate study of their remains?

A few things we know. They were of medium stature, no nearer to monkeys than we are in bone structure and general bodily conformation. They may have had something like a male utopia, meaning that their women did most or much of the hard labor, because remains of the females indicate

muscular development comparable to men's. We know they suffered high infant mortality, for many child burials are found. We know they suffered arthritis, for the evidence of it is still seen in their bone joints.

"This one was a warrior," the Tufts boy announced, holding up a skull. "He was killed in battle. Here's a hole made by a stone axe. I even have the axe that exactly fits it. That's proof!"

"Hold your hosses, son," Dr. Haury grinned amiably. "The axe is coincidence. Put that skull under the microscope and study the edges of the hole."

This done, the teeth marks of rodents showed plainly. Moreover, there was no hint of healing—evidence that the hole was made after death. This was a minor disappointment to the students, but a definite contribution to their notebooks. Burrowing animals are the worst destroyers of graves.

It is more than likely that scientists

in some post-atomic era, probing for facts about *our* life and times, will do as we do now—dig in the graveyards and the kitchen middens. For, surprisingly, man leaves his best records in his public dumps. Those ancients at Point of Pines lived in apartments of strong rock walls. These had no windows or doors as we know such, but entry to any room was through a hole in the roof, reached by a ladder pulled up at night for safety. And Mrs. Anasazi simply walked to the edge of her roof and tossed her garbage and trash overboard. When somebody died, often it was convenient just to toss him down there too, then go place beside him his favorite arrows, his sacred rattles, his awl, needle, tomahawk, and some food in a beautiful urn, and another urn over his skull for—we can presume—pure sentiment as well as protection from dirt, and finally cover him with a few feet of the trashy soil.



Archeologists at work. Here they are digging into a 14th century pueblo in quest of bits of stone and clay which will reveal something of the everyday life of the ancient occupants.

It is outside the walls of the pueblos, therefore, that Dr. Haury's students dig most avidly and with greatest care. They have learned to expect little in the first four-foot layer, for most of this has blown there since the pueblos were abandoned. But after that, each shovel or spoon of earth is carefully screened. One student was showing a more-than-prehistoric interest in his girl companion when he tossed a shovel full of earth out, and the co-ed caught a glint of black in it. She climbed out, and retrieved the most perfect double-bladed axe yet found there. For such unscientific negligence, he had to stand the camp's razzing for a month.

One morning a graduate student from Columbia gave a shout from his dig. Heads popped up over walls all around and Dr. Haury turned toward him.

"Look, Doc!" the boy called. "I got proof that a race of giants lived here. With amazon-type women!"

The professor waited. He was used to these alarms. But for once the student really did have interesting evidence. He came out of his hole with a fired pottery piece about 12 inches across and hollowed in the exact shape of a female breast. "It's a prehistoric brassiere, Doc, if I ever saw one!" he proclaimed.

It was in perfect condition, and unlike any other found there. Dr. Haury shot back at the lad in kind. "You never saw one, then. I never saw one like this, either. And I think it's a cover for a cooking vessel."

The Doc has to be wary. Students will plant anything possible on him. The most distinguished professors are gullible at times. Notorious instance, retold around campfires wherever archeologists work, was "Werner's Folly" in Germany. Years ago students there planted fake fossils, and the instructor was so taken in he wrote a book about them. Exposed and shamed, he bought back all of the books but two, then committed suicide. After his funeral, his relatives took advantage of the publicity to re-sell the books at a handsome profit.

But if Dr. Haury has to take a lot of friendly ribbing, he can also dish it out. One student grew a terrific waterfall mustache that became the sensation of the school. After about a week of it, the boy suddenly unearthed a very strange piece of pottery one morning. Everyone studied it with minute care. That night, in the serious laboratory seminar that is held four

evenings a week, the students asked their beloved professor to analyze and if possible identify the object. With consummate drollery he answered, "It's plainly a prehistoric mustache cup." It appeared to be precisely that, and not for a week did Mrs. Sayles confess that she had made it to Dr. Haury's order.

I sat on a rock for three hours one morning and watched a blond co-ed. Between shifts at pick, shovel, wheelbarrow, whiskbroom, measuring tape and notebook, she was delighted to talk. Her name was Edith Sykes, and she was momentarily distinguished in camp because she had outwitted Dr. Haury. She had been digging for the rock wall of a room in the clan house. The doctor came by, studied the situation and warned her that she'd never find it where she was working. But she did.

"How'd you know it was there?" he demanded.

"Woman's intuition," she teased. And then, more specific—"I'm engaged, and I've been thinking about homes. If I had been building this house I'd have wanted this partition about here, instead of over there where you said I'd find it." Professor Haury, Ph. D., bowed to a higher knowledge.

Edie, who looks like somebody's kid sister, has her paleontological philosophy all down pat. I asked her, "Why are you doing this? What are you grubbing in the dirt for, when you could be at home sitting on a pillow and sewing a fine seam?"

"Are you serious?" she challenged, mopping sweat. "My gosh, man, this is the most romantic work I ever heard of. And it's important, too. I'm going to marry a mining engineer, but archeology will always be my hobby if not my career." She climbed out of the hole to offer me a drink from her field canteen. Then she drove at me again. "Look here—what good is—well, painting a sunset, or composing a symphony, for instance? Why bother to be interested? Archeology is like that. It's spiritual, I mean. True, we dig out a lot of stuff that amounts only to abstruse knowledge, but in time it fits together. And somehow, just working at it enriches a personality; translates into earning power, and poise, and happiness."

I remained silent, because Dr. Haury was approaching. He had overheard. "Did you read that in a book, Edie?" he demanded.

"No sir."

"Well it's good, and I'll give you an A for it. I hadn't quite figured things out that clearly, myself."



These rocks withstood centuries of grinding and pounding on their long journey down from the headwaters of the Colorado river. Picture shows a bit of the floor of the desert in Sidewinder hills.

Shining Rocks of Sidewinder

Old Man Colorado is a rockhound himself. And after the old river collects, sorts and polishes its specimens, it generously piles them in terraces along the river valley where the rest of the rockhound tribe can do a little hunting. One of the best of the Colorado's rock caches lies at the foot of the historic Cargo Muchacho mountains. And, although it was first described nearly 100 years ago, it still produces beautiful specimens for those who search.

By HAROLD O. WEIGHT

WILLIAM P. Blake, geologist with the Pacific railroad surveys, rode from Fort Yuma with Lt. Hendershot, December 9, 1853, on a reconnaissance to the Cargo Muchacho mountains, shimmering to the northwest in the winter sunlight. Their route at first lay over the bottomlands of the Colorado river, among cottonwoods, willows and mesquite. The mules had to force their way through the weedy luxuriance of plant life until they reached the base of the upper plain, which rose 40 feet above the river valley, its edge gullied by storm runoff.

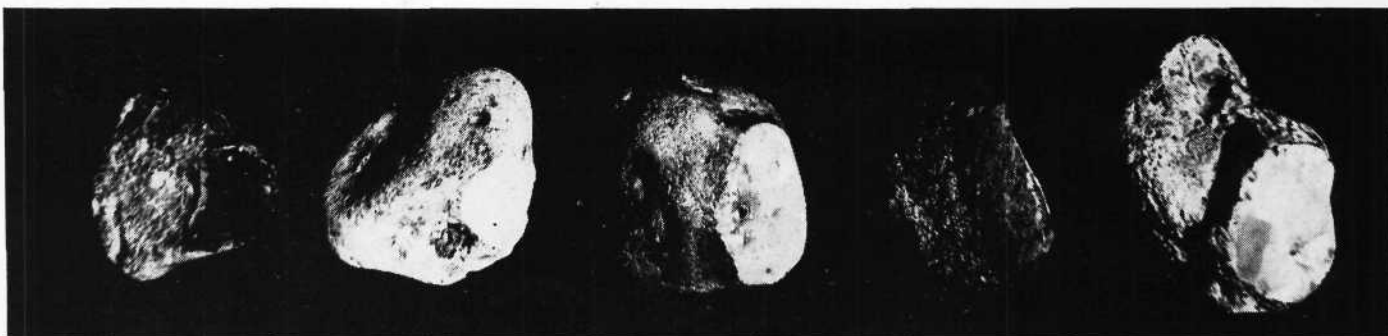
Through one of the arroyos, Blake and the lieutenant climbed to the plain. "From our feet to the base of the mountain," the geologist reported, "there was not a single swell of ground, a tree, shrub or boulder of rock to break the monotony of the level expanse." And the plain was "literally paved" with pebbles of "colored porphyries, basalt and greenstone, mingled with quartz, agates and jaspers." The pebbles were laid out compactly, all at the same height, as if they had been pressed down by a roller, and the whole surface was swept clean by the wind.

"Every pebble had a beautifully

polished and glistening exterior," Blake wrote, "and the diversity of colors was increased and their brilliance heightened by this singular polish. The glitter of the sun's rays on this plain was like that on the water of a lake on a summer's day, when the surface is thrown into ripples by a passing breeze."

We rockhounds know just how Blake felt as he rode across shining "myriads of polished pebbles of agate, jasper and carnelian." His attention "was constantly attracted by some stone of peculiar form or unusual color and it was difficult to resist the temptation to dismount and examine them." Some he could not resist, and a tap of the hammer on several elongated and irregular rocks revealed exquisite and beautifully preserved petrified wood in which cell and pore could be traced.

Blake had arrived at Fort Yuma only the day before from Warner's ranch. He was with Lt. R. S. Williamson's party, investigating routes in California which would connect with Whip-



For many miles in Sidewinder hills the surface of the ground is covered with hard smooth water-worn pebbles.

ple's survey for a transcontinental railroad along the 35th parallel and Parkes' survey along the 32nd. December 11, carrying his prized wood specimens, Blake headed back across the desert to San Diego, following the emigrant road across the dread desert which was to become Imperial Valley.

Then for the best part of a century, so far as we know, adventurers tramped and rode across the mesa, ignoring the beauty beneath their feet while their eyes were fixed on the golden ores that waxed and waned in the mountain's fabulous mines — the Cargo Muchacho, American Girl, Tumco and Padre y Madre. But modern Americans, cramped mentally and physically by city-herding, have rediscovered the release which comes through contact with Nature, the stimulation an outdoor hobby gives. And the mesa and bluffs where Blake found his shining stones — now called the Sidewinder hills—have become a popular rockhound hunting ground.

U. S. Highway 80 passes directly through the Sidewinders for several miles, between Knob siding and the old stage station at Araz. Pilot Knob bounds them on the south. There are not many such places—where collectors may park at the side of a transcontinental highway, walk a few

rods and find jasper, agate or petrified wood which can be finished into stones of real beauty. This generosity of the forces of Nature which mined, transported and sorted the vast deposit through the ages has not gone unappreciated by the fraternity. Slopes and mesas have been combed frequently but the field, by its nature, can never be exhausted. Time and erosion continually expose new material for those who are willing to search and who desire quality rather than quantity.

Blake visited the Sidewinders in December, and I would recommend the cooler seasons for collectors who follow him. My most recent trip to the area was taken in May. Mornings and evenings were pleasant. But midday and afternoon temperatures were above 100 and the blazing torch of the sun offered a special occupational hazard to rockhounds. Have you ever burned your tongue licking rocks? It is an unpleasant sensation, yet I will wager that you will be just as unable to break yourself of the licking habit on short notice as I was.

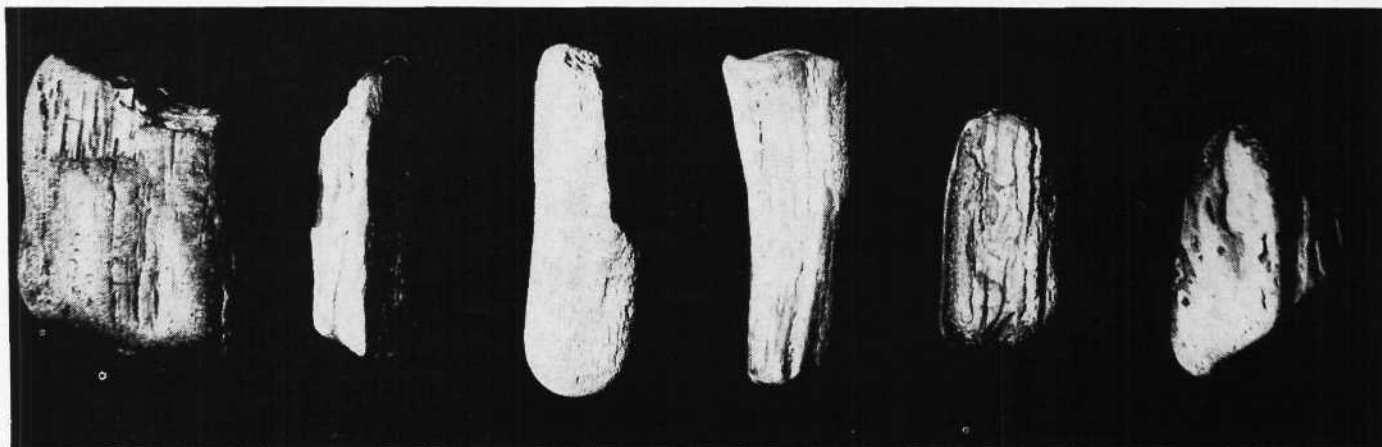
I had collected along the highway on several occasions, hiking some distance back into the arroyos and onto the mesa. Always I had looked farther up toward the Cargo Muchachos with

