POEM OF THE MONTH

THOUGHTS ON SEEING THE WIDE DESERT

What dust-dried Spanish Legion
With red-plumed spears of war,
Marched to the edge of this Mojave?

Was it on a day
When thunder slashed
The brooding eastern sky—
While the westward heaven held silence?

Whose dreadful cry noted room for Spain
(And enough for the bones of heathen foes)
Under the sweep of a gilded sword?

Who knelt to pray and felt the throbbing earth?

—G. D. Lawrel

Desert Magazine pays $5 each month for the poem chosen by the judges to appear in the magazine. To enter this contest simply mail your typed or handwritten poem (must be on a desert subject) to Poetry Contest, Desert Magazine, Palm Desert, Calif. Please include a stamped return envelope.
Publisher's Notes

The first special exhibit of Desert Magazine's Art Gallery for the 1960-61 season gets underway this month. Starting November 5 and running through the 30th, the gallery will feature authentic Indian sand designs by David Villasenor, who recently put on a very successful one-man show at the Los Angeles Exposition Park Museum.

At the same time Desert Magazine is proud to present dozens of the original paintings of three of America's most talented Navajo artists: Beatien Yazz, Harrison Begay and Frank Vigil! This special exhibit represents the largest selection of Yazz and Begay paintings now available for public sale.

The Desert Magazine Gallery and Craft Shop (the latter featuring Navajo rugs) is now open to the public without charge, seven days a week, from 9 a.m. to 6 p.m.

Desert tan is the color of our Christmas Gift Subscription Coupon, which we unashamedly invite you to use to the fullest. It is also the color of the ink in our newly-redecorated classified section, "The Trading Post." Again this month we run the book catalog for those who would buy books as Christmas gifts.

Our back cover, a four-color reproduction of a Bill Bender painting, is available as a quality reprint, with details for ordering the reprint carried on the back cover.

The heavy request for copies of the Clyde Forsythe "Gold Strike" series has encouraged Desert Magazine to set up a reprint project. Within six months a portfolio of Desert Magazine covers, in full color, and printed on high-grade paper, will be available. Details later.

Cordially,
CHUCK SHELTON
Publisher

Contents for November, 1960

Cover
Nal-Nishi, Navajo silversworker from Leupp, Arizona. Photograph by Charles W. Herbert of Tucson. For a description of the jewelry Nal-Nishi is wearing, see page 16.

Landscaping 5 Moving a Saguaro Cactus
Reminiscence 8 Prospecting the Desert
Personality 13 Sonora's Railroad Hero
Native Crafts 14 Southwest Indian Silverwork
Native Craftsman 17 The Silversmith's Background
November Travel 27 Kingman Cut-Off
Nature 28 Deer on the Desert
November Travel 30 Death Valley Encampment
Gems-Minerals 32 Wiley Well
November Travel 36 North of Gerlach
Desert Artist 39 Bill Bender
Back Cover Desert Wash

Also:
Poem of the Month: 2
Letters from our Readers: 4
Hard Rock Shorty: 18
Trading Post Classifieds: 19

The Desert Magazine, founded in 1937 by Randall Henderson, is published monthly by Desert Magazine, Inc., Palm Desert, California. Re-entered as second class matter July 12, 1948, at the postoffice at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U.S. Patent Office, and contents copyrighted 1960 by Desert Magazine, Inc. Permission to reproduce contents must be secured from the editor in writing.

Photography and Art Credits:

Address all editorial and circulation correspondence to Desert Magazine, Palm Desert, California.

Address all advertising correspondence to Going-Wright Advertising, 560 N. Larchmont, Los Angeles 4, Calif. Phone HD 6-2854.

SUBSCRIBE TO DESERT

[ ] One Year—$4 [ ] Three Years—$10.50

(Canadian subscriptions 25c extra, foreign 50c extra per year)

SEND DESERT MAGAZINE TO:

[ ] One Year—$4
[ ] Three Years—$10.50

(Canadian subscriptions 25c extra, foreign 50c extra per year)

Mail this Information and your remittance to: Desert Magazine, Palm Desert, California.
On the Warpath...

To the Editor: Boy, how my blood boiled when I read the letter from Will T. Scott in last month's magazine! If the only type of Indians he knows are as described, I feel sorry for him. That kind are to be found in all races.

My husband and I made some very good friends at Jemez Pueblo, Santo Domingo, Acoma and also a Navajo family. We have stayed in their homes. They are a very sincere people, and their children are well-behaved.

MARGARET DRENK, Arcadia, Calif.

Indians—Continued...

To the Editor: It is unfortunate that reader Will Scott doesn't appreciate your articles on the First Americans. As for me, the more Indian articles in the magazine, the better. I also like your selections on ghost towns (Nell Murbarger can't be beat in this category), and on desert flora and fauna (Dr. Jaeger is one of my favorites).

JOHN R. RAINWATER, Albuquerque, N.M.

Technicolor Trademark...

To the Editor: In the October 1960 issue of your excellent magazine, the Southwest News Briefs column carried an item about peyote. A statement was made that peyote produces hallucinations in "technicolor."

The name Technicolor is a registered trademark and should only be applied to the goods and services of a Technicolor company.

From what I have read about the vivid color visions produced by peyote, I'm sure that the association of our trademark with "hallucinations" was not intended in a derogatory sense. Your cooperation in avoiding such usage, however, will help us to prevent loss of trademark rights.

To add a personal note, I particularly enjoy the articles Desert has had about Baja California, such as the series of four beginning with the October, 1959, issue.


Better and Better...

To the Editor: I'm taking time out of a very busy day to say "thank you" for such an excellent magazine. It grows better each month.


DATES... from the Desert

A PERFECT Christmas Gift

3-pound attractively packaged "Four Varieties" special, including Barhi and Medjool and two other fancy-grade grown on the Laflin ranch.

We ship for $4.25

"Our Own" old-fashioned Date Cake. A very popular gift with a true desert flavor. 2½ pounds net.

We ship for $3

Write for our free illustrated color brochure and price list.

We have been growing and selling Coachella Valley dates for 48 years. All of the standard varieties plus the rare and unusual. References on request.

Laflin Date Gardens
P.O. Box 757
Thermal, Calif.
What

GOES

On

Here?

A giant saguaro cactus
donns a mattress
"coat of armor" for pro-
tection on the
long ride to a new home

The saguaro cactus pictured on
this page is about to be trans-
planted from a lonely spot on the
Arizona desert, where it took root
an estimated 250 to 350 years ago,
to a place of honor in the front
yard of a home in the foothills of
the Catalina Mountains near Tuc-
son.

Moving a 38-foot succulent
weighing 12 tons is no wheelbar-
row-and-spade job. The trick was
to get the cactus to its new home
in one piece—and unbruised. This
was accomplished by first secur-
ing the Sage-of-the-Desert's can-
dalabralike arms so they would
not snap off, and then transport-
ing the bulky mass in an upright
position. Of course it was a job
for heavy equipment, in the form
of a 20-ton Moto-Crane.

It took four days for a crew of
four men to pad the main trunk
and five arms of the cactus. They
used 43 old mattresses, six bales
of hay and untold feet of rope.
The lower trunk’s board splints, to
which the crane’s 1⁄4-inch cables
were attached, were held in place
by chains tightened with log-
boomers.

After a 14-inch trench was dug
around the shallow roots, the ca-
bles were attached. And then—
with one giant pull—the cactus
was hoisted out of the ground, and
it was on its way.

FOR PHOTOS OF THE MOVING OPERATION, TURN THE PAGE
The final digging around the roots was done after the crane cables were attached to trunk.

The saguaro is gently eased out of the ground by the giant crane.

At its new home, the desert giant is slowly lowered into awaiting hole.

End of the job: saguaro stands sturdily and unharmed.
Thinkin' of you at Christmas
"With Best Wishes for a Happy Holiday Season"

Tolling of the Christmas Bells
"May the Peace and Joy of Christmas be with you through all the Year"

The Merry Christmas Claim
"Season's Greetings and Good Diggings all the Year"

Chuck Wagon Santa
"With Best Wishes for a Happy Holiday Season"

"He shall feed His flock like a shepherd—"
"Wishing you all the Blessings and Joys of Christmas"

Season's Stampings
"And Best Wishes for the Brand New Year"

A Christmas Visit
"Merry Christmas and Happy New Year"

Season's Greetings
"With Best Wishes for the Coming Year"

"He shall feed His flock like a shepherd—"
"Wishing you all the Blessings and Joys of Christmas"

Candles in the Big Church
"May the Peace and Joy of Christmas be with you through all the Year"

Christmas Capers
"Merry Christmas"

A Christmas Kindness
Greeting is an appropriate verse

Christmas Eve in the West
"Wishing you all the Blessings and Joys of Christmas"

All new and different for 1960. Created by top Western artists Lorenz, Stohley, Tilton, Paris, and Hilton. All cards in full color, beautiful heavy grade textured paper, folded to 5" x 6 1/2", complete with matching envelopes. With or without your name imprinted in red to match greetings shown above. These exclusive cards available by mail only. Use this handy order page by writing quantity of each type you want in the box below the illustration, or mention card number in your letter. Print your name, address, and circle your total order in coupon below. Specify imprint desired. Your order given personal attention and shipped within 24 hours. Orders for Christmas 1960 accepted through December 15. Satisfaction guaranteed or money back. (Mail this page or your letter with cash, check, or money order today.

WE PAY POSTAGE
IN U.S. AND CANADA

The LAZY RL RANCH
P.O. BOX 950
BOULDER, COLORADO

Name

Address

City Zone State

Names to be Imprinted

Colorado residents add 2% sales tax.

Circle total quantity and price of your order.

November, 1960 / Desert Magazine / 7
A N ICE-BLUE ARROW shot out of the black sky into a low butte at our right. The horses and burros reared.

Dad counted to four as the beginning roll of thunder reached us.

"Jump down! Tie the horses up short to the tongue! Quickly! It's coming our way!" he commanded.

I jumped, to do his bidding. He slid out of the seat, pulled the tent's ridge-pole out the back-end of the wagon, and pushed it through the spokes of the rear wheels. We had barely stretched out in a nearby gully when the blinding, ear-splitting flash and crash came simultaneously, its thundering echoes reverberating from the nearby hills.

The horses reared and shied, then reared again, dragging the wagon a short distance. They stood shaking with fear as the sheets of water came pouring out of the awesome blackness which had descended upon us.

The next flash came to our left, a quarter of a mile away. In this brilliant flash the world about us glistened as though the rocks and shrubs a mile in all directions had been silver-plated. The burros were shaking water out of their ears.

Thus, the Turtle Mountains on California's eastern Mojave Desert introduced themselves to two bedraggled prospectors as we reached them that long-ago September afternoon in 1907.

We had outfitted two days before in our backyard in Needles for the long-planned trip to Carson's Well, where we intended to camp while we prospected a portion of the Turtles.

The sprawling Mojave Desert of 1907 had no graded or paved roads, power transmission lines, aqueducts, transcontinental natural gas lines, or TV relay stations. Roads were simple, meandering, double ruts—twisting here and there by line of least resistance between chocolate-varnished rocks on the mesas, or through sandy bottoms of the myriad of washes. There wasn't even a wagon road paralleling the Santa Fe Railroad.

We were using the same two horses we had had the year before at the Induna Mine—old Jim, the bay, and Fleabite Nellie. Behind the old Studebaker wagon we lead two burros, Jack and Jen.

The wagon carried hay and grain for the animals, to supplement the bunch grass and whatever else they found in their foraging. The wagon also carried our personal belongings, and a full camping and mining outfit, including a 10x10-foot oiled canvas tent that did double duty as a tarp to cover the load. There was a box of dynamite, a couple of rolls of fuse, and a tin box of caps, the latter wrapped carefully so they wouldn't be jarred. And we had along a pretty fair outfit with which to test minerals. Both of us wore high rawhide-laced hobnailed boots.

Into the sturdy wagon we had loaded a large barrel of water; staples such as flour, sugar, salt, a side of bacon, coffee, eggs, potatoes and onions; a variety of canned meats and vegetables, and condensed milk; and dried fruits. For my own use there was a small lard can full of jellybeans. Our medicine box contained cascarets, arnica, a tin of carbolated salve, and a bottle of "snakebite." In my bedroll I had a couple of the Diamond Dick variety dime novels, and a copy of the Count of Monte Cristo in case a chance to read presented itself. Dad had a couple of
magazines, one containing Ambrose Bierce's "A Happening at Owl Creek Bridge."

We figured to be completely self-sustaining for at least a month. In those days when you were 50 miles out in the desert, you were in real trouble if you broke a wheel, or if the road was washed out behind you. You couldn't tune in on the 10 o'clock news, or hop into an air-conditioned car and run back into town to pick up that sack of flour you had forgotten. And if you got lost there were no helicopters to search for you.

It had only been a few years since the last reported death of a prospector at the hands of renegade Indians like Ahvote who, while on the prowl for horses, grub, guns and blankets, had killed 10 men in three days. I was glad we each had six-shooters, although we seldom wore them except when we thought we might run into a bobcat or mountain lion. In addition to the two .41 Colts, Dad had a 30-40, 1895 "box magazine" Winchester, which carried a terrific wallop, and I had a double-barreled shotgun, and a .22 Winchester repeater for small game.

For beds we carried two light springs. We could always find rocks to put under the corners, to keep us off the ground. For mattresses we gathered creosote bush leaves, over which we spread quilts.

We knew that about a dozen Needles men who had recently caught Gold Fever were ahead of us, staking claims
in the wide valley floor on which quartz outcrops showed here and there. Many of the men were sure that because there were several “little black buttes” on both sides of the mountains, and the fact that Peg Leg Smith’s main stamping ground had been with the Mohave Indians around the Needles area, they would turn-up the Lost Peg Leg Mine. Dad scoffed at the idea. We had gone straight through the new Sunrise Mining District to the Turtles. Dad knew that any number of old-timers had combed the back country around Needles for gold and silver since the Civil War. He was interested in the economic minerals the old-timers knew little about, such as tungsten.

I CAUGHT THE fragrance of the greasewood in the rain. Dad was pleased. He took a deep breath of the clear desert air.

“We needn’t worry about Carson’s Well being dry,” he observed. I had been thinking about that too. It had been a dry summer, and if Carson’s had no water it would mean a quick turn-around for home.

The Well turned out to be a little wash where a natural rock barrier had forced the water to the surface. Seepage still moved from the recent rain. A “Devil’s darning needle” lazied about the tiny pool, along with some bees and a couple of “skater” flies.

We set up our equipment in an old abandoned cabin. Even without doors and windows, it was paradise compared to the hot tent. There was no evidence that anyone had been in the camp for years. Dad thought the nearby Van Slyke Mine had last been worked about 1900. I found some pretty chrysocolla, and a six-inch crystal of dog-tooth spar near the cabin. I had a place for both in my mineral collection.

That night we hobbled the animals. With plenty of water in the spring we were sure that our “hayburning wagon power” wouldn’t take a notion to go home and leave us stranded. The hobbles were ingenious affairs made of wide leather straps, with short chains between. The animals didn’t seem to mind them in the least.

It was my job to go out and round-up the animals in the mornings. Dad did the cooking. On my way I checked the spring for signs of wild animals. Years before someone had nailed a pair of curled sheep horns to the cabin wall, and we had visions of fresh mutton stew that would go good with frying-pan bread.

On one morning near the spring there was a set of the biggest tracks I’d ever seen. I rushed back to tell Dad. “We’ve got a big lobo wolf around here!” I exclaimed, panting.

Just then a coyote the size of a large police dog loped by about a hundred yards out.

“Anyway,” I said, “It had paws as big as a lobo’s!”

Each morning we loaded a pack-animal with an assortment of mining tools—a pick and shovel, single-jack, short steel drills, dynamite, fuse and caps; two one-gallon canteens, and our lunches, and a little grain for the burro. Then we headed into the surrounding hills in a predetermined direction. We planned to cover the terrain about five miles out, and circle a little on the afternoon return.

When we came to the first solid formation at the top of the talus or detrital slopes at the mouth of a wash, we began prospecting for “float,” the telltale sign of minerals above. At the same time we examined the canyon’s walls for veins. We were particularly interested in any form of quartz, especially in the rusty red “bugholey” varieties. The honeycomb-like bugholes in quartz were sometimes like little molds left when the crystal shapes had dissolved (leached out). These were the vestiges of the sulphides such as iron, lead or copper, which had originally been present in the rocks. These little hollow molds, when square, were nearly always from iron or lead; when triangular, from copper.

When plodding up-grade and we came to the end of the float findings, we began to systematically search the sides of the hills bordering the canyons for the source of the float. Dad would go up one side of the canyon, I the other. When we found a ledge that looked good, we generally drilled about a 12 inch hole and blasted it, then we took samples of the freshly broken rocks and sometimes staked a 600 x 1500-foot claim along the “strike” of the ledge, the location notice going into an inverted Prince Albert or Velvet tobacco can to keep it dry. When we ran out of tobacco cans we crumpled up a handful of greasewood leaves and covered the notice with them. The oil content of the leaves gradually waterproofed the paper, and it would stay in good condition for years.

Up at dawn, we followed the same procedure each day, except that we went out in a different direction. Some mornings, to vary the routine, we buried a Dutch oven filled with bacon and beans in a hole in which a fire had been allowed to burn down. At night, upon returning, the oven would be thoroughly cooked and still hot. When the oven was opened two hungry prospectors found the banquet quite sumptuous.

I early learned to live with the heat. Starting in the cool of the early morning, we never hurried. When the heat began to “bear down,” generally around 10 to 11 in the forenoon, we had lunch, afterwards testing, storing and labeling rock samples, or just lying around in the shadiest spot we could find until late afternoon. Always, around three in the afternoon, my energies miraculously returned.

Each evening Dad would run quick tests of the day’s haul of float or ledge samples. He carried a high-power magnifying glass for identifying the smaller crystals embedded in the rocks. He would first pour a few drops of hydrochloric acid on the one under examination, to determine whether or not it was a carbonate—whether the little shiny yellow spots were the real thing or merely specks of iron pyrite. If the rock was greenish in color, he would rub his knife blade on the acidulated spot to see if it would quickly copper-plate the steel blade. He made streak and hardness tests, and sometimes on Sundays, purple-of-Cassius tests for gold, and bead tests with a blowpipe and piece of charcoal for the lesser minerals.

I fell heir to the mortar, pestle and gold-pan end of it. Anything black, Dad would roast on a piece of tin in the campfire, then try a magnet on it for iron. Sometimes he would toss bits of the ores into the glowing coals and watch for burning colors. Copper always gave the flames a greenish tint. Barium would sparkle and crackle with a bluish tinge, and strontium, red. Any rock that resembled vermillion-colored cinnabar (quicksilver), he would immerse in a cup of water and watch for hair-like rising strings of bubbles. Interesting specimens containing minerals we couldn’t identify in the field, he kept for the assay office at the Needles Smelter. We were looking for anything rich enough to ship, and in those days it meant a long wagon haul to the nearest railroad siding, then shoveling the ores by hand from the wagon into a railroad car.

One day I picked up a beautifully clear crystal, pointed
at each end, shaped like two squat four-sided pyramids joined together at their bases. I was sure I had found a whopper of a diamond. I ran all the way back to the cabin to show it to Dad.

He whistled when he saw it. He had a way of ribbing me about my valuable finds, and especially about the little red mineralogy book that was my constant companion. He held the crystal to the light.

"Octahedral!" he said, his gray-blue eyes twinkling. "It's certainly the right shape!" He opened his pocket knife and made a deep, white scratch on one of the crystal faces.

"Hm-m—a soft diamond!" he commented.

