

THE

Desert

M A G A Z I N E



SEPTEMBER, 1938

25 CENTS

IT'S SO GLORIOUSLY

COOL

WHEN the thermometer "sees red" and "Old Sol" beats down unmercifully, keep in mind that you can reach California's Summer Capitol within a few hours' drive. Cool, invigorating breezes and a tumbling surf provide the ideal tonic. You can sail, fish, swim and tan to a deep bronze. You can loiter on the "Walk of a Thousand Lights" and stroll along the palisades with the Pacific bathed in the moonlight below. And you can sleep in such *cool* comfort! Rentals and living costs are surprisingly low.

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LONG BEACH



Pleasure Port of the Pacific

CREED OF THE DESERT

By JUNE LE MERT PAXTON

Dr. Yerba Santa and Dr. Squaw
Tea

Offer their service, asking nary
a fee;

While ol' Doc Sage always is handy
Steeping a brew that beats any
brandy.

DESERT

Calendar

AUG. 27—Arizona Small Mine Oper-
ators' association to hold jamboree at
Prescott, Arizona.

SEPT. 2—Annual fiesta and dance.
Acoma pueblo, New Mexico.

SEPT. 2—Fall semester opens at New
Mexico State college at Las Cruces.

SEPT. 3-5—Rock climbers of Sierra
Club of California will make annual
climb up east face of Mt. Whitney
Howard Koster, leader.

SEPT. 3-5—Dig-N-Dogie Days at King-
man, Arizona. Round-up of mine and
range sports.

SEPT. 3-5—Rodeo at Price, Utah.

SEPT. 3-5—Annual fiesta at Santa Fe,
New Mexico.

SEPT. 3-5—Rodeo at Winnemucca, Ne-
vada.

SEPT. 4-5—Annual Labor Day stam-
pede at Duchesne, Utah.

SEPT. 4-5—Amateur rodeo at Winslow,
Arizona.

SEPT. 6—Harvest dance, San Ildefonso,
New Mexico.

SEPT. 8-10—Beaver county fair at
Beaver, Utah.

SEPT. 8-10—Rodeo at Vernal, Utah.

SEPT. 9-11—Navajo county fair at Hol-
brook, Arizona.

SEPT. 12-14—Rodeo at Logan, Utah.

SEPT. 15—Jicarilla encampment, Apache
dances and ceremonies, Horse Lake,
New Mexico.

SEPT. 15-17—Rodeo at Provo, Utah.

SEPT. 16—American Legion tour to visit
Grand Canyon of Arizona.

SEPT. 16-18—Navajo fair, Window
Rock, Arizona.

SEPT. 17-18—New Mexico Kennel
club's dog show at Santa Fe.

SEPT. 18-20—Lea county fair and
rodeo, Lovington, New Mexico.

SEPT. 19—St. Joseph's Day, dance,
Laguna pueblo, New Mexico.

SEPT. 22-25—Nevada state fair at
Fallon.

SEPT. 23-24—Otero county fair, Ala-
mogordo, New Mexico.

SEPT. 28-30—Annual assembly, Order
of Beauceant at Albuquerque, New
Mexico.

SEPT. 29-30—Bi-state fair at Clovis,
New Mexico.

SEPT. 30—Frank A. Schilling, presi-
dent of the Nature Club of Southern
California to lecture on flora of Cali-
fornia and Arizona deserts at Sierra
Club headquarters in Los Angeles,
7:30 p.m.

SEPT. 30—Fiesta de San Geronimo at
Taos, New Mexico.



Vol. I

SEPTEMBER, 1938

No. 11

COVER	Sidewinder, Photo by James M. Dannaldson and Harold Allport, Jr.	
CALENDAR	September events on the desert	1
PHOTOGRAPHY	Prize contest winner	2
PERSONALITY	Padre of the Uncharted Desert By ARTHUR WOODWARD	3
REPTILES	Hunting Sidewinders By JAMES M. DANNALDSON	6
PRIZES	Amateur Photographers' contest	7
HISTORY	How Joshua Trees Were Named By DENNIS H. STOVALL	8
GEMS	Turquoise on the Mojave By JOHN W. HILTON	9
RECREATION	"I Caught a Trout - -" By MRS. WHITE MOUNTAIN SMITH	12
HOMES	House of 'dobe By LON GARRISON	14
CAMERA ART	"Feel" of the Desert Photo by Wm. M. PENNINGTON	17
MYSTERY	"Say that I Kept My Dream" By HUGH LACY	18
RANGE	Story of the Range Told in Branding Irons By RAYMOND F. LAW	21
TALL TALES	Prize winning hot weather story By CARLYLE ELLIS	24
WEATHER	Temperature reports	24
LETTERS	From readers of the Desert Magazine	25
POETRY	"Possessed" and other poems	27
NEWS	Here and There on the Desert	28
LANDMARKS	Prize contest winner	30
FICTION	Hard Rock Shorty By LON GARRISON	30
BOOKS	Reviews of past and present books of the desert	32
CONTRIBUTORS	Writers of the Desert	33
PLACE NAMES	Compiled by TRACY M. SCOTT	34
MINING	Brief notes of desert mine operations	35
COMMENT	Just Between You and Me—by the Editor	36

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Desert Storm

By CAROLINE S. YETTER
Fallon, Nevada

Desert's mighty stillness tightens
'round us,
Light reflects from sand of dead
white earth;
Flitting shadows 'mong the sage and
greasewood
Fill the air with songs of insect mirth.

Stiff and dry the leaves and sand
blown petals
Rustle now with hint of things to
come—
Swift upon us bursts a blinding storm
cloud
Pierced with biting sand to drive
us home.

Photograph by
JERRY McLAIN
301 Myrtle Avenue
Phoenix, Arizona

This picture was awarded
first prize in the July photo-
graphic contest of the Desert
Magazine. Taken with a 4x5
Speed Graphic, Schneider f:4.5
lens, 1/25 second exposure, 8
stop, using cloud filter at six
p.m.

While black fury, hateful and unbounded
Sends before it, but not long to lie,
Sagebrush, thistles, leaves and spiny
cactus,
Battered, torn from earth and left to
die.

Suddenly—
Billowing clouds scud quickly 'cross
the sky,
Thin films of mist obscure the
mountain peaks;
An eerie light on parched and windblown
earth
Portends that once more Silent
Nature speaks.

For, at this moment, grey with chilly
blast,
A golden light dispels the darkening
mist;
A gorgeous sun, blood-red, breaks
through at last—
Nor leaves the now resplendent hills
unkissed.



To the Yuma Indians the picture of an unsaved soul burning in hell always brought terror—it reminded them of the cremation of their own dead relatives.

Padre of the Uncharted Desert

By ARTHUR WOODWARD

Art by GLORIA WIDMANN

Father Eusebio Kino extended the outposts of the Christian faith north from Mexico to the Gila river. That was in the latter part of the 17th century. Seventy-five years later Father Francisco Garces carried the banner of Christendom farther north to the land of the Chemehuevi, the Mojave, the Havasupai and the Hopi. Father Garces died a martyr at the hands of the Yuma Indians before his work was finished—but he was a pioneer whose character will always be loved by the men and women of the desert.

ALMOST naked Yuma Indians squatted around the grey-robed Franciscan priest, Father Francisco Garces, as he earnestly exhorted them to follow the True Faith.

In one hand the good Father held the magic fetish, the little cross which an interpreter informed the awed Indians bore the image of the Son of God. Garces' other hand supported a staff from which fluttered a banner showing the picture of a saintly woman—the Virgin Mary.

Suddenly the Father reversed the banner and there staring at the astounded natives was a man writhing in the flames

of hell. To Garces it was but a symbol of the wrath to be visited on all unrepentant sinners. But to the Indians it might well have suggested the cremation of one of their own dead relatives—and since the Yumas in the year 1771 did not like to be reminded of the dead, any more than they do to this day, they turned their faces from the picture and many of them ran away.

This reaction of the heathen never failed to please the earnest young priest. Everywhere he went among the river people the Indians averted their gaze from the burning sinner. It was a sign of deep

understanding on the part of these poor ignorant children of the desert, Father Garces thought. The same people fingered the well thumbed breviary and kissed the crucifix because they were further evidences of the white man's power. The magnetic compass, the little metal thorn imprisoned in a case that told the medicine man where to go was also magic beyond their comprehension.