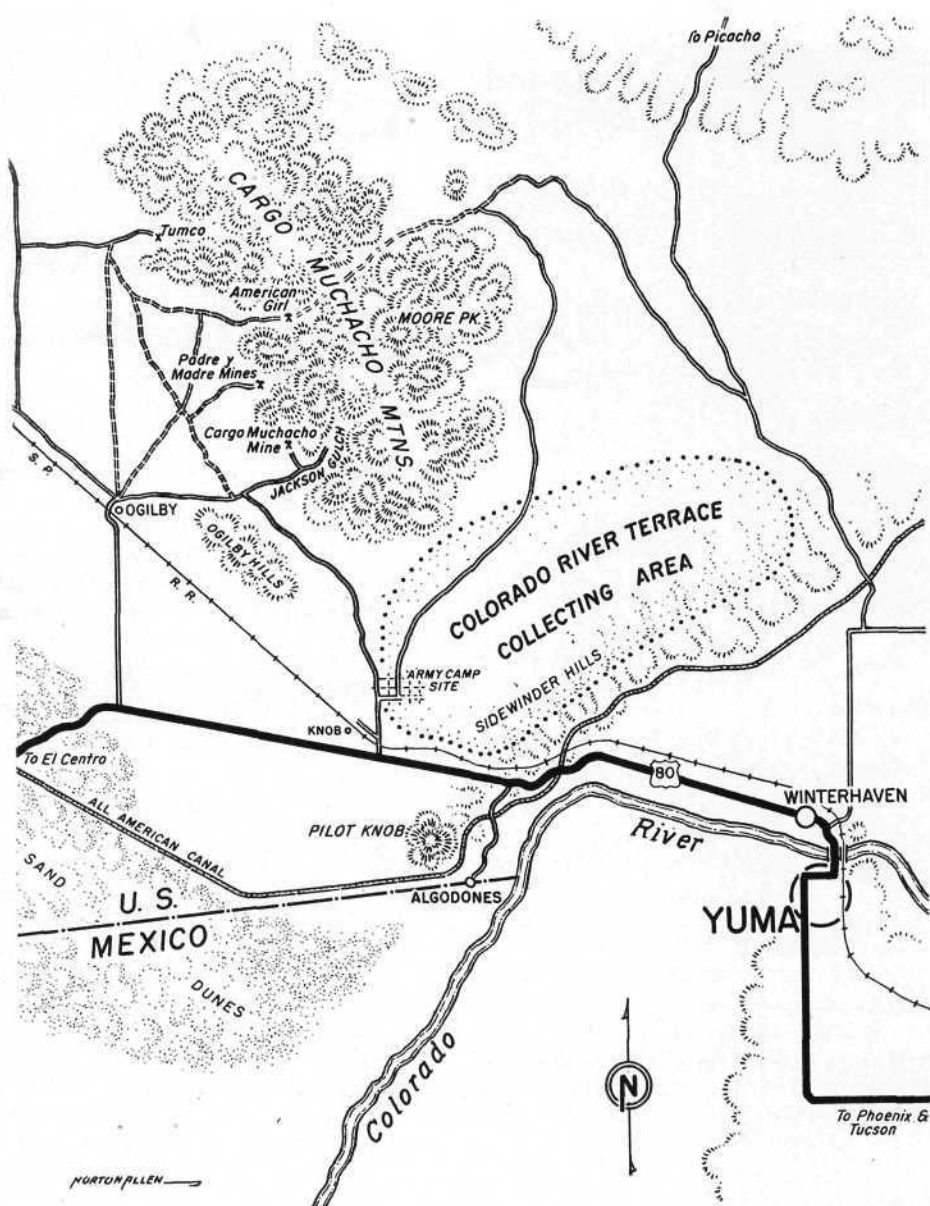
typical rockhound faith that the stones on more distant hills are mossier. This trip I decided to investigate a road which cut north from Highway 80 near Knob siding, hoping to drive far enough up the mesa to head the washes and thus be able to work my way down the gem-bearing tongues of land between them. The broad road left the highway exactly five miles east of the Ogilby turnoff, 4.9 miles west of Winterhaven.

It crossed the railroad tracks, continued about a mile then became a maze of scraped streets which marked the site of the Knob siding camp, where thousands of Patton's men sweated out their desert warfare training. The camp is gone now. Storm runoff has eroded the streets at every wash, and it is very easy for the unwary driver to become involved with sand. However one road, which has been marked with little "Jackson Flat" arrows by Prospector B. J. Recker, leads safely through the camp, up the mesa and around the southeastern shoulder of the Cargo Muchachos. From this road collectors can investigate most of the mesa area without trouble, if they will keep to the firm, pebble-paved flats.

In one of the washes near the army camp I came upon the first desert ironwoods, *Olneya tesota*, that I had seen

Small chunks of petrified wood such as aroused Blake's enthusiasm nearly a century ago may still be collected on the Sidewinder mesas.





in full bloom. The spectacle of these enormous pink-lavender bouquets would amply have repaid a visit in hotter weather than I experienced. Perhaps spectacle is not quite the right word—the display is beautiful and delicate. From a distance the ironwood is not as showy as its relative in the pea family, the smoke tree, whose almost purple blossoms stand out against the ash-green branches.

As a matter of fact, I did not notice the ironwood flowers at first. When I was at least 100 feet from one big tree, looking for gem pebbles on the wash slopes, I became conscious of a heavy hum which sounded more like a distant truck in an intermediate gear than any other comparable noise. Tracing the sound to its source, I suddenly realized that the ironwood, at least 20 feet high and with an equal limb spread, was one mass of flowers. The blooms were so thick that the branches and few new leaves were almost en-

tirely hidden and the light tinted flowers looked like a colored cloud against the sky.

And the drone I heard was made by thousands of desert bees, taking advantage of the brief flowering period to harvest rich stores of nectar. I would never have believed there possibly could be so many bees on the desert. Wherever I went that day, I found ironwoods blooming in the washes and every tree had a noisy halo of bees. Multiplying bees by trees, there must have been millions of the insects. I could distinguish two types. One was a greyish fellow, broad and stocky and larger than the domestic variety. The other was longer, thinner, and with an orangish-yellow body with dark rings. They zoomed on all sides of me but apparently did not resent my presence so long as I did not interfere with their work.

The grey bees were in the majority, and it was amusing to watch them

force their bulky bodies into the delicate sweetpea-like blossoms. Later C. S. Walker of Gold Rock ranch told me that he had seen these bees in their homes in the Cargo Muchachos. They live in crevices in the rocks, and Gold Rock ranch is one of their favorite watering places. It would be impossible to remove the honeycombs without blasting, Walker said, and then the honey would be of little use to the bees or the blaster. But I wonder what ironwood honey tastes like.

Two days later when I visited the same ironwoods, they had a bedraggled look and the ground was covered with fallen flowers which had turned a deeper blue as they died. There were fewer bees, but those remaining seemed to be working more frantically than ever. I think that the short blooming period of the ironwood and the apparent irregularity of its flowering date explains why so many desert visitors never have seen it in full flower. Most books on botany do not go into great detail about the tree. The majority of those who venture an opinion place the blooming date in June. These ironwoods in the washes of the Side-winders were at their best May 11.

Most botanists infer that the trees do not have many flowers. But the majority of those I saw were literally masses of the delicately-tinted, fragrant blossoms. In one wash I found two ironwoods in bloom while a third, between the others, was covered with new leaves but did not show a flower. The Walkers, who have lived near the Cargo Muchachos a long time, think the trees will skip a blooming season if they do not receive plenty of water the year before. It would appear that a closer study of the lives and habits of these beautiful desert trees would be a worthy project.

The old army camp seemed to be a place for odd noises. After I traced the buzzing to the bees, I heard a faint crackling noise. Following the sound I came to a pile of dead branches of palo verde trees, apparently lopped off during the army period. The noise seemed to come from within the branches. I broke some open, to find their interior a mass of yellow powder and circular burrows in which whitish grubs waved feebly in the unexpected brightness. Apparently they were the larva of some variety of the powder post beetle, going about their business of reducing dead timber to dust. Undoubtedly they play their part in Nature's process of keeping the desert neat. But what voracious little creatures they must be when you can hear them chomping their wooden rations 15 feet away!

Transferring my attention from wild life to the shining rocks of the mesa, I ranged for several miles in all directions across the pebble pavement. Toward the Cargo Muchachos this plain, made principally of water-worn rock fragments, is gently rolling with shallow drainage-ways. Down toward the highway the washes become deep sand-floored gashes with large trees and steep walls. Layers of pebbles are eroding from the walls. The rocks seem to vary in size and in the percentage of cutting material they contain. But almost everywhere it is possible to find a few specimens—moss agate, jasper, opalite, agates, bits of carnelian, fossils—some replaced by stone which will polish—and varieties of petrified wood.

This is a field in which the prospector's hammer is not to be scorned. With the exception of the petrified wood, which can be recognized by shape and grain, it is almost impossible to determine the color, kind or quality of a pebble from its exterior. Most have been worn fairly smooth by water and all those on the surface have been varnished a shining dark brown by water, sun and manganese. The hunter learns to recognize a few types. But the number of rocks that look alike is large and the percentage of gem stones small and a gentle chipping with a hammer often seems the only solution.

I have seen stones cut from Sidewinder material that will match anything from any collecting area in the West. At least one piece of wood partially replaced with precious opal



M. L. Allen at his cabin near the old Cargo Muchacho mine. He rediscovered the Padre y Madre mine.

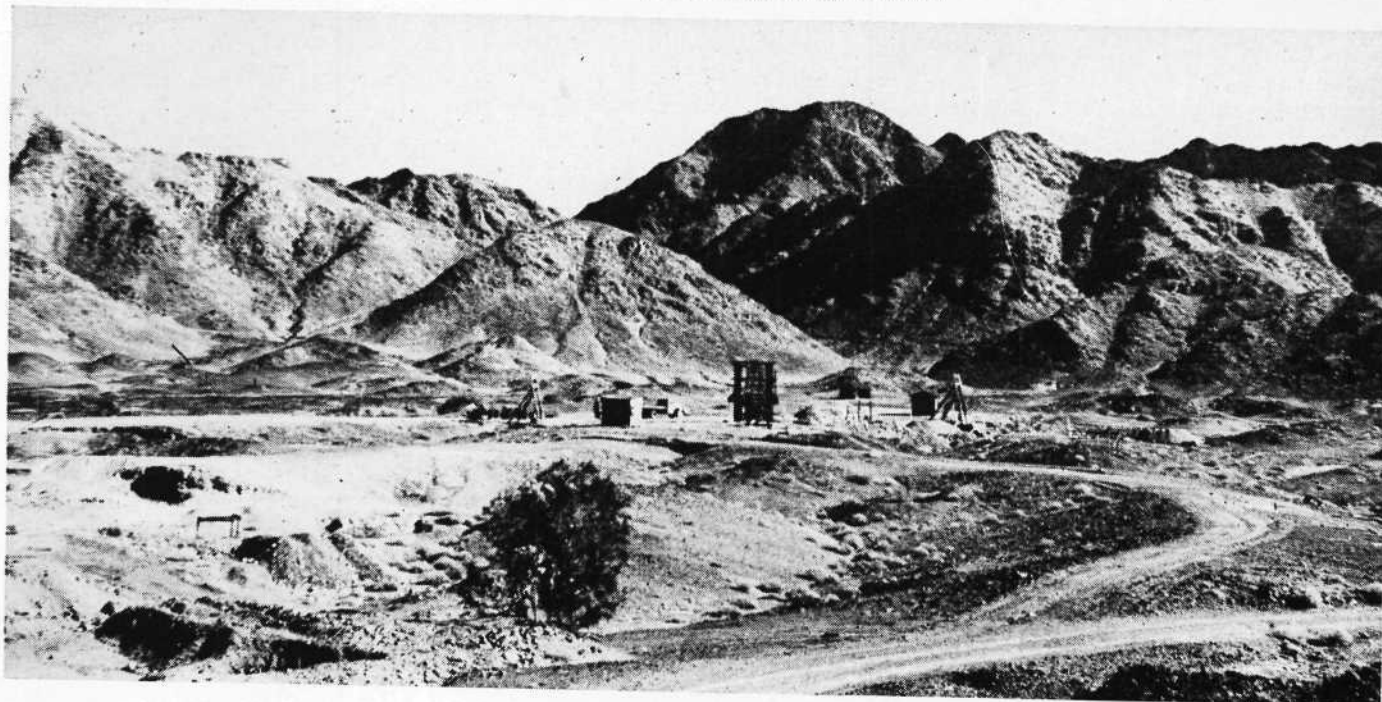
was found there. Where does it come from—all this variety of the Sidewinders? Well, your guess should be as good as that of anyone else. That red, yellow and lavender jasper appears identical with material found on Utah's San Rafael swell—and perhaps it did come from there. Those fossils—perhaps they were torn from the depths of the Grand Canyon. The wood—there are many varieties. Arizona is represented, and certainly Nevada.

For the Sidewinders might be called the kitchen-midden of the Colorado river. Their rocks are the hardy survivors of a long, rough ride. Through millions of years the sweepings of the West have been shoved, ground and rolled to this spot by the thundering storm waters of the Colorado to be dropped before the river entered the Gulf of California. And while it may be true that a rolling stone gathers no moss, a rock which has rolled and washed as far as the river terraces of the Sidewinder hills certainly must be tough and hard. Those two qualities can make for good polishing stones.

Most regular visitors to the Sidewinders have their own favorite hunting grounds. The easiest searching areas are along the slopes where the mesa breaks into the washes. Here some of the pebble layers below the surface have contributed their share, and rocks are easier to identify without their desert varnish. But I found good hunting on the flats and along the edges of shallow drainage lines. These areas apparently have not been investigated so closely, perhaps because there are not so many rocks showing and the average size seems smaller. I found some of the best pieces of wood by driving along the pebble pavement and watching the rocks as I passed.

One of the charms—and yet at times a frantic irritation—of collecting in the Sidewinders is the fact that the exquisite little pebble you discover may be the only one of its kind still in existence. It might have been transported a thousand miles to this spot, and the mountain from which it came eroded

Present workings of the Padre y Madre mines. Two tons of ore at the surface of the vein are said to have paid \$78,000 a ton.



away. And yet there might be another bigger piece of the same kind 10 feet or a mile away. You may never find its like again or you may repeat tomorrow or next year. That uncertainty keeps rockhounds coming back to the Sidewinders.

The Cargo Muchachos have more than rocks, bugs and botany to offer. One day or one trip cannot possibly exhaust their attractions. A branch of the road by which I entered the mesa, dividing at the army camp site, goes northwest between the Ogilby hills and the main mass of the Cargos. In this pass, a well-traveled auto trail heads almost east into Jackson gulch and to the Cargo Muchacho mine. The gulch placers and the oxidized surface ores of the Padre y Madre valley, still farther north, were first worked by Spaniards more than 150 years ago, according to publications of the California division of mines. The miners came from the settlement near the present site of Yuma which was destroyed by Chief Palma and his Yumans in 1781.

M. L. Allen told me about the rediscovery of the Padre y Madre vein. Allen lives in a cabin about half a mile

below the Cargo Muchacho mine. He has a claim with paying ore there and plans erection of a 10-ton mill in the fall. He had just closed operations for the summer when I visited him. There have been years when he worked right through, but a severe attack of rheumatism made him feel his 68 years and he admitted that, at the moment, he couldn't work quite as hard as he once did. He came to the Ogilby district 20 years ago for his health. Through personal investigation and contact with prospectors he has learned a great deal of its history.

Allen said that the Mexicans and Indians worked the Padre y Madre long ago, carrying out the ore in cowskin bags. When they went away the miners covered the rich vein. But runoff waters finally uncovered the ledge. Allen, then working with Kenneth Holmes, visited the valley when a placer miner was making his final cleanup at bed rock. Allen thought the bedrock looked good and asked if he could take a sample. The placer miner told him he could take it all if he wanted. From that surface discovery came two tons of ore which reputedly paid \$78,000 a ton. One piece.

Allen says, was country rock that had been shattered and the openings filled with seams of gold thicker than a knife blade.

The Cargo Muchacho mine apparently was the first one in the district worked on a large scale. The name Cargo Muchacho, which can be translated "Loaded Boy," reportedly was given to the area sometime after the Mexican revolution when children of the Mexican miners placering the canyons played prospectors like their fathers and came home with shirts loaded with rich gold ore.

