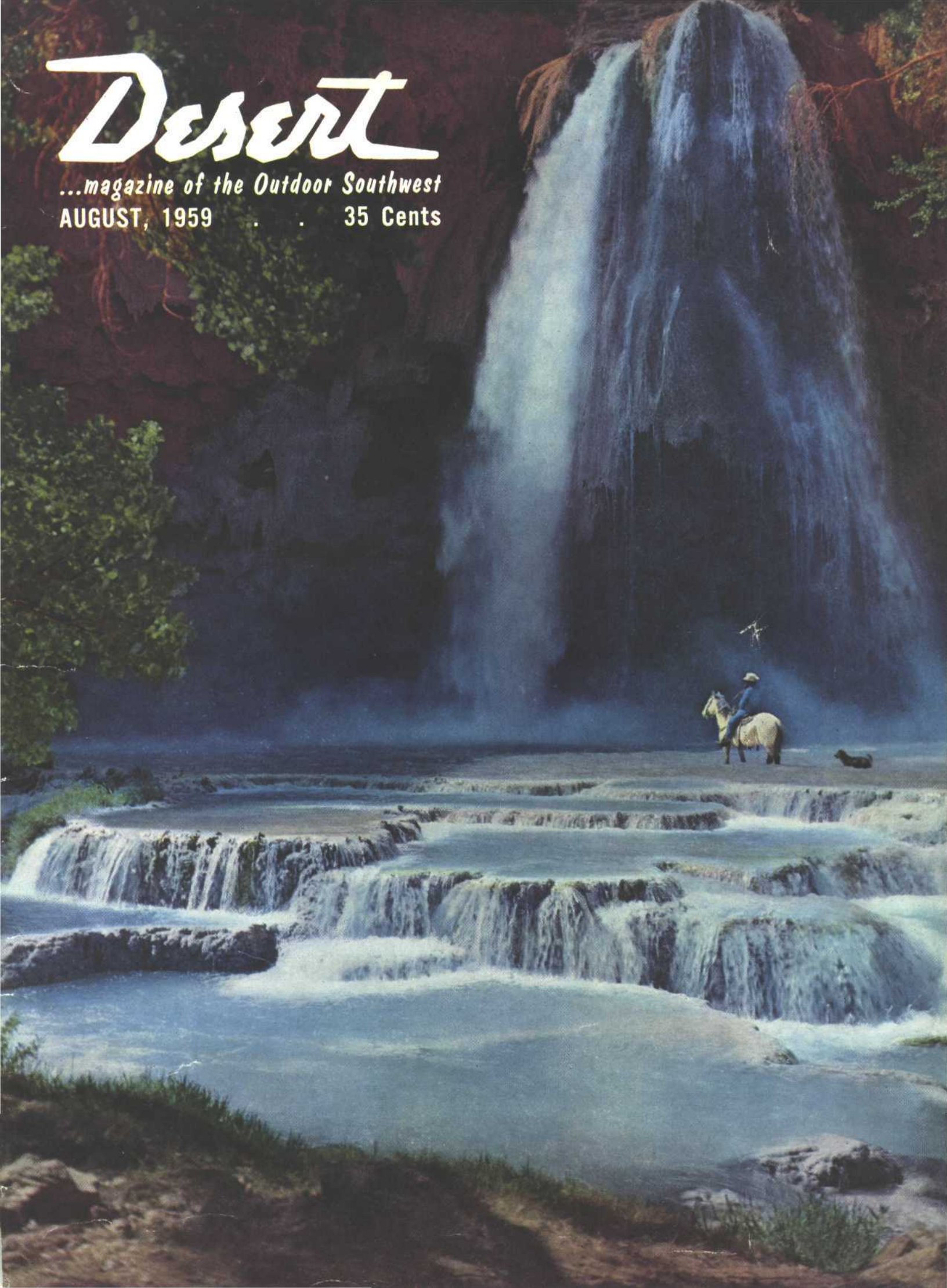
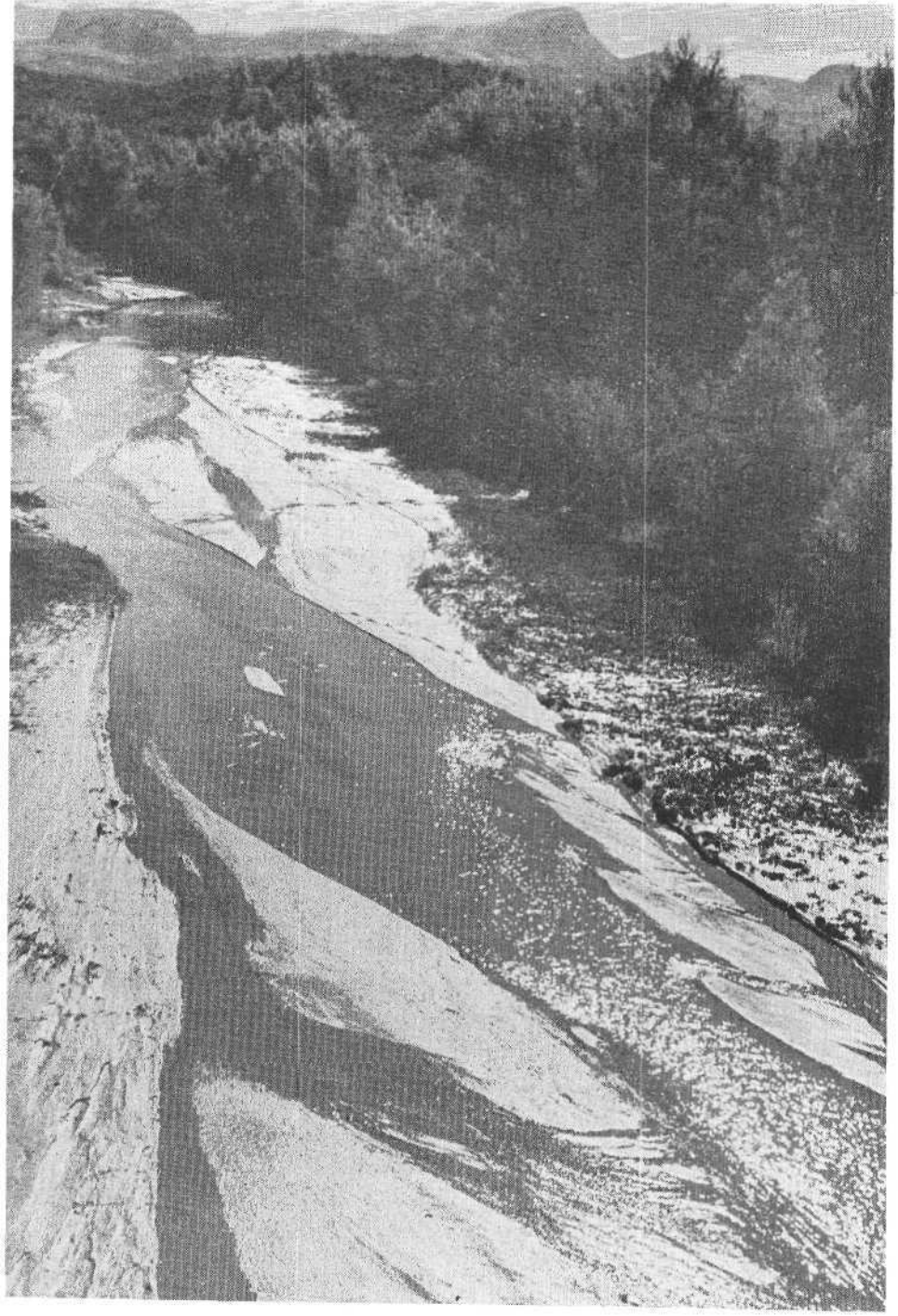
Desert

...magazine of the Outdoor Southwest

AUGUST, 1959 . . 35 Cents





The Silent Beauty

By L. STANLEY CHENEY
San Diego, California

There is a silence:
an unseen, unknown, yet ever living silence
Of the desert.

It stealthily moves
on the feet of fantasy across the vastness
Of the barren land.

And there is sadness:
an unconcerned, indifferent, strange sort of sadness: entwined with the silence and the vastness
Of the barren land.

Yet, with the silence and the vastness and the sadness
there is beauty—
an untamed, foreign, naked beauty.

And as I, knowing my smallness,
stand alone on these innumerable sands that comprise the desert
I am captured by the beauty,
and I listen, am enthralled, endowed with that happiness that only Nature can conceive in Man.

VERSE FOR AUGUST



Desert

...magazine of the Outdoor Southwest

Volume 22 **AUGUST, 1959** Number 8

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Photo by STEWART CASSIDY

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ABOUT THE COVER . . .

. . . In the language of the Indians who live in an isolated side-gorge of the Grand Canyon, "havasu" means "green-blue." Because the water in the creek flowing through their high-walled canyonland has a decided turquoise cast to it, the canyon, creek and the falls pictured on the cover all bear the name Havasu. And to make things unanimous, the Indians themselves use "blue-green" as a prefix to their tribal name—Havasupai. Photographer Stewart Cassidy of Prescott, Arizona, is a student at the University of Arizona. He took the cover picture while spending his Easter vacation in the well-favored land of the turquoise waters.

Publisher's Notes . . .

For the Indians of the Southwest, the month of August is the high point of their dances and ceremonies. Thus, *Desert Magazine's* August issue emphasizes the Indians.

Helping us with our task is one of Hollywood's top fashion photographers, Andre de Dienes, who supplied the fascinating Indian face-studies that appear on page 22 and 23 (in the center of the magazine).

The versatility of de Dienes is evident, but how came it to pass that a Hollywood craftsman also ranks as a master photographer of Indians? In his own words, de Dienes explains:

"When I was a child in Hungary, I read much about the Wild West. Some years ago when I first came to the United States I took time off between my first two assignments (photographing new cars in Detroit and movie stars in Hollywood) to visit Acoma, New Mexico.

"The 14-mile road to the pueblo was narrow and sandy, and I decided against driving it. So I left my car at the highway junction and started off afoot for the village. I got there at dusk.

"Of course there were no white people living in the village, and no accommodations for tourists. The Indian Governor very graciously offered me a bed in his home—in fact, it was his bed. The Governor and his parents, wife, sons and their wives and a large number of small children and I had a strange (to me) kind of stew for dinner, then the children performed Indian dances while their elders chanted. This went on for hours, and my introduction to the American Indian made a lasting impression on me. I returned to New Mexico year after year to photograph Indians.

"Although glamour photography is much more lucrative, my fascination with the Indians has never lessened, and if I were commissioned to spend several months among them to take photographs, I would happily close my Hollywood studio and trade my comfortable life for the rugged life of the desert. Indians are an inexhaustible source of inspiration for artists."

CHARLES E. SHELTON
Publisher

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CHARLES E. SHELTON, Publisher
EUGENE L. CONROTTO, Editor
RANDALL HENDERSON, Advisory Editor
EVONNE RIDDELL, Circulation Manager

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Part One RANDSBURG 1896-1901

By HARRISON DOYLE

THE FIRST thing I learned from the other kids in the Mojave Desert Mining Camp of Randsburg in 1896 was that so long as there were no white crystals of nitroglycerin on the outside of dynamite sticks, you could light them in your hand and they would burn like railroad flares.

Next: that I could apparently become rich selling whiskey bottles, running errands for the girls back of the saloons, and exploring for coins that fell through the cracks between the boards on the walks in front of the stores and saloons.

A decade before my Randsburg days, Dad had settled the family on a ranch in Santa Monica. From there he went to each new gold rush—Darwin, Calico and the various Arizona "excitements"—during the '80s and '90s.

I particularly remember the time early in '96 when he returned from Calico and exclaimed to Mother, "Mollie, they've just made a great strike between Kramer and Mojave. I'm getting in on the ground floor."

"This time we're all going with you," mother replied.

"But Randsburg is a raw camp, Mollie," Dad said emphatically. "No accommodations. It will be too rough on you and the children."

Mother was just as emphatic. There was quite an argument. I remember her telling him, "I was born at the foot of Mt. Shasta, in Indian territory. My nurse was Captain Jack's Modoc Squaw. I was with you in Tombstone when the Earps and Clantons had it out. Do you think Randsburg could be as rough as that buckboard trip we made into Benson to escape the Apache Kid?"

Dad capitulated. "You win," he said.

That's how we—my parents, two sisters, a younger brother, and myself—found ourselves in Randsburg.

For two $20 gold pieces Dad bought a nondescript dugout in the side of the gulch about a block behind "Main Street." Facing Main, even at this early date, were three saloons, an assay office, the St. Elmo Hotel and the Elite Dance Hall. Between our dugout and the back of the Elite was the canvas and tar-paper red-light "row." And between us and the St. Elmo stood the latter's board-and-batten outhouse—one end for the women, the other for the men.

The Elite was a board-on-end affair, tinder dry. It had a tinny piano, dance floor and small stage. The songs of the day floated over the warm clear desert air to us those first summer evenings: "Little Annie Rooney," "After the Ball," "Bicycle Built for Two," "Rainbarrel," and others.

We lived several months in the dugout while Dad prospected. Our table and chairs were made of dynamite boxes; our stove, from two five gallon coal oil cans riveted together. Mattresses were of striped ticking, filled with greasewood tops. Dad staked a claim back of the Yellow Aster which he called the "Lillie May" after my eldest sister.

I loved to watch the dusty six horse or mule jerk-line teams tugging ore to the new Kenyon Mill, or hauling freight into town from the railroad at Kramer, on the Santa Fe. A jerk on the line to the lead animals, and a shouted "Gee!" would turn them right; a "Haw" and a jerk, left. Sometimes loads of greasewood roots, the town's only firewood, would pass up the gulch in front of the dugout.

I used to wander barefoot into the St. Elmo, to look at the fist-sized "nugget" and other mineral specimens on the counter, and to run errands for the hotel clerk.

With no water in town except the little we had to drink, there was no way to save Main Street when the inevitable fire broke out.

As soon as the ashes cooled, I was

in the ruins prospecting for the St. Elmo nugget. I didn't know then that it was only a gilded piece of lead with which to fool the tenderfeet, but I was learning human nature fast. Instead of "gold," I struck a glob of silver coins melted together in what was left of the cash drawer, and in the excitement ran a nail through my bare foot.

There was no doctor in town, so Dad put my foot in a pail of turpentine for a couple of hours "to kill the lock-jaw."

After the fire we moved into larger quarters up the hill. We had three rooms now, and some furniture from the Santa Monica ranch.

In 1897 there were over 5000 people in the booming town. The new drug store purveyed the simple remedies of the day. For *la grippe* and sore throats we kids got a sour lemonade, or a spoonful of sugar, wet with coal oil or whiskey; for a purgative, cascara bark, calomel, salts, or castor oil; for bruises, wizard oil or arnica. Mainly because of its complete lack of sanitation, the town had one epidemic after another—"brain fever" (probably some form of meningitis), smallpox, chickenpox, mumps, measles.

When I sold some bottles, or found coins under the boardwalk, I'd repair to the drug store and buy hard candies which came in little green-and-white striped bags, or treat some of the other kids to a licorice root, or a sarsaparilla or cream soda bottle with their push-in wire sealing caps.

At that time gold and silver fever throbbed through the Southwest. Talk on the streets invariably turned to the Mother Lode, Virginia City, Panamint, Vanderbilt, Ballarat, and other bonanzas.

Besides the Yellow Aster, other mines working close by town were the Big Butte, Little Butte and Kenyon. Men came in every day from the Stringer District (later to become the great tungsten producer), with pokes of gold dust. They also came from the placers below town, which they worked with dry washers, and from the Goler placers across the valley.

The saloons always interested me. I liked the cool sawdust smell that came up from the cellars where they kept the kegs of beer and the ice. The saloons looked much like they do today on television except then they all had shield-like signs on each side of the bat-wing doors advertising the likes of "Wieland's Beer" and "Mayer & Zoblein." The saloons and barber shops all had poker tables in the rear, and really woke up on paydays. Floors were covered with sawdust, and brass machine. There was always a little strawberry left over for me.

A favorite sport of the men who hung around the saloon fronts was to "electrify" the canvas water bags hanging in the shade. A long-handled tin dipper touched to the water produced a man-sized shock, pretty rough on a barefooted kid. I early learned to stand on a dry board when drinking.

In 1898 Dad brought out his books from Santa Monica, and the townspeople, starved for reading material, persuaded him to start a library. There were sets of Dickens, Scott, Fenimore Cooper, Hugo, Dumas, Balzac, Voltaire, DeMaupassant and many others —some 2000 volumes. Dad also had an autographed set of the works of A. Conan Doyle, a distant cousin.

A short time after the library was



LOOKING EAST ON BUTTE STREET, RANDSBURG, IN FEB., 1897. PHOTO COURTESY KERN MUSEUM.



cuspidors were everywhere. Most of the games were straight. One time I saw a group of miners tar and feather a "shark" for cheating.

Girls "worked" the men in the larger saloons for drinks, on which they got a "cut," generally a poker chip, which they could cash at the bars. Most of these "floozies" were fat and frowzy.

When I was 11 I became the printer's devil at the *Randsburg Miner*. I straightened out type, swept the floors and delivered the papers. I worked awhile at Seebold's Meat Market, then at Miller's Drug Store across the corner from Wells-Fargo. I liked Miller's best because of the bobbing milkshake

opened a virulent outbreak of smallpox occurred. Some books were returned to the shelves from smallpox infested homes before the disease was identified, and the "Committee" burned Dad's library to "stop the epidemic." The only books saved were the Family Bible, and an old set of Shakespeare which my elder sister had hidden out.

We paid two-bits for a five-gallon can of water. The water man stuck a siphon hose in the top of a barrel on his wagon, sucked on it until the water came, then filled the cans.

Before water was piped into the town from Mesquite Springs it came mostly from Cuddeback Wells near



THE AUTHOR'S FAMILY IN 1901. STANDING, FROM LEFT: LILLIE MAY COOPER AND HAZEL DAVIES, SISTERS; FRANK M. DOYLE AND MARY S. DOYLE, PARENTS. SEATED: LIEUT. COL. R. N. DOYLE, GRANDFATHER, WHO HAD BEEN GENERAL SUPERINTENDENT OF CONSTRUCTION FOR THE ATLANTIC AND PACIFIC RAILROAD; THE AUTHOR, ABOUT 12 YEARS OF AGE; ROBERT N. DOYLE, BROTHER, NOW OF WENDEN, ARIZONA; AND ELIZABETH JANE SWEETMAN, GRANDMOTHER, WHO CAME WEST IN COVERED WAGON. TWO YOUNGER BROTHERS NOT PICTURED.

Atolia on the desert flats. This water was full of alkali, and we mixed oatmeal with it to kill the taste. The Yellow Aster piped water up from wells at Garlock, about eight miles away. They built an immense stamp mill which soon had a big tailings pond below it, but we kids could not swim in it because the mill ores were treated with cyanide.

About a dozen of us were enrolled in the little one-room school at the head of Fiddler's Gulch. For amusement during recess the boys dug tunnels in the side of the wash, until one lad was suffocated in a cave-in. I was sweet on a little girl named Nellie Lackey. One of her playmates was Viola McCann. Viola was forever getting into trouble with the teacher, and being switched. One day Viola came to school with cardboard under her stockings and elsewhere for protection. The sharp noise the teacher's whip made when she started in on Viola made the kids laugh. The teacher released Viola, then went outside and cried.

Sometimes the boys entertained themselves by placing revolver shells between two rocks and striking the top rock with another, or by throwing abandoned dynamite and caps down old shafts trying to make them explode. One day one of the boys held a blasting cap in his hand while another lighted it. One of them lost two fingers, the other an eye.

The one thing I hated to see happen was the older boys catch a dog, tie a tin can on his tail, and smear his rump with turpentine. The unfortunate canine would bang around under the boardwalk, yelping with pain.

My hero was a boy named Tommy Anderson, about four years my senior. He was a "powder monkey"—distributed dynamite to the miners in the eerie shadows of the flickering candles in the Yellow Aster's underground workings. I would have given an arm to have been in his shoes, except that rumor had it there were "hydrophobia skunks" up under the Glory Hole at the back end of the Trilby Tunnel. I wanted no part of them.

In those early days in Randsburg I never doubted any of the tales that floated around for little boys to hear. Like that of the existence of an animal the miners referred to as a "Side Hill Goudger," which, it was said, had short legs on one side so it could walk level around the hillsides. Also, I was sure of the existence of "Tommyknockers," a sort of gremlin that inhabited mines in which men had been killed.

Louie Stoll, the saloonkeeper, sent me under the walk one day to retrieve a gold piece he had lost. I went under in front of the Orpheum Dance Hall, and crawled back to Louie's, about three hundred feet. While I was industriously pawing about through the rubbish, I heard shouts and the wild clanging of a triangle. I smelled smoke, and saw a red flicker near the Orpheum. The town was on fire—for the third time—and I was trapped.

I started frantically looking for a place to exit, but the planks over me were heavily spiked. I scrambled as far as the front of Tenney's Barber Shop where someone pried up a plank and shoved a box of dynamite down alongside me. It was fused. I yelled again, and I'll never forget the expression on the man's face when he spied me.

"Hell!" he shouted. "There's a fool kid in here!"

He unceremoniously yanked me out and proceeded to push the box of dynamite farther under the barber shop.

I ran on down to the front of Asher's Store while boards and barber chairs rained down from where they had blasted the firebreak. Part of a piano came down about a hundred feet from where I had stopped to get my breath. It went "bong!" when it hit the ground, and a woman laughed hysterically.

At Asher's, people were putting furniture into his supposedly fireproof store. The building was of stone, with steel shutters and a corrugated iron roof.

I heard Mr. Asher say, "I'll put my wife in there, I'm so sure it's fireproof!"

Luckily, wiser heads prevailed, and Mrs. Asher was deported elsewhere, but a new piano, a lot of groceries and many valuables went up in smoke as Asher's building failed him.

The only whipping Dad ever gave me was over a $20 goldback I found one day in some trash. Edmund Young, the postmaster's son, and I went down to Illingsworth's Store and loaded up with fancy candies and other gewgaws.

When I got home, Dad was waiting for me with a board. "There's one thing I won't stand for in this family, and that's a thief!" he cried as he began laying it on.

About the third whack Mother screamed from the next room, "Frank, stop it! I've found the 20 where I hid it in a shoe!"

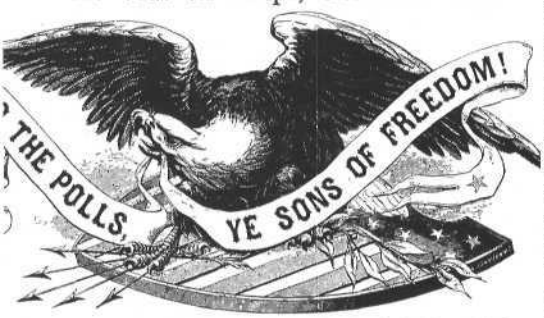
Dad threw the board out the door as far as he could. He looked at me a long moment, then said quietly, "I'll



never strike you again as long as I live!" And he never did.

Randsburg had its "crazes," too. There was the picture flipping craze around the turn of the century. The little cardboard pictures came in Abbot Kinney's Sweet Caporal "Cigareet" (we called them "coffin nails") packages. This art was of reigning actresses and what we would call today beauty queens. The boys would flip the pictures to a line, and the one who came closest to the mark would collect all the pictures. Most of the men smoked Bull Durham or Duke's Mixture, rolled their own in brown paper, or else chewed Star or Horseshoe plug cut tobacco.

My daily job at home was to fill the coal oil lamps, clean the chim-



neys, carry water, and grind Arbuckle's coffee in the little mill on the wall. With Arbuckle coupons you could get an assortment of premiums—even a piano if you collected enough. In the years we were in Randsburg, I swear I ground enough coffee to outfit a symphony orchestra.

For entertainment the townspeople watched the stagecoach come and go. The green strong box rode under the front seat in care of the Wells-Fargo Messenger and his sawed-off shotgun. As far as I can remember there never was a holdup of any sort, although in one month alone there was a million dollar "cleanup" sent out from the Yellow Aster Mill to the San Francisco Mint.

Some of the men in town would put on amateur minstrel shows at the Miner's Union Hall, until it burned down in the second fire. The "Quaker Doctors," a sort of small traveling carnival, came each year, lit up by newfangled gasoline flares. After the second fire the business district built up along Butte Avenue, detouring the hoist headframe over a deep shaft in the middle of the street in front of the Orpheum.

On the Fourth of July there was always plenty of excitement. Hard rock miners came from all over the country to the drilling contests. The miners, many of them Cornishmen ("Cousin Jacks") from the Yellow Aster, tied four inch fuses to sticks of dynamite, lit them and threw them into the air to explode overhead. On one Fourth a miner lost an arm, and the practice was discontinued then and there. The kids ran the three-legged race, the women the spoon race. Grown folks tried to catch the greased pig, or climb the greased pole. Boys my age always entered the pie, or soda cracker eating contest. In the cracker contest, the first kid who could whistle after eating the allotted number of crackers, won.