Father Garces was 33 years old when he first visited the Colorado river. He had been ordained scarcely five years when he was sent to the mission of San Xavier del Bac in the Papago country.



On a bluff overlooking the Colorado river at Yuma a monument has been erected in honor of Father Garces. The inscription reads: "Daring explorer, zealous missionary and unflinching friend of the Yuma Indians, Padre Garces founded the Yuma Indian mission, and nearby, gave his life for their souls. His faith was unshakable; his hope tranquil; his charity joyous, his zeal triumphant."

That was in the year 1768. In those days there was no elaborate structure with an imposing facade such as one sees today towering above the square, mud-and-wattled dwellings of the Papago on the desert south of Tucson. In that same year Garces had made his first *entrada* into the Pima country farther north. The next year he had ventured among the hostile Apache and in 1770 a fatal scourge of measles and diarrhoea sent him trudging back again to the dome shaped shelters of the Pima scattered among the cotton-

woods and arrowweed beside the waters of the Gila.

Like that indefatigable missionary, Father Eusebio Kino who now had rested in his grave in Magdalena for over half a century, Garces felt impelled to explore the hinterland.

There were many tribes to be visited, missions to be founded, souls to be saved. In the year 1771, Garces stood upon the bank of the mighty Rio de los Tizonas, River of the Firebrands, thus called by the Spanish explorers of the 16th century be-

cause the shivering natives carried embers with which to warm their naked bodies. Later it was renamed the Colorado because of its rusty red color.

On that trip he visited the Indians on the lower reaches of the Colorado, was ferried across the tawny flood, probably on a tule balsa, by Indian women, who swam and pushed it through the water, happy and innocent in their nakedness. He covered 900 miles before he finally returned to his home station in the Papagueria.

The year 1774 saw Garces as a member of the trail blazing expedition commanded by Juan Bautista de Anza. With that gallant soldier Garces journeyed on into Alta California.

The following fall, Father Garces and Padre Tomas Eixarch accompanied Anza on his second overland trip from Sonora to California, as far as the Colorado river. This time Garces went across the stream on the shoulders of three stalwart Yuma braves, face up, feet first, like a corpse. Fray Font, the grumbling one, swayed dizzily on a horse with three naked Indians holding him in place.

This was to be the first real opportunity for mission work among the river people. Garces and Eixarch would remain among the Yuma and catechize the tribesmen. It was a heaven sent moment. Accordingly a new stick-in-the-mud hovel was constructed in the bottom lands near the dwelling of Capitan Palma, while Anza made ready to push on to Monterey.

With some live cattle, three loads of *charqui* or dried beef, three hams, a box of biscuits, some chickpeas, tallow, six cheeses, beans, the inevitable chocolate and a little sugar as provisions, the two friars were left among the Yuma guardians of the river. To aid in making new friends, the priests also had some glass beads and twists of tobacco.

With the priests were also left two Indian interpreters and the runaway San Gabriel neophyte, Sebastian Taraval, Anza's erstwhile guide who was now to aid Garces in penetrating the desert fastness.

Garces traveled to the mouth of the Colorado on this trip, revisiting the tribes he had seen in 1771. Two Cajunche women who had been among the Yuma preceded him to let their people know that the cowed grey-robe came in peace from the Yuma land, the Cajunche and Yuma being enemies.

He reached his destination, the Gulf of California about January 3, 1776, and was back with Father Tomas early in February.

Now the sturdy Garces was imbued with the idea of opening newer and shorter routes between the Colorado and the missions of Upper California on the west, and to the settlements along the Rio Grande on the east. There were new

tribes to be visited. The country was so vast and the span of a man's life so short, that every day counted.

A flood threatened the rude quarters of Eixarch and himself and so Garces delayed long enough to aid in the removal of the hut from the inundated lowlands to the little hill of Puerto de la Concepcion, the ill-fated spot where three years later was to be erected the simple mission chapel, and where nearly a century later an American fort was to rise upon the ruins of the Spanish walls. Today, a school dominates the scene, dedicated to the education of the descendants of the same Yuma Indians for whom Garces laid down his life in an attempt to Christianize them.

Garces left the Yuma village on February 14, 1776, and traveled slowly up the California bank of the river. The Chemehuevi welcomed the stranger. He was the first white man to go among them.

The Jamajabs or Mojave were next to receive him. Mojave warriors joined his little party near the present site of Needles at a place he called Pozo de San Casimiro, the Well of St. Casimir. Thence he traveled up the river until he arrived at a point nearly opposite the spot where Fort Mojave was founded in 1859. Here the intrepid priest announced to his Mojave escort that he wished to take the trail

that led into the setting sun. He would visit the Mission of San Gabriel and then seek a short cut to the Mission de San Luis Obispo. The uncharted leagues of desert land that lay between him and the Pacific coast did not daunt him.

The trail he took was later to become an overland route. For centuries the bare feet of the Indian traders journeying from the river to the coastal villages of the Chumash had beat a well defined path from water hole to water hole. Today on topographic maps one may see the names of Pahute Springs, Rock Springs, Government Hole and Marl Springs. At these places Garces stopped to slake his thirst and after him in long and ghostly procession soldiers in dust powdered blue coats, tired emigrants, sweating freighters and unshaven prospectors halted beside the cool waters.

At a spring in the Providence Mountains, Garces met four Indians who had been on a trading venture among the Indians of the Santa Clara Valley not far from Ventura. The priest was amazed to learn that these men carried no bows and arrows for protection. Neither did

Father Garces was ferried across the Colorado river—probably on a tule balsa with the women of the Yuma tribe swimming alongside and pushing it through the water.

they have any food. The Mojave told him nonchalantly that it was quite customary for Indians crossing that dreary waste to go four days without food and if need be, without water.

On March 9, 1776, Francisco Garces discovered the Mojave river, the first white man ever to traverse its course. He paused on the shore of Soda Lake which became to him Arroyo de los Martires. Thence he continued southwest along the river past the place known as the Caves, where in later years Indians of the region liked to lie in wait for unlucky teamsters or stray prospectors. His sandaled feet shuffled across the site of the future Camp Cady, to be known to army men in the 1860s as the meanest military post in the west, a dreary collection of hovels and adobe huts hated by privates and officers alike. In this naked desert land poverty stricken Indians gave him of their best. The rabbits and corn atole he received were much better than the horse meat upon which he and his guides had been forced to subsist.

Now the goal was near. On across the desert and through the mountains, emerging at last into the Valle de San Jose, the San Bernardino of the Lugos and the Mormons. He tarried awhile at San Gabriel, then he was away, through San Fer-

Continued on page 26





Hunting Sidewinders

By JAMES M. DANNALDSON

Hunting sidewinders is not a dangerous occupation—if you have the proper equipment, and do not become careless. This is the opinion of James M. Dannaldson who hunts snakes for zoos, museums and laboratories. Bill Bischoff, who accompanied Dannaldson on the hunting trip described in this story, is shown in the picture above with the tools of the hunt—a lantern, a homemade “grabber” and a stout box.

As the back wheels of our car began to lose traction and spin deeper into the sand it became evident we must deflate the tires if we expected to get through the dunes ahead.

I stopped the motor on a short incline and was about to climb out when my companion exclaimed, “Sidewinder!”

I reached for the electric lantern and Bill Bischoff, from the seat beside me, began fumbling in the luggage compartment for the snake stick. The beam from my flashlight revealed the horned rattler coming along the ridge of sand which bordered the road. Bill had caught his first glimpse of the reptile as it flashed

across the path of the headlights in front of the car.

The snake seemed bewildered by the powerful gleam from my lantern and stopped, drawing its body up into a letter S. Its small triangular head was poised in readiness to strike. Its black forked tongue darted out, curving upward until it touched the top of its head.

Bill reached out with his snake stick and caught the reptile in the center of the body. Its tiny rattles began a nervous whirr and it struck furiously at the stick. Minute drops of yellow venom dripped from its two small fangs.

I brought a box from the car and the

squirring snake was lowered into the open compartment. Flashing the lantern into the box we saw that he had caught an exceptionally fine specimen about 18 inches long with a pale pink tinge to its straw colored body. The small brown spots arranged irregularly in a row down the center of its back were exceptionally well defined indicating the snake only recently had shed its skin.

