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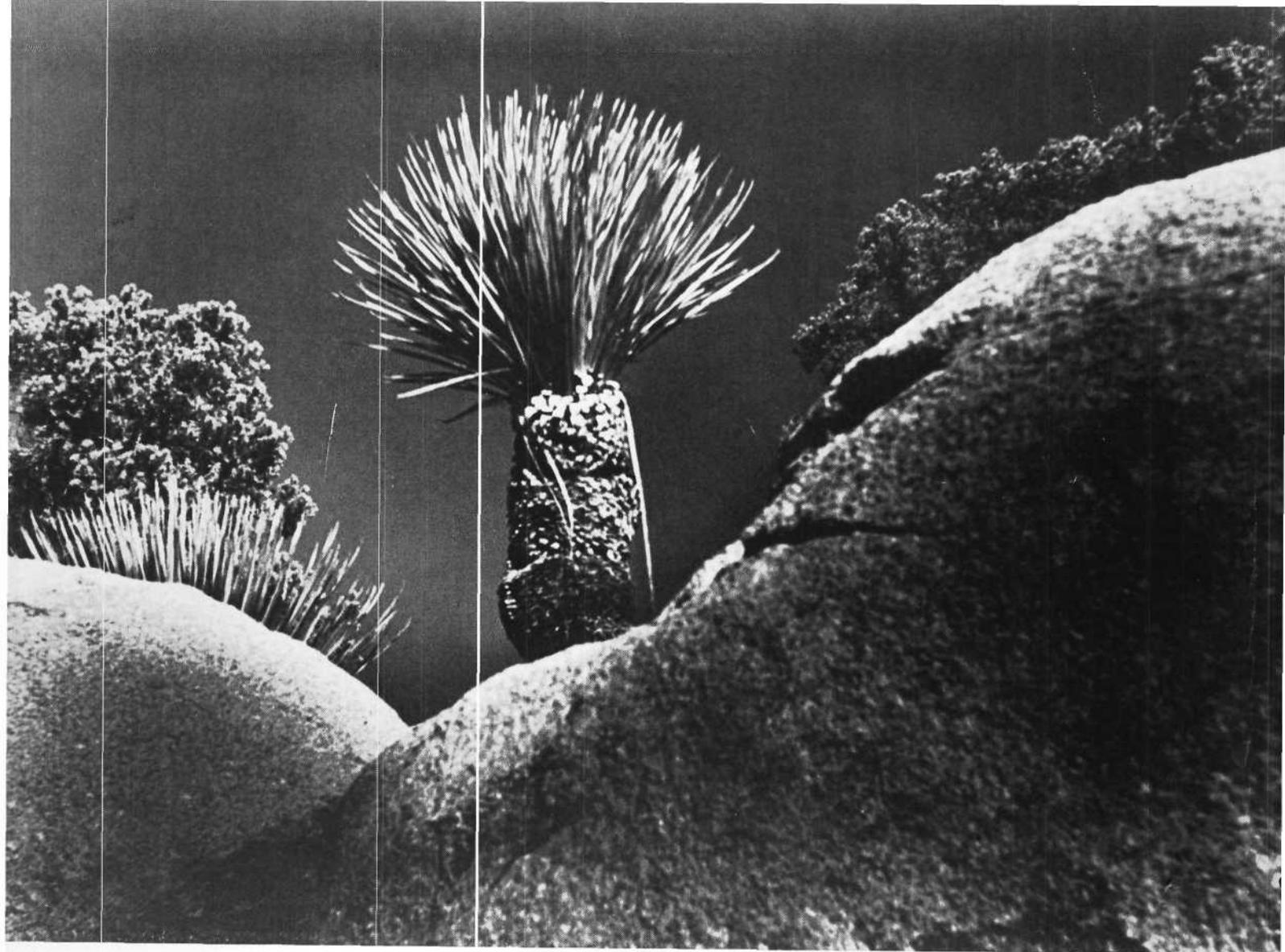
Desert

M A G A Z I N E



MAY, 1940

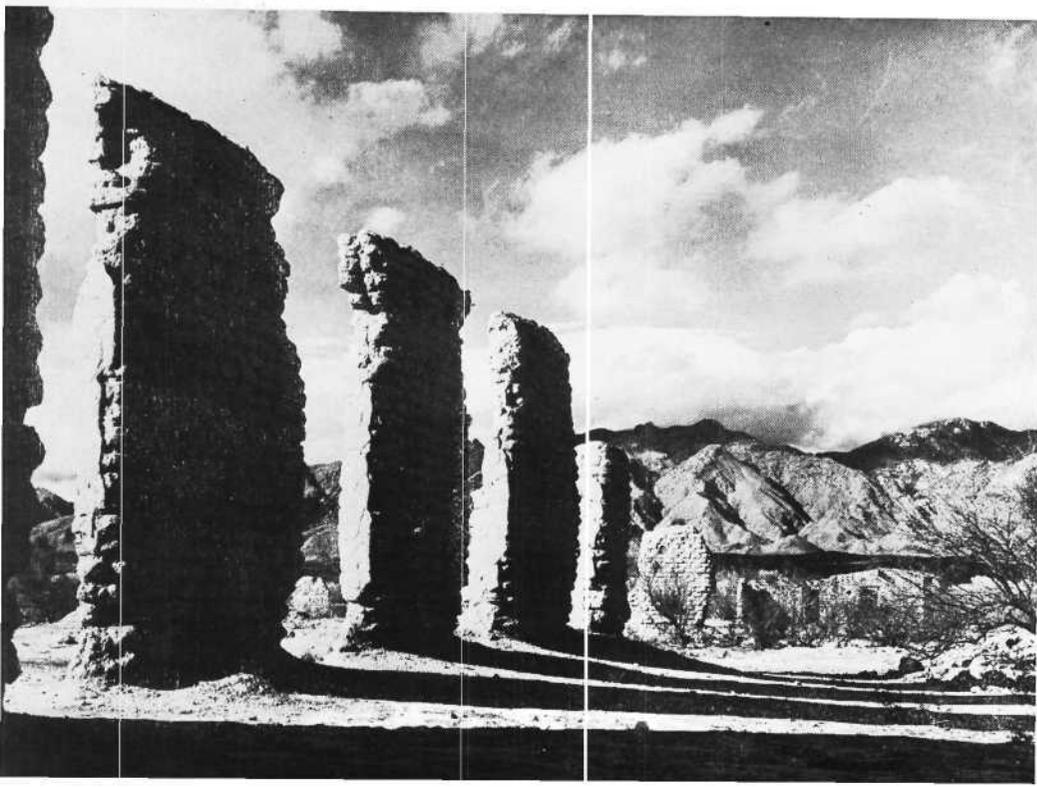
25 CENTS



In the Saddle

By RICHARD B. DIXON
Del Mar, California

First prize winner in the monthly photographic contest conducted by the Desert Magazine. Taken near the summit of Vallecitos mountain April 1938 with a Leica 50mm Elmar, Keitz No. 2 filter, Panatomic X in Eastman Ultra Fine Grain Dev., 1/100 second, f9.



Old Fort Lowell

By IVAN B. MARDIS
Tucson, Arizona

Awarded second place in the March contest. Picture made with Voightlander Avus, K-2 filter on Super XX film, exposure 1/25 second at f22.

Special Merit

Following entries in the March amateur contest were considered of outstanding quality:

"Death Valley Dunes" by H. D. Hellmers, Westend, Calif.

"Desert Pool" by Arles Adams, El Centro, California.

"Cat Canyon Jungle" by Dick Freeman, Los Angeles, California.

La Jolla, California

Dear Mr. Henderson:

Four months—four copies of the Desert Magazine and we bought a tent, two cots, a cook stove and purchased our fifth copy of your magazine enroute to the Salton sea!

Now we are here on the shore of the sea, and as I write this I can hear the lapping of the small waves on the shore. It is magnificent! Last night the sun went down in the only way it knows how in this arid land, in a glory of color and reflections in the sea. The sunrise this morning was a duplication of the sunset, but more wonderful because it is a new day.

I feel just like the writer of "I Too Have Learned" in one of the previous issues. I am still learning though. I have been on various parts of the desert before, for a day's outing or to stop at a hotel, but didn't know anything of the thrills of the sunsets and sunrises until now. We are encamped on the north-eastern shore with the Chocolate mountains back of us and across the sea the Santa Rosa range. There are two snow capped peaks and the rest of the mountains are purple in the haze. It is wonderful! We, I might add, are my husband, my mother and myself.

I find your magazine the most instructive of any I have read. You really deal with the nearby places, you have a way of writing about things so as people like ourselves won't rest until we go there.

The Marshall Souths' experience at Yaquitepec is most interesting to us. We know about where their paradise is located. We had heard of them before reading of them in the Desert. I know they are wonderful people. Any person who can enjoy his own company as they do, has something very few of us ever obtain. Good luck to Ghost mountain and may they retain their peace!

May I also mention that the signs concerning the picking of wild flowers between Julian and Kane Springs are just about beyond identification, I also noticed several people loaded with the beauty of the desert, going home with it. They couldn't read the signs I guess. Maybe a word from you and this might be remedied.

Thanking you for the fine publication, The Desert Magazine, I'll close now.

HARRIETTE STANFORD.

Kansas City, Kansas

Dear Editor:

It is with a feeling that I am making a good investment that I send a check to cover the cost of renewal of the Desert Magazine for two years—an investment where the dividends cannot be counted in dollars and cents, but in the many hours of pleasure that I get from the desert that is brought to me by your magazine.

From the cover—which is always so characteristic of the desert—through the editorial page there is a wealth of instructive and interesting material. Each copy always seems to be the best one that has been published.

Hoping that the Desert Magazine will have an interesting and profitable year in its new home.

SARA PATTERSON.

Fullerton, Calif.

Dear Sir:

We bought the March copy of the Desert Magazine and read it from cover to cover.

We went to the library for all back copies we could find and read them from cover to cover.

Did we like it? Well, here's a check for \$5.00, make it three years if you please!

E. N. SWEITZER.

LETTERS

Spokane, Washington

Gentlemen:

I wish to obtain an extra copy of your magazine of March 1940, as I wish to send it to Mrs. Maimie Fairchild Laing, of Grosse Point, Michigan. She is the daughter of Olivia Oatman Fairchild, the heroine of the book, "The Captivity of the Oatman Girls." Mrs. Laing formerly lived in Spokane, and I have heard her tell many times of the strange and harrowing experiences of her mother.

Mr. Oren Arnold is wrong in his statement that Olivia Oatman "in a little while (after arriving in the East from California) became ill and died, after having gone completely insane." Quite the contrary, she traveled with the Rev. Royal B. Stratton and his wife, delivering lectures in churches about her experiences, throughout the North. Later she married J. B. Fairchild, moving to Sherman, Texas, in 1872. She died there in 1903. The inscription on her gravestone, "Olive Oatman, wife of J. B. Fairchild." Her husband died here in 1908.

My copy of the book, "The Captivity of the Oatman Girls," bears this inscription on a fly-leaf, "Presented to Hiram G. Ferris by Rev. Royal B. Stratton, Little Falls, N. Y., April 29, 1859, as a token of respect and old acquaintanceship by the author." My father, Hiram G. Ferris, was acquainted with the Oatman family in Illinois, they living near his boyhood home.

I am enclosing a letter to Mr. Oren Arnold, requesting you to address and forward it to him.

MAJOR HIRAM B. FERRIS.

Phoenix, Arizona

Dear Major Ferris:

I have read the letter you sent me, via The DESERT MAGAZINE, about Olive Oatman, with great interest.

Apparently there is much conflicting data about the ultimate fate of Olive Oatman, and it is good to have your information in hand. In my article I had been forced to rely on old newspaper files, because other documentation seemed to be lacking entirely. One old source said that Olive married and died within a year of insanity. Another said she died insane without marrying. Another said she was thought to have committed suicide.

Because it seems that your information is beyond question, I am suggesting to Mr. Henderson, editor of The Desert Magazine, that he run for us at least a brief follow up paragraph containing your information about Olive, in order to have the magazine file records straight.

Many thanks for your interest, and do send me any more material you may have in this connection.

OREN ARNOLD.

Garvey, California

Dear Mr. Henderson:

Some time ago there appeared in the Desert Magazine an appeal for rocks, presumably for the purpose of embellishing your rockery. Well, on March 1st, 1940 (Friday) on one of our trips up Mount Wilson that appeal kept pealing in our ears, so-o-o-o-o as a result of action following urge we are sending you a piece of un-Hiltonized conglom which

with our fingernails we chiseled out of the top of Echo rock.

This gem is referred to by the Highway department as d. g. (deviled grapenuts).

It might be suggested to gem cutters that in working on this one should be provided with a very finely woven basket in order to preserve the matrix. However with little or no care wonderful results may be obtained as it is possible to have more facets from this than from any other known gem.

To produce the most brilliant colorings this stone should be ground with a small tack hammer and then run through an hourglass while being held toward the sunlight.

Should you wish to use this as a "setting" in your rock garden it might be well for the sake of permanency to embed it in a heavy layer of eiderdown or guncotton.

In fairness to the superstitious it should be said that this stone is not generally worn as a talisman or an amulet as it embodies neither a curse nor a charm.

Unquote:

GEO. A. STINGLE.

Dear George:

I was away from the office when your priceless rock arrived—but my associates tell me the package in which it came was no less remarkable than the specimen.

This will never go in the rock garden. It is a coastal rock. I am afraid it would be an outcast among all these desert rocks—like a cocklebur in a rose garden or a Hollywood playboy at a desert rat's reunion. It just doesn't belong.

And besides, it is too valuable a hunk of granite to be left unguarded where the pilfering throngs pass. No, I'll keep it in the inner sanctum under lock and key—and permit only the most illustrious of our office visitors to cast an eye upon its dazzling radiance.

—R. H. P. S. I might add that the village butcher just came into the office and when he saw your specimen he asked for permission to display it in the showcase where he keeps the bologna sausage.

Flagstaff, Arizona

Dear Desert:

I am enclosing a check for renewal for the coming year. We don't want to miss a copy of the Desert. I enjoy the "True or False" test very much. I have never made less than 70 or 75 percent on the tests and my son, aged 14, generally does better, so we feel we are both entitled to the Order of Desert Rats even though we haven't lived on the desert.

In making up these tests I find you are only human and occasionally make a mistake. I find this in the April test, No. 20 "Grand Canyon national monument lies entirely on the north rim of the Colorado river." You have this marked true. This is false as a large part of the Grand Canyon national monument lies on the south side of the Colorado river. This is shown on the Arizona highway maps. I was almost five years in Grand Canyon as assistant engineer and had occasion to carefully check the map of Grand Canyon national monument, from President Hoover's proclamation, and it includes the area south of the river. Supt. Tillotson tried to get the boundary of the monument revised but the revision was on the north side only, I am quite sure. I am quite sure Mr. Tillotson's revision has never been accepted.

I hope you will keep the magazine coming in the same type of publication it has been so far.

WILLARD BRADLEY.

Thanks, Mr. Bradley, the True and False editor's only alibi is that he looked at the wrong map. Apparently some of the map-makers have slipped—and we are glad to get the point straight. —R. H.



Warren E. Rollins

NEVER will be forgotten my first visit to that desert studio at Chaco canyon national monument, in New Mexico. All the peaceful beauty of the land awaited me there.

Stepping from his studio doorway to greet me, the artist at once radiated a geniality that spoke of many intimate years with desert life. We chatted for a few moments there in the sun flecked garden, passing comment on the loveliness of the early summer day, and the enchantment of that particular locality, abounding as it is in magnificent ruins of pre-Columbian time.

Warren E. Rollins is a man in his late seventies, but his spirit is that of a much younger personality. His walk is sprightly, his eyes merrily keen, and his smile benign. Though born in Nevada, he was raised in California. Ever since he began drawing pictures on his schoolroom desk, instead of doing the much dreaded arithmetic lesson, he has unceasingly given his time to painting and teaching. He was a very young man when he became art director of the School of Design in San Francisco. In that city he received many of his earlier honors.

Traveling, exhibiting, and painting led him 20 years ago to locate in the Southwest. Here the field opened new vistas in the portrayal of desert scenes and life. Being an assiduous student of history, the Southwest offered much creative work. Many of his canvases are historical. For a quarter of a century now, Rollins has adopted the land of the Pueblo and Navajo Indians as his home, by right of a real affection for it.

In Santa Fe, New Mexico, now a recognized art center, Rollins held the first formal art exhibition ever to be shown and he is dean of the art colony there.

Late in his 'seventies, Warren E. Rollins whose studio is in the heart of the New Mexico Indian country, still works with the zeal of youth. One of the reasons his work has such rare quality and beauty is that it comes from a man in whose heart is good cheer and friendliness. Rita Morris has given us an intimate glimpse of an artist we would like to know personally.

Painter at Chaco Canyon

By RITA MORRIS

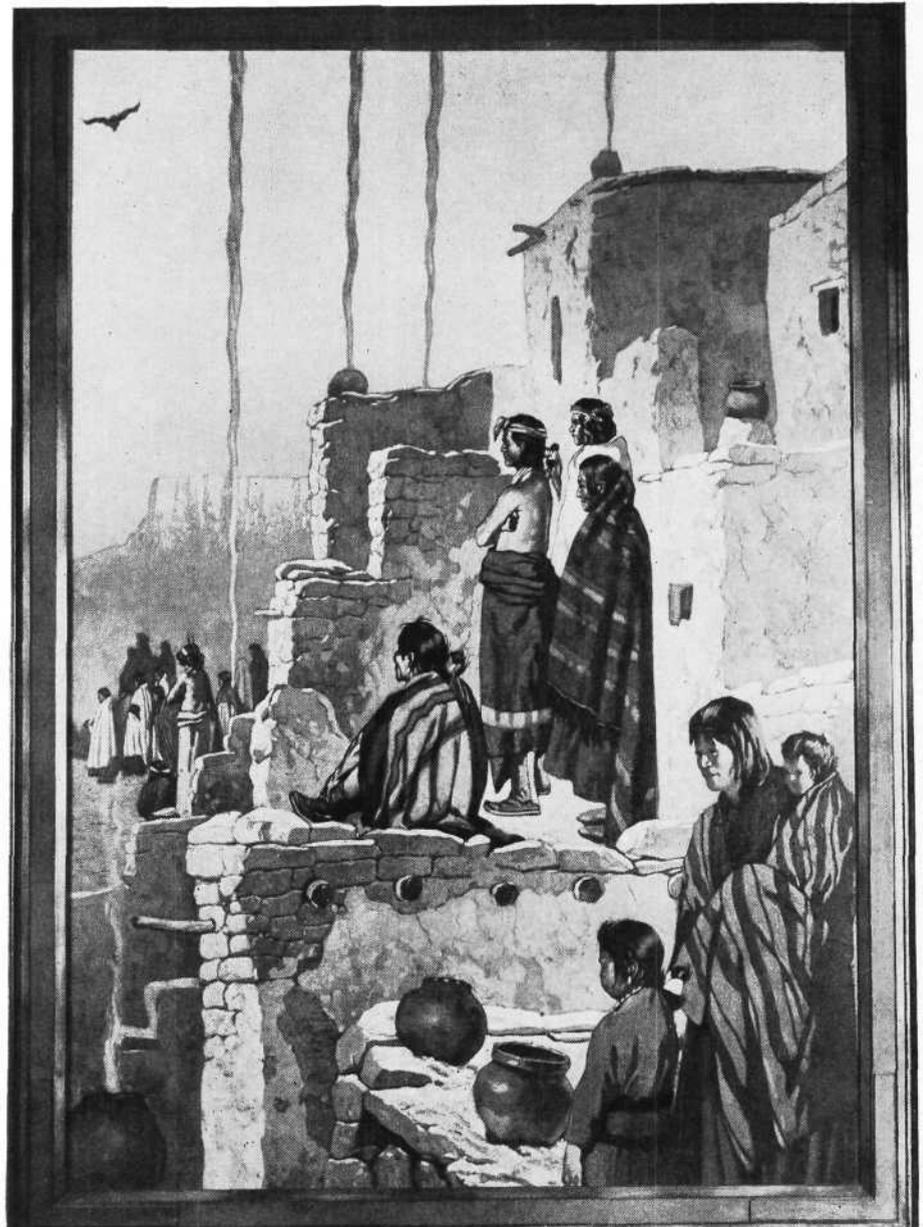
He still holds annual exhibitions in Santa Fe but his work shop is always in the desert country. The locality changes according to his need for subject matter.

Chaco canyon held his interest for 12 years. There he painted ruins, canyon walls, mesas and solitary wastes of desert spaces with the great expanse of sky. He lives alone since the passing of Mrs.

Rollins who was his ardent co-worker and inspiration.

Seated in the studio for over an hour, I gazed with rapturous delight at the many colorful canvases. The desert's moods are varied. They run a scale of color that demands a skilled artist's well stocked palette. Rollins' style is inimi-

Continued on page 43



Reproduction of Warren E. Rollins' "Waiting for Montezuma"

Father Font, who accompanied the Anza-California expedition in 1775-76 was the first white man to note the unusual fossil deposits on the Southern California desert near the Mexican border. More recently this area has become widely known as "the oyster beds of Yuha basin." To the student of natural history it is one of the most interesting regions in the Southwest. Hulbert Burroughs went to Yuha basin for the Desert Magazine—and here is a record of some of the unusual things he found.

Where Anza Camped at "the Flat Rocks"

By HULBERT BURROUGHS

LATE one winter afternoon Juan Bautista de Anza halted his exhausted caravan in the bed of a dry wash in what is now the Colorado desert of Southern California.

Slowly and patiently his men dug into the sand at a place indicated by their Yuma Indian guides—and found water. Captain de Anza named the spring Santa Rosa de las Lajas—Santa Rosa of the Flat rocks. That was March 8, 1774, when the intrepid Spanish captain was making his first trek across the southwestern desert from Sonora to the Pacific ocean. A year later he was to lead California's first colony of settlers over this same route.

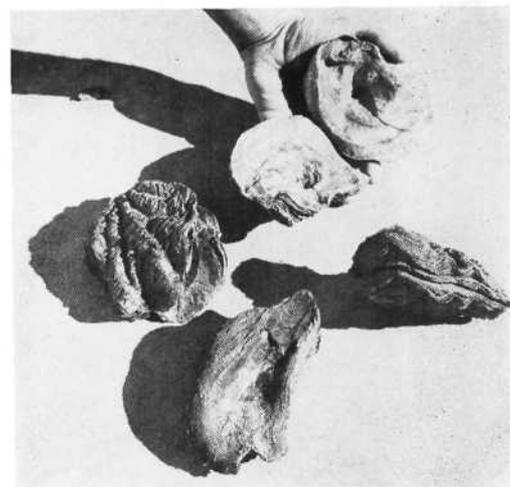
It was just 166 years later—March 8, 1940—that Charles Shelton, Don Pierotti and I stood on a low butte overlooking the site of that first De Anza camp in what is today California. A scant five or six miles to the south lay the Mexican border. Ten miles to the southeast rose that rugged desert landmark — Signal mountain. In endless procession low

sandy ridges and buttes stretched out before us.

I half closed my eyes. It was easy to visualize De Anza and his tiny caravan crawling across those sandy ridges. I could see the 34 dauntless men forcing their half starved mules and cattle onward into the unknown desert wilderness. I could hear the shouts of the muleteers and the soldiers when the springs were finally opened and the life-giving water began to flow at Santa Rosa de las Lajas.

Water in those days was very precious. It was the difference between life and death. Only a few days earlier De Anza's expedition had nearly met disaster among the waterless sand dunes farther to the east.

Leaving their last camp on the Colorado river they had set out to continue their search for a route across the unex-



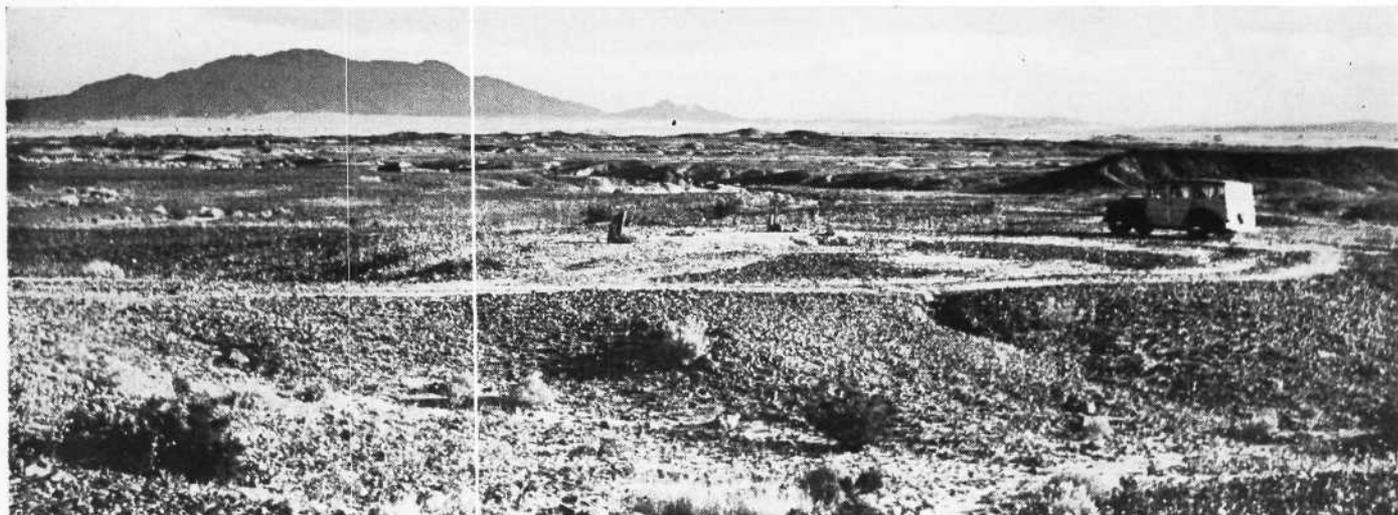
Group of oyster fossils—*Ostrea beer-manni*—from Yuha basin. The three upper shells are examples of the matched halves that can be found.

plored wilds to Monterey, California, where they planned to establish a Spanish colony.

Into the very heart of the sand dunes De Anza pushed his tiny band. But the grim desert began to take its toll. There was no water for the mules and cattle, no food. Many animals were dying by the wayside. Then followed those famous "heroic ten days." Faced with complete disaster, his animals stumbling and falling into the sand never to rise again, the fearless Captain turned his dying outfit around and foot by foot painfully retraced his trail. Nearly dead from thirst they finally reached the Colorado.

But this harrowing experience did not stop De Anza. He had been given a mission to perform. Waiting only long enough for his animals and men to partially recover, he set out again—to find a

Yuha Drill Hole—the two stakes to the left of the car—where an attempt was made in 1890 to find oil. To the left in the distance is Signal Mt., De Anza's old landmark. Oyster fossils are found there also. The Mexican border lies just this side of Signal Mt.



route around the sand dunes. This time he succeeded.

Today Santa Rosa de la Lajas is known as Yuha springs. You can drive your car almost to the place where De Anza made that first camp in what is now U. S. territory. But if you are like most of the visitors to Yuha basin today, you were not attracted there by the historical interest of this spot. The chances are you came to Yuha to see the famous "oyster beds"—the great Miocene fossil deposits that abound in this region.

The truth is, it was these fossils which brought Charles, Don and me to this place. Fossils have always attracted me. They and the rock layers containing them tell a fascinating story. In our own history, De Anza and 1774 seem a long time ago. Yet think of the mighty ages, long dead, which those rock history books tell! — Of life forms that lived and flourished and then died literally millions of years before the first recorded history of man.

I recall the thrill I used to experience as a boy when I'd split open flat pieces of soft limestone to find the delicately preserved impressions of fish skeletons—fish that had swum in prehistoric seas a million and more years ago. Nor have I ever lost my enthusiasm for exploring new and interesting fossil beds.