That's the way it went. He was always taking the wind out of my sails. That little red mineralogy book constantly got me into trouble. In it were long lists of minerals—white, green, brown and black; hard, soft, waxy, satiny, conchoidal . . . It was like reading the labels on patent medicine bottles, trying to determine what symptoms the stuff was good for. With the help of that little book I could make the "symptoms"—in this case the many-colored rocks I found—fit into any category.

However, I soon learned much about rocks; learned to heft them, discarding the light in weight. I learned, too, that ores came in "mineralized zones," and that many of these zones could be seen in the calico stripes on the distant hillsides. So we by-passed the drab foothills, the sandstones and limestones, unless the latter made a contact with granite, or one of the other "plutonics."

The time we spent in the Turtle Mountains was one of the most warmly remembered and peaceful periods of my life. While the days were hot, the quiet cool evenings were straight out of Chekov. When you are 18, it is a never-to-be-forgotten experience to see his "Lilac Distance" in the dusk of eventide.

Or, a short time later, watch a full, orange-colored moon rise over a deep black jagged mountain profile, and in the eerie quiet, sweep the desert clean with a platinum-edged broom.

I always speculate now, when I see a couple of men prospecting the Mojave in a jeep, that it would probably take much of the optimism out of them were they able to transport themselves back in time and meet all the old-timers who had so painstakingly covered every inch of the ground before them.

Although their methods of transportation were slower, the old-timers left little to be discovered on the surface of the desert. Many early-day prospectors even tested for the uranium ores by means of camera film and plates in dark closets. I know Dad did, for he had a little glass-encased gold-leaf electroscope at home with which he tested rocks he thought might contain pitchblende.

IN OCTOBER OF 1907 came another trip I had looked forward to for years—the Boundary Cone Region on the Arizona side of the Colorado River. Boundary Cone is a well-known landmark used since the early days as a datum point for survey maps.

This was a walking trip, on which we went light, using three burros. One of the animals carried a partially paralyzed man named "Lefty" Jones, who talked out of the left-side of his mouth. Jonsey claimed that before he had suffered his stroke, he had discovered and worked a rich gold outcrop in the valley beyond Boundary Cone.

On the other burros we carried mining tools, blankets, groceries and cooking equipment. We slept on the ground, which I soon learned to hollow-out to fit my contours. The nights were on the cool side, and I slept fitfully the whole time we were out, sure that before morning a rattler would crawl in with me to get warm.

We had to help Jonesy up onto his burro, and lift him off when we camped. It was quite a chore, but Jonsey seemed to know where he was going.

Bill Sweeney got us safely across the river in his scow, and we threaded our way across the mesquite, cottonwood and willow-strewn thickets past Spear's Lake. Then began the long toilsome climb up the gently sloping mesas and washes leading to Boundary Cone. We camped at a little spring just west of the high saddle between the Cone and the Black Mountains. Here, two miners were working in a shallow tunnel.

Next day we journeyed around the Cone, up into a broad valley where we made our base camp. From here we could see two other tents about a half-mile away. We found out later that there were two prospectors in one, and three in the other.

We searched for days on end for Jonsey's outcrop, but had no luck whatever. "I'll know it when I see it," he
kept repeating. “It’s just a little ways up a small arroyo to the right of a little brown butte.”

In the 20 to 30 square miles we tramped over, leading Jonesy and his burro, there were at least a dozen places to fit the description he gave us. Low-grade gold ores were present in several spots, but it was too poor to be of any economic value, and much of the country was already staked.

After two frustrating weeks, Dad could stand no more of it and we took the crippled man home. Jonesy lived several years after that trip, protesting to the last that “If we’d stayed just one more day, I’d have found it!”

And surely enough, a few years later, exactly where Jones had circled around for days, there burgeoned the fabulous Oatman-Goldroads District, where deep mines which took out millions became commonplace.

Almost 40 years were to pass before I saw the same region again. Returning from a trip east by automobile in the late ‘40s, I came home by way of Oatman. Many of the mines and mills had been on the downgrade for years.

I stayed a few minutes for a sandwich and cup of coffee at a hotel on the main street, where I could sit before a window and glimpse the idle Tom Reed Mill, situated right where Dad, Jonesy and I had camped so many years before. The hills and horizon were still as familiar as though the 40 years had clicked off in so many days.

I drove on down the fine paved highway around Boundary Cone, but drew up short near where the little spring worked-out mine, and the desert fast reclaiming its own.

Words can never describe the emotions which flooded over me at sight of the long abandoned ruins now overgrown by desert shrubs. Suddenly it came to me just how old Rip Van Winkle must have felt when he awakened from his long sleep, found himself with a long white beard, no wife, and contemplating the changes in his boyhood village. I drove on to Needles with a heavy heart; to the town where I had spent a fair part of my boyhood. I looked in vain for someone who might remember me, might help me bridge the link, but I was a total stranger in my old home town.

I MADE ONE LAST and particularly rough trip with Dad south of Needles up what is known today as Lo-beck Pass, past where we now see a big natural gas pumping installation, and on to Parker via (old) Hank’s Well.

The wagon by now was getting pretty rickety, the “hay burners” and harness both sort of worn out. We were a couple of days longer reaching Hank’s Well than we had anticipated, and neither of us having been there before we were unprepared for the highly mineralized water it contained. Even though we had been out of water in the heat since noon, the water was impossible, and our stomachs rebelled. There was nothing else to do but make our way down to the Colorado. I figured that if the horses could drink the muddy river water, so could I.

We drove as far as we could down the sandy wash, but were forced to unhitch at dark and lead the animals the last mile. But they had other ideas. As soon as they smelled the water they became unruly, and we let them go ahead. We found a half-hour later, in mud up to their knees. They had satisfied their long thirst, and were tractable again.

I could feel the mud go down as I drank, but I was so dry I didn’t care. It didn’t seem to harm me, for I was as chipper as ever the next day.

We followed a well-worn but dangerous road through the red volcanic Copper Basin Country, where a couple of small mines were working, one by a man from Needles whom we knew. There was also a good spring near his mine where we stayed long enough to clean a couple of inches of river mud out of our water barrel, and refill it.

Eubanks told us that the water at Hank’s “spring” had been used by the Indians, as far back as they could remember, as a “strong laxative.”

“Too big a dose of it could kill you,” he said, “because its medicinal qualities come from small amounts of arsenic.” He also told us that there were two or three places in the Chemehuevis Wash near the Hank’s spring where good water could be found within three feet of the surface. (There is a good well there today.)

We also learned from Eubanks that there was some good gold prospecting country back of the Whipple Mountains, and that it was about as quick that way to Parker as any. Three days later we tied the horses to a couple of willow trees up river from the newly constructed railroad bridge, and walked the ties to Parker where we picked up the supplies we needed for the return trip to Needles.

Little did we dream, in those days so long ago, that one day our camping place in Copper Basin would be in the middle of a lake that would be a link in the immense Metropolitan Water System. Or that we would both live to see a great dam and powerhouse constructed just below Aubrey’s Landing, at the mouth of the unpredictable Bill Williams River, where the old stern-wheelers nosed-in for wood. Or that one day I myself would be working on the big electric motors that powered the mixers, pumps, high-lines and compressors when the dam was being built.

And I certainly would have laughed it away as a wild dream had someone told me that 50 years later, where Dad and I had thirstily gulped down the muddy water in the dark on that slippery river bank below Hank’s Well, that I would one day be fishing out of a modern outboard motorboat close to the same spot.

... A desert wash that now lies for all time far below the placid blue waters of Lake Havasu.
By RICHARD BARNES
of Hermosillo, Sonora

ON A FOUR-WHEEL-drive trip through the back country of Sonora I stopped overnight in Nacozari de Garcia, a pleasant little mining town in the Moctezuma River valley, to treat myself to a shower, a civilized meal, and a bed with clean sheets.

Walking out in the cooling late afternoon I paused to watch a stick-ball game being played in the little plaza near the railroad station. The scene was dominated by a tall monument that proved, on examination, to be a hero's grave. A stone slab on the ground in front of the monument covered the remains of Jesus Garcia. A bronze plaque on the monument reads: To the memory of the engineer Jesus Garcia who to save the lives of the inhabitants of Nacozari died heroically the 7th of November 1907 when driving away from this place a burning train of dynamite which exploded. Homage of gratitude!

“Quite a deed,” I said to one of the boys waiting to bat.

“Yes, sir. Every year they have speeches and put flowers on the monument.”

“Do you know anybody that was here then?”

“Maybe Don Ramon Ortiz, the photographer. It was a long time ago.”

Next morning I climbed the steep hillside that a part of the town is built on, and inquired my way to the small neat house of Don Ramon Ortiz.

Yes, he remembered Jesus Garcia. They used to call him Guero (a nickname for anybody whose hair is not quite black).

“Did you ever take a picture of him?” his wife asked.

“No, I didn’t have a camera then.”

Jesus Garcia worked as an engineer on the narrow-gauge railway that hauled supplies up to the mines at Pilares, and brought down the ore in open gondolas. The trains were drawn by little wood-burning locomotives with big cabezon chimneys, that could draw about 15 ore cars and three or four boxcars of tools, machinery, explosives, feed for the mules and groceries for the men who worked in the mines. Anybody that wanted to could hitch a ride on those trains. They only went up to the mines.

In 1907 Nacozari was about the same size it is now—several hundred families. Jesus Garcia’s family had come from Ures several years before; his father was a blacksmith, and when he died it was up to Jesus Garcia to support his mother and sister. The engineer was 25. The girls liked him because he was so gay and arrogant, but he wasn’t married.

There used to be donkeys that would get on the track all the time, little burros loaded with firewood. The engineers had orders to go ahead and hit them, but Jesus Garcia always stopped. Once his brakes failed coming down the grade and he stayed on after everyone else had jumped for it, and saved the train by reversing the engine.

At about two in the afternoon of November 7, 1907, the siesta was shattered by an alarm. Smoke was coming out of one of the two boxcars standing in the station yard. Stacked atop these cars were bales of alfalfa (for the work mules out at the mine); stored within were 12 tons of dynamite. And nearby was the powder magazine, with many more tons of dynamite and 7000 dynamite caps: Hercules powder from Oakland, California.

Panic spread quickly through town. Some people tried to find shelter, some ran out into the desert, others ran screaming through the streets. A few of the braver men tried to put out the fire, but it was no use—the flames were already burning down in between the cases of dynamite.

Then Jesus Garcia and his fireman, Jose Romero, climbed into the cab of the locomotive, hitched on the burning cars, and headed out of town. It was up hill and the little train pulled away very slowly. Twice Jesus Garcia had to jump down and work switches in the track, and then scramble back into the doomed locomotive. Romero stoked the firebox until it would hold no more fuel.

When they were on open track, Jesus Garcia told the fireman to jump. His last words were, “Get down, I’m going to run my luck!”

Six kilometers out of town the dynamite exploded and blew the train to bits. The blast shook Nacozari like a giant earthquake. The people hurried out to where the train was and found Jesus Garcia’s body crushed, his right hand on the brake lever.

His deed won him many honors: monuments, yearly speeches, streets and schools named for him all over Sonora, the American Cross of Honor, songs and poems that celebrate his courage. More impressive is that the whole town of Nacozari went into mourning for a year, with black clothing and no dances.

We went out into Don Ramon Ortiz’s yard and looked down over the town: the houses in the valley under brushy hills, the railroad yard in the center with the tracks still leading out of town, the monument in the plaza: the pleasant peaceful town of Nacozari de Garcia.
SILVER JEWELRY handmade by Southwest Indians is one of the few remaining native art forms in the United States. Those who are familiar with these beautiful pieces value them highly; yet the average American tourist is painfully unaware of what to buy. Travelers are attracted by this jewelry’s beauty; but many people end up in the so-called “trading posts,” well-advertised by billboards along the main highways, in which not one piece of genuine work is carried. One day last summer I counted cars from 11 different states parked in front of one such establishment.

There are three types of Indian silverwork in the Southwest—Navajo, Zuni and Hopi. The San Juan pueblos (particularly Santo Domingo) did a somewhat different type of work, but did not succeed in establishing a definite style. The Navajo craft is the oldest—almost a century old now. The Zuni took up silverwork a few years after the Navajos, and the newcomers are the Hopi who developed their silver industry after World War II.

It does not follow that a member of a particular tribe sticks exclusively to his people’s traditional patterns. Fred Wilson, the Phoenix trader, told me that the silver for many of the Zuni channel-work (stones inlaid in silver) pieces is done by Navajo “sub contractors.” Demand for Hopi work, adds Wilson, is so great the 20-plus Hopi smiths often can not keep up with the orders, and therefore some “Hopi silver” is made by Navajos. Conversely, Hale Sekakuku, a Hopi who has a trading post on one of the mesas, showed me a pair of bracelets he had made that had the smallest Zuni-style needlepoints (very small oval sets) I have ever seen. And so it goes, for Indians are individuals, and many of their smiths are true artists with wide interests and methods of expression.

The origins of silverwork stem from two sources—trade goods, and the early Spaniards. The trade goods worked their way west through the fur-trappers and traders, and also as battle trophies from fallen foes. Simple round hair-plates from the Plains Indians were well known to early Navajos.

The Spaniards of New Mexico adorned themselves with silver. Jewelry, saddle-mountings, and pomegranate blossoms (round silver beads with petals) on chains on the sides of the men’s trousers were commonly worn. Because the semi-nomadic Navajos and the invading Spaniards maintained a rather constant state of warfare against one another (the Navajos sought sheep and...
Navajos through the natural course of events. But, silversmithing is not learned by owning a piece of jewelry. The Navajos say it takes six years to make a good smith. Consequently, despite the Indians' admiration for the whitemen's trinkets, there was no way for them to learn how to make silver pieces themselves.

When the United States took over the Southwest, relations between Navajos and whites remained strained. Kit Carson brought the Indians to bay, and forced them on the humiliating Long March. It is impossible, of course, to set an exact date for the beginning of the Navajo silver craft, but it is directly related to their surrender to Carson in 1863. A Captain Henry L. Dodge brought a Mexican silversmith to Ft. Defiance, and Atsidi Sani, the first Navajo smith, probably learned his art by watching this Mexican work silver. By 1880 silversmithing was quite widespread among the Navajos.

While they learned from others originally, the Navajos very quickly developed an art-form that was and is distinctly theirs. The Spanish pomegranate blossom became the Navajo squash blossom, and the dangle on the horse's headstalls (to ward off the evil eye) became the naja, or moon-shaped pendant. The popular Navajo squash-blossom necklace resulted from combining the two. The round hairplate of the Plains Indians, and the Spanish bridle conchas, have become the "conch belt."

Fred Harvey, the hotel man, popularized Navajo jewelry, and by the 1920s the Navajos were producing for the tourist trade. The silver became thinner, and the stampings, as Navajo silversmith Chester Yellowhair (see story following) says, became "hen tracks in a chicken yard." The need for cash income in that arid land, especially during the Depression, was great, and many Indian smiths took the needs of their stomachs to be precedent over whatever need they might have felt to uplift the quality of their crafts.

But traders who knew the beauty of the old work, and who also understood Navajo pride, began to assert themselves. With government guidance, the Navajo Arts and Crafts Guild was formed, and it pioneered the move back to the simplicity and purity of the old designs, while providing a means of marketing the craftsmen's goods.

Navajo silverwork is characterized by an emphasis on the silver, with turquoise sometimes used merely to enhance the beauty of the metal. This is not to say the Navajos do not value turquoise; strings of drilled turquoise are worn by both men and women. But, with silver the Navajos can portray ancient and sacred designs taken from their sand paintings and ceremonials. Navajos also have learned to cut molds from what is called sandstone (most of this material is solidified pumiceous tufa), and therein cast silver. The older cast work was of simple geometric design, but of late Indian craftsmen have begun to use the animal figures copied from petroglyphs and pictographs on canyon walls. The Navajos are not a static people, and this fact is reflected in their dynamic work.

There is little opportunity today to purchase quality silver pieces directly from the Navajo silversmith. Most of the better smiths are under contract to the traders, a more stable situation, financially, for both parties.

Atsidi Sani, the first Navajo silversmith, taught Atsidi Chon how to work silver. The latter spent a year in the Zuni pueblo, and then returned home a well-to-do man with many horses and sheep. While in Zuni he taught a Zuni friend, Lanyade. For many years Lanyade did his work in secrecy, but later taught others.

Zuni silverwork developed quite a different form from that of the Navajos. Long before the Spaniards came to the Southwest, Zuni artists set mosaics of turquoise in shell, wood and bone to wear as ornaments. This historic background, plus the influence of Mexican design and the extra time afforded by a more sedentary life, brought forth an intricate and elaborate type of silver work.

Silver lost its importance with the Zunis, except as a base to hold stone sets. Small stones, known as snake eyes and needlepoints, with scores or hundreds in a single piece, became characteristic. There is extensive use of jet, coral and shell, as well as turquoise. The Shalako ceremony forms the basis of much of Zuni jewelry design.

A later development is Zuni inlay (stones fitted to each other) and channelwork (stones inlaid but outlined in silver). The stones are cut to fit open designs in the silver, and then polished flush to the outer surface of the silver. C. G. Wallace, the Gallup trader, has done much to encourage the Zunis and also to bring women as well as men into the craft.

The Hopis of northern Arizona, until recently the most isolated of all pueblo peoples, are late arrivals in the silversmith craft. They had suffered greatly under the Spanish, and the association of silver with their oppressors probably had much to do with their not taking up the work earlier. Hopi veterans coming back from World War II had few jobs to which to return. Encouraged by the government and the Museum of Northern Arizona, silverwork was taught near the high school at Oraibi. And for this new crop of artists, a new and distinctive design and silver-working method was developed by art director

November, 1960 / Desert Magazine / 15
Fred Kabotie and instructor Paul Saufkie.

The Hopi jewelry patterns are taken from traditional pottery and basket-work designs. These are then sawed out of a sheet of silver, and sweat-soldered onto a solid sheet. After shaping, the design is blackened by oxidation to make it contrast with the polished silver. It has an unusual modern effect, and actually has more versatile uses with today's clothes than the polished silver. It has an unusual oxidization to make it contrast with modern effect, and actually has more gradations in style and design. 

Many of the trading posts have been forced by competition to carry some of the cheap stuff. How can one be sure the piece of jewelry he is buying is genuine? He can't be, for even the experts have been fooled. However, one of the latest gimmicks is to make a mold of a genuine piece, particularly rings, and cast perfect duplications. Even the slight imperfections and soldered places that mark a hand-made piece are exactly reproduced.

The turquoise sets in Indian jewelry can also fool the uninitiated. Because the Indians themselves have been taken-in by imitations, they recently have come to prefer spider-web turquoise which cannot so easily be artificially duplicated. Another pitfall is the fact that poor color turquoise can be doctored with wax, oil and plastics to make it look for a time like the robin's-egg or sky-blue turquoise the Indians like.

Many of the trading posts have been forced by competition to carry some of the cheap stuff. How can one be sure the piece of jewelry he is buying is genuine? He can't be, for even the experts have been fooled. However, rule No. 1 is to deal through a reputable dealer or an Indian guild. Work produced by the Navajo Arts and Crafts Guild and by the Hopi Guild is so stamped with the proper insignia.

Always remember when shopping for a "bargain": silverwork that has taken many hours to make cannot be sold at costume jewelry prices. Those dealers with excellent reputations are always happy to advise customers on the merits of a particular piece. Representative of this group are C. G. Wallace and Woodard's in Gallup, Fred Wilson and Reese Vaughn in Phoenix, and the White Hogan in Scottsdale.

But what if the particular piece you are interested in carries no insignia, and the dealer's reputation is not known to you? Here are a few rules-of-thumb that will help you reach the right decision: Is the turquoise (if any) good, hard and blue? Is the overall design of the piece in good proportion? If it is stamped, does the stamping enhance or smother the overall design? Are the soldered places neat? Is the finish good? Are all the work marks removed (such as saw marks on the edges)? Does the piece have a good polish?