This was Sidewinder No. 1 for the evening.

Bill Bischoff and I had driven out to the southern part of the Mojave desert of California on one of our periodic snake hunts.

During the heat of the day we loafed

in the shade at Twentynine Palms oasis. It was useless to hunt sidewinders during daylight hours. Exposure to the direct rays of the midsummer sun will kill one of these little horned rattlers in a few minutes.

But toward evening the doves began to stir in the trees of the desert oasis and as we had many miles to travel before we reached the dune country where I knew the snakes would be plentiful, I aroused Bill from his siesta and we began to make preparations for the night's work.

Our equipment consisted of a powerful lantern, boxes with hinged covers in which to keep our victims, and the snake stick or "grabber." This is an indispensable part of our hunting equipment. It is a homemade gadget consisting of a four-foot handle to which two metal prongs are attached. The prongs can be snapped together by pressure on the lever which runs up the handle. Of course we wore thick high-topped boots.

As we headed our car out across the open desert the sun was sinking behind the mountains in the west. Myriads of stars appeared in the canopy overhead. Joshua trees along the road loomed black against the sky, assuming all sorts of weird poses and appearing at times to be gesturing with their shaggy armlike branches.

Snakes Come Out at Night

With the coming of night the desert dunes are places of intense activity. Out of holes and burrows and from the concealment of rocks and shrubs come rodents and reptiles and insects—barb-tailed scorpions, hairy tarantulas, poison centipedes, fanged rattlers, and a horde of harmless squirrels and rats. They do their foraging after the sun has gone down.

We kept our eyes focused on the road ahead. Perhaps the headlights of the car would pick out the sinuous form of a rattler. Several times we stopped to examine rocks and sticks which to our straining vision seemed to have the appearance of the snakes we were seeking.

Having caught our first sidewinder, we lowered the pressure in the tires of our car and continued into the dune area where our prey was likely to be most plentiful.

In the fine sand of the road the headlights revealed the graceful curved markings which the sidewinder always leaves as the sign of his passing.

Suddenly we saw a tiny grey shadow looping its way along in front of the car. We were out almost before the wheels had ceased to turn. When we were nearly upon him, the sidewinder unexpectedly reversed his direction and came directly

toward us. Caught off our guard we were unable to bring the "grabber" into action quickly enough, and we leaped for the safety of the running board as the snake passed under the car. His change of direction was not an attack—sidewinders do not fight except when crowded. But it is not a comfortable feeling to have a reptile wiggling between one's feet.

We put the car in reverse and backing up a few yards brought the sidewinder into the range of the headlights again—and with more caution than we had used before, caught him.

The desert sidewinder or horned rattler is *crotalus cerastes* and seldom grows to a length greater than two feet. It gets its common name from the odd motion with which it propels itself along the ground. With head and tail parallel the middle part of the body describes a series of loops, giving the impression that it is moving at right angles to a normal course. The marks left in the sand resemble a series of shallow S S S's.

Nineteen in the Box

At the end of three hours hunting we had captured 19 sidewinders. On our way back to Twentynine Palms we had a new experience with horned rattlers. Passing a mesquite tree we observed a slight movement in the branches. When we went to investigate we found a sidewinder twining among the branches. Its mission was not clear, but it probably was there in search of food. Bill brought the snake stick and we added the tree-climber to our collection.

While this was a new observation as to the habits of the sidewinder, we were not surprised. I have found these little

snakes in many odd places. It is not uncommon while digging in rats' nests to find a sidewinder in possession of the nest with two or three bulges in its stomach—evidence of a recent meal on baby rats. I have found them in the carcasses of dead cattle, in the debris under deserted cabins, in mine shafts, and occasionally in tortoise burrows.

Back at the oasis we removed the boxes from the car and inspected the lids to make certain they were securely fastened. The danger from sidewinders is not so much in the hunting as in carelessness or overconfidence. With boots and ordinary intelligence the sport of sidewinder hunting is not especially hazardous and provides thrills at least equal to those of fishing or game hunting.

It is legendary among old prospectors that the sidewinder frequently makes itself a bed companion. Such a thing has happened, but the ordinary traveler may spend years on the desert without seeing one of the horned rattlers. One thing is sure—they never go about looking for trouble.

Announcement of Winners

Ralph Gardner of Tujunga, California, was the winner of second prize in the July photography contest held by the Desert Magazine. Mr. Gardner's winning picture will appear in a later number.

In addition to the prize-winning photographs, the following entries were of special merit:

- Alonzo W. Pond, Milton Jct., Wisc., "Crossing of the Fathers."
- Roy L. Shipp, Jr., Boulder City, Nevada, "Cholla."
- Arthur Buckwalter, Upland, Calif., "Yucca Blossoms."

Prizes to Amateur Photographers

Each month the Desert Magazine offers cash prizes to amateur photographers of desert subjects. These contests are open to all readers of the magazine regardless of residence.

The first award is \$5.00 and the second \$3.00. The pictures may include any desert subject, photographed on the desert. Close-ups of plant and animal life, unusual personal pictures, well-composed landscapes and scenic effects, rock formations, water holes, oases and recreational pictures are among the subjects suggested.

Following are the rules governing the contest:

- 1—Pictures submitted in the September contest must be received at the Desert Magazine office by September 20.
- 2—Not more than four prints may be submitted by one person in one month.
- 3—Winners will be required to furnish either good glossy enlargements or the original negatives if requested.
- 4—Prints must be in black and white, 2 1/4 x 3 1/4 or larger.
- 5—Pictures will be returned only when postage is enclosed.

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

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

CONTEST EDITOR,
DESERT MAGAZINE,
El Centro, California.

How Joshua Trees Were Named

By DENNIS H. STOVALL

DRAWN by gaunt-ribbed oxen, a train of cumbersome immigrant wagons creaked slowly across the upper mesas of the Mojave desert in Southern California. Bearded men goaded the shambling beasts. Others rode lean-flanked horses. Women and children, faces drawn by thirst and hunger, looked out through the tattered canvas flaps as the heavy vehicles jolted along.

Leader of the caravan was Elisha Hunt. The grim-featured men and women who accompanied him were members of the Mormon colony destined to form the settlement of San Bernardino in 1851.

Like many of the westward treks of the Mormon pilgrims, this one was inspired by a vision revealed to Brigham Young in a dream. Elisha Hunt was but the faithful emissary of a greater prophet. He was leading this company of chosen people toward a gigantic arrowhead on a mountainside which Brigham Young had seen in his vision. The arrow would point to the land the colony was to occupy.

Leaving Salt Lake early in March, the caravan traveled across Meadowlake wash and the southern Nevada desert to Dry Lake, thence through Las Vegas valley to the Mojave river, and from there toward the Cajon pass. The wagons were so large, so heavily loaded with implements and supplies, they could not follow the regular trail in many places. Long and wearisome detours were made.

By the time they reached the eastern border of the Mojave their food supply was almost gone. The wagons were brought to a stop on the upper plateau of the desert. Ahead of them on the distant horizon was a jagged range of mountains—the San Bernardinos. Beyond that range the leader believed they would find the great arrowhead pointing like the finger of God.

Nearer at hand, the things that attracted their attention just now were the queer-foliaged trees. The mesa and ravines were covered with them. To the weary eyes of the travelers it was like a fantastic Garden of Eden. To the bearded leader the strange forest in the desert was taken for a "sign."

They had turned this way, off the beaten route, because their advance riders reported the wagons were too wide to

pass down the Cajon trail. Westward they had come to the edge of this forest of trees such as they had never seen before.

"It is a good omen from the Lord Almighty!" declared the leader.

He uncovered his head and raised his face to heaven. A delicious coolness had tempered the sultry air. Clouds hid the sun.