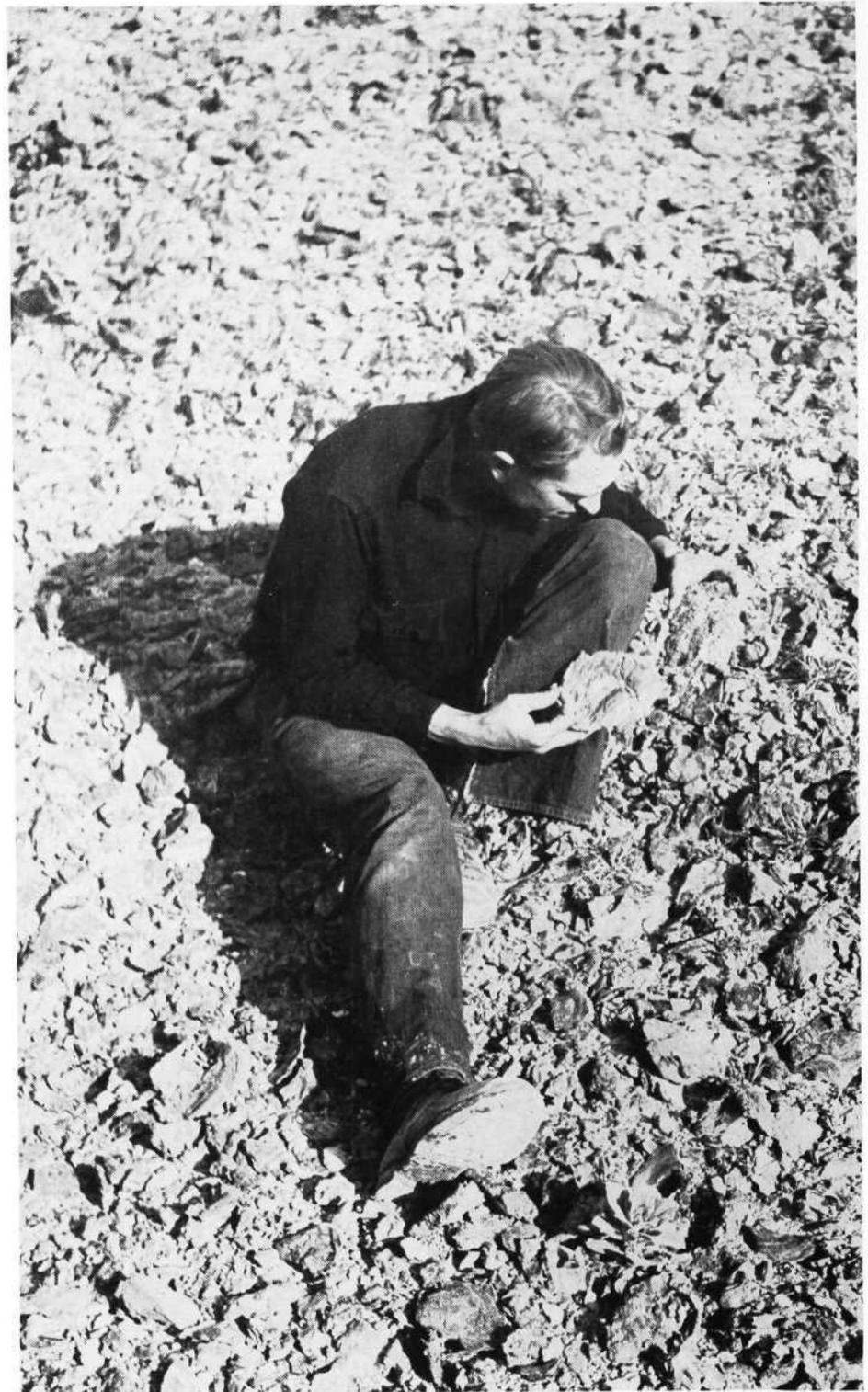
So, recently, when I heard someone facetiously remark that the soil in Imperial valley was so fertile that even oysters grew all the year around, my interest was aroused. That was my first knowledge of the Yuha fossils — commonly called the "oyster beds." I wanted to see them.

The next weekend Chuck, Don and I tossed our bedrolls and cameras into the car and headed for an oyster "feast." At El Centro, California, we turned west at the intersection of U. S. highways 99 and 80. We followed highway 80, the main road to San Diego, and at 13.6 miles from the intersection, came to the Yuha basin turn-off. This side road is just 3½ miles east of Plaster City. Here we turned due south for a mile and a quarter.

The road then angled diagonally off to the southwest. It was a very old road. In fact it was part of the old stage route to San Diego in the early days. Since then someone had oiled it, but even that must have been long ago for there were many ruts and holes that forced us to drive very carefully.

Across and along low ridges we moved slowly toward the mountains in the distance. Diagonally to our right in the northwest rose Coyote mountain. To our left in the southeast was De Anza's old landmark—Signal mountain.

According to the map we should be in the heart of the fossil beds now. At a distance of about six miles from U. S. 80



Don Pierotti examines a solid bank of oyster fossils.

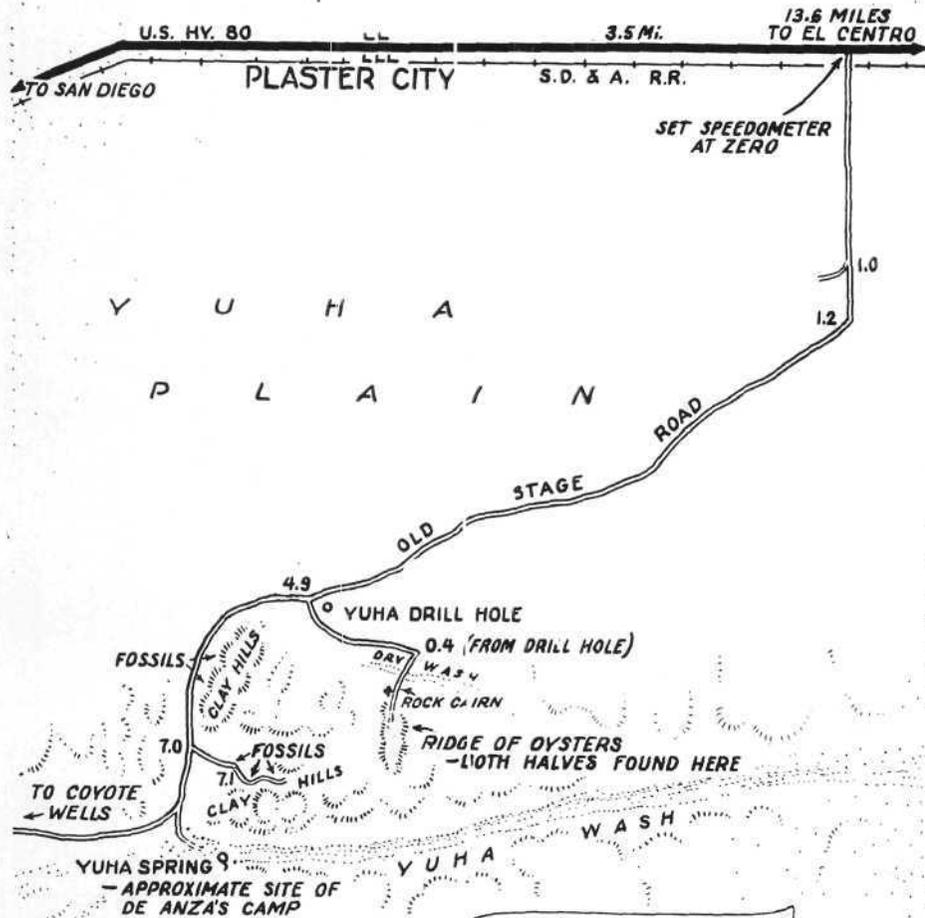
we stopped at the foot of several low buttes. Scattered fragments of flattish grey-brown stones—oddly shaped—lay in profusion on the slopes of the clay hills.

There was no mistaking them. We were standing in a veritable sea of oyster shells. Intermingled with the soft dry clays some were broken and badly eroded; others were almost perfect in form. All were completely metamorphosed. They ranged in size from five to eight inches in diameter—considerably larger than anything we had expected.

At a point exactly seven miles from U. S. 80 a short branch of the road jogs off to the left for one-tenth of a mile. There on the slopes of the low hills we found literally millions of oyster shells. In some places the hills seem to be composed solely of fossils.

It was here that Don found the sidewinder or horned rattlesnake that quite willingly posed for the picture on the opposite page. He seemed such a harmless little fellow that it was difficult to realize he was really a rattler. In fact

ON COYOTE, SUPERSTITION AND SIGNAL MTS.
THE SAME YUHA OYSTER BEDS OCCUR.



FOSSIL OYSTERS ARE FOUND THROUGHOUT THE REGION, BUT THOSE HERE INDICATED ARE THE MOST ACCESSIBLE.



once in taking a close-up of him I did forget. Angling for a good shot I moved in very close.

Suddenly in the finder lens I saw his horned head dart out—straight for me. Magnified by the lens he seemed to be striking right for my face. With a lurch I sprawled over backwards into a bed of fossils. That was my first and last close-up of a sidewinder.

Scenic and scientific interest in the Yuha area is not limited alone to the ancient fossils found here. Nature at some period in the ancient past created in this region a fantastic rock garden of sandstone concretions. They are scattered widely over the Yuha basin—a million odd forms ranging in size and shape from tiny stone marbles to huge prolonged "logs" that have been eroded and broken until they bear resemblance to the vertebrae of gigantic beasts.

One of the fields of concretions—there are many of them at scattered intervals—bears such striking resemblance to one of the staple American garden products it has been called the "cabbage patch." Another field is covered with rocks which have the form of petrified logs. An imaginative mind will find the broken heads and torsos of nearly every beast that roams the jungle—created in sandstone.

The main road from which we had branched off continues down to Yuha wash. Although we were unable of course to find the exact spot, it was some place nearby in this wash that De Anza made his first camp in what was destined to be the United States.

Retracing our route to a point 4.9 miles from U. S. 80 we saw faint wheel tracks angling off to the south. About a hundred feet or so beyond we found the site of the old Yuha drill hole. Here in 1890 an attempt was made to find oil—usually associated with fossil deposits. Although the well was drilled to a depth of 1100 feet no oil deposit was ever tapped.

Continuing down this branch road to the south for 0.4 miles we stopped at the edge of a wash running east and west. It was some place near here that I was told to look for oyster shells with both halves lying in position. The ones we had thus far found were only single shells from which the other halves had been lost. If complete bivalves were there I was anxious to add them to my collection.

Leaving the car at the edge of the wash we started walking due south. Topping the ridge beyond the wash we saw a small cairn of rocks about 200 yards straight south.

There we found the best assortment of fossil oyster shells I have ever seen. A low ridge—an outcropping only a few feet above the level of the rolling plain

—is composed almost entirely of oysters. It is a long low reef running north and south. After a short search we found several fine specimens with both halves of the bivalves in place. This is quite remarkable considering the millions of years they have been lying there.

In discussing the geological aspects of the Yuha basin fossils it is necessary also to mention the even larger deposits on Coyote mountain to the northwest. The same oyster beds are found there in association with other fossils. Of the Coyote mountain formations the lowest in position are the coral reefs of Alverson canyon. Above those lie a 200-foot thickness of calcareous sandstones often referred to as the Latrania sands. Next above these are tremendous deposits of clay. Above these clays and interbedded with them near the top are extensive beds of oyster shells—*ostrea heermanni*. This fossil layer is called the Yuha reef deposit because the type specimens were first taken from the Yuha basin oyster beds. The same oyster reefs can be found also on Superstition mountain and Signal mountain.

Above the Yuha reefs is an enormous thickness of silt deposited in the fresh waters of ancient lake Cahuilla whose

prehistoric beachline is still clearly visible near Travertine point west of the Salton sea along U. S. highway 99. This Cahuilla silt is best seen where the San Diego-El Centro highway (U. S. 80) crosses New river just west of Seely. The deposit contains many fresh water fossils which were deposited when the entire Salton sea basin was covered by the much larger lake Cahuilla. But even before that the older marine oyster fossils of Yuha basin were deposited at a time when the entire region was not a lake but a much longer arm of the present Gulf of California.

How long ago that occurred has been a disputed matter among geologists for some time. Father Pedro Font who accompanied the second de Anza expedition in 1775-76 through this same region, was the first to speculate about the fossils. In his remarkable diary he says:

"On account of the unfruitfulness of these lands, so level, and of the aspect of the sand dunes, and especially of the abundance of shells of mussels and sea snails which I saw today in piles in some places . . . I have come to surmise that in olden times the sea spread over all this land, and that in some of the great recessions which histories tell us about it

left these salty and sandy wastes uncovered. Indeed . . . one finds on the way many piles of oyster shells, mixed with the earth and half buried, and other shells and maritime signs. It is not possible that people should have made such mountains of shells by carrying them from the sea so great a distance merely to bury them in piles. All of which, although merely conjecture, has a high degree of probability."

Father Font's observations and comments are interesting, even though he was not qualified as a scientist. Today trained geologists have established the age of the Yuha oyster beds as belonging to the Miocene. That means that their age is at least 17 million years.

That's a long time ago. Yet we picked up shells which, although completely metamorphosed, were as perfect as if they had been freshly taken from the sea. It seemed incredible that we were holding in our hands the stony remains of creatures that once lived millions of years ago in the clear warm waters of a great sea that then covered a land where cotton, dates, fruit, and melons are now growing.

When we think back over the great changes that have marked the history of the Imperial basin—once the bottom of the sea; later the bed of a freshwater lake; flooded in recent times by the wild Colorado — we wonder what the Great

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Three interesting products of the ages: A marine oyster shell fossil 17 million years old; a horned rattlesnake that now crawls over the barren sand that was once the bed of that ancient sea; and an ultra-modern camera, the product of modern man's ingenuity.



East of the Rocky mountains dandelions are just a pesky weed that everlastingly invades the prim blue-grass lawn and causes no end of annoyance to those whose chore it is to chop them out. But not so with desert dandelions. Here they are delicate yellow blossoms that grow by the side of the trail and give delight to all who pass. If you want to get acquainted with this pretty desert wildflower Mary Beal will give you an informal introduction on this page.

Early to Bed, this Sleepyhead

By MARY BEAL



Malacothrix coulteri—the dandelion commonly called Snake's Head.

DESERT dandelion is a lovely flower—but such a sleepyhead! She toddles off to bed while the sun is still high above the western horizon—and sleeps the long night through until old sol is high in the heavens the next morning.

On those rare desert days when the sky remains overcast with clouds the dandelions sleep entirely through the daylight hours. Time means nothing to them. Only bright sunshine counts.

If they seem to require more beauty sleep than their neighbors in the wildflower world, it is not all in vain for when the wake-up hour comes they unfold exquisite blossoms of pale gold.

On the sandy slopes and mesas where the dandelions grow and flower they present an array of color as if some fairy magic had turned the desert into molten sunshine. Just east of Daggett, California, where I often pass a widespread gar-

den of these refreshing flowers I always have an impulse to stop and exclaim at the beauty of the natural garden.

Following are the desert species of *Malacothrix*, the genus of the desert dandelion:

Malacothrix californica var. *glabrata*

A gloriously common annual 4 to 12 inches high, the smooth hairless herbage often tinged with red. The thread-like leaves, 2 to 8 inches long, in a basal tuft, are divided into remote pointed lobes. The numerous pale-yellow flowers are an inch or two across, with many narrow rays, red-tipped on the back. These tips form a red center in the flower before the inner rays unfold. The involucre bracts are narrow and often dotted with brown or reddish glands.

They spread out in countless numbers over the sandy and gravelly plains, slopes and mesas of the Colorado and Mojave deserts, Nevada and Utah.

Malacothrix sonchoides

Somewhat similar to the preceding but branching, less than a foot high. The pinnately-lobed leaves, 1 to 6 inches long, have short rounded or toothed lobes. The bright yellow flowers are an inch or less broad, the rays not numerous as in *glabrata*, exhaling a delicate fragrance. Not a gregarious species but not uncommon in sandy soil on plains of the Inyo and Mojave deserts, Nevada and Arizona.

Malacothrix coulteri

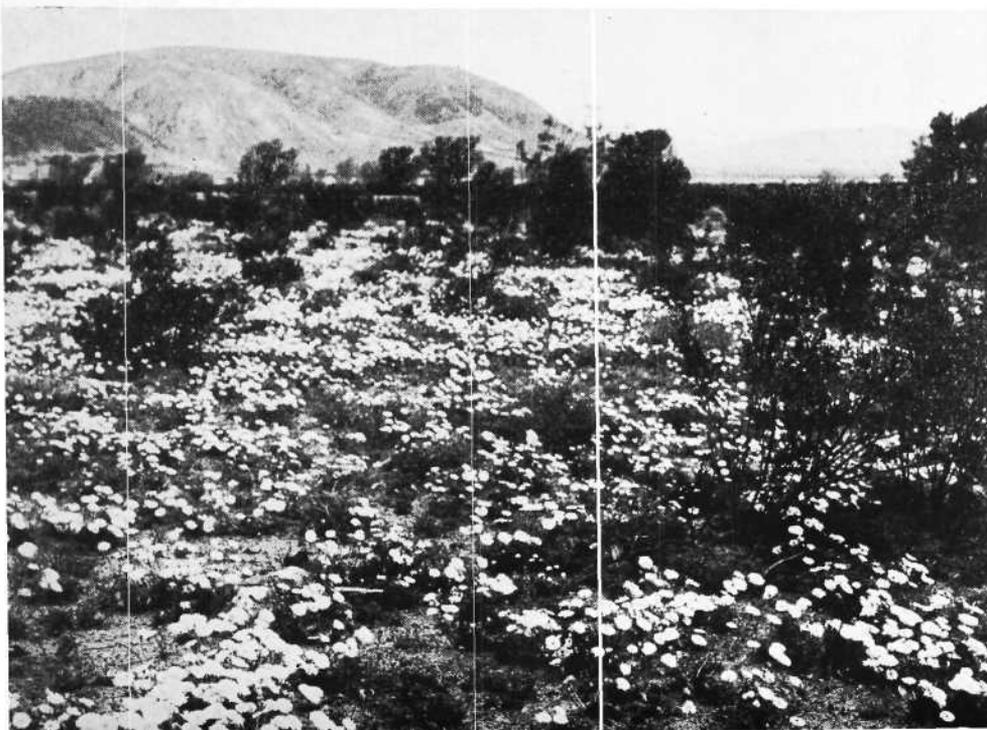
Snake's Head it is in common parlance and by no means far-fetched. The unopened buds do show a resemblance to a snake's head. It's quite an odd plant, from four inches to a foot high with leafy branching stems, a faint bloom veiling the herbage. The toothed leaves are ovate to lanceolate, stemless or clasping, and the flowers pale yellow, the narrow rays often with a pink streak on the back. The conspicuous roundish involucre are the interesting feature of the plant. The paper-thin silvery, translucent bracts, each marked in the center by a thick green or brown streak are disposed in overlapping series, producing the snake-head effect.

Not uncommon but forming no showy masses on sandy plains and mesas, and gravelly slopes of the Inyo and Mojave deserts. I know a rocky knoll high up in the Calico mountains where quite an array of them can be found, also stony slopes in the Providence mountains where they seem as much at home as in the sand and gravel they supposedly prefer.

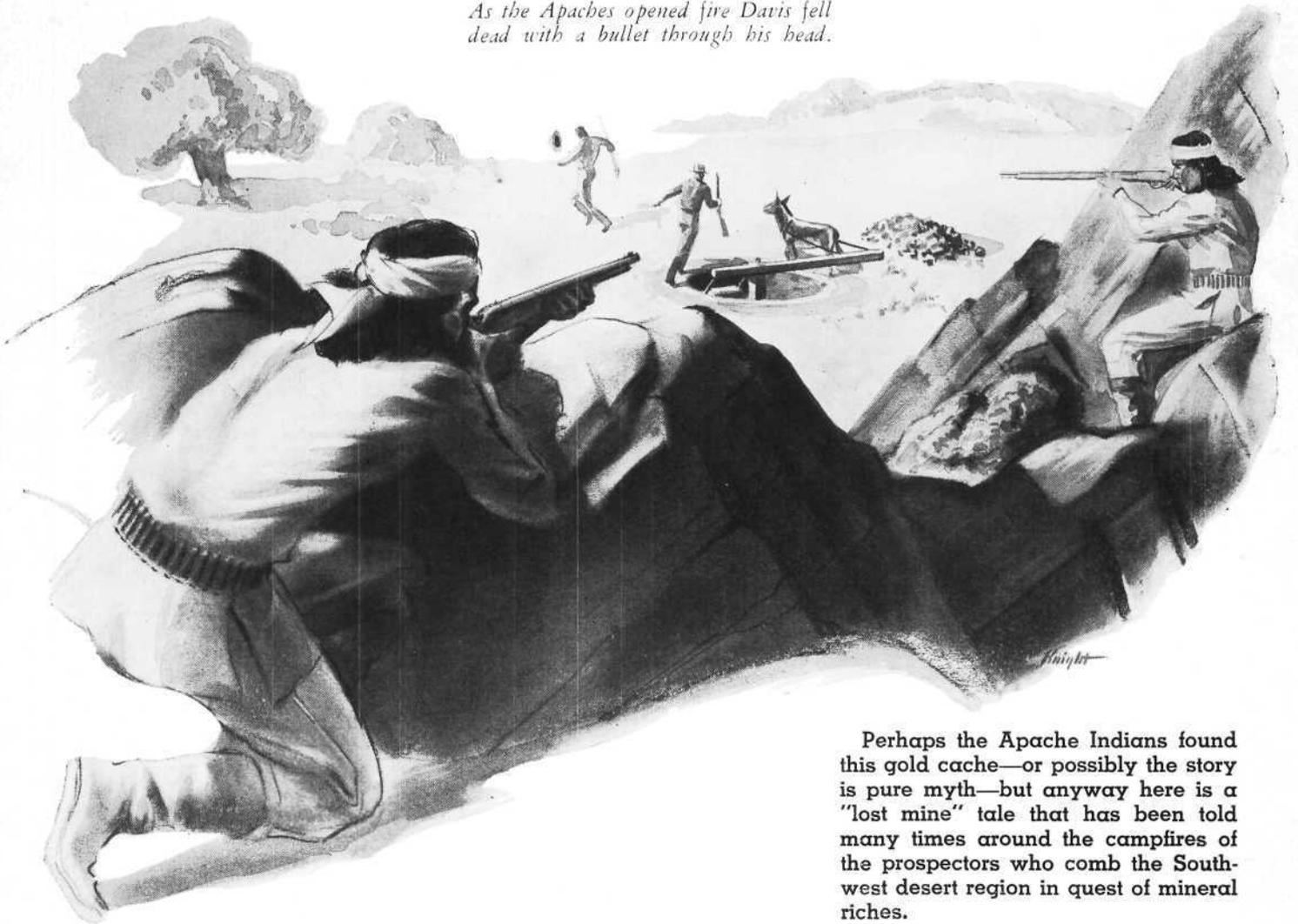
Malacothrix fendleri

Arizona claims this graceful species. Not more than 5 or 6 inches high, its rather stiff pale blue-green leaves are pinnately divided into irregular lobes and disposed in an attractive basal rosette. The pale yellow flowers are quite pretty, about an inch across.

Desert dandelion on the Mojave east of Daggett.



As the Apaches opened fire Davis fell dead with a bullet through his head.



Perhaps the Apache Indians found this gold cache—or possibly the story is pure myth—but anyway here is a “lost mine” tale that has been told many times around the campfires of the prospectors who comb the Southwest desert region in quest of mineral riches.

Lost Pick Mine

By JOHN D. MITCHELL
Illustration by GENE Knight

IT was rumored in the frontier town of Phoenix in 1871, that an old Apache Indian was bartering rich chunks of gold ore for supplies at the store in Fort McDowell. The Apache was known to live up in the Bronco canyon country about 50 miles north of Phoenix and twenty-five miles northwest of the fort.

When the bartering had been going on for about a year two prospectors by the name of Brown and Davis came into the country from Phoenix and were in the store one day when the old Apache came in with his pockets full of the rich ore which was matted together with coarse wires and nuggets of gold. The two prospectors were old-timers, but in all their experience they had never seen such rich rock.

After bartering his gold the Indian started off across the desert. After traveling about 10 miles he dropped down into Coon creek canyon and followed that

up to where it joins the east fork of Bronco canyon.

There the trail was lost by the two prospectors who had been following a few miles behind the Indian.

Returning to the fort the two men purchased supplies sufficient to last them several weeks and then headed their burros out across the desert in the direction of Wild Bronco canyon. That night they camped at a small spring on the south fork of the canyon where a stream of water bubbled from the west bank and ran several hundred feet before losing itself in the sand.

One day while prospecting in the wild brush covered country on the west side of the canyon they discovered an 18-inch quartz vein very rich in free gold similar in form to that they had seen in the hands of the Indian. The vein outcropped in a patch of manzanita brush and showed every evidence of having been worked. Little piles of ore were scattered

along the vein and under the paloverde trees that grew nearby.

Pottery shards strewn over the ground indicated that the vein had been worked by Indian squaws.

Brown and Davis returned to their camp at the spring and constructed a crude arrastre in which to grind the rich ore. After twenty-five sacks of the quartz had been mined and milled the partners estimated they had in the neighborhood of \$70,000 or \$80,000 in gold in their possession. Their pannings indicated that the ore would assay around \$80,000 per ton in gold. As fast as the amalgam was taken from the floor of the arrastre it was rolled into balls and stored in a hole under a large rock that stood near the arrastre on the east bank of the creek.

With all this wealth the partners decided to return to their old home in San Francisco, where after a few months rest they would purchase machinery and return to work their mine.

Early in the morning as they were

getting ready to break camp, a small party of Apache warriors emerged from the rocks near the arrastre and started firing. Davis the younger of the two prospectors fell dead with a bullet through his head. Brown grabbed his rifle and sprang behind a large boulder as six Apaches made a rush for the camp. From his place of concealment Brown killed three of the Apaches and wounded a fourth. The others abandoned the fight and disappeared into the rocky canyon.

Brown crawled into the manzanita thicket and escaped with his rifle and the clothes he had on his back. A piece of rich ore he carried in his pocket was assayed in San Francisco some years later and was found to contain \$84,000 a ton in gold.

Brown kept his secret, awaiting the time when it would be safe to return to the Indian country.

Eventually the Indians were pacified and placed on reservations. Then, although he was now 80 years of age, the prospector decided to return to the scene of the strike.

He reached Phoenix on his way to the Bronco canyon country, but while he was gathering supplies and an outfit to accompany him into the desert wilderness, he was taken ill and placed in a hospital.

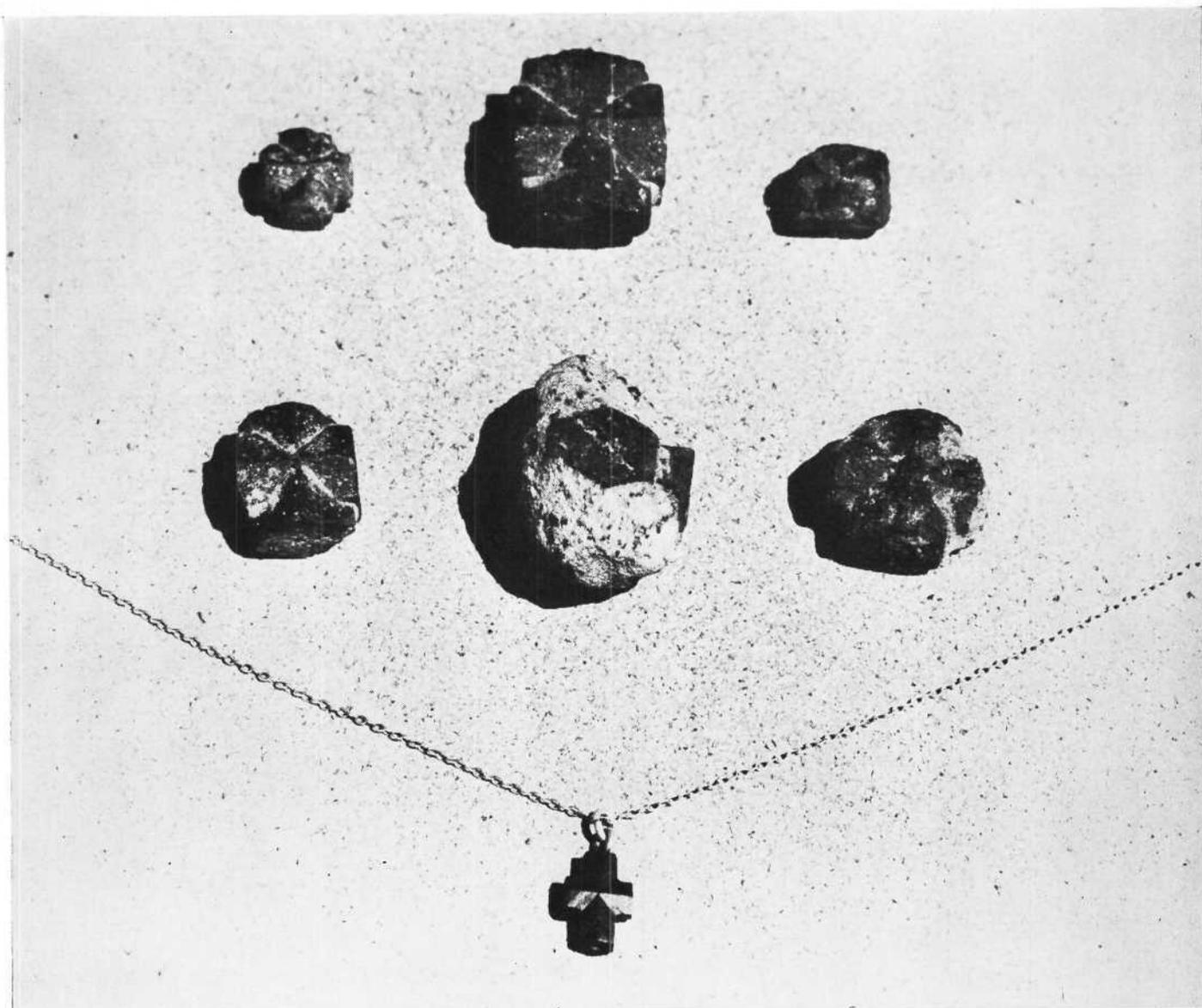
On his deathbed he told for the first time the story of the strike he and Davis had made, and of the fight with the Indians. The balls of amalgam, he said, were buried in a shallow hole between a large boulder and a stratum of white volcanic ash that outcrops along the foot of the mountains on the east side of the little valley. It probably was still there unless the Apaches had seen it buried and taken it.