The mine is said to have been operated profitably for many years during the last century. But it was a ghost camp by 1905 and today big tailing piles are the only reminders of the early days.

Allen believes the Cargo Muchacho is going to be a bigger mine than ever. The veins, he explained, are "stratified." The developers of the mine thought they were going in on the bottom vein, but there were others below which they had not found. Kenneth Holmes of Holmes and Nicholson has been blocking out low grade ore in the mine. He cut through the footwall

Motorists may drive over the pebble-paved mesas without difficulty—but should beware of the arroyos.



of the old ledge, Allen says, and hit two rich veins, one seven feet wide, one five. Assays have shown up to a reported \$97 a ton. There is talk of big milling operations this winter.

If the big strike materializes, it may mean another rush of prospectors. But whether or not gold brings new boom times to the Cargo Muchachos, the old mountains offer unquestioned attrac-

tions to those who like scenery, history and a few fine rocks to collect.

Visitors to the Sidewinder hills and mesa today will not find the scene greatly changed from the description Blake gave nearly 100 years ago. The Cargo Muchachos still shimmer, red-brown, purple and blue, unmarked on the mesa side by man's diggings. The flats still stretch, pebble covered, to the mountain slopes. But the flats no longer are unmarked. They are scarred and torn and crisscrossed by tracks and roads of army vehicles — half tracks, tanks, cannon.

And these old army roads are perfect booby-traps for rockhounds. They look so broad, so well-traveled—so important, in fact—that it is obvious they must be the main roads to somewhere.

Then, when the hopeful rockhound has followed them into a bad spot—sandy wash or gulch or mountain side—they suddenly disintegrate and the unfortunate who does not have tractor treads finds himself staring at isolated trails which lead up banks or plunge off cliffs at impossible angles.

Collectors in the Sidewinders north of Highway 80 should not enter the washes with the idea of following them down to the highway. They will find a railroad embankment blocking their progress just north of the pavement, and they will have to return the way they came. This may prove very difficult unless they have a short wheel-base jeep or—better still—follow William Blake's procedure and ride a mule.

Hard Rock Shorty of Death Valley



The loungers on the porch of the Inferno store watched the tow-car pass in a cloud of dust.

"Huh!" exclaimed Hard Rock Shorty. "Bet somebody's stuck on that Eight Ball crick road. Lot's o' quick sand up that way.

"Yu can't always tell about that quick sand. Some folks think wet sand is the only kind that's quick. But that dry sand up in Eight Ball is jest as bad. When the car drops down to the runnin' boards that's quicksand, wet or dry.

"Navigatin' that Eight Ball road is jest like navigatin' the ol' Missouri river — you gotta know yer channels t' get through it.

"Wunst I see a feller sinkin' down in that dry sand. He was clear in to his chin, and hollerin' like bloody-murder. I throwed him a piece of pipe to breath through till I could git help. But it wasn't necessary. One of the whirlin' dust devils came along jest then—a big wallop it was—and sucked him right outta that hole.

"Ol' Pisgah Bill found a trace o' gold in that sand wunst. He figgered the deeper he went the more gold there would be on account of the gold bein' heavier than the sand. So he got him a pair of snow shoes and set up a dry washer out there in the middle o' one of them shoals o' quicksand. But the next mornin' the dry washer was no where to be seen. After losin' three dry-wash outfits and a burro he done gave it up."

TRUE OR FALSE

This month's test of your desert knowledge covers the fields of history, geography, mineralogy, botany, Indian life and literature. If you get over 15 correct answers you are a versatile student. Ten is an average score. Twelve to 15 is good. Only an exceptional student answers 18 correctly. The answers are on page 31.

- 1—Rainfall is unknown in many parts of the Great American Desert. True..... False.....
- 2—A National Monument may be set aside by presidential proclamation. True..... False.....
- 3—*Hosteel* is a Navajo term, being approximately the equivalent of "Mister" in English. True..... False.....
- 4—Ores of copper may be red, blue, green, grey or black in color. True..... False.....
- 5—Death Valley's Ubehebe crater has erupted within the memory of living people. True..... False.....
- 6—Native palm trees of the Colorado desert will send their roots to great depths for water. True..... False.....
- 7—The northern portion of the Grand Canyon national park lies in Utah. True..... False.....
- 8—Chief industry of the White Mountain Apaches of Arizona is weaving. True..... False.....
- 9—The blossom of datura, or "desert Jimson" is red. True..... False.....
- 10—Nevada was admitted to statehood before Utah. True..... False.....
- 11—The late Henry Chee Dodge was the last war chief of the Hopi Indians. True..... False.....
- 12—The sidewinder rattlesnake is generally found among rocky ledges and mountains. True..... False.....
- 13—Halite is the mineral name of salt. True..... False.....
- 14—Yuma is closer to the Mexican boundary than Tucson. True..... False.....
- 15—The Great White Throne is a landmark in Bryce Canyon national park. True..... False.....
- 16—The book *Campfires on Desert and Lava* tells about the lava fields of New Mexico. True..... False.....
- 17—Indian traders must be licensed by the U. S. Department of Interior before they can operate on the Navajo reservation. True..... False.....
- 18—Nevada is nicknamed "The Sagebrush State." True..... False.....
- 19—One end of Davis dam is in Arizona and the other in Nevada. True..... False.....
- 20—The Grand Falls of the Little Colorado river is in Arizona. True..... False.....

LETTERS...

It's a Big Desert...

Van Nuys, California

Dear Desert:

I sure like to read Desert Magazine, but I get fed up with Arizona desert and Colorado. Let's hear about our great California desert. And thanks for letting me get this gripe off my chest.

WILLARD ERBECK

The other day a loyal Arizonan accused us of giving too much space to California. So — we'll probably just keep on as we have been doing—covering the Great American Desert which includes Arizona, New Mexico, Nevada, Utah and the desert portion of California as best we can, and wishing we could give more space to all of 'em.

—Editor

Honey Bees—and the Law...

Chula Vista, California

Dear Desert:

Am glad some red-blooded tax payers have at last taken up arms against the nuisance maintained at the state borders under the guise of agricultural inspection.

One day last year I had occasion to go through Yuma on a prospecting trip. The Arizona inspector would not permit me to pass through with a jar of honey in my grub box. I guess they figure a rockhound has no right to eat honey on his flapjacks.

While resting one day in the shade of a mesquite tree on the bank of the Colorado I noticed bees gathering nectar, and—horror of horrors, those bees were making a beeline for the other side of the river as soon as they got loaded up. A law-breaker, every one of them.

F. A. MARKLEY

Wildlife at Lake Havasu...

Whittier, California

Dear Desert:

The valuable article on Colorado river otter in the August issue I have read with interest.

During the latter part of the construction period of Metropolitan Water district aqueduct and for several years following, I lived in Gene camp, a short distance above Parker dam. I was there when the gates were closed and Lake Havasu filled.

At that time the cattle ranges and miles of brush covered desert were submerged. I made many long hikes along the west shore as the water was rising. Early one morning, along the road above the intake pumping plant I saw an animal I believe to have been an otter. It was only a fleeting glimpse and I cannot be sure.

There was much wildlife in evidence during that period. The rising waters drove the coyotes, foxes, swifts, also skunks, badgers and possums from their homes in the river bottom.

Beavers are increasing in that area, and that is the only place I ever saw a lake-traveling rattlesnake. I am confident a competent observer who would go on foot the 16 miles between the Bill Williams river and the Manganese works on the east shore of the lake would find traces of otter.

That is a very isolated region. Many wild burros and deer may be seen in season. The shore is low and rolling, there are clay banks, sandy beaches and bars much more suited to otter than the west shore.

PAUL J. LINSLEY

Wild Burros, Sheep and Otter...

Picacho, California

Dear Desert:

In the July issue of Desert, a news item from Boulder City, stated that in the Lake Mead area wild burros were competing with big horn sheep for forage and water.

The shore line of Lake Mead is several hundred miles in extent. It easily is the biggest waterhole in the southwestern desert. If it is true that the bighorn sheep and wild burros have "ganged up" around this pond and are battling each other for water and food, it is a situation without parallel on the desert.

But perhaps I got the wrong impression from the story. Most likely what actually happened was that around some isolated tank, far back from Lake Mead, where the feed temporarily was good, a congestion of sheep and burros occurred. I have witnessed such a situation many times. The localized rains that filled the waterhole also produced green feed in the area. The wild animals from far and wide came to the new feed. So long as any of the green feed remained—or until rains in some other section prompted them to leave—the animals would stay with the best pasture.

Such a temporary congestion in a desert region does not necessarily indicate an over-stocked range. Sooner or later more rains come, then the animals scatter out over a vast country and you seldom find more than three or four head in a place.

The desert bighorn sheep truly is a noble animal. No reasonable effort should be spared to preserve the few remaining bands of them. But, too, the wild burro is a likeable creature. They have proven their ability to survive in a not too friendly environment. If there is no organized campaign to exterminate them they will continue to roam the deserts of the Southwest for the balance of time.

Otter occasionally are seen along the section of Colorado river between Imperial dam and Blythe, California. I saw one near the mouth of Yuma wash not long ago. Fishermen have reported having seen an animal "big as a beaver but with a round tail." Fish carcasses, on tramped-down beds of cane or tules may be otter sign. My opinion is that within a dozen years otter again will be plentiful along Colorado river.

ED ROCHESTER

In Defense of the Inspectors...

Pasadena, California

Dear Desert:

I have been much amused as well as chagrined at the recent outburst from some of your subscribers on the subject of the border inspection.

I would like to give three cheers for F. B. Reese (August issue) who to my mind has written the only sensible letter to you on the question. Let others, who feel as he did, write to the proper authorities, (in this case the California Department of Agriculture), to find out the "raison d'être" instead of sounding off to a magazine which has no jurisdiction over the situation.

No wonder some of the inspectors develop an arrogant attitude if they meet with such mumbblings and grumbblings as some of the letters to you would indicate.

Personally, I am willing to give up a small part of my time and effort every few years or so to help keep agriculture pests such as the boll-weevil out of the hair of California growers.

MARY ALICE WAUGH

Call of the Desert Wilderness...

Banning, California

Dear Desert:

In rummaging through some old papers I came upon the enclosed eulogy of the desert—by an unknown author. It is written on the letterhead of Donnell's Desert Hotel at 29 Palms—which dates it about 20 years ago when we visited that charming family. It reads:

"THE DESERT! Mighty kingdom of the blazing sun—land of romance and adventure—a fascinating mystical realm where vagrant winds waft the perfume of scented sage over the creeping dunes. Countless years have fled, but few people have glimpsed the true soul of the desert. Once you really know it, no power on earth can keep you from it. Its magic spell will follow you to the ends of the earth and you will hear its call. When blue stars climb high above the panting crags and the roguish moon steals from out her nest behind the blue mountain range a gentle rustle floats on the cooling night breeze—the air is vibrant—night has come—and then the desert's children are at play."

If any of your readers recognize the passage and know the name of the author I will appreciate this information.

C. G. GILLESPIE

New Mexico's Highest Peak...

Banning, California

My dear Randall:

In the current D M there looks like a bit of confusion in the note about New Mexico's new high spot. Wheeler peak, 13,151, is touted above South Truchas by 51 feet—but we mustn't overlook North Truchas, which for years, and as recently as Dec. 14, 1937, was named by the U. S. Geological Survey as the tallest thing in New Mexico, with stature of 13,306. Or have later computations shorn North Truchas of her crowning glory?

TOM HUGHES

Friend Tom: The New Mexico State Tourist bureau reports: "About the only information the Geological Survey has to go on concerning the altitude of the Truchas peaks is a penciled notation in a copy of Bulletin 274 which says: 'North Peak 13,306, South Peak 13,140 and Truchas Peak 13,275.' This penciled notation has the wrong altitude for each of the three Truchas peaks, so the survey men will soon be scouring the area with altimeter, transit and all the necessary equipment to correct elevations and altitudes."

—R. H.

This Was an Exchange Deal...

Monrovia, California

Dear Desert:

Isn't there some error in your reference to the jackrabbit homesteaders taking up government land in Section 36 in the Coachella valley area of California? By act of congress sections 16 and 36 in every township are school lands, granted to the state, and available only by purchase from the state.

LEWIS L. BUCK

Answering the question raised by Reader Buck, Paul Witmer, acting manager of the Bureau of Land Management in Los Angeles has written Desert's staff as follows: "When Township 5S, Range 5E was surveyed, Section 36 was withdrawn from the San Jacinto Forest reserve. The State then selected land in another township. Later Section 36 was restored to entry."

DESERT MOONRISE

By WHEELER FORD NEWMAN
San Pedro, California

A friend goes with me to a quiet land
Where we shall wait in silence for the dusk,
When full the desert moon ascends the sky
And spreads its glow until the rippled dunes
Stir in their shadows and lie still again,
Entangled and supine,

Then guardedly
I shall put subtle questions to my friend
Until at last it is revealed to me
The forms he sees, the sounds he dimly
hears,
The dreams that stir and grope and struggle
free
To walk the dunes, enchanted.

Thus shall I
Be able to arrive at mine own state
And weigh and judge and at the last decide
Beyond all doubt if I retain the gift
To hear and feel and see the mystic things—
Music and forms eternal—that evolve
Out of vast shadows as the desert moon,
Full to a perfect roundness, sweeps the sky
Clear of all stars except a chosen few,
And on the captive dunes lays such a spell
That life becomes an unimportant phase,
But Life Beyond, a vast reality.

MOJAVE MEADOWS

By CHESNEY W. CARVER
Pasadena, California

Beyond a green expanse,
The lofty mountains stand
Above great cottonwoods
That bound the meadow land.

Old Baldy, robed in white
That winter tempests bring,
Exalts the loveliness
Of each returning spring.

To lush and smiling fields
Mojave's waters flow,
But pass the barren sands
In secret depths below.

Near by, bleak mesas yearn
For rest from parching heat,
And yet endure to guard
The meadows at their feet.

Where herds of cattle graze
In sleek and vast content,
Here peace is pledged anew
As blissful hours are spent.

THE DESERT

By ENOLA CHAMBERLIN
Los Alamitos, California

It is a place of cactus, rock and sage;
Of violent rain, and heat and bitter cold;
Of winds that tear the land as if in rage;
Of peaceful dawns, of sunsets red and bold.

It is a place of distance and of pain;
Of dried up springs; of short and sullen
shade;
Of death where a mirage had left no stain,
When closeness caused its trees and lakes to
fade.

It is a place where man must work and fight
To tear a living from its grudging breast;
It is a place of passions hot and white;
A place that is a promise and a quest.

It is a place where white stars lonely brood
Beneath a sky far-reaching and immense;
It is a place of solemn solitude—
And yet I love it with a love intense.



Photo by George M. Ames

Moontide

By LOUISA SPRENGER AMES
Coachella Valley, California

Wash me in desert moonlight
That lies on the breast of the sea,
And all of the dusty worries
Will slip from the heart of me.
Here in the silvered silence
Lulled by the swish of the sea
There is cleansing and peace and wisdom
Enough for the world and me.