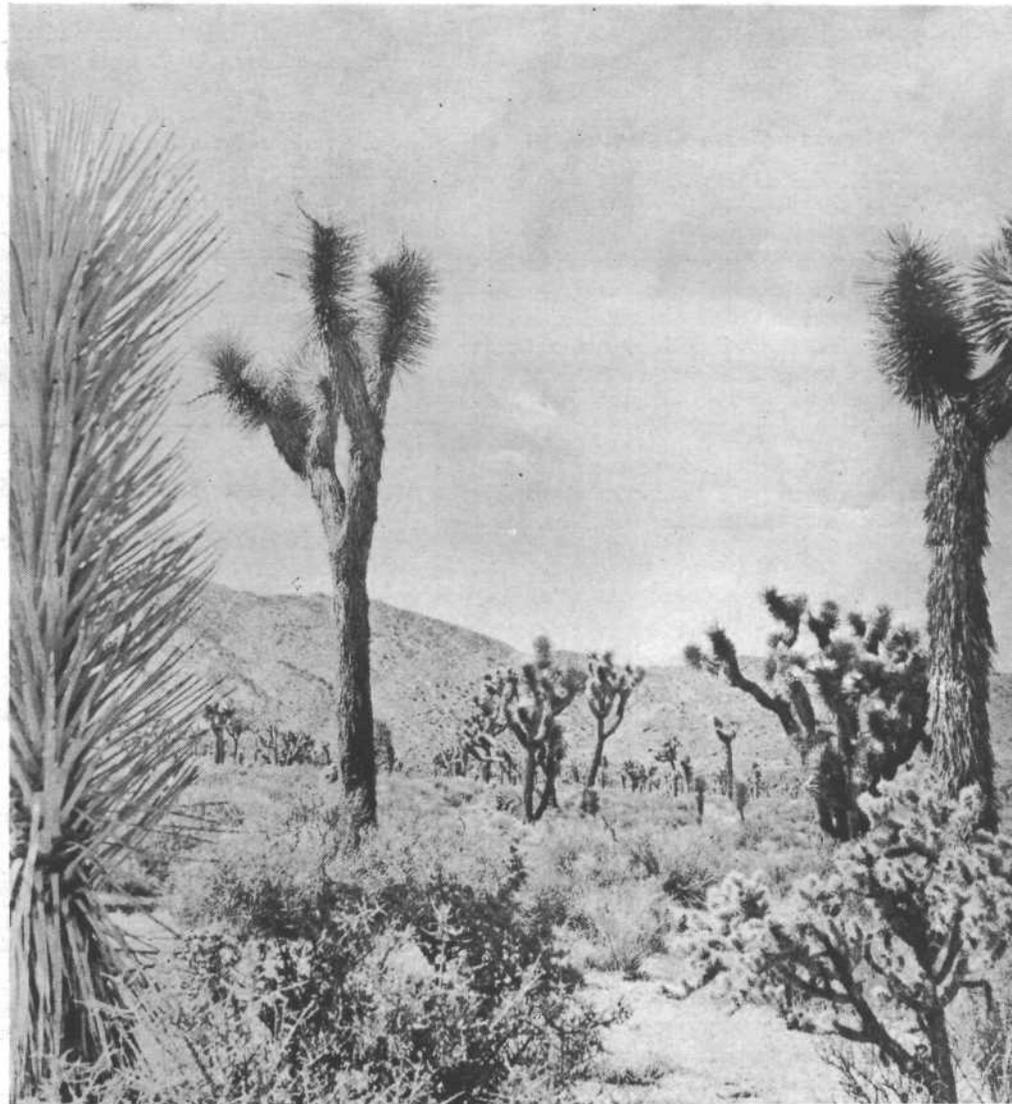
"Look, brethren! The sky no longer is like brazen brass. God has sent the clouds. It is as if the sun stood still—as Joshua commanded. These green trees are lifting their arms to heaven in supplication.

"We shall call them Joshua trees! Soon will we reach the Promised land!"

The caravan moved on—down the Cajon on the western side of the canyon to what later became known as Sycamore grove. It is a verdant spot 1½ miles west of what is now Devore station on the Santa Fe railroad. A monument at this spot memorializes those sturdy immigrants who founded the colony of San Bernardino.

It was from their camp at Sycamore grove, near the mouth of Cajon canyon that Elisha Hunt and his company beheld the vision—the gigantic arrowhead high up on the precipitous walls of the San Bernardino. They knew they were at their journey's end.

Since that day, uncounted pilgrims of many faiths have found rest and peace and comfort in the shade of the Joshua trees. The desert wind whispers softly and always with a note of mystery through their ragged fronds. Seen against a background of lilac, when the sun's heat dances in a shimmering haze at noon-time, or in the quiet dusk of a desert evening when the sky changes from turquoise to gold—the Joshuas always are alluring, mysterious, beautiful.



Prehistoric Indians were working the turquoise deposits in the desert Southwest long before the white man arrived in America. Many of the ancient Indian pit excavations are still to be found in New Mexico, Nevada and California. In the accompanying text and map John Hilton gives the location of some of the prehistoric mines, and also tells where collectors may obtain fair specimens of turquoise gem rock today.

Turquoise on the Mojave

By JOHN W. HILTON

LIKE thousands of other gem cutters before me, my first experience in lapidary work was cutting and polishing turquoise—mystic gem stone of the American Indian. Due to its comparatively low hardness of six and its even texture, turquoise is made to order for the practice work of the beginner, especially if the soft inferior grades are available for this purpose.

One cannot handle a great amount of turquoise without developing a great liking for the gem—such is its character. There seems to be beneath its surface beauty a mysterious attraction which in my case created a desire to know more about this fascinating gem.

I learned that it was mined on the Sinai peninsula in Persia, and in many other widely scattered desert regions of the earth, including portions of our own desert Southwest. A fact which interested me perhaps more than anything else was the almost invariable presence of prehistoric workings where turquoise deposits of any consequence are located.

Ancient turquoise mines are scattered over a considerable part of our American desert region. Some of the largest are near Cerillos in New Mexico. Mount Chalchihuitl is the site of the most extensive prehistoric mineral workings in America. The whole north side of the



Zuni Dick, until his death a few months ago, was one of the most skilled of Indian turquoise workers. According to Burton Frasher, who took this picture Zuni Dick was able to recall the last excursion made to the Pacific coast by members of his tribe to secure seashells for beads and ornaments. It is believed this trek was nearly 100 years ago.

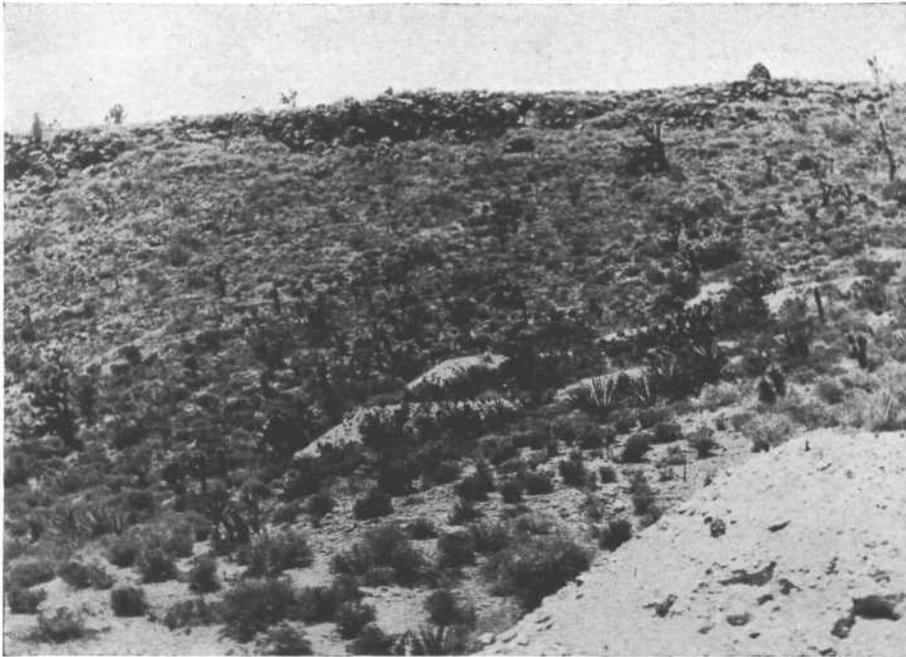
hill has been quarried out and the present floor of the pit supports a growth of giant pines which perhaps are hundreds of years old. The largest pit is over a hundred feet deep and 200 feet wide. The dumps of debris about these workings cover several acres.

It is almost inconceivable that a primitive race could have moved the countless tons of solid rock with the tools which must have been used at that time. Scattered through the debris and in the bottoms of the workings have been found

stone hammers which quite evidently were used by the aborigines of that ancient period for mining purposes.