The miners' wives never used anything for beautification except perhaps a little face powder. A few more daring souls used a hint of rouge and took the chance of being labeled "fast." Everyone in town knew the floozies by the way they dressed. They wore hats instead of fascinators. Many were "embryo" actresses, having started in that profession and failed.

As I look back I think the funniest event that transpired in my Randsburg episode took place on a journey I made with my Grandmother Sweetman in the winter of 1898.

As we boarded the stagecoach to Mojave she gave me a newspaper-wrapped package. There being no room inside the vehicle, I was put up between the driver and the shotgun messenger. A fierce north wind was blowing, and I was numb with cold by the time we reached Kane Springs. The wind had completely ripped the wrapping off the parcel I was carrying. I disembarked from the stage in a barrage of laughter, tightly clasping Grandmother's glistening white china chamberpot.

I learned a great many things in Randsburg, chief of which was to sift the gold from the gilt; the real from the tinsel in life. And the gift has stood me in good stead throughout a long, and, I hope, useful life. In its way I'm sure life in a raw mining camp was no worse than what some kids go through today with their voodoo dances, TV blood baths, and horror movies. I saw the drab uncolorful real day-to-day West; today, the youngsters see the dressed-up version which came in with Tom Mix movies.

I instinctively realized then that folks changed the minute they got away from "civilization." They would let down the bars and do things in a mining camp they would never dream of doing at home.

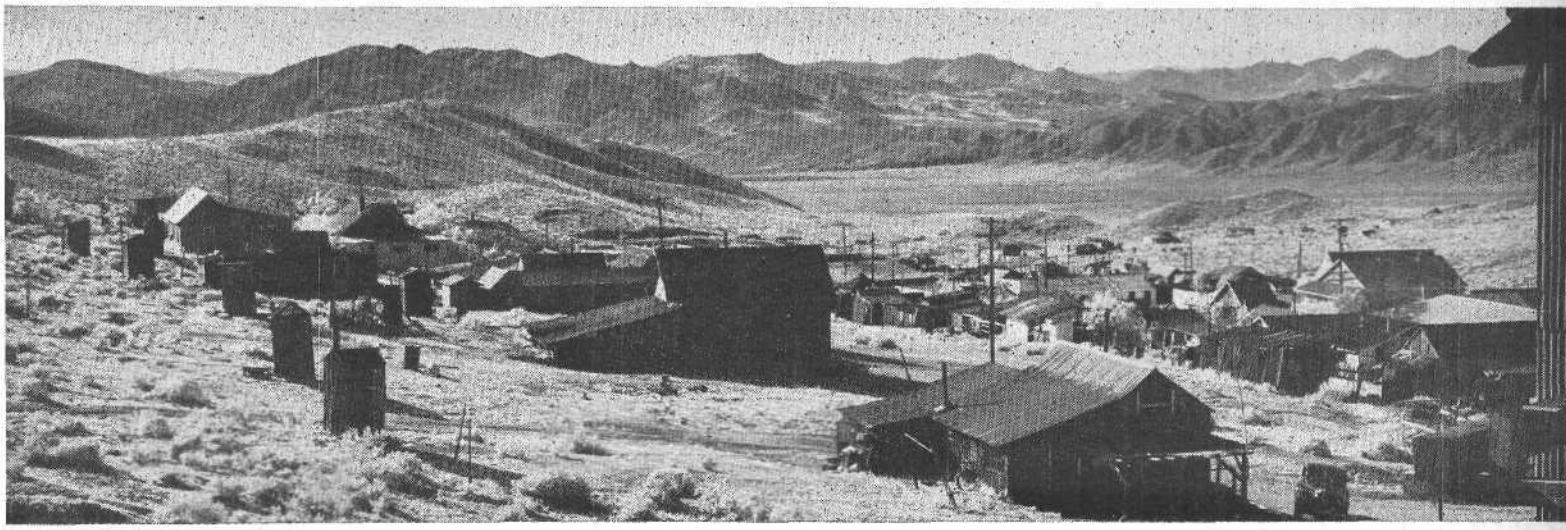
It came time for Dad to leave. Rumor had it the railroad was coming in as far as Johannesburg, over the hill from Randsburg. Dad bought into a business in Needles on the Colorado River — "a very likely mining country."—END

COMING

In Desert Magazine

Part II of Harrison Doyle's "A Boy's Eyeview of the Wild West"—his 1901 experiences in the "railroad and river" town of Needles, California.

TODAY RANDSBURG IS "WESTERN," BUT NOT "WILD."



SANGRE DE CRISTO

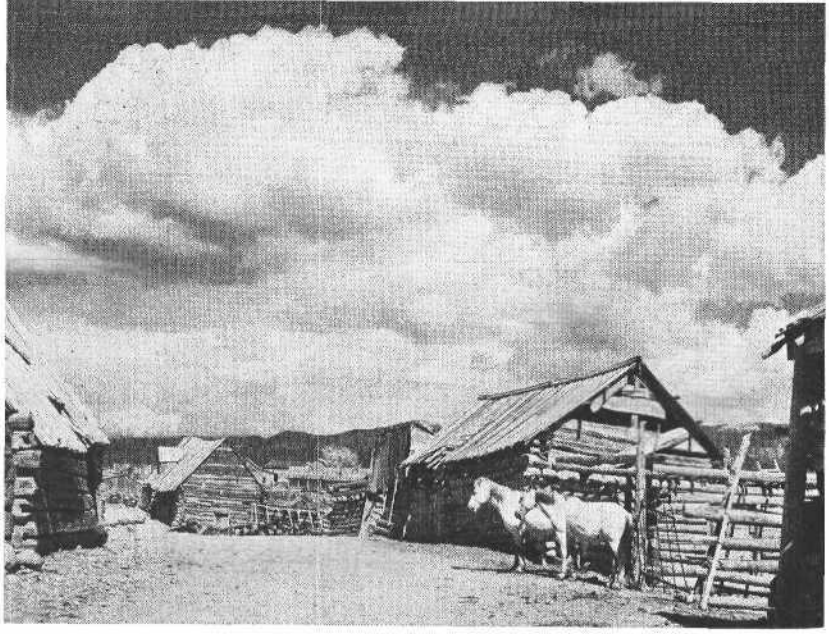
SANTO TOMAS DEL RIO DE LAS TRAMPAS—THE 350-YEAR-OLD CHURCH SERVING THE SANGRE DE CRISTO MOUNTAIN VILLAGE OF LAS TRAMPAS.



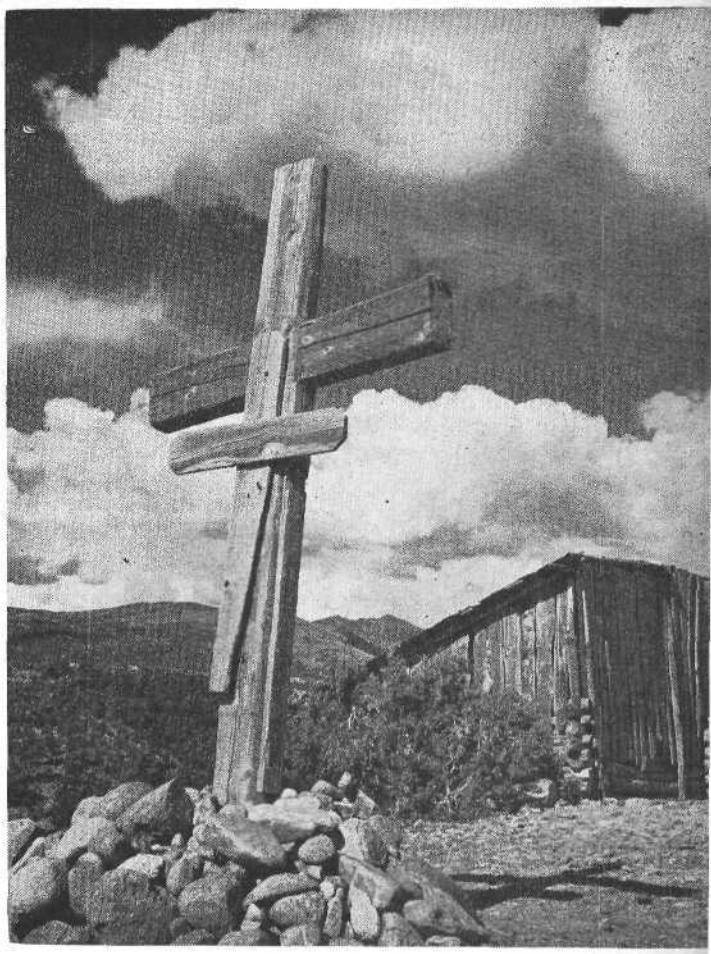
Three hundred years vanish — everything in these beautiful mountains seems to be of an earlier vintage—the sun-scoured buildings, the corrals, the pastoral economy, the people. When the Penitente villages were young, Spain was the center of the earth and the New World its brightest jewel. The Sangre de Cristo Mountains run north and east from Santa Fe to Colorado.

PHOTOGRAPHS BY
JOSEF MUENCH

GEORGE LOPEZ IS A SIXTH GENERATION WOOD CARVER—ONE OF THE MOST FAMOUS OF ALL "SANTEROS." LOPEZ LIVES IN CORDOVA, A QUAINT SPANISH-AMERICAN VILLAGE IN THE PENITENTE COUNTRY.

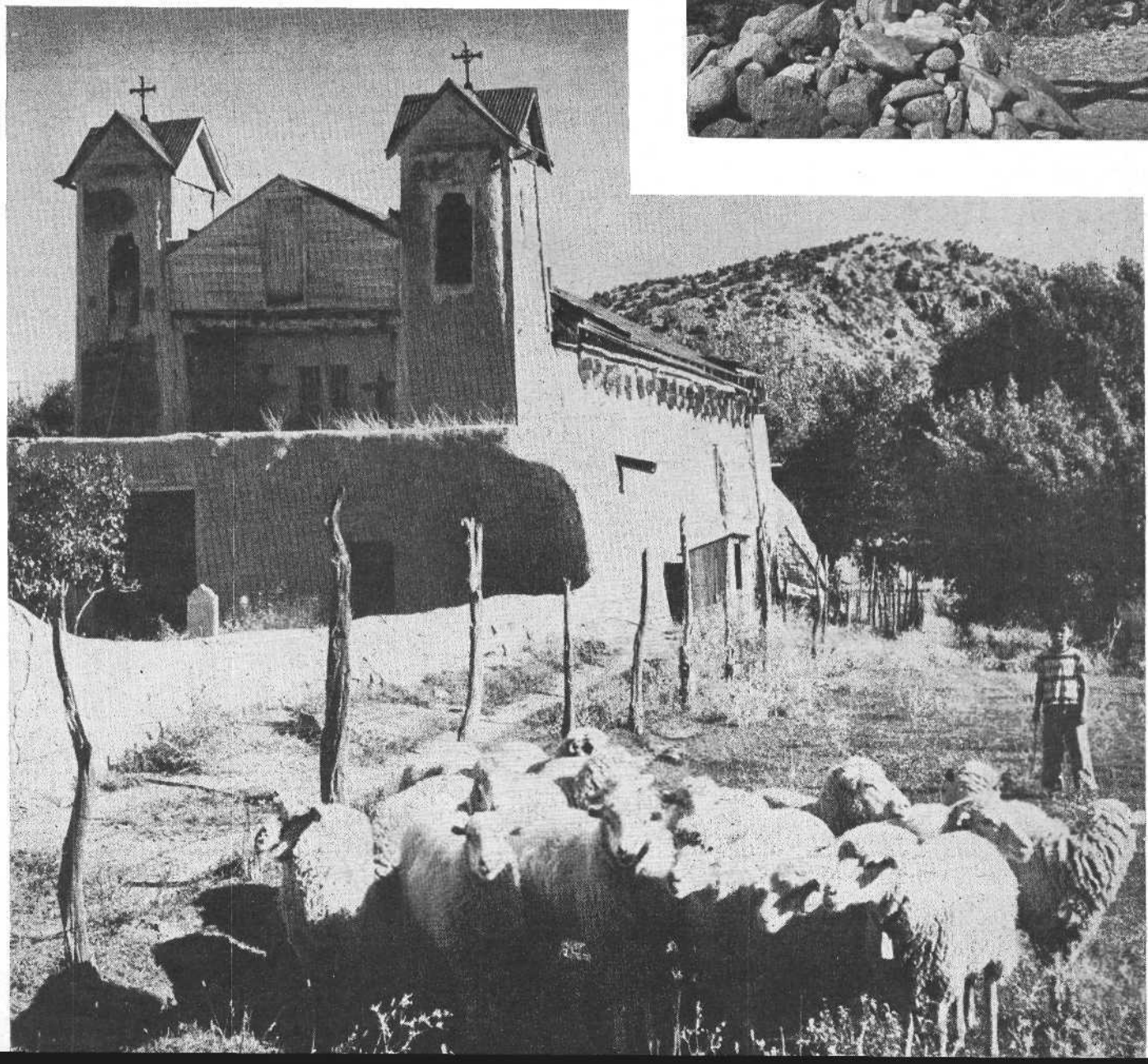


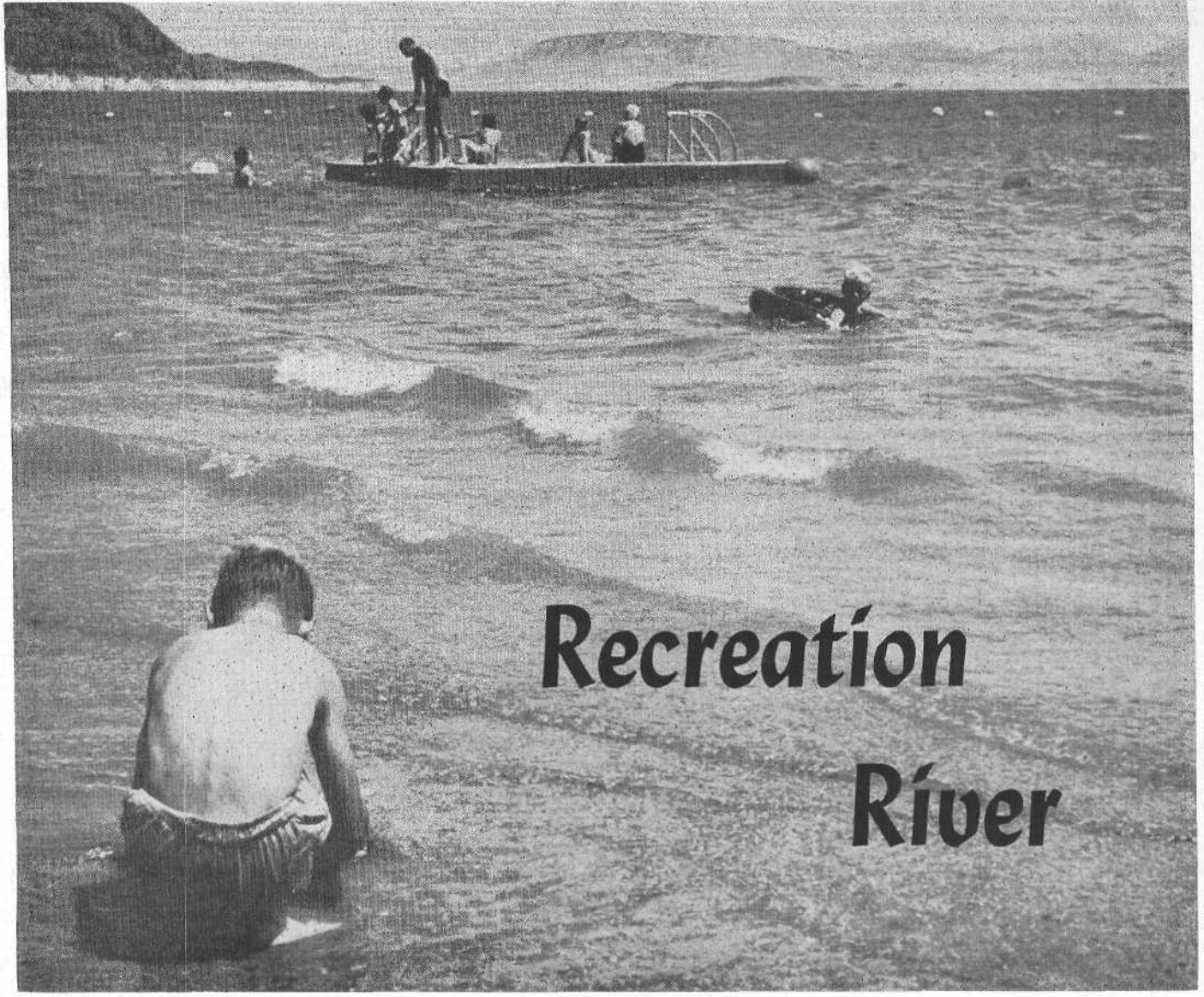
STREET SCENE (ABOVE) IN ISOLATED VILLAGE OF TRUCHAS.



CROSS AT TRUCHAS (RIGHT) IS ONE OF MANY SEEN IN LAND OF THE PENITENTES.

VILLAGERS WHO RAISE WOOL TO WEAVE INTO FINE CLOTH BELIEVE IN THE CURATIVE POWERS OF SAND FROM DRY WELL IN SANCTUARIO DE CHIMAYO.





Recreation River

Water sports, fishing, lakeshore camping, all-year "enjoyability"— these are the lures of the Lower Colorado's glimmering chain of man-made lakes.

By NELL MURBARGER

LOOPING ACROSS the gray breast of the desert from the Grand Canyon to the Gulf of California is a sparkling necklace of diamond-bright lakes and silver river. What an anomaly that here in the heart of this otherwise driest land should be the greatest freshwater playground in the entire West, and that to these shores each year should come vacationists by hundreds of thousands from every state in the union, each seeking the peace and relaxation afforded by quiet hills and calm blue water.

So thoroughly have the man-made lakes of the Lower Colorado River integrated themselves in our consciousness we now regard them as an indispensable part of our Southwestern scene—a part that each season contributes more abundantly to the pleasure of Southwest living.

Fortunately, the bounty of this great water wonderland is available to all comers, the cost of a vacation on these shores being wholly contingent on individual circumstances. Luxury accommodations rate luxury prices—or the entire cost of a never-to-be-forgotten week may be held to a tankful of gasoline, a quarter's worth of fishhooks, and box of groceries!

During the past two-dozen years I have camped along the Lower Colorado on scores of occasions, and have yet to see real proof that the amount of money spent on a vacation has any direct bearing on the amount of enjoyment reaped. As a matter of fact, one of the most thoroughly happy vacationing families I have ever known was camped in a ragged old tent set in the shade of a tamarisk tree along the river north of Topock, Arizona. The group included several adults and a flock of youngsters, and there wasn't a daylight moment when someone around that camp wasn't laughing!

Every morning found each member of the family equipped with a crooked willow pole and out fishing the shallows for "pan fish;" every afternoon the entire group donned makeshift bathing suits and spent a couple of hours frolicking in the river. Later, they played handball and ran foot races; and each evening, after the day's catch had been cooked and eaten, and every bite savored, the family gathered around a driftwood campfire and sang songs, told stories, and discussed the pleasure of the day.

From what I saw of that group I'm sure not one of its members would have changed places with the wealthiest man on the river—which isn't to say that this "wealthiest man" wasn't enjoying himself equally well, in his own way.

It is impossible to know how many

persons spend all or part of their annual vacation along the Colorado and its chain of lakes. The only clue to that figure, which itself is necessarily incomplete, is found in records of Lake Mead National Recreation Area, embracing Lakes Mead and Mohave, and extending for 185 miles along the river.

During 1958, according to Merdith B. Ingham, chief park naturalist, this section of the river was host to 3,190,580 vacationers, representing the second largest number accommodated by any National Park area in the entire United States. During the 14 years since close of World War II the Lake Mead-Lake Mohave area has been visited by some 30,000,000 vacationers. When it is considered that these totals include no accounting of the hundreds of thousands of persons who annually utilize recreation facilities along the shores of Lake Havasu and the remaining 200 miles of river between Parker, Arizona, and the Gulf, it becomes apparent that the Lower Colorado shoreline is not far from being the top in fresh-water vacation areas of the nation.

Better Fishing

Sometimes, I suspect, we're too inclined to carry a torch for the so-called "good old days" when fish and game were allegedly more plentiful. Truth is, back in those lamented "good days" this section of the Colorado River was so full of silt that about the only species of fish that could exist in it were sticklebacks, bonytail, and carp, none of which is renowned as either a game fish or food fish.

Today, due to efforts of the U.S. Fish and Wildlife Service, and the fish and game departments of Arizona, Nevada and California, the Lower Colorado provides some of the finest fresh-water game fishing in the entire United States and Canada—"big ones" being so plentiful that the season is open 24 hours a day, 365 days a year! Here largemouth bass, rainbow trout and channel catfish grow to phenomenal sizes, while perch, crappies, and bluegill do their part in assuring fish aplenty for everyone, regardless of meager equipment or previous inexperience.

Cold Water Area

Largest and best of the rainbows are taken in the 20-mile stretch of cold water (55-60 degrees F.) below Lake Mead, and for another 20 miles in the cold, clear water below Lake Mohave. (When I was at Bullhead City, Arizona, in April, this year, one of the local men caught a 29-inch rainbow weighing 14 pounds, and I was told that 10-pound rainbows are common there.) Choicest bass fishing is in the quiet, warmer water immediately above each of the dams.

Full information concerning lures and baits most successful in taking the various species, as well as tackle and fishing licenses, may be had at most of the boat landings and in sporting goods stores in all larger towns in the vicinity of the river.

Safety

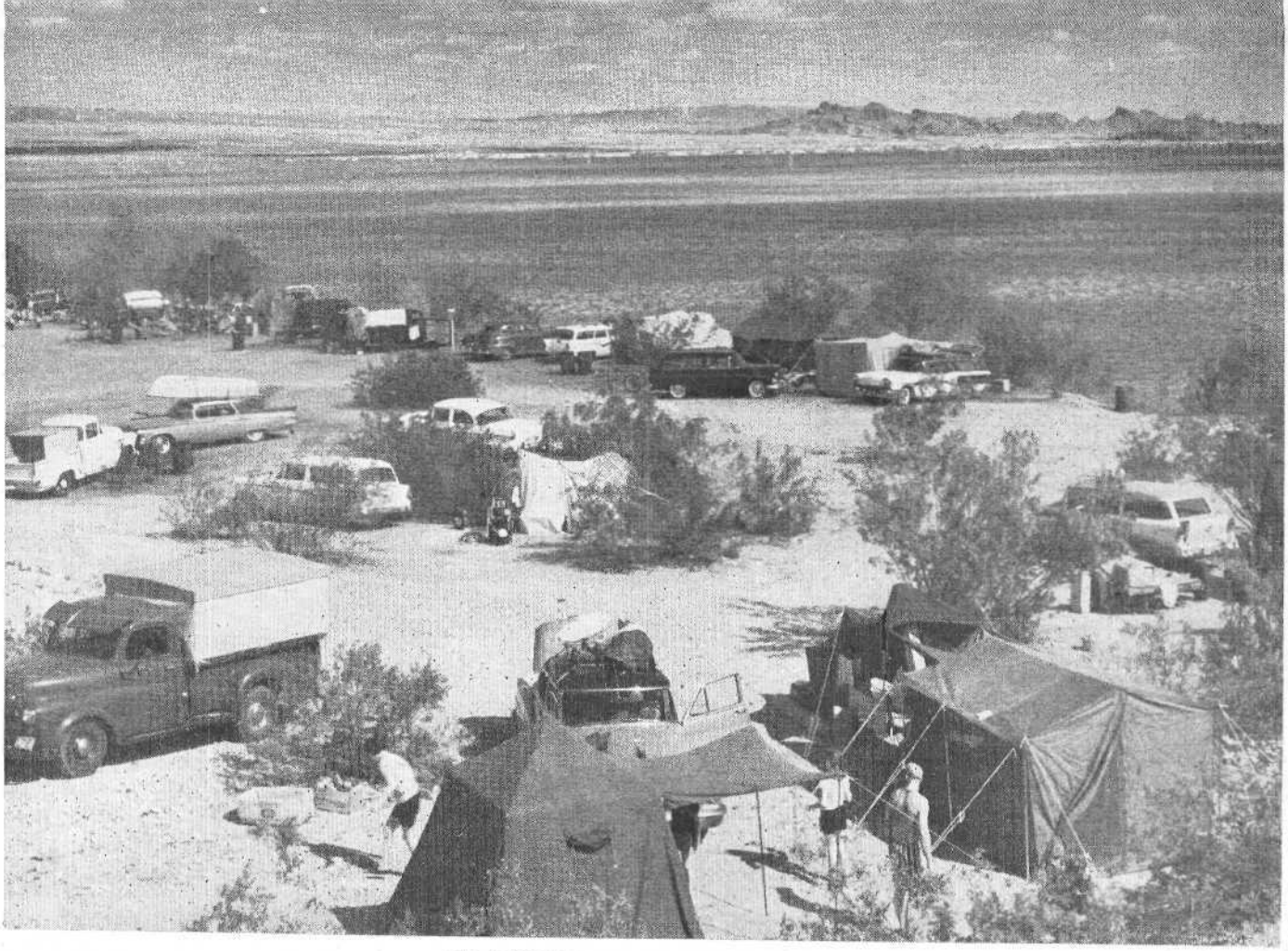
Motor boats, with or without guides, may be rented at many of the public landings, and privately - owned boats may be launched on any of the lakes without a permit. In the interest of safety on the Lower Colorado and its lakes, the U.S. Coast Guard urges that certain simple precautions be observed in boating, one of the most important being that every boat carry a usable life preserver or life jacket for every passenger aboard, and that it be worn or kept available for instant use. One of the cardinal rules of the lakes is that in the advent of a sudden severe wind, boatmen should immediately head for the nearest land and go ashore until the blow has subsided. Even gales of brief duration, when sweeping the length of a 60-mile lake, soon roughen the surface of the water sufficiently to swamp a small craft, especially if heavily laden. As all the lakes are relatively narrow it rarely takes more than a few minutes for a boat to gain the safety of the nearest shoreline—and as the Park Service points out, "The life you save will be your own!"