Several years later a Mexican goat-herder in that area came across the site of an old mining camp, and reported that he had seen a rusty pick sticking in a crevice in a small quartz vein, but did not stop to investigate. This story tallied closely with Brown's dying statement that his partner's pick was in the quartz when he was killed by the Indians. The Mexican had disappeared, however, before the story of the pick reached those who knew about the lost gold mine. It is said that a circle of rocks indicating the location of an ancient arrastre may be found in that region today, but neither the pick nor the cache of gold has been relocated as far as is known.

DESERT QUIZ

This monthly puzzle feature of the Desert Magazine is designed both for those who pride themselves on their knowledge of the desert Southwest, and for those who would like to broaden their fund of information about this fascinating area. Practically all the answers to these questions have appeared in the pages of this magazine during the past two years. Check the answer you believe to be correct and then compare with the answer list on another page. If you get 10 of them correct you know more about the desert than the average person. A score of 15 rates you as eligible for the fraternity of dyed-in-the-wool Desert Rats. A score of 16 or more entitles you to the honorary degree of S. D. S. (Sand Dune Sage). Answers are on page 38.

- 1—Desert holly grows frequently—
In the bottom of arroyos..... Around waterholes.....
Above 3000 feet..... In alkaline soil.....
- 2—A metate was used by the Indians for—
Killing game..... Grinding meal.....
Storing food..... Ceremonial purposes.....
- 3—Going through Daylight pass the traveler enters Death valley from—
The East..... West..... North..... South.....
- 4—The famous Nevada "Bottlehouse" is located in—
Goldfield..... Tonopah..... Rhyolite..... Searchlight.....
- 5—Borrego park in Southern California is a—
State park..... National park..... Private park.....
National monument.....
- 6—The Epitaph is the name of a famous frontier newspaper published in—
Yuma..... Death Valley..... Tombstone..... Nogales.....
- 7—The blossom of *Encelia farinosa*, commonly known as incense or brittle bush is—
White..... Yellow..... Pink..... Indigo.....
- 8—The Catalina mountains are visible from—
Needles..... Santa Fe..... Cedar City..... Tucson.....
- 9—The Seven Cities of Cibola were supposed to be pueblos in the area now occupied by the—
Walpai Indians..... Zuni..... Pahutes..... Apaches.....
- 10—Leader of the first Mormon colony to Salt Lake was—
Brigham Young..... Jedediah Smith..... Bishop Hunter.....
Joseph Smith.....
- 11—Hematite is the scientific name of a mineral from which is derived—
Copper..... Nickel..... Tin..... Iron.....
- 12—The Enchanted Mesa is located in—
Utah..... California..... Arizona..... New Mexico.....
- 13—Head of the national park service in the department of interior is—
Collier..... Cammerer..... Page..... Woodring.....
- 14—Author of "The Land of Poco Tiempo" was—
Austin..... James..... Lummis..... Bandelier.....
- 15—The Museum of Northern Arizona is located in—
Flagstaff..... Prescott..... Grand Canyon..... Cameron.....
- 16—Largest of the California desert lizards is the—
Gecko..... Zebra-tail..... Chuckawalla..... Whiptail.....
- 17—Five-spot is the common name of a desert—
Lizard..... Flower..... Bird..... Gem rock.....
- 18—In case of a rattlesnake bite the proper thing to do first is—
Run for a doctor..... Kill the snake..... Bandage the wound.....
Apply a tourniquet.....
- 19—First Spanish conquistador to sail up the gulf to mouth of the Colorado river was—
Ulloa..... Cortez..... Balboa..... Cabeza de Vaca.....
- 20—The Squash-blossom hairdress is worn by Hopi girls to—
Announce their engagement..... Eligibility for marriage.....
Pay homage to the gods..... Mourn the loss of relatives.....



Fairy stones—as picked up in their natural form in the hills near Taos, New Mexico, and as polished and worn as lucky tokens. Those shown in the photograph are reproduced exact size.

Stones Where the Fairies Danced

By MRS. WHITE MOUNTAIN SMITH

I was seated in the sunlit office of Dr. Charles N. Gould in Santa Fe, New Mexico—across the desk from the renowned geologist.

"Is that a Fairy stone you are wearing?" he asked.

"Why yes," I answered. "All good Virginians wear Fairy stones. They are found only in Patrick county, Virginia, you

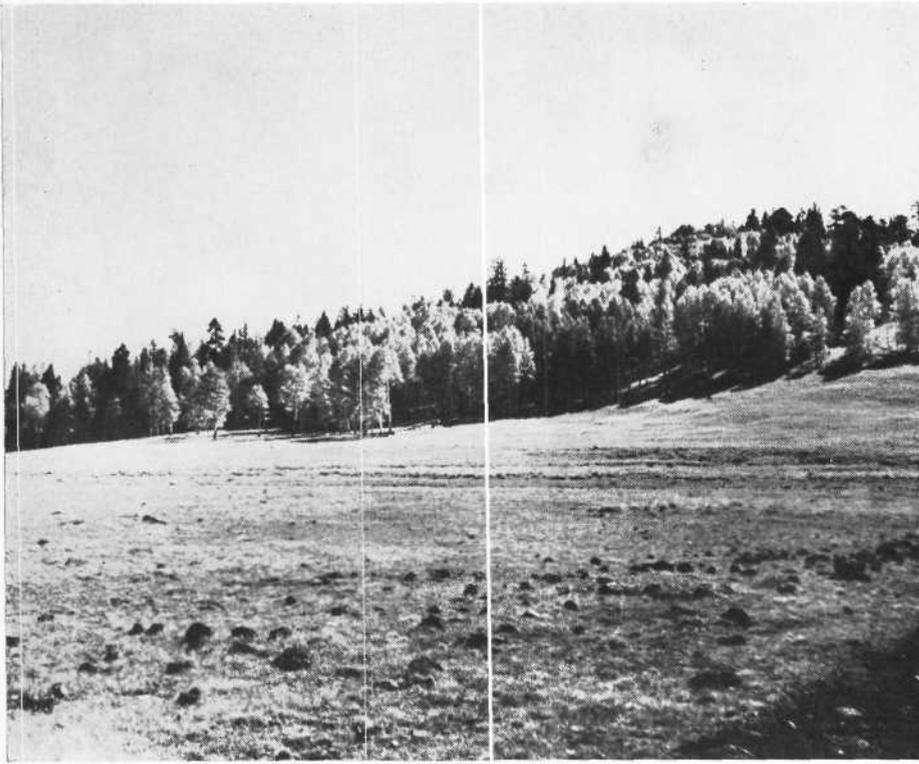
know. Recently it has been made a park—Fairy Stone park!" I glibly recited the tale I had heard all my life—that we state-proud Virginians had a special right to wear these little natural crosses of brown gem stone found in our southern mountains, prized beyond their worth, and worn by every sentimental daughter of the Old Dominion state.

Dr. Gould smiled. "That's what *you* think—that they are found only in Virginia."

He turned toward the open door leading into the file room. "Pedro, come here a minute!"

Into the room came an alert young man, Pedro Suazo, Spanish-American, whose forefathers had followed the first

In Virginia, where Fairy stones are most commonly found, there is a pretty legend about them—and many of the natives wear them as good luck tokens. Not many people know that these same stones—staurolite is their scientific name—are also found in New Mexico, near Taos. Mrs. White Mountain Smith was led to the New Mexico Fairy stone field by a Spanish American boy who formerly herded sheep in that region. Here is a story that will interest Desert Magazine readers—whether they are mineral collectors or not.



Mrs. Smith found her New Mexico stones beneath the trees at the top of this hill not far from Taos.

great leaders into the deserts of the Southwest.

"Let Mrs. Smith see some of the pebbles with crosses you brought into the office." Pedro emptied his pocket and a handful of stones lay on the desk.

I picked up some of the specimens. There were the twin-crystals, crossing each other at right angles. No other crystalline formation is just like them.

"Where did you get these?" I asked.

"We have always had lots of them around the houses where I live and where my uncle lives, near Taos. We find many of them when we follow our herds of sheep in the mountain pastures. Yesterday when I saw you wearing a small one on a chain around your neck I remembered these and I thought maybe I could fix some of them on chains. I would like to take you and Dr. Gould to the hills where they are found."

Sunset found us settled in the ancient pueblo of Taos, after one of the most beautiful and thrilling mountain drives in New Mexico. Our way followed up the canyon of the Rio Grande, sometimes close behind the tumbling stream, and sometimes hundreds of feet above the water as we wound up the side of a cliff which shut us completely away from the rest of the world. Because it was so late in the day when we came to the arroyo in which the desert Fairy stones were said to abound, we resolved to see sunset and moonrise on the most talked of Indian pueblo in the Southwest, historic Taos.

There are no words to tell just how much fascination hangs over this village nestled at the foot of the purple mountains which rear their heights 13,000 feet into the deep blue sky of New Mexico. The whole scene is unreal, or rather like Jerusalem, or some of the other old cities found in the Bible. There are two massive piles of homes, four stories high, each story terraced back on the one beneath giving a rooftop front yard for the upstairs dwellers. It must be the manner in which the men wrap themselves, head and all, in white cotton blankets that gives the impression so Arab-like. Seeing these white garbed men mounted on fast moving horses in the desert gives a feeling that one should also see some gallant soldiers of the Legion close around!

The women sing and chatter as they move about their household tasks carrying clothes to be washed in the fast moving mountain stream running between the two pueblos, baking bread in the outdoor ovens, or just walking back and forth on their housetops wrapped in blue or scarlet blankets, fat placid babies bobbing their heads above the shawl that holds them.

The sun slipped behind the mountains as we finished our supper, but out on the desert the red rays still lingered, and we walked down to a corral to watch the threshing of wheat. The golden straw was piled thickly over the clean hard earth inside the enclosure made of upright juniper logs sunk into the ground and lashed together with rawhide thongs.

A herd of protesting goats was being driven around and over the grain, their sharp gleaming hoofs beating the ripened kernels from the straw. One sullen old billygoat lowered his head and glared at us in such a human manner we laughed until we were weak. When he stopped, his followers also went on strike, so we moved to a nearby housetop and watched from there. After awhile the straw was removed and the wheat gathered into great baskets and stored until a windy day. Then the grain would be poured from basket to basket and the breeze would carry the light chaff away. The herd of goats was turned out and driven down from the village into the pasture, still led by the belligerent patriarch.

Moonlight, and in the plaza small excited boys gathered around an outdoor fire, and to the thump of a drum practiced the graceful hoop dance seen to best advantage under those conditions.

Blue shadows still lay heavy over the sleeping village when we left next morning and retraced 15 miles of our yesterday's journey. I stopped long enough to walk to the quiet little graveyard where Kit Carson and his beloved Josefa sleep, close to the home they built many years ago when Taos was the meeting place for the fur traders and frontier soldiers of fortune.

At the small Mexican town of Cieneguilla, on the Taos highway, we left our car and walked up the dry bed of the Agua Caliente wash two miles.

"Here is where we start up the mountain," said Pedro, who knows every foot of that country. He has played and hunted and followed his father's herds over almost every mile of the mountains and valleys surrounding his home town, Penasco.

While I was looking down into the blue shadowed desert and trying to see across the thousands of miles into my own Blue Ridge mountains, the others started up the hillside and I scrambled after them. It really wasn't as steep as it looked, and as we climbed upward there were little open grassy spots among the yellow pines and clusters of quaking asp, with here and there a piñon tree.

The ground was almost bare among the trees and there we found the modest little brown pebbles lying loose on top of the ground, each one blanketing a twin-crystal which formed a cross. Some of the crosses were almost free of their matrix while others were completely protected by the enveloping mica schist. There were pebbles of all sizes, some as tiny as a thumb nail and others measuring two inches across. It didn't take me long to realize that Virginia has no corner on Fairy stones.

Pedro told us the deposit covered many acres in that region, and that the Mexicans and Indians had known of the

strange crosses for many years and held them in superstitious awe.

"My people have not thought much of them other than to pick up the most perfect ones and carry them to their homes, but the Indians use them as magic stones."

"Have they no legend to account for them?" I asked, thinking of the romantic fable surrounding the Virginia crosses or Fairy stones.

"Not that I have ever heard. Perhaps the older people did but since I can remember they have only been interesting souvenirs of our days spent in these pretty mountain glades."

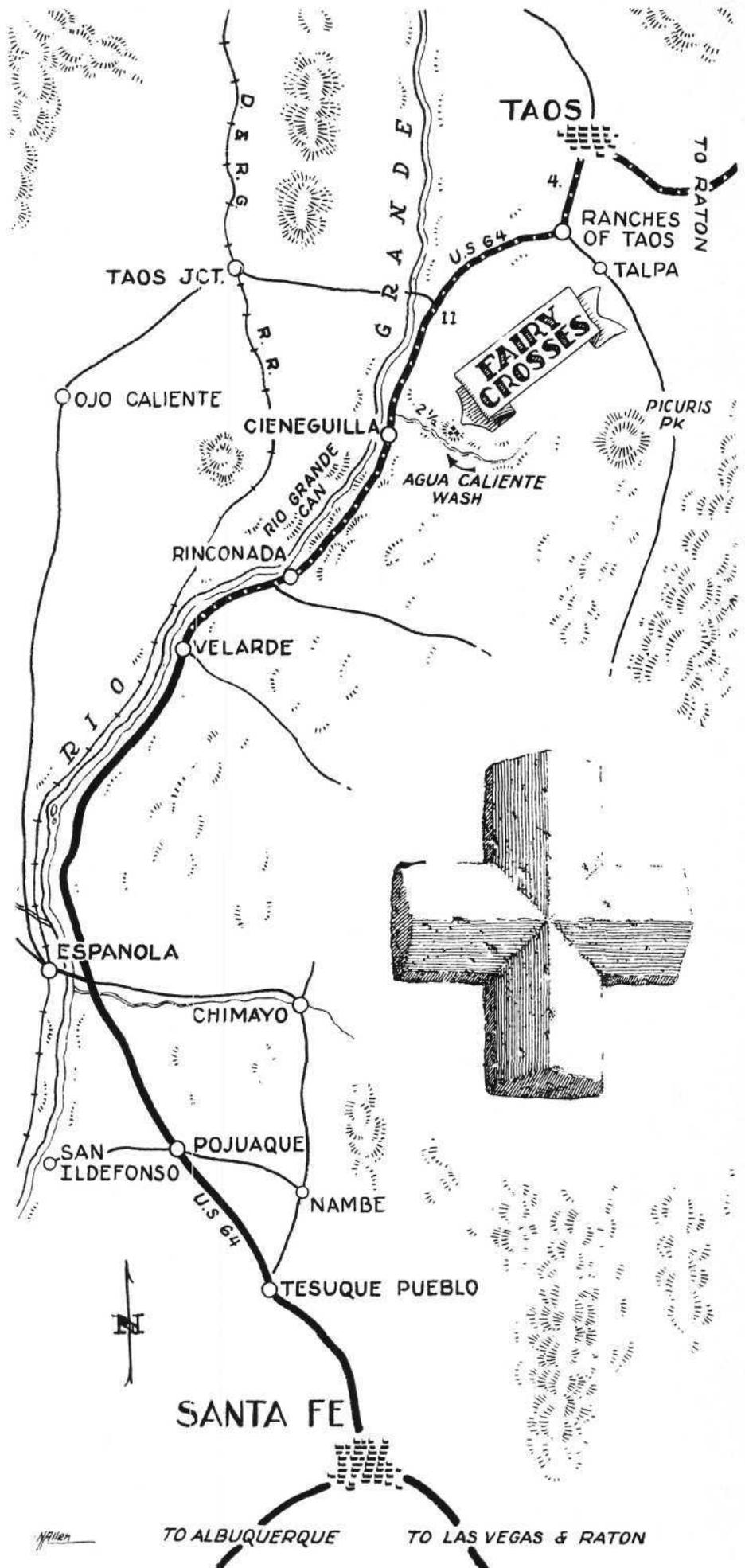
I loosened the chain which carried my Virginia Fairy stone and compared it with the smallest one I'd picked up there in New Mexico. They were very much alike. I wondered why nothing had been said about these western staurolites.

"Your Virginia Fairy stones are well advertised and that's why people hear of them," suggested Dr. Gould. "They are for sale in all the little shops at Mt. Vernon and Luray caverns, and thousands of tourists ask questions about them. You remember that much of the story 'Trail of the Lonesome Pine' is built around the tiny Fairy stone given to the little mountain girl when she left her home in the hills for the first time. Many people have read the story. And, too, the pretty legend you people have about this twin crystal appeals to the popular imagination. Just how does the story go?"

Never reluctant to repeat the legend that I've heard since I was a small girl, I told how dainty fairies were dancing around a beautiful pool of water, playing with the naiads and wood nymphs who made their home in the southern mountains, when a weary little bird fluttered to rest among them and brought the cruel message of Christ's crucifixion. As the dancers listened to the story their tears fell upon the earth where they crystallized into little crosses. They never danced there again, but to this day their tears are found and cherished as luck pieces. President Teddy Roosevelt may have "carried a big stick" but he also always had a Fairy stone tucked snugly in his vest pocket to give him luck. And President Wilson made no secret of his interest and love for the little crosses found in his native state. Scarcely a lad went away to war from Virginia without carrying with him as a special protection one of these Fairy stones presented by his sweetheart.

"Very pretty indeed," said Dr. Gould, and then became scientific for my benefit. "These pebbles with crosses are found in very old mountain ranges—in the oldest formation of the earth's structure. They are most plentiful in the Piedmont

Continued on page 39



Coronado came north into the upper Rio Grande valley 400 years ago expecting to find Indian tribes with a treasure that might exceed even the gold and jewels which Cortez had wrested from Montezuma. It was a bitter disappointment when the fabled Cities of Cibola turned out to be mud houses peopled by unpretentious Indian tribesmen whose main source of wealth was the fields along the river bottom. As far as Coronado was concerned, the expedition was a failure. But the Spanish conquistador pioneered the way for new industry and development of more lasting value than any golden hoard he might have seized. And so New Mexico is this year celebrating the 400th anniversary of Coronado's conquest with festivities designed to attract visitors from all over the continent.

400 Years after Coronado's Conquest

By EDDIE SHERMAN

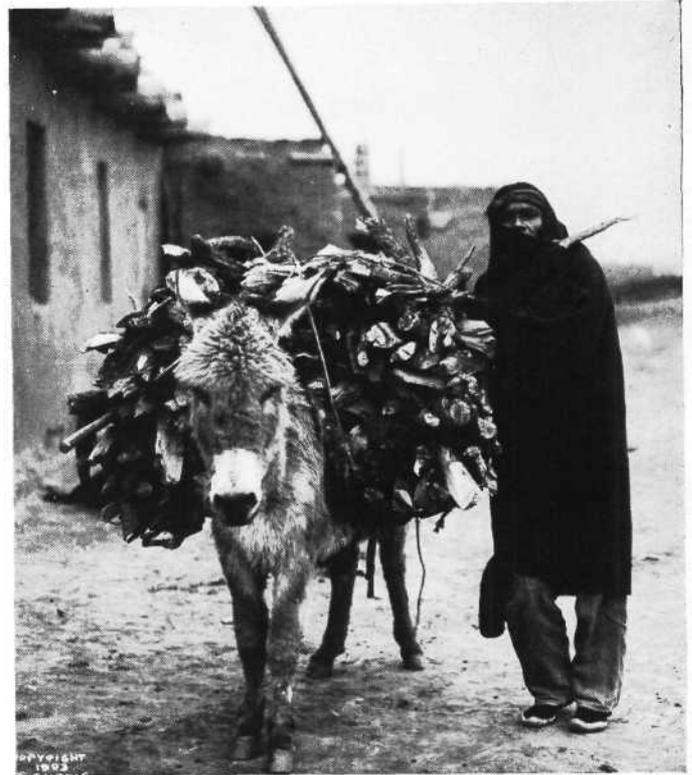
THE golden brilliance of the mid-day sun beat down on gilded armor. Far in the distance the same sun reflected the mica in the walls of the adobe-plastered pueblos situated high on the sandstone mesa. The floor of the intervening desert was a colorful pattern of wildflowers.

The scene was 400 years ago, and the wearer of the gilded armor was Francisco Vasquez de Coronado, followed by several hundred soldiers and friendly Indians bearing light cannon, crossbows and harquebuses. Several months previously this same army, without the Indians, had paraded proudly before the viceroy at Compostela, Mexico, resplendent in gay garb and shiny breastplates, typical of the Spanish grandees who came as adventurers to the new world.

Now the soldiers were in low spirits, their clothing torn and their armor dulled by weather and the dust of hard and disappointing trail. But the first glimpse of the sparkling mica in the walls of the dwellings had revived their hopes somewhat. That city on the plateau might be the first of the famed cities of Cibola where the soldiers had been told there were houses of gold inlaid with precious stores.

But Coronado was soon to learn the bitter truth about this village on the distant mesa. Instead of a friendly welcome and a golden harvest of treasure, he and his followers were greeted with stones and the pagan curses of tribesmen whose only wealth was the grain they gathered in crude fashion from the fields below the mesa.

So blinded by their lust for gold had been Coronado and his Spaniards that they missed the real wealth which abounds in this great desert country. On all sides was rugged scenic beauty unknown to other parts of the world.



Woodcutter of the Pueblos. Photo courtesy Southern California Auto club.

Scenery meant nothing to this band of conquistadores. Nor fertile valleys where water was available for the creation of agricultural wealth. Finding neither glistening gold nor sparkling gems—the expedition was a complete failure as far as Coronado and his band were concerned.

But to the Southwest, this first Spanish invasion heralded a new era in agriculture and the foundation of the Southwest's greatest industry—stockraising. It was the conquistadores who opened the way for the padres and the settlers who introduced cattle, sheep and horses to the Indians.

Honoring Coronado and his band of pathfinders, Southwesterners in New Mexico, Arizona and Texas will this year hold festivities for the entertainment of visitors from all parts of the American continent.

In the typical Southwestern way of doing things, 20 cities and scores of smaller communities in New Mexico and West Texas will present pageants depicting the Coronado invasion. The various celebrations already are in progress, and will continue through the summer and fall months.

As far back as 1935 New Mexicans began plans for the program to celebrate the four-hundredth anniversary of Coronado's travels. In 1937 the federal government looked toward a celebration in honor of a Spaniard as another step in the "Good Neighbor" policy of the United States with the Latin Americas. An appropriation of \$200,000 was passed which would be used to formulate plans under the direction of the United States Coronado Exposition commission.

Today those plans have blossomed forth into the makings of vivid pageantry entailing a cast of hundreds using 555 costumes which are authentic of the 16th century to the last degree.

On stages measuring more than 250 feet long these characters, many of whom are actual descendants of the famous Spanish explorers, will re-live the hectic days of 1540. The first major pageant will be presented in New Mexico's largest city, Albuquerque, May 29, under artificial lights in the uni-

versity of New Mexico's huge stadium. From there the pagentry, stages and all, will move to 19 other cities in New Mexico and West Texas to present a new phase in the Coronado adventures.

Turning back the clock 400 years is but a step to the people of New Mexico and Arizona. In the former state 52 per cent of the population still speak the native Spanish tongue which was introduced by Coronado, and the customs which the early Spaniards planted in this picturesque country still linger practically unchanged.

New Mexico, perhaps more than any other state in the union, today presents a fascinating picture in which the colorful past is blended and harmonized with a progressive present. Here are three peoples with widely differing cultural backgrounds—Anglo-American, Mexican and Indian—living together without apparent conflict, preserving the most interesting phases of the past while taking advantage of the best in the new civilization.

The Indians may be seen living much as they lived when Coronado came to this region—weaving blankets, molding pottery and carrying on the rituals of their forefathers. From their simple code of plain-living and their primitive appreciation of beauty, Americans have much to learn—and perhaps the white American visitors who go there this year to witness the festivities will find more than mere entertainment—it is possible they will take away with them some lessons in the fine art of living happy useful lives without some of the gadgets and the ballyhoo which a stream-lined civilization has led them to believe are a necessary part of life in 1940.

Anyway, New Mexico's latchstring is hanging far outside the door this year.

Prizes for Pictures

Amateur photographers planning to submit entries in the monthly contest of the Desert Magazine should note that the minimum size of pictures acceptable for judging is now $3\frac{1}{4} \times 5\frac{1}{2}$. This is larger than the size formerly required.

This magazine pays \$5.00 for first and \$3.00 for second prize pictures submitted each month. Pictures are limited to desert subjects and may include Indian pictures, rock formations, flora and fauna, canyons, waterholes—in fact anything that belongs essentially to the desert country.

Following are the rules governing the contest:

1—Pictures submitted in the May contest must be received at the Desert Magazine office by May 20.

2—Not more than four prints may be submitted by one person in one month.

3—Winners will be required to furnish either good glossy enlargements or the original negatives if requested.

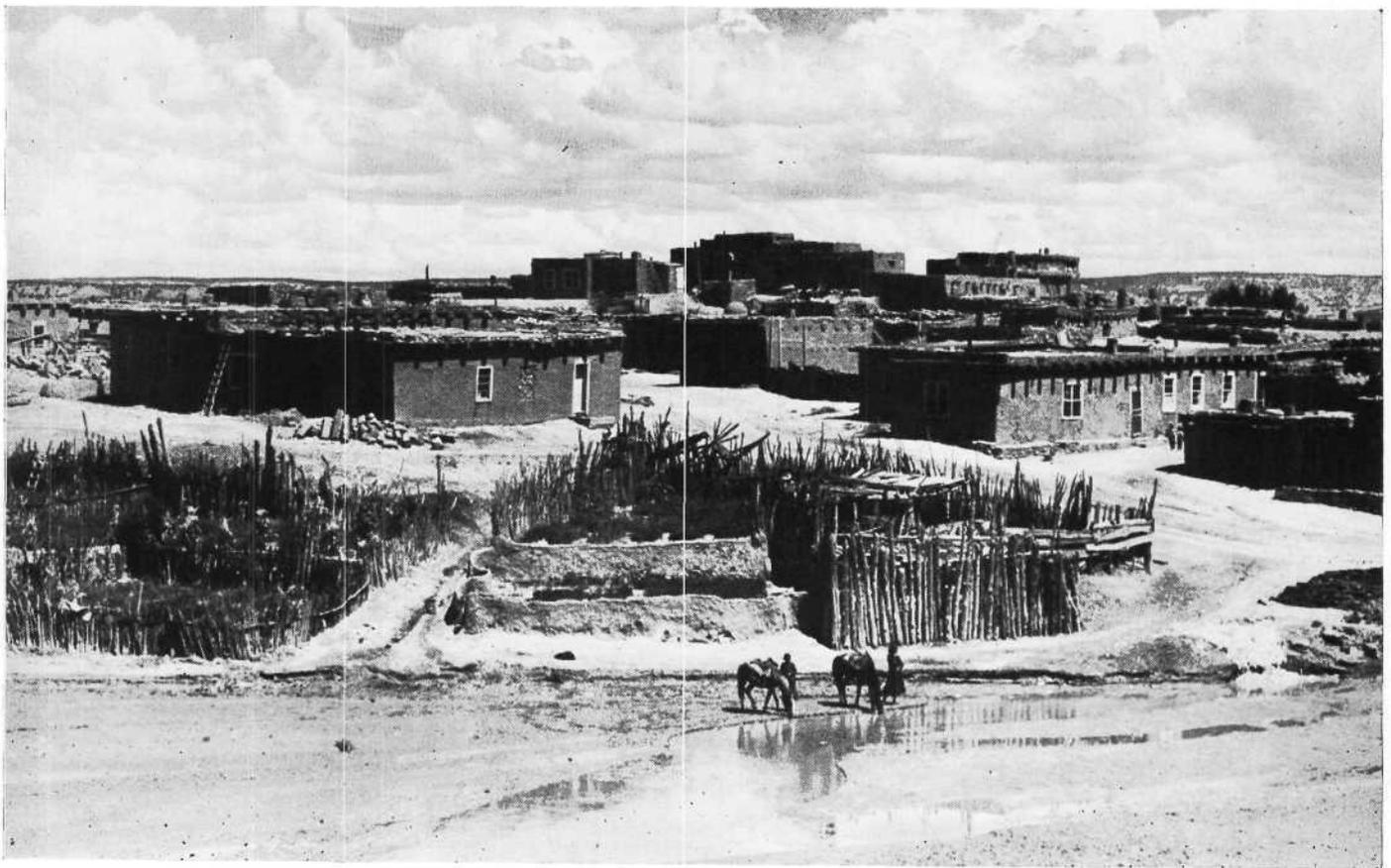
4—Prints must be in black and white, $3\frac{1}{4} \times 5\frac{1}{2}$ or larger, and must be on glossy paper.