Several other districts in New Mexico were worked in prehistoric times and some of these have produced commercial turquoise since then. Notable among these are the Burro mountains and the Hachita district in Grant county and the Jarilla district in Otero county.

Turquoise occurs in Arizona near Tombstone, Cochise county, Mineral park in Mohave county and a number of other



Mojave desert landscape showing dumps from the old turquoise workings. The monument on the trap rock at the top of the hill was erected when the claims were located.

places. In almost every instance the present mines either are on the site of the old Indian diggings or near them. Evidence indicates that a considerable mining industry existed in the pre-Columbian period in Arizona. Colorado and Utah also have produced turquoise. In Conejos county, Colorado, near Lajara, several commercial ventures in turquoise mining have been launched. As in other places, the Indians had been here ahead of the white men.

Today Nevada is the most productive source of high grade turquoise. Mining is going on in several districts on a fairly large scale. The Nevada holdings of the American Gem company are producing a large part of the high grade turquoise now offered on the market. The principal Nevada turquoise deposits are in Esmeralda and Nye counties, but there are also deposits in Lincoln and Lyon counties.

Belongs to the Desert

One of the most interesting facts about turquoise is its unwavering attachment to the desert. Generally minerals and gems are no respecters of climate or locality. But strangely enough, turquoise is found in commercial quantities only where desert climatic conditions prevail now or have existed in the immediate past. No explanation of this odd circumstance has been offered unless it be the fact that it is a superficial mineral and actually depends on certain climatic conditions for its formation.

Turquoise is a hydrous phosphate of aluminium with traces of iron and copper. It is assumed that the blue coloring

comes from the copper content and that the varying amounts of iron present are responsible for the greenish shades found in the inferior grades. It is present in rocks whose surface composition includes the elements of which it is formed. Usually turquoise occurs in tiny veinlets or small nodules as a secondary mineral filling the cavities in the decomposing surface of rocks.

Always Close to Surface

It is not believed to occur in any degree of perfection much below 100 feet in depth. A geochemist may some day establish a relationship between this fact and its persistent desert occurrence. In many other parts of the world the same rocks which mother the turquoise are found in the same associations—but only where such elements are combined in the desert is turquoise found in sufficient quantity for profitable mining.

In the northeastern corner of San Bernardino county, California, is an interesting group of old turquoise mines. My attention first was called to them in a publication of the California state division of mines. Author of the article was the eminent gem authority George Frederic Kunz, and it was entitled "Gems and Jewelers' Materials of California." This publication, printed in 1905, gives a most fascinating description of the San Bernardino turquoise region and the mining operations carried on there since 1897.

It describes at length many prehistoric workings in that region. These workings are in the form of saucer-like pits 15 to 30 feet across. I found on visiting the locality that these depressions are not easi-

ly seen when close at hand. However, they are readily identified from a high point some distance away at a time of day when the shadows are long. Action of wind and water over a long period of time has almost obliterated these pits. I found that it required several days of hard labor to remove the debris from one of them—but was rewarded by the discovery of a fine stone hammer some distance below the surface. The claim I located at this point failed to produce turquoise of fine enough grade to compete with other mines being worked at the time.

Evidence of previous Indian habitation in the vicinity of the old turquoise pits is found in petroglyphs on the walls of nearby canyons. Commenting on these glyphs, Kunz said:

"The most impressive feature, however, is the abundance of rock carvings in the whole region. These are varied, conspicuous and peculiar, while elsewhere they are very rare. Some are recognizable as Aztec water signs, pointing the way to springs, but most of them are unlike any others known and offer a most interesting problem to American archeologists."

This section of the desert may well have been the source of the first turquoise used in America. In defense of this conclusion I offer the following version of legends current among the Indians of Death Valley today:

"A long time ago the desert Mojaves occupied this region. One day there appeared from the west or south a strange people searching for precious stones in the rocks. The visiting tribesmen were an entirely different race of Indians and brought feathers of tropical birds as gifts. These people made friends with the desert Mojaves and remained to mine the turquoise found in the rocks here. They were peaceable and industrious neighbors and were blessed with many strange arts and much magic.

"They not only taught the natives how to mine the turquoise but how to inscribe the desert rocks with mystic symbols.

Pahutes Are Suspicious

"The neighboring Pahutes looked upon the new arrivals with suspicion for they did not know but that the strangers would teach the Mojaves a knowledge which would make them superior in warfare and enable them to destroy other desert tribes.

"The whole proceeding looked like bad medicine for the Pahutes and so their chiefs made plans for a sudden attack before their potential enemy became too strong. There ensued a bitter conflict in which all of the strangers and most of the Mojaves were killed."

This seems to have brought an end to

the turquoise workings until the advent of the white man.

Supporting this folklore tale is the story of Mexican Indians that they got their turquoise from the far north in exchange for bird feathers.

It probably was at a later date the Indians of the south finding it impossible to cope with the savage Pahutes discovered that turquoise of even better quality could be secured in the country of the more peaceable Pueblo Indians. It probably was through the turquoise-seeking emissaries from the south that the Pueblo Indians learned to prize the gem for themselves.

On a recent return to the old turquoise mines described by Kunz I found the west camp just about the same as it had been when I first saw it nearly 10 years ago. The route of the highway has been changed and several new service stations erected along the way, but the rocky trail in to the old camp is unchanged.

Due to the hardness of the rock the tunnels of the old "Tiffany" workings are still in good condition and there seems to be no danger in entering them although they have been abandoned for many years. Turquoise is still to be found there, both fragments in the old dump and occasional specimens embedded in the walls of the mine. Visitors should be careful about dislodging loose rock in seeking to secure the gem stone from the tunnels.

Although the mines are only 5.2 miles from the paved highway the road is rough

Collectors and others who plan to visit the old turquoise workings described in this story are urged to await the coming of cool weather before undertaking the trip. While there are no great hazards for those accustomed to summer temperatures in the desert region, the pleasure of exploring the gem field will be much greater when climatic conditions are favorable.

and rocky and an ample supply of water should be carried. Also, the visitor should watch for rattlers except in the winter months.

If the visitor allows a full day for the trip from Yucca Grove or Baker there will be ample time for exploring both the abandoned tunnels of the white man's workings and the pits of the prehistoric Indians.

The accompanying map is an accurate guide for those who are interested in making this trip. Visitors should not go there expecting to find specimens of great commercial value. If fine gem stone was there in any quantity it is needless to say the property would not have been abandoned. However, any collector with careful search will find at least a few samples of turquoise worth taking home—and for those who love the desert it will be an interesting day of exploration.