Each vacationer must determine for himself which of the several lakes of the Lower Colorado or which connecting length of river has most to offer as a potential vacation site. Nearly all the improved campgrounds, public boat landings and resort concessions are accessible over good roads of paved or graveled surface. Some of the campgrounds and trailer parks afford better shade and more conveniences than others; some have a more scenic setting. Every landing and lodge from Temple Bar to the Gulf offers fishing and swimming, and some have attractions such as horseback riding, square dancing, water skiing, boat racing, skin diving, river and lake tours; shuffleboard, horseshoe, tennis and croquet courts; agate and fossil fields; hunting for ducks, geese, doves, quail and pheasant—even bullfrog fishing!

Campgrounds

Free public campgrounds on Lake Mead and Lake Mohave are maintained by the National Park Service on a first-come-first-served basis and are open to both tenters and trailer-





FREE HAVASU LANDING PUBLIC CAMPGROUND.

ists with, generally, a 90-day use limit. Shade, water, fireplaces, tables and modern restrooms are provided in the campground at Boulder Beach, in Nevada — the only one of these seven camps where heavy usage now makes necessary a 15-day limit. Similar facilities are available in the National Park Service campgrounds at Temple Bar (Arizona) on Lake Mead; at Katherine Landing and Willow Beach, both on the Arizona side of Lake Mohave; and at Cottonwood Cove, on the Nevada side of the same lake. The public camps maintained at Overton Beach (Lake Mead) and Eldorado Canyon (Lake Mohave) are classed by the Park Service as "primitive" and afford only native vegetation for shade, and pit toilets. In addition, camping is permitted in all the more remote sections of the National Recreation Area, the only requirements being that fire and sanitary precautions be observed. State laws prohibit camping within 200 feet of the water, and no campfires are permitted on beaches near boat harbors, or on swimming beaches.

As in vacation locales thoughout the country, an ever-present problem in the Colorado River area is the curse of the litterbug.

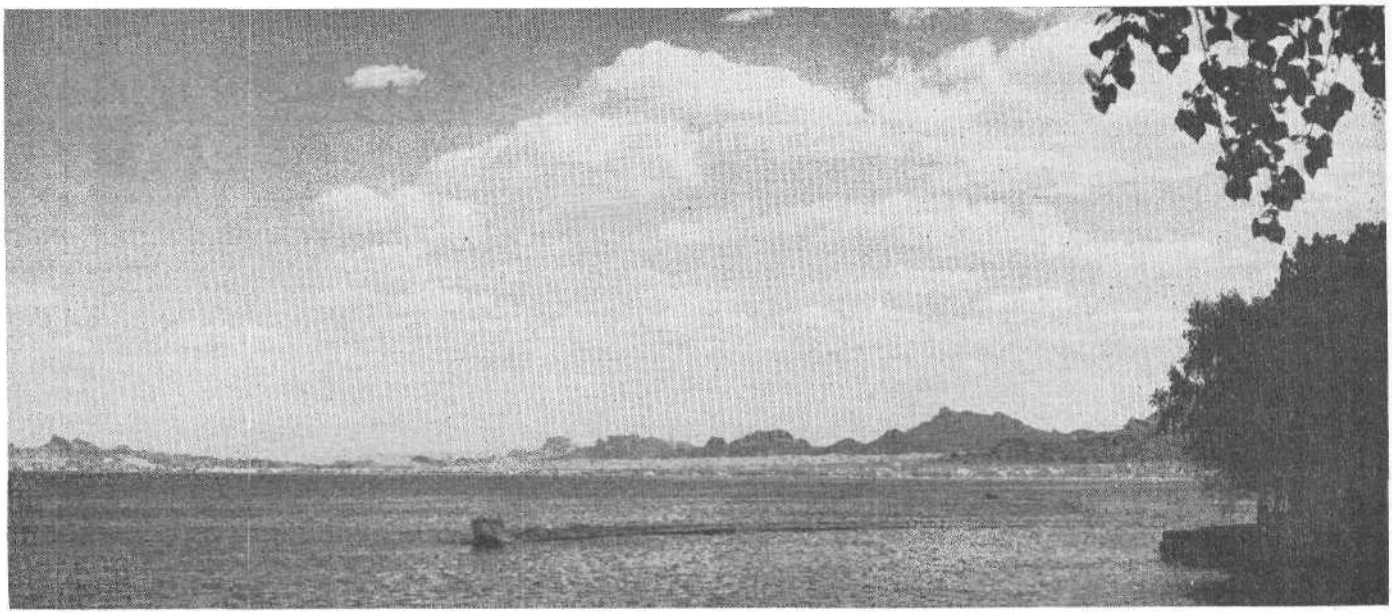
"We have had a great problem with materials being thrown into the lakes and also buried in the sand along shore," said Ingham, who pointed out that the water level of Lake Mead has varied as much as 300 feet; therefore, tin cans and other trash thrown into the lake are exposed as the water level falls, while materials buried in the sand are often uncovered by animals or by rising water. All good outdoorsmen and campers should place their trash in receptacles provided for that purpose — where such are available. In remote areas not serviced by trash pick-up, however, it is recommended that all papers, cartons and other combustible material be burned in a cleared area to guard against fire hazard, and at a time of day when wind velocity is low, while tins should be flattened and buried at least a foot deep and well above high-water line. (Flattening may be accomplished more easily if the tins are first well burned, which also hastens the rusting process and so promotes their earlier assimilation by the soil.)

Mounting population is almost certain to bring to the lakes of the Lower Colorado in years to come a bad dose of overcrowding. At present, however, there is little evidence of this problem along the river. Even in midsummer, when use of facilities is heaviest, we have always been able to find a campsite (although not always with shade or immediately adjacent to the water) and during the "off-season" (October to April) the vacationer can just about take his pick. Which brings the question: When is the best time for a vacation on the river?

Potential fishermen will do well to bear in mind that the year's strongest winds occur between March and June, at which time there is an average of 13 days in each month when the lakes are too rough for safe usage of small boats. The least wind of the year occurs between September and March. Beginning around May 1 and continuing through September, maximum daytime temperatures average almost 100 degrees, with occasional days in July and August that are real scorchers. While such temperatures can be quite uncomfortable in an unshaded campsite, they have the advantage of warming the water to make this the best time of year for swimming and water skiing. Winter brings clear pleasantly-warm days and chill nights, with short periods when the mercury may drop to freezing. Rainfall occurs in both winter and midsummer, but with the area's total precipitation averaging less than five inches annually, it isn't likely to upset vacation plans. (At Cottonwood Landing, on Lake Mohave, I awakened one January morning to find a snowstorm blowing across the lake and whitening the Joshua trees on surrounding hills, but by mid-fore-

noon the snow had vanished and the sun was again shining beautifully.)

It sifts down to the fact that any time of year is better in some respects, and not so good in others. If there is any all-around "best" time on the Lower Colorado, my choice would be for the latter part of September, all of October, and the forepart of November, even until Thanksgiving. Then the heat of summer has broken, yet the nights are still pleasantly warm for camping and boating, there is virtually no wind and autumn is in the air. Golden plumes are on the rabbit brush, the first yellow tints have come to the cottonwoods, willows and tamarisks, and night hours bring the haunting call of wild geese and ducks winging through the darkness. Then peace, like a powerful essence, seems to seep out of the old brown desert hills, and a wonderful feeling of drowsiness settles over land and water.—END



LAKE HAVASU. ACROSS THE WAY IS ARIZONA.

A LOVELINESS BEYOND ALL WORDING . . .

By GRACE PRATT

WHEN WE are home again among the northern firs and pines, and cold winds sweep down from snowy peaks, I shall want to remember this camp beside the Colorado.

There are the mornings when my husband and I watch the stars wink out before the oncoming dawn, and pink streaks, like flamingo feathers, whisk across the eastern sky, catch fire, leap into flames of scarlet and orange, burn down to gold and soften quickly to yellow as the sun pushes above the long hills. I shall want to recall the pungent odor of wood smoke coming from our campfire; the fragrance of coffee and baked beans; the satisfaction of our meals eaten in the open on the river's bank.

I shall want to remember our walks over the mesa where the hills are oddly smooth on top and blackened with the scorching of countless summer suns; to recapture, in some small way, the excitement of finding among those blackened hills a well-colored bit of jasper or a delicate floweret of desert rose.

In our leisurely wanderings we have found pleasure in the simplest things: following an old road to an abandoned mine; finding a clean wooden box to use for a camp cupboard; coming upon our first ocotillo in bloom; seeing the tiny baby-hand tracks of a raccoon; eating our lunch under a wide-spreading palo verde.

The little sparrows eagerly await our crumbs, and are so friendly they almost — but not quite — eat from our hands. When we leave we will miss them and all the other birds we have come to know here: the ungainly road runner, the mockingbird that was never in a mood to sing for us, the pair of tree ducks floating lazily along the small pond we named "Duck Puddle," and the great blue heron that stands frozen for a quarter of an hour on the sandspit.

Most fascinating of all are the egrets which sail on fine white wings to their roosting grounds on the diminutive island in the center of West Pond. The first one lands when the waters are brilliant with the colors of sunset, the last lingers until dusk makes its homeward flight impossible to follow.

I shall want to remember the other campers, their kindness in bringing our mail from town, their generous gifts of fresh-caught fish (we are not fishermen), their integrity in keeping a primitive camp clean and free from all unpleasantness, and the fine fellowship and impromptu programs around evening campfires.

Each hour of the day has its own charm. In the quietness of late afternoon when even the bird voices are subdued to a murmur, there comes the time of shadows. A blending of purple, orchid and lilac gathers along the distant mountains and creeps gently over the mesa. Like a veil of silk it softens the sharp outlines, covers the bareness, erases all harshness. That it is without substance does not matter; it creates a loveliness beyond all wording. The shadow is for the discerning eye and receptive heart. It reaches out to bring peace to one's soul. This, above all else, I must remember.—END

To Baja California With A Naturalist . . .

By EDMUND C. JAEGER, D.Sc.
Curator of Plants
Riverside Municipal Museum

EVERY YEAR with but one exception in forty I've spent my Christmas holidays in desert wilderness places. It was always a case of seeking out the areas at once most lonely and scenic and with traversing roads that were mere trails of rock and sand.

Last year the choice was the arid country reached by the new road bladed far down the east gulf shore of Lower California below San Felipe. My four companions and I, traveling in two Willys station wagons, entered Mexico at the quaint and friendly village of Tecate, bought pesos at one of the banks and sped eastward on the well-paved highway toward Mexicali. As we went down the highly scenic Cantu grade and saw before us the expansive dry Laguna Salada, Stanley Phair proposed that we make a short-cut by attempting to go down the entire length of the big playa and join the Mexicali-San Felipe road at the sand dunes some 65 miles below the Border.

"Few people have ever gone that way," I said, "and it is somewhat doubtful if we can make it, especially since the playa has been recently flooded; but adventure is what we desire so let's try it. If we can't get through we can always come back."

Going over the first twenty-five miles of the hard surface of dry barren flats was easy enough, but from then on it began to get "rough." Our first real troubles began when we found ourselves compelled to go across large areas of dry tamarisk shrub stubble, many of the spike-like stubs from 6 to 10 inches tall. They were almost as hard as nails. Every one was a possible menace to our tires, so we tried to avoid all we could. But in spite of great care one of Tom Danielsen's tires was soon pierced and he had to put on his only spare—and this the first day out! Subsequent travel over the dry laguna clays appraised us of the fact that the tire-menacing tamarisk stubs were to be met with in many places.

Before mid-afternoon our way was blocked by broad mud flats and finally by a 50-foot stream of slowly moving water flowing north from the Colorado River through the center of the Pattie Basin (*Desert Magazine*, June 1958, p. 24). We found this stream and its bordering salt cedar or tamarisk bushes of great interest because of the numerous water-loving birds we saw, and several hours with our field glasses were spent observing them. It was now necessary to turn west and to make numerous time consuming diversionary travels to avoid slippery mud flats, wide stretches of spreading water and again the treacherous flats covered thick with tamarisk stubble.

ON THE MUD FLATS OF LAGUNA SALADA.



The high excitement of the first day came when Stan Phair and I, traveling in my Willys station wagon chanced upon a large well-fed and handsome coyote, who having quenched his thirst at the stream, was now returning across the hard mud flats to his home in the brush country of the foothills in the nearby mountains. In quest of long-desired information on just how fast a coyote can run we took out after him. At 20 miles per hour he loped along with ease. He was still ahead of us at twenty-five miles but when goaded on by our pursuit at 30 miles per hour he was doing all he could. Even at this speed he traveled for at least a quarter of a mile. Finally he began to weary and slow down. We were not convinced that he exactly appreciated this foot-race with an auto and when we saw him tiring we stopped the car and let him go. He immediately made for the hills. Frequently he paused and turned to reproachfully look back at us. Ours was probably the first automobile he'd ever seen and I don't think he was too happy about his strange pursuer.

Evening closed in on us when we were only half way down the length of the playa; because of so many obstacles we'd only traveled about 40 miles that day.

The day before we left home I'd roasted a 12 lb. turkey stuffed with dressing, made cranberry sauce, "built" a pumpkin pie and prepared other good things for holiday feasting, so we settled down that evening to a savory meal under pleasant conditions that only such surroundings can provide. After supper we recounted the day's strange adventures, listened to the deep calls of the horned owl, the ludicrous cries of friend coyote and went to sleep under clear star-studded skies.

Next morning we were again on an uncharted, devious and dubious way over the enormous southern end of the playa. Again we found our forward progress slowed by mud flats and the broad sheets of spreading water. Eventually we were actually driven back into the sand dunes which in many places border the laguna on the west. Here by merest chance we came upon a long-abandoned almost century-old smuggler's road which for several miles guided us around parts of the untravelable dry lake bottom.

But no sooner were we on the playa again than the tamarisk stubble fields began to give us more trouble; indeed

we now had three flat tires in contrast to yesterday's one, all in a space of a few minutes. It was a rather disheartening experience when we realized we yet had before us at least 700 miles of travel over rocky roads that would be very hard on tires. Once our tires were repaired we traveled in zig-zags and wide circles most of the day, picking our way as best we could, many times thwarted by the incoming widespreading flood-waters that were fast filling the laguna. Again the day's mileage was meager and early evening found us hunting a campsite on the playa's western edge. A long bit of unused road led us back to a big clean sand wash bordered by enormous ironwood trees and with magnificent specimens of palo verdes and smoke trees growing here and there in the center. If space and the tonic of wilderness are needful for man's proper aesthetic and physical development here we had the essentials in abundance.

Far to the west was the grand mile-high escarpment of the Sierra Juarez; in the distant south rose the majestic 2-mile high Sierra San Pedro Martir bathed in blue; on the east was the broad playa and the rocky barren slopes of the Cocopahs, now tinted rich magenta in departing sunset glow. Just a few miles from this charming campsite rose up, like an island in a sea of desert gray-green trees and shrubs, the steep cone-like form of a peak called Cerro Capirote, topped "ice-cream-sundae-like" with a black and brown cap of congealed lava.

Next morning at sunup we were off again to do our final lap on the dry lake-bed clays. It was again miles and miles of diversionary driving. The water, never more than a few inches deep, was now expanding so much at the place where one ordinarily goes up onto the highway near the Sierra Prieta hills that we had to go up to and over the deep sands of the dunes to make the connection. It was now noon of the third day.



PORTION OF ROAD IN VOLCANIC HILLS.

The largely level stretch of desert from here southward along the Gulf of California has been called El Desierto de Los Chinos (Desert of the Chinese) by the Mexicans because of the death from thirst of almost the entire group of 42 Chinese who near the turn of the century attempted in summer to traverse this lonely, practically waterless desert while on their way from San Felipe to get work in the fields at Mexicali.

To most travelers this is a rather monotonous uninteresting bit of desert to cross but we, being enthusiastic naturalists, found it far from barren waste. We rejoiced in the many strange forms of plant life including the bizarre whisker or senita cactus and, before reaching San Felipe, the first specimens of the giant cardon (*Pachycereus pringlei*), two kinds of elephant trees and countless ocotillos. Summer cloudbursts had done much to supply these plants with water and some were in full leaf and flower.

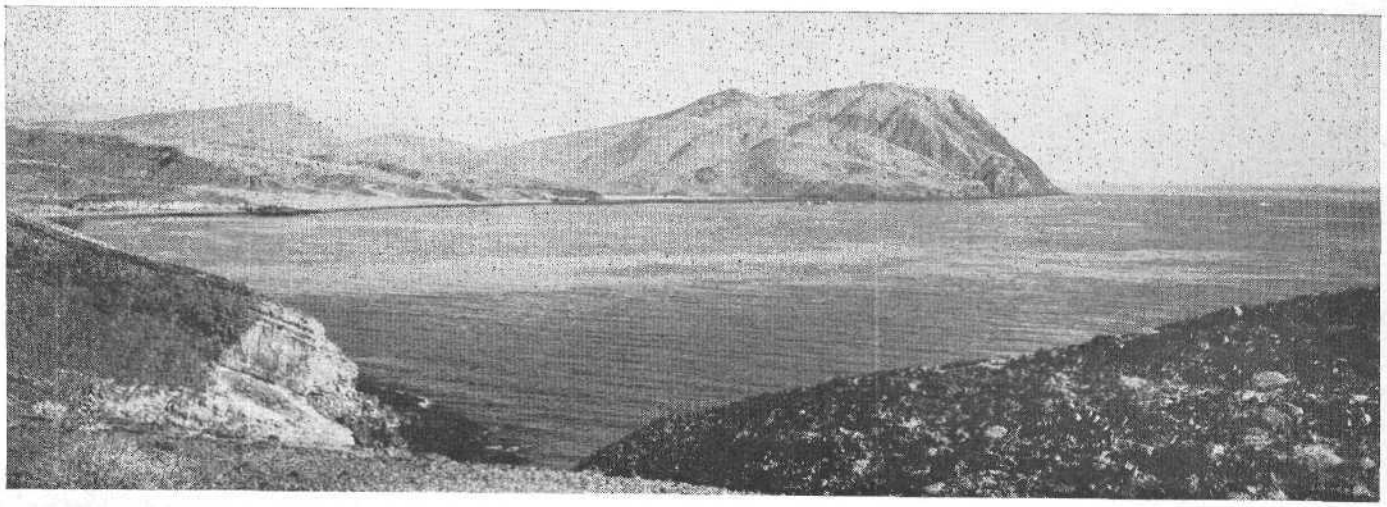
We had 30 gallons of good water with us when we left home but in spite of meager use we had only 20 gallons left when on the fourth day we broke camp 15 miles below San Felipe. We were indeed happy when nearing Puertocitos some 35 miles south, we found a crude sign pointing to water about a quarter of a mile up a dry wash. The dug well was fitted with a small gasoline engine and pump and we soon replenished our supply. This was our only chance to again get good water for another 200 miles.

In these out-of-the-way places native people are almost always very friendly. Long remembered will be the exceedingly handsome, lithe and lively young Mexican at Puertocitos, who out of pure friendliness, offered us handfuls of delicious boiled shrimp he had just taken from a steaming kettle. We returned his favor with half a dozen fresh avocados. A big smile and laughing eyes, brightened a face with forehead overhung by dangling curls of blackest hair. Salvador, you are indeed a prince among men.

Most travelers in autos go no farther south, for although the new road is fairly wide and well marked, it is often very rocky or sandy and when going inland to avoid sea cliffs, is often very steep. For many miles it follows along numerous ridges and goes up and down steep arroyo banks. The lava flows which here go down to the edge of and even into the sea are quite recent but already broken up into uncountable black angular blocks.

Hardly a plant has ventured to

BAHIA SAN LUIS GONZAGA ON THE GULF.



grow upon them and this gives the scene an appearance of peculiar desolation. We saw only a few tall, white-stalked milkweeds (*Aesclepias alibicans*) and brave, far-scattered brittle bushes, their few white leaves contrasting markedly with the black rock.

Near The Sea

From time to time we got marvelously beautiful vistas of the ultra-blue sea in which jutted up pyramidal barren rocky volcanic islands which form the roosting and nesting places of myriads of small and large sea birds. A few of these islands are joined to the shore by a low narrow sandy isthmus, visible at low tide, and at such times of exposure the resourceful coyotes wander back and forth from the mainland to hunt for edible sea animals and to surprise and gobble up unwary roosting sea birds.

At the lower end of this long stretch of up and down roads we again came to the sea and charmingly situated Bahia San Luis Gonzaga.



By BENN KELLER, *Manager*
Ford Desert Proving Grounds
Kingman, Arizona

Pre-Trip Preparation

If you are planning a trip to the desert, or if you live here and are about to start off on a long vacation trek, here are things you should do to insure a trouble-free ride:

Clean and flush engine cooling system. In summer weather do not use any type of anti-freeze in radiator. Be sure fan belt is tight and in serviceable condition. Have radiator pressure cap checked to be sure it is pressure tight. Be sure radiator hose clamps are sufficiently tight, hoses are in good condition, and no coolant leaks are in evidence. Clean front face of radiator core of all bug carcasses, leaves, waste paper scraps and any other debris that would restrict normal air flow. Do not strap spare tire, baggage or other material to front of vehicle in a manner that will restrict air flow.

Inflate tires to recommended inflation pressures. If you have a sizable quantity of luggage, give every consideration to the purchase of a car-top type of luggage carrier. They result in a more even distribution of excess load which is better for tires, effective braking, handling, headlight altitude at night, and also leaves your spare tire more readily accessible in case its use should be required. Secure the luggage thoroughly with adequate tie-downs and provide a waterproof, well-anchored cover for protection against bugs and the elements.

We are old-fashioned campers who like to cook our meals on a wood fire. We found that along the sea, wood was "hard to come by" since there is very little drift wood and still less to be had from growing trees on the nearby rocky hills. However, by diligent and wide search we found enough fuel for the evening and morning fire which we made in a nearby sheltered cove. The tide-pool sea life here was remarkably varied, wonderful to behold and plentiful. Especially handsome were the big golden-brown solasters or 20-rayed sea stars and numerous gay-colored snails and bivalved mollusks, tan-tinted sponges, delicately plumed sea worms, hydroids and limpets.

Our road from now on for many miles was again on the almost level sand and continued on southward, passing several miles inland, the big and unbelievably beautiful bay called Ensenada San Francisquito. The graded road ends near here at a barrier of rocks. A one-track sand road then turns up a broad wash which debauches from the low mountains which form the backbone of the peninsula.

In the sands of our wash were unusual numbers of animal tracks of many kinds. That night Stan Phair was disturbed twice by soft-furred wild mice in his bed, and all of us repeatedly heard the bewitching wails of Don Coyote. Grateful we were that the paid poison squads have not yet in wild Mexico begun their senseless and nefarious campaigns to eliminate the valuable coyote.

Next morning we noticed several ravens flying about and circumspectly watching our every move. The moment we pulled out of camp the whole lot of them swooped down to clean up every scrap of food refuse, including the turkey bones we'd put out for the coyotes and foxes. Just a case of first there, first served.