The possibility of making a mistake in purchasing jewelry becomes more

About the cover illustration . . .

(Advanced proofs of this month's cover illustration were sent to Lillian Kelley, author of the "Southwest Indian Silverwork" article, for her analysis of the jewelry adorning the subject. Her interesting letter follows. —Ed.)

To the Editor: The Chester Yellowhairs were over last night, and I had Mr. Yellowhair check the information I had for you on the jewelry in your cover picture. I handed him the photo and he exclaimed: "Oh, I know this man well. I just saw him last week. He was one of the first Navajos to be known as one of the best (silver) workers, and was given that name — Nal-Nishi — 'Worker.' He is from Leupp, Arizona. He is an old man now, about 70, but he made his living much more advanced than any other Navajo. By his work he became rich in cattle, sheep, jewelry and turquoise. He is one of the wealthy well-known men in that area.

All the jewelry in the picture is Navajo, and you have chosen an excellent representation of the craft. The earrings are worn in the oldest style—turquoise chunks held by string through pierced ears. Mrs. Yellowhair said they used to pierce the ears of babies when they were just a few days old.

The necklace is known as a jah-eh-loh and is made of beads of turquoise, shell and coral. A good jah-eh-loh, such as this, has the beads going all around the neck, instead of just in front. The loops dangling from it used to be worn as ear-bobs, but later Navajo style dictates they be hung from the bottom of the jah-eh-loh.

The bracelets seem to be a matched pair and are typical Navajo work, as are the two rings. He is wearing a ketoh, or bow-guard, but unfortunately the silver ornamentation on the back does not show. A ketoh is one of the most prized possessions the Navajos have. The buttons are simply known as but-tons and have been used as decoration as long as the Navajos have been making silver.

The conch-belt with the center sun-burst design is as heavily decorated with turquoise sets as any you will see. This sunburst design is typical of the 1890 period when the Navajos learned to make more elaborate dies; but the extensive use of turquoise is of a much later period.

Mr. Yellowhair says Nal-Nishi always wears a silver hat-band, which does not show in this picture. Apparently you picked one of the best examples of a wealthy Navajo you could find. As Mr. Yellowhair said, "Everything is of the best. That is a real high-priced conch belt."

LILLIAN KELLEY
Riverside, Calif.
remote as you travel away from the main highways and deeper into the Navajo Reservation. In the backcountry you begin running into traders still performing their old-time function. Typical of the posts run by such men are Indian Wells, Bita Hoche, Keams Canyon, Polacca, Shipaulovi, and on up the road going north from Holbrook and west to Tuba City.

I believe the best place for the novice to buy jewelry, both for price and authenticity, is at the Navajo Arts and Crafts Guild, located less than 30 miles north and west of Gallup on the fairgrounds at Window Rock. Here you will find representative silver of all kinds and at reasonable prices. The Guild is run on a non-profit basis, with just enough mark-up to pay for the running of the shop.

Generally there are always several silversmiths working at the Guild Shop, but much of the work is done by Navajos working at home. The turquoise and silver are supplied to them by the Guild, and the artisans are paid by the piece. The Guild maintains high standards in design and workmanship. Ambrose Roanhorse, one of the finest of Navajo silversmiths, deserves much credit for the Guild's level of excellence. He and Chester Yellowhair were on the committee that helped form this organization.

Today one sees new forms in the old jewelry styles. The modern workmanship is better due to more available tools. The finish (perfected by many additional hours of work) on today's jewelry is far superior to that on the old pieces. Soldering is hardly discernible today because of the better control possible with gasoline and acetylene torches, as compared to the old bellows and charcoal fire.

Learn to appreciate the cigarette boxes, ash trays and hair combs that are being made today by the Indians, as well as the traditional belts, bracelets, necklaces and rings. Look at the beautiful hand-workmanship. It may not be here tomorrow. The silversmiths can make more money working in the fields and factories or on the railroads than they can with their hammers, chisels and torches. You are far better off purchasing one well-made ring as a souvenir of your trip into the Indian Country than by going home adorned from head to toe with factory-made imitations.

Navajo Silversmith CHESTER YELLOWHAIR tells how he bridged the gap from Dark Age to Atomic Age in his own lifetime

I WAS BORN IN THE DARK AGES . . .

. . . Until I was eight or nine years old I did not know there were people on earth other than my family. There were 11 children in my family. I was the eldest. The first five children were boys.

The raising of sheep is important to Navajos. Because I was the eldest child, I had to do the herding. I herded little lambs until I was three or four. At five I herded the sheep. I did this work alone with the dog. He was a short-haired scrub dog.

When I was seven I cared for the horses. I watered them and put them on pasture. I learned how to track them when they strayed. I rode bareback. I could tell our horses by their hoofprints.

The farther away from people, the happier we were. We were really "wild." We were afraid of other people, even our own relatives—especially the eldest ones.

My father, Yellowhair Bedonie, never had a regular job in his life. He was a medicine man. My mother, Yellowhair Bitsie, was a weaver, and her rugs were a dependable source of income. When my mother wove in the evening I used to help by carding the wool. There were no other helpers for her. My father would take the rugs to the trading post. I didn't know where it was, but we always looked forward to his return. He would bring back good things—especially good food. Our main diet was corn meal and corn bread.

We were always moving to where there was more feed and more dependable water. My father farmed a little, raising crops in the summer-time. Some of these things we stored away for winter use in a round pit lined with weeds. Into this hole we placed dried apples, corn, pinto beans, plums and peaches. Melons and pumpkins were not dried. Sometimes, when the rains were good, there would be potatoes. The pit had a vent whose opening was covered with a coffee can, and over all was heaped dirt to cover traces of our cache. Thus, we made sure others would not find it. One could herd sheep over the spot and not know that underfoot there were many good things to eat.

We had the sheep and goats for fresh meat. We made coffee from burnt corn. It is good. Instead of baking powder we used the ashes from burned cedar branches in our corn bread.

Ours was not a well-to-do family. I had no idea there was such a thing as schooling. We all wore our hair long. When you have long hair you are a part of the Navajo tribe. We only stayed two or three months in one place. We stayed longest in the summer so my father could raise his

November, 1960 / Desert Magazine / 17
When I was out in the desert herding, I used to dream about having a nice saddle. At the squaw dances I would see my relatives who had more money, and they all had nice saddles.

In 1922—when I was 10 years old—my father heard about the schools from the trader. He was told that government workers were going to make all the Navajo children in the area go to school. When strangers came to our camp after that my father would hide me because I was the oldest. If I was in the hogan I would hide behind a sheepskin. If I was out herding, I would duck into an arroyo. How frightened we children were!

Finally our game was up. Father told me he had to give me away to the white men. He would go to jail if he disobeyed—but he left the decision up to me.

I said I would go. Father put his little cap on my head and cut off my long hair with the sheep shears. One of the worst things in the life of a Navajo is for him to lose his long hair. Father burned the hair along with bits of fresh vegetation which represents the knowledge of life. He set fire to the pyre with a prayer, asking that I acquire enough knowledge to bring the white man's ways back to him.

We rode double on a horse to Lorenzo Hubbell's trading post at Oraibi. My father gave me my "last minute" advice: "Whatever you do, do a good job. If you are going to be a thief, don't get caught. If you are going to be a gambler, be a good one. Do not forget, if you run away from school, I will have to go to jail."

The trader took me to Keams Canyon. There was much light there—it was a strange country. The people at the school trimmed my hair some more and fixed me up a little bit. I stayed there until 1928, then I went to high school in Santa Fe. In the summer I would return to my home.

At Santa Fe I learned the art of silversmithing. My teacher was Ambrose Roanhorse. Later we served together on the committee that founded the Navajo Arts and Crafts Guild.

From 1934 to 1946 I taught silversmithing to Indian children at Albuquerque and Fort Wingate, New Mexico. Then I became the instructor of general shop at Sherman Institute in Riverside, California.

My wife and I have three daughters. My parents are still living on Howell Mesa (also known as Coal Mine Mesa) near Tuba City. Two years ago I took them to visit the Indian Center in Gallup, and they spent their first night inside the four walls of a white man's building.

I never did get the saddle I dreamed of as a child. Now that I can afford one, I have no horse or pasture.
**BOOKS - MAGAZINES**

**READ THE Prospector's Guide. Tells how and where to prospect for minerals, etc. Send for application to United Prospectors, 7011 E. Edgeware, Los Angeles 26, California.**

**OUT-OF-print books at lowest prices! You name it—we find it! Western Americas, desert and Indian books a specialty. Send us your wants. No obligation. International Bookfinders, Box 3003-D, Beverly Hills, California.**

**LOCATE ANY book. No obligation. We search; quote price. Specializing Western Americana. Aardvarks Desert Bookhunters, Box 734-D, La Mesa, California.**

**SO YOU Want to Start a Rock Shop, new book by Arthur E. and Lila Mae Victor, 52 pages, price $2. Invaluable information for the beginning rock shop, or any "thumbnail" sized retail business. Interesting reading for any one. By the same authors, Gem Tumbling and Baroque Jewelry Making, sixth edition, authoritative and recognized book of complete instructions. At your dealers or order direct, 20¢ each postpaid from Victor, Agate Shop, South 170th Street, Spokane 41, Washington.**

**DEATH VALLEY valuable guide. The secrets of Death Valley lore. Beautiful illustrations. $3.50 postpaid. Travel Writer's Passport, unique handbook for travel writers and photographers, tells you how to sell your stories and pictures, $1 postpaid. Special Offer: both books for only 4 postpaid. Order today from: Martin Gross, P.O. Box 3021, Grand Central Station, New York 17, N. Y.**

**LOST MINES, buried or sunken treasure, bibliography. Our research has 41 books, articles, maps covering this fascinating subject. Complete list $2. Earth Science Enterprises, Parkwood Drive, Madisonville, Kentucky.**

**GEMS & Minerals Magazine," largest rock hobby monthly. Field trips, "how" articles, pictures, ads. $3 year. Sample 25¢. Box 5872, Mentone, California.**

**GEM HUNTERS Atlas. Three great books for the rock collector, covering the eleven western states. Each atlas has 32 full page maps with gem hunting areas spotted in color. Type of material, mileage and all highways are shown. Northwest $1, California—Nebraska $1, Southwest $1, postpaid. We also sell a selected list of books on mineralogy, wildlife, America, and travel. Scenic Guides, Box 288, Susanville, California.**

**SPECIAL GRAB-BAG offer: we will mail you 20 different baroques of Desert Magazine (all issues complete and in good condition) selected at random from our 1950 thru 1957 files, for only $3 (sorry, no exchanges). A treasury of illustrated feature articles, maps and stories on the Great American Desert. Best bargain the postman can deliver, for Desert is one of the few magazines people save. Send orders to: Grab-Bag, Desert Magazine, Palm Desert, Calif.**

**FOR WOMEN**

**LADY GODIVA "The World's Finest Beautifier." Your whole beauty treatment in one jar. Protect skin against sun, wind. For free brochure write: Lola Barnes, 963 North Oakland, Pasadena 6, California.**

**DRY SKIN conditions solved with daily application of G'Bye Dry. Large jar prepaid for only $1. Try it now and be desert happy, Nevada RX Drug, Boulder City, Nevada.**

**SOUR DOUGH biscuit recipe and full directions. Write for price list. Peninsula Scientific, 2421 El Camino, Palo Alto, California.**

**RETURN GREY hair to youthful color, in privacy your bedroom. Guaranteed. Details free. Mary Reid, Box 68, Hackensack City 2, New Jersey.**

**ENJOY DELICIOUS salt rising bread. Send $1 for complete recipe to: A'Dolla Whitmore, 808 31st Street, Bakersfield, Calif.**

**FREE CLASSIFIED—World's finest lightweight camping and mountaineering equipment. $1.10 jobbed on Mt. Everest, Himalayas, Andes, etc. It's expensive but absolutely unsurpassed! Gerry, Dept. 107, Ward, Colorado.**

**MICROSCOPES, NEW and used, for professionals and hobbyists. Slides, accessories, books. Write for price list. Peninsular Scientific, 2421 El Camino, Palo Alto, California.**

**NEW TYPE tumber rough grinds, polishes, one operation, no changing belts or pulleys. Six polished Lake Superior agates from Missippi River, postpaid $1. Scoop Advertising Service, Stockton, Illinois.**

**FOR SALE: complete camp outfit for two, like new. Miss Triall, 7122 Stafford Ave., Apartment 2, Huntington Park, California. See or write today for a real bargain.**

**GEMS, CUT - POLISHED**

**AUSTRALIAN TUMBLED gemstones, 8 different polished baroques, identified, suitable for mediante orchal jewelry, $1.10 postpaid. Or 10 different polished baroques, identified, from around the world, $1.25 postpaid. Bensenu, 8615 Columbus Avenue, Sepulveda, California.**

**GENUINE TURQUOISE: Natural color, blue and bluish green, cut and polished cabochons—25 carats (5 to 10 stones according to size) $3.50 including tax, postpaid, 50 carats (10 to 20 cabochons) $6.15 including tax, postpaid in U.S.A. Write for folder: Earl Gem & Mineral Shop, 235 E. Sea Side Blvd., Long Beach 2, Calif.**

**CALIFORNIA DESERT rocks. Gem quality. Polished. Large assortment. One dollar postpaid. Pollard, 12719 Laurel Street, Lakeside, Calif.**

**ROCKHOUNDS AND craftsmen invited to visit new gemcraft shop, 6276 Adobe Road, Twentynine Palms. Opening November 10. Featuring fluorescence.**

**FIRE AGATE, tumbled, polished, will cut a 13x18 mm. cabochon. $3 each tax included, postpaid. Fire guaranteed or money refunded. Dimick Mining Co., P.O. Box 1795, Clifton, Arizona.**

**OPAL, AMETHYST, etc. 10 ring size stones, ground and polished ready to set. $5. Opals, carnelian red, blue, green, golden flashing. In all colors of the rainbow, direct from the mine, 15 for $5. Kendall, San Miguel d'Allende, Guanajuato, Mexico.**

**GOOD QUALITY polished opalite baroques, assorted sizes, fine for all types jewelry, $3.50 pound postpaid. Gody Inn Curio Shop, 883 Golden, Colorado.**

**TUMBLE POLISHED Arizona fire agates, $2.50 each. Agates, jaspers, $3.50 pound, plus postage. Apacheland Agate Co., 501 North 17th, Phoenix, Arizona.**

**GEMS, DEALERS**

**NATIONALLY KNOW and noted for large choice varietes of gemstones, minerals, Indian artifacts, fossils, handcrafted jewelry, etc., including unusual gifts. Retail and wholesale. Dealers inquiries and suppliers offering invited. The Coles', 551 S.W. Coast Hwy, Newport, Oregon.**

RED ROCK Shop has minerals, slabs, petrified wood, gifts, curios. Will trade. 21/2 miles southwest on U.S. 89A, Sedona, Arizona.

RIVERSIDE CALIFORNIA. We have everything for the rock hound, pebble pups, interesting gifts for those who are not rock hounds. Minerals, slabs, rough materials, lapidary supplies, mountings, equipment, black lights. Why not stop and browse? Shamrock Rock Shop, 593 West La Cadena Drive, Riverside, Calif. Overland 6-3956.

VISIT GOLD Pan Rock Shop. Beautiful sphere material, mineral specimens, choice crystals, cutting materials, jewelry, bolo ties, baroques, spheres, bookends, paperweights, cabochons, faceted stones, etc. Jewelry findings, lapidary equipment and supplies, Navajo rugs, sun colored desert glass—gold specimens, our spectacular Rock Originals. Etta James, proprietress, 20385 Stanton Avenue, Castro Valley, Calif.

CHOICE MINERAL specimens, rough and cut gem material, lapidary and jewelry equipment and supplies, mountings, fluorescent lamps, books. Valley Art Shop, Chatsworth, 21108 Devenish Street, Chatsworth, Calif.

GEODES, CRYSTAL. Lined, complete, unbroken, 3" to 5", $1.50 postpaid. Many have inclu- sions, most are partially filled with loose, tiny double terminated quartz crystals and clusters. Limited supply. Act Fast. Unusual present for a rockhound. Free list: gems and minerals. The Vellor Co., P.O. Box 44(D), Overland, St. Louis 14, Mo.

GEMS, MINERALS - FOSSILS

FOSSILS. 12 different for $2. Other prices on request. Will buy, sell or trade. Museum of Fossils. Clifford H. Earl, P. O. Box 188, Sedona, Arizona.

FINE DOMESTIC and foreign crystals and massive minerals. Please ask for free list. Continental Minerals, P.O. Box 1206, Anaconda, Montana.

MIOCENE, EOCENE, pliocene fossils: 50,000 shark teeth, 200 varieties intact shells; whale ribs, vertebrae, disks; petrified cabs. Free wholesale listing available. 25 different Identified fossils $3. Malick's, 5514 Plymouth Road, Baltimore 14, Maryland.

FOUR NATURAL stalactites, cross on both sides, for $1 postpaid. "Animals" assembly from uncut quartz crystals — "Rockhound," $1.25 each. Five assorted animals, $5.50 postpaid. Rebecca Rose Originals, Crown King Highway, Bumble Bee, Arizona.

GEMS, ROUGH MATERIAL

COLORFUL AUSTRALIAN Fire Opal; rough or cut. Wholesale, retail prices on request. See before you buy. We deal in "Opal Exclusively." Free list. Western Rock & Gem, 20085 Stanton Avenue, Castro Valley, Calif.

TURQUOISE for sale. Turquoise in the rough priced at from $5 to $50 a pound. Royal Blue Mines Co., Tonopah, Nevada.

MINNESOTA SUPERIOR agates 1/2 to 1 inch $1.35 postpaid; 1 to 2 inch $2.50 postpaid, 3 polished Thompsonites $1 postpaid. Frank Engstrom, Grey Eagle, Minn.

TRINIDAD JASPER 10 pounds $8.50, postpaid. Dealers write for prices on baroques. Roy's Rock Shop, P. O. Box 133, Trinidad, Calif.

TITAN WILL TRADE mixed obsidian for agate, or sell gold sheen, silver sheen, olive green banded, spider web, feather, ambers, etc., 60c pound postpaid. Blacks for doublets, etc., 25c pound postpaid. Colorful common, 35c pound postpaid. Ashby's, Route 2, Box 92, Redmond, Oregon.

OPALS and sapphires direct from Australia. This month's best buy: Rough emeralds, fine cabochon material, deep color, 2 carat to 25 carat pieces. Two qualities, $15 and $45 per oz., send an SASE for price check, or national money order, bank draft. Free 16 page list of all Australian gemstones. Australian Gem Trading P.O. 294 Little Collins St., Melbourne C.!, Australia.

ROCK COLLECTORS-attention! Like Surprises? Leave it to me. A mixed box of crystals, fossils, minerals, fluorocencents, fabeled, or a box of curvetables, chunks and slabs labeled. $6 each or both for $11 postpaid. For lepi- dists who want enough rough to cut on a long time send $25 and pay the express when it gets to you. The Rockologist, Box 181, Cathedral City, Calif.

ASTERATED GARNETS, 15 rough or 10 tumbled, $1. 1 ounce stones $3 each, larger $5. Rough ground, hard, gemmy stones, $7.50 pound. 1 ounce tumbled $2. Postage, please. List free. Upper Jones, Wicken, Arizona.

INDIAN GOODS

FINE RESERVATION-Made Navajo, Zuni, Hopi jewelry. Old pawn, pre-Columbian artifacts, pottery, beads, baskets, stone implements, fetishes, etc. No lists. George W. Sturtle, Route 3, Box 94, Angeles Forest Highway, Palmdale, California. Windsor 7-2743. Open Sundays only.