GRAIN OF SAND

By PAUL WILHELM
Thousand Palms, California

Who seeks perfection in this land
Need not search beyond the sand,
The mystery of this desert land
Is held within a grain of sand.

To The Young

By TANYA SOUTH

Do not despair, oh, weeping heart,
At best life is so short.
Too soon shall fate new things impart.
Where is your inner fort
Of strength and courage and of Truth
To breast your grief and doubt?
The weaker only seek the smooth.
Then drive your sorrows out!
Whate'er they are, death shall erase
Too soon, too soon, life's priceless
place.
Then carry on! And let nor time,
Nor fate, nor grief, nor hate and
grime,
Keep you from progress, and the right
To wrest from life a clearer light.

HEART OF THE DESERT

By MILDRED C. TALLANT
Glendale, California

Like a wounded heart,
Low-pulsed, and wise through pain,
The desert shrinks from the acrid smart
Of garish worldliness and gain.
Sun-shriven sands, in weathered sheets with-
hold
From view, its jasper fire and virgin gold.

Like a valiant heart,
It lays bright paths for spring,
And draws vermilion hues apart
From evening's cloud-spun folds, to fling
A crimson cape across its cooling breast,
Aware that ardor reaps the foil of rest.

Like a burning heart
That finds no sure response,
The desert practices the subtle art
Of feigning joy. Lone bluffs ensconce
With sun-gleaned bars of copper fused with
rose,
Their saffron slopes that wane to gray
repose.

Like a pulsing heart,
It knows the breath of stars.
It touches with a poignant dart,
And purifies all thought that mars
The mind. And he who hears its melic
voice,
Will make its test and teaching his, through
choice.

DESERT JOURNEY

By ANNA M. PRIESTLEY
San Diego, California

Life seldom offers such a perfect day
As that on which good friends were desert-
bound.
Over the magic mountains and away
The highway, bordered with wild lilac,
wound.
There was a meadow, spread with cloth of
gold,
Patterned with poppies by a gracious sun;
And lupins, with the power to catch and
hold
The sky's own blue, said summer was begun.

Then down we dropped to meet the waste
of sand
That has repelled invasion through the
years;
A brooding silence wraps this hostile land,
Safeguarded by a host of cruel spears.
Yet, even in this harsh, unfriendly place,
Frail beauty still presumes to show its face.

DESERT CONTENTMENT

By KATHRYN AINSWORTH GROVER
Alhambra, California

Northwest lie the Last Chance mountains,
To the south runs Cottonwood Creek,
With my shack unseen,
Tucked down between,
Of sun-cooked pumice brick.

There's the low soft breeze of the morning,
And the hot-rock sun of noon,
While a tumbleweed
That the wind has freed
Dances by to my fiddle tune.

On a twilight summer evening,
Never miss those friendly chats,
In my stocking feet
My world's complete
I'm the King of Sagebrush Flats.

HERE AND THERE . . . on the Desert

ARIZONA

Father Anselm Leaves . . .

ST. MICHAELS—Navajo gathered from Ft. Defiance, Window Rock, Sawmill, Hunters Point and Oak Springs late in July to say goodbye to Rev. Anselm Sippel, O. F. M., superior of St. Michaels Mission and friend of The People during 17 years of service among them. Before the Franciscan left for new work at Louisville, Kentucky, Henry Talliman presented him with a large Navajo rug in the name of the tribe. A great barbecue of mutton was held in the mission yard, and the Navajo performed chants around a huge fire.—*Gallup Independent*.

Water for the Medicine Men . . .

MOENCOPI—When 10 Hopi children returned to the reservation after a two week vacation in Southern California, the special treasures which they brought back were bottles of sea water. The water will be used by medicine men in tribal ceremonies. The 10 Hopis and 10 Navajo children were guests of the American Friends Service committee. None of them had seen the ocean before, but most were finally persuaded to go into the surf, according to Mrs. Guy Dickerson who accompanied them.—*Cocino Sun*.

Apaches Plan Budget . . .

WHITERIVER — The White Mountain tribal council has worked out its own annual budget for the first time this year, with a total expenditure of \$147,845 to be drawn from tribal funds. Previously, the council had submitted individual requests, each for a specific purpose. Before a tribal constitution was adopted in 1938, all income was deposited in the treasury and could not be expended except by act of Congress. Since adoption, the council collects its own income, deposits it in an Arizona bank and draws its own funds.—*Tucson Citizen*.

New Speed System Set . . .

YUMA—The state highway commission has set a schedule of speed limits between Yuma and Gila Bend based for the first time on what department engineers have determined are safe speeds. Top limits vary between 45 miles per hour to 60 by day and 50 by night with two stretches where drivers are limited to "reasonable and prudent" speed, which means more than 60 miles an hour if there is little traffic and perfect conditions, less under less favorable conditions. Similar zoning will be established on all highways.—*Yuma Sun*.

Park Service Takes Hance Ranch . . .

GRAND CANYON — Historic Hance ranch, last privately owned land on the East Rim drive, has been purchased by the national park service from Mrs. Eva Buggelin Moss, long-time Grand Canyon resident. The 160 acre ranch was taken up by Captain John Hance in 1883. Hance operated the first tourist camp and first tourist guide service into the canyon. His log cabin, first to be built on the rim of Grand Canyon, still stands and the park service expects to preserve it.—*Gallup Independent*.

Courthouse to Hotel . . .

TOMBSTONE—In a transaction reportedly involving \$750,000, the old Tombstone court house was leased to J. E. Goldman of New York for 30 years. W. L. Lombardi and Albert Kazal, who leased the building, had been working to convert it to a 60 room hotel. Goldman announced the hotel would be ready for guests by January 1. Plans call for use of the old jail house as a dining room, and the courtyard where five men were hanged at once in the early days as an outside lounge for guests.—*Tombstone Epitaph*.

Teachers for the Navajo . . .

WINDOW ROCK — George A. Boyce, director of Navajo education, wants teachers for "the most challenging educational service in the United States." All locations are isolated, mostly two-teacher schools deep in the Indian reservation, all near trading

posts. Persons with two years of college may be appointed for the year. Pay is \$2498 per year including one month vacation, two weeks cumulative sick leave, and one month educational leave subject to approval. Many of the children for whom schools are available will receive no education unless vacancies are filled.—*Holbrook Tribune-News*.

Huachuca to Game Commission . . .

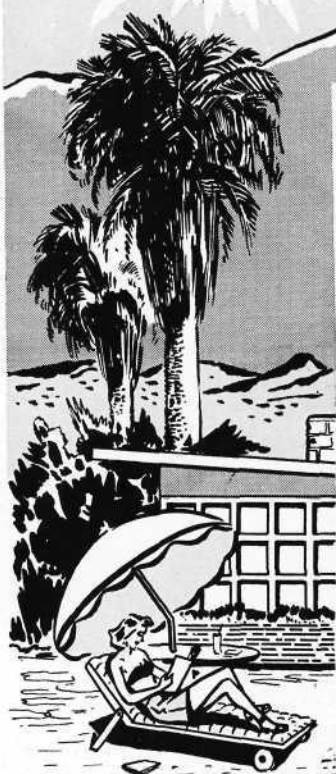
FT. HUACHUCA—The War Assets administration has accepted an application from the Arizona game and fish commission for this old frontier army post southwest of Tombstone. The commission will establish the state game farm, now located at Pima, at Huachuca and the range at the post will be stocked with turkey and antelope. A public camp ground is included in plans and fish rearing ponds may be built and stocked.—*San Pedro Valley News*.

Flood in Bright Angel . . .

BRIGHT ANGEL LODGE—The North Rim of the Grand Canyon was without electric power, water and sewage after a violent storm on August 6 sent water cascading down Bright Angel canyon. The flood

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

PREHISTORIC INDIAN RELICS—Ten arrows \$1.00. State wants. Sample arrow 10c. Kenneth Mayhall, Belmont, Miss.

SELLING my entire collection: Coins, Cartridges, Indian Relics, South Sea Souvenirs, Shells, Minerals, Fossils, Rocks and many other items—PRICED RIGHT. Write or come and see my collection. No calls Sunday. Rev. David Champion, 11775 Idaho Ave., West Los Angeles 25, Calif.

RARE INDIAN RELICS—Dance masks, rattles, necklaces, concha belts, costumes, war bonnets, blankets, pipes, tomahawks, spears, arrowheads, Yumas, Folsoms, also antique flintlock and percussion guns, swords, daggers, mounted Texas longhorns. Send want list for quotation. I also buy and exchange. P. L. Summers, Stamford, Texas.

BOOKS—MAGAZINES

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

"GOLD PANNING FOR PROFIT" Healthy, profitable occupation. Beginners' big illustrated instruction book, \$1.00. Desert Jim, 627 Lillian, Stockton, California.

USED BOOKS priced by year, 29c-98c (1942-1947). Free booklist. Ireland Book and Library Service, 549 E. Poppyfields Drive, Altadena, California.

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AMETHYST MINE FOR SALE—For price of assessment work done and cost of machine for taking out dirt. Box 403, Windsor, Colo.

SALE OR LEASE—Black Mammoth Gold Mine, Manhattan, Nevada, owned by the late Dr. H. G. Clinton, in operation before the war. Adjoins Gold Metals mine which is in operation. Other operating mines nearby. 5 claims, 2 furnished houses, 4 cabins, blacksmith shop, garage. Only mining men with capital need answer. Would consider income property in trade if in California, Nevada or Arizona. Inez Lewis, Manhattan, Nevada.

MISCELLANEOUS

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, Calif.

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 OF DESERT MAGAZINE, published monthly at Palm Desert, California, for October, 1948.

State of California, County of Riverside, ss. Before me, a notary public in and for the State and county aforesaid, personally appeared Randall Henderson, who, having been duly sworn according to law, deposes and says that he is the Editor of the Desert Magazine and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily, weekly, semi-weekly or tri-weekly newspaper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, as amended by the acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher Randall Henderson, Palm Desert, California.

Editor, same.

Managing editor, same.

Business manager, Bess Stacy, Palm Desert, California.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

Desert Press Inc., Palm Desert, Calif.; Lena Clements, Palm Desert, Calif.; Randall Henderson, Palm Desert, Calif.; Clifford W. Henderson, Palm Desert, Calif.; Vera L. Henderson, Los Angeles, Calif.; Evonne Riddell, Los Angeles, Calif.; Nina Paul Shumway, Indio, Calif.; Bess Stacy, Palm Desert, Calif.; Lucile Weight, Palm Desert, Calif.; Phillip T. Henderson, Pasadena, Calif.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

Bank of America, Indio, California.

4. That the two paragraphs above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

RANDALL HENDERSON

(Signature of editor, publisher, business manager, or owner).

Sworn to and subscribed before me this 28th day of August, 1948.

(Seal)

AGNES WHITTLESEY.

My commission expires February 8, 1950.

washed out 240 feet of the penstock of the Utah Parks company hydroelectric plant. The lodge and cafeteria were closed to the public until repairs could be made on the plant. Kaibab trail from the North Rim and Bright Angel trail from the South Rim were washed out.—*Gallup Independent*.

Yuma Was Hotter . . .

YUMA—Yuma "won" in a "drip derby" held August 17 to determine whether it, Tucson or Phoenix was Arizona's hottest city. A block of ice weighing 100 pounds was placed in a prominent position in the direct sunlight in each of the three cities at 7:30 a. m. At 7:02 p. m. Yuma's block had melted completely. When the race was officially over at 8:15 p. m., Phoenix had one-half pound left and Tucson five pounds four ounces. Official high temperatures for the day were, Yuma 110, Phoenix 109, Tucson 103 degrees.—*Yuma Sun*.

One of the first buildings erected on the Sells Papago Indian reservation, the Huish trading post built at the turn of the century, was completely destroyed by fire on July 26.

Tiffany Construction company of Phoenix has submitted the low bid, \$49,747, for improving 30 miles of the highway south toward Yuma from Quartzsite.

After his new automobile was destroyed in a flash flood, Orval Wise, Bumble Bee miner, bought a burro saying he needed transportation he could depend upon.

CALIFORNIA

Another Lost Ledge . . .

RIDGECREST — When the weather cools, Angus C. Fox of Grass Valley is going to look for a lost ledge of rose quartz and wire gold in Death Valley. Fox has a map given to him by Gomer Richards, grandson of the Gomer Richards who found the ledge while freighting between Salt Lake and Los Angeles in the early days. Richards, a Mormon, showed samples to Brigham Young who advised him that attempts to mine it would probably bring misery and death. Richards did not look for the ledge again, but he gave the map and samples to his son.—*Randsburg Times*.

Shrimp from Mono . . .

MONO LAKE — Harvesting of Mono Lake shrimp is under way. Wallis McPherson averages 1200 pounds per day and is under contract to deliver the shrimp to the Hot Creek hatchery where they are used as a choice trout food. The shrimp are so small that they average only a half-inch in length and McPherson harvests them by

locating the schools, running them down with his launch and capturing them with a fine mesh plastic net.—*Randsburg Times*.

Rockets Started There . . .

BARSTOW—Goldstone lake, once a desert mining camp 35 miles north of Barstow, has been revealed as the site of early military rocket experimentation in World War II. Here Dr. C. Lauritsen, Dr. Emory L. Ellis and Commander J. H. Hearn were the first to develop, test and fire the deadly retro rocket, used by aircraft against submarines. When there was not enough room at the lake for expanding activities, the project was moved to what is now NOTS at Inyokern.—*Barstow Printer-Review*.

Explore Tramway Tower Sites . . .

PALM SPRINGS—Exploratory work beneath the surface of the ten sites where giant steel towers of the San Jacinto tramway will be erected will start soon. Gordon Bannerman, chief bridge and tramway engineer for American Steel and Wire corporation, who was in charge of surveying the tramway route, will supervise the new work. When the subsurface examination is complete the contractors will have information on which to base bids for the construction jobs.—*Palm Springs Desert Sun*.

Easy Mountaineering? . . .

BISHOP — Pilot Howard Stevens of Bishop landed a borrowed plane on a hogback at 12,100 feet elevation in the White mountains early in July. He had long regarded the ridge as a possible landing spot and after circling for 30 minutes decided to try it. He landed without a scratch but when taking off, found he could not generate enough power to taxi down the hogback. So he flew off the edge of a sharp canyon, damaging the tail wheel in the process. He claims it is an easy way to travel to the mountains and plans to try again in the fall.—*Inyo Register*.

The year to date has been the driest during the past 13 years in the Joshua Tree national monument, according to figures of the national park service. By August only .06 inches of rain had fallen.