Strange Plants

It was our plan to go far enough inland to see the giant cirio, close relation of the ocotillo and strangest of all the peninsula's plants. These we found in typical abundance as we neared the top of the peninsular divide and with them were cardons and other Viscaino Desert plants. From this point we could look over the broad shrub-covered downward slope to the Pacific. A few miles easy travel would have brought us to dry clay-bottomed Laguna Chapala and the junction with the main peninsular highway. Using it we could have made our return home by way of Ensenada. But here at the summit we decided to turn east again to the Gulf and spend some time in the vicinity of Puerto Calamajue.

In some way we missed the road and we were forced to make camp in a broad wash leading up to some old mines. But it was a most impressive place because of the extensive forest of giant cardons. We had never expected to see them so near the sea and certainly not such big ones. Among these massive cacti we found the most strange cristated one I've ever seen. Almost every one of the numerous branches ended in a huge fan-like fluted crest. Such grotesque deformities are thought to be caused by a virus.

Next morning we traveled north to spend two days at the sheltered bay called Ensenada San Francisquito. It is a beautiful place but difficult of access because of the heavy sands. We had to make our own road.

Marine Life

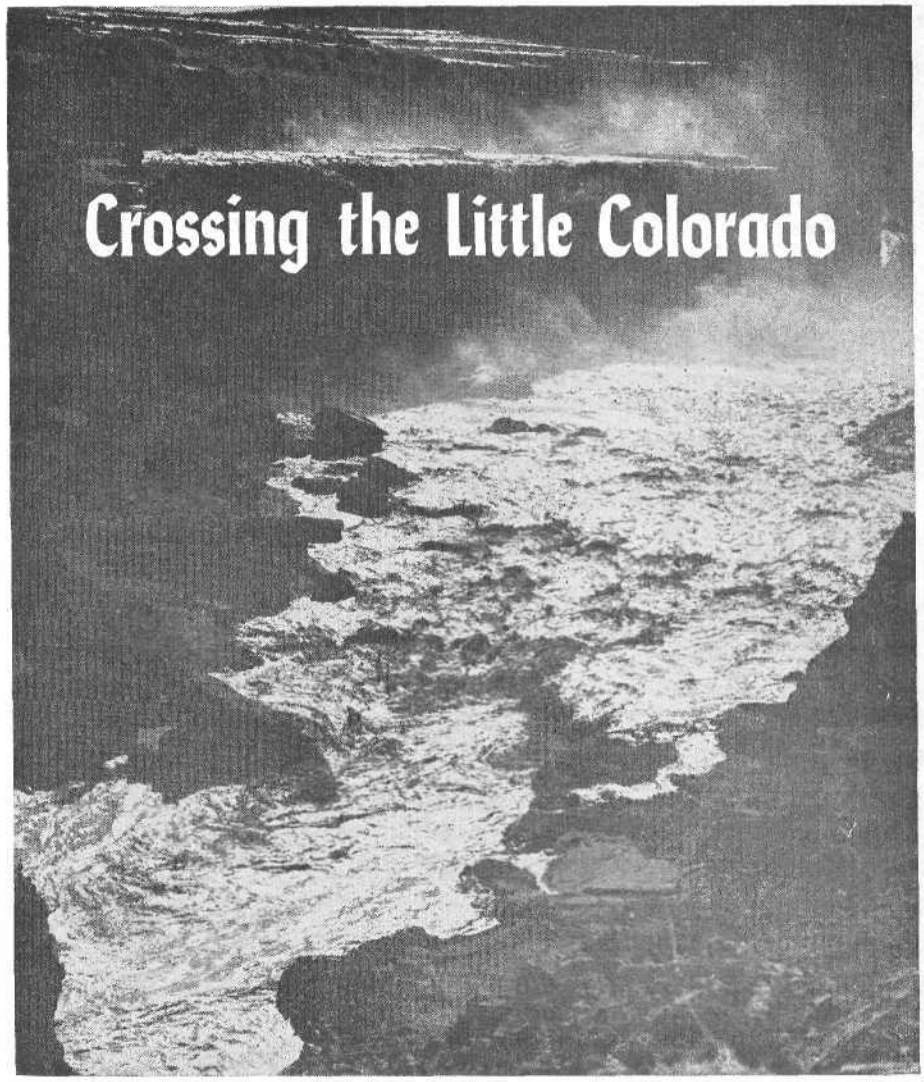
We found the blue, often calm waters of the bay alive with many forms of small marine life and sharks and rays and many kinds of colorful fish; also several mammals — playful porpoises and several kinds of whales. Far back from the water's edge on the dry sand we came upon five dessicated carcasses of stranded Pacific Blackfish (*Globicephala scammoni*) often called Pilot Whales, each of them about 16 feet long. Their bodies were black from small-mouthed globular head to divided tail. This most gentle and gregarious of all whales often assembles in great herds of hundreds of individuals and all members of the herd blindly follow a leader. Here the leader at a time of exceptionally high shoal water had gone too far toward the shore, had become stranded and the others had followed suit. With him they died because they were unable to get back to the sea when the waters receded.

From here we returned home over the same rough roads we had traveled on the way down the coast. But we felt that our primitive road was very good in comparison to the old one which largely paralleled it and portions of which we could see from time to time. So narrow, so rocky, so steep and meandering were many of its parts that one is truly amazed how even the toughest well-trained mule teams ever dragged wagons over it; moreover, we are prone to ask where did the brave and resourceful mule drivers, while carrying machinery and supplies for the distant mines, ever find or haul enough water and feed to supply their hard working beasts? —END

Crossing the Little Colorado

By BILLIE WILLIAMS YOST

When the wagon became mired in the dangerous river, the boy went for help, leaving his two sisters to guard the precious sacks of flour and sugar they had salvaged.



GRAND FALLS OF THE LITTLE COLORADO ON THE PAINTED DESERT NORTHEAST OF FLAGSTAFF. AFTER A STORM, THE USUALLY DRY FALLS BECOME A ROARING CASCADE.

IN 1917 B.B. (Before Bridges) while fording the Little Colorado River, I had a brush with a deadly combination—quicksand and locoweed. I was a girl of 10 at the time, and our home was the isolated Red Lake Trading Post on the Navajo Reservation 45 miles northwest of Winslow, Arizona. Besides my parents, who were Indian traders, and me, there were my brothers Walter, 18, and Roy, 16, and my sister Esther, 12.

Electricity, telephones and modern plumbing were years away. It is difficult to imagine the remoteness of the single structure of our trading post. It was situated on a flat barren stretch of red desertland, with not another human habitation in sight. Far to the west rose the majestic San Francisco Peaks; east and north was a maze of small buttes and mesas; southward, between the trading post and our supply point of Winslow, the Little Colorado River cut a saber scar through the desert.

A Watery Enemy

To reach "civilization" we had to cross the Little Colorado. This river dealt us all kinds of misery. To us it was an enemy to fight, conquer and then talk about.

It was especially treacherous in spring, for in addition to flood waters, there grew on its banks a species of locoweed (*Astragalus*) that was the first plant in the region to turn green each year. Horses and cattle, starved for green fodder after the long barren winter, often ate locoweed. It caused the animals to have the blind staggers that eventually led to death—at least this was the common belief at the time.

When the river was running, its water was red and muddy. "Too thick to drink, and too thin to plow," was how the old-timers described the flow. It was impossible to predict the condition of the river from one week to the next. It could be bone dry one day, and 48 hours later filled from bank to bank with swift turbulent water.

Danger

When low, it was an alkaline trickle, the sandy bed firm and safe. Approaching flood stage, it was a dangerous chasm to cross. With frightening swiftness, the hard moving stream could gouge out a hole deep enough to snare a horse and its rider. Then the river bed was a highway of treacherous shifting quicksand.

I shall never forget the trip to Winslow for a load of flour and sugar that Walter, Esther and I made. "Our supplies are low, and I think the trip will be good experience for you," father had said.

We borrowed an Indian horse and teamed him with our horse, Tony. We hitched them to the wagon and started off on our adventure. Everything went smoothly on the trip in. We crossed the river without mishap and arrived late that evening at our Winslow home on Aspinwall Street. Father allowed us two days in town, and Esther and I spent most of that time—and all of our allowances—at The Palace of Sweets. Ice cream on the reservation was far scarcer than snowballs must be in Hades.

At sunrise the third day, we began the long return trip to Red Lake. We arrived at the river at noon, and rested the team. While the animals grazed, Walter appraised the river. It would not be necessary, he decided, to wade the stream to test it for quicksand. So we boldly drove the team into the swift muddy current. At mid-stream the Indian horse unceremoniously proceeded to lie down. Walter struck at him again and again with the long whip, but without effect. Tony looked around as if to say, "I can't pull this load alone."

Loco Horse

"Crazy loco horse!" Walter shouted as he leaped into the muddy water. He unharnessed the animals, blindfolded the Indian horse with a blue bandana handkerchief, pulled him to his feet, and then led both animals to the opposite bank.

"This horse must have eaten loco-

weed," Walter called. "They always act this way when they get locoed!"

Esther and I sprang into action. We jumped in and started hauling sacks of flour to dry ground. We worked like possessed demons to save the precious cargo. We knew how angry father would be. Walter, of course, worked hardest of all for he had failed to heed father's order to "never cross the river without testing it."

The wagon wheels were sinking deeper into the quicksand. Soon the muddy water would be in the wagon bed and the supplies would be ruined!

"Hurry!" Walter cried as he trotted through the water with a 100 pound sugar sack on his shoulder. "If this load gets wet father will skin us alive!"

I stumbled under the weight of 25-pound flour sacks, but only lost one. After many trips, we had our cargo on the bank.

"Whoo-ee," sighed Walter in relief. "Now we have to get the wagon out. The muddy water was level with the bed. Two Navajo men approached on horseback, and they helped Walter lift the bed off the frame and pull it to shore, but the frame and wheels were hopelessly mired. The Indians offered no solution, and the sun was low in the west.

"You girls stay with the load," Walter ordered. "I'll ride to Red Lake for father. He'll know what to do."

Esther and I looked at one another, but we said nothing.

"I'll ride fast as I can," Walter promised as he mounted Tony. "It's 25 miles to Red Lake, so don't expect father until daylight. He'll have to lead another horse back — we can never use that Indian horse again."

Navajos Remain

And then Walter was gone, but our newly-made Navajo friends remained. Esther produced a can of pork and beans and one of sardines, one of the Indians took a box of soda crackers from his saddle bag, and the four of us sat down to dinner. The only words that passed between us were when Esther offered sardines to one of the Indians. He refused, saying, "fish cousin to rattlesnake, Navajo no eat snake."

By the time we finished our meal, the weather had turned cold. The Indians built a roaring fire, and we sat around it. After awhile, Esther and I spread our lone blanket on the floor of the wagon bed, and turned in. The Indians curled up near the dying embers. I'm sure, in our innocence, that we slept much more soundly that night than did our poor mother.

We were awakened at dawn by father. He was greatly disturbed to find us sleeping at water's edge. The river had risen during the night.

Father Is Relieved

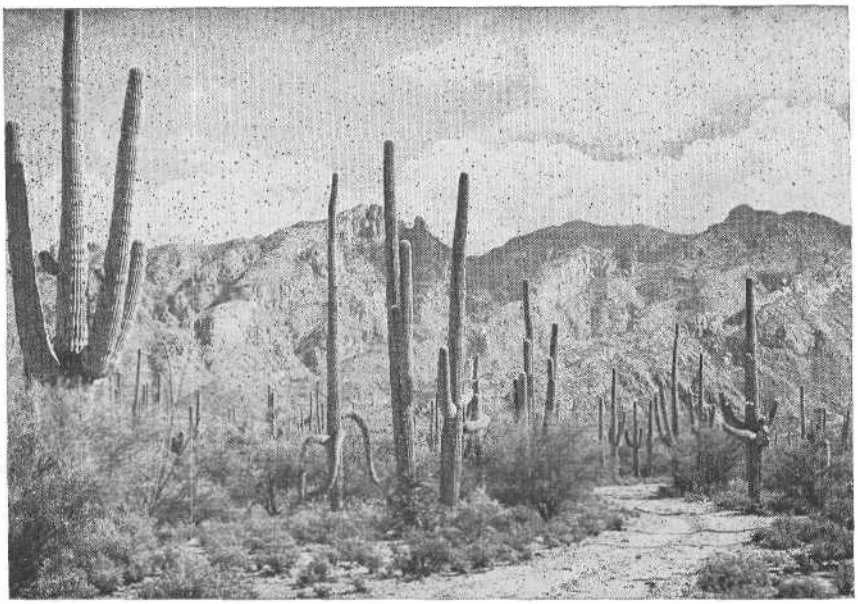
We fully expected a tirade, but father was so glad we were safe not one word of rebuke was offered from that day to this.

It was a long and tedious job to free the wagon from the quicksand. By morning it had sunk out of sight, and we had to point out the place where we had last seen it. Using a cottonwood log for a lever, he pried it out of the sand one wheel at a time.

With the wagon bed in place, the cargo re-loaded, the horses harnessed, and father at the reins, we drove away from the river feeling very safe and happy. The loco horse was left behind to forage for himself. He would never be useful again, father said.

Esther and I sang mother's favorite hymn, "Shall We Gather at the River." "There's a big difference between the river you're singing about and the muddy Little Colorado," father said with a smile.—END

Photo Hints by Bob Riddell



DESERT SCENICS . . .

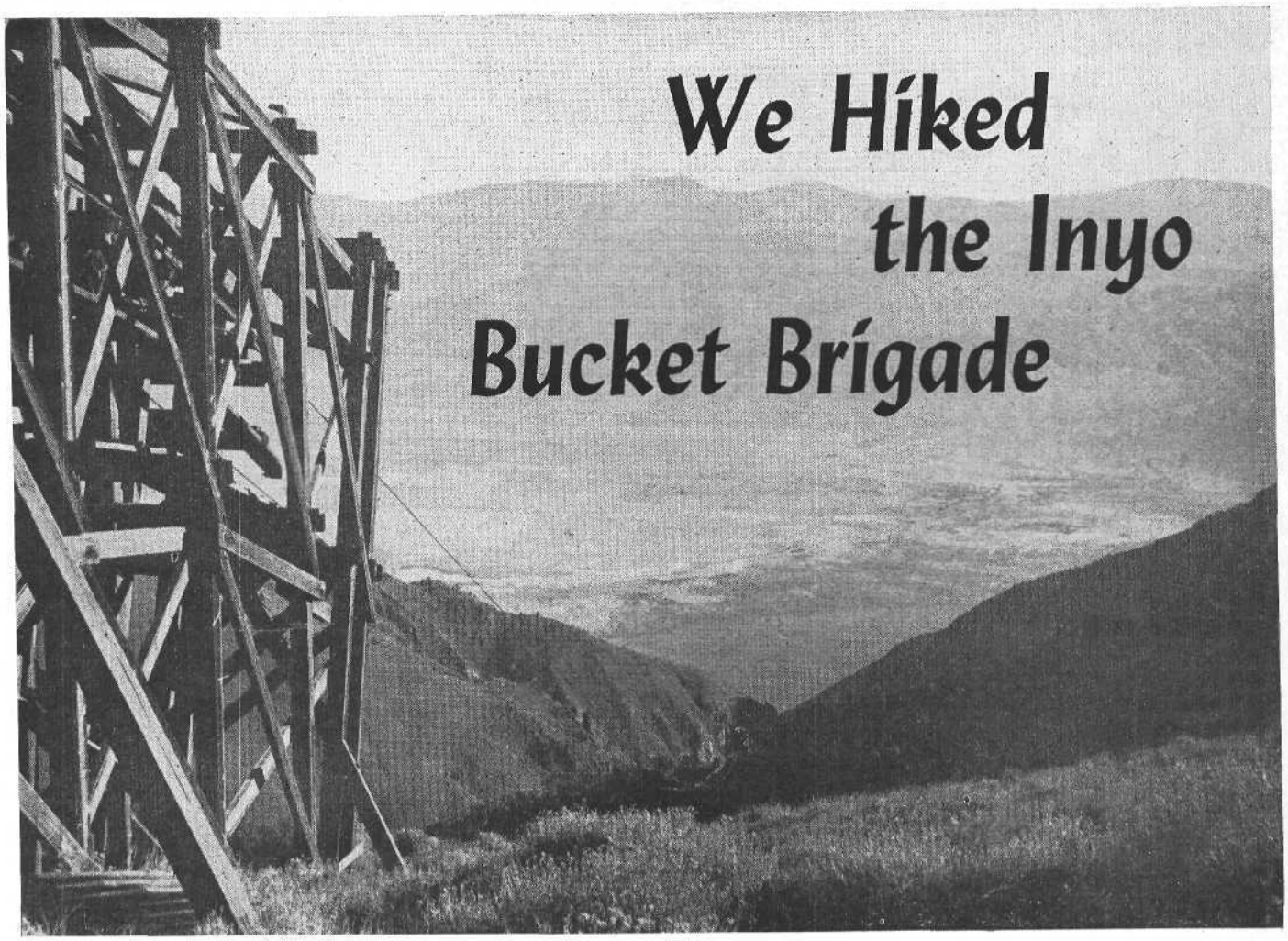
When photographing a desert scenic, shooting time is very important. Nothing looks duller than a photo of the desert taken when the sun is directly overhead. Always take your desert pictures when the sun is at a low enough angle to give nice shadow detail. Morning light for color film tends to be cool; afternoon light is warmer. Either morning or afternoon light give excellent results for black and white, for the desert is truly a photographer's paradise.

To get depth of field—a most important factor in shooting scenics —a slow shutter speed and small lens opening are a must. I usually check with my light meter for extra assurance. Most of my scenics are shot—camera on a tripod—at 1/25th of a second at f. 16 aperture, after allowing 1½ stops increase for a yellow filter (from f. 32). I use Super XX Kodak film in a 4x5 speed graphic camera, 6-inch lens. My color scenics are mostly on Anscochrome, 1/10th at f. 32.

Composition is the most important factor for a good scenic. Nice cloud formations help balance your outdoor pictures. A yellow filter over the lens darkens the sky and brings out the clouds to their white, billowy best. A red filter gives an even more dramatic effect. If you can't wait for clouds, try framing with a palo verde tree, or saguaro cactus, to take away that empty-sky feeling of the picture.

Only luck will find a well-composed picture from the highway. Get out and walk. Search for a well-shaped saguaro or a picturesque desert trail for your foreground. Keep distracting clutter to a minimum. I spend hours scouting new locations, but I come back with pictures not found in every desert album.

Photo above shows a typical country trail running through the desert floor at the foot of the Santa Catalina Mountains north of Tucson. Exposure: 1/25th of a second at f. 16, with yellow filter.



We Hiked the Inyo Bucket Brigade

The Saline Valley tramway on California's Mojave Desert was a bold mining venture—13 miles of steel cable over the rugged Inyo Mountains.

By ROBERT O. GREENAWALT

VALUE OF the extremely concentrated salt deposit in Saline Valley, a raw desolate trough west of Death Valley, was early recognized by mining men—but between the salt lake and a transportation outlet to the waiting markets of Southern California was the massive barrier of the Inyo Mountains. This rocky ridge abruptly rises 7000 feet above the lake.

The Saline Valley Salt Company engineers made bold plans: a 13.4 mile tramway over the Inyos to a discharge terminal near Swansea, historic eastern shore port on Owens Lake when that lake held its due share of water.

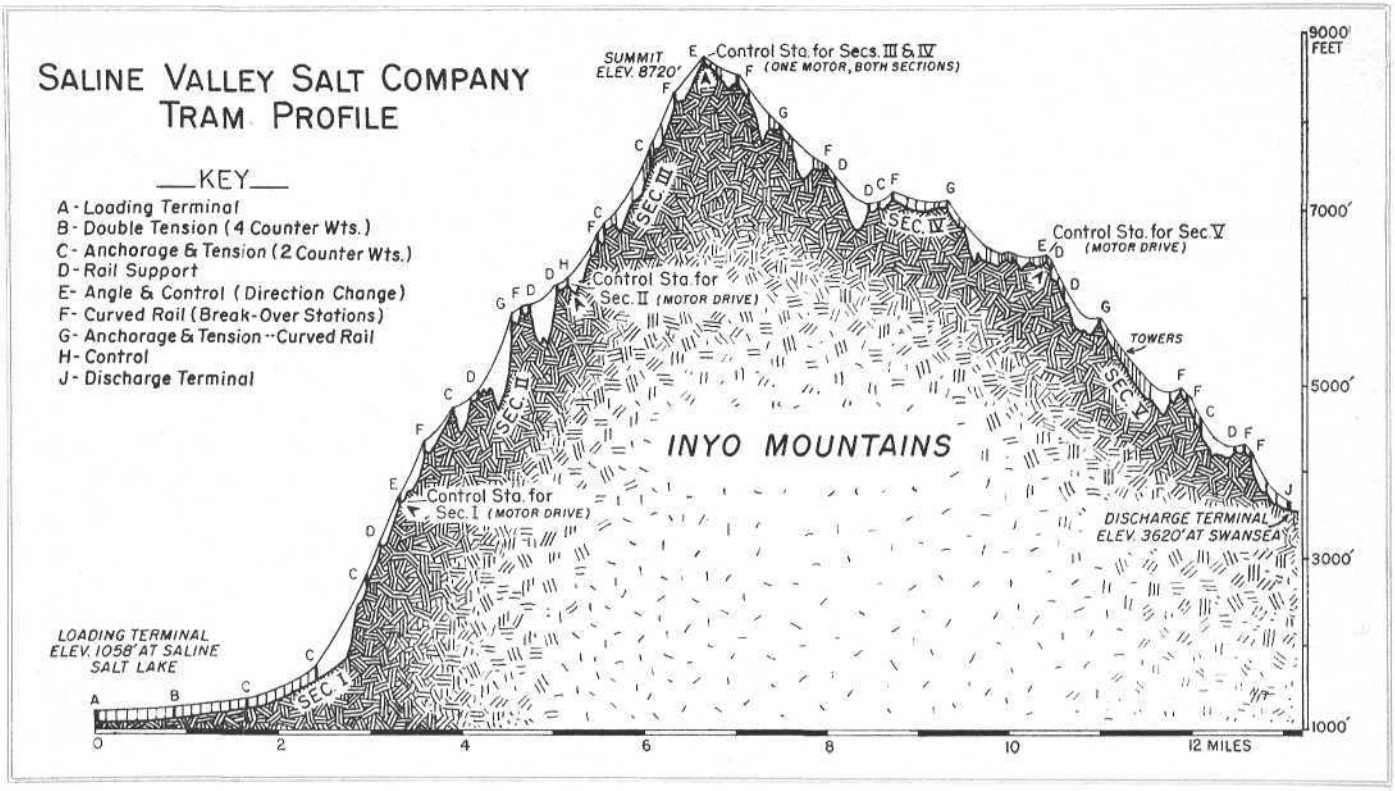
After two arduous years of mule-powered construction, the system began operating in 1913. Capable of hourly transporting 20 tons of what local residents claim is still "the purest salt in the world," and cutting four arrow-straight swaths in its right-of-way over the mountains, the line was routed from the salt lake's south shore up precipitous Daisy Canyon, across the summit saddle between 10,668-foot New York Butte and 9705-foot Pleasant Mountain, and then down across a series of brushy canyons past pock-marked striated cliffs to the floor of Owens Valley. The discharge terminal was connected with Keeler by the Southern Pacific narrow gage railroad line, the posted stop of "Tramway" adequately handling the salt trade.

Not only did the multiple steel strings supported by heavy wooden frameworks represent one of the world's longest tramways at that time —13 miles of cable line in the year 1913—the salt tram provided the highest lift, and few would dispute the fact that the tram traversed a finger of the most rugged terrain on earth.

For 17 years of intermittent operation by several companies the salt tram's nearly 300 buckets made the slow round trips from loading terminal to discharge terminal. In 1930 the Depression — and competition from better sodium chloride deposits — wrote an end to the mining venture.

I have long been interested in this project. Last summer I hiked along the bucket brigade, heeding the advice of a number of long-time Owens Valley residents who answered my queries concerning the present condition of the tram with: "Can't tell you much about it, you'll have to go up the mountain and see for yourself."

The daybreak hour of a Saturday morn found five companions and me huddled around a campfire munching breakfast. We had camped off Highway 190 near the several weathered cabins that mark Swansea and the discharge terminal site. Only numerous concrete footings, a small



pile of dust-laden salt, and the ruts of an uprooted railway spur give evidence of the discharge terminal's position. Before shipping, the stockpiled salt was crushed at this site.

Our party was split into two teams: hikers and drivers. The hikers, Don Minassian, Fred Duerst and I, would make our ascent of the western face of the mountain that day. The drivers, Hugh Parshall, Andy Kocela and Rolly Shehyn, were to take our vehicles over a 16.5 mile roundabout jeep trail and set up camp at the tram summit.

With a "See you before dark, and have supper ready," we were on our way. We climbed the near ridge hand over foot and soon reached our first massive framework. It stands several hundred feet above the highway, but is barely visible to passing motorists. The cables were supported along the 13 mile up-and-down-hill route by 39 such major structures. Between them, 123 80-foot-high intermediate towers kept the cargo off the ground along the parallel slopes and more shallow canyons.