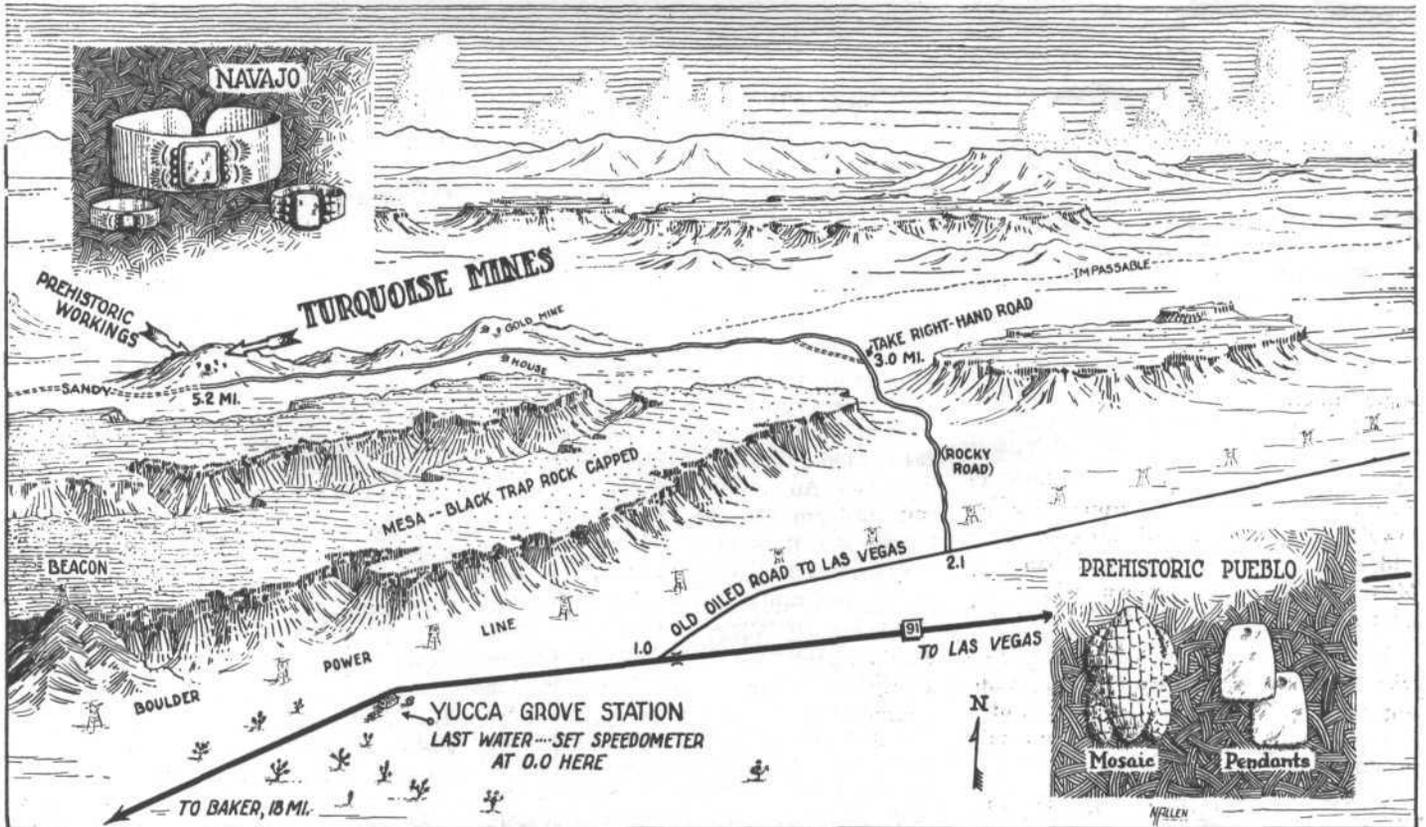
BOATING EVENTS DRAW DESERT VACATIONISTS



Desert folk who scurry to the seashore when the thermometer does the Highland fling have shown interest in yachting at Pacific harbors this season.

San Diego, Newport-Balboa, and Long Beach all boast international races during August and September. This year there are meets for every size of boat, from six-meter snowbirds to 45-foot schooners.

During the week August 23-28, Newport Harbor Yacht club sponsors the climactic yachting event of the summer with a program of racing which has attracted international attention.



There are two kinds of fishermen—those who can catch fish, and those who can tell good fishing stories. Evidently Mrs. White Mountain Smith is one of those rare persons who has mastered both branches of the fishing art. Anyway, you may read this story and judge for yourself.

"I Caught a Trout--"

By MRS. WHITE MOUNTAIN SMITH

Cartoon by
REG MANNING

If you're not a natural born angler whose fishing career began with a bent pin on twine tied to a willow switch, right now is a good time to turn to another story. For I'm one of those incomprehensible females who would rather fish for trout in a clear cool mountain stream than angle for a no-trump in a bridge deck.

Northern Arizona is dotted with lakes full of game trout, and up in the White mountains, streams come down from the snow covered peaks and they are a fisherman's perfect dream. About once a week I look around the Petrified Forest and begin to compare stone trees with living murmuring pines. I dive into the closet for a pair of woolen slacks and my sweat shirt. While I lace my boots White Mountain Smith, whose enthusiasm for fishing isn't as great as mine, thinks of some imperative duty over at the Painted Desert, and so my brother and I collect our over-night equipment and depart. We each take a sleeping bag with an eiderdown quilt. Into a zipper bag go towels, toothbrushes and soap, and we add iodine, adhesive tape and bandage. Most anything can happen when one goes fishing.

We learned long ago that most people take too much food when they go camping, and so our standard list consists of:

1 pound good ground coffee (no milk or sugar)

1 pound sliced bacon (grease from this fries fish)



"A warning rattle sounded and I leaped waist deep into the ice cold water just as a harmless water snake floated past me and a buzzing jarfly lighted on a twig close by my head and resumed its vibrations."

- 1 can of pickles
- 1 dozen eggs (should fish fail to bite)
- 2 loaves of bread, 2 cans tomato juice
- Salt, pepper and cracker crumbs

Sometimes I have softening of the heart and add marshmallows to toast over the fire while Fisherman smokes, or perhaps a cake for the sweet touch.

Cooking utensils are a coffee pot, a long handled steel skillet and the necessary knives, forks, tin cups and a can opener. We cook over a small gasoline camp stove. It sounds more romantic to use a camp fire but I have to do the cooking, and I never was willing to trade comfort for romance.

We carry five-ounce bamboo rods and ordinary reels. Our hooks are assorted sizes, some snelled, some plain short shanked steel hooks. A few flies are taken along for effect. One large-mouthed thermos jug is filled with ice and kept sealed until we are ready to store the cleaned fish in it for impressing the Forest dwellers.

As for bait—it is always a safe bet to

take plenty of fishing worms which can be found along most any irrigation ditch. I say "along most any ditch." One recalls with mixed emotions the strategy of a farmer at Concho who graciously permitted us to thoroughly clean out his irrigation ditch in search of non-existent worms. Incidentally, it's never quite safe to leave a baited hook outside a farmhouse while calling within. A grand flapping of wings combined with astonished squawks and the remarks of the indignant housewife brought to light the fact that an old grey goose had swallowed a fishing worm. Well, the worm was impaled on a hook and the hook tied to a line, and the line ended on a reel and the reel on a pole—and the pole belonged to me. I bought myself an old grey goose that time.

Last Wednesday was sultry in the Petrified Forest. The hills beckoned and Fisherman and I left for a fishing trip. We drove over U. S. 260 to Springerville and on up through Eagar to where a Forest service road led into the South Fork of the Little Colorado. You, who have seen this sluggish muddy river in the

lower country would not recognize it as the clear icy mountain stream leaping and foaming in the narrow gorge of the South Fork. Almost every pool contains brook or rainbow trout ready to welcome a diet of worms. My only objection to this stream is the thick foliage interlacing across the water which makes casting an impossibility and landing your catch somewhat of a gamble. It's disconcerting to find your finny victim giving you a fishy stare from the top of a ten-foot willow. I always feel that insult has been added to injury when I have to coon-hunt a trout after I've succeeded in flipping it out of a treacherous pool.

Beavers, too, have claimed this stream for their home and have dammed it three times within a mile. Around their homes the water has spread, surrounding trees which resemble cypress in the Great Dismal swamp. And here lie the wary old trout that have survived many a fishing season. We usually garner half a dozen from this spot for our supper.

Farther down the river the steep banks are rocky and wreathed in wild roses.

While I fish with one eye on the business in hand I bend the other one on the bank in a diligent search for rattlers sunning themselves. I was intent on hooking a trifling trout and carelessly neglected my snake hunting. A warning rattle sounded and I leaped waist deep into the ice cold water just as a harmless water snake floated past me and a buzzing jarfly lighted on a twig close to my head and resumed his vibrations. Strange as it may seem the astonished fish swallowed the bait and struggled to get under a submerged log. I looked at my brother;

"Fisherman!" There was a world of pleading in that one word.

"Every man for himself!" was the heartless answer and he rolled on the bank and laughed. I dragged that trout from under the log and hauled him to shore. And then we left there.

Back to Springerville we resumed our journey on U. S. 260 and climbed steadily until we reached Alpine. Three miles from there and close to the New Mexico border, a side road led directly to the shore of a tiny lake set like a jewel in a tiffany mounting of green hills. Fishing, to me, is one of the greatest sports in the world, but fishing in a blue lake 7000 feet high, where one can look for a hundred miles and see distant mountains silhouetted against the sunset, is supreme. Across the lake cows grazed on the grass growing to the water's edge. A sudden thunder storm broke from the storm caps rising behind the mountains and great warm drops of rain flattened against the lake water. We crawled into slickers and



Trout stream in the scenic White mountains of Arizona.

were warm and dry while we fished from the red volcanic ledge against which the water lapped. The trout struck hungrily at salmon eggs and we caught our limit before sunset. We stopped fishing early because each of us had staked the staggering sum of 40 cents on the Schmeling-Louis fight, and we wanted nothing to interfere when it came time to turn on the car radio.