10 WARPODS $1.50; 6 arrowheads $1.50; 4 birdpoints $1.50; 2 spearheads $1.50; 2 gem- points $1.50; 24" strand trade beads $1.50; 4 photographs framed relics, idols, beadwork, masks, rugs, pipes, baskets $1.50. (Refunded with $10 order.) Paul Summers, Canyon, Texas.

APACHE TRADING Post, specializing in fine In- dian pre-Columbian artifacts, pottery, beads, baskets, stone implements, fetishes, etc. No lists. Worcester, 1229B University Ave., Berkeley 2, California.

JEWELRY

GENUINE TURQUOISE bolo ties $1.50, 1 stone turquoise bracelet $2. Gem quality golden tiger-eye $1.75 pound, beautiful mixed agate baroques $3 pound. Postage and tax extra. Tabby's Rock Shop, 24201S Honolulu Ave., Montrose, California.

JEWELRY PARTS-why pay retail? Catalog lists bracelets, sweater clips, tools, balls, cuff links, bell caps, cement, earrings, jump rings, chains, ring clasps, key chains, bolo slides, tips or clamps, as well as belt buckles, ring mountings, pendant's, bracelets, silver, rock crystal stones, synthetic stones, and gold rings. Prompt and safe delivery assured. All items sold on money-back guarantee. Send 4c; stamp to cover postage on your catalog. Rock Craft, Box 424-D, Temple City, California.

CHOICE AMETHYST or apache tear dangle-type earrings, sterling silver, gift boxed. $2. Yucca Bill, Box 958, Yucca Valley, California.

ALUMINUM CHAINS! Dealers, write for whole- sale price list on our fabulous line of non- tarnishing aluminum chains, includes $1 for samples postpaid. Please use letterhead or state tax number. R. C. Berry & Company, 5040 Corby Street, Omaha 4, Nebraska.
LADY'S SOLITAIRE birthstone ring, 6V2—7 mm, round brilliant synthetic stone in sterling silver mounting. This elegant ring is perfect for all occasions and sizes (whole sizes 4-9). Only $7.50, tax, postage included. Satisfaction guaranteed. Worldwide Gems & Minerals, 1628 11th Street, Sacramento, Calif.

LADIES! WEAR with pride the stone of legend. Apache tear bracelet $2.98, necklace $2.98, earrings $2.98. Hobbies Unlimited, Box 1450, Sunland, California.

UNIQUE LOVELY bracelets of ten different identifying gems on one strand, flat on untarnishable gilt H.P. mounting. Choice of "Gems of the World" or "Western Gems," $3 each. Also choker-style necklaces to match, $3.75 each. Choice of "Gems of World" or "Western Gems," $3 each. Also choker-style necklaces to match, $3.75 each. This elegant ring is perfect for all occasions and sizes (whole sizes 4-9). Mounting. This elegant ring is perfect for all occasions and sizes (whole sizes 4-9).

LADIES! WEAR with pride the stone of legend. Apache tear bracelet $2.98, necklace $2.98, earrings $2.98. Hobbies Unlimited, Box 1450, Sunland, California.


SECTIONIZED COUNTY maps — San Bernardino, $3; Riverside $1; Imperial, small $1, large $2; San Diego $1.25; Inyo $2.50; Kern $1.25; other California counties $1.25 each. Nevada counties small $1 each. Include 4 percent sales tax. Topographic maps of all mapped western areas. Westwide Maps Co., 114 West Third Street, Los Angeles 13, California.


TREASURE MAPPERS: Texas treasuries in color, showing locations of mines, sunken ships buried treasure and old trails. Topo maps of all mapped western areas. Westwide Maps Co., 114 West Third Street, Los Angeles 13, California.

ROUTE MAP Pacific Crest Trail, 2153 miles. Canada to Mexico through 22 National Forests and 6 National Parks in Oregon and California. 20-page folder. J. W. Rogers, 2123 South Park Drive, Santa Ana, California.

BURIED TREASURE and lost mine map, 72 authentic California locations, 19x24, beautiful four-color with free gold nugget, $2 postpaid. 100-years-old Indian trade beads, approximately 24" strand, $4, 40" $60 postpaid. San Gabriel Trail maps, 17x22", suitable for framing, $2 postpaid. Rem Productions, P.O. Box 1693, Fort Worth, Texas.

WILDFLOWERS SEEDS: New catalog offers over 600 different kinds of wildflower and wild tree seeds. Catalog 50c. Clyde Robin, Cabin Valley, California.

CACI—MANY varieties of specimen plants only. Send for list. Rosso's Cactus Nursery, 25399 Hiyaw 99, Loma Linda, California.

CACI AND Excavators from the deserts of the Southwest. Free illustrated catalog. Davis Cactus Garden, 1522 Jefferson Street, Kerrville, Texas.


PLANTS, SEEDS

ENGINEERS, PROSPECTORS, geologists. Locate boron, lithium, strontium, uranium and other valuable minerals with the new always ready, fluorescent mineral detector. Detector operates in daylight, uses no batteries, fits in shirt pocket and eliminates dark box. Is unsuualled for open pit uranium mining operations. Price only $12.50. Free brochure. Estes Products and Engineering, Box 4174, Coronado Station, Santa Fe, New Mexico.


BIG STOCK of new and used treasure and mineral detectors, geiger and scintillation counters. Ultra violet lights. Free list. Easy terms. All makes serviced. White's Electronics, 1218 Main Street, Sweet Home, Oregon.

GOLD COINS wanted. Send your list of dates for my high premium prices. Louis Friedland, Kent, Ohio.

GOLD COINS for profitable sale investment. They make good gifts, too. Buy any amount, $5.75 to $10,000. I import U.S. $5, $10, $20 and English and Swiss coins, and deliver to your bank before you pay. For details write: Loyd Parker, 4606 Austin, Houston 4, Texas.

PLANTS, SEEDS

ENGINEERS, PROSPECTORS, geologists. Locate boron, lithium, strontium, uranium and other valuable minerals with the new always ready, fluorescent mineral detector. Detector operates in daylight, uses no batteries, fits in shirt pocket and eliminates dark box. Is unsuualled for open pit uranium mining operations. Price only $12.50. Free brochure. Estes Products and Engineering, Box 4174, Coronado Station, Santa Fe, New Mexico.


WILDFLOWERS SEEDS: New catalog offers over 600 different kinds of wildflower and wild tree seeds. Catalog 50c. Clyde Robin, Cabin Valley, California.

CACTI—MANY varieties of specimen plants only. Send for list. Rosso's Cactus Nursery, 25399 Hiyaw 99, Loma Linda, California.

CACI AND Excavators from the deserts of the Southwest. Free illustrated catalog. Davis Cactus Garden, 1522 Jefferson Street, Kerrville, Texas.


PHOTO SUPPLIES

ENGINEERS, PROSPECTORS, geologists. Locate boron, lithium, strontium, uranium and other valuable minerals with the new always ready, fluorescent mineral detector. Detector operates in daylight, uses no batteries, fits in shirt pocket and eliminates dark box. Is unsuualled for open pit uranium mining operations. Price only $12.50. Free brochure. Estes Products and Engineering, Box 4174, Coronado Station, Santa Fe, New Mexico.


WILDFLOWERS SEEDS: New catalog offers over 600 different kinds of wildflower and wild tree seeds. Catalog 50c. Clyde Robin, Cabin Valley, California.

CACTI—MANY varieties of specimen plants only. Send for list. Rosso's Cactus Nursery, 25399 Hiyaw 99, Loma Linda, California.

CACI AND Excavators from the deserts of the Southwest. Free illustrated catalog. Davis Cactus Garden, 1522 Jefferson Street, Kerrville, Texas.


PHOTO SUPPLIES

FIRST TIME available, Hollywood and Los Angeles 8 mm. color home movies, beautiful natural color, sharp focus, no artificial titles. A & B editing, can be sound stripped. Also Los Vegas, Carmel and Disneyland, $5.95 postpaid USA. Kaycee, Dept. DM, Box 2967, Hollywood, 38, California.

WILDFLOWERS OF Alaska, color, 16 mm, 8 mm. movies, 90 min slides, walrus, sheep, caribou, moose, goat, glaciers, Lake George Breakup, wildflowers, small animals, birds, sport fishing, Eskimo dances, 3 sample slides $1. Alaska Film, Box 5-621, Mt. View, Alaska.

COLOR SLIDES. Re-live your vacation trips. 3000 travel Kodachromes, parks, U.S., foreign, nature, etc. Free list (sample 30c). Send today. Kelly D. Choda, Box 15, Palmer Lake, Colo.

BINDER

Gold embossed on Spanish Grain Imitation Leather Space for 12 magazines Easily inserted

A BEAUTIFUL AND PRACTICAL ADDITION TO YOUR HOME BOOK-SHELF

Mail postpaid $3

Bound for: DESERT MAGAZINE PALM DESERT, CALIFORNIA

MORE CLASSIFIEDS

Keep your<br>
DESSERT MAGAZINES in attractive loose-leaf<br>

BINDER

Gold embossed on Spanish Grain Imitation Leather Space for 12 magazines Easily inserted

A BEAUTIFUL AND PRACTICAL ADDITION TO YOUR HOME BOOK-SHELF

Mail postpaid $3

Bound for: DESERT MAGAZINE PALM DESERT, CALIFORNIA

MORE CLASSIFIEDS
DON'T PAY subdivision cost! You can own $25 DOWN, $10 month buys level Nevada 5-acre lot. OWNER LOVES this Lucerne Valley hideaway FOR SALE: large lot in Apple Valley, $2500. 20 ACRES flat, 9 miles west of Randsburg. $3990. MAC'S ORIGINAL timberline weathered wood. 22 • Desert Magazine / November, 1960

DESERT TREASURES, primitive relics, purple glass, gem stones, paintings, rock trips, information on Last Chance Canyon. Visit Roberta's in the ghost town of Garlock, 12 miles east of Red Rock Canyon. Write Roberta's, Box 246, Lucerne, Lake County, California. SELING MY mounted Kiwi, believe extinct. Send stamped envelope for full description and price. Address on front page, Worcester, 12997 University Ave., Berkeley, 2 California.

WESTERN MERCHANDISE

DESSERT TREASURES, primitive relics, purple glass, gem stones, paintings, rock trips, information on Last Chance Canyon. Visit Roberta's in the ghost town of Garlock, 12 miles east of Red Rock Canyon. Highway 6, via Randsburg road, or 8 miles west of Randsburg and Highway 395. Mail inquiries answered, Roberta's, Box C, Randsburg, California.


NEW DESERT BOOKS

FROM FORBIDDING DESERT TO WINTER PLAYGROUND

The Coachella Valley, once one of the most carefully avoided desert areas in North America, is today one of the most popular resort sites in the country. Millions of vacationers visit the Coachella Valley, seeking the autumn and winter sunshine, from Palm Springs to the Salton Sea. Too, the area is in the midst of a rapid agricultural and residential boom.

The period "between"—when the Coachella area was developing from desert to an important center of population in Southern California—is the subject of a delightfully written book, Your Desert and Mine, by Nina Paul Shumway.

The author's family moved to the Coachella wastelands when Mrs. Shumway was a young newlywed. She has watched the region develop for a half century, and her book tells not only of the historic steps in Coachella Valley's growth, but of her own personal and emotional responses to a heated land that could be scorching in the summer and serene beauty the rest of the year.

Mrs. Shumway, who writes in true soprano, has been a Desert Magazine contributor over the years. Her book is part of the narrative of one Daniel W. Jones, who came West in 1847. Jones was a peace-loving Mormon, was in the front line, so to speak, of the Mormons' path of empire through Indian lands. His attitudes and actions speak clearly to toward explaining the relatively tranquil nature of this displacement of one people by another.

A WESTERN CLASSIC IS REPUBLISHED

The rare book, Forty Years Among the Indians, has been republished by Westernlore Press as No. 19 in its Great West and Indian Series. Forty Years is the candid narrative of one Daniel W. Jones, who came West in 1847. Jones was a peace-loving Mormon, was in the front line, so to speak, of the Mormons' path of empire through Indian lands. His attitudes and actions speak clearly to toward explaining the relatively tranquil nature of this displacement of one people by another.

Of particular interest to devotees of Mexican things historical is Jones's recounting of his experiences as a Mormon colonizer in Chihuahuah. Here his path crossed those of priests, rowdies, robbers, officials and common citizens—with interesting results. This is the first republication of Forty Years Among the Indians, and is limited to 1000 copies. The book contains 378 pages and sells for $8.50 from Desert Magazine Book Shop (see details below for purchasing the book by mail).

POSTAGE AND HANDLING PER BOOK: California residents also add 4% sales tax. Write for free book catalog.

NEW DESERT BOOKS

FROM FORBIDDING DESERT TO WINTER PLAYGROUND

The Coachella Valley, once one of the most carefully avoided desert areas in North America, is today one of the most popular resort sites in the country. Millions of vacationers visit the Coachella Valley, seeking the autumn and winter sunshine, from Palm Springs to the Salton Sea. Too, the area is in the midst of a rapid agricultural and residential boom.

The period "between"—when the Coachella area was developing from desert to an important center of population in Southern California—is the subject of a delightfully written book, Your Desert and Mine, by Nina Paul Shumway.

The author's family moved to the Coachella wastelands when Mrs. Shumway was a young newlywed. She has watched the region develop for a half century, and her book tells not only of the historic steps in Coachella Valley's growth, but of her own personal and emotional responses to a heated land that could be scorching in the summer and serene beauty the rest of the year.

Mrs. Shumway, who writes in true soprano, has been a Desert Magazine contributor over the years. Her book is part of the narrative of one Daniel W. Jones, who came West in 1847. Jones was a peace-loving Mormon, was in the front line, so to speak, of the Mormons' path of empire through Indian lands. His attitudes and actions speak clearly to toward explaining the relatively tranquil nature of this displacement of one people by another.

Of particular interest to devotees of Mexican things historical is Jones's recounting of his experiences as a Mormon colonizer in Chihuahuah. Here his path crossed those of priests, rowdies, robbers, officials and common citizens—with interesting results. This is the first republication of Forty Years Among the Indians, and is limited to 1000 copies. The book contains 378 pages and sells for $8.50 from Desert Magazine Book Shop (see details below for purchasing the book by mail).

POSTAGE AND HANDLING PER BOOK: California residents also add 4% sales tax. Write for free book catalog.

NEW DESERT BOOKS

FROM FORBIDDING DESERT TO WINTER PLAYGROUND

The Coachella Valley, once one of the most carefully avoided desert areas in North America, is today one of the most popular resort sites in the country. Millions of vacationers visit the Coachella Valley, seeking the autumn and winter sunshine, from Palm Springs to the Salton Sea. Too, the area is in the midst of a rapid agricultural and residential boom.

The period "between"—when the Coachella area was developing from desert to an important center of population in Southern California—is the subject of a delightfully written book, Your Desert and Mine, by Nina Paul Shumway.

The author's family moved to the Coachella wastelands when Mrs. Shumway was a young newlywed. She has watched the region develop for a half century, and her book tells not only of the historic steps in Coachella Valley's growth, but of her own personal and emotional responses to a heated land that could be scorching in the summer and serene beauty the rest of the year.

Mrs. Shumway, who writes in true soprano, has been a Desert Magazine contributor over the years. Her book is part of the narrative of one Daniel W. Jones, who came West in 1847. Jones was a peace-loving Mormon, was in the front line, so to speak, of the Mormons' path of empire through Indian lands. His attitudes and actions speak clearly to toward explaining the relatively tranquil nature of this displacement of one people by another.

Of particular interest to devotees of Mexican things historical is Jones's recounting of his experiences as a Mormon colonizer in Chihuahuah. Here his path crossed those of priests, rowdies, robbers, officials and common citizens—with interesting results. This is the first republication of Forty Years Among the Indians, and is limited to 1000 copies. The book contains 378 pages and sells for $8.50 from Desert Magazine Book Shop (see details below for purchasing the book by mail).

POSTAGE AND HANDLING PER BOOK: California residents also add 4% sales tax. Write for free book catalog.

NEW DESERT BOOKS

FROM FORBIDDING DESERT TO WINTER PLAYGROUND

The Coachella Valley, once one of the most carefully avoided desert areas in North America, is today one of the most popular resort sites in the country. Millions of vacationers visit the Coachella Valley, seeking the autumn and winter sunshine, from Palm Springs to the Salton Sea. Too, the area is in the midst of a rapid agricultural and residential boom.

The period "between"—when the Coachella area was developing from desert to an important center of population in Southern California—is the subject of a delightfully written book, Your Desert and Mine, by Nina Paul Shumway.

The author's family moved to the Coachella wastelands when Mrs. Shumway was a young newlywed. She has watched the region develop for a half century, and her book tells not only of the historic steps in Coachella Valley's growth, but of her own personal and emotional responses to a heated land that could be scorching in the summer and serene beauty the rest of the year.

Mrs. Shumway, who writes in true soprano, has been a Desert Magazine contributor over the years. Her book is part of the narrative of one Daniel W. Jones, who came West in 1847. Jones was a peace-loving Mormon, was in the front line, so to speak, of the Mormons' path of empire through Indian lands. His attitudes and actions speak clearly to toward explaining the relatively tranquil nature of this displacement of one people by another.

Of particular interest to devotees of Mexican things historical is Jones's recounting of his experiences as a Mormon colonizer in Chihuahuah. Here his path crossed those of priests, rowdies, robbers, officials and common citizens—with interesting results. This is the first republication of Forty Years Among the Indians, and is limited to 1000 copies. The book contains 378 pages and sells for $8.50 from Desert Magazine Book Shop (see details below for purchasing the book by mail).

POSTAGE AND HANDLING PER BOOK: California residents also add 4% sales tax. Write for free book catalog.
BUY BOOKS BY MAIL . . .