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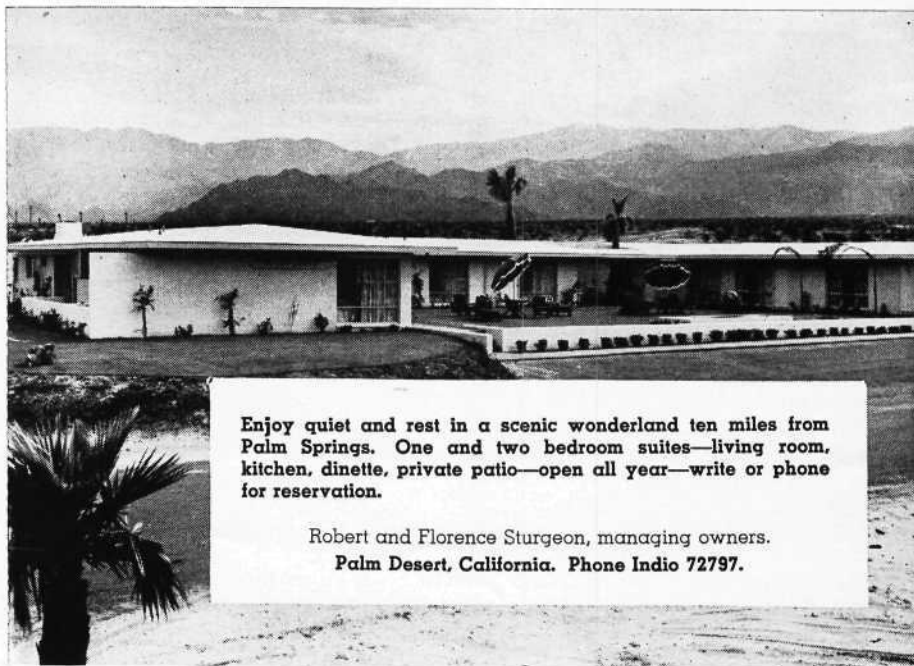
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Scotty Was Bitten . . .

DEATH VALLEY—Death Valley Scotty, who says he had been bitten four or five times, was struck on the thumb by a sidewinder while repairing a leaky water line

near his ranch. "Lots of darn fool ring-tails start crying and hollering and jump around," 76-year-old Scotty declared. "I just reached into my pocket, pulled out the bottle of serum I carry with me, detached the razor blade I kept tied to it and slashed the wound. I doused it with the solution and laid down in the rear of my station wagon." Scotty's sore thumb is said to be healing rapidly.—*Inyo Register*.

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THE *Desert* MAGAZINE
Palm Desert, Calif.

Cement Plant Blocked . . .

PALM SPRINGS—When Palm Springs protested that the dust from a proposed cement plant would ruin the resort city, the Riverside county board of supervisors voted a zoning ordinance which outlawed heavy industry in 66 square miles of desert. The four to one vote to make the section a residential and recreational area was intended to block construction of the \$10,000,000 cement plant which S. A. Guiberson, jr., planned at the edge of San Geronimo pass, 4½ miles from Palm Springs.—*Palm Springs Desert Sun*.

Remove Desert Duds . . .

BLYTHE — A bomb disposal crew of army engineers and civilian searchers is completing a cleanup of the desert areas south of Blythe and in the Yuma section,

finding and disposing of unexploded shells, bombs and practice mines. Captain Donovan, in charge, warned that considerable material remained to be located. Finders of strange articles on the desert should not touch them, he said, but notify the army at once.—*Palo Verde Valley Times*.

No Hunting in Mojave Area . . .

BARSTOW — Warden Leo Rossier of Essex has revealed that regulation 712 has closed 10,000 square miles of desert to hunting for five years. The area covered includes from Daggett-Yermo to the Nevada-Arizona state line and between U. S. Highways 91 and 66. The state recently has stocked the area—especially the Providence and New York mountains—with deer, pheasants and other wild life.—*Barstow Printer-Review*.

New Well Near Mojave . . .

MOJAVE—A popular Mojave theory, that dikes blocked any large underground streams from reaching the area, appeared to have been disproved by a new well five miles from Mojave on the Barstow road. After the drill entered granite at 367 feet, water rushed into the pipe up to the 150-foot level, it was reported. A diesel pump was installed and is producing 1000 gallons per minute with no let-up in volume.—*Mojave Desert News*.

Sixty Navajo Indians were brought from Window Rock to Cucamonga, California, to work in the vineyards and citrus orchards. If they like the work and are satisfactory, a permanent labor bank will be established.

Engineers were puzzling over the cause of large cracks which opened in western Coachella valley following a recent flood. An old fault line was suspected, but the cracks might have been caused by land settling due to lowering of the water table, it was reported.

NEVADA

How Our Fathers Lived . . .

FALLON—Deputy Clerk and Treasurer Phil York, in the process of refiling court records which are dated as far back as 1903, found the following items on a store property list filed in 1908: 18 bottles of consumption cure, five bottles of hive syrup, two bottles of pain killer, 10 bottles of nature juice, 17 cans of gall cure, one package of horse medicine, nine bottles of catarrh cure and 11 bottles of cherry tonic.—*Fallon Standard*.

Gold Camp Lawyer Dies . . .

RENO—Judge John Adams Sanders, for 18 years a justice of the Nevada supreme court, died in Reno in August, age 82. Sanders established offices in Goldfield in 1904 and was one of the colorful group of mining men, lawyers, business men and promoters who boomed the camps of Goldfield, Tonopah, Rhyolite, Manhattan and Silver Peak. His speech, "The Prospector," given at the 1909 session of the American Mining congress still is quoted by mining men.—*Tonopah Times-Bonanza*.

Paved Road to Lehman Caves . . .

BAKER—The new oiled highway from Baker to Lehman Caves national monument was scheduled for dedication September 5 at the caves, with dancing, entertainment and a free trip through the underground caverns. Lehman Caves, previously reached only over rough roads, were dis-

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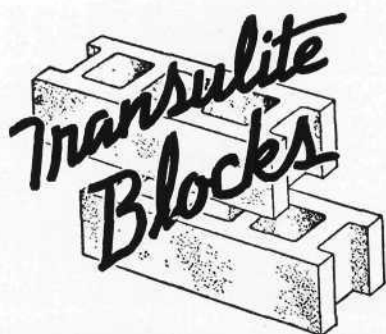
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covered about 1878 when a horse driven by Abe Lehman broke through the crust. They have no natural entrance, extend 1400 feet and go down 200 feet.—*Ely Record*.

Will Simplify Lake Mead Fishing ...

CARSON CITY — A bill to establish reciprocal recognition with Arizona for fishing licenses on Lake Mead and the Colorado river will be presented to the Nevada legislature in January. At present anglers fishing on the lake or river must have licenses from both states if they cross the state line. Supporters of the bill plan to urge a similar agreement between California and Nevada on Lake Tahoe.—*Humboldt Star*.

Sagehen Hunting Barred ...

CARSON CITY—There will be no sagehen hunting in the state of Nevada during 1948. Elko, Pershing, Lincoln and White Pine counties had set a tentative season for two Sundays in August, but further investigation of the state's dwindling sagehen population reportedly decided them to follow the action of other county game management boards and close their seasons for this year.—*Caliente Herald*.

The Rattler Carries a Punch ...

TONOPAH—How fatal is the bite of a rattlesnake? The debated question was revived with the death of a Hereford bull belonging to the Fallini brothers of Twin Springs. The big animal, weighing three-quarters of a ton, was struck by a medium-sized rattlesnake and died in a few minutes, so quickly that the bite did not have time to swell. Hot weather and the fact that the bull was moving was believed to have contributed to the rapid action of the poison.—*Tonopah Times-Bonanza*.

New Hours at Hoover Dam ...

BOULDER CITY—A new schedule of visiting hours went into effect at Hoover

dam August 16, according to C. P. Christensen, power director. Guided tours through the huge structure will be available from 8 a. m. to 5 p. m. daily, but the practice of allowing visitors to go through the dam until 9:30 p. m. has been discontinued.—*Needles Star*.

The Wheels Are Back ...

CARSON CITY—The brass canon which Captain John C. Fremont abandoned 104 years ago near Sonora pass on the California border, while on an exploring expedition, has been assembled again in the Nevada state museum in Carson City. The canon was found and taken to Glenbrook, Nevada, where the wheels were installed on a hay wagon. The canon was finally given to the museum but the wheels only rejoined it on August 20 when they were removed from their hiding place near Tahoe City, California.—*Salt Lake City Tribune*.

Drouth Evacuates Cattle ...

BEATTY—An extended drouth, aggravated by an unusually cold winter and a torrid summer, is forcing Beatty ranchers to evacuate their cattle to keep them from starving to death. Shipments have been made to Warm Springs, Nevada, and Cortez, Colorado, and only the ranchers who are able to irrigate their land have survived the drouth, called the worst in 30 years, without loss. Even Beatty's water supply has been affected and it has been necessary to open several new wells.—*Beatty Bulletin*.

Fire in Tuscarora ...

ELKO—Buildings in the silver camp of Tuscarora, 50 miles northwest of Elko, which have been landmarks since the boom days of the '70s and '80s, were destroyed August 4 in a fire caused by a defective chimney. The flames leveled four buildings and damaged a fifth before being brought under control. Among the buildings burned were the old Tuscarora express office and the No. 2 fire station.—*Pioche Record*.

Carson City Daily Appeal, Nevada's oldest daily newspaper, has been sold to George H. Payne.

NEW MEXICO

Thunder Over New Mexico ...

LAS CRUCES—In a boisterous interior department hearing, state land, highway and game protection officials, ranchers, cattlemen, sheepmen, miners and prospectors

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TRUE OR FALSE ANSWERS

Questions are on page 24

- 1—False. No part of the Great American Desert is without occasional rainfall.
- 2—True. 3—True. 4—True.
- 5—False. While Ubehebe is believed to have erupted within the last 1000 years, the date is unknown.
- 6—False. Native palm trees are evidence of water close to the surface.
- 7—False. Grand Canyon national park is entirely in Arizona.
- 8—False. The White Mountain Apaches derive most of their income from cattle.
- 9—False. The blossom of datura is white.
- 10—True.
- 11—False. Chee Dodge was a Navajo chief.
- 12—False. The sidewinder prefers sand dunes.
- 13—True. 14—True.
- 15—False. The Great White Throne is Zion national park.
- 16—False. Campfires on Desert and Lava is about the Pinacate region just south of the border in Sonora, Mexico.
- 17—True. 18—True. 19—True. 20—True.

COUNTY MAPS

For Schools, Hunters, Fishermen, Public Offices, and Travelers

CALIF.: with Twnshp., Rng., Sec., Mines, Roads, Trails, Streams, Lakes, R.R., Schools, Rngr. Sta., Elev., Nat. Forest, Pwr. Lines, Canals, Boundaries, etc.

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WORLD'S MINERALS

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united to blast army demands that the White Sands proving ground be expanded 1,500,000 acres. Interior department representatives returned to Washington to study the testimony. A decision by Interior Secretary Krug was expected within 60 days.—*Santa Fe New Mexican*.

Was He Billy the Kid? ...

RAMAH—Press stories that Billy the Kid is alive recalled the conviction of local residents that John Miller, a rancher who settled in the area in the '80s with his Mexican wife, was the notorious outlaw. Those who passed the Miller place at any time of night found him in the doorway, fully dressed and with his guns strapped on. A man known as Billy Meadows, himself suspected of using an alias, identified Miller as the Kid and then precipitously sold his ranch and left the country. When asked by neighbors, with whom he retained peaceful relations, if he were Billy, Miller's only retort was: "Billy the Kid will outlive some of you." Miller reportedly died in the Globe, Arizona, area in the '30s.—*Gallup Independent*.

Indians Can Vote ...

SANTA FE—A three-judge federal court has ruled invalid and void a section of the New Mexico constitution which bars "Indians not taxed" from voting, and issued a permanent injunction prohibiting enforcement of the constitutional provision. The decision gives New Mexico reservation and Pueblo Indians otherwise qualified the right to vote. The bureau of Indian affairs estimated that the ruling would affect 15,900

Indians in New Mexico and that a similar Arizona decision would add 25,500 voters to the rolls in that state.—*Santa Fe New Mexican*.

Old Post Changes Hands ...

MANUELITO—The Mike Kirk trading post, one of the oldest in the Navajo country, has been purchased by John Wall from John Kirk, jr., and Tom Kirk. The Manuelito store was opened in 1881 by S. E. Aldrich, who had just completed a hitch in the army at St. Johns. Mike Kirk took over the store 25 years ago and operated it until his death in 1942.—*Gallup Independent*.

Early Population Large ...

GRANTS—A brief survey of an area south of Grants by Ed Dittert and Ray Ruppe, University of New Mexico student anthropologists, uncovered 52 ruins of Indian villages on 3½ sections of land. The number of ruins indicated, it was said, that the Indian population of New Mexico between 1250 and 1350 A. D. was as great as the total population of the state today.—*Gallup Independent*.

Returns to Pueblo Agency ...

ALBUQUERQUE—Former Indian Commissioner William A. Brophy has returned to his old job as special attorney for the United Pueblos agency in Albuquerque. Brophy was commissioner from 1945 until June, 1948, when he resigned because of his health. From 1933 to 1942 the interior department retained him as legal adviser to Southwest Indians. William Zimmerman, jr., is acting commissioner of Indian affairs.—*Santa Fe New Mexican*.

DESERT CLOSE-UPS

Oren Arnold tells the story of the University of Arizona's "on-the-job" archeology training at Point of Pines in "Winning a Degree—the Pick and Shovel Way." Oren, who has appeared in *Desert* many times in the past, is credited with hundreds of articles which have appeared in the *Saturday Evening Post*, *Colliers*, and other leading American magazines. His twelfth book "Sun In Your Eyes," a collection of Southwestern facts and fables published by the University of New Mexico press, is selling widely. Oren, in fact, has reached that dream world of the writer—winters in Phoenix, summers on the California coast.

Hollywood does some amazing things on location. Joyce Muench thought the story of what happened "When Tombstone Came to Monument Valley," as Harry Goulding told it, was so enjoyable that it should be shared with *Desert* readers. And, of course, Josef Muench took the pictures. The highly successful Muench & Muench combination of writing and photography started as a hobby. And the Muenches, who live in Santa Barbara, still head for the Southwestern deserts when a vacation comes along.

Readers who admire Jerry Lauder-milk's striking pen and ink illustrations, such as those in "They Left Their Prints in Stone," which will appear shortly in *Desert Magazine*, will not be surprised to learn that he once was a professional artist whose work was collected by notables. They may wonder whether he was right in transferring his interests to archeology, chemistry, anthropology, geology, ballistics, writing and lecturing—with art as a side issue. But Jerry is happy finding the unexpected stories which lie behind the face of commonplace facts, and in poking an investigating finger into the unknown.

Lewis W. Walker is an ardent naturalist, photographer and desert explorer. Readers probably will remember him best for his kit fox picture on the cover of the January, 1947, *Desert*. Walker's greatest interest lies in Lower California and the gulf. Sometimes his investigations take unexpected turns. On a trip from Yuma down the Colorado, Walker's boat was so damaged when caught in the tidal bore that the party reached safety only after seven hours of ceaseless bailing. "Freak Tree of the Peninsula," telling the story of some of Lower California's strange vegetation, will be published soon.