"Shall we eat before the fight?" I asked Fisherman.

"Sure. Otherwise it'll be nine o'clock before we get any supper. Those boys will stall for a few rounds!"

Back in the pines from the lake we made camp. Fisherman gathered wood for the camp fire and broke fat-wood out from a pine stump for kindling while I fried bacon and trout and made coffee. It's funny how good trout taste out in the woods. Fried to a crisp brown, sprinkled with salt and pepper and eaten without benefit of knife or fork they just naturally melt from sight. I licked the last crumb from my fingertips and turned the dial. Time for the fight.

"Bur-r-r-r, Grin-n-n-d-d-d, Scre-e-e-c-c-c-h!" Warming up in the high altitude with an electrical storm hovering near the radio made weird noises. "Zip-p-p-p, and that blow, ladie-e-s and gentlemen, finished the fight!" From seven until eleven o'clock I fought static and swing music until the Richfield Reporter told us what really happened. I reluctantly handed over 40 cents I'd clutched hopefully.

If you've never shared a camp fire of fragrant pine high in the mountains with

a companion who knows enough to smoke silently and leave you to your thoughts, you've missed one of Nature's greatest gifts. On this night the storm clouds drifted apart and a far off moon looked timidly down to mark a path across the dark waters of the lake. On the other side a lonely calf appealed to his mother and she answered in reassuring tones. An owl scolded softly to himself about some wrong done him and I crawled into my sleeping bag. As I zippered myself securely inside the bag I hoped, as always, that some comfort loving rattlesnake hadn't pre-empted the place and homesteaded.

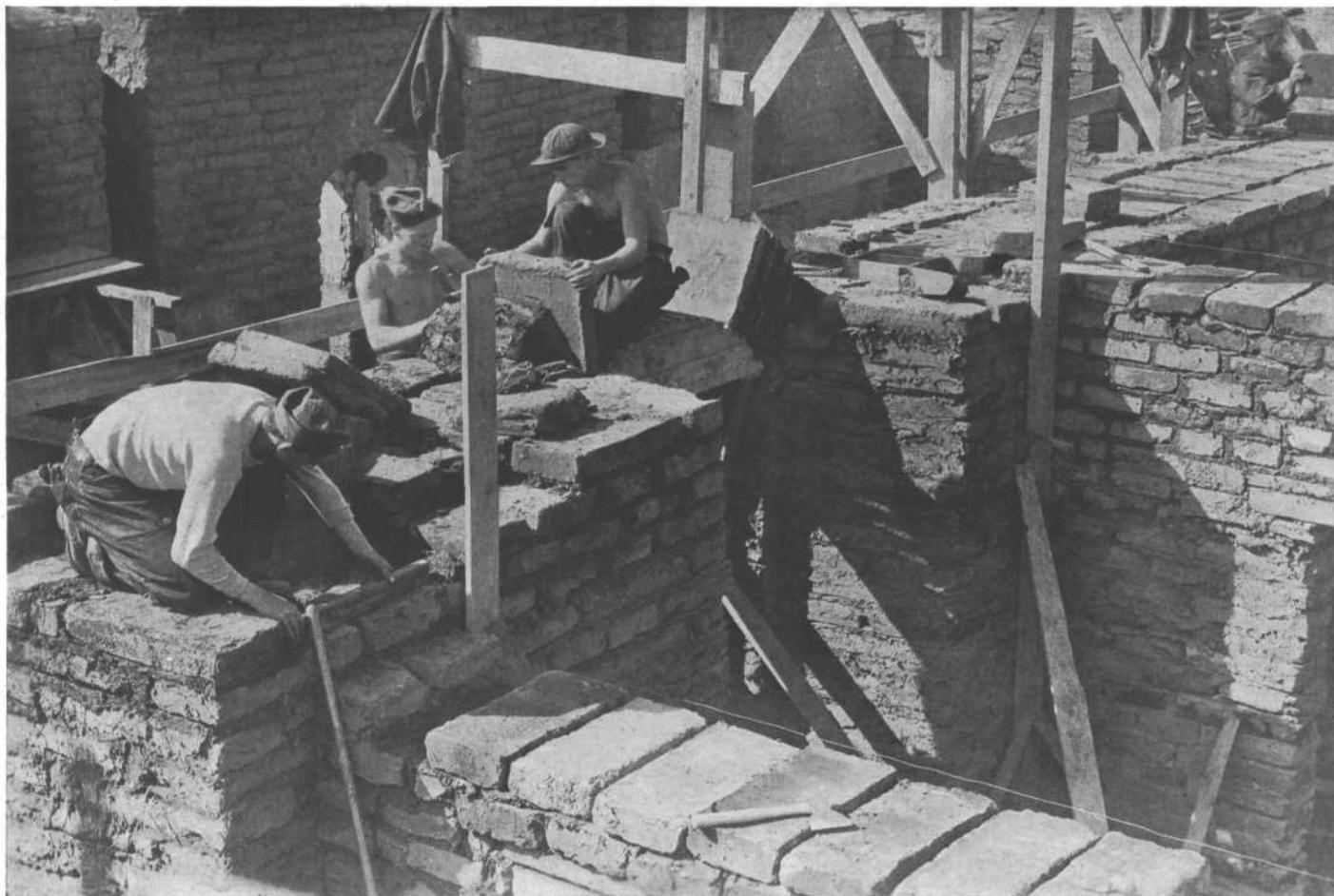
Fisherman evidently wasn't ready for slumber and he turned the radio dial to an eastern station in search of something besides "swing" which we both detest. I watched the stars twinkling between the branches above me and listened. "O, I hear that New River train, O, I hear that New River train. It's the same old train, —!" I drifted to sleep thinking of the wildly beautiful New River canyon where we were born. There was a change in the program. Lights were out and only a few embers shone dully in the ashes. The moon gave enough light for me to see a coyote sitting on his tail protesting long and loudly about some imaginary grief, or, perhaps after all it was genuine. He left behind him an empty pan that had been full of gingerbread intended for breakfast. I had made the gingerbread.

Five o'clock found breakfast over, camp broken and the fire buried. I baited the hook with a nice juicy fishing worm wrapped around a salmon egg and dropped it into the water preparatory to casting. Instantly a fish struck and my reel sang as he started south. The battle lasted several minutes during which time I was vaguely conscious of a large pulpy person annoying me with "Neighbor, give him slack! Reel him in! Run up the bank and pull your line in! Here, let me land him!" I not only had to fight the fish but it was necessary to defend with elbows and black looks the right to catch my own fish. At last I had a 15-inch brook trout safely strung.

"Now, neighbor, I wouldn't want to tell you how to fish—"

"It's mutual. I wouldn't want you to!" And he drifted sadly away to kibitzer his way through the day. As he rounded the turn small rocks rolled his feet from under him and he sat down with a resounding smack. "Oh, my goodness, my goodness!" said he. Fisherman and I felt that God was still in His Heaven.

By ten o'clock we had caught 30 nice trout and since the game warden was visiting with us most of the time, our better judgment told us to go back to the Petrified Forest.



Laying adobe bricks at La Purisima Mission

House of 'dobe

By LON GARRISON

Of course there are some folks who feel that a house made of adobe mud is a bit too homespun for genteel occupancy. But for those whose sense of values is unhampered by such notions, the adobe house remains just what it has always been to the desert dweller—a cool, comfortable place to call Home Sweet Home.

Having decided to erect a house of adobe, one of the first problems to be solved by the builder is where to find the dirt to make the bricks. Strange to relate, most any kind of dirt will do—except 'dobe. Real adobe soil contains too much clay and cracks wide open when dried.

It is a good idea to experiment with the various soils and see how they work out. If the texture is too sandy and the bricks crumble, add clay. If the soil contains too much clay and the bricks crack

when dry, add sand. A good clay-loam soil is best.

Shovel a four-inch layer of this into a mixing trough such as plasterers use. And, since one of the economies of adobe brick for building is that it allows the use of unskilled labor—in this instance, meaning you—get your hoe and bust up all the big clods. Then run water in until a nice goeey mud results. You might even get in and squish-squash around in it with your toes. It all helps, and since you're unskilled labor anyway it won't make much difference if the neighbors do see you.