. . . satisfaction guaranteed by Desert Magazine

WORLD'S LARGEST SELECTION OF BOOKS DEVOTED EXCLUSIVELY TO THE DESERT SOUTHWEST—

1. List books you want by title and author. 2. Add 15c per book for postage & handling. 3. California residents add 4% sales tax. 4. If book is to be a gift, please mark name and mailing address legibly. 5. Please PRINT your . . . satisfaction guaranteed by Desert Magazine

THE SOUTHWEST TODAY

ARIZONA PLACE NAMES. Barnes and Granger. Accepted reference to the names of towns, valleys, mountains and streams of Arizona. Beautifully printed. 519 pages. $10

ANTHOLOGY OF DESERT POETRY. A collection of 89 poetic interpretations of the desertland. Peaceful and inspirational reading for those who would meditate under the spell of verse. Paperbound.— $1.50

THE COWBOY AT WORK. Fay E. Ward. 32 chapters of cowboy, horse and cattle lore. Beautifully illustrated, written in cowhand lingo. Will settle lots of corral caucuses. 288 pages. Indexed. $6.50

GRAND CANYON DEEPS. Benjamin J. Kimber. A compilation of some of the descriptions of the Grand Canyon, written by dozens of well-known authors and travelers. Historic words telling in different ways of the grandeur of Grand Canyon. Paperbound. 64 pages. $1.50

CABINS AND VACATION HOUSES. This Sunset book contains 252 plans and drawings and 250 photos. Tells how to plan cabins for beach, mountains or desert. Paperback. 128 pages. $1.95

MEET THE SOUTHWEST DESERTS. Phillip Wellels. A well illustrated guide book that generalizes the Southwest desert country for the newcomer or for the reluctant back enst who think that Indians still ride Model Ts while the squaws walk behind. 110 illustrations. 82 pages. Paper-back $1, Hard-bound $2.25

NEW GUIDE TO MEXICO. Frances Toor. Completely revised, up-to-the-minute edition of this famous guide, including Lower California. Over 80 illustrations and an account of new West Coast highways into Mexico City. 277 pages. $2.95

LOWER CALIFORNIA ILLUSTRATED BOOK. Gerhard and Gulick. Maps, motor mileage, supplies—the complete data you will need for a journey into the fascinating land south of the border. Includes information as to customs, food, passports—everything you will want to know whether you go by auto, boat, plane or burro. Paper, $5.25. Cloth $6

BOUNCING DOWN TO BAJA. Bill and Orv Wartman. Lively account of a husband, a wife, and a jeep, and their adventure into Baja California, with notes for travelers. For arm-chair tourists and confirmed jeepsters. Illus., 200 pages. $3.75

ANZA-BORREGO DESERT GUIDE BOOK. Horace Parker. First complete and authentic guide to California’s largest state park. For motorists, camper and hiker. Maps and pictures. 108 pages. $2.50


EXPLORING DEATH VALLEY. Ruth Kirk. An informative guide for tourists with maps, pictures. Scores of interesting side trips described in detail by a park ranger’s wife. 82 pages. Paper cover. $1.95

GEMSTONES OF NORTH AMERICA. John Sinkankas. The largest and finest work on gem rocks of this continent. The author is recognized as an expert. 675 pages, beautiful illustrations, many in color. Indexed, plus bibliography and glossary. $15

GEM HUNTER'S ATLAS, CALIFORNIA & NEVADA. H. Cyril Johnson. A small booklet of 32 maps, showing gem stone areas. $1


THE SOUTHWEST TODAY

AMONG THE ROCKS. Terry Shannon and Charles Payzant. Tells where and how to collect gem-stones, how to slab, cut, polish and engrave them. Many good drawings and photos. Bibliography. 181 pages. $7.50

THE ROCK BOOK. Carroll and Mildred Fenton. An authoritative, usable volume on the rocks of the world. A classic in its field. Beautiful full color photos, plus 48 pages of black and white, and drawings. 350 pages. $11

JEWELRY MAKING. Greta Pack. For the beginning craftsman. This is heavily illustrated, very clearly written. Goes from simple to advanced silver and gem projects. Hard Cover. $3.75

FIELD BOOK OF COMMON ROCKS AND MINERALS. F. B. Loomis. Nature Field Book series. For collecting, Identification. 144 pages on minerals, rocks. Minerals in which color is important for identification are illustrated in color. Many photos, drawings. Geological time chart, bibliography, index. 352 pages. Special. $3.30


GEM TUMBLING. The Victors. A guide for amateur lapidarists. Also describes baroque jewelry making. Paperback. 55 pages. $3.50

ROCK TO RICHES. Charles H. Dunning. Story of Arizona mines and mining—past, present and future, written by a man with 50 years mining experience in the Copper State. 496 pages. Illustrations. $8.75

THE FIRST BOOK OF STONES. M. B. Cormack. For children. Makes stone collecting easy and exciting for beginners. Large type and plenty of simple illustrations. 90 pages, index. $1.95

MORE BOOKS
NATURE SUBJECTS

NATURAL HISTORY OF THE SOUTHWEST. A compilation showing the beauty and color of the Southwest by excellent photos, and telling of its trees, shrubs, birds, reptiles and mammals. A general book on the area, it has many color pictures. A guide for those who want an introduction to the outdoor Southwest. 144 pages. $4.95

WILDLIFE OF MEXICO. A Starker Leopold. Readable yet highly authoritative, this book contains almost 200 excellent drawings and photos of Mexican wildlife. For sportsmen and naturalists. Many desert animals included. 568 pages. $12.50

CACTUS AND SUCULENTS AND HOW TO GROW THEM. Scott E. Haslent. An inexpensive instruction book, written for the beginner. Contains all the essential information for growing a pretty cactus garden. 65 Illustrations. 64 pages. Paper cover. $1.50

BOOK OF CACTI AND OTHER SUCULENTS. Claude Chidamain. For those interested in gardening or collecting here is an encyclopedia of information as to the nature, propagation and cultivation of the great family of drought-resistant plants. Well illustrated. $4.50

BIRDS OF THE SOUTHWESTERN DESERT. Guze Thomas Smith. To this author, birds are happy friends and so we are told that every desert dweller should cultivate. All the more common species are given a delightful introduction in this book. Excellent pen sketches. $1.95

WONDER OF THE DATE. George Roy. 64-page paperback booklet on romance and history of the fabulous Colorado date date industry. Date recipes included. $1

WESTERN GARDEN BOOK. Handsome information-packed Sunset book showing all about growing in the West. Truly the last word for amateur landscape artists. 384 pages, illustrations. $3.95

MAMMALS OF THE SOUTHWEST DESERT. G. Olin. One of the series of the Southwestern Monuments Association; an invaluable book on the desert-dwelling animals; habits, detailed drawings, charts. $1


NATIVE PLANTS FOR CALIFORNIA GARDENS. Lee W. Lent. California has a wealth of native flowers and shrubs—many of which make delightful domestic landscaping. Here are the recommended species, and how to grow them in your garden. Photo illus. 166 pages. $3.95

INTRODUCTION TO DESERT PLANTS. W. Taylor Marshall. If you've wanted to cultivate some of the native desert plants in your home landscaping, this book will be a most helpful guide. 49 pages. $1.25

WILD FOLK IN THE DESERT. Carroll Lane Fenton & Evelyn Carrwell. For young (10-14) nature lovers who want to know more about the animals of the desert. Written in narrative, nicely illustrated. $3.50


THE NORTH AMERICAN DESERTS. Edmund C. Jaeger. Published in September 77. The Southwest's great deserts treat for the first time of the five important deserts of the North American continent. 356 line drawings, 29 pages of maps and photos. $5.95

DESERT WILD FLOWERS. Edmund C. Jaeger. Fine handbook on desert flora, almost 800 species described and illustrated by line drawing or photos. Contains material on discovery and naming uses, exploration of botanists and naturalists. $5

THE TREES AND SHRUBS OF THE SOUTHWESTERN DESERT. L. Benson and R. Darrow. This revised edition has all the information a beginner in botany will need for identifying the perennial vegetation in the entire Southwest. Appendix, 115 illustrations, 9 in color... $8.50

THE VOICE OF THE DESERT. Joseph Wood Krutch. In which a Naturalist explores the rich, intriguing, unexpected variety of life on the Southwest desert. 224 pages. $3.75

POISONOUS DWELLERS OF THE DESERT. Natt N. Dodge. "...should become as much a part of the kit of any desert visitor as his canteen." Description and habitat of the world's most feared reptile and naturalist's experiences with the jackrabbit, the packrat, the coyote, the sidewinder, and scores of birds and animals and reptiles of the Southwest Desert. Illus. 115 pages, illustrated. $1

FLOWERS OF THE SOUTHWEST DESERT. Natt N. Dodge. Written for those who, lacking a scientific knowledge of botany, would still like to learn the names of the more common desert naturalist's prospects for the desert shrubs. Both the scientific and common names of 145 species are given. 110 pages, illustrated. Paper cover. $1

FLOWERS OF THE SOUTHWEST MESA. Pauline M. Petraw. Identifies by an easy-to-follow color key, the common plants of the Pinyon-Juniper Woodland, extending from about 4500 to 7500 feet in elevation. Descriptive drawings by Jeanne R. Jamish. Paper cover. $1

WILD PALMS OF THE CALIFORNIA DESERT. Randall Henderson. Interesting and descriptive stories of the wild palms that grow in the Palm Canyon, Andreas Canyon, Fern Canyon, Eagle Canyon... $1

THE DESERT IN PICTURES. Published by the Palm Springs Museum. Striking photographs of the geology, geography, flora and fauna. Edited by Edmund Jaeger. Paper cover... $1

A NATURALIST'S DEATH VALLEY. Dr. Edmund C. Jaeger. A simplified story of the mammals, birds, reptiles, insects, trees, flowers, fossils and Indian life in the Death Valley region. A Death Valley '49er book. Illustrated. Paper cover. 68 pages. $1.50

OUR DESERT NEIGHBORS. Edmund C. Jaeger. A fascinating book of a naturalist's experiences with the jackrabbit, the packrat, the coyote, the canyon wren, the sidewinder, and scores of birds and animals and reptiles. A Death Valley '49er book. Illustrated. Paper cover. 68 pages. $1.50

THE CLEVER COYOTE. Stanley Young and Harley Jackson. Despite his wanton ways nothing at all about the coyote—I mean the wildest coyote is one of the few animals which has been able to extend its range and more than hold its own in historic times. Illustrated... $6.50
SOUTHWEST HISTORY and SOUTHWEST PERSONALITIES

YOUR DESERT AND MINE. Nina Paul Shumway. A delightful personal account of a family's early-day experiences in the Coschella Valley, with much detail on the history of the mining industry. Hardback. $1.95

SOUTHWEST TALENTS are all seen through the eyes of a young woman meeting the personal account of a family's early-day experiences in the Coachella Valley, with much valuable history of the date palm industry. Palm Valley Trails, this is "a personal narrative of people and places," of the historic dentist—turned faro dealer-gunman. Much use of early-morning editor. $1.95

PLAYING IN THE SAGE. Nell Murbarger. This delightful new subtitle for this semi-novel about one of the West's great trappers, Kinyon. Willie Boy, who had murdered two people, outfooted horses...and bullets for weeks, but finally shot himself. San Bernardino and Riverside counties in Southern California are the setting for this 1909 account of how Manly and his party survived many hardships. $6.50

AMERICA'S DARK AND BLOODY GROUND. Earl R. Forrest. This is the fourth printing of an authenticated account of the ruthless Graham-Tewksbury cattle war in Arizona's Pleasant Valley from 1882 to 1892. More than a score of men died in this western feud. $5

AUTHENTIC LIFE OF BILLY THE KID. Pat Garrett. This work reads easily but may not be quite as genuine as Garrett, who shot the Kid, might like us to believe. Part of the Western Frontier Library, published by University of Oklahoma Press. $2

TRUE STORY OF BILLY THE KID. William Lee Hamlin. Hamlin's thesis is that the Kid, contrary to general belief, was a loyal and reliable young man, ready to serve the law, but misunderstood. $6

DEATH VALLEY IN '49. William Lewis Manly. Written in his own words, the classic of Death Valley crossing; the day-by-day amazing account of how Manly and his party survived many hardships. $6.95

THE MANLY MAP AND THE MANLY STORY. Ardis M. Walker. One of the epics of southwestern history: that of the heroic struggle of Wm. Lewis Manly and John Rogers and their companions through Death Valley. Reproduction of their map. Paper. $1

DEATH VALLEY TALES. A Death Valley '49er publication. Nine writers have written true chapters from the drama-crammed past of the Death Valley region. 59 pages, paper. $1


LOAFING ALONG DEATH VALLEY TRAILS. William Caruthers. From a store of excellent material gained through 25 years on Death Valley Trails, this is 'a personal narrative of people and places,' of such people as Shorty Harris, Charles Brown and many others. $4.25

DEATH VALLEY SCOTTY TOLD ME. Eleanor Jordan Howard. Here is Death Valley Scotty as his friends knew him. Reported conversations while Mrs. Howard's husband was a Death Valley Park Ranger. $1.50

DEATH VALLEY SCOTTY RIDES AGAIN. Earl C. Driskill. Scotty's stories, just as he told them, written by a man who was close to the fabulous Death Valley character during his last years. A salty book. $1

20 MULE TEAM DAYS IN DEATH VALLEY. Harold O. Weight. Story of the most colorful episode in western mining history, as revealed by the old-timers, and from the records of the period. $1

SIXGUNS. Elmer Keith. For the man who wants the last word on pistols and revolvers, by one of America's top authorities in the field. 400 illustrations. Arms design and ammunition information. $10

JOSEPH REDDELFORD WALKER AND THE ARIZONA ADVENTURE. Daniel Ellis Conner, edited by Ethel Marie and Davenport. Walker's amazing Arizona expedition, a hundred years ago, when the South-west could provide adventure for anyone willing to be a leader. Walker lived, trapped and guided in the West for 30 years. $5

A PEEP AT WASHOE. J. Ross Browne. This is a reprint of a lively first-hand report of the early days of the Comstock boom. The author was an illustrator and writer for several Eastern journals. His book contains interesting wood cuts, done on the scene. A classic in its field. 256 pages, hard cover. $5.50

MEN TO MATCH MY MOUNTAINS. Irving Stone. A gripping story of the men and events which in 60 years brought the white man's civilization to the great western wilderness of United States... $5.95

PHILIP ST. GEORGE COOKE. Oris E. Young. The west, as seen by the famous cavalryman, Cooke, in the pre-Civil War days of frontier exploration. His Civil War service. Authoritatively documented. $10

HOLE-IN-THE-ROCK. David E. Miller. This well-illustrated book by a trained Utah historian, is the best available on the amazing Mormon Hole-in-the-Rock expedition of 1879-80. Maps, 229 pages. $5.50

ARIZONA IN THE 50s. James H. Tevis. The breathtaking memoirs of Captain Tevis on a march through Arizona in 1857, when lawlessness was the order of the day. 237 pages. $3

APACHE VENGEANCE. Jess G. Hayes. The true story of the Apache Kid, telling what changed him from a trusted scout into one of the old West's most hunted outlaws. 185 pages $3

TOMBSTONE. Walter Noble Burns. Story of the "Town too tough to die." Gunfighting, cattle rustling days in Old Arizona. As history it is accurate, as a story it holds you spellbound. $3.75

JOURNEY OF THE FLAME. Fierro Blanco. Reprint of the popular historical novel, acclaimed as the greatest collection of desert lore ever compiled. A collection of fact and fiction about Baja California $3.75

FIG TREE JOHN. Edwin Corle. A fine novel of the Southwest by the late Edwin Corle. Limited edition, illustrated by Don Percival $7.50

MORE BOOKS
LEGENDS AND LOST TREASURE


GOLD, GUNS AND GHOST TOWNS. W. A. Chalfant. Combines OUTPOSTS OF CIVILIZATION and TALES OF THE PIONEERS in an attractive 7x10 edition. "All the rough and ready, gold-crazy exuberance of the old West is captured in these stories. The days when men, good and bad, were motivated only by the lust for nuggets and gold dust have been sympathetically yet humorously chronicled." $3.75

ON THE TRAIL OF PEGLEG SMITH'S LOST GOLD. J. Wilson McKenney. Here new clues are added to the fantastic story of Pegleg Smith's fabulous black nuggets of the California desert. Photos. Map. $1.50

THE LOST DUTCHMAN MINE. Sims Ely. Latest information on the top mystery among lost mines of the Southwest. Ely attempts to separate facts from fiction. Endmaps, 178 pages. $5.00


LEGENDS AND LOST TREASURE


BEFORE AND AFTER DINOSAURS. Lois and Louis Darling. A valuable, richly illustrated guide to junior naturalists, age 10-14. The story of the world of reptiles, keystone in the story of evolution. From tiny lizards to the huge Brontosaurus. $2.95

CHILDREN'S BOOKS

PETIE THE PACKRAT. Van Clark. A small collection of fanciful animal tales with a Navajo setting. Beautifully illustrated by the famous Indian artist, Andy Tsinnie. For youngsters 6 to 9. 108 pages. $5

YOUNG RANCHERS AT OAK VALLEY. Lucille M. Nixon. All about life today on a large California ranch. Teaches conservation. Ages 8 to 11. Illustrated. 64 pages. $2.95

WINING CANYON. Ruby Sanders. A young orphan finds adventure in Southern California in the 1850's on his uncle's barley ranch. Semi-historical. Ages 9 to 12. 166 pages. Illustrated. $3.50

RODEO DAYS. Elizabeth Clemons. Prepared with the aid of the Rodeo Cowboys Association, it answers all the questions children ask about rodeos—why horses buck, why clowns are always on hand in the arena, how do the cowboys bulldog a steer, etc. Ages 9 to 12. 84 pages. Illustrated. $2.95

INSECTS IN THEIR WORLD. Su Zan N. Swain. An introduction to the insect world for young nature lovers. Beautifully illustrated, well written. Hard cover, 53 pages. $2.95

INDIAN LORE

TRADERS TO THE NAVALOBS. Frances Gillmore & Louisa Wetherill. The story of the Wetherills at Kayenta. True information regarding the Navajos. Archeological and geographical explorations of the Wetherill men. 256 pages. $3.90

SECRET OF LIFE. A Walt Disney book with 100 beautiful color plates. A beginner's book in the study of Nature. Every 12-year-old should have this inspiring story. 124 pages. $3.50

LET'S GO TO THE DESERT. Harriet E. Huntington. Facts about desert plants and animals written for children up to 9. Each story illustrated by full-page photographs. 88 pages, 44 photos. $2.75

INSECTS IN THEIR WORLD. Su Zan N. Swain. A delightful novel of Hopi Indian life, by an author who knows the problems of these stalwart tribesmen intimately. Portrays the conflict between old traditions and the white man's influence on the Hopi Mesa. 286 pages. $3.50
From Congress to Kingman
In Two Hours--Or Two Days

By THOMAS LESURE

Desert Magazine's Arizona Travel Correspondent

STATE 93—the so-called Kingman cut-off between Phoenix and Las Vegas—may be the shortest route between these two Southwestern vacation capitals, but it's mighty long on diverse sightseeing and outdoor fun. As much, however, than just the short trip that many motorists give it.

The route begins a few miles west of Congress, northwest of Wickenburg. Be sure your car's gas tank is full (though there's a gas station at Wikieup about half way along the 120 mile road); chances are you'll want to make numerous side-trips along the way. In minutes, the highway barrels through one of the few and best Joshua tree forests in Arizona. In the background, rugged mountain escarpments rear skyward while occasional flat-bedded arroyos across the road show prominent streaks of black sand which, gold-seekers claim, is one pointer toward that precious ore.

About 25 miles along, the road swings across the Santa Maria River (which cuts through a steep-walled canyon loaded with mighty rock formations in the distance) and twists up past rocks jumbled and weathered into fantastic shapes. The horizon—twisted, cracked and savagely hammered—screams with starkness, painted a somber contrast to such bucolic scenes as cattle docilely grazing beside the road.

Typical desert roads amble off into the cactus-dotted hills. One leads to the copper mining town of Bagdad; others meander to former mining camps and ghost towns like Alamo, Rawhide, Signal and Yucca. Then, plunging dramatically, the highway plunges into the gorge formed by Burro Creek. Around here—if you like rockhunting—you may uncover such items as Apache tears, agate, carnolite, jasper and opalite.

Soaking up again, the road affords dramatic views of the gorge, then tosses in a surprise with narrow Kaiser Springs Canyon and formations resembling a miniature Grand Canyon in the making. Arid range country now takes over the scenery, and when you suddenly spot the emerald swash of trees along the Big Sandy River, it seems as though an artist had incidentally streaked green paint over part of the brown-gold canvas. Here, the "wide spot" in the road known as Wikieup appears to have only its gas pump as an attraction. Three miles away, though, Cofer Hot Springs, an old Indian thermal hang-out, is still said to have health-giving qualities in its waters.

In any event, it's a nice shady spot with water for camping or picnicking.

State 93 gradually rises as it continues toward Kingman, and the Joshua's and saguaros appear again on the scene. Soon to the east, the Aquarius Cliffs rim the valley while westward looms the 8200-foot-high Hu- alpai Mountains. Atop the range, by the way, is a cool pine retreat known as Hualpai Mountain Park. There are cabins, lodge, camp and picnic facilities in this heavily-wooded region.

The last lap of the road—before it runs into U. S. highways near Kingman—has several other treats in store: the "Natural Corrals," or eroded rock alcoves formerly used by cowhands; cattle roaming over old operations like the Cedar Mine Mill where each passing year further obliterates traces of once buoyant hopes; deer bounding across the juniper-decorated hills; sweeping vistas of open range backed by the mineral-laden Cerbat Mountains and other ranges; and finally the old mining town of King- man on U. S. 66.