Carted Off Wood

All of the structures within easy access of roads, including both terminals, have long since been carted off—easy prey of the wood gatherers and junk dealers. Used lumber can be very precious on the sparsely populated desert. The stout 10x10s are especially prized. But because most of this jagged range is inaccessible, especially the eastern slopes, the mountain will be as reluctant to give up its tram as it was to receive it.

The morning climb was rugged, and the panorama of the broad expanse of Owens Valley became more impressive at each new height. Into view on the far side of the lake came the ribbon formed by the Southern Pacific's "Jawbone" broad gage. The construction of this railroad north from Mojave in 1911 was largely responsible for the tram's creation. The broad gage joined the narrow rails at Owenyo.

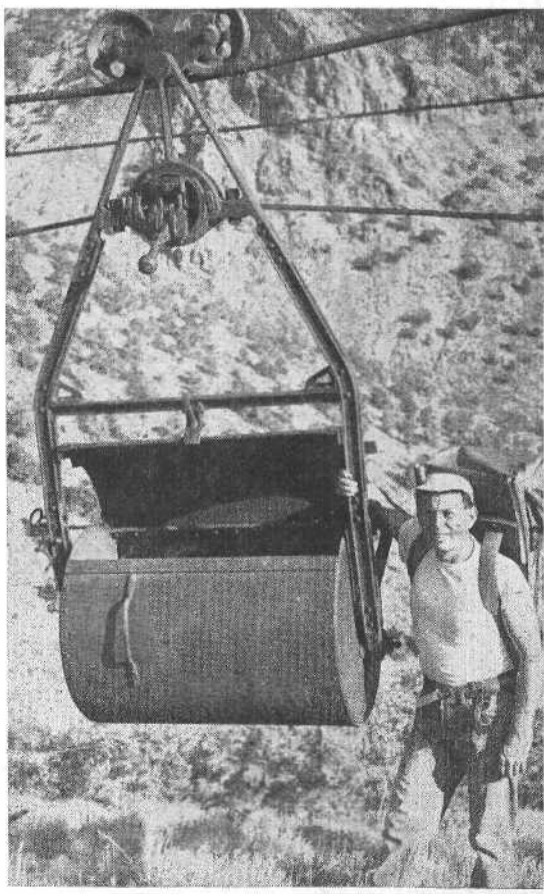
Near one of the towers we found a small rattlesnake shading itself near a corner footing. In the higher country we came across four remote operators' cabins, a couple in the same condition as they were when their inhabitants left them for the last time.

Bleached White

The western slope's towers, some void of cables, are bleached a dull white. Many of the steel buckets that formed the brigade still cling to their steadfast cables high over deep canyons. Other wire ropes, victims of vandals' hacksaws, lie limply on the ground as their twisted containers rest half-buried in churned-over cloudburst debris.

Near the 7000-foot contour friendly pinyon pines began to appear, and joined by juniper and mountain mahogany, they accompanied us to the summit.

We were well spent as we approached the crest. Within whistling distance of camp, a shout from one of the drivers enlightened our spirits. Dinner was ready, as promised, and the sleeping bags were layed out on



THE AUTHOR AND ONE OF THE SALINE VALLEY TRAM BUCKETS. STEEL CONTAINER HELD ABOUT 800 POUNDS OF SALT. ITS TWO-WHEEL CARRIAGE RODE THE STATIONARY SMOOTH TRACK CABLE WHILE THE AUTOMATIC GRIP BELOW ATTACHED ITSELF TO THE MOVING TRACTION ROPE.

the pleasant veranda of the summit operator's six-room house. This is an impressive campsite — 8700 feet in altitude, surrounded by a beautifully fragrant forest, and far below the sight of creeping headlights of Sierra motorists.

The sparkling night was void of all sound, but it was not this way when the tram was in operation. This was a busy place with a bucket of Saline salt raising its head over the eastern crest almost ever minute. From the opposite direction an empty bucket would come jogging through the pines, and then disappear.

Control Points

The summit station motors drove two of the five sections that formed the continuous circuit. Each station housed equipment for controlling the electrically-driven traction ropes that provided the thrust for the two-hour journey.

The parallel stationary track cables were eight feet apart, and the buckets, holding 800 pounds of salt and suspended from two-wheel carriages, rode the smooth track cables. Automatic grips attached the buckets to the moving ropes.

The Last Leg

The three drivers left early in the morning, their destination the same as ours: the salt lake on the floor of Saline Valley. Their route was along the crest of the mountains to the old mining camp of Cerro Gordo, back to the highway at Keeler, and then a 50-mile J-loop around the mountains to the lake. We hikers took the shorter, but far more difficult, direct route to the lake. It was almost straight-down hiking which can be as arduous as climbing. We entered Daisy Canyon on a poor trail. Here the wooden tram structures were seasoned to a rich reddish hue, reflecting the difference in exposure received on this side of the mountain from that of the western slope.

If the view from the summit station westward across Owens Valley is superb, the view eastward down the dizzy slopes of Daisy Canyon and across forbidding Saline Valley, 7000 feet below, is sensational.

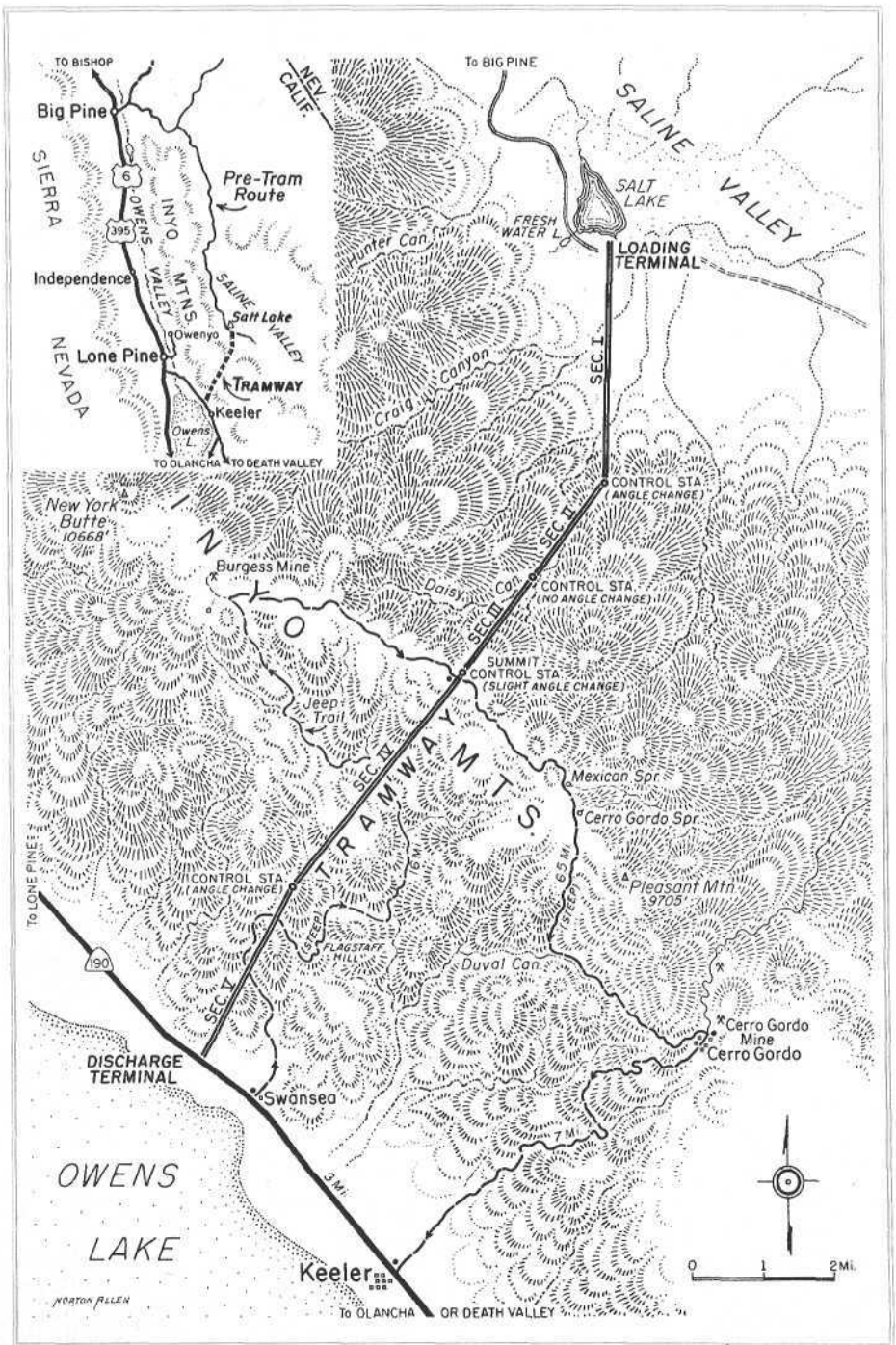
Keeping us company along the way were several coveys of chukar partridges. They had far less trouble than we in following the dim trails down the canyon. The tram line made three wild broadjumps over the gorge, and how the engineers ever pushed this project through is nothing short of incredible.

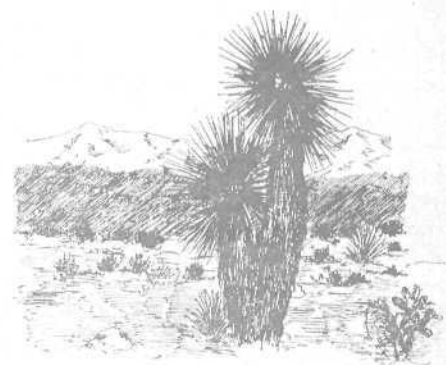
Three Lakes Below

We stopped to rest at the Section I control station on the lower mountain slopes. From this vantage point the Saline Valley lake became three lakes: the dry playa, the salt lake, and to the west a fresh water lake. The latter body of water is frequented by many birds. A black speck on the shores of the salt lake indicated the position of our transportation.

At this control station, whose stable still contains a supply of straw, the cables turned a sharp angle for a beeline northward to the loading terminal which we reached in late afternoon. The dock is marked today by small pieces of lumber rent into grotesque shapes by salt action. We joined the birds for a dip in the fresh water lake, and much refreshed we settled down for an evening around a cheery campfire.

Behind us, hidden by night, was the half-million dollar monument to a marvelous project that wasn't worth its salt financially.—END





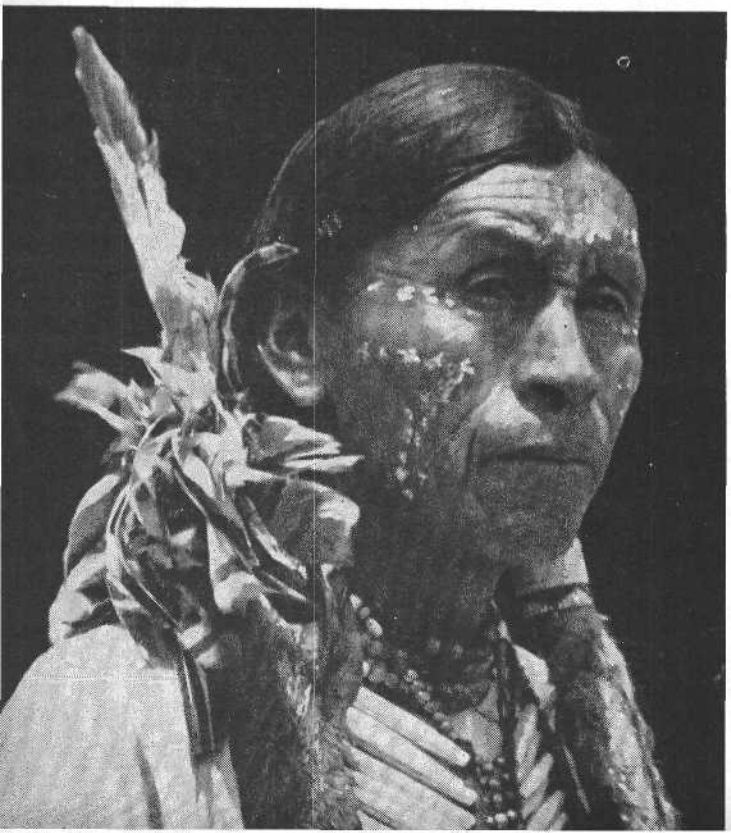


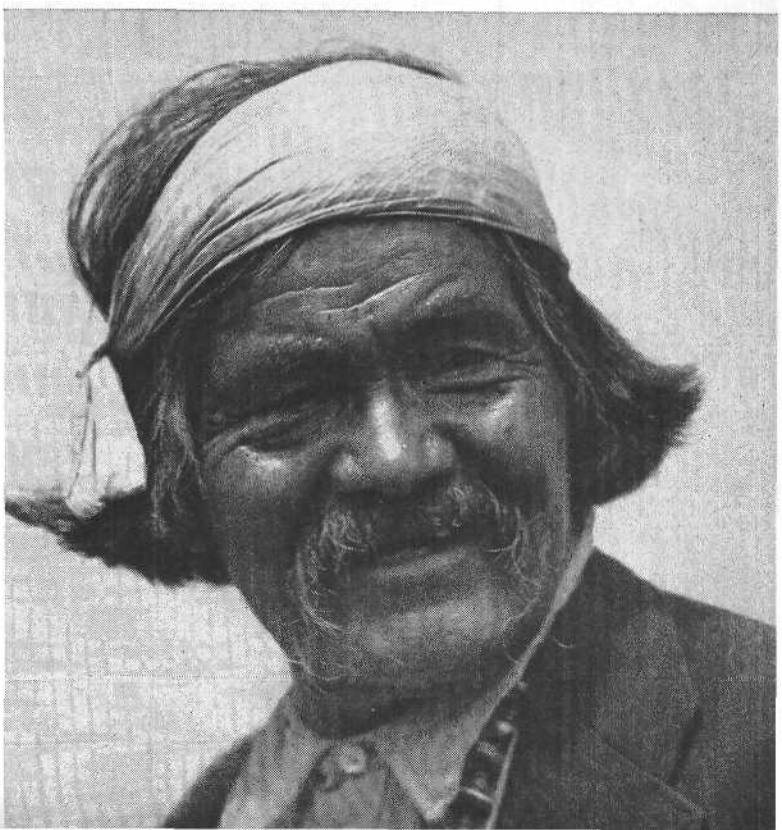


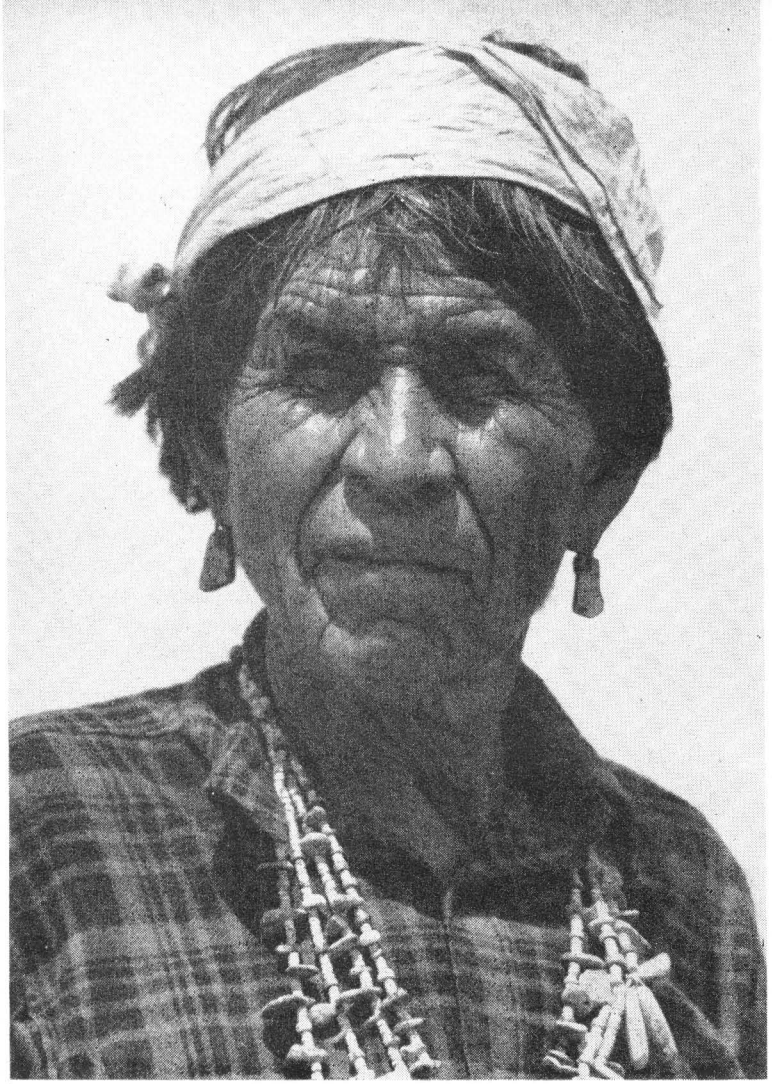
"LOS INDIOS"

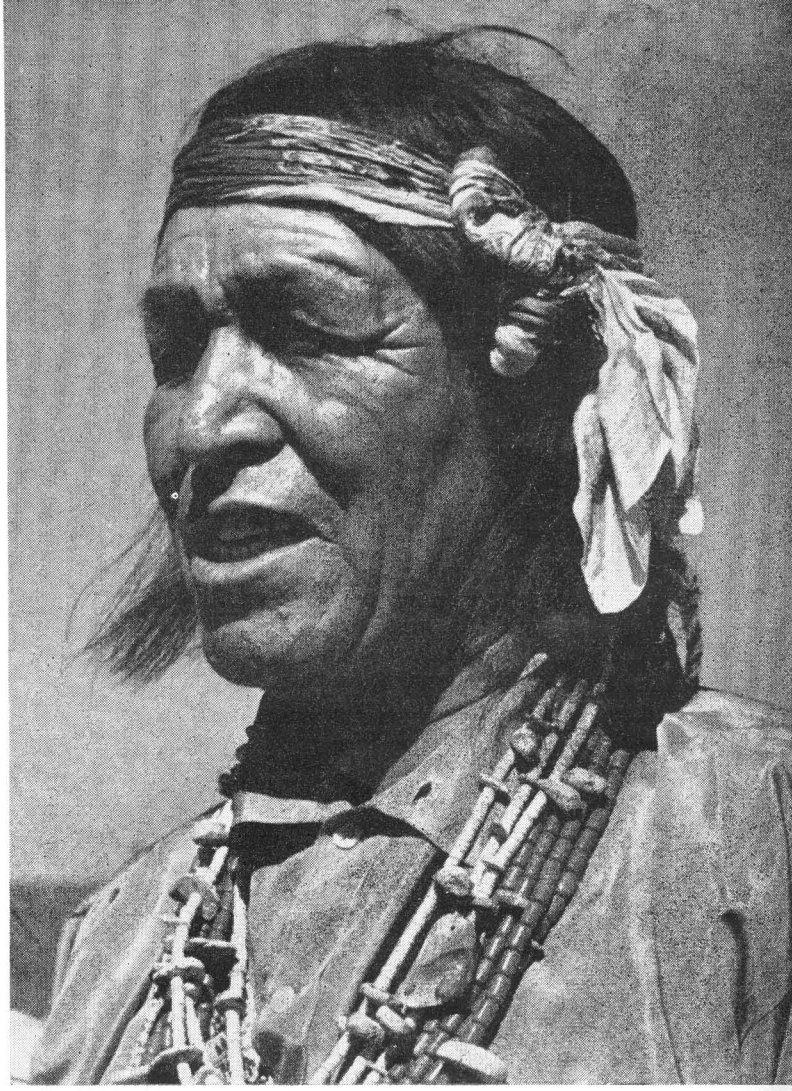
The faces on these pages belong to contemporary Southwestern Indians—proud first Americans whose grandfathers saw the red man's dawn advance, as day itself does, only to be swallowed up in the glaring world of the white man's noontide. The tribesmen here were photographed at the annual Gallup, New Mexico, Inter-Tribal Indian Ceremonial, scheduled this year for August 13-16. In addition to its varied program, the Ceremonial is a photographer's heyday.

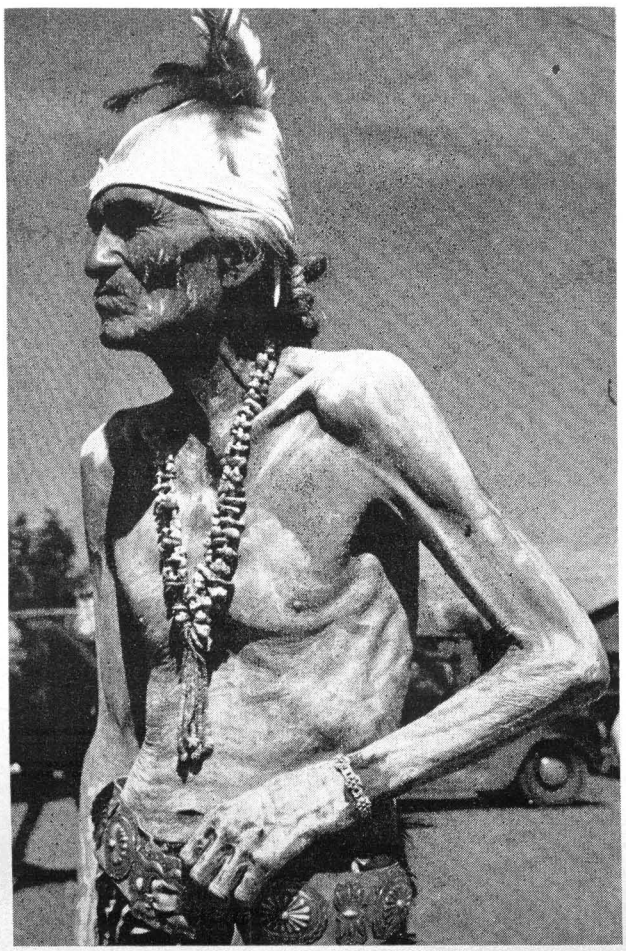
Photographs by ANDRE De DIENES

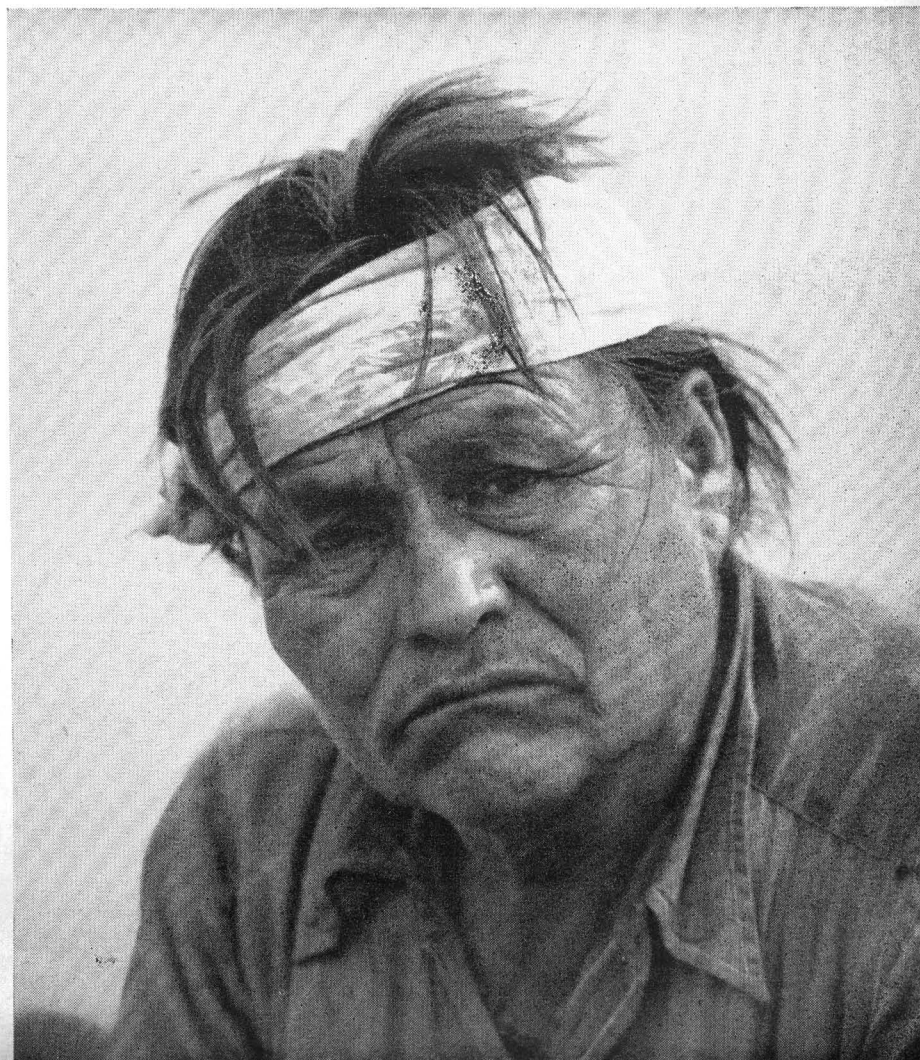












For more on photographer Andre de Dienes see Publisher's Notes on page 3.