Desert Photos Wanted ...

Every month *Desert Magazine* holds a contest for its photographer readers, with cash prizes for the winners. The type of camera or reputation of the photographer plays no part in selection of the prize pictures—every contestant, amateur or professional, has an equal chance. The picture most suitable for reproduction or most original in treatment of a desert subject will win.

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

HERE ARE THE RULES

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

ADDRESS ALL ENTRIES TO PHOTO EDITOR, DESERT MAGAZINE

THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA

Big Meteorite Obtained . . .

ALBUQUERQUE—The Universities of New Mexico and Nebraska have purchased a 1000-pound fragment of stony meteorite found recently near Norton, Kansas. Dr. H. H. Nininger of the American Meteorite museum, Winslow, Arizona, was the other bidder. The fragment, 39 inches long and wide and about 18 inches thick, was the largest of more than 1000 pieces reportedly recovered from a fall last May 18. According to Dr. Lincoln La Paz of the University of New Mexico, one of the discoverers, it is probably the largest stony meteorite seen to fall.—*Tucson Citizen*.

Signs of Ancient Massacre . . .

CUBA—The 18th Indian tower ruin uncovered in northwestern New Mexico shows the same evidence of wholesale massacre and ruthless extermination found in the others, according to Dr. Frank C. Hibben, university anthropologist. Ten bodies found in the tower had been mutilated and apparently covered with rocks while still alive. The tower, according to tree-ring dating, was built in 1087 and sacked about a century later. Some of the towers, Dr. Hibben says, had been raided, burned and destroyed at least three times.—*Gallup Independent*.

Storm Damages Taos Pueblo . . .

TAOS—Two of the top rooms on the great South House at Taos Indian pueblo caved in during heavy August rain. The collapse was not unexpected and the owners already had moved out and adobes and other material for reconstruction were on

hand. Governor Antonio Mirabal says that the fallen rooms will be rebuilt at once and the familiar architectural profile of the ancient building restored.—*Taos El Crepusculo*.

UTAH

Angle for Ancient Fish . . .

VERNAL—Dr. D. H. Dunkle of the National museum, Washington, D. C., and Dr. Bob Schaeffer of the Museum of Natural History, New York, are studying the fossils of 50,000,000-year-old fish of the Green River formation of the Uintah basin. The scientists, leaders in their field, plan to compare the fish of the Utah oil shales with those found at Fossil, Wyoming, and to study the growth patterns which the fossil fish disclose.—*Vernal Express*.

Blasts in Lake Bonneville . . .

DUGWAY PROVING GROUNDS — The U. S. army engineers previewed their explosion tests in the desert southwest of Salt Lake by detonating 2560-pound charges of TNT July 27. The explosions, planned to furnish information on construction likely to be really protective under attacks with the destructive force of modern bombs, will be climaxed in November when 320,000-pound charges of TNT will be set off.—*Salt Lake City Tribune*.

Wheat Seed From Heaven . . .

TOOELE — A forage-depleted area in Skull valley, 25 miles south and west of Tooele has been selected for Utah's first seed-pellet planting by air. Sometime in October or November, crested wheat grass and possibly Indian rice will be dropped in little brown pellets from airplanes, in an attempt to halt accelerating erosion.—*Salt Lake City Tribune*.

They See Their Geology . . .

SALT LAKE CITY—Geology students in a summer course at the University of Utah are learning the structure of the state by seeing it. The group, taught by Professor Norman C. Williams, has spent a week in the Uintah mountains with earlier excursions to House mountains, Topaz mountains, Big and Little Cottonwood canyons and other localities. The course will be concluded with an eight-day inspection tour of the geology of southern Utah. Students do all their own cooking and camp tending and carry sleeping bags. — *Salt Lake City Tribune*.

Study Uintah Indians . . .

WHITEROCKS—From headquarters at Whiterocks, Dr. Florence Hawley and a group of anthropologists from the University of New Mexico are studying ancient and modern Uintah basin Indian cultures. They will attempt to find the relationship of the early inhabitants to present-day Utes and other Indian tribes of the Southwest. Data regarding adaption of the Utes to modern conditions, and their government and social life will be collected.—*Vernal Express*.

Romance of Fremont Island . . .

SALT LAKE CITY—Soon Blanche Wenner plans to place a plaque on the newly built cairn over the lonely grave of her parents on Fremont Island in Great Salt Lake. The U. J. Weners came to Fremont in 1885, because of Wenner's failing health. In 1891, in the midst of a raging storm, Wenner died, and with the help of a hired hand,

his wife buried him in a home made coffin. When Mrs. Wenner died in 1943, her daughter buried her ashes beside the grave of her husband, as the mother wished.—*Salt Lake City Tribune*.

Utah Promised Power . . .

SALT LAKE CITY—The Utah water and power board has approved the Colorado river upper states compact agreed upon recently at a conference in Vernal. The bureau of reclamation estimated that under the agreement water supplies for 251,780 acres of new land, supplemental water for 161,160 acres of land and power facilities to generate 5,383,000,000 kilowatt hours annually will come to Utah. On the basis of 1940 costs, the bureau figured the whole development would run to \$930,142,000.—*Salt Lake City Tribune*.

Rangely Pipe Line Building . . .

MOAB—The 10-inch crude oil pipeline being built from Rangely, Colorado, to Salt Lake City was reported 30 per cent complete in August. The route of the line lies across the prairie country of the Uintah basin, into Wolf Creek pass and across the Wasatch mountains. Sixty-five per cent of the right-of-way has been cleared and 50 miles of pipe are in the ground. When the project is completed, about November 1, a maintenance patrol will be established, and the possibility of doing this work by airplane is being considered. — *Moab Times-Independent*.

Utah Jeep Posse . . .

BOUNTIFUL CITY — Bountiful City claims the world's first jeep posse. This group of 23 of the versatile little cars was organized by the town's Lion's club and is on hand whenever the fire chief, city marshal, sheriff or forestry service calls. The posse has gone on blizzard rescues, followed forgotten trails to fight forest fires, hauled out hunters trapped by snowslides, and located crashed planes on isolated mountain sides. The members of the group serve without pay.—*Salt Lake City Tribune*.

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MINES AND MINING . . .

Ajo, Arizona . . .

The Ajo district, with 30,477 ounces, led Arizona in production of gold in 1947, according to figures of the bureau of mines. Ajo was third in copper production, being preceded by Morenci and Globe-Miami. Value of metals produced at Ajo was \$22,255,414. Morenci mined metals worth \$62,901,140; Globe-Miami, \$38,561,737; and Bisbee \$20,599,396. Bisbee led in production of lead and zinc. Arizona continued to lead all states in production of copper—732,436,000 pounds—and was first in total value of all metals—*Ajo Copper News*.

Ely, Nevada . . .

A newly installed mill at the properties of the Old English Gold corporation in Troy canyon is processing 50 tons per day, according to Joe Hafen, president and manager. Operations at present are centered on the hanging wall of the vein with yields averaging \$15 a ton, it was said, and the 40-foot vein itself probably would average \$5 to \$6 a ton. First run of the mill showed a recovery of 95 per cent. Plans call for eventual processing of 500 tons a day. The mine first was developed by an English concern in the 1860s, but operations were closed in the slump of the 70s—*Ely Record*.

Barstow, California . . .

George Golden of Daggett, mine operator and prospector, has made a lead and silver strike just west of Lead mountain and less than 10 miles from the center of Barstow. With lead prices advancing, Golden remembered some galena float he had found in the early nineties. He retraced his steps, followed the float and located the vein which is 15 feet wide at the surface and grows wider as it goes down. Golden declares the ore should average 20 per cent lead, runs 9½ ounces of silver, and is free of the barium which is present in the galena of Lead mountain—*Barstow Printer-Review*.

Randsburg, California . . .

Pipelines and water storage facilities of the Yellow Aster Mining and Milling company will be used to make available an adequate supplementary domestic and industrial water supply for the Rand district, if present plans are carried out. Officials of the company report a satisfactory agreement had been reached regarding ways and means of utilizing the mine's facilities. But a contract between Randsburg Water company and James Alspach for purchase of water from Judge well, and actual hookup of the water with the Yellow Aster cannot be made until the public utilities commission is heard from—*Randsburg Times*.

Goldfield, Nevada . . .

Lack of water is hampering plans to have the new 100-ton mill of Newmont Mining corporation operating by the latter part of September. The old Laguna shaft, which the corporation is cleaning out to the 711-foot station, at present can furnish only 25,000 of the estimated 75,000 gallons needed. It has been found that the old workings are so tightly caved below the water level that flow of water to the shaft is hampered. Plans for clearing the shaft to its bottom then diamond drilling to another shaft have been advanced—*Goldfield News*.

Desert Center, California . . .

Included in the shining aluminum covered buildings at the Kaiser company's new Eagle mountain mining camp are 10 dormitories, two bath houses, mess hall, staff buildings and a dozen two and three bedroom homes for engineers and executives and their families, all complete with fluorescent lighting and air conditioning. When operations begin in the open-pit iron mine in September, production to 4000 tons a day is anticipated. The deposit now blocked out covers a vein seven miles long and a mile and a half wide, which assays 50 to 70 per cent iron—*Indio News*.

Ludlow, California . . .

Strontium minerals along the south slope of the Cady mountains, northwest of Ludlow, are reportedly attracting the attention of mining men. The principal claims, under the ownership of Rowe, Gabelic and Buehler, are on the slopes of the range north of the railroad section house of Lavic. Commercial deposits of celestite, rhyolite, red ochre, flagstone, jasper and limestones were said to be found on the properties, now under lease to D. A. Kendall, owner of the Red Ball mill at Barstow. Mining is done by open pit methods, employing a half-yard shovel—*Mining World*.

Shoshone, California . . .

The old Crystal Spring lead and zinc mine in Death Valley, owned by John Prato of Fontana, has been leased to F. W. Mackey of Seattle, Washington. The mine which operated for a number of years before closing down during the depression, was considered expensive to operate because of its inaccessibility. But the new leaser has contracted for the building of a road to the property which reportedly will be completed within a short time—*Barstow Printer-Review*.

Kingman, Arizona . . .

The Williams tungsten mine, 72 miles southeast of Kingman in the Sandy and Burro creek area, shipped a ton of concentrates worth \$2500 the first week in August. The properties are operated by Jewell Tungsten, Ltd., Dr. Harry C. Kupp and J. H. Van Buskirk, owners. The mill has been revamped and new machinery moved in, with \$10,000 additional equipment coming, it was reported. It was said that 100 tons of ore are ready for milling—*Mohave Miner*.

Pioche, Nevada . . .

Extensive churn drilling is being carried on over a large area in the Comet Coalition property near Pioche, to explore areas below and beyond the old productive zone and prepare the property for major production, it was reported. David Gemmill is shipping lead-zinc ore from his lease on a developed part of the mine, but production is restricted by a shortage of skilled miners. The Comet Coalition is credited with containing large ore deposits carrying lead, silver, zinc and manganese—*Los Angeles Times*.

Silver Peak, Nevada . . .

Walter Dunnigan, Esmeralda county miner, is carrying on a one man mercury mining operation on his Red Rock claims above Lake valley, southwest of Silver Peak. Dunnigan does his own mining, fills his 50-ton bin, and shifts to the furnace and treats the broken ore. He handles the ore himself through all successive operations until the quicksilver is obtained—*Inyo Register*.

Ouray, Utah . . .

A deep test well with rotary rig reportedly is to be drilled by Seaboard Oil company of Delaware, 20 miles southeast of Ouray near the junction of Bittercreek with Whiteriver. The Ross Construction company is bulldozing a 30-mile road from Ouray to the site, which lies 20 miles west of the Colorado state line and 30 miles east of the producing Rangely oil field. Kerr-McGee will drill the well—*Vernal Express*.

Beaumont, California . . .

A mining rush is in progress around Albert B. Marshall's 300-acre ranch north of Beaumont. It started when Marshall took what he thought might be gold ore to Assayer Fred B. Greusel who told him the rock contained uranium. Further checks with a Geiger counter showed at least 20 acres of Marshall's ranch to have radioactive mineral, it was reported, and some of it runs above the minimum requirements to qualify for the \$10,000 bonus recently offered by the Atomic Energy commission. The bonus was offered for development of new sources of .2 per cent uranium trioxide ore in quantities exceeding 20 tons.

Marshall declared: "Back in the hills they're staking claims everywhere—on my property, on my neighbor's property—wherever the fence plays out. They've staked claims to everything but my cows." Asked about future plans, the rancher explained: "I've found a couple of pieces of rose quartz with quite a bit of gold in them. Think I'll start looking around for the place they came from"—*Banning Record*.

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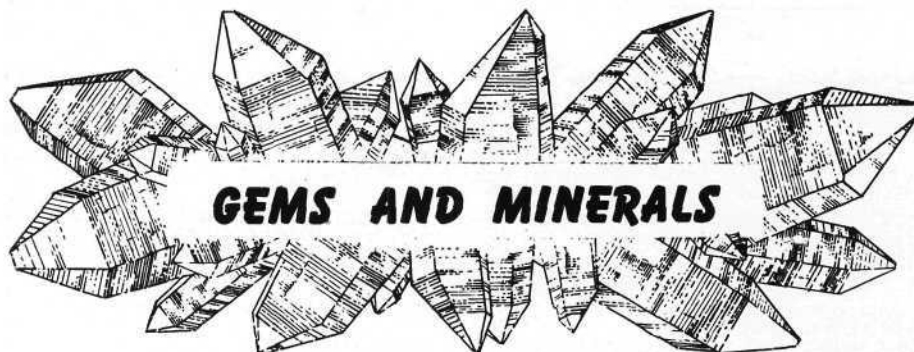
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OCTOBER 16-17 SET FOR SAN DIEGO GEM SHOW

The annual show of the San Diego Mineral and Gem Society, Inc., will be held October 16-17 in the Federal building, Balboa park, San Diego. The society plans to present a complete and diversified show with instructive displays as the keynote, according to Robert W. Rowland, publicity chairman. A lapidary shop will be set up and visitors will see the various processes of gem making. Members' showcase displays will contain crystals, matrix pieces, faceted stones and associated work with the accent on San Diego county. Society displays will depict its history, membership, affiliations and activities. Commercial displays are expected to cover the field: mineral specimens, gem materials, books, supplies and finished products.

There is a large free parking space in front of the building, and a resting area with plenty of chairs will be provided inside. There will be a free checkroom with numbered boxes where purchases may be parked until visitors are ready to leave. There will be no raffles, and admission will be free. The park concessionaire will have hot and cold refreshments. Displays may be installed from Friday noon to 10 a. m. Saturday, and will be removed from 6 p. m. Sunday until Monday noon.