Pictures will be returned only when stamped envelopes or photo-mailers are enclosed.

For non-prize-winning pictures accepted for publication \$1.00 will be paid for each print.

Winners of the May contest will be announced and the pictures published in the July number of the magazine. Address all entries to:

Contest Editor, Desert Magazine, El Centro, California.



*Zuñi Indian pueblo today. The ancient pueblo of Hawikub which is believed to have been the first seen by the Coronado expedition has long since fallen to ruin.
Photo by Frasher.*

Desert dwellers learned many years ago that the imported athel tree is ideal for quick shade and wind-breaks—but it was not until Bert Woodhouse devoted years of study to the curing of this fast-growing tamarix of the arid region that its value for household furniture and utensils became known. Here is the story of a man whose patience and skill have created something new in desert craftsmanship.

Boats and Bowls by Woodhouse

By NINA PAUL SHUMWAY

Photographs by DAL WOODHOUSE

THE first time I held one of Bert Woodhouse's athelwood bowls in my hands I felt as I do when I read a great poem or listen to a splendid symphony. I knew a little of what had gone into the creation of it. And even here in the desert where one learns to expect the unusual, that little seemed so remarkable I determined to learn the whole story. Accordingly, a few days later, I drove over to the E. F. Woodhouse ranch, six miles south of Indio, California, in the Colorado desert.

Billows of sand still lap at the edge of the reclaimed desert ranch and surge against the windbreak of big athel trees Bert and Katherine Woodhouse planted around their homestead when they came here 20 years ago. But within this barrier all is beauty and modern comfort.

The hospitable two-story house, surrounded by shrubbery and flowers, stands back from the drive in the whispering shade of the athels. Beyond is Bert's workshop where a jacked-up automobile furnishes power for lathe and bandsaw. In the background stretch acres of grapefruit—the chief horticultural product of the ranch. It is a place to be proud of, especially when you have earned it as Bert and Katherine have.

I found Bert at the lathe in a shower of fine sawdust, working on a bowl. Coveralls zippered up to the chin, and tight dust-proof goggles protected him from the rain of wood particles. I motioned him to keep on with his work, and from just outside the radius of flying atoms I watched the chunk of wood on the lathe swiftly take form under his skilled manipulation.

When the machine work was done he put the bowl in my hands. It was far from finished but the graceful symmetry, the exquisite coloring, the fine hard texture and grain of the wood were there. Between this piece of artistic craftsmanship, and the wood we were burning in stove and fireplaces, was Bert's discovery—the secret of curing athel.

"Please tell me about the very beginning," I asked. "How did you get started making these beautiful things?"

He took off his goggles. Interest kindled in his blue eyes. "I've always been interested in hard woods," he said, "As a little shaver back in Wallingford, Connecticut, I used to pore by the hour over the collection my grandfather, a maker of fine violins, had gathered from every part of the globe. You see, hard woods are used in boat building. And it was one of my great ambitions to build boats. I started a canoe when I was eight years old."

I glanced toward the dry dunes that hemmed us in. Boats!



Guests at the Woodhouse home in Coachella valley exclaim at the beauty and perfection of this gorgeous salad set of athel wood.

He caught my expression, and smiled. "Believe it or not, the first thing I did on the desert was to build a boat — down on the shore of Salton sea. In fact it really was the sea that drew me here in 1911 when my brother G. C. and I drove a team and wagon down from Pasadena.

"We named our boat *La Ola* — The Wave. She was designed to be used as an excursion and pleasure craft in conjunction with the recreation camp we started near Salton. Everything was going nicely. *La Ola* was finished, and also 180 feet of pier. But the rapid recession of the sea soon made it necessary to take people out in small boats to board our vessel. They didn't like this. We needed pontoons and other equipment to make our venture a success. But our backing failed and the project had to be abandoned.

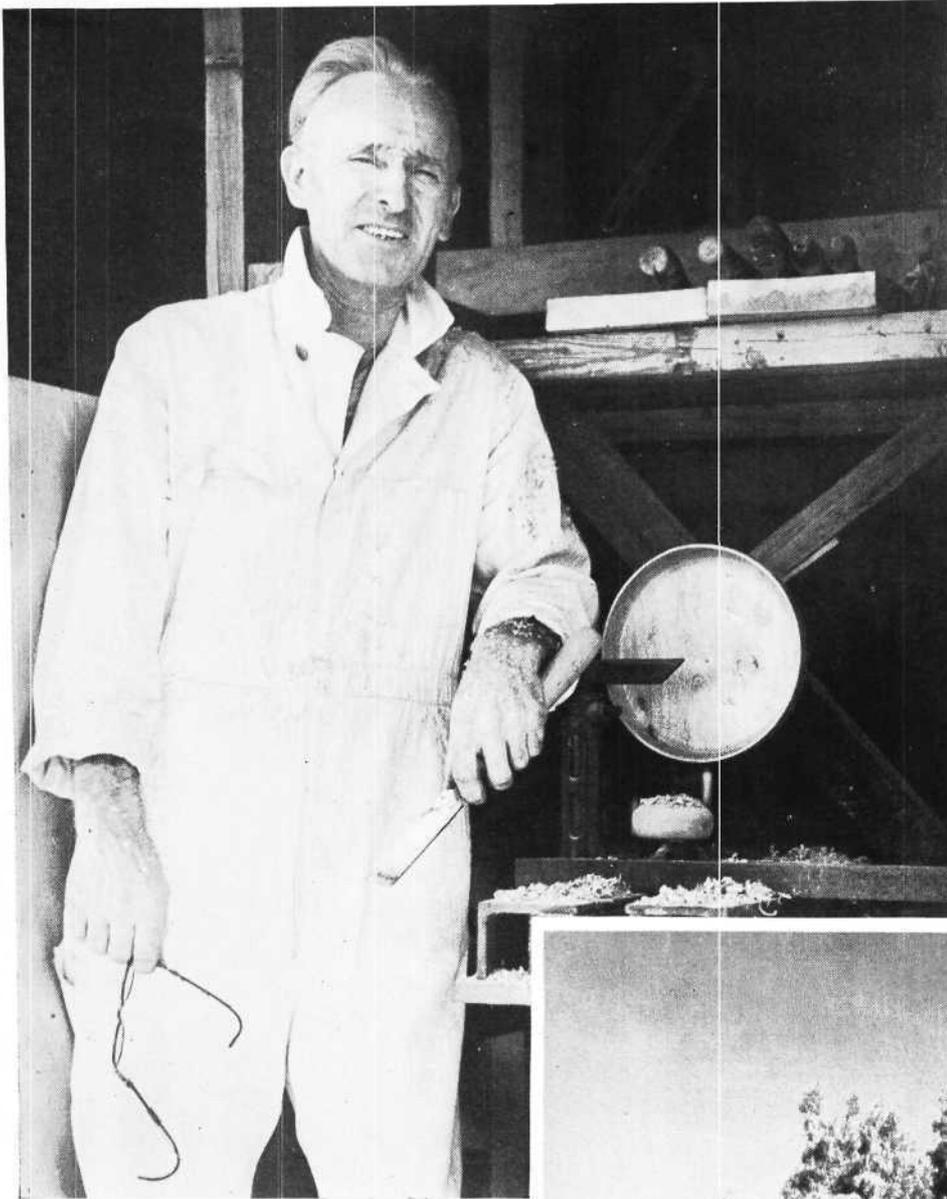
"Eventually *La Ola* was sold to Japanese fishermen who used her as a 'flagship' during the years that Salton sea supplied thousands of tons of mullet to the Los Angeles markets. When the waters were fished out, the boat was shipped to San Pedro where for all I know she is still part of some fishing fleet."

One might suppose that this disappointment would have sent Bert Woodhouse to the coast or waterways—some environment more suited to his cherished ambition. But though he still talks of the sea and boats as a man talks of his dream, the spell of the desert was strong enough to hold him.

Before the year was out he filed on 160 acres of raw land, married Katherine, and began the desert homesteader's battle with wind and sand and solitude, summer heat, savage aridity. Of this pioneer period Bert said, "I actually felt sorry for myself once—that time the horse lamed himself on a stone, going to town, and I had to plod through the sand lugging his feed out on my own back."

At the start they lived in a tent house — the walls boarded up a few feet. During the first heavy rain Katherine had to sit up in bed and hold an umbrella over her head. After that Bert decided there had to be a roof so he built the little cabin that now stands hidden among the grapefruit trees where it was moved to make place for the big house.

Katherine and I visited it. There were two rooms. In the tiny kitchen there was a sink but this, she told me, had been put in after they had lived in the cabin several years. As we walked back single file along the narrow path, I asked



Bert Woodhouse is almost as perfect an example of desert adaptation as the athel tree which provides the wood for his hobby. This picture was taken in his workshop.

"Which did you mind most, the physical hardships or the loneliness?"

Over her shoulder Katherine gave me a grin. "To tell the truth, I didn't mind either. Except for an occasional mood, which anyone has, regardless, it was fun. We were young. This was our own, and we were working for the future."

We were out of the trees now. A little wistfully she added, "Sometimes I almost wish we were back in the little homestead cabin doing it all over again. The big house and all that goes with it, ties me down so."

Except for a leave of absence when their son Dal was born, and the period during the World War when Bert worked in the shipyards in San Pedro, the Woodhouses continued to live on their homestead among the dunes, dreaming, working, achieving.

They dug their well by hand. To furnish

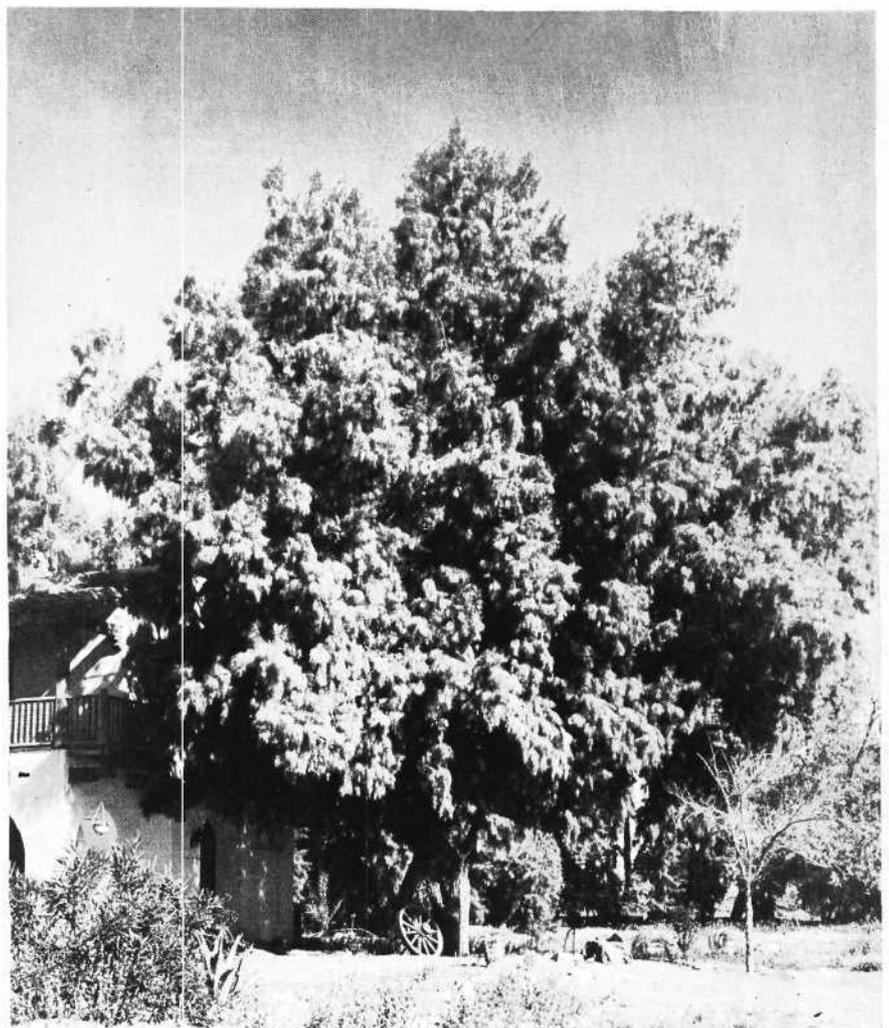
money for living expenses and development, Bert worked at the trade of interior decorating which he had learned as a boy from his father in New England and which later, he had carried on in Pasadena. Between jobs, on Sundays and during every spare hour, he worked on the well. It was a slow process that dragged through several years. During this time he had to haul water from a distant ranch every morning before leaving for the day's job—enough for domestic use and to fill the tank which furnished a drip on the cooler he had rigged up to serve as an icebox.

It was about 1917, when he was working on the well, that he made his first important discovery about athel wood.

The athel tree, an evergreen variety of tamarix, found from Morocco to Arabia and India in the Old World, and first brought to this country by

Continued on page 29

Athel was brought from the deserts of the old world by Dr. J. J. Thornber—and immediately adapted itself to the Southwest. This picture illustrates the fine growth of the tree in Coachella valley where ample water is available.



The desert has many hobbies—some for those who have the time and health to tramp the hills and explore out-of-the-way places—and others for the shut-ins. Here is a suggestion for a fascinating indoor pastime—from a woman who all her life has wanted to paint—and then learned quite by accident how the desert sun would help her fulfill her wish.

"I wish I could paint that!"

By KATE CRICHTON GREDLER

I'M a top-notch gardener—and sometimes I write poetry that editors accept. But I can't paint. I cannot even draw the sketches that go on the canvas before the color is added.

Or, at least I couldn't until the desert sun showed me how. The lesson came quite by accident—and now I have a portfolio bulging with "sunsketches" of every wildflower that has blossomed this season on the Palm Springs desert.

It happened this way. I was in the patio arranging a bouquet of geraea—the "desert sunshine" that has been growing so luxuriantly this spring—with a bit of Smoke tree. I got them from the florist—if you have to know.

The shadows of my flowers and twigs fell sharply on the florist's wrapping paper that lay on the table top. I ran for



"Desert Sunshine."



Lupine

a pencil, slipped the paper more fully under the shadow and drew like mad—tracing the clear outline of every tiny detail. Then I drove to town for paint and drawing paper. I couldn't draw—but the sun could.

What a delightful hobby it has been! Some of the flowers I found myself. More of them have been brought by friends to the hospital where I have been convalescing from a stubborn illness.

I know that I have sand in my hair when I hasten to add that it was an imported *eastern* illness — and not a desert product.

Since the miracle happened I have improved my ART, have established a technique, and added several useful tricks. I decorated a lovely waste-basket, with the same flower spray painted on each of the four sides by the simple expedient of turning the basket around so the shadow fell on each side in turn, and then tracing it there. I painted flowers, added a colored border, shellacked the whole—and it looks quite professional.

I use poster paint for color as it is easier for the amateur artist to handle, and covers my errors—which are many, but not as many as there were. I have even done some interesting enlargements at night in a dark room with a strong unshaded light, moving the flowers until the shadow picture is magnified. It really takes no knowledge of drawing—only a little care and patience.

For those who would make sunsketches, the formula is simple. Put the flowers in a low vase of water, using a "frog" to hold them steady. Place the drawing paper on a firm cardboard backing just where you want the shadow to fall.

Turn the flower, adding or subtracting a leaf, bud or blossom until the shadow composite suits you. Then trace it as swiftly as possible, as the sun moves more rapidly than you would believe. Or, the paper can be slipped along with the shadow if you want more time for the detail.

After the flower is drawn and colored as nearly like the

natural model as possible, I look up the botanical name from a book, and write this with the date and the place where it was found, on the back of the print. I also add any pet name furnished by the day nurse or the filling station attendant or the delivery boy—or whoever stops to admire it.

And what pleasure I have gotten from this pastime!

Never a stranger again to me
Shall any flower of the desert be.
For now I've known it by its name —
Called it—and lo! the flower came.

• • •

Wildflower Parade

May is the month when the spine clad, armored clans of the desert begin to show a brilliance unsuspected during most of the year. It is May that draws back the curtain for the colorful performance of cacti and desert shrubs — in canyons rimming the desert, the higher elevations of isolated mountains and in the northern reaches.

The month following mid-April should see the best display of shrub and cacti bloom in Arizona. In southern and southeastern areas cacti had started to bloom before April. First in order are the hedgehogs below 4,000 feet altitude, then the saguaro and prickly pears of the lower regions, followed in mid-May by the barrel cacti.

The major mass bloom of the Gila valley is provided by the golden palo verde and red ocotillo, at their height from April 15 to May 15. The end of April will see the cholla and prickly pear, and about May 1 the saguaro. Also during May the hedgehog cactus and lilac-flowered ironwoods will bloom.

The visitor to the national park service museum in Boulder City will find a new herbarium with 200 or more species already identified and catalogued.

Commonest flowers in the Boulder dam area are paintbrush, monkey flower, poppy, lupin, buckwheat, mallow, indigo bush, ocotillo, and the barrel, cholla and beavertail cacti.

Death Valley. May visitors should follow roads to upper levels—1500 feet and higher—to find the following cacti blooming: strawberry *Echinocactus engelmannii*, fishhook *Neomammillaria microcarpa*, corkseed *Phellosperma tetrancistra*, beehive *Ferocactus johnsonii*, strawtop *Opuntia echinocarpa*, diamond *O. ramosissima*, Mojave prickly pear *O. mohavensis*, grizzly *O. erinacea*, mound *Echinocereus mohavensis*, cottontop *Echinocactus polycephalus*, and pineapple *Sclerocactus polyancistrus*.

Mojave Desert. Copious rains which ushered in April are likely to produce

a good season of flowers well into May. Antelope valley may be counted on for poppy, lupin, coreopsis, paintbrush, scarlet bugler and penstemon. Areas are well marked for motorists.

Desert lily, show-flower of the Cronese valley, will continue into May in that area, as will the desert broom and catalpa. Others will be thistle poppy, yellow sage and purple aster.

Upland areas of the Mojave should reach their peak at mid-April. Barstow-Cave Springs road, Ord mountain, second summit north of Barstow, Hinkley and Kramer, Victorville and Hesperia regions and the Providence mountains are good wild flower areas. Highlights of these drives will be Mojave aster and poppy, larkspur, mariposa tulip, pink monkey flower, brodiaea, owl flower, paintbrush, desert candle, thistle and blue sage, penstemon, yuccas and the following cacti: beavertail, Englemann and Mo-

jave cereus, grizzly, silver and pencil chollas.

Colorado Desert. In the Colorado desert below the 3000-foot level the peak of the flowering season has passed for most of the wildflower species—but along the foothills and in the higher zones ocotillo, many varieties of cacti, yucca, agave, nolina, yerba santa and other perennials will be brightening the landscape with their bloom. The finest ocotillo display will be seen along the western edge of the Cahuilla basin from Whitewater to the Mexican border. Banner grade below Julian is a favorite haunt of agave. Nolina will be found plentifully along the Palms-to-Pines highway, in parts of the Joshua Tree national monument, and on the slopes of the Vallecito and Laguna mountains. Palo verde already is in blossom and toward the end of May smoke tree will begin to put on its clusters of deep indigo—a gorgeous sight for those who have never seen it.

Sez Hard Rock Shorty

of . . .
Death
Valley

By LON GARRISON



"Hillside Hens?" asked Hard Rock Shorty. "Sure I guess I knows more about them Hillside Hens than any other man in the world. I've seen 'em—looked at the eggs, an' watched 'em hatch. Yes sir—I'll tell yuh about it."

He yawned, fired up his pipe, and relaxed in the short noon-day shade on the front porch of the Inferno store.

"Lots 'o foks'll tell yuh there ain't no such animal as the Hillside Hen—claim it's a quaint bit o' local folk lore' as one pefessor puts it. But right up here in the Panamints I seen a pair of 'em—a hen an' a rooster walkin' around them steep hills, one leg longer'n the other to keep their heads level, pickin' up bugs an' actin' just like any other bird. I reported it to the University an' they sent some profs in to investigate, an' by Gum, I was right as usual.

They claimed it was absolutely a scientific marvel — a discovery o' unusual biological interest. They wrote a lot o' other profs an' there was a whole posse of 'em come in. Spent hours watchin' these birds buildin' their nests, an' when the

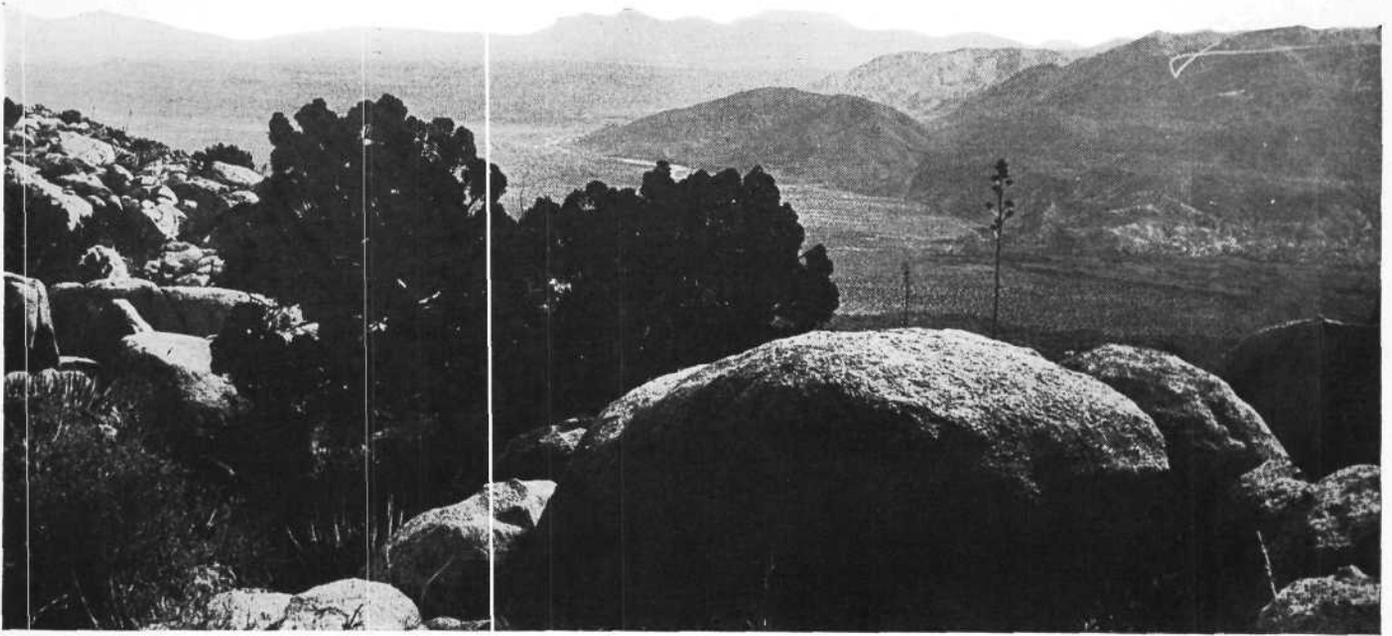
birds laid a couple o' eggs I thought these pefessers'd bust their glasses the way their eyes bugged out. Square eggs, — absolutely! — with dots on 'em running' from one to six on a side. There was more 'Oh's' and 'Ah's' than a afternoon tea party lookin' at a new baby.

"They wrot the Governor an' had the whole valley marked off as the Hillside Hen reservation. Wouldn't let nobody in to look—claimed it was the last nestin' place in the world an' they had to be protected. They took better care o' those eggs 'n the hen did, fussin' an' measurin' an' takin' pitchers!

Fin'ly the great day come—the eggs was ready to hatch!

The pefessers was all there busier'n a bull pup with fleas, so there was lots o' witnesses to the disaster. One o' them profs'd put them two eggs back in the nest the wrong way an' they was turned around. The little birds was hatched out with their long legs up the hill instead o' down, an' they both rolled down into a little creek at the bottom o' the canyon an' was drowned.

"Yes sir—there ain't no more of 'em now. I seen the last ones!"



From the top of Ghost mountain looking out across the Colorado desert.

DESERT DIARY

By MARSHAL SOUTH

April at Yaquitepec

ALL about the desert wastelands where the mesquites grow there are ancient roasting hearths. Unvisited and forgotten, almost obliterated, many of them, by rains and storms and the slow march of uncounted years they nevertheless hold in their blackened stones an uncanny power to turn back the flight of Time.

Standing beside these lonely circles it does not require much imagination to see again the old days when the fires roared and the wind skirled fountains of sparks across the gullies and dusky forms moved in the glow, bearing loads of fuel or new, fresh mescal hearts to the roasting.

Many brown feet trod these deserted trails in those old days. In the sunlit silences or beneath the low hung stars the desert was then, as now, a great land of mystery. But it was not deserted. The mountain sheep were here. And great flocks of quail. And on the secluded ridges and in quiet canyons the tiny, timid, Chihuahua deer. Chia bloomed along the trails and beans of the catsclaw and the mesquite swayed and ripened in the wind above grey rocks deep with mortar holes worn by the labors of many generations of dusky squaws.

The Indian, then, was part of the picture. He was as much a part of it as the desert wild life and the spiny plants whose food secrets he knew. A kindlier, brighter desert in those days; a bountiful mother to her simple, dusky children. Many things they did not have, many things they did not know. But it is all a question of values. Is the white man happier? Does he really *know*, with any more certainty, from whence he came—or to where he will depart?

"The Spaniards, the white people, were too mean to the Indians," a philosophic snowy-haired old Mexican señora told us once. "The good *Dios* became angry. Many of the springs he dried up so the white men should not have them. In the old days when the *indios* dwelt in the land there were

April is the month when prehistoric dwellers in the desert region feasted on the sweet sticky substance of mescal hearts—roasted in a rock-lined pit in the open. The blackened stones that mark the old pit-sites are still to be found on the desert—but few people of the present generation—either Indian or white—have tasted this ancient luxury. Marshal and Tanya South have eaten roast mescal many times—there were days during their first year on Ghost mountain when it was about the only food they had. Marshal tells about the mescal pits and other interesting sidelights of their desert experience in his diary this month.

many, many more *ojos de agua*. Now they are gone. Where? It is the work of *Dios*. No one can sin without punishment!"

Yes, the dusky feet have departed from the old trails. But the old camp spots remain—and the mescal pits. No one wants roast mescal any more, in these enlightened days, except barbarians who have deliberately turned their back upon "progress." Even the reservation Indian is, to a great extent, too modern and civilized to accept such coarse food. Some there are who still roast the ancient delicacy. But the company of them is few and fast dwindling.

Silence is over the old hearths. When our fires flame at Yaquitepec and we, treading in the footsteps of the shadowy company who have passed on, bear fuel and the sprouting mescal hearts of April to the old stone circles, we feel somehow ghostly and unreal and part of a phantom picture that is all but forgotten.

But there is more to April than mescal roasting. All the desert is awake and rejoicing in Spring. Fountains of wax-like white flowers tower above the green, bristling bayonets of the yucas and the emerald wands of the newly-leaved ocotillos are tipped with points of flame. Color! Sharp, vivid color! That is the keynote of the wasteland's awakening. And the knowledge that the vanished Children of the Desert found in many of these gorgeous blossoms a source of nourishing food takes nothing from their charm. Both the flowers of the yucca and the ocotillo are good to eat. But, lest the knowledge should tempt the transient wastelands visitor to sacrifice

beauty to experiment, it should be stated that they are not food for the unaccustomed. Like most desert bounty the taste is bitter, according to civilized standards.

Then there is the chia. The chia is a companionable little plant which seems especially to like the vicinity of the old mescal roasting hearths, spreading its circle of dark green, earth-hugging leaves, in the very shadow of the ancient fire-blackened stones. Its flower spike bears round, compact, multiple-flowered blooms, set in stages, one above the other, on the slender stem. And the little grey-brown seeds that follow the tiny, short-lived blue flowers are one of the most important "Indian grains" of the desert. It is microscopic and tedious to collect. But there is high nutrition in these sand-like seeds. They were ground into meal which was eaten as mush or baked in cakes or combined with the tiny, pounded seeds of many other desert herbs and grasses. It was real labor to collect food in the old days. But it was healthy labor and healthy food. And not all of the desert harvest was so difficult.