The drive can take you about two hours—or two days. If you're in a rush to lose your money in Las Vegas or, having lost it, in a rush to get away, then a couple of hours is par for the course. On the other hand, if you'd like something money can't buy—a bonanza of natural allurements, fun and outdoor inspiration—then figure on taking your time. The profit is greater than any you'll find in the gambling halls—and it's there whenever you want it.

Arizona's November calendar: 4-13—Arizona State Fair, Phoenix. 11-13—(tentative dates) Gun Collectors' Show at Yuma County Fairgrounds. 18-20—Dons Club bus tour to Hermosillo and Guaymas, from Phoenix (transportation and two nights' lodging: $36.75; for details write: Dons Club Information Desk, Box 13493, Phoe- nix). 26-27—28th Annual Junior Parade, Florence.

If you're up Utah way, you'll be interested in the 42nd Annual Golden Spike National Livestock Show at Ogdin, Novem- ber 4-13.
DEER ON THE DESERT!

By EDMUND C. JAEGER, D.Sc.

DEER ON THE DESERT! Sounds strange to most people, even to permanent desert dwellers, who, like so many, take it for granted that deer are animals only of the brush-covered or pine-clad mountains. But the deserts—at least certain ones—have their deer, some all the time, others at least temporarily. The desert trough known as Owen's Valley which lies between the High Sierra and the precipitous somewhat lower and much drier Inyo Range has visitations of California Mule Deer during late autumn when the animals leave the cold storm-swept Sierra and move eastward in considerable numbers to find a temporary home in the warmer brush-covered Inyos. The migrations may last several days. In the spring there is a spectacular return mass migration. But these deer are only desert visitants, and can hardly be called desert denizens since their actual home is in the high mountains to the west.

But the variety of the California Mule Deer (Odocoileus hemionus eremicus) known because of its bigger ears and heavier, larger body as the Burro Deer (“Cuervo” to the Mexicans) is quite a different animal. It is a year-round desert resident. The deserts of Pima and Yuma counties along the lower Colorado River in mid-western Arizona and far-eastern Imperial and Riverside counties in California, where the heat of summer is often intense, are local dwelling places for this imposing pale-colored animal. In northeastern Baja California and on the dry cactus-covered flats of the western Sonoran plains, small herds of Burro Deer are yet found. It was from northwestern Sonora, just to the east of Tiburon Island, that the type specimen was taken and brought to the attention of scientists long ago. The first valid description of this animal was made by Dr. Alexander Mearns of the U. S. Mexican Boundary Survey in 1897. The type specimen was killed in the barren Sierra Seri by Dr. W. J. McGee of the Bureau of Ethnology while making a study of the very primitive Seri Indians who lived on Tiburon Island and the mainland along the Gulf of California. He found that they occasionally hunted deer for food and for the hide.

The California Mule Deer range touches on the margin of Burro Deer country along the edge of the Colorado Desert in the United States and Lower California where the great difference in size and color between the two is at once apparent.

Clavigero, the Mexican historian (1731-1787), long ago mentions the stalking of desert deer by Lower California aborigines of the mid-peninsula with the aid of an antler and head disguise, and in Consag’s diary of his Baja California 1751 expedition, he reports the natives driving these deer with grass fires, a method probably not often used since grasses and woody perennial vegetation are generally too sparse in this country to support running fires.

That these large antlered animals were already scarce in the early 1900s in Papagoland near the Pinacate Mountains of Sonora is attested by the fact that neither Carl Lumholtz (New Trails in Mexico) nor Wm. T. Hornaday (Campfires on Desert and Lava) who well explored this area in 1905 and 1906, mentions seeing them. Joseph Grinnell in his Mammals and Birds of the Lower Colorado Valley says that he saw very few Burro Deer at the time he made his studies in 1910. Since those days there seems to have been some resurgence in numbers, but these are still comparatively scarce animals. When Burro Deer are seen in California or Arizona they are generally found as individuals or in small herds of not more than 6 or 10 in the willow and cottonwood thickets along the Colorado River bottoms or in the nearby arid mountains, creosote bush desert flats or ironwood washes. They feed on willow-twigs, on the tender shoots of palo verde trees and the nutritious leaves of ironwood trees, among other things. The time of browsing is mostly at night or in early morning or evening, but on several occasions I have seen Burro Deer feeding in the daytime.

Except when frightened, each deer herd stays pretty much in a restricted “home area,” seldom roaming about aimlessly. When out on the desert proper they hide during the day in the

DEER ON THE DESERT
small side washes, concealing themselves under brush or the small trees that may grow there. Because of their small numbers, their tracks and trails (except near waterholes) are seldom noticed. I remember on a number of occasions seeing their large tracks, along with the smaller spore of javelinas, in the mud near several springs in the Gila-Mohawk Mountain area of Arizona. Progression, except when walking, is generally by a series of most graceful bounds, all four feet leaving the ground simultaneously. Over short distances this pace is very rapid.

In dry months the animals like to drink daily (mostly at night) at the seepages and springs. When succulent green food is plentiful, they may drink only every third day.

During pairing time in January the bucks are exceedingly pugnacious and quarrel fiercely over the few does. The young stay with the mother throughout the first year. The spots so characteristic of young deer are said to be retained only until late September or October.

At somewhat higher elevations and feeding on chaparral of the pinyon-juniper woodlands, arid desert flats or rocky hills of southern New Mexico, the Big Bend area of Texas and adjacent similar areas in the states of Chihuahua, Coahila and Durango of Mexico, is another kind of pale-coated Mule Deer known as Desert Mule Deer, Crook’s Mule Deer or Gray Mule Deer (Odocoileus hemionus crooki). Its general habits are much like those of the Burro Deer.

About the only animal the Burro Deer and Crook’s Desert Deer must fear is predatory gun-toting man. The coyotes kill very few and then it is mostly the diseased or starving animals that fall prey to them. My friend Gale Monson of the Fish and Wildlife Service writes me from Yuma that in southwestern Arizona the mountain lion is just about absent from Desert Mule Deer country.

“We have only one record of a lion killing a deer on the Kofa Game Range—and this was an old tom who was trapped in 1944 after killing a number of bighorn sheep as well as deer. I don’t think they come anywhere near Laguna Prieta, and I suspect lions are now extinct in the Colorado Delta.

“There is no doubt,” Monson continues, “that deer are preyed upon by bobcats, as we have at least two eyewitness experiences; but I doubt that either bobcats or coyotes have much effect on their numbers.” He goes on to say that observers have seen deer chase coyotes away from waterholes, striking at them with their forefeet.

One of Monson’s men had an experience with deer worthy of note. This F&W Service man was taking a dawn-to-dusk waterhole count at Hoo-do Well in the Kofa Mountains, and for several days the tally averaged about 20 deer per day. On the eve of his final day, knowing that a number of deer were watering at night, he closed the corral gates so animals could not get to the waterhole. Next morning at daybreak when he went again to his station to resume his count, he found 65 deer outside the fence waiting to drink! When he went to open the gate, the animals scarcely got out of his way, and they almost ran over him when the portals were finally opened.

The two great enemies of desert deer are hunters and the over-grazing of the range by the stockmen’s cattle herds. “Overshooting,” says A. Starke Leopold in his recently published Wildlife of Mexico, “was begun at an early date.” He mentions how in 1884-5 in the Bolson de Mapimí of northeastern Durango, Don Donaciano Montera, a professional hunter, killed 400 Desert Mule Deer, including both bucks and does.

Unfortunately, some states still permit and encourage the killing of these fine deer, even though their numbers are so small; few Mexicans pay any attention to regulatory laws and shoot deer whenever and wherever chance affords the opportunity. Dr. Alexander Meears in his Mammals of the Mexican Boundary of the United States, wrote in 1907 that Burro Deer occurred “in large herds in Lower California during the winter season.” No such numbers are found today.

A few of the animals are killed at night by automobiles. I recently saw such a fatality on the highway between Yuma and Quartzsite, Arizona. The animal must have weighed close to 130 pounds and gave me the impression of being a very strongly-built creature. I could see that it had the usual number of ectoparasites, from ticks to fleas. Hitting such a large animal had been costly indeed to the fast-driving motorist. Later in the day just after sunset I saw three Burro Deer crossing the road in front of us, not appearing unduly alarmed at our approach. One was a fine antlered buck, the other two were yearling does.
DEATH VALLEY this month especially will be the goal of many thousands, for the Death Valley 49ers Encampment, Nov. 10-13, will be marked by the dedication of the Visitor Center-Museum of Death Valley National Monument, just north of Furnace Creek Ranch. And Jubilee Pass may be a new and pleasant route for those who usually enter the Valley by better-known highways.

With that event as our goal, this trip begins at one ghost lake and ends in another. The starting point is Baker, on U.S. Highway 91/466. Soda Lake south of Baker and Silver and Silurian lakes north of it, are the remnants of ancient Lake Mohave. The ghost lake at the Death Valley end of the trip—Lake Manly—is a much greater one, with which the southern lakes were connected.

Driving today along Silver Lake, it seems fantastic that this area once was covered with water, 40 feet above the present dry lake surface. Now, an annual rainfall of more than three to five inches is unusual. But thousands of years ago, when giant glaciers in the Sierras were feeding a stream which flowed all the way to Death Valley, water also reached the Valley from San Bernardino, which flowed all the way to Death Valley, and hence into the Amargosa River and hence into Death Valley by better-known highways.

To Shoshone by State Senator Charley Brown. Despite a modern supermarket, motel, swimming pool, golf course and the beautiful Death Valley High School, Shoshone retains the atmosphere of the early desert. Cabins are almost hidden under mesquites, and terraces, beach lines and sand spits, best preserved on the west and northwest.

Discovery that ancient man lived around the lake perhaps 15 to 20 thousand years ago, was made by Mr. and Mrs. William Campbell of Twentynine Palms and Mr. and Mrs. Charles Amsden of the Southwest Museum, Los Angeles. The artifacts were primarily handmade stone tools, scrapers, knives and others which predate arrowheads and metates. They were fashioned out of materials like obsidian, quartzite, flint and chert.

Jubilee Pass may be a new and pleasant ancestor covered 75 to 100 square miles. Past levels are indicated by wave-cut cliffs and terraces, beach lines and sand spits, best preserved on the west and northwest.

The Silver dry lake of today is about 12 or 13 square miles in area, but its ghostly ancestor covered 75 to 100 square miles. Past levels are indicated by wave-cut cliffs and terraces, beach lines and sand spits, best preserved on the west and northwest.

Jubilee Pass -- and the Death Valley Encampment

BY LUCILE WEIGHT

Desert Magazine's California Travel Correspondent

With the passing of the T&T, the community of Silver Lake also virtually ended, although it had lost its post office by 1937. But in boom days it was a busy crossroads supply center for numerous brief-lived mining camps. One such was Crackajack, in the Avawatz Mountains to the west. It was going to be a wonder; it had a newspaper to tell the world so. On the strength of the paper and promises, supplies and hopeful miners—and before long hauled them out. But the camps kept Silver Lake's boarding house, general store, and saloons going for quite a while. Even Diamond Lil, known as a shrewd business woman in Nevada camps, had been snared by Crackajack, then moved down to Silver Lake.

Less than 30 miles from Baker, the valley narrows about where you cross the Old Spanish Trail. Then you pass Salt Springs, a stopping place on the Trail, just before reaching a left junction with the Avawatz-Saratoga Springs road. Here a historical monument marks the approximate place where the Wade family, Death Valley 49ers, struck the Old Spanish Trail, along which the original group from Salt Lake City had already passed to San Bernardino and Los Angeles. These were the only 49ers entering Death Valley to use this natural way out, thus escaping the fate of their companions who had taken the "short cut" to California gold fields.

The modern highway now crosses the wide bed of Amargosa River which here makes a U-turn around the Ibex Mountains on its way to Bad Water in Death Valley. Soon you reach the first turnoff to Tecopa Hot Springs, 48.6 miles from Baker. Once an Indian camp, later a rendezvous for prospectors, it now draws many for its climate and hot mineral water.

Zabriskie ruins, less than two miles beyond, are remains of Amargosa Borax Mining Co., a Wm. T. Coleman enterprise. The borax deposit was discovered in 1882. Because summer temperatures in Death Valley were so high, the solution could not crystallize. Harmony Borax works were shut down in summer, and operations transferred here. Those who have gone through in summer can hardly imagine this as a spot for hard work in August or September — it will be hot, but miles away. But in cool weather perhaps you may want to spend some time hunting for the tiny opals that still can be found in the clay nodules in the cliffs not far from the road, left.

A surprising oasis has been created at Shoshone by State Senator Charley Brown. Despite a modern supermarket, motel, swimming pool, golf course and the beautiful Death Valley High School, Shoshone retains the atmosphere of the early desert. Cabins are almost hidden under mesquites.

The Silver dry lake of today is about 12 or 13 square miles in area, but its ghostly ancestor covered 75 to 100 square miles. Past levels are indicated by wave-cut cliffs and terraces, beach lines and sand spits, best preserved on the west and northwest.
Do you Have a Memorable Desert Experience That You Would Like To Share With Others?

Announcing a new contest for Desert Magazine readers...

$50 First Prize

$10 for all other manuscripts accepted for publication

Once again Desert Magazine invites you to participate in the telling of the Southwest story by relating your most memorable personal experience on the desert. There is no subject matter limitation — adventure, human interest, exploration, wildlife, inspiration — so long as the story has a desert setting, and all the contest requirements are met.

This contest is restricted to those whose writing has not appeared in Desert Magazine during the past four years (since issue of Nov., 1956). All manuscripts must be typewritten on one side of the sheet only; double spaced; wide margins.

Manuscripts should be from 1200 to 1500 words in length. Photos and appropriate art work are not essential, but if available should be included with the manuscript.

Stories should be true experiences, previously unpublished and original. Writers must be prepared to supply confirmation as to the authenticity of their stories. Tall tales and heresies are not solicited.

Contest ends Dec. 12, 1960. Decision of the judges will be final. Unaccepted manuscripts will be returned only if accompanied with return postage. Mail entries to: Contest, Desert Magazine, Palm Desert, Calif.

the odor of arrowweed pervades the air, oldtimers still talk mining.

About two miles north, leaving Highway 127, turn left on a surfaced road which takes you over two passes between the Ibex and Black Mountains to Ashford Junction, just over 25 miles away. After climbing to Sawberry Pass, over 3000 feet elevation, you start dropping, enter Death Valley National Monument 14.6 miles from Shoshone Junction, and go over Jubilee Pass at 20.3 miles.

Magnificent views of the ranges enclosing Death Valley are with you all the way from Ashford Junction to Furnace Creek Junction, 43.8 miles away. And there are many other interesting things close at hand. Such as the Ashford Mill ruins, 1.9 miles north of the junction.

And at the river is Shoreline Butte, to remind you that you are again at a ghost lake. This dark basalt hill rises 600 feet from its base, and a careful look will reveal several terraces cut by the waters of Lake Manly.

As the road continues north it stays above the level of the 20 Mule Team route. Before reaching Furnace Creek you pass some of Death Valley's widely publicized spots — Badwater, left; branch to Natural Bridge; right to Salt Pools; left to Devil's Golf Course; right to Gold Canyon drive.

Finally you reach Death Valley's newest attraction, the Visitor Center - Museum which is due to be dedicated Nov. 12 at 10 a.m. The project initiated in 1954 by Death Valley 49ers, was boosted by donation of 50 acres by U. S. Borax. State and federal appropriated government money for buildings, while the State Division of Parks and Beaches was in charge of construction. The museum will house many Death Valley items, and its opening may encourage donation of other historical items now held in private collections.

Encampment Program

The Death Valley 49ers Encampment begins at 7:30 p.m. Thursday the 10th with a campfire program at the Sand Dunes. Here are other program highlights:

FRIDAY, Nov. 11—Authors' Breakfast at Furnace Creek Golf Course, 8 a.m. Veterans Day Services at Scotty's Castle, 2:30 p.m. Campfire at Texas Springs, 8 p.m.

SATURDAY, Nov. 12 — Photographers' Breakfast at Furnace Creek, 8 a.m. Dedication of Museum and Visitors' Center, 10 a.m. Chuck Wagon Luncheon at Stove Pipe Wells, 2 p.m. Stovepipe Wells Bivouac at Stove Pipe Wells, 2:30 p.m. Evening assembly at park north of Golf Course road, 7:30 p.m.

SUNDAY, Nov. 13 — Religious services at sunrise. Artists' Breakfast at Furnace Creek, 8:30 a.m.

The Encampment is the big autumn event on the California deserts, but the annual Weed Show at Twentynine Palms is certainly worth a visit. The displays feature unique desert arrangements. Dates are November 12-13.

ASHFORD MILL RUIN. IN MIDDLE DISTANCE IS THE COURSE OF THE UNDERGROUND-FLOWING AMARGOSA. BEYOND ARE CONFIDENCE HILLS.

HICKORY FARMS OF OHIO "BEef STICK"

"No Pepper" "No Garlic" "No Vinegar" "No Pork" • FOR SPORTSMEN • A MUST for Fishing, Hunting, Camping, Picnics, Boating, Packing Trips — Because of its long lasting freshness — will keep without refrigeration. Guarantee of Satisfaction and Safe Delivery. No Charge for Mailing 100% Pure Beef Hickory Farms of Ohio Western Division P. O. Box 2306, Van Nuys, Cal. Approx. 4 lb. beef sticks are $5.98 ea., including all packing and mailing. Send check or money order. Please ship me Beef Sticks at $5.98 ea. New Customer Old Customer To: ___________________________________________________________________________ Don't forget a friend this Christmas!!

November, 1960 / Desert Magazine / 31
after two decades, still the desert's best gem-mineral field

By GLENN and MARTHA VARGAS

WILEY WELL: Twenty-five miles east and south of Blythe, California, is the Wiley Well District—one of the great Desert Southwest semi-precious gem fields. The well itself was dug just after the turn of the century, and for many years was an important watering place for desert travelers until paved highways replaced the pioneer trails. Wiley Well then became a source of water for livestock run in the region during years of good rainfall.

We have visited this area countless times in the past 15 years, and on only two occasions have we failed to see other rockhounds in the field. It is not uncommon to see a dozen parties on a rock search, and sometimes the number of amateur mineralogists at Wiley Well runs into the hundreds. Such popularity is wonderful, but it has its drawbacks. At least two of the more prominent collecting fields developed by rockhounds in this district have had mining claims filed on them, and vigorous attempts made by the claim holders to keep collectors away. We have always felt that areas discovered and developed by groups of amateur hobbyists should always remain free and open to those pursuing the pleasures of the collecting hobby.

Perhaps the solution to this problem is the creation, either under county, state or federal sponsorship, of a Mineral Collectors' Reserve at Wiley Well. The land here is nearly all in the public domain. Logically, Wiley Well itself could become the headquarters area for such a Reserve. Its water is potable, though somewhat hard. The well area abounds in good natural campsites, and is an ideal base from which to make short trips to the various collecting fields nearby.

We have expressed this idea on occasion; at first it received poor response from hobbyists. But times have changed. More and more good fields have been closed to collectors for one reason or another. The West is filling up with people—even the vast desert is no longer safe from the threat of being over-run. Of course, it will be many years before there is a hot-dog stand at Wiley Well—but the time will come—and the time to act is now, not after it is too late. We are very interested in hearing from others on this subject, and letters addressed to us, c/o Desert Magazine, Palm Desert, Calif., will receive careful attention. Let us hear what you think of the idea.

COON HOLLOW: Fire agate is a new gem material, having been known for less than 20 years. The first specimens we saw were displayed by Sam Payson of El Centro. He showed them to us one night in 1945 when we were camping at Wiley Well. Payson didn't know what they were, and was hoping that we did—but the only thing we could tell him about the stones was that they were beautiful. He showed them to others, and the rush was on to what became known as Coon Hol-
Fire agate.