SOUTHWEST MINERALOGISTS INVITE COLLECTORS

The Southwest Mineralogists, Inc., welcome any and all interested in minerals, crystals and stone polishing to visit them at their new address, 471 W. 41st Place, Los Angeles, according to Connie Trombatore, corresponding secretary. Meetings are held the second Monday of each month at 7:30 p. m., except when that date is a holiday, and the meeting is postponed until the third Monday. Gene Allen was speaker at the August 9 meeting, describing the history of rock sawing. He explained that saws originated with the Chinese who used a wire drawn across a slab until it literally was worn through.

EDEN SOCIETY CHANGES NAME TO CASTRO VALLEY

At the regular August meeting of the Eden Mineral and Gem society, members voted unanimously to change the name of the group to the Mineral and Gem Society of Castro Valley. Mrs. G. W. Luce showed colored slides and exhibited fluorescent materials at the meeting while Mr. Luce donated a sample of Lavie jasper to everyone present. Mr. and Mrs. F. W. Buhn displayed a part of their collection of polished specimens. Eleven new members joined the society at the meeting.

AMATEUR GEMCUTTER OFFERS LENS BLANKS TO POLISHERS

R. V. Andree declares that he and his wife are newcomers to the stone cutting hobby and they are learning fast and enjoying the process. They will be interested in hearing from other enthusiasts and any helpful tips will be appreciated. In return, Andree has some lens blanks of high grade optical glass, suitable for magnifying lenses. "They can be polished on any lap unit with a little care," he says, "and I would like to share them. If any of your readers want a lens blank I will send them one or two if they will send me postage.

"I also have a few blanks suitable for grinding three-inch telescope mirrors, but please don't ask for them unless you are really interested as I only have a few and it is a lot of work to finish the concave surface. I have some thick lenses, about 1x1½ inches which are excellent for demonstrating and practice work in faceting. I'll send a couple of these to anyone planning a demonstration who will write and enclose sufficient postage." Mr. Andree's address is 612 Howard Place, Madison 3, Wisconsin.

CLUB PROPOSES COOPERATION WITH GOVERNMENT AGENCIES

San Fernando Valley Mineral and Gem society is on record as the first society in the country to propose a definite and systematic plan of cooperation with federal and state mineral agencies in the study of minerals, locations, geologic data and other valuable information. Mrs. E. Waller, delegate at the State Federation convention presented the proposal which was accepted by the federation and a committee will be appointed to work out further plans.

Members will be furnished with information regarding identification of valuable minerals, proper location procedure, recognition of unusual topographic features and other factors which would increase the pleasure of members' field trips while adding to the technical knowledge of government agencies. At the August meeting of the society, Myor Wolfenson of Myco Precision Casting company described "Casting by the Lost Wax Method."

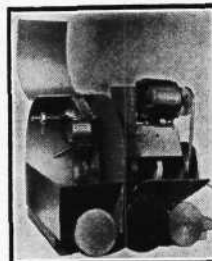
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AMONG THE ROCK HUNTERS

Benedict Bagrowski, vice-president of the Midwest Federation of Mineralogical societies spoke to the Chicago Rocks and Minerals society on some phases of mineral collecting and the care of collections at the June meeting. A good collection, he said is of little value unless it is catalogued and contains the name of each specimen, the location in which it was found and other pertinent information. Reports on the Denver mineral convention and a general discussion of the society's future activities were planned for July, last regular meeting until September.

August meeting of the Sequoia Mineral society was to be a picnic held in Selma park. Members who attended the California Federation convention in Long Beach were to report on the event and display specimens brought back.

A field trip which included a visit to the Cleveland mine, and agate beds north of the city was enjoyed by 34 members of the Columbian Geological society of Spokane, Washington, on August 6.

San Jacinto-Hemet Rockhound club has filed articles of incorporation at Sacramento. The club, a non-profit institution, plans to promote an interest in geology and mineralogy in the San Jacinto-Hemet area. Directors are W. G. Tallent, Edna P. Nicolls and L. F. Harvey, of Hemet; Albert E. Davis and V. F. Clark, of San Jacinto; and Ethel M. Harwell and Thomas V. Harwell, of Sunnymead.

"The Art of Lost Wax Casting," presented by guest speaker Myor Wolfenson, was featured at the August meeting of Santa Monica Gemological society. The speaker cleared up mysteries of metal casting and explained how the hobbyist could assemble at little cost an outfit with which he could turn out satisfactory work. Mrs. Louise Elakey, display chairman, reported on the Long Beach convention and was given a vote of appreciation for her Quartz Family exhibit there. Starting with the August meeting, the club plans individual exhibits at all meetings.

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Mayor E. C. Seale was to bring the greetings of the city and Superintendent of Schools Don Sheldon was to speak on behalf of the Prescott schools on September 4, opening day of the second annual gem and mineral show of the Prescott, Arizona, Junior Rockhounds to be held in the showroom of the Arizona Power company. Judge George William Fryer was to speak in the evening, and Homer R. Wood was to give a talk the next afternoon. Mrs. Mary Ann Kasey, Fred Wilson and Joseph F. Champion have contributed specimens to be sold at the show. At the regular meeting of the Junior Rockhounds, held August 6, John Butcher gave a talk on cabochons.

Harold Butcher was elected president of the Yavapai Gem and Mineral society at a meeting held August 12 at the Hassayampa hotel, Prescott. E. E. Michael is the new vice-president and Mrs. E. E. Michael is secretary-treasurer. The incoming president expressed the club's debt of gratitude to Mr. and Mrs. Moulton B. Smith, retiring president and secretary-treasurer and founders of the society. In the address of the evening, Homer R. Wood spoke on "Early Day Miners of Prescott." President Butcher announced that Dr. H. H. Ninger, director of the American Meteorite museum, near Arizona's Meteor Crater, will include Prescott in a lecture tour this fall.



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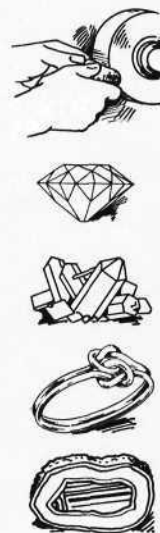
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A lecture by George H. Needham on the preparation of micro-mounts was to feature the September meeting of the San Jose Lapidary Society, Inc., at the De Anza hotel. Members were to view specimens under the binocular microscope and see 2x2 inch micro-photographs in color projected. The group planned a picnic September 12 at Flood park.

The Los Angeles Lapidary society had Myor Wolfenson of Myco Casting company, as guest speaker at the August meeting. His subject was the "Lost Wax Process of Casting." This year the society plans to launch a program of exchange visits with other gem and mineral societies, according to J. E. Gaston, corresponding secretary.

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HOLLYWOOD LAPIDARY SOCIETY PLANS FOR FIRST SHOW

The Hollywood Lapidary society will hold its first gem and mineral show at Plummer Park, October 16-17. Chairman of the event is Walt Shirey and his committee members are Virginia Haithcock, Della Holbrook, Jimmie Van Nostrand and Charles A. Robinson. Regular meeting of the society was held July 8, with Retiring President James C. Arnold presiding. The chair was turned over to the new president, Tom Virgin, and the other newly elected officers took up their duties. The Mint canyon field trip was attended by 44 members. After collecting some geodes and nodules, the group went to the old Pacific Coast Borax mine for howlite. Some members were lost and finally discovered in the mine tunnel. They claimed it was the only place they could keep cool.

David M. Seaman, associate curator of minerals at the Carnegie museum, spoke on pegmatites at a recent meeting of the Canon City Geology club held in conjunction with the Royal Gorge Fine Arts institute. He declared that 265 different minerals are found in the pegmatite dikes.

Tucson Gem and Mineral society is not having guest speakers or field trips during the hot weather, but regular meetings are being held and attendance is reported good.

Members at the August meeting of the Oklahoma Mineral and Gem society of Oklahoma City were to see a magic show by J. B. Lankford and hear a talk on fluorescent rocks. At the July meeting H. M. Rackets lectured on the art of facet cutting, and society members who had visited the Denver national convention of mineralogical societies reported on it.

OUR NEW ADDRESS

Gem and mineral society secretaries are requested to send all society news and other communications to:

**Gem and Mineral Dept.
Desert Magazine
Palm Desert, California**

Deadline for copy for the Gem and Mineral section is the 20th of the month preceding the date of publication.

Oklahoma Mineral and Gem society recently has authorized a junior division, and set up a committee to guide and direct its activities. The junior division meets on the second Friday of each month for programs on rock and mineral collecting, mounting and arranging. Jerry Lilly, Tommie Williamson and Delbert Lacefield, are charter members of the new group.

Jack Pierce, newly elected secretary-treasurer of the Rocky Mountain Federation of Mineralogical societies and secretary of the New Mexico Miners and Prospectors association, gave a lecture on potash at the July meeting of the Albuquerque Gem and Mineral society and showed a film on the same subject. The society meets the first and third Wednesdays of each month in the administration building at the University of New Mexico.

Grand Junction Mineral society, of Colorado, is on official vacation for the summer months. However the club planned a field trip into the Crystal creek country for August 14-15. There were 34 out-of-state cars at Grand Junction on the Western field trip which followed the Denver national convention, and the trippers were taken through the oil shale plant and the Thomas coal mine. The attendance at the chuck wagon dinner in the orchard was 150.

August meeting of the Dona Ana County Rockhound club was held at the home of Mrs. C. P. Archer at Brazito. At the close of the business session papers on diamonds, emeralds and rubies by Mrs. Markley, Mr. Foster and Mrs. Kilgore were read. A field trip was scheduled for August 22 to the Picacho peak fossil beds.

Don Alfredo, editor of the Dona Ana County Rockhound bulletin doesn't like the word lapidary. "I know it has official sanction," he says, "but if I were a builder of houses I wouldn't like to be called a carpenter. A washer of clothes isn't a laundery and a student of the earth and its formation isn't a geology. I don't want to be mentioned as the authority of this article or the artistry who drew the picture at the top of the page. I just don't like it."

The Texas Mineral society met at the Baker hotel in Dallas for the regular August meeting. American Airlines showed color sound films entitled *Viking-Land* and *Mexico*. Plans for a banquet to be held at the hotel September 14 were announced at the meeting.

NOTS Rockhounds will make a field trip to the ghost mining towns of Bodie and Aurora, situated on either side of the California-Nevada state line, on September 4-6.

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SEARLES LAKE SOCIETY PLANS OCTOBER GEM SHOW

Searles Lake Gem and Mineral society will hold a mineral show October 23-24, at Trona, California. In conjunction with the show, field trips to a number of collecting areas are planned, including one for minerals from Searles lake. Club President Robert Cartter invites any rockhound who has a collection to exhibit it and to come to the show for the excellent trading opportunities promised.

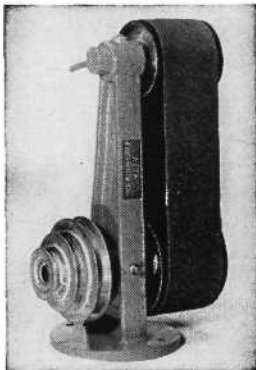
There are few accommodations at Trona, and visitors should make arrangements well ahead of time or bring camping equipment. Those who plan to exhibit should notify the society before October 10 so space may be provided for their exhibit. The society's address is: Box 1315, Trona, California.

Twenty-five members of the Pomona Valley Mineral club met at the California Institute of Technology at Pasadena, August 8, for a trip through the museum under the guidance of Don George, curator. The main mineralogical exhibit was the first stop, where case upon case of beautiful specimens were on display. One of the highlights of the visit was the large case filled with cut and polished stones. A stop was made in another building where smaller specimens of almost every type were displayed. The last stop was at the prehistoric animal exhibit, with a visit to the laboratory where the bones are assorted and assembled. The Cal-Tech museum is open from 8 a. m. to 5 p. m. school days and 9 a. m. to 12 noon Saturdays.

The Rainbow Forest museum at Petrified Forest national monument contains a display of cut and polished sections of petrified wood. Specimens range in size from cabochons to large slabs, according to Park Naturalist Harold J. Brodrick. One case contains a map showing other petrified wood sites in the United States with specimens from some of those sites arranged around it.

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September 2 meeting of the East Bay Mineral Society, Inc., of Oakland, California, was to be the annual get-together with members telling of their experiences and trips during the summer months. Members were advised to "bring along a hunk of the mountain you climbed." First field trip of the new season was planned for September 5 to the onyx deposits back of Fairfield. Tenth birthday of the society will be celebrated September 19 with an open air picnic at Redwood regional park.

SAN FERNANDO GROUP PLANS SHOW AT NORTH HOLLYWOOD

San Fernando Valley Mineral and Gem society will hold its annual show October 9-10 at North Hollywood park, Tujunga and Magnolia streets. There will be a display of cut and polished stones and costume jewelry. Another attraction will be a case showing the essential minerals. Admission will be free, and visitors will be welcome, according to Tom Sheely, publicity chairman.

Definite plans are now being formulated for the second annual exhibit to be held by the Orange Belt Mineralogical society at the Orange show building in San Bernardino, November 6-7. The society wound up its annual summer series of combined meetings and picnics at Sylvan park, Redlands, on September 12.

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"NATION'S LARGEST MFGRS OF FINE LAPIDARY EQUIPMENT"

AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

A lapidary idea from a doctor's office is supplied by Dr. H. H. Snook of Palmdale, Calif. Doctors buy sterile solutions for hypodermic injection from pharmaceutical houses. They are rubber stoppered. "These stoppers," says Dr. Snook, "hold the grit and oil for drills. I cement them to the rocks with plastic household cement." So there is something else you can salvage from the doctor's waste basket and find very useful. Dr. Snook also advises that he holds rocks on the table with an aeroplane clamp he purchased at Sears and that he finds it better than the conventional C clamp. "When the drill comes through it doesn't break out a piece," the doctor claims.

We do hope that no society will feel badly if we decline to use publicity for its events in these columns. We have risked annoying people with our tub thumping for the American Federation and California Federation conventions, and we must say something once in a while about gem cutting. Desert Magazine has a section of club news and has long published more news of that character than any other magazine.

But we must mention one individual society show that will take place in the Federal building in Balboa Park in San Diego on October 16-17. We must mention it because it represents the adoption of so many ideas we have initiated in these columns in the past and because we believe it will be a larger and better show than any put on at any time at any place by any individual society. It all comes about because of organizing and the San Diego Mineral & Gem society is organized.

It wasn't always thus. Their story is typical and from it other societies can learn much. The Mineral Society of San Diego was formed in March, 1934 as an outgrowth of government sponsored classes in mineral identification. A small group interested in gems broke away in September 1936 and started the San Diego Gem society. In August 1938 the groups got together again as the San Diego Mineralogical society, which name it retained until February of this year when it eliminated the clumsy word "mineralogical" in favor of the San Diego Mineral & Gem Society.

In September 1944 it had declined to a membership of 26 but it has climbed steadily to its present record of 238. The club went through all the phases—prospecting in depression years, collecting minerals later and finally faceting the native tourmalines and kunzite. It was the lapidary art, however, plus the seven league boots of Solon S. Kipp's \$25,000 shop that lifted the society to its present high level.