The gathering of the golden mesquite beans, and the job of reducing them to a brown, sugar-rich meal, must have had its joys. Then, as now, there were birds and butterflies among the swaying branches and soft, drowsy breezes stirring in from the silver-glinted mirages of the lowland desert. Some of the old Indian camps, with the steady thumping of the stone pestles in the granite mortar holes and the low chatter of the busy squaws blending with the happy laughter of brown youngsters chasing each other through the aisles of patterned mesquite shade, must have been rather pleasant places.

There is a new adobe wall going up at Yaquitepec. There is always a new wall in progress. They grow slowly for there are many more things to do than building walls. But whenever we have built a new bit we always feel proud. It takes us back in retrospect to the days when there were no walls. The days when the wind gods, whenever they came yelling over the mountain crest, would heave the tent, and our cooking pots and household effects stored within would jump and rattle and sometimes upset with deafening crashes. We would have to rush frantically and pile rocks on the beds to keep them from blowing away.

We could build only a tiny section of wall at a time when we first came, because the only water we had was what we could catch in old tomato cans and such receptacles. But now we have a cistern, and the adobe walls grow more rapidly.

"King 'nake! king 'nake!" Rudyard notified us this afternoon. He stood on the top of a big boulder, pointing excitedly and shouting with all the lusty power of two-year-old lungs. Tanya and Rider ran out to investigate. Yes it was the king snake—our old friend of several seasons. He came now, sliding his handsome ringed cream-and-black length down one of our garden terraces, his alert little brown eyes beady and twinkling, his sensitive eager nose and flickering tongue moving investigatively here and there.

But he was disappointed as he slithered confidently towards the porch. The wall gap of yesteryear, through which he was accustomed to wander inside, was gone. The wall had been built up. There was almost hurt accusation in the glance he gave us as he turned slowly away and slid along the foundation, looking for mouse holes. Rudyard came over and screwed a belligerent face after the departing streak. "King 'nake!" he said definitely. "Gun, Shoo', bang!"

"King snake won't hurt you," Tanya comforted. "It's not like a rattlesnake, precious."

We all went down and sat on the great flat rock at Lake Yaquitepec—which is a little stone hollow which every rain fills with water. Here Rider sails his fleet of tiny boats. The snakes were out, we said, bad ones as well as good, and we would have to be cautious—as though caution was ever relaxed in an existence where caution becomes a vital part of life.

It was warm and sunny and pleasant, sitting there on the broad rock top. A glinting, crystal silence was over all the desert.

Away to the west, Granite mountain, its reef-lined slopes tawny and savage as the claw-scarred flanks of some sullen monster, hunched against the sky and in the lowering sun the dry lakes and all the wasteland hollows, far away below us, flashed their myriad tiny flowers in sheets of mingled wine and gold. An Arizona hooded oriole swept past our heads with a dazzling flash of yellow and jetty black. The green and brown plumes of the bunch grass swayed in the slow moving air and the massed ranks of jumbled granite boulders shimmered in a warm, drowsy glow . . . Desert April!

Problem for the Census Taker . .

Census takers in other parts of the country who think theirs is a tough job should consider the enumerators whose difficult task it is to count the brown noses of 45,000 Navajos on their 50,000 square miles of reservation in Arizona, New Mexico and Utah. This region is the largest and most primitive covered by Uncle Sam's counters and within its boundaries live 10 per cent of all the Indians in the United States. Enumerators included traders, trappers, missionaries and former government employes. They went to school two days at Window Rock, Arizona, and then literally took to the field. They carried camping equipment, will eat and sleep in the open until their job is finished. Reluctance of the Navajos to discuss their personal affairs is an obstacle. One enumerator said he expected to get around this by asking occupants of each hogan to tell him about their neighbors.



UNION OIL COMPANY

1890—INDEPENDENT

1940—STILL INDEPENDENT



This photograph of the Rainbow bridge discovery party was taken near the arch in 1909 by Stuart Young, a member of the party.

Upper row—left to right, F. English, Dan Perkins, Jack Keenan, Chris Christensen, Neil M. Judd and Don Beauregard.

Lower row—Mike's boy, John Wetherill, Byron Cummings, W. B. Douglas and Malcolm Cummings.

By MALCOLM B. CUMMINGS

DURING the summer of 1908, my father Dr. Byron Cummings, at that time Dean of Arts and Sciences at the University of Utah, made a trip into southeastern Utah and northern Arizona. The prehistoric ruins in this vast area so interested him that he determined to return the following summer with several students for excavation and reconnaissance. From Mr. and Mrs. John Wetherill at Oljato, Utah, Dr. Cummings learned of many large ruins in the Segie and Nitsie canyons and also of a rumor about a great stone arch somewhere near Navajo mountain.

The six members of the Cummings party who left Salt Lake that June evening in 1909 for Thompsons, Utah, with one exception, were a scientifically minded group. I was the renegade. To emulate Kit Carson or Buffalo Bill was to me more colorful, but being 11 years old perhaps that was only natural. With the others, my father, Dr. Blum, Stuart M. Young, Neil M. Judd and Don Beauregard it was different.

From Thompsons we drove by stage to Moab, then to Monticello where we outfitted with saddle ponies and pack burros. We were a mounted troop for our ride to Bluff, 50 miles to the south. Here we crossed the San Juan river which is the northern boundary of the Navajo Indian reservation.

At Bluff John Wetherill met us to guide our party to Oljato, 70 miles away, where he and Clyde Colville had established a trading post.

Until the middle of July we worked in Segie-ot-Sosie canyon about 25 miles southeast from Oljato. Here were caves my father had visited the year before and wanted to investigate more thoroughly.

In this canyon I had my first experience in excavation — interesting because one never knows what contribution there may be to science in each new shovelful.

Rumors of the sandstone arch were prevalent among the Indians. But when questioned by the Wetherills, none of them had seen it, or could tell exactly where it was. Finally, Mrs. Wetherill traced the story to Nasja, a Pahute Indian from Pahute canyon. Nasja said his son, Nasja-begay had actually seen this great arch in a remote canyon north of Navajo mountain, and could go to it again.

My father then made plans for an exploration trip. We were to return to Oljato about the second week in July. Wetherill would be ready to join us there and show the way to Pahute canyon where Nasja-begay could be engaged to lead the expedition to the canyon where he had seen the arch.

When we returned to Oljato in July Wetherill could not leave. Another plan was made. Our party would go to Segie canyon where there were caves and large cliff ruins and wait there until Wetherill could join us for the trip.

When John Wetherill arrived he brought mail for my father from Bluff, also news that a government surveyor, W. B. Douglas, was on his way to Navajo mountain in search of a natural bridge. His guide was a Ute Indian from Bluff called Mike's Boy.

The letters from Bluff informed my father that Douglas had been trying to persuade the Washington authorities to withdraw excavating permits which had been granted to him, Dr. Cummings. His reason for this no one knew.

This news created a new problem

I Finished Race to K

---says M

Should our party return to Oljato over 40 miles of rough trail to meet Douglas? It might avoid friction and misunderstanding if he were invited to join our party in search of the arch.

We returned to Oljato, but were unable to learn where we could find Douglas. After several days' wait my father felt he could not delay longer. So one morning we packed up and were on the trail again, this time really on our way to find the Nonnezoshie as Nasja called it. Nonnezoshie means "great arch." We had provisions for a ten-day trip. Wetherill knew thoroughly the area we were to travel, and in conversations with Nasja and his son at Oljato, had learned the location of the arch in its relation to Navajo mountain.

In the northern side of Navajo mountain there is a confusing range of canyons. Many of these are box canyons and in 1909 no trails traversed them. There was a limited amount of feed for animals but the terrain was so rough and difficult to cross, even Indians avoided the area. Somewhere in this region was the great stone bridge.

From Oljato we went northwest, with the mesa country on our left and the broad expanse of Monument valley on our right. At Organ rock an Indian rider overtook us. He said a party of white men from Bluff was coming. We made camp and waited. Toward evening the Douglas party arrived.

I do not remember much about their arrival or the conversation leading up to Douglas' decision to join our party. I believe Douglas thought he could find the arch better with his own guide Mike's Boy. In his party were Dan Perkins and Jack Keenan from Bluff, Gene Rogerson from Monticello, Chris Christensen, F. English from Seattle, and the Ute guide Mike's Boy.

Douglas was quite deaf and one conversed with him through an ear horn on a flexible tube about 30 inches long. He asked someone to ride beside him. Members of his own party appeared reluctant to do this and my father and John Wetherill volunteered.

As we veered to the west in the direction of Navajo mountain, leaving the valley country behind, the trails became less

Last in the inbow Bridge

olm Cummings

There has been some controversy as to which member of Cummings-Douglas party first caught sight of Rainbow bridge, in that historic trek in 1909—but there is no dispute as to which one of the explorers arrived at the bridge last. Malcolm Cummings admits he was at the tailend of the race. He was just an 11-year-old boy when he accompanied his scientist-father on the famous expedition—and before the goal was reached he was so tired he did not care whether he ever saw the arch. But he remembers well the details of that rough journey into the northern Arizona wilderness—and has written an interesting story of the experience for *Desert Magazine* readers.

distinct and the going harder. From scrub cedar and jack pine flats we dropped into box canyons and climbed out again on trails almost perpendicular. The Navajo are skillful riders and a trail to them is any place a pony can travel without breaking its neck. When a Navajo dismounts to walk up or down a trail, that trail is really bad. Dogeye-begay our Navajo horse wrangler did this often.

When we reached the rim of Pahute canyon members of both parties were growing weary. But as we descended in-

to the canyon and saw corn fields, sheep and a hogan our spirits were revived. Corn fields and hogan belonged to Nasja and his family. From here Nasja-begay would guide us to the arch. Nasja was at home but his son was away looking after the sheep. Nasja gave Wetherill general directions for our route. We were to go on and Nasja-begay would overtake us. We were ready but Douglas did not like the plan. His guide was completely lost. He wanted to wait for Nasja-begay and have him

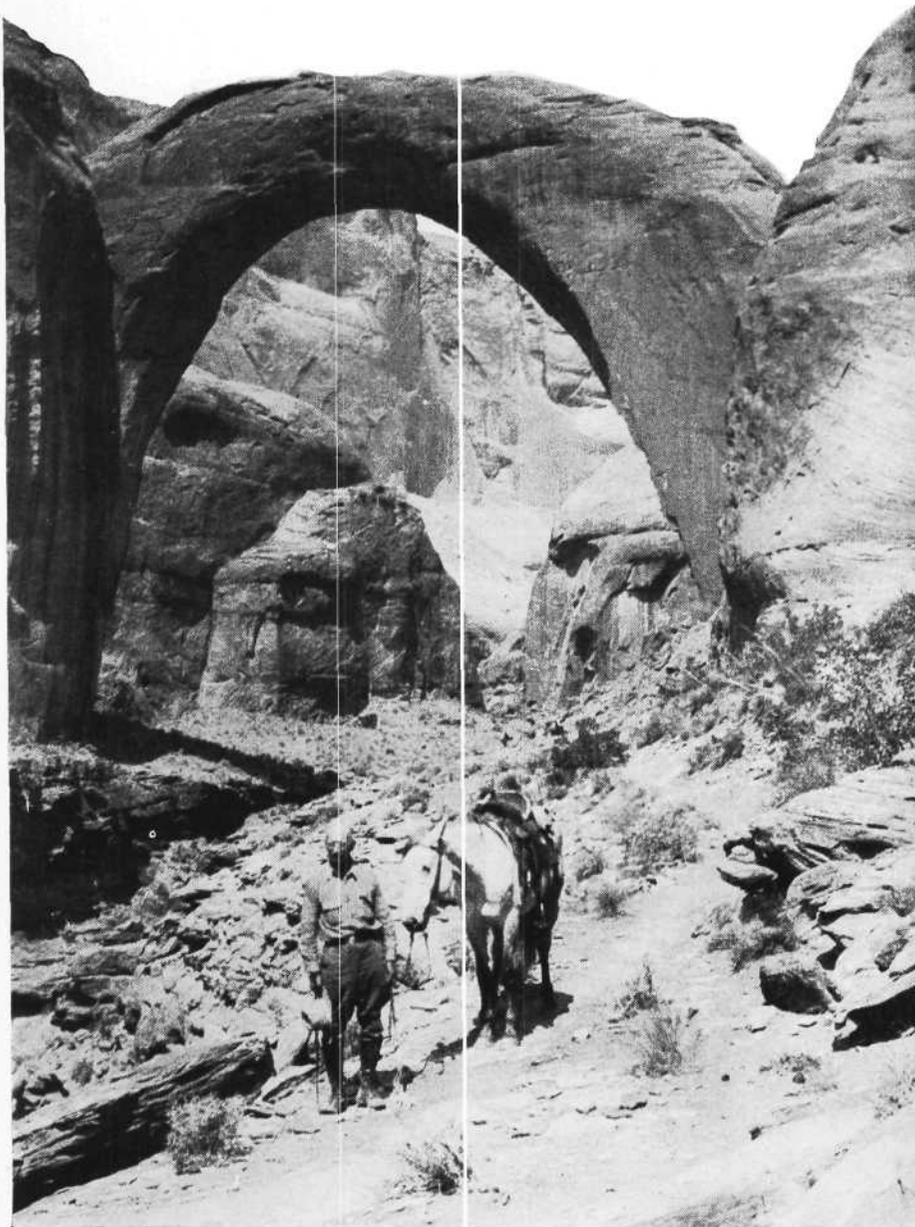
start out from there with us. After some palavering we started, both parties together.

That night we camped beyond Pahute canyon on the northeast side of Navajo mountain. The next day we traveled west around the north side of this mountain over trails which made those we had come over previously seem like highways. We were now getting into country through which few Indians had traveled and probably never a white man.

By the time we stopped for lunch several in the party suggested we probably were lost, as Nasja-begay had not ar-

Rainbow Bridge. —Photo by Josef Muench.





Photograph of Dr. Byron Cummings when he revisited Rainbow Bridge in 1936.

rived. That evening we reached a small canyon called Beaver creek, but still our guide had not joined us.

Were we going in the right direction, and if so where would we find the arch? Douglas said we were lost and should turn back. Our horses were footsore, but those ridden by members of the Douglas party were in a more serious condition. They were all larger animals and being used to oats and hay, the rough trails and scanty forage were telling on them. Douglas suggested we abandon the trip but Dr. Cummings said our party was going on. We were out to find an arch if there was one. Fortunately Nasja-begay came into camp that night at 10 o'clock.

The next day we followed the Navajo over rocky prominences, through cedar and scrub pine, often going back and around in search of a better way when ledges were too high or walls too steep for the horses.

I remember vividly the slick rock trail. It is an area of very smooth sandstone over which we had to go to get into a green and attractive canyon later called Paradise valley. We went around and over, up and down for hours on those slippery rocks. The horses slipped and skidded, while we looked down first on one side, and then on the other, into canyons hundreds of feet below. There were no casualties, but it was ticklish going and gave me the sensation of walking over a giant-sized basket full of eggs.

Paradise valley with its green vegetation and trickle of water from a spring revived our hopes somewhat. About noon we came out of the scrub cedar trees suddenly and there before us stretched another valley. It was given the name of Hidden valley, which described it well, for it was virtually hidden away from sight by the trees and sandstone. There

was a discussion when we stopped for lunch about the possibilities of any arch in this country. Wetherill said Nasja-begay told him we were not far away, and would see it before sundown. We were eager to go on.

Through more scrub cedar we rode and then dropped down into another canyon. We followed the bottom of this without difficulty at first, but as the canyon deepened and the walls rose higher on each side, the rocks in the bottom became larger and more numerous. There was no running water in the canyon but we came to places where the flood waters had washed out great bowls. Around these we had to go, some of the horses just able to make it. Word came back from the head of the cavalcade we were in Nonnezoshie Boko, meaning the canyon of the arch.

By this time I didn't care whether I ever saw it or not. My pony and I were both tired. We were too fagged to hurry even if the others did seem to go faster all the time. I believe I was last in the procession all the way down Nonnezoshie Boko. I remember watching the round smooth boulders over my pony's withers as she picked her way over them. If a hoof caught, a fall would mean a broken leg. My father sent Dogeye-begay back once or twice to see how I was getting along. Later I learned why the speed had been increased. Douglas wanted to be at the head of the line so he could see the bridge first and be the discoverer. He thought my father should go back and look after me. I was much too young to make such a trip as this! However, my father, John Wetherill and Nasja-begay kept in the lead. Nasja-begay told us later Dr. Cummings was the first one to see the bridge, and was very positive about it. The date was August 14, 1909.

Most of the horses were unsaddled and several of the boys had started for the top of the bridge when I arrived with my trousers torn and my shirt all ripped. We had gone through a lot of brambles in the bottom of the canyon. It was three o'clock when the arch was first sighted, possibly half an hour later when I first saw it.

Coming down the canyon there is a turn to the left just before reaching the arch. As you come around this bend, there to your left and reaching from one side of the canyon wall to the other in a graceful arc is the Nonnezoshie or Rainbow bridge.

It stands there majestically defying time, the elements, and man. From the top of the arch to the bottom of the canyon it is 396 feet and across the span at its base 276 feet. Truly a natural wonder! Standing under the arch and looking upward at the dark red sandstone mass, high above, the picture makes a deep im-

pression on the visitor. This view remains a vivid memory in my mind today. Tons of beautifully tinted sandstone high in the air—and just staying there. It is beyond words.

The next morning we were to pack up and start on the return trip to Oljato. Breakfast over we began our preparations, while Stuart Young, interested in leaving a permanent record, busied himself carving on the cliff wall below the arch in small letters the fact that the arch was discovered on this particular date by the Cummings' party. There was a commotion in his direction. Douglas was objecting. This was to be a national monument, and marking on or defacing there was a misdemeanor subject to fine and imprisonment. My father stepped into the situation to placate matters. I believe there was a compromise and the defacement became legal when the carving showed discovery by the Cummings-Douglas parties.

We were to return directly to Oljato. Mr. Douglas wished to do the same and then go back into the Segie canyon for survey of the cliff ruins the Cummings' party had located there. Perkins said his horses were in such bad condition he could not make a trip back into the Segie canyon.

It was then decided Douglas and his party would go to Oljato by way of the Segie canyon. Douglas feared they would not find the way nor locate the ruins as their guide Mike's Boy was not familiar with the country. Consequently my father agreed to let our Navajo, Dogeye-begay, guide them and persuaded Neil Judd, much against his own wishes, to go along and show Douglas the cliff ruins he wished to visit. Both parties were running low on food, but as we were going back to Oljato and could if necessary get a few supplies at one of the Indian camps, some of our staples were turned over to the Douglas party.

A last look at the Rainbow arch and we were back-tracking through the rocks and brush on our way out of Nonnezoshie Boko. From this canyon we turned from our route to go by way of Nitsie canyon and Pinniettin's camp. Wetherill was certain we could get from him enough flour, sugar and coffee to last until we reached Oljato. Our supplies of these would last two days and it would take us probably four to reach Oljato.

We rode over the rough trail into Nitsie canyon and found Pinniettin's camp deserted. Our hopes for supplies faded away. We then had to trust to the possibility of a few supplies from Nasja at Pahute canyon.

The next morning we had the last of the biscuits, sugar and coffee. It would now be necessary to reach Pahute canyon that day, otherwise we would be real-

ly hungry by breakfast time next morning.

Late in the afternoon we reached Pahute canyon and Noschaw's camp. Noschaw had little flour and no coffee or sugar. One of his boys had gone to Oljato for these. John Wetherill bartered for some goat meat and green corn roasting ears. There was one difficulty. The meat was "on the hoof" and would have to be butchered, the corn still on the stalk in the fields. We had to wait for the goat to be caught, butchered and skinned. The corn we gathered from the field ourselves. By dusk we were glad to chew on tough, fresh goat meat and corn on the cob roasted in hot ashes. For several years after this I could not eat goat or mutton. Even now the taste brings back unpleasant memories.

The second day from Pahute canyon we arrived at Oljato, hungry for something other than goat meat and roasted corn.

We were back from our trip of discovery. Nonnezoshie — the Rainbow bridge — was a thing of reality.

RECORD DROUGHT IS PREDICTED IN 1946

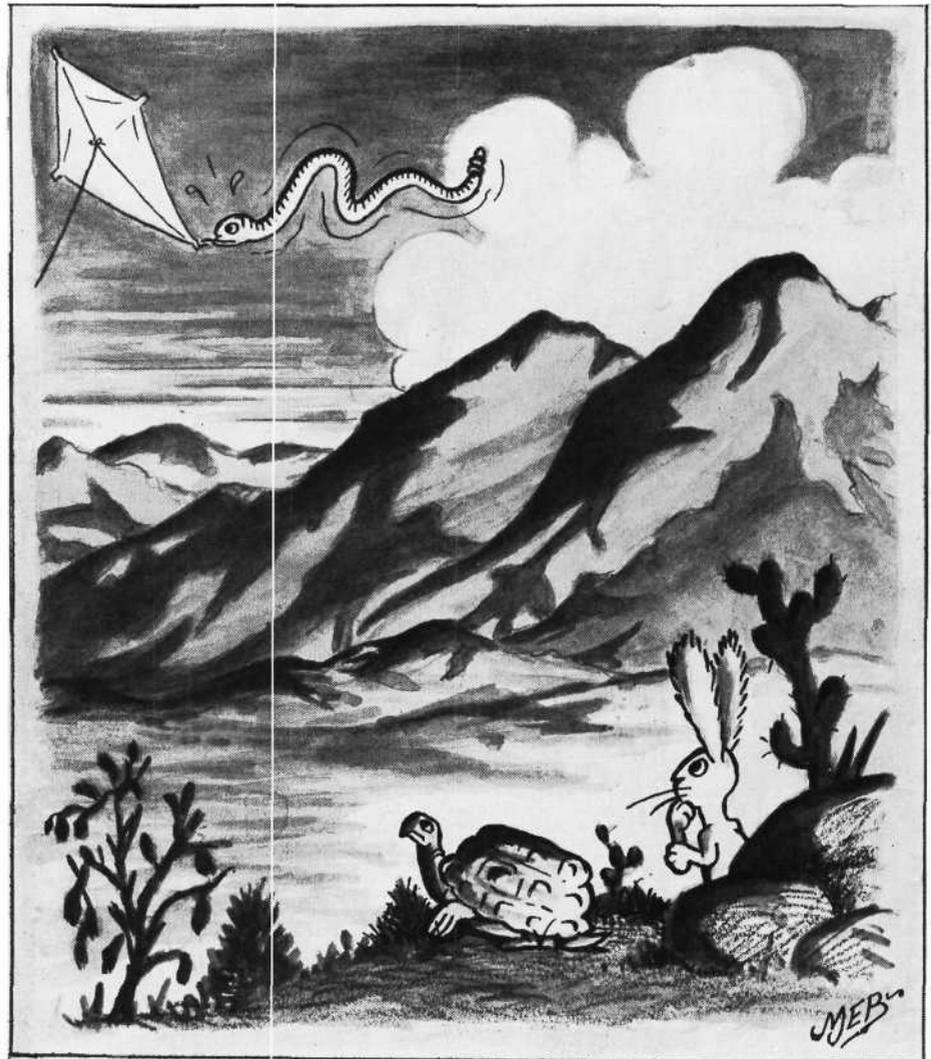
Super drought in 1946 with possibility that Lake Mead will go dry in 25 years, was predicted by Halbert P. Gillette, San Marino, California engineer in discussion of geological calendar based on silt deposits known as varves. Gillette has spent 14 years studying varves, going back 4200 years.

MILLER IS SUCCESSOR TO FRANK PINKLEY

Hugh M. Miller has been appointed superintendent of southwestern national monuments, to succeed Frank Pinkley, who died February 14 at Casa Grande, Arizona. The new chief will be responsible for administration of 27 national monuments, covering 760,000 acres in Arizona, New Mexico, Colorado and Utah. His headquarters will be at Casa Grande. Miller joined the southwestern division in 1931.

SIDEWINDER SAM

By M. E. Brady



"The Chuckawalla boys told Sam flyin' was safer 'n crawlin' "

Writers of the Desert . . .

am trying to think of some good reason for coming back to the desert next season," says his wife.

MALCOLM B. CUMMINGS was a very tired 11-year-old boy when he jogged into camp at Rainbow bridge on that memorable day in 1908 where the first party of white men discovered the mighty arch. But the events of that trip made a deep impression on the junior member of the expedition—as will be evident in reading his story "I Finished Last in the Race to Rainbow Bridge" in this number of the Desert Magazine.

Malcolm accompanied his father on many archaeological trips during his boyhood days, and according to one report was the discoverer of the inscription at Inscription House ruins. Later he left school to enlist during the war, but returned to the university of Arizona following his discharge and was graduated in 1922. After his school days were over he engaged in the Indian and Mexican art business in Tucson, and later spent two years in Prescott and Clarkdale in archaeological work at the Smoki and Tuzigoot museums.

In 1936 he moved to San Diego to engage in the business of manufacturing candy. This may seem a long jump from digging for Indian artifacts, but it was the outgrowth of several years' experiments in sugar and its adaptability to candy-making.

Archaeology is still his hobby—but he has found it more fun as a hobby than as a source of livelihood.

. . . .

"I may have been a tenderfoot when I came to the desert last November," says KATE CRICHTON GREGLER, "but now I have

read every word in the 29 numbers of the Desert Magazine—and I will challenge any of the desert rats to make a better score than mine in the monthly Quiz."

Mrs. Gredler's home is in Bedford Township, New York where she and her husband have a beautiful country residence on which are 4,000 trees they planted themselves. She has been a convalescent in the Reid hospital at Palm Springs since December, and it was there that she learned to do the "sunsketching" described in her story "I Wish I Could Paint That" in this number of the Desert Magazine.

Her verses, mostly about flowers and seasons and the "things of the spirit" have appeared in garden publications, poetry magazines and newspapers.

"There never was such an ignoramus regarding the things on the desert," she confesses. "But being garden-crazy I wanted to know the name of each flower I saw. I wanted to hear the tall tales of the pioneers, the folklore of the mesa, the pueblo and the 'dobe shack. I asked endless questions, mostly of people who apparently had just arrived from Long Island or Dubuque, and what dusty answers I did receive.

"And then a friend brought me the Desert Magazine—probably in self defense. And I had at last found what I wanted. I ordered all the back numbers, and then, other than the daily papers, the Bible and Pilgrim's Progress, I haven't read anything else since Christmas."

Mr. Gredler formerly was a banker, but now is on the Debt service of the board of a national church. "And now that I am well, I

Far up in the northwest corner of the Hopi Indian reservation in northern Arizona is Tonalea. It is just a little frontier settlement which doesn't often make the headlines—but it is the home of RITA MORRIS who has written for Desert Magazine readers this month an interesting sketch about Warren E. Rollins, artist of Chaco canyon, New Mexico. Mrs. Morris is not a professional writer, her time has been devoted largely to the rearing of a family in Arizona and New Mexico, but she is devoted to music and art—and finds them in many out-of-the-way places in the desert country. She is a native of California and "when the spirit moves her" contributes to periodicals and newspapers in the Southwest.

. . . .

EDDIE SHERMAN, who wrote the story about the Coronado anniversary festivities in New Mexico for this number of the Desert Magazine, is a resident of Albuquerque. He is now engaged in free lance feature and fiction writing after 11 years of newspaper work for Scripps-Howard, Hearst and other newspaper publishers. During his newspaper career he served in various capacities ranging from reporter to news editor.

Sherman is a native of Maryland and began his newspaper career as a cub reporter on an Arkansas daily. He is 30 years old and married. Hobbies are cartooning and aviation. While most of his writing until now has been for newspapers, he wants to do magazine features—and is hoping he will find a market for some fiction on which he is now working.

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If you want to enjoy summer comfort, install an evaporative cooling fan in your home or office, but be sure it is equipped with a Wagner evaporative cooling fan assembly. They are available in a range of sizes to meet every requirement, and are priced from \$17.50 up. Your hardware dealer, electrical shop, electric power company, building supply house or contractor will gladly give you full information.

V39-3



Illustrated are a few of the thousands of homes and offices equipped with evaporative coolers, on which Wagner evaporative fan assemblies are being used.

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Old Man of the Desert

Dedicated to San Diego Rawson
Joseph City, Arizona

BY ELLA ALLEN
Fort Smith, Arkansas

Old Man of the Desert, you are wise!
You've found an earthly paradise.

You shunned the place of buildings tall,
Where the sky's obscured by a high brick
wall;

Humans surging on the street,
Bartering their souls for bread and meat

Old Man of the Desert, you are wise!
Your friends are mountains, desert, skies.

A DESERT ROAD

BY MARGARET CRAWFORD
Phoenix, Arizona

No beginning—never ending,
Wandering where fancy wills,
Among sand dunes gayly wending,
O'er mesquite and sage clad hills.