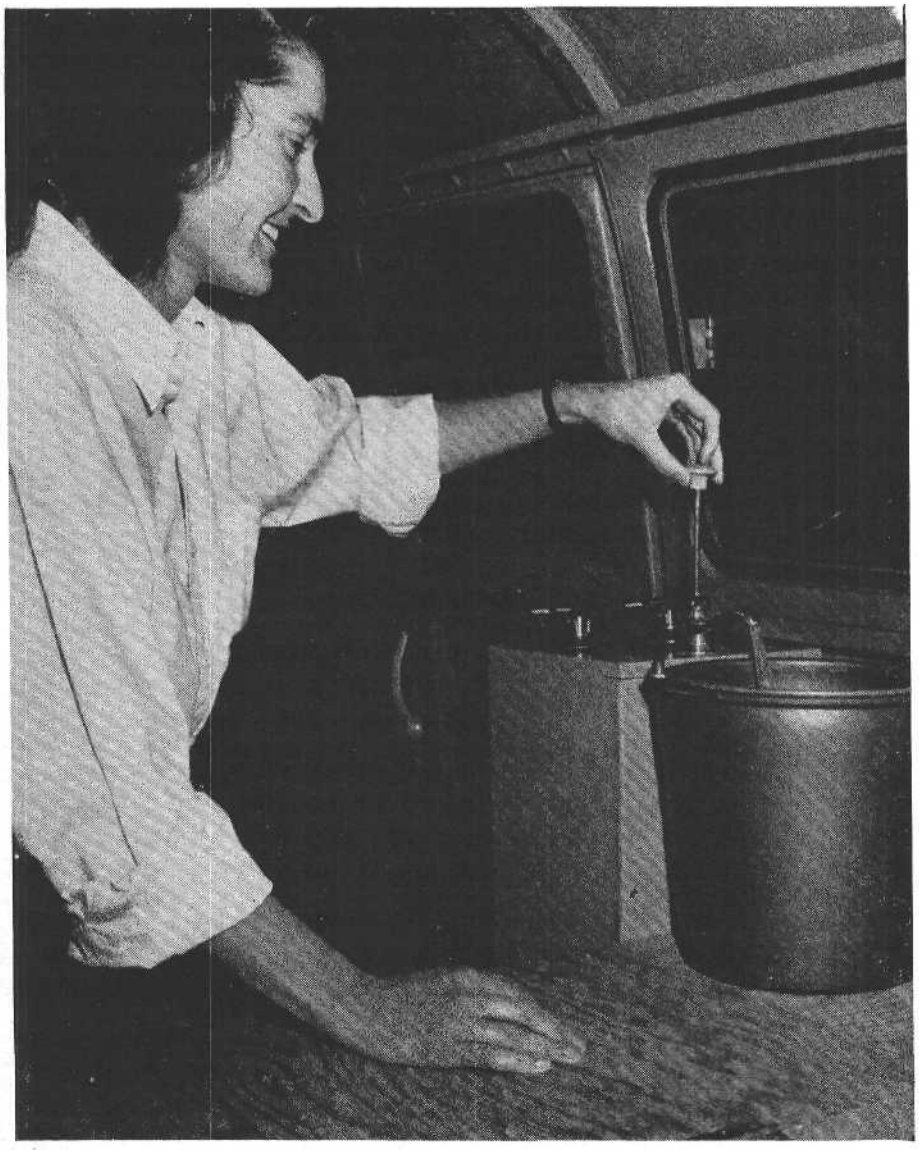
A Desertgoing Water Tank



By MARY HILL

WHEN I acquired a half-interest in a Volkswagen Kombi, and began to equip it for a desert vacation, the one thing I particularly wanted was a water tank. So I looked at water tanks for trailers, which were just tin cans, and not, to my mind, very sturdy; I looked at jugs of several sizes, which were awkward in shape, and either too small to be practical, or too heavy to lift; I looked at farm tanks the big galvanized type used to store water—but they were much too large for a car.

Finally, I went to several ship chandlers on the San Francisco waterfront, and by dint of insistent questioning learned the answer to my problem —a built-in wooden water tank lined with fiber glass similar to the tanks used on fishing boats. Such a water tank, I was told, kept the water fresh and pure—as tasty as the day it was stored.



AUTHOR PUMPS WATER FROM TANK THAT SHE MADE AND THEN INSTALLED IN HER CAR.

Fiber glass can be purchased from auto and marine supply houses, or from the large mail order houses. It is sold by the yard (in 44, 48 and 50 inch widths), and the resin to seal it is sold by the half-pint or more.

I bought my materials from Lawrence Zieger of the Edgewater Boat Shop in Sausalito. It was a good thing I did, for I had never worked with fiber glass, and his words of advice were of invaluable help.

"How do you plan to make the tank?" he asked.

"I'm going to make a box with a lid," I answered, "fiber glass each piece, then fasten it together and seal the joined edges from the inside. I'll use half-inch plywood, so I might even glass the outside, too, if the material isn't too expensive."

"You're on the right track," Larry said. "I doubt if it will be necessary to fiber glass each section individually, but it would be good insurance if you did. And glassing the outside may prevent any leaks that might occur from damaging the car interior. Be sure you have enough fiber glass cloth for the job before you start.

"This," he said, handing me a half-gallon can, "is the resin. And this," handing me a small, translucent plastic tube marked off in quarter ounces, "is the hardening catalyst that you will mix with the resin. I suggest you mix

up no more than a pint at a time, for it hardens in half an hour."

The tank I planned—measured to fit a space behind the side door—stood 27 inches high, and had outside dimensions of nine and a half inches by 8 and three quarters inches. My calculations showed that it would hold an adequate supply of water for drinking, cooking and personal needs for two people and a dog for two days—about seven and a quarter gallons.

Problems

I sawed all of the wood panels by hand (most of the cuts were fairly straight), laid the strips of cloth on them, and proceeded to mix a pint of hardener. Then I began to paint.

The cloth wiggled and squirmed as I worked; inexplicable air bubbles appeared from nowhere; and insects divebombed the panels, to become preserved forever in timeless glass. To hold the cloth still, I tried to "staple lightly" as suggested in the directions, but it only added new air bubbles. I achieved the best results by smoothing the resin mixture with my fingers. Halfway through the first layer, the hardener began to coagulate, and I began to rush. After that, I mixed half a pint or less.

At this point, I found a small warning on the can of hardener. "Once this resin hardens," it read, "nothing will soften it. Clean brushes, pots, etc., before hardening, with solvents . . ."

To my pleasure and relief, warm water and soap readily washed the brush and my hands. Thereafter, so long as the hardener was at all soft, very thick detergent suds quickly and easily cleaned us both.

From then on, the going was fairly easy. I sanded the excess glass and cloth, using a very coarse grit, smoothed off the surfaces, and fastened the four sides and bottom of the tank together, leaving the top piece until last.

Sealing the Inside

Next step was to seal the inside, particularly the joined edges, with fiber glass. I took small strips of cloth, laid them in the corner grooves, and secured them, one by one, with resin. Since my water tank was 27 inches deep, the bottom joints were nearly out of reach. Wiser persons than I will attach and seal three side panels to the bottom piece, leaving only one long reach after the fourth side panel is fastened on.

And here let me add a warning: be sure to work the hardener resin in a well-ventilated room, or, preferably, out - of - doors. Breathing the resin fumes can produce a roaring headache.

Another reason for doing this work out-of-doors is to keep the fine glass dust that results from the sanding off of the floor and furniture. I used an electric drill attachment to file off the excess cloth and glass, and the cloud that came from it was thick! And use safety glasses—the dust contains large glass splinters.

On the whole, the tank went together smoothly, but slowly. The first day the weather was hot and dry, and the resin glassed quickly. The second day was humid, and the tank dried very slowly. At first I thought I had incorrectly measured the quantities of my ingredients, though I had used a measuring cup and spoon religiously, but I found that by bringing the tank in by the furnace, it dried rapidly.

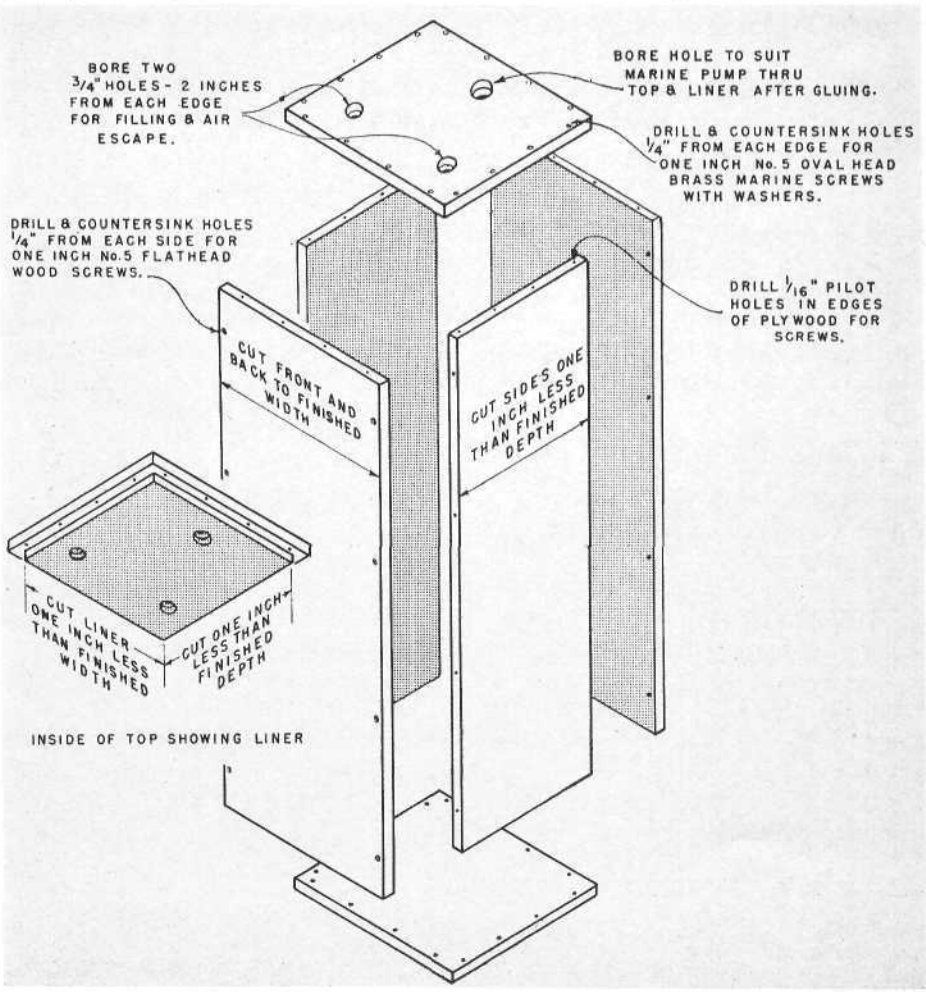
When my tank walls were completed, including the top which had an inset board the size of the opening to prevent leakage around the unsealed joint, I was faced with the problem of how to tap it. An installation that is placed fairly high in a car can be tapped by a faucet or hose drained by gravity, but by this time I was so proud of my tank I decided to invest $10 in a small galley pump.

Here's a practical solution to your water needs while motoring through the desert — a custom-built tank with marine fittings.

Two holes drilled beside the pump, one for filling, the other for air escape, completed my tank. I fitted them with small brass marine screw tops (although corks will serve as well), and my tank was ready for trial. I washed it out carefully, not wishing to drink the ground glass left over from sanding, and fastened it to the floor of the car with angle irons. The garden hose filled it quickly. I fitted the plugs back into the holes, and pulled the pump up. A jet of water struck the pail I had placed under the spout. The downstroke added a bit more. Then, joy! —a clean shut-off, with no drip!

Water for the Curious

I took my desert water tank to Death Valley on its maiden voyage, and I'm afraid I took every opportunity to show it off. I pumped much more water for demonstrations than I did for drinking. I pointed out to all who would listen that here was a water tank that could be designed to fit any location in a car, that it was inexpensive, lightweight, could be painted to fit the decor, was completely waterproof, extremely sturdy, didn't rattle, gave the water no odor or taste, the materials for making it were easily obtainable, and what's more, I made it myself.—END



Cahuilla Cat's Cradle..



VICTORIA WEIRICK DEMONSTRATES CRADLE PATTERN THAT SIGNIFIED: "IT WILL BE A BOY."

By HARRY C. JAMES

THE INDIANS of the Americas participated in a variety of games. These pastimes were basically similar throughout North America, and, as Stewart Culin notes in his *American Indian Games,* they were very much akin to the games played by the people of China, Korea and Japan.

One of the most widespread diversions among the people of the world is the one that has come to be known as "cat's cradle." This is played with string looped on the fingers in such a way as to resemble a small cradle. The loops then are transferred from one finger to another, each shifting of the loops forming a change of pattern.

Among such North American tribes as the Miwok of Northern California, the Hopi of Arizona, and the stalwart independent Cahuilla of the mountains and deserts of Southern California's Riverside and San Diego counties, cat's cradle was widely played as an amusing game of skill. Someone would call the designs and the contestants would see which one could complete it first, the string patterns becoming more and more complex as the contest progressed. Anthropologists say that the Cahuilla developed more than 100 different designs, among them the vulture, crow, eagle, eagle's nest, blue heron, dove, flying dove and grinding stone.

With the Cahuilla, however, the cat's cradle was more than a game. It had religious significance as well. Upon the death of a Cahuilla, his spirit started its journey to a final resting place, *Telmekish.* Before the spirit could gain entrance to *Telmekish* it had to demonstrate to the guardian of the Cahuilla heaven that it could remember a variety of intricate and significant cat's cradle patterns. The Cahuilla believe that all these patterns were taught to them by *Man-el,* the Moon Goddess, while she lived among them in the days of their genesis.

Mrs. Victoria Weirick, a highly respected matriarch of the Cahuilla's Wanikicktum clan who lives on the Morongo Reservation near Banning, was able to recall for me a number of the simpler cat's cradle patterns. She sat in the warm sunlight outside her little house which overlooks the whole sweep of San Gorgonio Pass and the San Jacinto massif beyond, and puzzled out nearly forgotten designs. Witty and often sagacious were the remarks she made when her old stiff fingers would not do exactly what she wanted them to do, or when her memory played her false.

Mrs. Weirick explained how cat's cradle was used to determine the sex of an unborn child. An expectant mother anxious to know if she was going to have a boy or a girl, would seek out an older woman known to be adept at prophetic skills. Whereupon the older woman would get string and set to work on a rather simple pattern.

Because of some slight unconscious difference in the final manipulation of this pattern, it would come out in one of two distinct designs when the strings were pulled taut. One pattern was considered masculine, the other feminine.

The older woman would make a series of these cat's cradles, and when the masculine or feminine design turned up three times in succession, the sex of the expected infant was declared.

When Mrs. Weirick attempted to demonstrate this sex-forecasting trick, the string on her fingers became all fouled up.

"Evidently a miscarriage!" she said with a smile, her wise old eyes twinkling.—END

Making string cat's cradles is one of the most widespread pastimes on earth . . . but with the Cahuilla Indians of Southern California, it was more than a game . . .

READER RESPONSE

Save the Mustang . . .

Desert:

More power to Velma Johnston ("Wild Horse Annie Fights to Save the Mustang," June *Desert*). How can we help?

BERT REYNOLDS
Lancaster, Calif.

Fight for Mustangs . . .

Desert:

I am enraged about the way private interests are treating the mustang. How do I join the fight?

MRS. F. QUAST
San Diego, Calif.

(*Supporters of the Save the Mustang campaign should register with Mrs. Johnston, Box 626, Reno.—Ed.*)

Laudermilk's Green Conquest . . .

Desert:

What a mind the late Jerry Laudermilk presents! His "Green Conquest" in the May issue was excellent.

LEWIS H. VanBILLIARD
Dalton, Mass.

Happy Over Poetry Policy . . .

Desert:

Congratulations on the new "Poem-of-the-Month" policy. This will afford a thrill to all of us who write poetry, and I am sure it will also inspire our best efforts in this direction.

Already two poets, many times represented in *Desert*, and my close friends, have called me about it. We are sincerely happy that this recognition will be given poetry—too often merely a labor of love; yet in spite of the reader polls, eagerly looked forward to by many of us.

MIRIAM ANDERSON
San Bernardino, Calif.

Dutch Oven Hoax . . .

Desert:

My advice to Vernon Anderson, who expressed a desire in his letter (June *Desert*) to search for the Lost Dutch Oven Mine, is: "Don't waste your time."

In 1932 a group with whom I was associated began an extensive search for the mine. For two years we prospected the Clipper Mountains of California. I covered just about every square yard in that range.

We became acquainted with an old-timer in the district who reportedly first told the Lost Dutch Oven story. From him we heard the story again—first hand—along with many other tall, tall tales. Then we pinned him down to a direct answer as to the truth of the story, and he admitted that he had "spun the yarn" in a Barstow saloon. The "mine" did not exist beyond the doors of the saloon.

This man passed away a few years later. At least two men have lost their lives in the search for the Lost Dutch Oven Mine.

PAUL B. WALLACE
Inglewood, Calif.

Reproductions Available? . . .

Desert:

Our congratulations for the attractive and interesting magazine. We especially like your color reproductions for the covers. Do you have any thought of making such reproductions available for mailing?

THE CLIFFORD VINCENTS
Whittier, Calif.

(*There are three or four reasons why color reproductions, especially of artists' paintings, are not feasible at this time. However, we are going to have a special full color insert—eight pages of Southwest color—in our December issue.—Editor*)

He Was There . . .

Desert:

Congratulations on your front and back cover paintings by R. Brownell McGrew for the July *Desert Magazine*. Having camped both in Box Canyon and Monument Valley, I know how realistic they are, and they help me recapture the charm of both places. Nostalgia (in moderation) is a good thing for all of us.

JIM BARBOUR
San Francisco, Calif.

Please Don't . . .

Desert:

We beg you, please DO NOT serve us artificial front and back covers in *Desert Magazine*. With the wonderful photographs which were reproduced on the front and back covers of *Desert* up to two months ago we had the impression to really live what we were looking at. Please follow same policy.

C. L. BISSONNETTE
Montebello, Calif.

Through Cataract Rapids Alone . . .

Desert:

I finally made it through the Cataract rapids — alone. You will recall that in 1957 when I tried to make the trip from Green River, Utah, I lost one motor and smashed another in the rapids just below the junction of the Green and Colorado rivers. I had to give it up, and tied the boat to the willows and climbed out and was getting pretty weak from hunger when I ran into a surveyor's camp. Also, I lost a billfold with $250 while scaling the cliffs.

This year I tried it again, without a motor. I bought a 16-foot plywood boat, covered it with three layers of fiber-glass, built in big watertight compartments at both ends, and attached three inflated innertubes to both sides for added buoyancy in the rapids. When I came to the first rapids I almost lost my nerve. Big rocks in the middle of the stream were causing fierce eddies and whirlpools. I tied the boat up and tried to climb out, but the cliffs were too precipitous. I couldn't make it.

I camped there 17 days, catching a few fish but my grub supply finally ran low. In the meantime the water had risen and since there was nothing to do but continue down the river, I shoved off. It was a rough ride and I frequently had to pull in and bail out the water—some of it had even seeped into the "watertight" compartments.

But I made it through, and just after I came to smooth water a helicopter landed on a bar. As I was long overdue the sheriff's office had asked the Phillips Petroleum Company scouts to watch for me.

I passed my 63rd birthday while on the river, and believe I am the oldest man to have gone through Cataract alone.

BURTON G. ODELL
Amarillo, Texas

Ramon's World . . .

Desert:

I have a question in regard to the illustration (a little boy crying) that accompanys the June poem-of-the-month. The poem itself is a treasure, lovely to read, but:

WHY DOES RAMON CRY

He plays in the sand by the open door,
And happily greets each morn.
His blanket-bed is warm at night,
And he is American born.

A kind mother gives him food and faith;
A father works near by;
His little-boy-world is a pleasant one
So why does Ramon cry?

SYLVIA REEVES
Tucson

(*The little citizen of Ensenada, Mexico, was frightened by the stranger who took his picture: Al Christman of China Lake, Calif.—Ed.*)



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KENT FROST, Monticello, Utah

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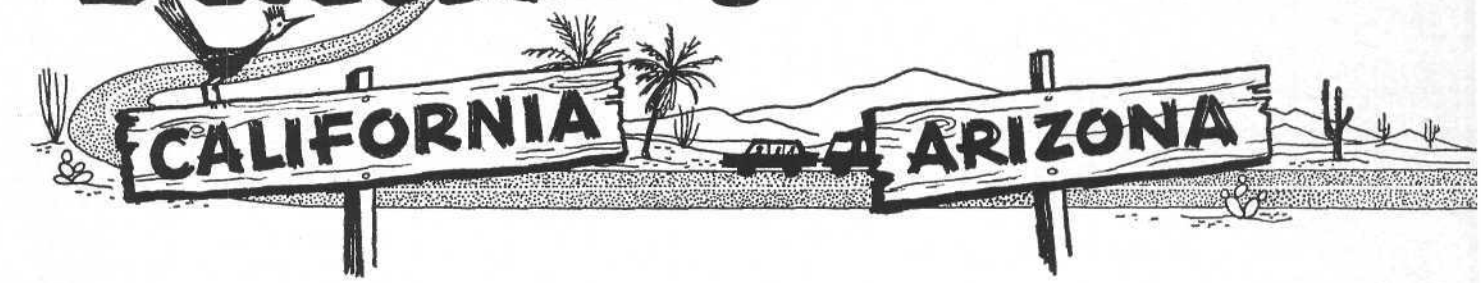
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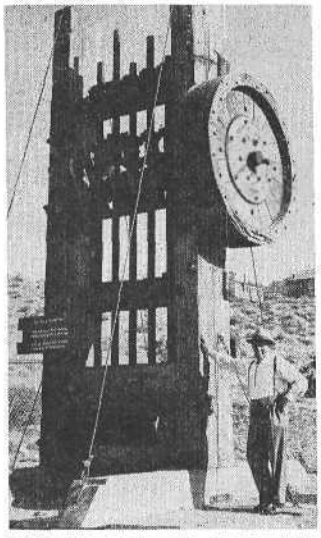
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Desert's August Travel Fare:



By LUCILE WEIGHT
P. O. Drawer 758, Twentynine Palms, Calif.

IF YOUR SUMMER vacation travels take you through the California Mojave Desert, you won't regret spending a few hours or a few days in a mine camp that smacks of the old days. You'll enjoy prowling through the crooked streets, talking to the friendly folks who live in the amazing Rand District on Highway 395. This is the site of successive rich gold, tungsten and silver strikes that have made the area an almost constant producer since 1895.


MAX HESS AND OLD STAMP MILL.

The Rand's population is centered in Randsburg, Johannesburg, Red Mountain and Atolia, and not one of these towns has ever become a ghost. Residents, still confident of their destiny, "mine" when any two of them engage in conversation.

Randsburg, in its secluded northern canyon of the Rand Mountains, has retained most of its early atmosphere. Homes and businesses are in the lee of tailings from the fabulous Yellow Aster gold mine, which, with Big and Little Butte and Kenyon mines, partially surround the town's canyon streets. A road out of Fiddler's Gulch at the upper end is a back route to "Joburg" or to the Stringer District mines on the south slope, and to the silver center of Red Mountain and the tungsten area of Atolia.

Since the Death Valley '49ers, gold seekers have passed near here. Goler District, just north, drew hopefuls in '93, some of them working east to Summit Diggings. Among the latter, in '95, were Charles Austin Burcham, grubstaked by his wife, a San Bernardino physician; John Singleton, carpenter-millwright; and Frederic M. Mooers, ex-newspaperman. Ready to quit, Mooers overheard men plan to prospect a mountain he had checked the year before. Could he have overlooked gold? If so, he didn't mean to let it get away.

Mooers, Burcham and Singleton slipped out and headed southwest. They found gold, staking claims April 25, 1895, on the Rand Mine, later named Yellow Aster.

Litigation and other problems soon were in the capable hands of Burcham's wife, Dr. Rose La Monte Burcham, who left her practice to cook at the mine and generally manage it. Randsburg grew quickly to a lively family town.