By the time Randall Henderson wrote about the area in the March '54 Desert Magazine, many nice pieces had been collected there. In fact, the material was so popular that in '54 a few mining claims had been filed at Coon Hollow. Within three more years, claims were staked over almost the entire fire agate ground. The situation became such that claimants were carrying guns in order to keep collectors off. But, the "miners" soon found that the material was not plentiful enough to return a profit. Rockhounds want to dig their own baubles out of the ground. Few hobbyists feel inclined to pay for material that previously was theirs for the taking. Most of the claimants have drifted away, and today only a few remain. Recently we read a notice that one of them has re-opened his mine to rockhounds; all that he asks is that each visitor carry his automobile to find it.

Now that the area is again open, we heartily recommend it to all hobbyists. Material is plentiful, and one need walk only a short distance from his automobile to find it.

The road to Coon Hollow leads east from a point about three miles south of Wiley Well. After you have gone a mile on this side-road, a camp area is reached. Here the road forks, the left branch going up a hill a short distance to a number of diggings. We usually take the right fork, driving 1/2 mile to a turnout near the top of a slightly sloping grade. Others in our party have found nice pieces at the parking place, but hunting is better in the wash to the northeast and on the hills beyond.

Look for knobs of chalcedony with a deep orange to chocolate color. The latter color usually indicates the best specimens.

Fire agate is very interesting material. Actually, it is a form of chalcedony made-up of thin bands of microscopic quartz crystals. These crystal bands, usually laid down in hot solutions, are only roughly parallel, and usually take the form of knobs. At some point during this band formation, a layer of iron oxide in the form of the mineral limonite is laid down and then covered with more layers of quartz crystals. This layer of limonite may be only a very few thousandths of an inch thick, and as such tends to show an iridescent play of colors. If the chalcedony (quartz crystal layer) over it is clear, this iridescence can easily be seen. Careful grinding and polishing of this clear layer down to, but not into, the limonite layer produces the fire agate stones.

The chalcedony at Coon Hollow is of a milky-to-clear material generously cut through with color layers ranging from yellow through brown. Naturally, all of the material does not have fire, but these banded pieces often produce very nice stones when cut across the bands.

On rare occasion we have found small chalcedony nodules or geodes at Coon Hollow. Those that are hollow when cut are usually lined with tiny (drussy) quartz crystals. Sometimes the crystals are in the form of stalactites. Best of all, some of these geodes will show the wavy colored banding in the cut walls. This indeed can be a treasure!

Much of the rough chalcedony is lying on the hillsides and in the washes as float, having eroded out of the slopes above. This can be good material, but it is not as plentiful as in the past. Digging for fire agate is the most profitable means of gathering material. If you dig in one of the open claims, the problem of where the chalcedony is located is usually solved for you. But, you will have to do a bit of mineral detective work if you dig in undisturbed ground: follow the float up a slope; at the point where the chalcedony markedly diminishes in quantity is the most promising place to start digging. Hidden under the ground here may be the vein from which the float is eroding. You should begin uncovering chalcedony (if you are digging over a vein) just below the surface. The material is embedded in weathered lava, and careful digging (using a brush or small broom to expose the chalcedony knobs) usually pays off. Fire agate is still waiting for you at Coon Hollow!

Hauzer Geode Beds: Many hobbyists are interested in geodes, for they are fun to hunt. One of the North American Continent's most famous geode diggings is the Hauzer Beds, lying at the southern tip of the Black Hills. This field has been known for over 20 years, and is still a heavy producer. Not only are there geodes still left in developed fields, there are whole deposits untouched in the Black Hills. Each time we visit the area, we sight new roads leading to new finds.

To reach this popular area, first described by Harold Weight in the May '47 Desert Magazine, drive south on the main Wiley Well road two miles beyond the Coon Hollow turnout. You will pass two roads leading off to the right—the first is to a camp area; the second is the original road to the Hauser Beds, which still is passable. At the two mile point (just before a low range of hills) is a newer road to Hauser which saves a mile of travel, and misses some sharp dips. This winding road tends south and west, and has many side-branches; but the main road is fairly easy to determine. About four miles from the Wiley Well Road, Middle Camp is reached. Branch roads lead to the

THE LAPIDARY’S STANDARD OF VALUE

A LEADER IN ITS FIELD
Highland Park Powerfeed Slab Saw
Sizes range from 12" to 24". Metal or Lucite hood.

E-10 Combination Unit
Highland Park Combination Unit Available in all sizes. Perfect combination unit for lapidary work. Handles sawing, grinding, sanding, and polishing. Exceptionally quiet operation.

Arbors of All Sizes—Tumblers, Belt Sanders, Trim Saws — 41 Models to Choose From

For Less
Congo Dia Blades Sizes range from 4 to 24".

New . . . New . . . New

TERRY'S 1960 CATALOG

BIGGER AND BETTER

Unusual mountings and findings. Good selection of jewelers' tools, equipment, supplies, silver, books, cut stones, etc. Covington lapidary equipment. Top quality merchandise at reasonable prices.

Send 50c today for your copy

Money refunded on first $5.00 order

TERRY'S LAPIDARY
3616 E. GAGE AVE. BELL, CALIF.
east and other geode beds, but the main road tends south. If you are pulling a trailer, you had best park it at Middle Camp, for road conditions deteriorate beyond this point. A mile-and-a-half beyond Middle Camp, on the left, is a road to a geode bed known as the Potato Patch, discussed below. Farther on are a number of right-branches leading to other geode fields, and about five miles beyond Middle Camp is a flat area from which you can see a number of large whitish scars on a hill. This is it.

In this area you are literally surrounded by diggings. Almost any of the old holes, after some cleaning out, will yield geodes—or you may want to hunt for float geodes and open a new hole. Opportunities here are almost unlimited. Recently we were asked to name the best place in the Southwest for a novice rockhound to visit on his first field trip. Without hesitation we chose the Hauser Beds. If you don't care for digging, nice specimens can be found on the dumps on the slopes below each hole. We actually picked up a whole geode, later found to be lined with amethyst quartz crystals, on one of these dumps. If you like to dig for treasure, you may have the thrill of uncovering a "nest" of geodes—by no means a rare event. Digging here is easy; the volcanic ash in which the geodes are found is powdery.

We recommend that these geodes be broken open, rather than sawed. More than 85% of the Hauser geodes contain little or no agate; their hollows more often lined with beautiful crystals. Sawing does nothing to enhance the beauty of the crystals, and the brown rock geode shell will not take even a fair polish. We crack all of our Hauser geodes by carefully chipping with a chisel along a line in about three places on one face. We choose the longer dimension, and if carefully done, we end up with two nice halves. Hitting geodes with a hammer only results in smashed specimens.

POTATO PATCH: This field lying south of the road into Hauser Beds has been badly neglected by past writers. True, the Potato Patch is not as extensive as Hauser and the digging is not as easy, but a good percentage of the Potato Patch geodes contain prized amethyst quartz crystals. Some of the finest amethyst geodes that have originated in America were found here.

After leaving the Hauser Bed Road, about 1½ miles from Middle Camp, the Potato Patch Road dips into a small valley. Directly to the east, near the top of a low ridge, lie the beds. The geodes are contained in a layer of volcanic ash about a foot or two thick; the whole overlaid by a layer of lava. This makes for difficult digging, but plenty of it has been done here in the past. A pry bar and a medium or heavy hammer will help break-up the lava layer.

**Complete and practical—**

**Ultra Violet Guide to Minerals**

By STERLING GLEASON

A highly informative up-to-the-minute guide—designed to help every rockhound, gem collector, prospector, and geologist identify hundreds of minerals quickly and simply. Scores of full-color photos of fluorescent rock samples illustrate every vital point. Detailed chapters give all essential information on rare minerals, the fine points of prospecting, a survey of ores, industrial gems, the nature of fluorescence, and radioactivity. $7.50

At your bookstore, or order direct from

D. VAN NOSTRAND COMPANY, Inc.
Dept. D-11
120 Alexander St., Princeton, N. J.
At present, the most popular of the time Weight wrote about this area, the agate field, has been used to describe the landmark. Some near the agate field, and a new discovery of a manganese deposit made it fit for burro or four-wheel-drive vehicle. Continued penetration by rockhounds improved the road somewhat, but for several years this was a stretch to be dreaded. Then came discovery of a manganese deposit near the agate field, and a new road was cut through the area. Who the miners were, we never learned, for the ore deposit played out before we could offer our thanks for the boulevard they had created.

To reach the Twin Buttes area, travel south from Wiley Well about 5½ miles. Just after you pass the hills beyond the Hauser Bed turnoff, the road crosses a deep but easily passable wash. The Twin Buttes cut-off is on the left just beyond the wash, and can be seen winding over the small hills and washes to the east. About 1½ miles along the Twin Buttes Road, another wash is crossed. Just beyond this point, the road makes a sharp left turn, and then forks. The left branch leads to a nice camping area at the northern edge of the agate field and the foot of the buttes. We usually take the unimproved right-fork and follow it about a half-mile to its end, where there is a large parking area and a fair campground. From here a trail leads south down into a valley which contains the main agate field. We look the slopes to the right as you move westward. They have produced fine material.

ALO VERDE PASS: In the east-end of the Palo Verde Mountains lies Palo Verde Pass. This defile contains an agate field that Harold Weight wrote about in the November '56 Desert Magazine. Evidently, the field is an extension of the other areas to the west, for we find the material to be quite similar. At no time, as far as we can determine, was the Palo Verde Pass material plentiful, and the visits of many rockhounds have removed most of the accessible supply.

The thing to strive for in this field is quality. The good pieces are seldom more than 1½-inches long in greatest dimension. Out of most pieces we cut only a single cabochon. Our favorite method of hunting such material is to sit down on the ground and carefully search a five-to-ten foot circle, repeating this across the flat. Easiest rockhounding we know of!

If you camp at the foot of the buttes, you can reach the main field by walking up the valley and wash to the west. Hunting is good a short distance out of camp, and don't overlook the slopes to the right as you move westward. They have produced fine material.

white-to-yellowish material usually is poor or worthless when cut, and the best specimens are those small irregular pieces that are black with desert varnish. Careful chipping of the corner of one of these may reveal red, blue, purple or orange agate—or excellent-quality fortification agate made up of roughly circular concentric banding. We also have found green, black and orange moss agate, and, on rare occasions, fine golden sagenite. This sagenite, made up of bundles and sprays of golden needles in a blue or purplish background, is really prize material.

The flat areas yield agate float. The
OUT WHERE the mirage begins and the pavement ends is the 40-mile Gerlach-to-Leadville Road. If you can shake the trappings of ultra-civilized travel, do without noise, hamburger stands and signboards, you'll find this trip a dandy.

Maps won't tell you much about this country, except that Gerlach is 111 miles northerly of Reno, and can be reached by pavement on Nevada's State Route 34 or by a longer unloved road that winds past Pyramid Lake's west-side and through the Smoke Creek Desert. No map can tell you about the splendid hills, strange mountains, long valleys and wild canyons, streams and swamps north of Gerlach. Most maps don't even show Leadville—a highly photogenic "ghost town"—nor the petrified forest of "dawn redwoods" just beyond there. Maps also don't designate one of the strangest fountains ever evolved from a combination of natural force and human error, particularly strange in that it is a hop-skip from the great expanse of the Black Rock Desert.

This is old country in the known account of time, first explored by Fremont in 1844 and still much the way he and his tired men saw it. Gerlach is its own town, and Gerlach is very good to those visitors who don't carp for luxuries.

The fast route to Gerlach (Route 34) takes off from U.S. 40, 33 miles northeast of Reno at Wadsworth. It leads past the south-end of Pyramid Lake, through the Paiute community of Nixon, along the long dry Winnemucca Lake shores with their acres of ancient terracing left by long-gone inland seas. Route 34 skirts the industrial town of Empire, where U.S. Gypsum's immense white-powdered mill looms among neat homes and tree-shaded streets, but Empire is there for business and not to cuter to passers-by. Gerlach, another six miles up the road, is a fraction of Empire's size but its eight decades of being a frontier village permit it to look on Empire as an industrial suburb.

I prefer the Smoke Creek route, though it really is worth a trip in itself. A few ranches are along here, Garnaventa's, with the Garnaventa plane usually parked a long side the road, is one of the better known. In this remote country, the family plane is often as important as the family pickup, and the airplanies are uncluttered except by an occasional brown eagle. A few old mines, several side roads, shallow caves that may yield arrowheads or better—all of these make the Smoke Creek Road a happily slow trip.

But, however you get to Gerlach, be prepared to be self-sufficient henceforth. No filling stations, stores, hotels or motels from here on. The necessities are available in Gerlach, dotted along its one street. There is one small motel—Baum's—and one elderly one-story hotel which is usually full by evening with ranchers and "rail" from the nearby Western Pacific mainline. One restaurant, the Stanley Cafe, purveys good plain food. A garage and filling station, several bars, a movie theater and an excellent general store run by Justice of the Peace Charles Carter complete the facilities. There is no telephone line. Emergencies must rely on the lone radio-telephone, or on the Western Pacific's private wire to its own stations.

Most Gerlachers are glad to tell you what you need to know about the country hereabouts, and it's particularly wise to ask if you intend to leave the main Gerlach-Leadville stretch of road. Judge Carter has been here 31 years, and what he can't supply in the way of general information, gracious Postmistress Helen Thrasher can, and the postoffice is in the same building as the store. A couple of other obliging people with a great deal of necessary local know-how are Deputy Sheriff Cisco Aschenbrenner and Constable Shorty Taylor, who are the only law in these parts. Cisco and Shorty earn their wages; Gerlach can be rough and tough on a Saturday pay night.

Gerlach also bounces around in other ways. Every passing train jiggles it like a bowl of tapioca, and the omnipresent mirage frequently greets arriving travelers with the fine spectacle of Gerlach rising gently into the air and floating around the Black Rock's edge.

A half-mile westerly of town are Gerlach's own hot springs at which some experts (Prof. V. P. Gianella of Reno, for one) believe Fremont himself probably camped. The hot springs are still available to anyone, and they come in three temperatures—steam-hot, very warm and cool. The latter two are deep roundish outdoor pools filled with translucent turquoise waters. A "steam bath" is in a small hut made of railroad ties, and people with aches and pains say it does wonders for them. No charge, no restrictions, no life-guards—so keep an eye on the kids if they take a dip.

The road to Leadville (actually Route 34 extended) leads almost due north past the hot springs, at the edge of alluvial fans spread out to form rugged Granite Mountain's skirts. A lot of us who are familiar with the country quit the road about three miles from Gerlach and whiz along on the Black Rock Desert's marvelous flatness, enjoying our own wheel-tracks in the biscuit-colored surface, then cut back to the road several miles later. It's a good idea to know what you are doing when you try this cutoff — better check at Gerlach to make sure a recent rain hasn't turned this fast track into a quagmire.

Where the Leadville Road bends away from the Desert, it enters a broad valley dotted with ranches, most of which are holdings of the extensive Holland Land & Livestock Co. The fantastic fountain is
It's up to you where you go from Leadville. Maybe you'll mosey back to Gerlach and about the long long road across the Black Rock east to Sulphur, Rabbitbush and Lovelock. Maybe you'll push on north another 48 miles to Vya (and Vya is not a town—just its sides folded and draped to resemble a group of hooded figures. Its colors are rich umbers and oranges, greens shading from emerald to chartreuse, dashes of red and ochre. Rising from the tall grasses of the flat with the muted pastels of the Calico Range in the distance, the fountain is a spectacular phenomenon.

Beyond the fountain turnoff, the Leadville road stops along easily for some miles, then begins to climb. All along here are great sandy roads, and canyons. There are side-roads—but here again, know what you're doing when you explore them. Some lead into very rough country.

Some of the rougher parts of that country still carry the marks of emigrant trails. One of these routes winds through massive High Rick Canyon, and in one place the Canyon's shallow caves are names and dates of a century ago, scrawled in axe gashes. This side-trip requires a four-wheel-drive vehicle and a guide for comfort and safety. Leadville is 40 miles from Gerlach, and a small sign indicates the better of two roads to the little cluster of abandoned buildings clinging to the steep hillside. A booming mining community several decades ago, Leadville is peacefully vacant now. The rocky portal of its main tunnel just above the buildings is a cool resting place on a hot day, but going farther in is not recommended. There are usually a few miners still at work in the tunnel, and deep shafts or weak sidewall can mean serious trouble. The little watercourse in the canyon bottom is another attractive stopping place; last time there, my husband and I jumped a magnificent buck on its edge.

The petrified forest is another suburb of Leadville, a couple of miles farther along the main road. The great stumps, some of them larger than 20-feet in diameter, are relics of a forest that persisted through the ice age. They are for looking only, as recent legislation provides heavy penalties for souvenir-gathering. Ugly pits show why this relic of prehistoric splendors cannot be socialized. Some of the better stumps to get slabs for polishing.

Statement Required by the Act of August 24, 1912, as amended by the Acts of March 3, 1923, July 2, 1946 and June 11, 1960 (74 Stat. 208) showing the ownership, management, and circulation of Desert Magazine published monthly at Palm Desert, California, for October 1, 1960.

1. The names and addresses of the publisher, editor, managing editor, and business managers are:
   Publisher Charles E. Shelton, La Quinta, Calif.
   Editor Eugene L. Conrotto, P.O. Box 481, La Quinta, Calif.
   Managing Editor, Charles E. Shelton, P.O. Box 153, La Quinta, Calif.
   Business Manager, Leonard A. Shelton, California Bank Bldg., Pompoma, Calif.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the name and address of the stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the name and address of the individual owners must be given.)
   Owner Ray Golden, Hotel Reprint Dept., Desert Magazine, Palm Desert, Calif.

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

4. Paragraphs 2 and 3 include, in cases where the security holder is a corporation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to all the circumstances and conditions under which such bondholders and security holders do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960 to be included in all statements regardless of frequency of issue.) 34483.

Edw. Lightfoot, California Bank Bldg., Pompoma, Calif.
Mrs. Alice Shelton, 334 N. Cambridge, Claremont, Calif.
Robert M. Shelton, 2950 Lombardy Rd., Pasadena, Calif.
Eugene L. Conrotto, La Quinta, Calif.

November, 1960 / Desert Magazine / 37
AUTUMN DAYS are here again. The leaves on the cottonwoods are turning yellow, the ground squirrels are toting grass into their burrows for warmth against the chill air, the prospectors are returning from the higher elevations where they migrated when the low desert began to sizzle in 100-plus temperatures.

While most desert dwellers spend as many of the summer days as they can afford in the mountains or at the seashore, the desert also has been taking a recess. There have been few visitors to the remote canyons and along the unpaved trails, for the hazards of summer exploration where waterholes are far apart are well known.

In the meantime Mother Nature has been doing her annual house-cleaning. The winds have been sweeping the arroyos clean of the debris left by last winter's picnickers. Summer storms in many of the mountain ranges have scratched out new channels in the canyons and obliterated the tracks of former invaders, and perhaps uncovered new specimens for the trophy-hunting clan.

These cool crisp mornings are an invitation to get out the camping gear and the hiking boots and prepare for new excursions into this strange and fascinating land, much of which has never known human exploitation. It is good tonic for men and women and youth to go out occasionally, and for a few hours or days live close to the Good Earth which is the source of man's security no less than his sustenance. And that is especially true in these days when competition among men for office, for power and for wealth—at home and all around the world—seems to have reached a new and bewildering zenith.

This summer I have had the opportunity to renew my acquaintance with some of the park rangers who are custodians of the national parks and monuments in the Southwest. Almost without exception, they are courteous and helpful, and I have a high regard for the dedication with which they are doing their jobs.