For those of you who have not read about Kipp's shop (*Lapidary Journal* for June '48) we mention briefly that Mr. Kipp,

a member, set up a shop with every known lapidary device in it; many of them duplicated. The cost has been variously estimated at from \$25,000 to \$50,000 including tons of material Mr. Kipp has purchased for his society member students. Kipp's shop, possibly the finest in the country, and certainly the most talked about, will be dismantled and moved into the show and the public will have every phase of the lapidary art demonstrated for them. They will be shown that lapidary work is not difficult and that it is not confined to pebble polishing.

And then the dealers have been invited to exhibit in commercial space. People can see what it takes and then find out how much it costs. This is our idea of what a show should be. The only idea they have not adopted is that of charging a small admission. However in their case the cost of the show is not the problem it is with some other societies.

If you belong to a languishing society do two things to make it grow fast—promote a lapidary division and then give a show of the members' work, no matter how poor, as soon as possible.

By the time this appears we will have accomplished the organization of the Pasadena Lapidary society. We helped organize a society in Downey, California, last month. It meets in the high school every second and fourth Tuesday evenings. We now have a list of about 20 residents of Ontario, California, who wish to have a gem society. Are there more? Send us your names and we'll notify you when a club will be formed.

Melvin Kathan of Portland, Oregon, mounts cabochons on slabs of white cardboard by making a small loop of scotch tape (glue out) and pressing the gems to the card. He prefers plastic coated white paper when he can get it. This type of mounting permits easy removal and replacement.

Kathan also advises that he finds stick shellac much faster and better than wax and some types of cement for dopping. It is cheap and easily obtained at paint stores. In grinding and sanding a gem, handle it gently until it is warm. This insures better sticking qualities as heat makes the shellac tacky. Stones dopped with shellac are easily removed with a knife blade.

Eldon Moore of South English, Iowa, writes that he uses a length of 1/8 inch bronze welding rod for template marking on slabs in preference to an aluminum pencil. A bronze pencil can be obtained at garages and machine shops. The advantage of the bronze is that it is harder than aluminum. Marks can be seen as well and stay on longer and they can be made closer to the template edge.

This page of Desert Magazine is for those who have, or aspire to have, their own gem cutting and polishing equipment. Leland Quick, who edits "The Lapidary Journal," will be glad to answer all questions in connection with your lapidary work. And he would like details about new short cuts or devices which lapidary workers have discovered, to pass on to readers. Queries and information should be addressed to Desert Magazine, Palm Desert, California.

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DESERT RAT SCRAP BOOK

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By RANDALL HENDERSON

SOME of my neighbors on the Colorado desert have become alarmed over recurring rumors that the tidal bore at the head of the Gulf of California is slowly eating into the great earthen barrier which separates the gulf from Imperial and Coachella valleys.

And that would be something for the 90-odd thousand people in these below-sea-level valleys to worry about if there was even a remote possibility that such a catastrophe could happen.

I believe Randolph Leigh sounded the original alarm. In his book *Forgotten Waters*, published in 1941, he reported that on a visit to the Colorado river delta he found that during the six years since Hoover dam was completed the tide limit had moved inland 18 miles, that thousands of acres of delta vegetation had been killed by the encroachment of salt water, and tidal erosion was gnawing at the silt embankments at the headwaters of the gulf.

The barrier is 24 feet high at its lowest point, and about 60 miles wide. The Colorado river built it over a period of thousands of years when it poured millions of tons of silt annually into its delta and eventually formed a great dam across the middle of the gulf. Evaporation of the water above the dam opened the way for the reclamation of the below-sea-level-basin and the development of the valleys as we know them today.

Hoover dam brought an end to the building process. The silt carried down from the Colorado's upper watershed is now deposited in Lake Mead.

Leigh's theory is that tidal erosion is causing the barrier to slough off into the gulf, and since no new silt is being brought down to the delta, the erosive action of the tide threatens the security of the people in this great desert basin.

Following the publication of Leigh's book, I discussed the question he raised with M. J. Dowd of the Imperial Irrigation district and other qualified engineers. Without exception they dismissed the idea as pure fantasy.

It is true the construction of Hoover dam has brought many new problems to the engineers on the lower river. Tampering with Nature's balance inevitably entails unforeseen and often damaging consequences.

But the possibility that the lapping waves of the Gulf of California will ever gnaw their way through the great land barrier that extends from sea level at the gulf to sea level at Calexico 60 miles away is so remote is to be classified as a fairy tale.

If, a thousand or five thousand years from now, the farmers who till these fertile desert areas find that the salt waters of the gulf actually have lapped their way inland to the danger point, it will be a comparatively simple matter to bring enough trains and rocks—if trains and rock are still being used for revetment purpose in that distant

age—and throw a dike across the delta from Pilot Knob to the bluffs on the Sonora side. Such a feat would be merely a before-breakfast task for the engineers who built the Panama canal.

The Arizona supreme court has decided that Indians who can read and write are entitled to vote, even though they live on reservations under the paternal care of Uncle Sam.

On the face of it the decision appears to be a great victory for the tribesmen. But some of the Indians are not sure they want the privilege of taking part in Uncle Sam's elections. For the right to vote sooner or later will entail the obligation to pay taxes.

In Zuni pueblo the chief men of the tribe have advised their people not to register, even though eligible under New Mexico laws to take part in state elections.

But do not condemn the Indians too harshly for putting dollar values above civic pride. Perhaps they learned that from Anglo-American neighbors who during the last 100 years have slowly but surely encroached on tribal lands and resources.

I am quite sure, that given the same opportunity as other Americans, the tribesmen will assume the obligations of citizenship in good faith. Their war record bears this out.

As this is written, early in September, there's a tinge of autumn in the air. We desert folks know that summer is passing when we wake up toward morning and crawl under a sheet to keep out the chill air.

The desert dweller's year really begins in October. July, August and September are months when we just coast along doing the necessary chores of home and shop, and take as long a vacation as we can afford.

But when October comes the recess is over. And the dry crisp air of the winter months is ample compensation for any discomfort brought by the high summer temperatures.

Some of us complain about extremes of temperature, but they are good for us. They make for tough resistant fiber, in both plant and animal, including the human animal. It is unfortunate our system of education does not place greater stress on this fact. Too many humans spend their lives slaving for the wealth that will bring them comfort and ease and luxury—and to the extent that they succeed they bring about their own physical—and often moral—decline. The seeds of decay find fertile soil in soft living.

The time when Americans could build strong bodies and develop self-reliance by going out and reclaiming a homestead on the western frontier have passed. But good roads and fast transportation have greatly enlarged the opportunities for those who would build physical and spiritual strength by weekends and vacations of primitive living in untamed wilderness areas.



THEY BUILT THEIR HOUSE OF MUD

People come from miles around to see the adobe house which Paul and Doris Allers and their daughter Diane built entirely with their own hands. "We prefer to think," the Allers say, "that they come to see a house which they know to be the expression of one family, to be reassured that everyday people, perhaps they themselves, can still make a major and successful effort without the help of experts and specialists, without finance companies and time payments."

In **BUILD YOUR OWN ADOBE**, the Allers give an entertaining step-by-step account of the construction of their country home from the first foundation to interior finishing, complete with diagrams and excellent illustrations. Adobe is thought of primarily as an ancient and basic building material of the Southwest—and the Allers built theirs in Santa Cruz county, south of San Francisco. But adobe is adobe, and their troubles and triumphs will make valuable reading for the builder of the desert regions.

The Allers had no knowledge of adobe when they started to build. But they had what they considered to be the basic requirements—imagination, self-confidence, an easy-going attitude, patience, zeal, enthusiasm and friends who share it. Their philosophy was that of Mexican builders: "Whatever the material, he did the best he could with it, and after doing his best he was content even if the finished product was a little crooked or lopsided."

One Fourth of July they poured the foundation of their house. By Thanksgiving the last brick was laid and by the next Thanksgiving they had moved in. All work was done on weekends and two short summer vacations. And to aid those whom, they hope, will follow in their footsteps, the Allers have given complete details of roofing, plumbing, wiring, and hanging windows and doors, in addition to the basic problems of making brick and pouring cement.

The Allers are adobe enthusiasts. They had the time of their lives, building their earthen home. And they declare: "From our experience, we say you and your family can have that home in the country or the little house in the suburbs that you long for, if you have just half the gumption of your forefathers and will consider building with adobe and doing the work yourselves." If you plan to build or just want to dream about it, **BUILD YOUR OWN ADOBE** will prove worth while.

Stanford University Press, 1947. 110 pps., photographic illustrations, one in color, and diagrams. \$3.00.

A COMPLETE GUIDE TO THE ART OF GEM CUTTING

We had been using the word cabochon for years before learning from J. Daniel Willems' recently published **GEM CUTTING** that it is from the French *en cabochon*, meaning "like a bald head." The similarity between the polished, rounded

stone and a hairless head is delightfully obvious. That, of course, is one of the minor items which the reader will learn from Willems' book, but it indicates the thoroughness with which the author has investigated his subject.

GEM CUTTING is designed as a complete guide to the art. With it, beginners should be able to accomplish creditable work and experts will learn short cuts and new techniques. Dr. Willems is an M. D. who took up gem cutting as a hobby ten years ago. But in that time he has invented the Willems' faceting device and other tools used by amateur and professional, and has become one of the most expert workers in the faceting field.

The new—and to date most useful—manual of gem cutting has chapters on gem materials, sawing, rough grinding, dopping, finish grinding, sanding, polishing, and cleaning. Then it enters the faceting field and describes optical properties of gem materials, forms and types of facet cuts, preliminary facet cutting practice, and all through the phases of faceting. There are chapters on special lapidary techniques and diamond cutting, and a listing of the absolute minimum equipment requirements for a beginner's shop.

In addition to giving step-by-step procedure, the book has many drawings and photographic illustrations to help clarify instructions. It should be of value to anyone interested in the gemcutting field.

Manual Arts Press, Peoria, Illinois, 1948. 224 pps., index, bibliography, numerous illustrations including one color plate. \$3.50.

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MARIA MADE POTTERY AS THE "OLD ONES" DID

MARIA: THE POTTER OF SAN ILDEFONSO, by Alice Marriott, tells the story of a Pueblo woman, from childhood to old age, and tells it with such simple, direct strength that it is one of the most moving pictures of native culture yet published. Of

course, Maria Montoya Martinez is no ordinary woman, although she considers herself such.

It was Maria who rescued the art of Pueblo pottery making from obscurity—making it as the "old ones" did—and built financial security for her family and for the people of her pueblo. And her husband Julian developed the process for giving the black sheen which is now an accepted trademark of San Ildefonso. Samples of their beautiful ware, signed "Marie and Julian" are to be found in almost every large public or private collection today.

Alice Marriott is an ethnologist who has served as a specialist in the division of Indian arts and crafts, department of the interior and as research fellow for the Laboratory of Anthropology in Santa Fe and the department of anthropology, University of Oklahoma. But she does not forget for a moment that she is dealing with human beings. The terms and technicalities of the ethnologist—which sound like double-talk to the uninitiated—are not to be found here. The story is told largely as Maria would tell it and think it—and a great deal of it in Maria's own words. Miss Marriott gathered the material through several months of almost daily interviews with Maria.

But the book is more than Maria's life and the methods and history of Pueblo pottery making. It is the story of San Ildefonso, of the way it is governed and of the way its people think, of the work they do and how they do it. It is the story of outside influences—some good but mostly bad—and their effect upon the Indians. But principally it is the story of Maria and Julian, and of how drink, introduced by the Europeans, ruined his life and distorted their relationship.

When Maria's parents tried to discourage her marriage to Julian, she said: "I can't be sure of happiness. You never can be sure about anything in life, it seems to me. I can try to make it a good life, though. I can work hard to make it good." Alice Marriott has told the story of Maria's efforts to make it a good life with the deftness of a novelist while maintaining the authority of fact. Accurate reproductions of pottery and drawings of pueblo scenes by Margaret Lefranc add to the book's charm.

Civilization of the American Indian series, University of Oklahoma Press, Norman, Oklahoma, 1948. 294 pps., drawings, bibliography, chronology of Maria's pottery making. \$3.75.

Pottery in the Southwestern Pueblos...

MARIA: POTTER OF SAN ILDEFONSO

By ALICE MARRIOTT

The fascinating biography of a woman who has become a legend in her own lifetime—Maria Martinez, who revived the ancient Pueblo craft of pottery making and found an economic way out for her family and for her village. Told largely in Maria's own words, with the readability of a novel.

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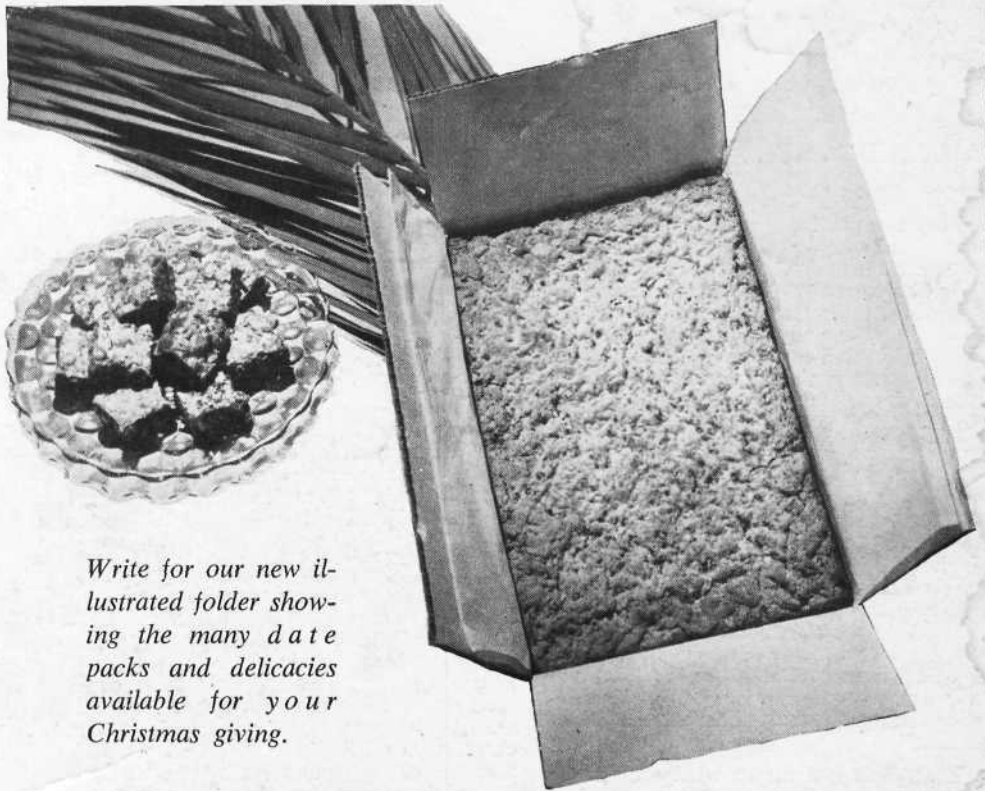
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