Here it heads straight for a clearing,
And there—wayward as the wind—
An Ocotillo thicket nearing;
Then abruptly turns again
And strolls beside sweet scented Ironwood;
Glides into a shady hold
Formed by graceful Palos Verdes;
Decks itself with Cloth of Gold
When once more it seeks the sunlight;
Gathers Poppies to its breasts,
Nods at dignified Saguaros,
Climbs Arroyo's rocky crests;
Parts a bed of gay Verbenas,
Tweaks a Lupin's purple hood,
'Neath a Yucca's candle lingers,
Skirts a mound in playful mood.

No beginning — never ending;
Loitering where fancy wills,
A Vagabond — forever lending
Enchantment to sand dunes and hills.

CHIQUITA'S SNARLS

BY MYRTLE ANNE DODGE
Tucson, Arizona

INDIAN MOTHER TO HER BABY:

"Who put the snarls in Chiquita's hair,
Was it a chipmunk or was it a bear,
Or was it the wind that came nesting there?"

Such tangled locks will never do
For an Indian baby as sweet as you,
So a brush I shall make that is fine and new.

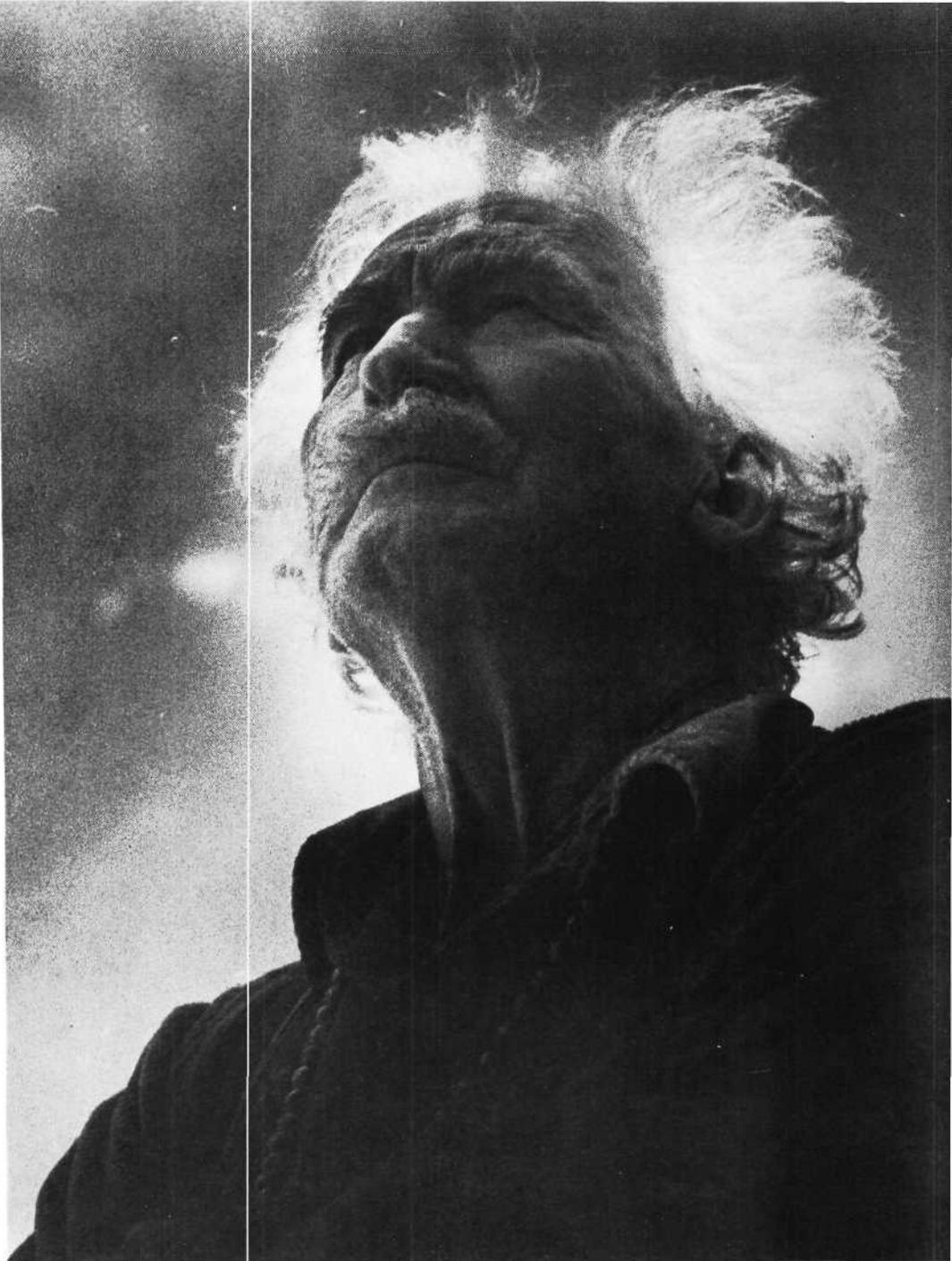
I'll use the needles of the fragrant pine,
And a raw-hide thong about them entwine,
To hold them securely for Baby mine.

Then one by one, with gentle care,
I'll brush those snarls from Chiquita's hair,
But still I wonder — Who put them there?"

CREED OF THE DESERT

BY JUNE LE MERT PAXTON
Yucca Valley, California

Dainty little flower of gold,
You seem so fragile, yet so bold.
For wind and cold you dare with-
stand
To smile upon this desert land.



San Diego Rawson

PROSPECTOR'S HEAVEN

BY ROBERTA CHILDERS
Fallon, Nevada

When the last jackhammer has quieted
And muck-sticks lay idle about,
When the carbide lamps are all darkened,
And that last golden streak has pinched out;

Prospectors shall have a new Heaven.
There will be gallows-frame trees galore,
Where each unlucky earth miner
Can pluck him a bucket of ore.

And no one shall ask him for royalty,
Nor touch one brick from his mould—
Still he'll be the same dumb miner.
For the corners of Heaven are gold.

And he'll pick and he'll gouge at those corners
Until all of the shining streets quake.
To him Heaven's glory will not be for his soul,
But for his chance to dig that last stake!

ARIZONA DESERT

BY ADELAIDE HAIGHT CHAPIN
Tucson, Arizona

I came into the desert and I said
"These mountains etch hard lines upon the
sky.
As though with etchers' tools they cut my
heart.
They are a barrier from the world I know
And passionately love. Must I exist
Apart? This is not living. Give me back
My world."

Spring came into the desert and I saw
Ecstatic blossoming strew rock and sand,
The wonder of the ugly cereus
At night, with transient, perfumed beauty
starred,
The menacing, grey arms of saguaro ringed
with bloom;
Saw skies whose glowing colors stayed my
breath.
"Where miracles like these are wrought," I
said,
"Is home to me. I shall not live apart
For God's work here has healed my heart.
This is My world."

HELLDORADO

The rip-roarin' days of the old West may have passed into history — but they have not been forgotten. Nor is it likely they will become a lost memory as long as Las Vegas, Nevada holds its annual rodeo and Helledorado.

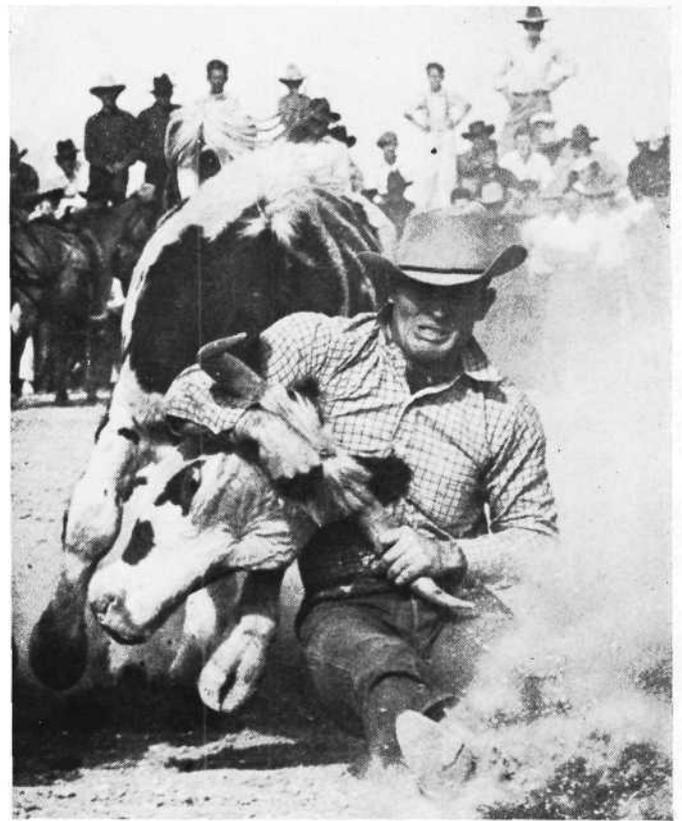
For three days each year the cowmen, the miners, the ranchers and gamblers—in fact the whole population of southern Nevada dons 10-gallon hats and six-guns and goes in for a revival of the famous old-fashioned western whoopee.

The program this year is to be staged May 17-19. Rodeo events with many of the best western riders participating will be held in the afternoon, and the evenings given over to festivities of many sorts. A parade featuring a collection of ancient vehicles and other relics of the early days will be a part of the show.

An added feature this year will be Helledorado Village—a six-acre replica of Las Vegas as it appeared in the '80s, enclosed in a stockade such as was used by early western settlers for defense against the Indians. The Las Vegans plan to preserve this village as a permanent attraction for visitors who go to the Nevada city the year 'round.

Bull-dogging will be among the rodeo events featured on the Las Vegas program.

Roulette will be one of the most popular of the games in Helledorado Village.



Boats and Bowls

By Woodhouse . . .

Continued from page 17

Professor J. J. Thornber of the University of Arizona, was introduced into Coachella valley in 1916. Professor Bruce Drummond, then superintendent of the government date garden at Indio, procured from Dr. Thornber the cuttings which formed a nucleus for later distribution in the valley.

This variety furnishes an interesting example of desert adaptation; the heavy foliage is punctured by myriads of minute pits secreting saline solutions which during cool nights attract moisture. Special cells at the bottom of the tiny cavities facilitate absorption of this moisture. In the daytime the dried salts cover the foliage with a crust which protects the plant from excessive evaporation.

The athel's rapid growth—often 20 feet in a year—and its handsome evergreen plumage made it popular immediately. Soon it became a familiar feature in the irrigated sections of this area where it furnishes splendid windbreaks, shade and fuel.

Bert, as soon as his well was finished, secured cuttings of the athel and planted them along his north and west boundaries. These are the trees now going into bowl production. To water them he used a hand pump, working up and down for hours at a time the 12-foot two-by-four used as a handle. To prevent loss of water in the heavy sand he built tubes of wood to carry it from tree to tree. Where the grade of the land made this method impossible, he carried the water in five-gallon cans.

Discovers Hardness of Wood

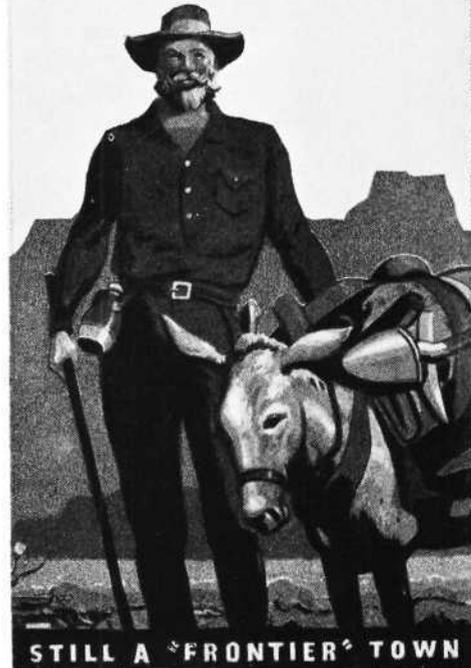
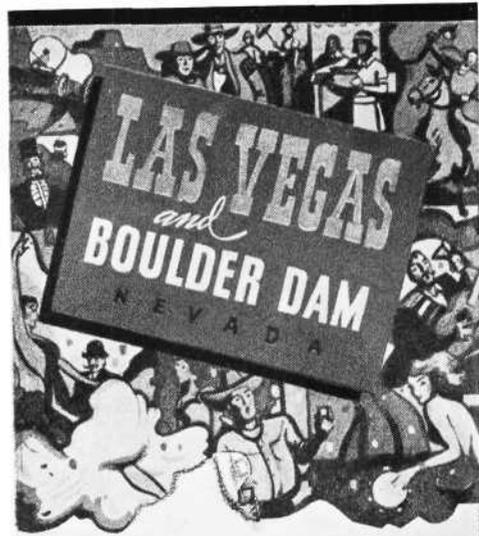
Meantime, he had found out something about athel wood. In working the sand pump while digging his well he had used a block of it as a cable clamp. It is an established observation that hardwood trees are of slow growth. According to this rule the athel block should soon have been cut by the cable. Instead, Bert noted, it showed little sign of wear. With all his experience he had never seen the like of this—a fast-growing soft wood that cured out as hard as ash or sycamore.

He planed the surface of the block, revealing the beauty of grain and coloring. Then he grew excited over the possibilities of athel for fine furniture. But inquiry disclosed that no successful way of curing athel had been found. Bert sent for everything the government had printed on the subject of curing wood, tried every method suggested by commercial experts. All failed on athel. Yet without proper curing the wood is so brash as to be utterly useless under tools.

Then Bert began a series of patient, painstaking experiments—that was many years ago. It took three years to complete the first cure. Later methods have shortened the period and by taking a heavier loss in quality output the process has been speeded up. But Bert is still not satisfied. He is trying to find a quicker yet equally effective method.

He has sought in vain for a way to kill the tree on the stump. Girdling, boring, peeling, applications of kerosene, crude oil, bluestone and various sure-fire commercial preparations have been tried without success. Doses which would kill other kinds of trees overnight seem only to encourage the athel. One tree completely girdled through the cambian layer and peeled to a height of five or six feet continues to send out flourishing new growth.

Once off the stump, curing must be started at once. Even a wait of 24 hours proves disastrous, so quickly does cracking



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Desert Magazine
R E A D E R S

I have recently completed a beautiful rock garden at the entrance to Desert Magazine's pueblo office building and wish to extend an invitation to all its readers and friends to stop when in El Centro, California to see this artistic creation.

For a number of years I have designed and built rock gardens similar to this as well as many other artistic effects.

Let me design a rock garden, patio, barbecue or unique building front for you or landscape your home.

KENNETH KRIEGLH (Cree).

Some of my past landscape designing and building include . . .

- Largest Barbecue and Fireplace set-up in Santa Barbara County for Mrs. J. J. Mitchell (Lellta Armour)
- Native botanical garden, rock entrance and fountains at Ramona Pageant Bowl, Hemet, San Jacinto, Calif.
- 1000-ton Indian rock garden — Soboba Hot Springs resort.
- California's most unique museum building — San Jacinto, Calif.
- Santa Maria Inn—Horticultural work.
- Alpine rock garden—noted mountain resort
- Landscaped home of Millard Sheets, artist.
- Landscaped most unique Indian shop in Southern California (HOGAN) San Jacinto

How about it 29 Palms? or perhaps you in Santa Barbara, Santa Fe, Hollywood, Laguna, Phoenix are interested?

Estimates and plans may be made by mail, or I will go anywhere.

Wish to contact a party with capital to operate unique restaurant or gift shop. Have two good places. For details write:

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CREATIVE DESIGNER and HORTICULTURIST

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and checking begin. Yet by proper seasoning this brittle wood so toughens that it works as beautifully under tools as ash or sycamore.

The sap cells of the athel are big and airy. It is so soft in its green state that the strong blow of an ax will bury the blade deep in the wood. Yet it is impossible to drive a nail in the wood when well cured. And how it stands the weather! In the Woodhouse's back yard is a skiff Bert made for his son Dal. The parts that needed special strength were made of oak, maple and athel. Dal went away to school and the skiff has remained in the desert sun for more than three years—a supreme test—and no flaw or check has appeared in the athel wood.

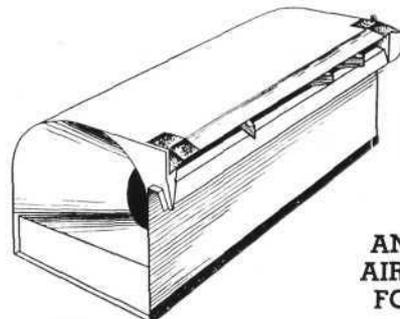
Casa Madera (a Spanish rendition of Woodhouse) is the trade name Bert has given his product. There are several reasons why he devotes his time to bowls rather than some other practical or ornamental object. For one thing, no other article lends itself to more varied uses or better decorative effects in the home. Since the days of the ancient Greeks the bowl has been a classic. As for utility, a major example is the salad set—a big athel bowl and six individual dishes Bert made for Katherine—which would make the eyes of any normal woman water with desire. I was fortunate enough to receive an athel-wood salad bowl last Christmas and I can't stop gloating. It looks and feels as if it might be cut from golden brown onyx, yet it is almost as light as aluminum.

Athel bowls are being used by a number of date growers as containers for their finest packs—a typical desert offering of rare elegance.

As yet the Casa Madera output is too small to judge the venture from a commercial standpoint. But whether the future brings financial success or not, Bert has won his laurels. The Desert is justified in having transferred his talents from boats to bowls.

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Mines and Mining . .

Gain of more than a billion barrels in the United States oil reserve during 1939 is reported by the American Petroleum Institute. After deducting production of 1,264,256,000 barrels from the 2,399,122,000 in reserves of new and old fields, the institute finds Uncle Sam's net increase in "proved" reserves amounts to 1,134,866,000 barrels. This is a conservative estimate, according to the announcement made in New York. Most of the gain comes from development of fields discovered before January 1, 1939. Texas leads all states in reserves, added 805,134,000 barrels to the underground oil inventory. California takes second place, credited with 567,933,000 barrels. Mississippi and Nebraska are listed for the first time, new pools in these two states estimated at 6,800,000 barrels.

Winnemucca, Nevada . . .

Development of quicksilver deposits in districts between here and the Oregon line continues to attract widespread interest. Quicksilver is now quoted at \$185 per flask (76 pounds) and numerous shipments are being made. The Cordero group of five claims near McDermitt has been leased with option by Horse Heavens mines and Sun oil company of Portland, Oregon. Activity is increasing in the Bottle creek district. Californians have incorporated White peak mines, inc., 65 miles northwest of here, to operate a property formerly owned by James and Arnold Scossa.

Milford, Utah . . .

Revival of large scale operations at the Horn Silver mine in the Frisco district marks the comeback of a producer credited with \$60,000,000 output in the past. Fifty men are working there now and the mine has shipped 41 carloads of ore since January 1, 1940. During 1939 production was valued at \$128,000.

Los Angeles, California . . .

Internationally famous Dr. Louis D. Ricketts, known throughout the mining world as "Dr. Ricketts of Arizona," died here in March, 80 years old. Last fall he had received the James S. Douglas medal of the American institute of mining and metallurgical engineers for "inspirational leadership and distinguished achievements in the metallurgy of copper." He had won fame by his construction of smelters and concentrators for handling lowgrade ore. He was the son of a Maryland newspaper publisher. During all his career he was rather famous, too, among newspaper men for his neverfailing kindness to reporters.

El Paso, Texas . . .

European war sends business to lead furnaces of the local smelter. Six hundred men are employed, boat loads of foreign lead-silver ore are being handled. From Chile and Australia the smelter receives ore formerly smelted in Belgium and Germany.

Artesia, New Mexico . . .

A 20-year-old boy, William Dooley, jr., who refused to listen to oil veterans and wildcatted west of here, brought in a million-cubic-foot gasser and set the town wild with talk of a possible oil pool in a location scorned by geologists.

Tucson, Arizona . . .

Dedication of the new James Douglas memorial mining and metallurgy building at the state university has been set for May 29. It is a gift to the university from the Phelps Dodge corporation. Lewis W. Douglas, grandson of the man for whom the building is named, will speak at the dedication ceremony. Also taking part in the program will be Dr. Louis Cates, president of P.-D.

Ogilby, California . . .

Cave-in of the old Padre gold mine in the Cargo Muchacho mountains has caused damage estimated at \$50,000. The property is operated by the Holmes and Nicholson mining company. Kenneth Holmes, manager, says the damaged section of the mine workings will be reconstructed, active production will be resumed as soon as possible.

Prescott, Arizona . . .

Charley Williams, 48, wants to know if he will get into trouble with the federal government when he tries to market \$100,000 worth of Spanish gold he hid in the Superstition mountains several years ago. The little job of recovering the gold doesn't worry him. Williams, patient in the U. S. veterans hospital here, wrote to the secretary of the treasury about his problem. He says he found the gold in 1935 in a cave he believes to be the shaft of the famed Lost Dutchman mine. On his way to camp he was caught in a snowstorm, cached his gold under a flat rock. Then he wandered three days in a blizzard before he was found by a searching party of 300 men. Since then, he adds, he has put in most of his time in hospitals.

Virginia City, Nevada . . .

Workings of the famous old Dayton mine will be abandoned to water. All underground equipment is being removed from this one-time rich producer, from which more than \$2,500,000 has been taken. Recent explorations extending several thousand feet failed to locate continuation of the profitable ore body.

Ely, Nevada . . .

At its property between Ely and Pioche the Nevada Tungsten corporation is concentrating 130 tons of ore daily. In Sand springs valley a 50-ton concentrating plant nears completion on the Koyn-Theriot tungsten property and at Oak springs tungsten mine a new mill will be in commission soon.

Phoenix, Arizona . . .

Another fabulously rich "abandoned mine" has been found in the Superstitions. Barry Storm, writer and adventurer, and Walter Upson, mining engineer fresh from the discovery scene, vouch for the story. Upson says discoverers are three prospectors, Jim Booth, Joe Thatcher and Frank Gillick. Their find is in a huge conglomerate cliff near the Weaver's needle, a pinnacle which has served for a landmark to seekers of the Lost Dutchman. "It's not certain that this is the Lost Dutchman," says Upson, "but the low passageways, clumsy timbering and ox-cart trails leave no doubt it was originally a Spanish mine."

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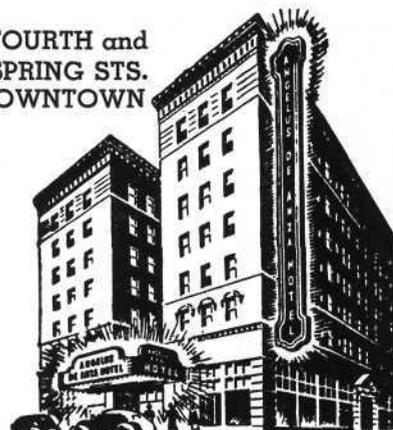
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CACTI

Sclerocactus polyancistrus . . .

By GEORGE OLIN

Fortunate indeed is the person who finds this aristocrat of native cacti. Its symmetry of form and colorful armament of graceful spines combine to create a most pleasing impression on those who see it for the first time. When in full bloom it is truly one of the miracles of the desert.

Man has proved to be the worst enemy of this plant. Its fragile beauty makes people want to give it the protection of a garden environment. It cannot survive this treatment and the majority of plants brought in do not live more than a year or so at best. In their natural habitat many of the plants are infested with a species of borer. This does not seem to affect them seriously while in the desert but if brought into town they soon contract an orange rot which quickly kills them.

Polyancistrus is found in many localities and in many different kinds of soil. Its range extends from the Mojave and Colorado deserts of California into western Arizona and through Nevada. It is not plentiful anywhere—in fact it is one of our rarest cacti. If he finds more than four or five plants in a casual day's search, the cactus enthusiast may feel proud of his sharp eyesight.

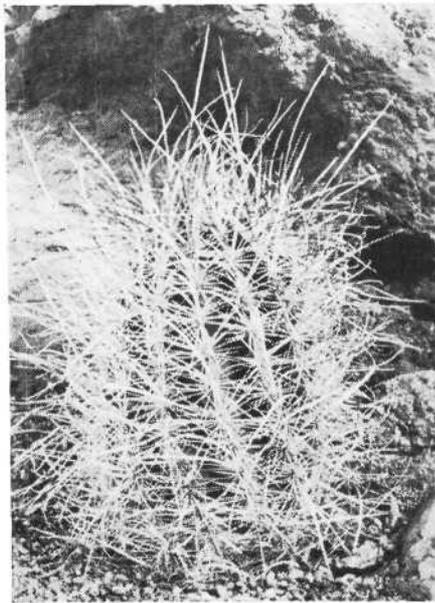
This species is most readily found during the blooming season which begins in April and lasts through May depending on the locality. The flowers are a beautiful shade of magenta, a single plant displaying as many as a dozen blossoms at one time. Under these conditions they may be seen for some distance.

In growth, *polyancistrus* is solitary. That is, the plant does not ordinarily clump but is found as one tall single head. If the growing tip is injured however, beautiful clusters of three or four heads may result. It will grow as high as 18 inches although the average is much smaller. The plant body is a fresh dark green color and is divided by 13 to 17 ribs.

The spines constitute a tangled mass which on close inspection may be divided into three general types. The most conspicuous are the long white centrals which are flattened and in most cases somewhat twisted. They are very showy and form one of the distinguishing features of the plant. Next in order come the hooked centrals which number from two to five. These are usually a reddish brown and form a fine contrast to the rest of the plant. The radial spines are white and grow very close to the body of the plant. There may be as many as 20 to the areole. This armor serves not only as a physical protection for the plant but also gives it a protective coloration which is almost impossible to distinguish from the sparse clumps of grass or low brush in which *polyancistrus* prefers to grow.

The flowers are up to three inches across and about as long. They open for several days and vary in color from a deep magenta when first open to a shade close to red on the last day. The stamens are yellow and very showy and the pistil is red. The plant blossoms from near the growing tip and when in full bloom the top of the plant is completely hidden from view.

The seed and its propagation form an interesting subject. The red fruit may be 2 inches



This little fishhook cactus with a pineapple-shaped body is rarely found, but its delicate entanglement of spines and its lovely magenta flowers repay the effort of searching for it.

long and the walls quite fleshy. As it ripens the walls become dry and thin and when completely ripe it breaks away from the areole. This leaves a hole in the bottom of the pod and since the spines hold it in an upright position the seeds are spilled down the side of the plant. Many of the seeds germinate in the shelter of the tangle of spines and usually several small seedlings will be found with the mature plant.

No specific location will be given here in which *polyancistrus* may be found. Through the persistence with it has been collected, it is rapidly becoming extinct. To those who are interested in the plant for its own sake the joy of seeing it will be ample reward. Leave this plant in the desert—it is the desert's own. It cannot and will not exist in alien surroundings.

. . .

What the Cactus Clan is Doing in . . .

Denver, Colorado . . .

An ambitious little club of cactophiles here has a full program for the season. Denver Cactus and Succulent society plans an exhibit in one of the large department stores, study of one genus at each meeting, building a library, field trips and visits to outstanding collections in the state, naming and locating native species.

Current officers are Jack Barker, president, C. D. Hollingsworth vice president, Miss Muriel Colburn secretary, Mrs. Kai Villien treasurer. Organized October 1938.

. . .

Boulder City, Nevada . . .

A perpetual trophy for the best cactus and rock garden each year has been donated the Desert Garden club by Mrs. Frona Waite Colburn of Washington D. C. Purpose is to foster appreciation of cacti and other native desert flora. Present holders of the trophy are Mr. and Mrs. Lee Hayward.

Meetings are open to those interested and are held in the municipal court room last Friday of each month. Mrs. R. G. MacDonald is founder and president of the club, Mrs. Ragnald Fyhen secretary and Mrs. Jefferson Howery treasurer.

This page belong to the growing fraternity of cactus and succulent collectors. Hobbyists in this fascinating field are invited to send in their notes and suggestions to the Desert Magazine.

LUCILE HARRIS, Editor.

Warren, Ohio . . .

A group of cactophiles have been active here since they organized in July 1939 as the Cactus Study club. Officers are Mrs. F. S. Van Gorder president, Mrs. J. G. Kirk vice president, Mrs. George Little secretary-treasurer.

. . .

Cincinnati, Ohio . . .

Starting with three members in 1937, the KIO Cactus club became an affiliate of the Cactus and Succulent society of America the next year. There are now 31 active members in the group. Officers are Prof. Geoffrey A. Gray president, Joe F. Schnurr vice president, Chas. R. Cole secretary-treasurer.

Club name stands for the three states adjoining Cincinnati territory, Kentucky, Indiana, Ohio.

. . .

Long Beach, California . . .