It is seldom necessary, but they can be tough if circumstances make it necessary. I learned this a few years ago when I visited the Petrified Forest National Monument (now Park) in eastern Arizona. I came along just as a trio of motor visitors, attempting to leave the Monument with some choice specimens of agatized wood they had picked up within the boundaries, were being questioned by a guard. When the ranger told them politely it was against the rules, they mistook his courtesy for weakness and tried to bully him. And then they learned their mistake—and in the end they puffed back up the hill and deposited the specimens in the exact spot from which they had stolen them.

If the Republicans and Democrats don't very soon quit their game of passing the buck and solve some of the problems which are plaguing this nation—from farm surpluses to inflation to foreign policy—I will be in favor of rounding up all the politicians and sending them to the Congo and turning the administration of government over to the park rangers.

Speaking of foreign policy, I am ready to go half-way with Nikita K. I am in favor of moving the United Nations headquarters—but not to Austria or Switzerland or Russia. I would locate the offices and assembly rooms on an isolated bluff on the North Rim of Grand Canyon. The delegates—black, white and yellow—would eat together in a big mess hall and sleep in bunkhouses with big picture windows where every morning and evening and throughout the day they would be confronted with the harmony and majesty of God's creation. In such a setting, petty human struggles for power and selfish advantage become very insignificant indeed. That is a place to learn humility.

Folks are discussing and debating birth control these days as if it were a problem of recent origin. Actually, nature had devised various schemes for limiting its plant population long before man appeared on this planet. As an example: Several years ago Dr. James Bonner of Caltech carried on experiments with the leaves of common brittlebush (Encelia farinosa), the golden blossoms of which add color to the roadways and slopes during March and April.

The brittlebush—sometimes called incense bush—is a rather exclusive plant. Whereas some botanical species are sociable and snuggle up to each other, the encelia does not like to be crowded by its neighbors. Seeking the explanation of this Dr. Bonner gathered some of the fallen leaves and spread them around the stems of potted tomato plants and sprinkled them with water. In three or four days the tomato plants were dead. Then the scientist made a brew from the brittlebush leaves. The extract from this brew, he learned, kills several species of plants including corn and peppers. The extract, it seems, acts to prevent the roots of many other species from absorbing water—hence cuts down the birth rate in its immediate vicinity.
This feature story on Bill Bender is reprinted from the new book, "Painters of the Desert," written by the well-known Southwestern author and Los Angeles Times columnist Ed Ainsworth.

Featured in the book, in addition to Bender, are:

Carl Eytel • John Hilton • Don Perceval • Burt Procter
Brownell McGrew • Orpha Klinker • Conrad Buff • Paul Lauritz
Nicholas Fechin • Jimmy Swinnerton • Clyde Forsythe • Maynard Dixon

"Painters of the Desert" is now in the printers' hands, and will be published before Christmas. It will contain both color and black-and-white illustrations of the artists and their works. Desert art devotees desirous of receiving full publication data should write to Desert Magazine Book Store, Palm Desert, Calif.

The Master and the Pupil in the wilds.

A fresh touch in the symmetry of Nature.

Horses drawn from "the saddle viewpoint".

If there can be, without blood kin, a "second generation" of desert painters starting because of the profound influence of the "first generation" on them, Bill Bender is leading the cavalcade. All the factors above enter into his unfolding career.

Jimmy Swinnerton and Bill Bender will always be names linked in the annals of desert art; and the latter is becoming widely recognized not because he is an imitator but, on the contrary, due to the fact that he has had the courage to be different from his great teacher.

It is impossible to separate Swinnerton and Bender in any discussion of the latter. Yet the story of this young painter, not yet 40, and the amazingly devious route by which he has come to his present pinnacle of promise require no bolstering from any source.

Bill Bender is on his own. How he got there is worth chronicling.

The tale could begin in many ways. It might start...
with a very little boy living in his father's grocery store and covering the entire wall within reach with horse pictures on those occasions of meditation when he retired to the one sanctuary where he could really be comfortable and alone.

Or it could begin with the amazed customers of the grocery store when they received their sacks of canned goods and vegetables from the delivery boy because each sack was decorated with the drawings of the lad who had dawdled along the way.

Or it could even start a little later when a "saddle tramp" got "busted up."

All the beginnings would apply to Bill Bender and all would be appropriate and important in describing the events leading him, as if by preordination, to the one thing for which life was fitting him. At least, in retrospect, he so fits together all the tendencies and happenings shaping his future. Even more extraordinary, he did not even realize that the man whom he hero worshiped for so long was a painter; or that he, Bill Bender, would be so influenced in a particular direction when he finally met this exhausted being—Jimmy Swinnerton.

For sequence, the story of Bill Bender must begin in the little coastal town of El Segundo, California. This seems a strange place for the start of an interest in horses and horse trading, yet it was here that he launched on the type of activity which was to lead him down the strange trail toward palette and brush.

He was working in his father's grocery store but not enjoying it. From early childhood Bill had been able to handle horses and at this period he saw a way to begin to turn this talent into money. When he wasn't delivering groceries he was breaking horses and selling them to other richer—but more timid—boys.

At this time, besides being interested in turning the bathroom into an artistic stable with his horse pictures, he also began to fancy himself as a writer. But even this line of endeavor was interrupted because of his great success with horses.

He got good enough in the saddle to enter a rodeo. All over Oregon, Nevada, California and Arizona he went, either taking care of horses or riding them in rodeos.

Then came the real turning point in his life. He was really "busted up" by a horse, suffering serious internal injuries as well as a broken leg. Thus deprived of his chance to keep on making any money around horses, he turned seriously to writing.

Up in Oregon he had come to own a small piece of ground on which he thought he might try farming and writing while his insides and leg were healing. He hated the farming but thought he was doing well with the writing. He did stories on the West and decided he might as well try pen and ink sketches to go with them. His writing, he admits, must have been pretty bad. But out of it came Sequence No. 2 in the "Story of Bill Bender, Desert Painter."

He took a long manuscript, complete with pen and ink sketches to Paul Bailey, head of the Westernlor Press in Los Angeles in the hope of publication. Bailey a kindly adviser who knows both writing and painting, tried to be tactful and merciful in his judgment of Bender's literary efforts.

"I advise you," he said, "to try illustrating. You aren't very good at that either, but I don't believe writing is your strong point."

Thus rebuffed on one front and faintly encouraged on another Bender went out and bought a book on cartooning. At this time he knew nothing of Swinnerton's fame as an oil painter of the desert.

Swinnerton was making a lot of money doing the "Little Jimmy," "Kanyon Kiddies" and other western cartoons. "Oh boy, this is for me," thought Bender. "I could go live with the Indians."

Just at this moment, though, an editor bought an article and paid $35 for it. With this wealth in hand, Bill went down and traded his old car for a boat with the idea of going to South America.

Then Sequence No. 3 occurred. While he was waiting for the boat to be fixed up for the voyage, Bender bought a paper one day and saw in it that Jimmy Swinnerton was having an exhibition of desert paintings at a fashionable gallery. By this time Bender had become a tremendous admirer of Swinnerton because of his cartoon talents. Now to find that his idol also was a serious painter and actually close by so that his work could be seen was an exciting development. "Good gravy, I'm going to meet the guy," Bender exclaimed.

He made his way to the swanky address where the show was in progress. Outside, scores of fine shiny cars were parked. Inside, things were worse. Swinnerton was surrounded by a crowd of richly attired people, men in $300 suits and women in the smartest gowns.

"They all looked like millionaires to me and I heard them talking about trips to Europe and Rio de Janeiro and Miami," Bender confesses. "I just didn't have the nerve to go up and try to speak to Swinnerton."

Actually, this went on for six or seven trips. Bender would go to the gallery all fired up with his determination to meet his hero and then the same shyness would come over him when he saw the rich people surrounding Swinnerton.

Finally, in desperation, Bender telephoned the art gallery and asked for Swinnerton. "I told him," says Bender, "that I just wanted to come over and shake his paw because I had liked his cartoons for so long and had just found out that he did oil paintings too."

"Well, come on down," Swinnerton told me," Bender recollects. "That was all I needed."

When Bender arrived at the gallery Swinnerton left the group of admirers which always surrounded him and came to greet him. Swinnerton asked whether Bender had ever done any painting.

"Oh, just a little," I told him. 'I'm busy writing.' Of course I had to try to be a big shot and pretend I was an author. But pretty soon I got ashamed of
myself because Jimmy was so nice and showed me his paintings and paid more attention to me than he did to the other people. I told him I really wasn’t much of a writer and that I really would like to try to paint. Then I showed him my sketches.

Swinnerton asked casually whether Bender would like to go on a sketching trip. This sounded like heaven, of course, and Bill went down and talked the man into trading back the old car for the boat. South America lost out to Swinnerton.

But then Bender waited for three months. Finally, at last, Swinnerton did call up and inquire: “Are you ready to go to Arizona?” “Sure,” replied Bill who had been ready for 90 days.

He went over to Swinnerton’s house and there in front was a big new Packard all packed up with fancy suitcases and fine camping gear.

“I thought it was going to be pretty swanky stuff going in that Packard,” Bill recounts ruefully. But he was soon disillusioned. Another man came out to the car with Jimmy.

“You follow us,” Swinnerton told Bill. This was more of a shock than Bender cares to think about.

“I hardly had money enough to buy gasoline for my old car; much less any food. But I tagged along and got by the best I could. Jimmy and his friend would let me watch them sketch and I would try to see how Jimmy worked and then try to copy him.”

The memories of those days are still vivid with Bender. One day, years later, when he visited the Desert Magazine Art Gallery in Palm Desert he stopped suddenly and glanced closely at one of a number of Swinnerton’s field sketches which were being exhibited. Pointing, Bill exclaimed: “There’s the place where I made my first sketch, copying that one of Jimmy’s.” It was near Cameron on the Little Colorado River.

The expeditions in which Jimmy rode in his big Packard and Bill trailed along behind went on for a couple of years.

Then, one day Jimmy called up in his usual fashion and invited Bill over for another painting journey. Bill had gotten so used to tagging along by this time that he threw in his gear with the expectation of continuing the usual routine. But when he reached Swinnerton’s house a happy surprise awaited him.

No one was there waiting to get into the big Packard with Jimmy. “Who are you taking?” Bill asked. “You,” said Jimmy. “Get in.”

This was the real beginning of Bill Bender’s art career.

On that trip Jimmy began to devote his time to instructing Bill on the guiding fundamentals of painting in the out-of-doors. The first principle in all this was concentrated observation.

“ ’If you can’t see it you can’t paint it’, Jimmy used to tell me,” says Bender. “Lots of times he would tell me to sit and look at something so that I would be able to paint it and sometimes it was only four square feet of dirt.”

Swinnerton explained the mystery of shadows and the innumerable shades of color embodied in them if they were to be translated onto canvas. He particularly stressed that there is a balance in all Nature and that if the painter will look long, and philosophically, enough he can detect and translate this balance.

“My trouble was,” says Bender, “that I would miss the balancing factor so often and Jimmy would have to
tell me what it was. Sometimes it was only a rock to carry out the elemental composition.”

At this point, when he is remembering his early struggles in the realm of brush and palette, Bill grins and then grimaces. “So I never got to South America. And worst of all I had to go to work. Jimmy made me do it. I needed money for brushes and paints and for living expenses so I got a job in an airplane factory.

“They started me out doing blue prints for tool design at Northrop but I wasn’t geared right for drawin’ cold dead things. They finally came up with an idea of lettin’ me make perspective drawings off the blueprints for folks that couldn’t quite figger out a b.p., so that was a little better. But I was still waitin’ for that day when I could sit out amongst the sage, rocks and smoke trees . . . no tie, no starched shirt, no slicked back hair and no flat shiny shoes.”

For a long time he had felt this urge for wandering and the unconventional. He rode a horse from the Canadian line to the Mexican border. He went all around the country “on the rods” of freight trains. He associated with bums and prospectors. And all the time he was storing up ideas and ambitions for the painting phase which was to come later. Nothing ever daunted him.

“We used to get pretty hungry sometimes when we were bumming around,” he recalls. “I remember some other tramps and I were just about starved one time when we found a bull frog pond. We caught some frogs all right but nobody knew how to cook ’em. We finally just threw ’em in a pot and when their eyes popped out we figgered they were done.”

During his “dude” period he enrolled in Otis Art Institute at Jimmy Swinnerton’s suggestion. He couldn’t stand it. After one week he left to go back to his method of painting by trial and error. He did this with great enthusiasm. This young man has gone through life zestfully. He paints, collects saddles, rocks, bones and any kind of stuff, including skulls, with as much gusto as a kid trading for marbles.

He even shows his enthusiasm when he smokes. He “rolls his own” in brown papers out of Bull Durham, lights them up as if they were the most important things in the world, and then gets to talking so hard he lets them go out and has to light up all over again.

Bill is a sucker for pets, dating from the days when he was gallivanting around in his truck-camper in his bachelor days. Sometimes the pets presented real problems. He had the camper rigged up with enough water and butane so he could stay out for three weeks before going back to civilization. The conveniences included a gas refrigerator which he usually managed to keep full of trout.

“I’ve hauled as high as one mama dog, her seven pups, another yearlin’ pup—the previous year’s batch—and one coyote, plus canvas and frames. One year I received a telegram from Jim who was vacationing at the Bohemian Grove in San Francisco which read ‘Come a runnin’ at your convenience’ which meant he was ready to go home. Well, I was about three day drive away and on the way mama has another mess o’ pups.

“All went hunky dory on the way up but comin’ back through the Sacramento Valley it got so doggon hot and the jiggling of the truck sorts slid all then lil’ ole pups up forward in the aisle of the camper and one got himself smothered. He looked mighty deai to me when I pulled him out from under the rest o’ them but I wrapped him up in some wax paper and stuffed him in the freezing unit of the refrigerator and Jim an’ I waited under the shade of a big olive tree In a few minutes we could hear a little squeak an’ sur enough that pup was fulla life again. We gave it back to mama who gave it a good bath, a milk shake and the little fellar was good as new again.”

On the long trips with Swinnerton, Bill learned a technique which he still uses in his serious painting. He makes quick sketches for all the transitory light effects and shadows and then takes them back to the studio for finishing. Although he still contends he knows nothing of composition in a formal way, Bill Bender’s paintings show a cohesion and balance which reflect his basic understanding of the great lesson which Swinnerton imparted to him about the symmetry of Nature.

With this, he combines an almost poetic element in his makeup which enables him to look out upon a scene and cloak it with romance. “I remember once a mass of sheep coming over the edge of a red mesa and the shimmer from the sheep in the sun light,” Bill reminisces, with his eyes half closed.

At least once each year he feels he must travel to Arizona into the realm of vivid blue sky, jagged peaks, square-cut mesas and brilliant sunshine. He never gets enough of this kind of life. The out-of-doors always is calling even when he is in his long-wanted studio which he at last has obtained.

For that matter, he even has a little “spread” of his own at Oro Grande near Victorville in the Mojave Desert where he can step from easel out into the midst of Nature whenever he feels he has to have a breath of fresh air. Sometimes, too, he quits painting if there are too many people around.

“I can’t do much when folks are watching me but with the dogs fighting and scratching around I’m not bothered a bit. Dogs don’t criticize.”

In addition to his best dog, Senor Coyote—whose mama must have been part hamster because she was so prolific—Bill and his wife Helen maintain a Palomino horse, Mr. Bones. Helen is a real help in the painting business because she sands the frames into artistic patterns and paints them herself. She loves to fish and to collect rocks, which fits right in with Bill’s sketching trips.

Bill Bender, for all his knocking around among rough and unruly men for so long maintains a sensitive approach to the whole subject of painting the desert. He realizes the necessity of selling his paintings for
monetary returns but refuses to let it change his philo-

sophic or artistic approach.

"Jimmy told me to go ahead and paint what I want, what ever appealed to me, and that when I got married I'd sell some more and keep things going financially. That's the way it's turned out. Can you imagine Bill Bender, the old saddle tramp, with a bank account and my name printed on the checks!"

As more and more success has come to him Bill Bender has not forgotten loyal friends who showed faith in him when he was just a green kid trying to get started and still living in the mighty shadow of Jimmy Swinnerton. One of these is Harriet Day, former curator of art galleries in Palm Springs and at the Desert Magazine Gallery in Palm Desert. Bill recalls that in the early days at the time of his first shows Harriet would even have to name the pictures for him, a task which still stumps him at times. He professes not to know how to provide appropriate titles for his painting but his patrons are satisfied. Some of the people he treasures as friends as well as customers are content to have a mingling of simple titles with those of a more dramatic nature.

One of the friendships which was born of a “hand-

shake deal” in Death Valley nearly a decade ago is that of Bill with Mr. and Mrs. Harry Lee of Rancho Santa Fe.

“When I first saw Harry up in Death Valley he asked me how much I wanted for a painting called ‘April on the Desert’. I told him. He said he had to run back to Stove Pipe Wells for his check book which he had forgotten so we shook hands to bind the deal and he took off. While he was gone, I had a chance to sell the same painting for cash to one feller and also by check to another but I was letting my faith ride on that one handshake . . . by a feller who’d known and lived with the same breed as I had in my days in the Owens Valley, where I packing into the mountains.

“Well sir, that handshake was one that’d stand the test of time. Harry and his wife, Dottie, became lifetime friends.”

Among others who have become painting owners and friends are Dr. and Mrs. James L. Killpack of Victorville who have “Desert Autumn,” “Evening Gold,” and “Where Smoketrees Grow;” Miss Margaret E. Niles of Los Angeles who owns “Springtime in Box Canyon,” “Evening Solitude,” “The Old Guard,” and “Trail to the Monuments.”

One of Bender’s cowboy scenes showing cattle being taken from one range to another is called “Movin’ A Few” and is owned by Mr. and Mrs. Bob Beckwith of Pacific Palisades. A mountain scene “The Campsite” belongs to Mr. and Mrs. W. D. McNamee of San Gabriel who manufacture the kind of campers used by the Benders.

Bill ranges far to get his subjects, and sometimes he has wondered whether he was ever going to get home again. Once he was out with a missionary in the Yaqui country southeast of Hermosillo, Mexico. A whole group of Yaquis started chasing Bill and he thought his last hour had come. When they caught up with him he held out a can of tuna to stave off massacre.

“God Bless, you Brother Bill,” one of the Yaquis said.

It turned out the Indians had been pursuing him only out of religious gratitude and one of them gave him a plot of ground as a token of friendship. But Bill still doesn’t have the deed. He figures he has to get some more tuna and paints and go down there to round out his Yaqui experience.

He still uses only a few paints, as was taught by Jimmy Swinnerton. In recent years, though, he has had the courage to try other palettes besides that of Swinnerton. As a result, he has attained more and more individuality in his work.

The first prizes he has won at the Death Valley art exhibit and the response he has met in the galleries at Palm Desert, Scottsdale and Palm Springs have proved he has made good on his own.

Recognition has come on a national scale as well as locally.

“Blooming Ironwood,” one of his large paintings which won first place in Death Valley in 1959 has been chosen by the National Geographic Magazine for use in an article about Death Valley. Another painting “Desert Foliage,” has been reproduced in prints in New York and has been chosen by an American chain of financial institutions to hang in each of its offices.

These are landscapes but Bill cannot long resist doing pictures with his favorite subject—horses—in them. He says he tries to paint horses with one thought in mind, a question for himself:

“How did you feel when you were in the saddle?”

His horses do have the animation and reality which only a “saddle tramp” with great feeling for them could convey.

So, today, a long way from the little boy scribbling horses on the wall and the confused youth who first went to see Jimmy Swinnerton, Bill Bender is racing full tilt ahead in his art career.

He never for a moment forgets Swinnerton the Master.

But Bender the Pupil now rides alone.
If you would like to have a superbly lithographed reprint of "Desert Wash," on heavy quality stock, suitable for framing, 8.5x12-inch in size (including a half-inch white margin), send $1 to: Reprint Department, Desert Magazine.

Artist: Bill Bender

(see story on page 39)