(Continued on page 38)

By THOMAS B. LESURE
6120 N. 18th St., Phoenix

AUGUST IS RAIN month — and snake month — in Arizona. The rains, coming in drenching late afternoon or evening thundershowers that flood arroyos, may be a nuisance to travelers (though a blessing to natives!), but the snakes are guaranteed to thrill even the most jaded tourist.

Actually, the snakes and rain go together—as any good Indian will tell you. The serpents are messengers to the gods and, when properly placated with pulse-throbbing ceremonials, help to bring the moisture so urgently needed for crops.

Most famous of these August ceremonials designed to cleave open the heavens for their life-giving rains is the Hopi Snake Dance which this year will be staged at the First Mesa village of Walpi and on the Second Mesa at Mishongnovi. Exact dates are never known until religious leaders set them, about 10 days ahead of the climactic, public part of the rite. Usually, though, it's the last week in August.

Fortunately, the new paved road across the Hopi Reservation (less than 30 miles are still top-speed gravel) hasn't affected the authenticity of this age-old ritual, even if it has decidedly changed modern Hopi outlook and brought some of the usual adverse elements of commercialism. Tip: bring your own camping equipment (including a raincoat — the dance almost always brings results) and be on deck early to insure yourself a rooftop vantage spot away from the slithering snakes.

A few years ago, while driving with a Hopi friend to Shongopovi from a pow-wow of tribal elders (who were and still are legitimately arguing the encroachments of white men and the Navajos) at Hotevilla, our companion

(Continued on page 31)


SMOKI DANCER RE-CREATES SNAKE DANCE.

√ Randsburg Mining District
√ Gallup Intertribal Ceremonial
√ Arizona Snake Dances
√ Wilderness Road to Winnemucca

NEW MEXICO

UTAH-NEVADA

By W. THETFORD LeVINESS
P. O. Box 155, Santa Fe



INDIANS FROM 31 SOUTHWEST TRIBES PARTICIPATE IN CEREMONIAL.

NAVAJOS IN COVERED wagons, Navajos in pick-ups, Navajos walking the streets by the hundreds. Navajos camping on the nearby hillsides. The Zuni band, and Zuni women with *ollas*. Indians of these and other tribes in full regalia. A parade of dances, songs, and beauty contests. Crowded hotels, motels, restaurants . . .

This is Gallup at ceremonial time—four days of excitement—August 13-16.

The "Gallup Intertribal Indian Ceremonials" is the official name of this event, perhaps the biggest of all yearly pow-wows among American Indians. Gallup is on U.S. 66 in Western New Mexico, south of the Navajo reservation, near the Arizona line. Zuni is to the south. The presence of so many Navajos makes it appear that they are the host tribe, but this is not really the case. They give only a few of the dances, but their picturesque covered wagons, usually one to a family, lend color and romance to the whole.

The daily program is set. The parade each morning is repeated, circus fashion, in a "grand entry" each afternoon and night at the stadium. For sheer spectacle, there's little to equal this twice-a-day start of the ceremonials. Both in the parade and the "grand entry," the dozen or so women of Zuni who march in single file with *ollas* balanced on their heads win the most genuine applause.

Most of the dancing is by Pueblo Indians. The Taos "hoop dance," Cochiti's "buffalo dance," and a Hopi version of the "corn dance" are invariably given. In addition, there are dances by several Southwestern Apache groups and a few Plains Indians. Concluding the repertoire at night is the Navajo "fire dance," in which striped and painted figures perform around a hastily built bonfire—they're all male, and naked except for the scantiest of

(Continued on page 35)

By PEGGY TREGO
Unionville, via Imlay, Nev.

"WINNEMUCCA-TO-THE-SEA" has been a rallying cry for improvement of State Highway 8-A across northern Nevada these many years. The shouting has had effect, and 8-A is today an improved road through a remarkable wilderness, paved half its 151 miles from the state line to Winnemucca itself.

August is the ideal month for you to reverse the "Winnemucca-to-the-Sea" path to drive out here for the Nevada State Rodeo, August 29-31. It is a wonderful trip, ending with a splendid show.

Wise travelers will begin the 8-A trip with an overnight stop at Cedarville, Calif., nine miles from the state line, so that at least a full day can be spent in the northern Nevada highlands, with Winnemucca gained by afternoon or early evening. It is wise, too, to be sure of your food, water and gasoline supply at Cedarville because there are no service stations or hot dog stands between there and Denio, 90 miles to the east.

Instead, there are miles of open country dotted by a few big ranches, and side roads into some of the more remote parts of this isolated area. In a canyon just across the Nevada border stand the brooding wooden buildings of Stage Station 49, a relic of days when horse-drawn coaches traveled this way. At Vya (merely a crossroads where a few ranches rub elbows) 8-A begins its swing into the high hilly plateau land to which it keeps most of its length. Side roads lead northward into the Massacre Lakes area, where arrowheads and pieces of petrified wood are still to be found on the surface of the ground. The Lakes are merely damp this time of year, though there are springs in the vicinity, and camping is pleasant.

Traveling northeasterly, 8-A goes through country that is covered with obsidian — the black volcanic glass so valuable to early Indians for arrowhead making. Thirty miles from Vya is the intersection with the Summit Lake Indian Reservation road—a day's trip in itself to the high lake country some 20 miles south, and rewarding if you are not afraid of rough travel.

(Continued on page 39)



YOUNG NEVADA RODEO ENTRY.

BOOKS OF THE SOUTHWEST

STORY OF A NOTORIOUS WESTERN OUTLAW

Born of respectable Mormon parents, Butch Cassidy (real name: George LeRoy Parker) early in life became one of the most notorious bandits in Western history. He and his "Wild Bunch" held up trains, robbed banks and payrolls. They were a scourge to officers in Wyoming, Utah and Colorado for more than a decade.

Tales of Butch Cassidy and his gang have become a legend in the Great Basin where they operated, but it remained for Charles Kelly, Utah historian, to compile an authentic story of the man and his record. Kelly's book *Outlaw Trail* first was published in a limited edition in 1938. The first edition was soon sold and has become a collector's item. This year a new and revised edition has come off the press.

At the time the first edition was published many of the frontiersmen who knew Cassidy were still living, and called attention to some errors in the original volume, and furnished much additional material which has been incorporated in the new edition.

The hard-riding "Wild Bunch" had three main hideouts—Hole-in-the-Wall in central Wyoming, Brown's Hole near where the states of Wyoming, Utah and Colorado meet, and Robber's Roost near the junction of the Green and Colorado rivers. Members of the robber gang staged holdups as far distant as Idaho and Oregon.

Published by The Devin - Adair Company, New York, 374 pages with maps, index and photo illustrations. $6.

HOW INDIANS USED NATIVE PLANTS

Several years of study of range herbs and plants has culminated in a handy reference booklet, *Indian Uses of Native Plants*, by Edith Van Allen Murphey. The 72-page guide would be a good traveling companion for those who wander the West.

Mrs. Murphey has done a service to record the Indian customs, use of herbs, and tribal names for many plants.

Published by Desert Printers, Inc., Palm Desert, Calif., the book is paper-covered, is heavily illustrated, and sells for $2.50.

Books reviewed on this page are selected as being worthy of your consideration. They can be purchased by mail from Desert Magazine Book Shop, Palm Desert, California. Please add 10c per book for postage and handling, also four percent sales tax on orders to be sent to California. Write for complete catalog of Southwestern books.

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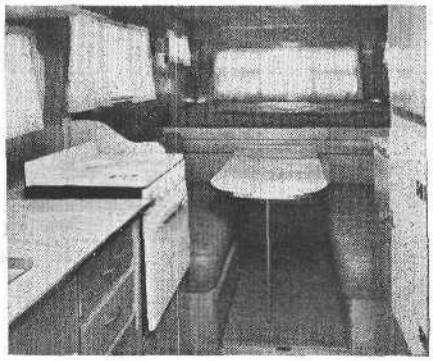


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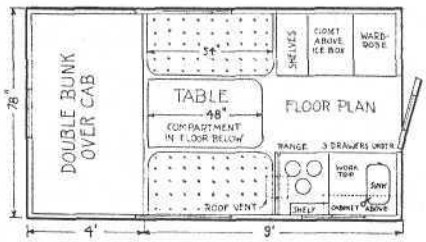
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ARIZONA TRAVEL

(Continued from page 28)

asked if we'd ever seen that "other" snake dance — the one at Prescott presented by a local organization — the "Smokis." "They use snakes, you know," he commented, "but it's not a real snake dance. We have the only real one." Then he added, "Someday, I'd like to see that one." There was a note of derision in his voice.

Quite regularly, however, the Hopi elders protest against the Smoki Snake Dance in Prescott as being a sacrilegious, mocking infringement on their religion. Nonetheless — despite the use of bullsnakes instead of rattlesnakes, and a few changes necessitated by the theatrical demands of their ceremonial arena — the Smoki People do present a faithful portrayal of the ancient Hopi rite. And nonpurists who cherish Indian customs could do a lot worse — witness the "Hopi" dances at Grand Canyon— than make the Smoki Ceremonials a substitute for the real thing.

Here, in two distinct forms, are symbols of separation, the unity that mark the relationship of white men and Indians. Strangely, their ends are often the same, but the twain resists merging. Each has something the other might benefit from, but each still fights the other. Perhaps someday, when better reason and goodwill prevail, the cold war will be over. Then the blending of the better elements of both cultures will be an inspiration to future generations.

In the meantime, you may enjoy the enticements of Prescott — swimming, camping, picnicking, hiking or scenic driving at magnets like Granite Dells, Thumb Butte, Granite Basin and the Senator Highway, former gold camps such as Walker or the old Territorial Capitol with its Sharlot Hall Museum. Or you may spend a spell on the Hopi Reservation, seeking out prehistoric dinosaur tracks that are as abundant as villages, gazing at far-flung horizons whose solitude dwarfs a man's ego, meeting the friendly people and learning about their crafts and good way of life, and —if you're lucky—visiting their mesa-top homes.

Snakes and rain? Certainly. But they're only a part of the August story in Arizona. After all, this land of contrasts and odd extremes hardly sticks to the usual—and its oddities are among its main delights. We wouldn't want it any other way.—END

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DESERT PRIMER

WORDS TO A CAMPER'S WIFE



If you married an apparently normal man, only to discover that he suffers from pernicious camping fever, chances are you have the choice of becoming a camper's wife or a camper's widow.

You'll receive a lot of advice—including these words—on the art of camping, but the only hard and fast rule to follow is to have fun. That's why people go camping. If you are a greenhorn, admit it. If you are timid, talk it over. Chances are most of your fears are without foundation.

If you have never slept on the ground, it will help to arrive at the campsite early enough to give the premises a thorough inspection. Select a level site well away from bushes and other "cover" for desert animals. An air mattress will insure added comfort.

Nothing will get you out of your daily routine "rut" quicker than will camping. Look for unusual things to enjoy. They are everywhere — from the smallest pebble to the largest purple mountain range. Keep your good humor. When the going gets rough, complaining will only make things worse. A poor sport can chill a camping trip.

In camping, a good deal of the fun comes from the work involved. Making camp is a satisfying experience. Cooking over an open fire is fun. But, emphasis should be on simplicity of operation. Travel light. Don't expect to have every convenience you left behind at home. Instead of packing, hauling, unpacking, using, washing and then repacking your egg beater, leave it home and skip the whipped cream. An important by-product of roughing it outdoors is the appreciation you will gain—when you return home — of your taken-for-granted labor-saving gadgets.

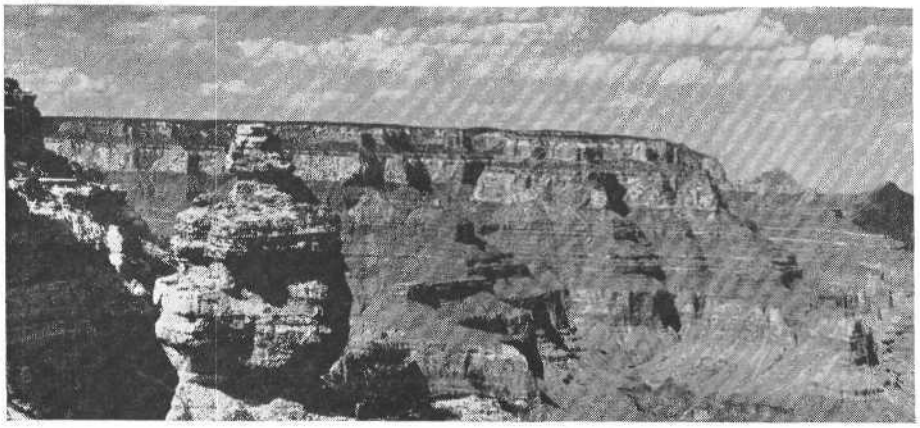
Improvise and conserve. Scour pans and dishes with clean sand before washing them. Paper towels remove the last clinging grounds from a coffee pot. Plan your camp menus around "one-pan" main dishes. Snacks —candy, nuts, raisins—will come in handy between meals.

Don't forget a good supply of lanolized skin lotion, for the desert air is dry. Take "layer" clothes—temperature changes can occur with suddenness. It's easier to add or subtract shirts, sweaters and scarves than to rely on a single heavy wrap for comfort.

Above all: be a pioneer. Be adaptable. Enjoy yourself. — Margaret Westover, Fullerton, Calif.

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WETHERILL INN KAYENTA ARIZONA

Desert Quiz

This little quiz will open the door to a score of desert facts—and the more you know about this beautiful land, the more you are bound to enjoy it. You must get 12 correct answers to graduate from the tenderfoot rank; 13 to 15 is good; 16 to 18, excellent; 19 or 20 correct answers and you're a mastermind. Answers are on page 35.

1. Tortoise, lizards and snakes are all "reptiles."—True_____. False_____.
2. New Mexico's state symbol — a circle projecting four rays—is properly known as the Hopi Friendship Symbol.—True_____. False_____.
3. Active volcanoes were once numerous in the Southwest.—True_____. False_____.
4. The Spaniards called the yucca, *"Las Velas de Dios,"* which translated means, "The Swords of God."—True_____. False_____.
5. Metamorphic rocks are formed when sedimentary or igneous rocks are altered by heat or pressure. True_____. False_____.
6. The road runner's back and wings are olive brown, underbody is white.—True_____. False_____.
7. The Air Force Academy is located in Utah. True_____. False_____.
8. Pinyon trees grow well at all elevations in the Southwest.—True_____. False_____.
9. Native gold and silver often are associated with copper.—True_____. False_____.
10. Mt. Charleston near Las Vegas, Nevada, is a popular ski run. — True_____. False_____.
11. The continental divide splits Arizona in half.—True_____. False_____.
12. Life zones are those areas in which climatic conditions, determined by distance from the equator and height above sea level, produce certain types of living things. — True_____. False_____.
13. Both the Navajo and Apache refer to themselves as "The People."—True_____. False_____.
14. John Wesley Powell is remembered for his exploration of the Grand Canyon.—True_____. False_____.
15. The coati is closely related to the raccoon.—True_____. False_____.
16. Bats no longer live in Carlsbad Caverns.—True_____. False_____.
17. Show Low, Arizona, is popularly known as "The Town Too Tough to Die."—True_____. False_____.
18. Gold mining took place in California years before the strike which resulted in the Gold Rush of '49.—True_____. False_____.
19. Now that Alaska is a state, Badwater at Death Valley is no longer the lowest point in the U.S. — True_____. False_____.
20. The Golden Spike ceremony—completing the transcontinental railroad—took place at Ely, Nevada, in May, 1869.—True_____. False_____.

Hard Rock Shorty of Death Valley



The tourist edged over to where Hard Rock was sitting in the patch of shade below the Inferno Store's front porch, and sat down beside him.

"Is this the desert where Peg Leg Smith found his black gold?" he asked by way of making conversation.

Shorty knocked out his pipe and looked up at the stranger.

"Naw," he answered at last. "Peg Leg foun' his gold in th' Coloradie desert down Yuma way." There was another pause and the tourist started to get up.

"See thet ol' buzzard on th' porch," Shorty said, pointing his stubby chin toward Pisgah Bill who was busy looking over the vegetable seeds on the rack. "He looked fer thet gold an' came durn near t' findin' it." The stranger sat down, his eyes fixed on Bill.

"It was in '16, if I recall right," Shorty continued. "Bill walked all through them canyons down there. At night he'd camp in th' palm oases an' share th' water with his burros an' th' coyotes.

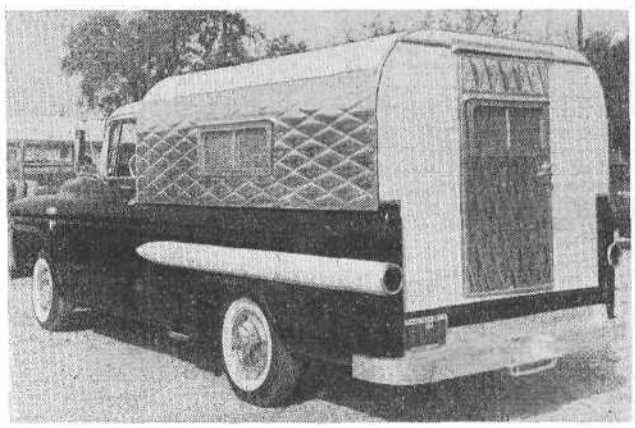
"Long 'bout May th' next year he finds himself a worm-eaten ol' peg leg under one o' them bushy palm trees sittin' way off by itself in a place where four washes meet.

"Bill gets all excited an' scoots his burros into town. Then he finds one o' them fortune teller gals and busts into her tent, burros an' all, wavin' a six-foot frond off'n thet palm tree.

"Naturally she lets out a scream.

" 'Look, lady,' sez Pisgah, 'that sign out front sez "Palms Read," an' I gotta find out which way Pegleg went after sleepin' under this one.' "

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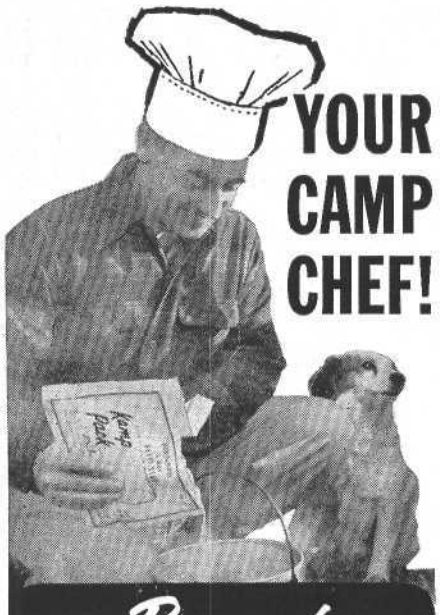
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SOUTHWEST NEWS BRIEFS

Squatters Face Eviction . . .

Yuma, Ariz.—The Department of Interior has asked the Justice Department to file eviction suits against 900 alleged trespassers on federal lands along the lower Colorado River in Arizona and California. The complex problem of squatters occupying thousands of acres of riverside land withdrawn from the unreserved public domain has been with the Interior Department since the late 1930s. One of the suits asked by the Department involves alleged selling of the government land.

Forests Due Facelifting . . .

Santa Fe — The Forest Service is asking for a $30 million 12-year development program for the Santa Fe and Carson National Forests in northern New Mexico. Plans call for construction of 460 miles of new roads, almost 100 miles of trails, and widespread recreation facilities, the Santa Fe *New Mexican* reports. Nearly $4 million is requested for erosion control, tree planting and other watershed rehabilitation. Recreation facility construction would cost $7.5 million for the Carson Forest, and $788,000 for Santa Fe.

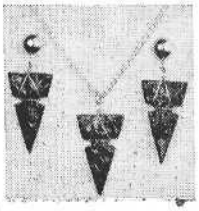
Indians Bid for Gambling . . .

Reno — Indians of Pyramid Lake Reservation 33 miles north of Reno offered nearly 14 miles of Pyramid Lake shore frontage for lease. The undeveloped land will be turned over to private interests for "commercial, recreational and residential" development . . . and gambling will be permitted "when not inconsistent with Nevada or federal law." The Pyramid Tribal Council will retain the right to issue fishing and boating permits. The leases are to be for 25 years with an option for 25-year renewal. The *Nevada State Journal* says a check of the state's top gambling authorities failed to uncover any interest in Pyramid Lake as a potential gaming locale.

Flaming Gorge Timetable . . .

Ogden, Utah — Recreation facility development along both sides of the Flaming Gorge Dam reservoir will be completed and ready for public use in 1962, it was reported. Ashley National Forest lands surrounding the reservoir will have boat ramps and parking areas, and eventually marinas and resorts. Planned for completion this year are four public campgrounds and access roads leading to them.

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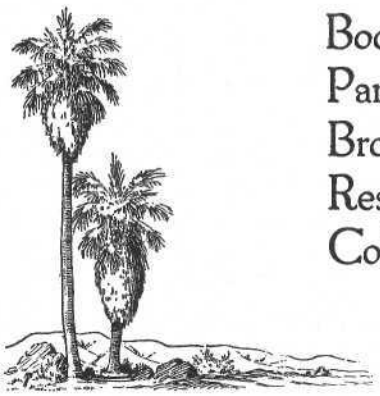
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Yumas Want Acreage Returned . . .

Winterhaven, Calif. — The Yuma (Quechan) Indians have petitioned Congress to re-establish their reservation boundaries as originally set by President Arthur's executive order of 1884. The big prize: 34,000 acres of land stripped from the original reservation by an 1893 pact signed with "x" marks by 203 Yuma males. Present-day Yumas say the 1893 agreement—by which the "x-signers" personally received five acres of land apiece—was reached through "fraud, duress and coercion." The 34,000 acres in question are west of Laguna Dam.

Oil Lease Revenue . . .

Ouray, Utah — High bids totaling $866,695 were received by the Uintah-Ouray Indian Tribe for oil leases on 14 tracts of tribally owned land. Standard Oil Company of California was high bidder on all 14 of the tracts.

Assets Can Be Distributed . . .

San Diego, Calif.—The Department of Interior announced new Federal regulations governing distribution of the assets of 41 Indian reservations and rancherias in California. Under the law the designated Indian groups are given an opportunity to divide their communally owned property, and take it out of Federal trust supervision.

NEW MEXICO TRAVEL

(Continued from page 29)

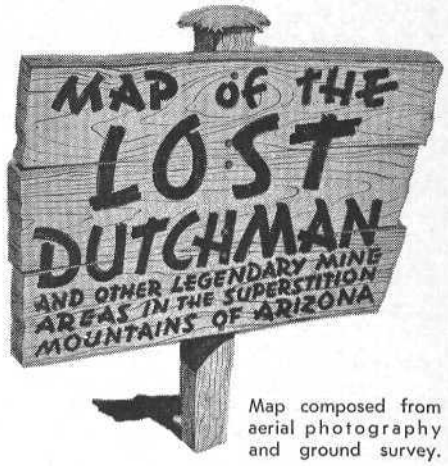
breechclouts. As the spectators leave, the more socially inclined Navajos begin a "round dance" near the stadium's main gate. Indians and non-Indians join in; the tonal chanting goes on until dawn.

Of the several side trips available to you, the swing south to Zuni on State Road 32, then east on State Road 53 to Grants and back to Gallup on U.S. 66 has the most to offer. It's a day's journey into ethnology, history, and geology perhaps unsurpassed in the nation. Zuni Pueblo was old when Spaniards first saw it in 1539; its ceremonial structure is as strong now as it was then, its masked dances as dramatic and meaningful. Between Zuni and Grants are two attractions—Inscription Rock and a cave of perpetual ice. Early Spanish explorers carved their names on the great stone history book, now El Morro National Monument; in the ice cave the temperature is 31° the year 'round, even though it varies from 105° in summer to —23° in winter in Bluewater, a few miles away. —END

TRUE OR FALSE ANSWERS

Questions are on page 33

1. True.
2. False. It is the Zia Sun Symbol.
3. True.
4. False. "Candles of God."
5. True. 6. True.
7. False. Colorado Springs, Colorado.
8. False. Pinyons range between 5000 and 7000 feet above sea level.
9. True. 10. True.
11. False. All of Arizona is west of the divide.
12. True. 13. True.
14. True. 15. True.
16. False.
17. False. Tombstone is the "Town Too Tough to Die."
18. True. Mexicans were working gold mines in northern Los Angeles County in the 1830s.
19. False.
20. False. The ceremony took place at Promontory, Utah.