Mace Taylor Jr., president of the Long Beach Cactus club, sums up the group's activities in his seventh anniversary message: "In these seven years we have done a lot that makes them look like twice that sum. We planned, ploughed and planted the cacti and other succulents specimen garden in Recreation park and then presented it to our city. We star gazed and staged a stellar cactus show . . . We put forth our efforts in a cactus bulletin whose style and manner has been copied by many other cactus bulletins. We have caused to be brought into our city library many books on these plants. We grow and have encouraged onward those people whom we have found were interested in this succulent group. Our own library books and magazines is well representative of the field. Our members have represented us well in magazines and newspapers. We feel proud that we are just seven and we say to all of you *Happy Birthday!*"

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The DESERT MAGAZINE

San Gabriel, California . . .

Fourth Wednesday each month the San Gabriel Valley Cactus club meets in homes of members. Officers are Robert Woods president, Mrs. Elmer Teague secretary-treasurer, Mrs. E. G. Prather program chairman and Mrs. George Aschenbrenner Jr., librarian.

Los Angeles, California . . .

A new weekly program has been outlined by the South West Cactus growers. First Tuesday each month is plant naming contest and general business, second Tuesday is trading night with a plant talk, third Tuesday is pot-luck supper meeting with guest speaker, fourth Tuesday is beginners night with plant discussions.

April events included a garden breakfast at Carl Hoffman's and a weekend spent in the Twentynine Palms and Split Rock district.

Des Moines, Iowa . . .

The park board has given Des Moines Cactus and Succulent society permission to install a garden in one of the city's new greenhouses. A number of the leading nurseries of California and the southwest have cooperated by adding named plants to the collection. Each group, individual or dealer who contributes plants will be given credit, with the name and address on a plaque. Says Mrs. Glen G. Wickliff, president, "We will all be glad for any correspondence which should come our way and we are on our bended knees when it comes to receiving any properly identified plants. We cannot pay for them, but we are always glad to pay the express or freight charges."

Officers besides Mrs. Wickliff are Mrs. Carl Singmaster vice president, Mrs. Lloyd Jaynes recording secretary, Mrs. H. A. Campbell corresponding secretary, Mrs. W. G. Crawford treasurer, Mrs. E. A. Williams librarian, Mrs. R. L. Naylor historian, Mrs. O. E. Kellar program director. Organized October 1938.

Weather

FROM PHOENIX BUREAU

Temperatures—	Degrees
Mean for month	64.8
Normal for March	60.7
High on March 25	88.
Low on March 12	39.

Rain—	Inches
Total for month	Trace
Normal for March	0.68

Weather—	
Days clear	16
Days partly cloudy	5
Days cloudy	10

J. M. LANNING, Meteorologist.

FROM YUMA BUREAU

Temperatures—	Degrees
Mean for month	67.8
Normal for March	64.1
High on March 24	92.
Low on March 12	42.0

Rain—	Inches
Total for month	0.21
71-year average for March	0.31

Weather—	
Days clear	22
Days partly cloudy	6
Days cloudy	3

Sunshine 90 percent (334 hours of sunshine out of possible 372 hours).

Colorado river—March discharge at Grand Canyon 470,000 acre feet. Release from Boulder dam 630,000 acre feet. Estimated storage March 31 behind Boulder dam 22,100,000 acre feet.

JAMES H. GORDON, Meteorologist.



BOOKS of the Desert

A selected group of the desert Southwest's finest literature. Books that will make an appropriate gift for your friends or enrich your own library. Choose either historical books . . . desert yarns . . . guides . . . Indian lore . . . or one of desert wildflowers.

CACTI AND BOTANY

SUCCULENTS FOR THE AMATEUR, edited by Scott E. Haselton. Beautifully illustrated handbook for collectors and students, paper \$1.50, cloth \$2.00

DESERT WILD FLOWERS, Edmund C. Jaeger. Most complete work yet published on flora of desert region. 764 plants described and illustrated in photographs or line drawings. 322 pages \$3.50

CACTUS AND ITS HOME, Forrest Shreve. A readable book for cacti and succulent hobbyists. Illustrated. 195 pages \$1.50

DESERT CACTI, A. T. Helm. New edition of a unique booklet, illustrated with sketches 50c

CACTI FOR THE AMATEUR, S. E. Haselton. By a ranking cacti authority. Color illustrations. Paper cover \$1.00 Board cover \$1.50

INDIANS

INDIAN TRIBES OF THE SOUTHWEST, Mrs. W. M. Smith. A vivid useful handbook on the desert tribes. 160 pages \$1.50

THE TRUTH OF A HOPI, Edmund Nequatewa. Legendary history of the Hopi Indians as told by one of them. 114 pages \$1.75

CARTOON GUIDES

CARTOON GUIDE OF CALIFORNIA, Reg Manning. Accurate and informative. Cartoon map. 138 pages \$1.00

CARTOON GUIDE OF ARIZONA, Reg Manning. There's a lugh in every mile as you tour Arizona with this humorist. Map. 122 pages \$1.00

CARTOON GUIDE OF THE BOULDER DAM COUNTRY, Reg Manning. Map. 50 pages 50c

CARTOON GUIDE OF NEW MEXICO, T. M. Pearce, with illustrations by James Hall. 108 pages of amusement about this fascinating state \$1.00

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3% sales tax added for buyers in California.

HISTORY AND GENERAL

I MARRIED A RANGER Mrs. W. M. Smith. Amusing experiences at Grand Canyon. 179 pages \$1.00

CALIFORNIA DESERTS, Edmund Jaeger. Complete information on Colorado and Mojave deserts. 209 pages, illustrated \$2.00

BORN OF THE DESERT, C. R. Rockwood. Story of Imperial Valley's conquest 50c

THE DESERT, John C. Van Dyke. New edition of a desert classic which has never been equalled for description of the mystery and color of the desert. 33 photos by J. Smeaton Chase. Cloth bound, 257 pages \$3.00

BOOKS OF THE SOUTHWEST, Mary Tucker. 105 page bibliography. Paper bound 75c

DEATH VALLEY, W. A. Chalfant. Authentic history of the famous sink. 160 pages, illustrated \$2.75

GUIDES

DEATH VALLEY, A GUIDE. New publication of Federal Writers Project. Very complete and beautifully illustrated \$1.00; cloth \$1.75

WHERE SHALL WE GO, A Guide to the Desert. William Mason and James Carling. 17 trips in Southern California desert out of Palm Springs with maps and mileage. Brief description flora and fauna 50c

GRAND CANYON COUNTRY, M. R. Tillotson and Frank J. Taylor. A thoroughly accurate handbook of information covering geology, wildlife, history and recreation. 108 pages \$1.00

DAYS IN THE PAINTED DESERT and the San Francisco mountains, a guide, by Harold S. Colton and Frank C. Baxter. Maps, flora, fauna, geology and archaeology. 113 pages \$1.00

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BOOKS OF YESTERDAY AND TODAY

—a monthly review of the best literature of the desert Southwest, past and present.

HE FOUND THE DESERT FIERCE—YET CHARMING

The desert always has been illusive. Its magic disappears in a mirage when tangible form is sought for it. And the man who most truly gave it substance was more aware than any other of its evanescent nature, confessing "I shall never be able to tell you the grandeur of these mountains, nor the glory of color that wraps the burning sands at their feet. We shoot arrows at the sun in vain; yet still we shoot."

Since 1901 various editions of John C. Van Dyke's *THE DESERT* have been read and re-read and underscored, until now his book has taken its place among the classics. The 1930 edition by Charles Scribner's Sons is illustrated with photographs by J. Smeaton Chase and annotated by the author's nephew, Dix Van Dyke.

It is that world of sunbleached sands and metallic hued hills stretching down from Southern California, across Arizona and into Mexico that Van Dyke has described in lyrical, colorful prose. No detail escaped the eye of the art critic nor the heart of the nature lover nor the analysis of the science student. The chapters on Light, Air and Color and on Illusions would not only aid an artist in his interpretation but would awaken the traveler to qualities which otherwise would be wholly missed.

The struggle of wild life becomes a very real drama as the author describes the environment and the adaptations necessary to existence. "Nature seems to have provided a whole arsenal of defensive weapons for these poor starved plants of the desert . . . And she has given them not only armor but a spirit of tenacity and stubbornness . . . Put heat, drouth, and animal attack against the desert shrubs and they fight back like the higher forms of organic life. How typical they are of everything in and about the desert. There is but one word to describe it and that word—fierce—I shall have worn thread-bare before I have finished these chapters."

Even more familiarly than he wrote of desert plants did he tell of desert animals and winged life—of their never ending search for water, of their food and shelter, their life cycle.

History, geology and meteorology are all interwoven in the sections titled *The Make of the Desert*, *Bottom of the Bowl*, *The Silent River*, *Mesas and Foot-Hills*, *Mountain Barriers*, *Desert Sky and Clouds*.

What was forbidding and colorless, repulsive and inexplicable, becomes under the spell of Van Dyke's words a land of palpable beauty and strange delight. "If we would but rid ourselves of the false ideas, which, taken *en masse*, are called education, we should know that there is nothing ugly under the sun, save that which comes from human distortion." 257 pages. \$3.00.

POTTERY IS BASIS FOR ARCHAEOLOGICAL STUDY

An archaeological survey by H. P. Mera entitled *POPULATION CHANGES IN THE RIO GRANDE GIAZE-PAINT AREA* was a January publication of the Laboratory of Anthropology, Santa Fe, New Mexico. For his conclusions, Dr. Mera relied largely on evidence of ceramic development.

The present paper, which is Bulletin 9 in

the Technical series, is a detailed report of the findings, and as such will be of interest chiefly to those who are students of archaeology. The theories regarding social and climatic changes arrived at by Dr. Mera after an intensive ten-year study are both interesting and logical. Maps, bibliography, 40 pages.

BOTANY HANDBOOK THAT ALL MAY UNDERSTAND

DESERT WILD FLOWERS made its appearance this spring just in time to add immeasurably to the enjoyment of desert travel. This new volume of Edmund C. Jaeger, published by Stanford university press, makes the identification of almost 800 species comparatively easy for the layman. It is the most complete reference yet published on the flora of the Mojave and Colorado deserts. Related species in Nevada, Arizona and Mexico are also included.

This is a book to interest not only the professional and amateur botanist but also the general traveler and "out-of-doorist." Ornithologists, entomologists, zoologists, ethnologists, cattlemen, bee-keepers, agriculturists and allergists will all find material on their special subjects.

Written primarily as a field guide, brevity has been stressed. More space has been given to the natural history of desert plants than to botanical descriptions. The excellent line drawings illustrating nearly every species eliminate necessity of more detailed written description. Included in discussion of the plants are notes on bird and other animal life associations, Indian and pioneer uses, botanists and explorers associated with discovery and naming of plants, explanation and translation of botanical names.

For more than 25 years Edmund Jaeger tramped the Southwest deserts with his pack-burro and a sketch pad, gaining an intimate knowledge of his subject and drawing from life nearly all the species represented in his present work.

DESERT WILD FLOWERS is a book that every desert lover will treasure in his library—for its wealth of material not ordinarily found in manuals or general works, for the ease with which identification may be made, and for the fine line drawings which may be filled in with colored pencil by the owner from specimens in the field.

Plants are grouped into families in the generally accepted order. There is both a general index and index of persons for whom desert plants have been named. Cloth bound, 322 pages. \$3.50.

NEW MEXICO LANDMARKS BOOK IS PUBLISHED

LANDMARKS OF NEW MEXICO is a mid-April publication of the University of New Mexico Press, written by Dr. Edgar L. Hewett and Wayne L. Mauzy. Eighty subjects of archaeological, ethnological, historical and natural interest are described and illustrated. Indian life is featured throughout. The handbook is for the special use of visitors to the state. One hundred ten half tones, double-page full color reproduction from Kuaua murals. Four color jacket design by Datus Myers depicts Inscription rock and the De Vargas inscription.

Gems and Minerals

This department of the Desert Magazine is reserved as a clearing house for gem and mineral collectors and their societies. Members of the "rock-hound" fraternity are invited to send in news of their field trips, exhibits, rare finds, or other information which will be of interest to other collectors.

ARTHUR L. EATON, Editor

MINERAL GUIDE AND COLLECTORS' DIRECTORY

Western mineral exchange, Seattle, commercial division affiliated with the Washington chamber of mines, conducts mineral and lapidary classes, and in the last five years has graduated over 1500 people living within a hundred mile radius of Seattle. Nine hundred are enrolled in the local gem club.

The exchange publishes "The American Mineral Guide," a work of value in the entire field of mineralogy. The guide contains also a list of mineral collectors in the United States, and information about outstanding mineral exhibits throughout the nation. A new edition of the book is now in preparation.

FLUORITE

To W. W. Wilkins of Deming, New Mexico, must go the credit for sending in the most beautiful fluorite specimens which we have had the opportunity of inspecting. The prevailing colors are emerald green and bright violet, with some brown, tan and colorless parts.

UNUSUAL SPECIMENS

A recent mail brought several specimens of blackish, metallic ore with the tentative identification of samarskite and yttrio-tantalite. At the request of the sender, all names and addresses are withheld. These two minerals are among the rare ores of uranium and radium. If the identification sent with the ores is correct, they must also carry varying amounts of gerium, thorium, yttrium and many other rare elements.

BARITE PEBBLES

Barite has been found recently in the territory north of Superstition mountains, in Imperial valley. It is not the usual bladed variety but comes in the form of flattened, white pebbles of varying sizes. It shows a beautiful white phosphorescence under the cold quartz lamp. As barite has a specific gravity of 4.5, the heavy weight of even a small piece is quite evident. Hardness 2.5 to 3.5. Test for barium sulphate (Ba SO₄).

Why We Wear Necklaces . . .

Many peoples have believed in the mysterious and baleful influence of the "Evil Eye." In order to divert its dangerous emanations, ancient man hung glittering objects about his neck. Hence today we wear necklaces.

Mineral day at the New York 1940 fair will be June 17th.

Sixty minerals are found in California which are not encountered elsewhere.

Of the 100 gem and mineral societies in the United States, 23 are in California.

As late as the 16th century the belief was prevalent that diamonds had sex, and could reproduce their kind. The offspring, if tenderly watered with May dew, would increase in size every year.

Misnamed Minerals

"Herkeimer Diamonds"

The word "diamond" often is applied to stones which, while they may be very attractive gems, are not diamonds at all. Little can be said in behalf of producers or dealers who seek to capitalize the prestige of the diamond by applying it to inferior minerals.

Real diamonds are chemically pure carbon, with a hardness of 10, and specific gravity of 3.52. While the colors of real diamonds range from black, through green, red, brown and yellow, to blue white the only colors known to the purchasing public are blue white or colorless. This renders them very liable to imitation.

"Herkeimer diamonds" are beautiful water-clear crystals of the finest quality. But they are not diamonds! They are famous for beauty and perfect transparency. As a matter of fact, few real diamond crystals, in the uncut stage, approach them in transparency and brilliance. They come from New York state. These crystals are seldom more than one-half inch in length.

"Herkeimer diamonds," like all other quartz crystals, are six-sided prisms, while real diamonds are octahedrons. Quartz has a hardness of only seven, whereas diamonds are always ten. Quartz almost always shows deep striations which are always lacking in diamonds. Quartz is quickly affected by hydrofluoric acid, which has no effect at all on diamonds.

Other so called "diamonds" which are frequently offered to the public are "Pecos diamonds," "Desert diamonds," "Arkansas diamonds" etc. All of these are merely quartz, and are easily distinguished from the real stones by the above tests.

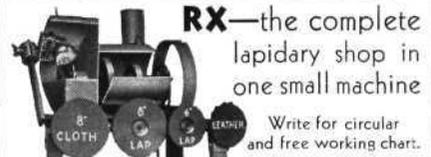
BIRTHSTONES

May—Emerald

Scientifically, seven green stones are recognized in the United States as emeralds. But only one of these, green beryl, is sold commercially in the jewelry store as emerald.

True emeralds of this class and of fine quality were rare in Europe before the discovery of America. All of those known at that time came from the Red sea coasts, from Ethiopia, and from the Egyptian ruins. Colombia, in South America, now furnishes most of the world's supply.

Beryl emeralds are found in long hexagonal crystals. As their beauty depends on their deep green color, rather than on their brilliance, they are almost always cut into long, flat stones. In the United States this is called "emerald cut." Rarity, beauty, color, and a hardness of eight, have blended together to make the emerald the most favored and expensive of all the precious stones.



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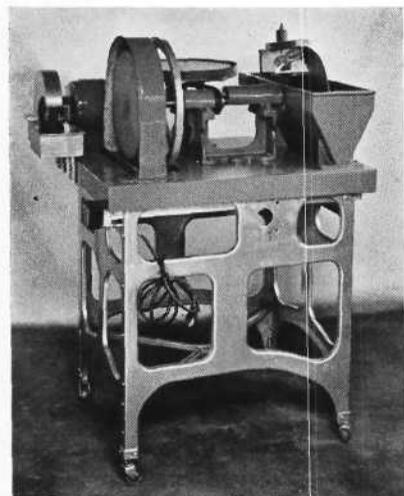
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WRITE FOR DETAILS — — —

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"Hammer Hounds"

There's a nuther animal been roamin' aroun here in the Desert which animal shure aint a rockhoun nor yet aint quite as onery as a rockhog. It's called "Houn" for a last name, but its furst name is a disgrace to the breed — It's a Hammer Houn. Hammers has heads but no brains, an a hammerhoun is likewise. It's sortuv a dog-in-the-manger, cuz it dont really want the rocks, but is jus curius to see what's inside. It takes its hammer (which probly is a shiney new one) an whacks likely looking specimens up into chunks an jus leaves em. If a honest rockhoun comes along, he cant use the debree for polishin, becuz it is fulluv crax. Rockhouns wishes Hammerhouns would be more considerut.

GEOLOGY COLLECTION GOES TO CALIFORNIA TECH

Metropolitan water district of Southern California has loaned to the California Institute of Technology the geological collection assembled at Banning, California during the construction of the Colorado river aqueduct.

The collection consists of a large number of rocks and geological exhibits illustrating the types of country crossed by the aqueduct and includes many samples taken from aqueduct tunnels. The exhibit will be used for study purposes by students of the division of geological sciences of Caltech.

EARRINGS

Last month this column carried a short item on "Why We Wear Earrings." A strange coincidence has come to light: A Chemehuevi Indian in Arizona recently was heard to remark, "Indian woman can't go to Heaven unless she have holes in her ears." When asked why, he answered, "Ears hear bad things. They must be punished." How did this superstition reach the American Indian of today?

Bob Knights of Goldfield is gathering a collection of petrified wood from fields all over the world. So far he has 14 countries represented in his cabinet. Most of his specimens are obtained by exchanging the highly colored Nevada wood with collectors in foreign countries.

H. L. Thomson, 4312-14 Sunset boulevard, Los Angeles, has published a pamphlet composed of excerpts from "Legends of Gems—How to Know and Cut Them," a book by Thomson himself. It explains the mechanics of handling material from the rough to the finished product; contains a bibliography and suggestions to the beginner about choice of materials.

One of the finest private collections of mineral and geological specimens to be seen in the Southwest is the exhibit owned by Harry P. Gower, superintendent of the Pacific Coast Borax company at Death Valley Junction. Gower has been gathering his specimens during the 28 years since he went to the Death valley region as a young surveyor and has them labeled and displayed in an annex to the lobby of the Amargosa hotel.

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A gem collector's handbook and a specimen set may open the door for a new hobby that will bring you enjoyment and health. Here's a hobby for every member of the family.

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AMONG THE ROCK HUNTERS

Don Davis spoke on "Philippine Gold Fields" at the March 21st meeting of the Los Angeles Mineralogical society.

The Pseudo, publication of Kern County Mineral society, Bakersfield, has completed three years of news activity. Dr. Groesbeck, one of the members, gave a talk in February on the geology and history of Mono basin. The March meeting was a closed meeting because of election.

Imperial Valley Gem and Mineral society members received all the awards in the cut and uncut gems classification at the Imperial midwinter fair. Doubtless some new saws and lap wheels will be purchased. Field trips to Painted gorge and to Little Mule mountains were made in March.

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Dr. Frederic Pough, associate curator of minerals, Museum of Natural History, N. Y., addressed Plainfield Mineralogical society at their March meeting on "Gems and Gem Minerals," illustrating his talk with slides and specimens. The March field trip was to Rutgers University, New Brunswick, N. J. Host and leader, Professor Albert O. Hayes of the geology department.

Gold has been discovered in New Jersey a short distance from Plainfield.

East Bay Mineral society, Oakland, visited the geological and mineralogical exhibits in the museum at Bacon hall, university of California, under the guidance of Dr. Adolf Pabst, professor of mineralogy, and A. L. Repecka, curator of the museum. March 21, Alfred L. Ransome gave an illustrated lecture on "Some physiographic features in California and their geological explanation."

Washington state chamber of mines, Seattle, maintains a free library of all mineral publications.

Mineralogical Society of Southern California and students of geology and faculty of Pasadena Junior college visited points of scenic, scientific and historical interest on a six day trip to Goodsprings, Nevada and Death valley points: total mileage, 1,000. Thirty-one cars and 117 persons made the trip.

Several societies, among them the East Bay Mineral society of Oakland defrayed the expenses of their representatives to the Santa Barbara convention by holding mineral auctions.

Genevra B. Dow, publicity chairman of Marquette Geologists association, Chicago, writes that in March Dr. Chester B. Slawson, department of mineralogy, university of Michigan, spoke on "The Theory and Practice of Cutting Gem and Industrial Diamonds," illustrating his talk with slides showing methods of cleaving and cutting. The members exhibited a display of polished stones—all their own work. Among their guests were Dr. Alfred Wolcott, formerly of Field Museum; Frank L. Fleenev, Ben Hur Wilson, co-authors with Dr. H. C. Dake of "Quartz Family Minerals;" L. B. Mather, Baltimore mineralogist now with Field Museum. In April the Marquette society enjoyed a colored movie of western gem fields, made by Dr. Daniel Williams, Chicago surgeon, whose hobby is faceting.

Ernest W. Chapman, Kenneth B. Garner, officers of the state federation, and E. C. Cline, Orange Belt federation director, were guests at a special meeting of the Imperial Valley Gem and Mineral society March 16. Garner brought official greetings from the federation and Chapman addressed the club on the objectives of the federation and the ethics of mineral collecting.

Newly elected officers of the San Diego mineralogical society are: Elmer C. Moore, president; Robert W. Rowland, vice president; Mrs. H. H. Mayfield, secretary-treasurer.

Owyhee Gem and Mineral society, Caldwell, Idaho, has elected the following officers for 1940-41: G. A. McGee, president, Caldwell; Harry Thomson, vice-president, Nampa; J. H. Roblyer, field marshal, Caldwell; Joyce Whitmore, treasurer, Caldwell.

Scheduled for the April meeting of the Plainfield Mineralogical society, Plainfield, New Jersey, was a lecture, on "Fluorescent Minerals," by H. E. Millson of the Calco Chemical company. The field trip for April was a visit to the Academy of Natural sciences of Philadelphia. It was a combined meeting with the Philadelphia society.

Columbia Geological society, Spokane, Washington, has elected Mrs. Bruce Neal to the position of field trip chairman. Dale Lambert, secretary of the society, suggests that a "True or False" program makes interesting entertainment. He will be glad to furnish details.

According to Secretary H. E. Murdock of the Rock club at Bozeman, Idaho, his group recently tried the experiment of holding an open meeting. The response from visitors outside the organization was so enthusiastic the crowd used all the standing room and then overflowed into the hall. A demonstration of fluorescent material was part of the program. Many new members have been added to the Bozeman club during the last few months.

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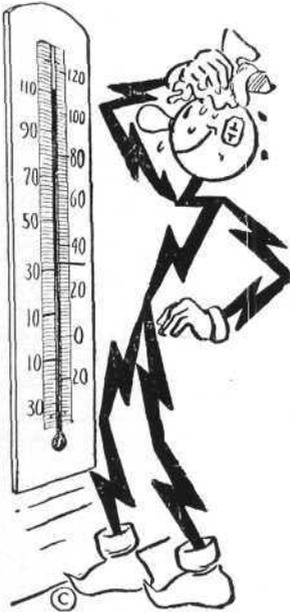
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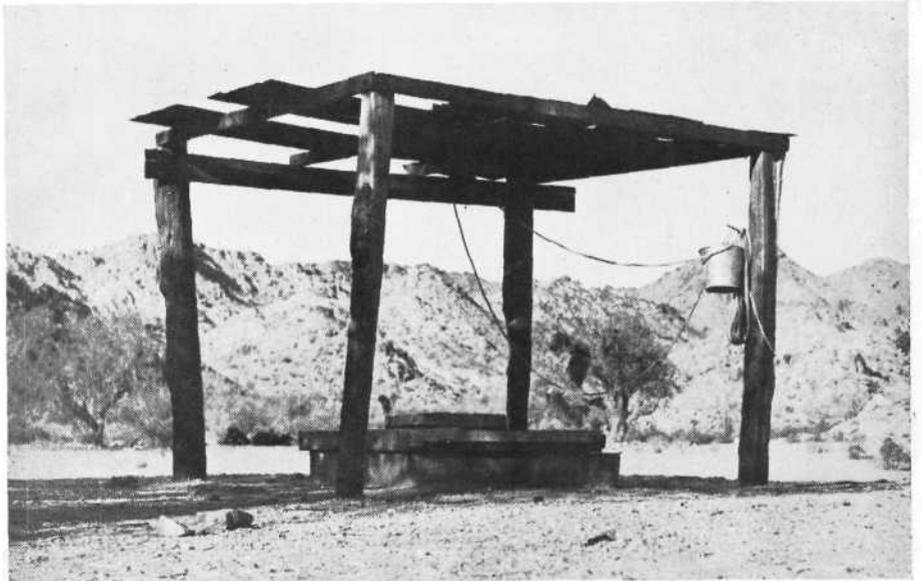
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BEAL'S WELL

Two cash prizes of \$5.00 each were awarded in the March Landmarks contest of the Desert Magazine, the winners being Geraldine Rehkopf of El Centro and Margaret Stanley of Brawley, California. Both of the young ladies submitted excellent manuscripts, but as each paper contained some pertinent facts not included in the other, two first prizes were awarded so that the manuscripts could be combined and the Desert Magazine readers given all available information as to the history and status of this well known waterhole.



By **GERALDINE REHKOPF** and
MARGARET STANLEY

The picture in the March Desert Magazine is of Beal's Well. This man-made waterhole is located in the Chocolate mountains in the northern part of Imperial county. It is on the Blythe-Niland road 13.8 miles from Niland. This road is on the Four States highway route in Southern California. Elevation is 1300 feet above sea level.

The original well was dug under the direction of Supervisor Willis Frank Beal of Road district No. 4 in Imperial county, the work being done by Roy Fisher and Johnnie Allen. It was started in 1919 and completed in 1920 and a windmill erected to pump the water.

In 1929 during the term of Supervisor Henry L. Jackson a cloudburst filled the original well and the present water was developed on higher ground about 150 yards north and east of the old site. This work was done by Deputy Sheriff Elmer Waters and a prison road gang, the well being sunk to a depth of 35 feet. During the 1935 drought water became so low in the well that Road Foreman Elmore, under the direction of Supervisor B. M. Graham went down another 19 feet, so the present depth of the well is 64 feet.

The region where this well is located was the scene of a desert tragedy in 1930 when a Mexican and his wife and four daughters and two sons perished along the route in Paradise valley eight miles

northeast of the well when their car broke down and their water supply was exhausted.

Indian petroglyphs and pottery shards indicate that the pass through the Chocolate mountains at this point was used by the Indians in prehistoric times. A spring north and east of the well and to the left of a black butte, flows during wet seasons.

The water while never very cold, is good, and an ample supply always is available for travelers now. The place is a popular rendezvous for prospectors, rockhounds and picnic parties.

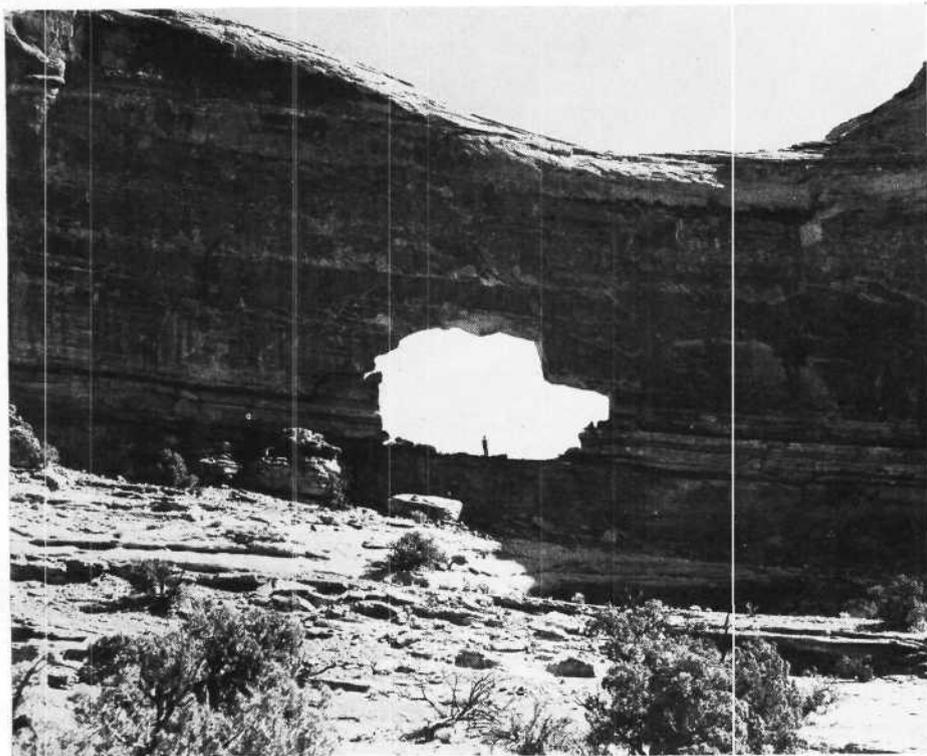
DESERT QUIZ ANSWERS

Questions on page 10.

- 1—In alkaline soil.
- 2—Grinding meal.
- 3—From the east.
- 4—Rhyolite.
- 5—State park.
- 6—Tombstone.
- 7—Yellow.
- 8—Tucson.
- 9—Zuni.
- 10—Brigham Young.
- 11—Iron.
- 12—New Mexico.
- 13—Cammerer.
- 14—Lummis.
- 15—Flagstaff.
- 16—Chuckawalla.
- 17—Flower—one of the mallows.
- 18—Apply a tourniquet.
- 19—Ulloa.
- 20—Eligible for marriage.

Scenic Arch in Utah

Who can identify this landmark?



Prize Contest Announcement . . .

This month's unnamed landmark is located in Utah, in one of the most rugged areas in the Southwest. The arch or window shown in the picture above is in the southeastern part of the state, and while not as well publicised as some of the other scenic attractions in Utah, is nevertheless well known to many travelers.

In order that Desert Magazine readers may become better acquainted with this unusual rock formation, a prize of \$5.00 will be paid for the most informative article of not more than 500 words describing the landmark.

Contestants should identify the arch by name, location and accessibility to highways and railroads. If there is anything of historical or legendary interest in connection with the place, this should be given also.

Manuscripts must be in the office of the Desert Magazine not later than May 20, and the prize-winning story will be published in our July number.

Stones Where the Fairies Danced . . .

Continued from page 13

region east of the Alleghany mountains, and extend from Maine to Georgia. They are also found in the Black canyon of the Gunnison, the Royal Gorge near to Pike's peak, and here in this small area in the Sangre de Cristo mountains."

"What makes them? From what are they formed, and why are they in the shape of crosses?"

"I've been waiting for that! First of all they are staurolites. Staurolites are formed of iron, aluminum and silicate. They are also called granatites, grenatites, staurotides and xantholites. They are probably the result of heat imposed by pressure. Twin crystals form and take the shape of crosses, Roman, Maltese and St. Andrew. The hardness ranges from seven to seven and a half, topaz is harder and quartz softer. Once this deposit here in New Mexico is known to gem cutters I've no doubt the little crosses will be cleaned of their enveloping schists, polished and put on the market just as they are in Virginia."

As I looked around that calm mountain glade, with the distant desert shimmering at our feet and the blue sky overhead, I was glad that all the Fairy stones

are not on the surface, and that probably they will be weathering out of the mortar rock—so that many generations of visitors may have the pleasure of finding them.

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HERE AND THERE . . . on the Desert

ARIZONA

Ajo . . .

Running his trapline in the Quijotoa placer mining district, William H. Coplen, jr., spied a small glinting particle at the surface of the ground. He dug out a piece of quartz in which a chunk of gold was gleaming. At the university of Arizona the nugget was valued at \$85.

Tucson . . .

Whites as well as Apaches of pioneer days captured children, according to territorial court records. In Pima county superior court vaults recently was found a document settling the fate of an Apache girl, 3 years old. F. N. Goodwin, judge of probate court, in May 1869 signed indenture of the girl under territorial law specifying procedure for captive Indian children. The girl was bound to domestic service, for 15 years "faithfully to serve and obey her master and mistress," who in return were obligated to "treat her with kindness due to a female, a human being and a Christian."

Holbrook . . .

Northern Arizona cattlemen elected William R. Bourdon former state senator and now state commander of the American Legion to head their association another year. A. T. Hutcherson was re-elected secretary-treasurer. Wallace Crawford of Apache county, Sam Euband of Navajo county and Boss Chilson of Coconino county, were named to serve as directors of the Arizona cattle growers association.

Tucson . . .

Lightning rods will protect ancient San Xavier mission. Damaged by thunderbolts in August 1939, the historic building is being repaired as funds and material are received from donations. Delicate pillars and arches of the cupola on the west tower have been restored.

Showlow . . .

University of Arizona students will excavate a pithouse village dating back to 700 A. D. Site of the work is at Forestdale creek, 30 miles from here in the Apache Indian reservation. Dr. Emil Haury, dean of the university's anthropology department, says the ruins represent a cultural blend of the southern Mogollons and the northern basketmakers.

Phoenix . . .

To the attorney general of Arizona W. T. Pipkin of Blythe, California, complains that 18 sections of Arizona land have been seized and sold by California. Pipkin says he lost his property, south of Ehrenberg, Arizona, because formation of an irrigation district caused a man-made change in the channel of the Colorado river.

Yuma . . .

Ralph Moreland killed a 6-foot diamond-back rattlesnake near the city limits. The snake had 14 rattles, there were 36 diamond-shaped marks on its back.

Glendale . . .

World's record production of Pima cotton was made by Sam Joy, new president of the Pima High Yield club. He raised 728 pounds lint of long staple cotton per acre from a field of 37 acres. This won for him a gold trophy cup, in addition to net return of \$66.80 per acre from the crop. Average return for 18 club members was \$31.79 per acre.

Grand Canyon . . .

Every state in the union, the District of Columbia, Alaska, Hawaiian islands and Canada sent visitors to the Grand Canyon of Arizona during February, in numbers far surpassing the record for February 1939. Dr. Harold C. Bryant, park superintendent, reports 6,926 tourists were registered during February this year, an increase of 2,059 over the corresponding month in 1939.

Phoenix . . .

Many medicine men of the aboriginal American Indian tribes practiced medicine as any modern white man who is a graduate of a medical college today treats his patients. So says Dr. Frederic H. Douglas, director of the Denver art museum. Dr. Douglas in a lecture here also declared that there was in the day of the aborigines as there is now, a definite relationship between religion and medicine. Early day Indians did not suffer from obesity, hardening of the arteries, heart disease, insanity, cancer or venereal diseases, he said.

CALIFORNIA

Niland . . .

North shore road along Salton sea between Niland and Mecca is a 40-mile stretch with nearly 100 bridges. State highway engineers are working to bring the road to standard specifications. Across Salton creek crews are building a new bridge three quarters of a mile long, including necessary approaches. Many small washes, leading from the mountains to Salton sea, will be consolidated by diversion channels.

Independence . . .

After 54 years in the desert Death Valley Scotty hankers for bright lights, a home where he can see movies, big buildings and crowds. That's why he says he decided to sell Scotty's castle for "four or five million dollars." Meantime tourists continue to pay \$1.10 a head to be escorted by guides through the elaborate establishment built by Scotty and his partner, A. M. Johnson of Chicago. On a recent Sunday more than 300 visitors paid the fee for a tour of the castle.

El Centro . . .

Deputy U. S. Marshal Tom Rynning who serves Imperial and San Diego counties went to the naval hospital in San Diego following recurrence of a heart ailment. Captain Tom, 74, was a cowhand in his young days, later captain of Arizona rangers, and warden of the old Yuma territorial prison. He went to Cuba with Roosevelt's Rough Riders.

Bishop . . .

White mountain's 10,242-foot summit was reached by four ski mountaineers of the Sierra club early in March—the first winter ascent of this peak. The climb was made from the Jeffry's ranch in Owens valley by Chet Errett, Howard Koster, Clyde V. Nelson on skis and Don McGeein on snowshoes. Little snow was found below the 10,000-foot level and the greatest obstacle was a terrific wind, the climbers reported. The ascent of this peak under more favorable conditions was told by Elizabeth Lewis in the November '39 issue of the Desert Magazine.

Lone Pine . . .

When his automobile hit a cow on the highway, then smashed into a truck, Father Crowley, famous desert priest, was killed. His parish, one of the largest in the world, ranged over Mt. Whitney, the country's highest peak, down into Death Valley, below sealevel, included 10,000 square miles. He was on his way to say 6:30 mass at Furnace creek CCC camp in Death Valley, at the time of the before-dawn collision. One of his pet projects called for building an All Souls memorial chapel of native stone on a spur of the Funeral range in Death valley, and he was leading a campaign to mark historic spots in the valley with wheels from old-time wagons, embedded in concrete. He was 48 years old. Miners and prospectors, Catholics, Jews and Gentiles joined in tribute to the desert padre at his funeral.

NEVADA

Reno . . .

Howard Mason, 50-year-old student, will get his diploma from the university of Nevada in May. His college education was interrupted in 1908. While enrolled at Nevada U., Mason has carried a full-time course, supported his family by doing part-time jobs. His daughters Dorothy and Elizabeth, twin sophomore students at the university, enjoy going to school with daddy. Mason was elected to membership in Phi Kappa Phi, national scholastic honor society.

Boulder City . . .

New legislation is pending in Washington to revise power and interest charges at Boulder dam and to govern operation of the power plant there. Secretary of the interior would be authorized to fix charges for electrical energy generated at the dam in amount sufficient to meet operation and maintenance costs over a 50-year period and to repay the treasury with interest, advances made to the Colorado river dam fund. Payment would be made annually of \$300,000 each to Nevada and Arizona, and in addition \$500,000 to a special Colorado river development fund.

NEW MEXICO

Albuquerque . . .

Fort Union, old Indian outpost near Las Vegas, will be added to the list of national monuments, if a proposal pending before the national park service is approved. Hilroy A. Tolson, regional parks director, says many of the old stone buildings and the hospital at the fort are in good condition. It will be necessary to acquire 900 acres of land from private owners.

Santa Fe . . .

Dr. Ross A. Maxwell has been appointed geologist of Region 3 of the national park service, with headquarters here. He will be in charge of geologic work in eight states, succeeding Dr. Charles N. Gould, who resigned in January to write several books.

Gallup . . .

Tourists who take coyote pups to the east from New Mexico and other states of the desert region have created a new problem for the federal biological survey. Dr. I. N. Gabrielson, survey director, reports coyote damage in Pennsylvania, New York, New Jersey and Virginia. Hundreds of coyote pups are taken to the east every

year by tourists, Gabrielson says, and some hunt clubs have bought coyotes under the mistaken belief that they were foxes. Descendants of these animals are now raiding eastern farms.

Tucumcari . . .

A new campsite of the Folsom man, believed to have lived in the southwest more than 10,000 years ago, has been found 20 miles southeast of here. Dr. Frank C. Hibben, curator of the university of New Mexico, announces the discovery, located on the bank of what was a small lake in the ancient era. Early in the summer, Dr. Hibben will explore the place, at which he found on his first visit a number of Folsom points, small lances which were the principal weapon of these prehistoric hunters.

Albuquerque . . .

From June 10 to August 3 students of the University of New Mexico will attend the 11th annual field school of art at Taos, and from August 3 to August 31 a course in Indian art at Santa Fe. Ralph Douglass will direct the Taos school. Kenneth Chapman will head the Santa Fe session. Field studies in anthropology will be conducted by the university for the 12th year in Jemez and Chaco canyon ruins, under direction of Dr. W. W. Hill at Jemez and Dr. Donald Brand at Chaco canyon.

Deming . . .

Safflower, yielding as high as 2000 pounds of seed to the acre, may be commercially valuable as a crop for the high plains of eastern New Mexico. Technical experts for a local oil mill say safflower is a source of drying oil in paint and varnish industries, has also been used in making soaps. After the oil is extracted, the cake can be fed to livestock.

UTAH

Roosevelt . . .

Ray E. Dillman, Roosevelt attorney, has been elected to the state board of education, giving the Uintah basin representation for the first time on that body.

Vernal . . .

Committees have been named for the annual Vernal rodeo to be held in September. Alvin E. Weeks is president of the association. H. E. Seeley, E. Lee Bennion and June Graham are members of the cattle committee; George P. Roth, Francis Felch and Howard Caldwell, parade; Ken Stringham, entertainment.

Cedar City . . .

Dr. John A. Widsøe, a member of the Quorum of Twelve Apostles in the Latter-day Saints Church, presided in dedication ceremonies for the new Cedar City L. D. S. institute building. The edifice cost \$30,000.

AUTOMOBILE COOLER FOR DESERT TRAVELERS

Motorists planning vacation trips which will take them across the desert during the summer months this year need suffer no discomfort from heat to which they are not accustomed. A simple and inexpensive type of automobile cooling device has been perfected by the Koolair company of Long Beach and will be available from distributors in all the important towns in the Southwest.

Koolair was introduced last summer and met with such success that its use is expected to become general on the desert this year. It is a self-contained water cooler easily attached or removed from the outside of the car door, and requiring no electrical hookup.



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LOS ANGELES CALIFORNIA

Desert Place Names

Magazine is indebted to the research work done by the late Will C. Barnes, author of "Arizona Place Names;" to Betty Toulouse of New Mexico, to Margaret Hussmann of Nevada and Hugh F. O'Neil of Utah.

For the historical data contained in this department the Desert

ARIZONA

BULLARD PARK Greenlee county
Elev. 7,862 feet. Few miles west of New Mexico line east of Blue river. Twitchell gives this story: "In November 1870 at Silver City, N. M., citizens followed a raiding party of Apaches who had stolen most of the horses in the town. John Bullard was captain. They followed the trail into the region between Dry creek and the Frisco river; struck the Indians and wiped them out. Almost at the last shot an Apache fired point blank at Bullard, who fell mortally wounded. His body was taken to Silver City for burial."

HUTTON PEAK Gila county
Ele. 5,608 feet. About 12 miles southwest of Globe. After Oscar Hutton, who "has the reputation of having personally killed more Indians than any other man in Arizona," according to Farish. Of Hutton. Bourke wrote: "One of the post guides at Old Camp Grant, 1870. A very good man. He had six toes on each foot. He died from the kick of a mule which crushed in the whole side of his face." Hutton Butte, 5 miles southeast of Point Imperial, Grand Canyon, was also named for this man.

CASTLE DOME Yuma county
Small mining camp located in the 1860s on Castle dome range about 50 miles northeast of Yuma. Bancroft says, "Castle Dome mines were discovered in 1863; supposed to be immensely rich but were abandoned when the ore turned out to be chiefly lead. Large quantities of lead were subsequently shipped to San Francisco and from 1869-70 the mines were profitably worked." P. O. established December 17, 1875. Castle Dome landing on the Colorado river was shipping point for this district. Arizona Gazeteer for 1881 says smelter of the Castle dome mining company was located at the steamboat landing. There was a postoffice at the landing in 1878. The mountain range extends northwest and southeast, about 30 miles east of the river. In shape it resembles a huge castle. Said to have been named *Cabeza de Gigante* (Giant's Head) by de Niza in 1744.

CALIFORNIA

FIGTREE JOHN SPRING
Named for an Indian who lived there until a few years after the turn of the century and cared for some fig trees said to have been planted by himself. The spring is due to escape of ground water under artesian pressure, giving rise to a marshy pool surrounded by cattails and a thicket of brush, in addition to which there are several palm trees. In early days springs such as this were of importance as watering places on the desert and were the centers of Indian settlements. Figtree John spring is accessible from U. S. Highway 99, the turnout marked. In old days somebody added to the sign the words: "Last good water before Imperial Valley." Many tales are told of Figtree John, among others that he held the secret of a rich gold deposit, from which he took as he needed money, nuggets of "black gold" and these he was said to use to trade for those few necessities he required from stores of white merchants. The secret

of his mythical wealth, according to this story, died with him.
(in Sec. 33, T. 8 S., R. 9 E.)

FURNACE CREEK Inyo county
Remains of an old furnace were found at this spot in Death valley and it was supposed to be the place where Mormons worked ore in 1858. An anvil found at Anvil springs in Death valley also was supposed to be of Mormon origin. Chalfant believes the equipment belonged to Mexican miners.

NEVADA

DEEP HOLE Washoe county
Established as a settlement, 115 miles north of Reno, when the railroad arrived, about 1869; so-called because of several very deep springs near by.

MOUNTAIN HOUSE Douglas county
Old stage station was located here in the heart of the sagebrush mountains. Site is about five miles east from Double springs, where the road branches off to Antelope valley. Station was built by Tom Rissue, was known at different times according to its owner, but today the old name of Mountain House is still used in reference to the old station.

NEW MEXICO

CUEVA PINTADA (ku-ay-va pin-ta-da) Sandoval county
Sp. "painted cave," so named by the Spanish because of numerous pictographs and paintings on its walls, but used by the Indians of the nearby pueblos for ceremonial purposes. It is situated near the cliff dwellings which according to tradition were the ancient homes of many of the Rio Grande pueblos inhabited today. It is still one of the points to which ceremonial pilgrimages are made by these Indians. The few cliff houses which occur near the cave in the face of the wall were probably not used as dwellings but rather as shrines where idols and other ceremonial objects were deposited.

UTAH

LOGAN Cache county
Derived its name from Logan's Fort, which was named from the river nearby. Ephriam Logan, early trapper, explored this region in the 1820s with Jedediah Smith. Peter Maugham, one of the first settlers in Cache valley, located here in the spring of 1859. On June 21, 1859 members of the community drew lots for the land. In the following year Logan was laid off into city lots, in January 1866 the act making it an incorporated city was approved. In 1875 the Utah and Northern railroad was built to Logan from a connection with the Union and Central Pacific railroads at Ogden. This line was acquired by the Union Pacific.

MANILA Daggett county
County seat. (Alt. 6,225; pop. 161). Named in 1898 by Adolph Jessen, surveyor, in commemoration of Admiral Dewey's victory over the Spanish fleet at Manila, Philippine islands. First called Chambers, probably for a pioneer family.

Where Anza Camped . . .

Continued from page 7

Spirit of the desert has in store for the future of this region.

Paradoxically—here is one of the driest areas on the American continent, and yet as far as is known to man, the important changes in its geographic history have been wrought by water.

Vegetation is sparse in the Yuha area. To the casual observer it is just another section of grim, forbidding desert. But to those who look behind and beyond the superficial aspect of the landscape there is rare interest here.

Rounding a little knoll of fossil shells in a place devoid of all other plant life, I came upon a lone desert lily sending forth its buds in preparation for a beautiful blossom. To me, that lily was symbolic of the desert that men and women learn to know—and love.

• • •

Painter of Chaco . . .

Continued from page 3

table in the depiction of these. I saw desert pictures in broad sunlight, moonlight, and when those rays of early morning and evening sun, tint sky and mesas in opalescent hues beyond compare. And that subtle clarity of desert atmosphere was there too.

The artist has just completed six large panels symbolic of Pueblo Indian culture. Foremost among these was one entitled "Waiting for Montezuma." In this painting are shown the Indians sitting and standing on their housetops at the sunset hour communing with the spirit of that great ruler of ancient days. Here again is maintained his same beautiful quality and truth in form and color.

Being much older than most of his contemporaries he paints with as much zeal as in his youth. He says that he owes this virility to the simplicity of his life on the desert. Also he adheres rigidly to a daily routine. With the regularity of the sun he takes his morning and evening walks. His musings with nature seem to be a necessary nutriment.

"You are very happy here, Mr. Rollins?" I asked him as I reluctantly prepared to leave. With his characteristic vehemence he replied, "Oh I love it, the quiet, the freedom and volition of it all!"

Would that I could pay better homage to this kindly veteran painter of our Southwest. May many such follow in the trail he has helped to blaze, for it is resplendent with sincere devotional endeavor and friendly cheer.

The Desert Trading Post

Classified advertising in this section costs five cents a word, \$1.00 minimum per issue—actually about 2½ cents per thousand readers.

CRAFTS

LADIES' THUNDERBIRD PIN, Indian made. coin silver set with Turquoise \$1.00. Thunderbird Pendant \$1.00. Clemans Specialties, Box 236 D. Coolidge, Arizona.

SALE: Must dispose Indian stock. Navajo jewelry, rugs, Chimayos, pottery, baskets, mostly old, good, at sacrifice price. Write John E. White, Banning, California.

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BOOKS

BOOKS OF BOULDER DAM—"Bunkhouse Bunk" vintage. (1) The real story of Boulder Dam — life and adventures of the big concrete wedge, so presented that even YOU will understand. (2) Denizens of the Dam—a glimpse of the beautiful beasts who live, love and have their being in the dam area. You'll be surprised. By a moron for those of like—mind—shall we say? Two bits (marked down from twenty five cents) postpaid. "Biz," Boulder City, Nevada.

BOOKS for gem and mineral collectors. May be obtained by addressing Desert Crafts Shop, 636 State St., El Centro, California. See listing and prices on page 37 of this issue of Desert Magazine.

MAGAZINES

ARCADIAN LIFE MAGAZINE. Tells the story of the Ozarks. Points the way to Pastoral Living. \$1.00 a year - copy 25c. 2c a word Classified. O. E. Rayburn, Caddo Gap, Arkansas.

LIVESTOCK

KARAKULS producers of Persian Lamb fur are easy to raise and adapted to the desert which is their native home. For further information write Addis Kelly, 4637 E. 52 Place, Maywood, California.

POINTS OF INTEREST

LIVING ON THE DESERT stimulates new life interest therefore choose a good Desert Village, Cathedral City, California. See W. R. Hillery.

REAL ESTATE

FOR SALE: 10 acres on Highway 91 ten miles East of Barstow. Price \$500. Ideal location for health or business. See owner opposite Big Tank Auto Camp. Earl W. Shaw, P. O. Box 363, Yermo, California.

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GROTTO BUILDING

Just completed in noted desert region. Built by California's leading rock artist—of rock from "all-over." Dozens of unique innovations incorporated in design—three long waterfalls, garnet sub-grotto, magnetic rock effects, hanging rock, smoking Indian, Poison Oak leaf impression panel, trick switches that do funny things to rattlesnake tails, drinking fountain, fish pool, a super-super rose quartz fireplace. BUILDING IS 30' by 70' with large patio.

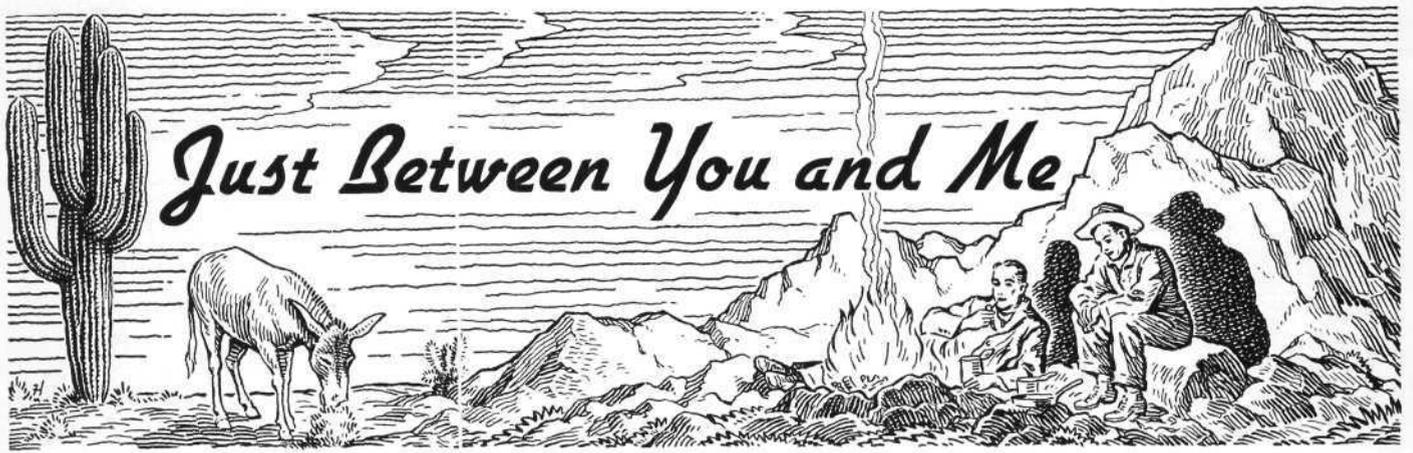
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Creative Designer & Horticulturist

PIONEER HOTEL — SAN JACINTO, CALIF.



By RANDALL HENDERSON

THANKS to all the rockhounds who have been lugging in stones—and to Kenneth Kreigh—the Desert Magazine's rock garden is practically complete. Kenneth came down from San Jacinto, California, to do the work. He's one of those artistic fellows who can take a few boulders and a sack of cement and create anything from a wishing well to a Niagara waterfall. I think we have nearly every mountain and mesa in the Southwest represented in that garden. Mrs. S. P. Seela even sent a box of barite "roses" all the way from Oklahoma City to add to the display.

I would like to revive and perpetuate the tradition of those ancient "trail shrines" which the prehistoric tribesmen of the desert erected along their trails. Each Indian as he passed deposited a pebble as a token to the gods. And so we are going to have a shrine in our rock-garden—along the trail that passes the Desert Magazine office—a mound not for scoffers, but where those who have found the peace and beauty and courage which lie beyond the grim mask of the desert, may deposit their prayer-stones as a simple token of goodwill toward the Great Spirit who rules the desert.

* * *

One evening late in March I returned to my old home of Calexico, California—down on the border—to witness the historical pageant "Desert Cavalcade," presented this year for the first time. The players in the great outdoor amphitheater were my former neighbors and friends—and I was especially proud of them that evening. Down the barranca in colorful procession tramped Juan Bautista de Anza and the grey-frocked Father Font, the army of General Kearny, the wagon trains of the 'forty-niners, the old Butterfield stage coach—and eventually the engineers and farmers who reclaimed the great Imperial valley. It was truly an international spectacle for the players and musicians were recruited from both sides of the border. I hope the folks in Calexico and Mexicali will make it an annual event—such pageantry deserves more than merely a local audience.

* * *

For 10 days last month I played hooky from the office and took a sort of gypsy trip up into Nevada and Death Valley to renew my acquaintance with a region I had not visited for many years.

It was a thousand-mile journey with blossoming desert wildflowers strewn along the roadside nearly every foot of the way. Among us humans it is customary to spread paths of flowers only for kings and potentates. But Mother Nature—bless her democratic old soul—pays no attention to caste or royalty. She spreads flowers for the humblest citizen.

* * *

I like to travel in Nevada. It is a big state with lots of

elbow room. It has an efficient highway department—and its public officials have been more concerned with keeping down taxes than with schemes for regimenting its citizens. Contrary to the practice at some of the other state lines, Nevadans assume that a motorist coming into their state is on an honest mission. You can pass their border without being subjected to a cross-examination that would make ol' St. Peter feel like a piker.

* * *

From Las Vegas I drove north through the Valley of Fire to see Overton museum and have a chat with George Perkins. I'd been wanting to meet George ever since he wrote that story about the Pahute renegade Mouse for the Desert Magazine last November. George began telling me about the interesting places to visit in the Overton area—and I wanted to call off my 10-day itinerary and spend the rest of the time tramping over those southern Nevada hills. The desert is that way—the more you see of it the more you want to see.

* * *

Old Charleston peak was capped with snow—the entire landscape along my route was rugged and intriguing. But after all, the most interesting thing about the desert is the people who dwell on it. As far as my time would permit, I stopped along the way to renew my acquaintance with some of those I have known, either personally or through correspondence . . . Bob and Lena Knights, the No. 1 rockhounds at Goldfield . . . Jack James who operates a giant gold dredger in a little artificial pond out in the desert at Jamestown . . . Mrs. Bennett who was entertaining an overflowing crowd of Easter weekenders at her Stope Pipe Wells Inn . . . Edith Murphey who operates the little Indian trading post on the floor of Death Valley and is trying to teach the impoverished tribesmen there to create wares that can be sold to the tourists . . . Superintendent T. R. Goodwin, Botanist French Gilman and Naturalist Don Curry who are making the Death Valley national monument one of the most popular winter playgrounds in the West . . . Tom Wilson whose Beacon Inn at Barstow is a haven for travel-weary motorists.

At Death Valley junction I met my old friend Harry Gower, superintendent for the Pacific Coast Borax company. We were in the University of Southern California together 30 years ago—and both buried our sheepskins in the bottom of our trunks and came to the desert as soon as school was out. This was our first reunion since 1911. We live in a big desert.

* * *

After a week in the Nevada and Death Valley deserts I met a caravan of Sierra club members from the San Francisco bay region, led by Jim Barbour and Fred Peak. They came