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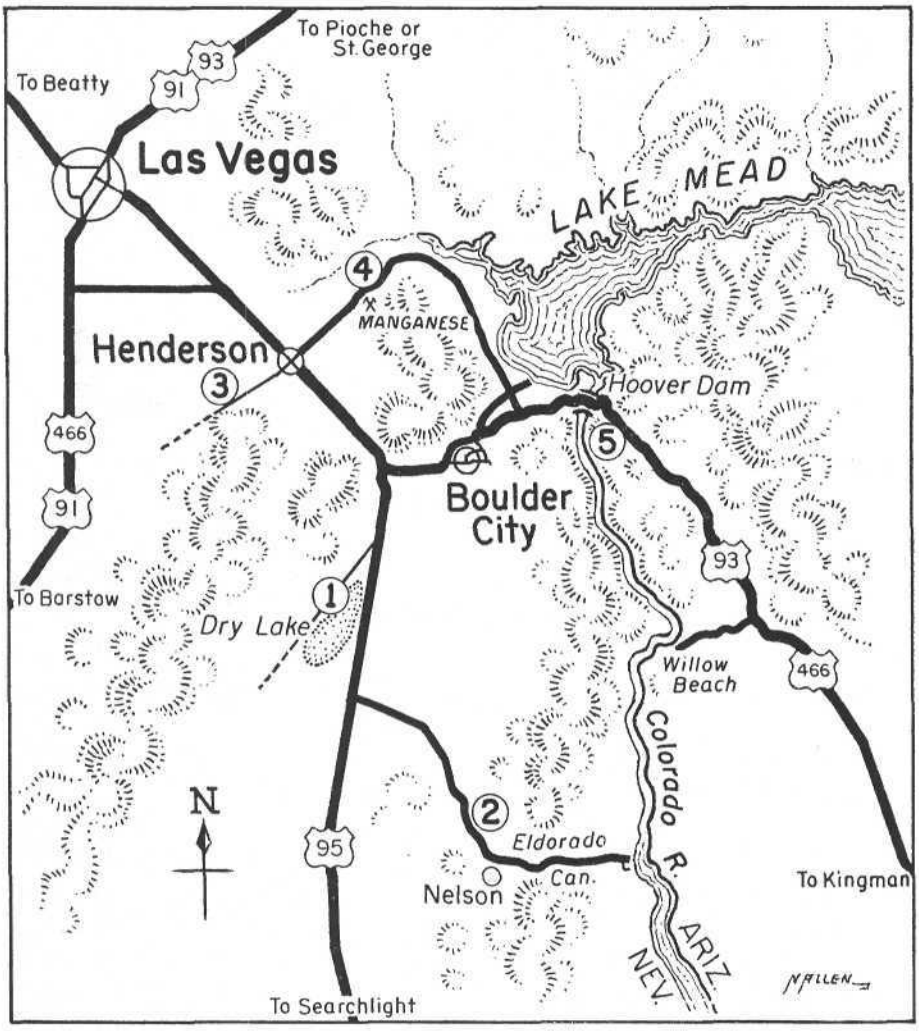
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Five Gem and Mineral Field Trips in the Hoover Dam Area

During the past 22 years, Desert Magazine has published over two dozen field trip stories on gem and mineral locales in southern Nevada. Because of this area's relative isolation (and distance from the concentration of rockhounds in Southern California), most of its gem fields still are productive. Earl Napier, Boulder City resident and well-known amateur mineralogist, reports on the current status of five of these fields.



By C. EARL NAPIER

(1) DRY LAKE PECTOLITES — The interesting field on the edge of a great playa that John Hilton described in the August '41 *Desert Magazine* is easy to reach. Drive south from the Railroad Pass Junction (where Highway 95 meets the freeway that connects Las Vegas and Boulder City) on Highway 95, then turn right (west) on the road paralleling the power line just above Dry Lake. A mile or so down this dirt road brings you to a large concentration of the curiously beautiful dog-tooth-shaped pectolites. Pectolites are an acid sodium calcium silicate in crystal aggregates and fibrous masses. Some specimens have a white satiny sheen. Having a hardness on Mohs' scale of 6-7, pectolites cut and polish nicely. They are also novel and attractive when mounted as they are, in bracelets, necklaces and earrings. It is likely that the source of the pectolites is buried beneath the vast alluvial fan here.

(2) ELDORADO "OPAL" — A few miles south of Dry Lake is a road leading from Highway 95 east to Nelson and Eldorado Canyon. This is an avenue to gem and mineral adventure. Harold Weight wrote a field report on this area in the August '54 *Desert*.

The Eldorado Mountains were first known as "The Opals." J. S. Newberry, geologist on the Ives Colorado River expedition, gave the mountains this name. While the steamer, "Explorer," was undergoing repairs in Black Canyon (near where Hoover Dam now stands), Newberry tramped over both sides of the river south from the canyon.

In this area he came upon what he thought to be opal in the form of crystal clusters around and over nodules of milk white, pink and clear chalcedony. Some specimens here do have an iridescence ("fire agate") which Newberry understandably mistook for precious opal.

About 8½ miles south of Highway 95 on the Nelson-Eldorado road, turn east on a dirt road and follow it through the old waste dump. Conventional cars should park here. The road beyond, leading down the wash to the river, becomes very sandy.

The farther down this wash you prospect, the better the material. You will find chalcedony in all forms. All the peaks and ridges from the dump to the river are worth prospecting. Here you will see ancient trails of both man and animals. Bighorn sheep are still at home here (see back cover) but there are pitifully few of them left. Grand old desert tortoise (also greatly reduced in number) live here.

There is another promising gem locale nearby. Instead of turning east on the road to the waste dump, drive another mile south toward Nelson. The hills to the west and south (across a small gulch) contain a most interesting deposit of nodules, thundereggs, geode "mud balls" and clusters—thick as raisins in plum duff—exposed but still tight in the rock of their origin. Very little sign here of rockhound activity.

The old mining camp of Nelson is worth visiting. The proprietors of the old store are friendly and willing to share their information on the old mines in this area.

The road ends at Eldorado Canyon

campground at the river's edge. Cabins, campgrounds, boats and tackle are available.

(3) PARK ONYX—When Hilton described this gem field in the September '46 *Desert,* the town of Henderson consisted of little more than the magnesium works. The onyx area lies on the slope of the mountain immediately west of what is now the "city" of Henderson.

To reach this field today turn west at the signal lights on the main highway through Henderson. Go beyond one stop sign, then turn left at the corner on which a lumber yard is situated. A few blocks down this residential street the pavement ends. Take the dirt road curving right, cross the railroad tracks, go through the old dump to the maintenance road that parallels a recently-laid pipe line. Follow this road until you are at a right angle with the new letter "B" plainly seen on the base of the mountain to the west. Park in the flat under the "B." The onyx is in this area.

This material has a hardness of 7 which puts it in the gem-grade class. Most of the choice material discovered by the late Dr. William S. Park is gone, but don't despair. By hiking and careful search you will be able to collect your share.

Best areas to prospect are south and west of the parking area. Cover all the lower base of the hills. The vast slope east to the freeway contains chalcedony roses, opal nodules, quartz crystals and some onyx float.

By taking the pipe line road south to the top of the grade and prospecting the west side of the road, you will find several varieties of semi-precious stones.

The mountains behind the onyx field contain many old mines and

---

You may purchase the five back copies of Desert Magazine in which these field trips were originally chronicled.

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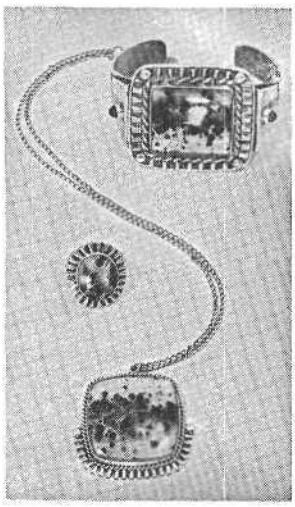
Planning a "gem and mineral vacation"? Among Desert Magazine's back issues are many which contain field trip reports (complete with illustrations and maps) to areas in the Southwest that you may be planning to visit. Drop us a card mentioning your outing destination and we'll mail you a list of appropriate issues in which these stories appear, and copy prices.

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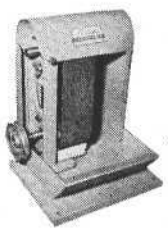
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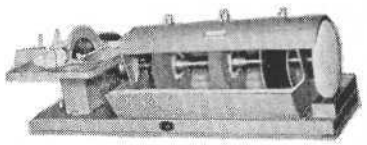
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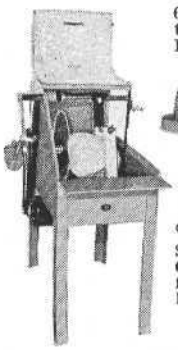
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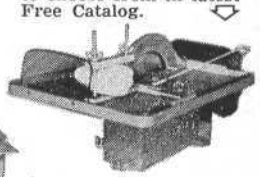
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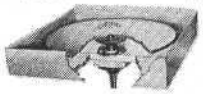


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prospects — mostly gold and silver. Some are semi-active. Best time to explore this and the other areas described in this article is in the very early morning hours. Mid-day can be very uncomfortable in the summer. Always bring plenty of water.

(4) LAS VEGAS WASH GREEN JASPER — On the opposite (east) side of Henderson is a field John Hilton told about in *Desert's* May '46 issue. Today these "rare gemstones of the ancients" are on land covered by mining claims, but permission to collect specimens can be obtained from the adjacent manganese mine's superintendent. I had no trouble receiving such permission—in writing.

Drive east from the traffic stops in the heart of Henderson. A short distance past the mine park in the first space to the left of the highway, and explore the hills to the north. On the slope a short distance from the parking area you will find a vein of green jasper. Other outcrops and float of this material are found in scattered locales over quite a large area.

To obtain rare specimens you have to work. A light sledge and chisel will chip pieces from the tight wall veins. The float below includes various combinations of agates, jaspers and chalcedony.

(5) BLACK MOUNTAIN AGATE — In the January '51 *Desert,* Al Haworth described one of the largest mass rock collecting field trips on record: 320 cars carrying 870 rockhounds. These folks—plus the thousands who have collected in this area before and since the '51 "invasion"—have not exhausted the field.

To reach this amazing locale drive across Hoover Dam into Arizona. Three miles past the dam, park in the flats alongside the highway. The hills to the west and south, a half-mile hike from the highway, still hold plenty of nice material for the collector. Agate is weathering from many veins in this district.

The farther west and south you walk, the steeper the hills. You will be wiser to skirt some of the more precipitous canyons. As you approach Black Canyon, which now holds the upper part of Lake Mohave, the terrain becomes downright rugged.

A boat trip up this portion of Lake Mohave provides a never-to-be-forgotten series of ever-changing views. You can launch at Willow Beach Boat Harbor. Campgrounds, trailer parks, cabins and all other needs for a pleasant stay are available here. Wherever you drive, hike or cruise in the Hoover Dam area, don't be caught short without your prospector's pick.—END

CALIFORNIA TRAVEL

(Continued from page 28)

Highgrading and incomplete records make accurate production figures impossible, estimates of $20-25 million being made for the Yellow Aster alone.

Second big discovery was tungsten at Atolia in 1904. A belt two miles by a half mile held the largest bodies of high grade scheelite in the U.S., in 1952 still rated one of the nation's principal tungsten sources. Richest spot was the Spud Patch, a mile southeast of town where 100-pound scheelite "potatoes" were found in ancient river channels. Greatest producer was Union Mine area to the west. P. J. "Pete" Osdick (*Desert,* June '59), owner of early claims, still is a prominent resident.

Third great strike was silver, made April 12, 1919, by Jack Nosser and Hamp Williams while putting up claim corners for Kern County Sheriff J. W. Kelly, the latter and associates forming California Rand Silver Mining Co. Production, say state officials, was $16,000,000, largest of any single California silver mine. Other strikes followed and the town of Osdick (now Red Mountain) was born. Co-discoverer's nephew, James Nosser of Joburg, now is justice of the peace.

A treasury of the District's past and present can be seen at Desert Museum, Randsburg, open week ends and holidays. Curator is old-timer Max Hess. Area residents have for 10 years sponsored Rand District Old Timers' Reunion in September, including gem and mineral show, mine tours, gold panning, rock drilling, desert paintings, shows, dinner, dance. This draws many old-timers and others interested in mining and desert history. Accommodations include two or three hotels, eating places, service stations and garages.—END

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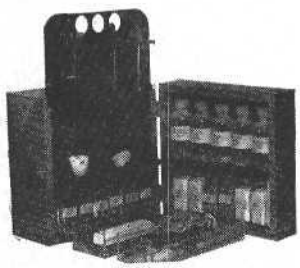
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NEVADA TRAVEL

(Continued from page 29)

Gaining its most northerly point, scarcely 10 miles from the Oregon border, 8-A bears east; not far from here is the entrance to Sheldon Antelope Refuge whose personnel will be glad to explain the workings of this faraway game preserve to you.

On toward Denio (which is five miles off the road itself) 8-A goes through Thousand Creek Ranch lands, past rocky promontories and rough hills and bends to the southeast toward Quinn River Crossing. Hills of the Pine Forest Range border the highway (8-A is definitely a highway here!) to the west, and the crags of Split Peak and Trident Peak rise to the east. There are trout to be caught in small streams out from the Crossing, though Quinn River itself is dry in August.

A spectacular desert valley brings 8-A to its intersection with U.S. 95, and Winnemucca is mostly a downhill coast from this point. Winnemucca's Nevada State Rodeo is all that a rodeo should be, in the heart of cattle ranch country where riding is still a profession. The town by the Humboldt River "goes Western" for the rodeo, but 10-to-1 those jeans, bright shirts and wide hats are everyday garb for more than half the people present. Winnemucca offers plenty of hotel, motel and restaurant accommodation for its guests as well as a really western welcome that is a fitting climax to 8-A's promising miles.—END

DESERT AUTHORS

Mary Hill ("A Desertgoing Water Tank") is a geologist by profession. She first became interested in the desert when she was three years old.

"My father, who was a door-to-door salesman, would come home from a selling trip and say to mother, 'The desert was beautiful—I walked 20 miles across it last week'," Miss Hill writes. "One of his favorite trips was the walk from Goldfield to Tonopah, Nevada. Sometimes he made this hike in the heat of summer carrying two heavy grips filled with books. I would ask him to describe the desert to me, and his word-pictures were graphic."

Miss Hill resides at 40 Lee Street, Mill Valley, California. Her current construction project is a split-level ranch-style dog house.

* * *

Robert O. Greenawalt's interest in famous desert country engineering projects comes naturally, for he is a structural engineer by vocation and a hiker by avocation. His story in this month's *Desert*, "We Hiked the Inyo Bucket Brigade," is his second feature article on tramways to appear in this magazine. In the January '58 issue he described the Bat Cave tram over Arizona's Granite Gorge.

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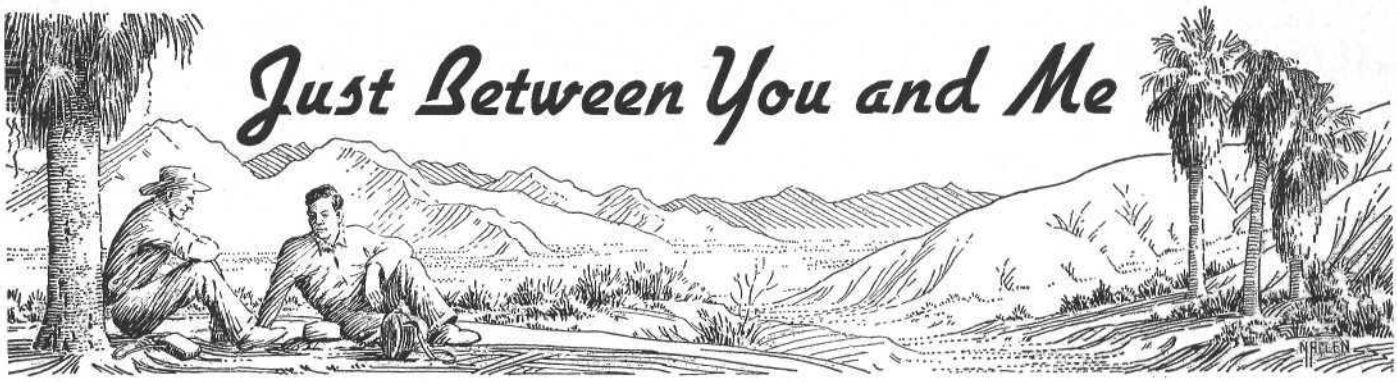
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By RANDALL HENDERSON

THIS SUMMER Cyria and I have been spending much of our time at the little cottage we built on the rim of the desert in the San Jacinto mountains. Our closest neighbors are the deer which come down to graze in our front yard nearly every day, the rabbits, ground squirrels, skunks, lizards and many species of birds. We would like to be accepted as cooperative members of this wildlife community—and we have made some progress, for one of the does will now walk up and drink from the hose Cyria holds in her hand as she waters the trees.

When Charles Darwin published his *Origin of Species* setting forth his theory of evolution, he conceived of Nature as a world of conflict in which life was a ruthless competitive struggle for survival. Today, while nearly all studious persons accept the evolutionary theory of origin and progress of life on this earth, continuing research in the field of biology has convinced many of the scientists that Darwin placed too much emphasis on the factor of competition. They hold that mutual aid is a more important influence in the evolution of species than competitive struggle. They recognize the validity of conflict in the progressive development of species, but they offer convincing proof that cooperation plays an even more important role. For those interested in further study of this basic problem I would suggest *Darwin, Competition and Cooperation* by Ashley Montagu of Rutgers University (1952) and Peter Farb's *Living Earth* just published.

All this is of interest to you and me because the most basic problem of our existence is one of adjustment to the natural laws of the universe. The old *laissez-faire* doctrine of economics—the original free competitive enterprise system of today—was based on the Darwin idea of competitive struggle—every fellow for himself and the devil take the hindmost. The fallacy of that theory as applied to human affairs today is evidenced by the extent to which it has been modified by the nations of the free world. Federal subsidies, social security, anti-trust laws, tariff and quota restrictions, federal aid to the weak and under-privileged — all these are humanitarian measures designed to modify Darwin's law of the jungle as applied to human society.

The most worthwhile achievements in man's world—just as in the world of Nature—have been accomplished by mutual aid. Our churches, our schools, Rotary clubs, chambers of commerce, credit unions, producer and consumer co-ops — these are all cooperative organizations designed for cultural and economic mutual aid purposes.

The Russians regard their U.S.S.R. as a cooperative society, but they have a radically different definition of the word than we have. Their concept of cooperation is mutual aid imposed by the state by force and deception. Our English language definition of cooperation implies voluntary association and complete integrity.

Competition carried to its vicious extreme is war. History does not record that any wars have ever resulted from cooperation. And so, in my dream of the better world of tomorrow which will emerge from the revolutionary changes taking place all over the globe today, including the United States, the inequities of extreme capitalistic competition no less than those of communistic tyranny, will have become modified to conform to the natural laws of mutual aid—and then we will have peace on earth.

In the meantime, Cyria and I are trying to create a little cooperative community of our own at the mountain cabin. Since we cannot speak the skunk language we are careful not to intrude on their domain, and they show us the same respect. And since the deer have a different concept of property rights than we have, we don't threaten them with harm when they nibble the bark off our fruit trees. We just build a fence around the trees. It has been a delightful experience.

* * *

A correspondent from the Pacific coast writes to ask where he may find a good health location on the desert. He wants dry air, lots of sunshine, no extremes of temperature, no sandstorms, and plenty of water. I could only answer him that as far as I know, there is no such place on earth. And if there were, it would be a very unhealthy place to live. The human body is endowed with adaptive functions which need to be exercised—otherwise the body grows soft, and susceptible to many kinds of ailments.

That is why the leaders in the advance of world civilization have come mostly from the cold and temperate zones. The tropics have never produced great teachers or statesmen. Jesus of Nazareth, whom I regard as the greatest teacher of all time, lived in a desert where the summer temperatures fairly sizzle.

I recall reading a book on this subject. The author emphasized the need for human beings to occasionally get out of their habitual ruts and do hard unpleasant tasks—because their adaptive functions need that kind of tonic. He suggested that if you live in the lowlands you should climb a mountain occasionally; if you work at a high pressure job, go out and camp alone in the wilderness for a few days; if you sleep in a soft bed it would be good tonic to crawl out and spend a night on the hard floor once in a while.

I know this will not be a popular formula—but the medicines and diets which the doctor prescribes are seldom very pleasant either. One of the reasons why the desert is a healthy place for normal persons is that it does have extremes of temperature. And as for the sandstorms, think what a foul place this earth would be without the winds.

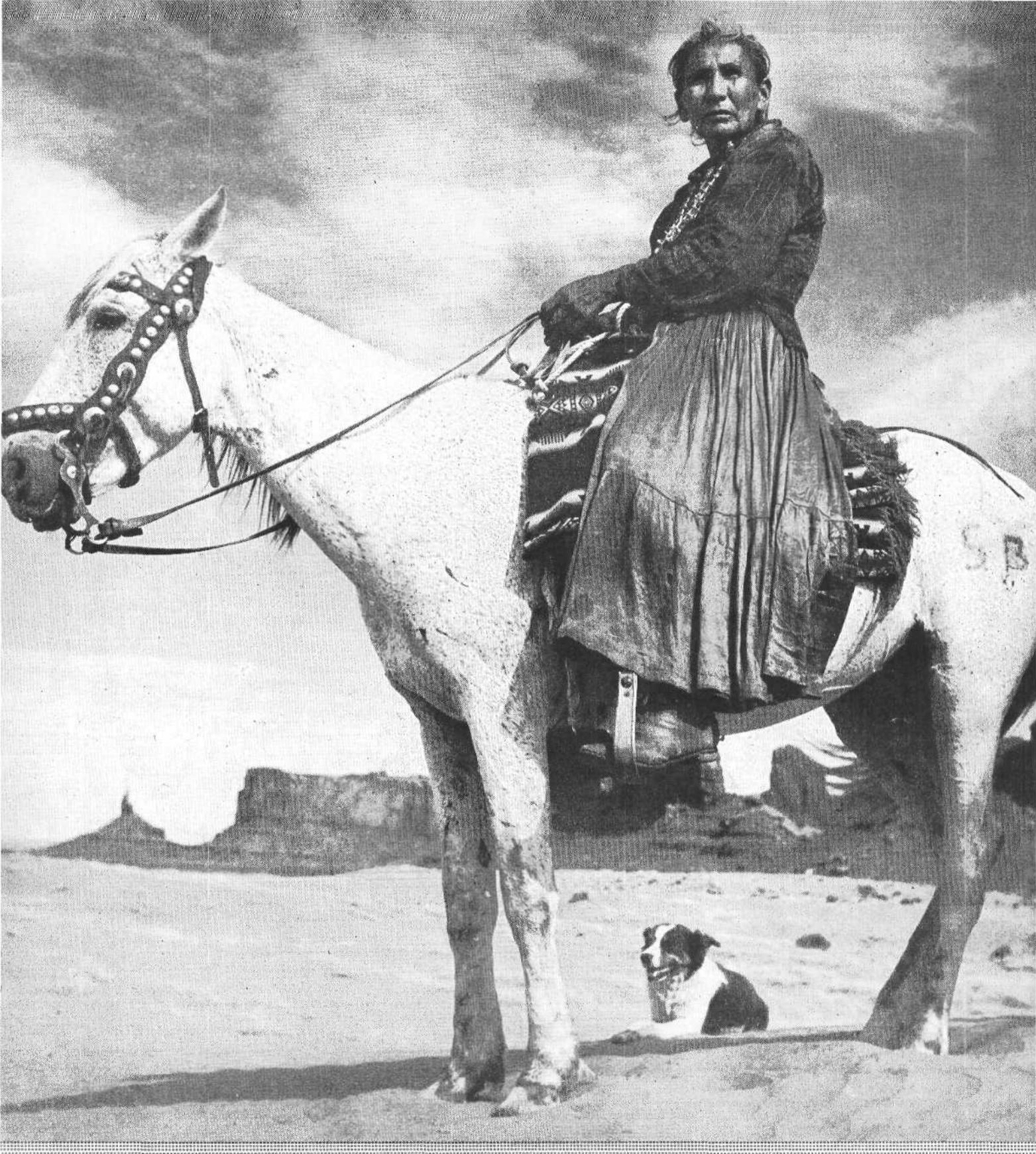


Photo of the Month . . .

A Navajo, her horse and her dog, are the subjects of this month's prize winning photograph. "Nobody's in a Hurry" might be the title of the picture, which won Gene Helland of Cedar City, Utah, the first prize award of $15. Desert Magazine's monthly photo contest is open to all. Send your desert-subject photos, along with return postage, to Photo Contest, Desert Magazine, Palm Desert, California.

Back Cover . . .

It is a rare treat to see a Desert Bighorn Sheep in his native habitat. It is even more unusual for a photographer to get as fine a picture of a Bighorn ram as did Marvin F. Ward of Los Angeles. Most Bighorns are extremely shy, even around their waterholes. The back cover picture was taken in Riverside County, California. Crown-Graphic camera, 135 mm. Steinheil lens, 1/100 second, f. 7, Ektachrome, 10 a.m.