Next add the straw—a layer about half as thick as the layer of mud. This should be mixed in with a hoe or pitchfork to get a good thorough distribution. The mess should be completely soaked, yet stiff enough to stay piled up. The purpose of the straw is one of those things like the riddle of the Sphinx. Some adobe

builders say that the straw is the tie that binds the brick more firmly together—gives it unity, coherence, and more of it, so to speak. Others insist that it is the other way around, the straw is to break up the homogeneity of the material and reduce thermal conductivity.

Frank S. Pinkley, superintendent of the Southwestern National Monuments at Casa Grande, Arizona, suggests that the straw may be for blotting purposes. That is, during a rain storm, capillary attraction sucks the moisture in along the straws without disintegrating the exterior of the brick. As soon as the storm is over, the process is reversed and the moisture steals away like the Arabs, leaving the brick undamaged. Take your pick as to theories, but put in the straw—or hay—or grass—or even manure if you think your wife can stand the smell.

Having mixed the bricks, the next thing is to mold them. Select a fairly level

For all-year comfort, modern man has not been able to improve much on the mud houses prehistoric Indians were building on the desert perhaps 600 years ago. True there have been some refinements both in structural method and in appearance—but adobe mud still remains one of the best insulating materials used for building purposes. Here are some hints for prospective builders, written with characteristic Lon Garrison humor.

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spot and cover with a thin layer of loose dirt, sand, or straw to keep the brick from sticking to the ground. Then make a brick mold. This can have from one to three compartments. And as to brick size, that is up to you to figure out. The most common size seems to be 12x18x4 but there is no law on the subject except the old economic law about supply and demand. Lay the mold on the ground, ladle it full of brick mixture and pat each mold compartment full. Do more than that—be firm about it. Stomp the stuff in so all the corners and cracks are full. Level the top and you're ready to lift off the mold and make some more bricks. A metal lining in the mold makes it lift off easier and gives better looking edges and corners. Bricks should not be moved for several days, depending on the weather, but when they can be stacked they should be stood on edge, not too close together, and allowed two or three weeks to season thoroughly. They should be well protected from rain during this period.

See if They'll Break

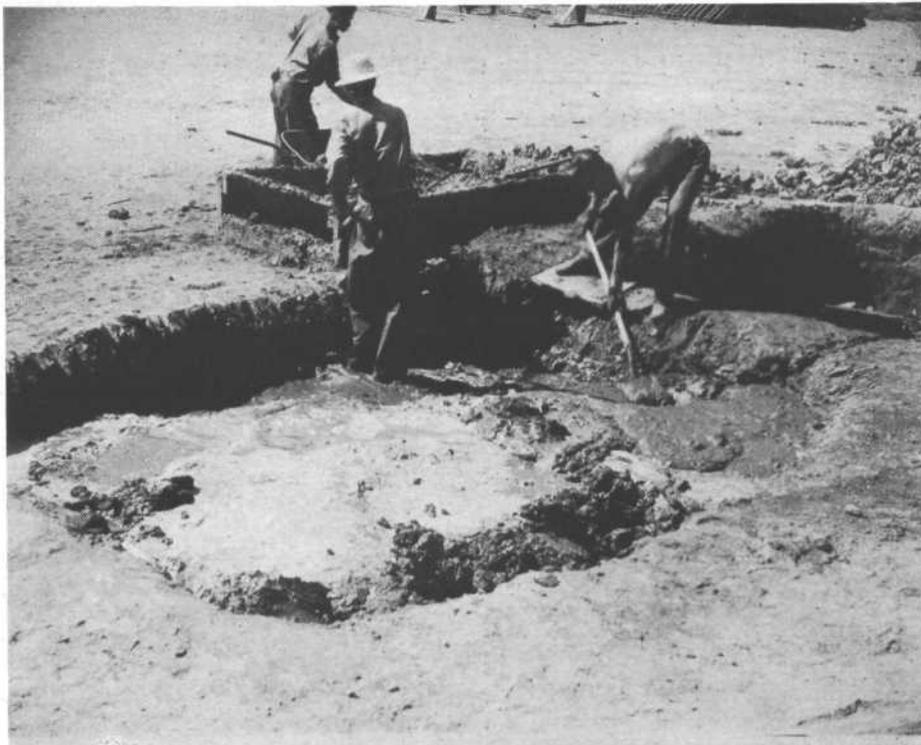
Mr. Pinkley of Casa Grande cites an old Mexican test of a brick. Hold a completed, dried brick flat in your arms at breast height and drop it on the ground, first moving your toes back out of the way. The brick should land flat, and if it busts it is no good and you can proceed to the test of the next brick. But if it survives in one chunk, you have done a good job.

The number of bricks you will need to mold and pile is up to you to figure out. And at this stage of the game you might as well get used to taking lots of time for figuring. True, you are only unskilled labor, but one of the first axioms seems to be that building an adobe house is like the construction of Rome—which has set the standard for most government jobs since then—don't try to do it in a hurry. In fact there is one stage of the work where experts advise waiting at least 60 days between steps. But let's go on about plans.

One of the advantages of an adobe home is that the thick walls and their remarkable insulating value make for a noteworthy evenness of temperature inside the house. And of course, the greater the temperature extremes, the thicker the walls should be. In places with sudden and wide variations, you may find it helpful to plan double walls with an air space between them. This is just one of the

Upper picture—Mixing Adobe mud for brick. La Purisima mission. Photo by Park Service.

Lower picture—Window and beam detail, Adobe building at Zoological State Park. Photo Park Service.



things to keep in mind before you begin on the foundation.

A foundation of rock and cement is usually best, dug down below frost line. It should be completely waterproofed where it contacts the bricks. A wooden sill laid on the foundation helps and this should be covered with a layer of tar paper to head off our old friend capillarity whom we met some paragraphs previously. And while it is true that the floor is best put in separately and in fact is usually built to the walls, a little foresight in providing footings for the sills and joists will be a big help later. You can add that to the things you will want to figure on.

Mud for Mortar

For building the walls, the bricks are laid just as in any brick construction, breaking the joints with each course. For mortar you can most handily use some of the same material you used for the bricks, with the straw left out. If you prefer, a mixture of one part lime with three parts of sand adds to the strength of the building but increases the cost.

And, as you go up with the walls, the figuring you have done will demonstrate just where you will want to leave gaps for windows and doors. Frames for these can either be set in with lots of mortar, or tacked to blocks of wood set in with the bricks, or both. It is after you get to the tops of the windows and have the lintels in that the best figuring comes along. At that point some experts advise waiting 60 to 90 days before proceeding to allow the bricks to dry and settle thoroughly along the windows. What patching is needed can then be taken care of before the roof is on. It is at this stage that some contract jobs prove unsatisfactory. The work is done in a hurry, the walls settle away from the window frames and unsightly cracks result. But, since

you are unskilled labor you will have time to figure your way around that difficulty. Besides, you need time to figure on the roof.

When the walls are finished, provide a good firm capping—a heavy timber is best for this although a layer of concrete is satisfactory. On the capping lay your roof timbers and then add the Roof of Your Dreams.

For extremely dry country where a flat roof is to be used the following procedure should be satisfactory. First, use very heavy roof timbers. Carry the walls on several courses above the timbers and cover with several layers of tar paper. On this spread a generous layer of roofing tar, and then lay flat a layer of adobe brick, leaving two-inch seams. Fill these cracks with mortar, and add enough more until the whole thing is smoothed up evenly. After this has dried, add another layer of bricks, laid at right angles to the first bricks, and smooth the surface with lots of mortar, paying particular attention to the joint with the roof parapet. Allow this to dry well and then with a spray gun, apply at least six layers of linseed oil, allowing each layer to dry thoroughly. Rain drains must be provided in the form of little funnels or scuppers along the timbers and the job is ready to operate as a roof.

Takes Tall Figurin'

Of course, if you prefer, you may add a pitch roof—single or double, depending on how good you are at figuring. In general, the more rain there is in your locality, the wider the eaves should be, which is just another item for you to keep in mind. And you can build a two story house if you want to—even with orna-

Caretakers' lodge of adobe. Zoological State Park of California. National Park Service Photo.

mental arches, but it takes high class figuring to do it.

To finish the outside walls, the most common treatment is whitewash. This is effective, attractive, and not very durable. If it is used, it is best to waterproof the wall first and as good a treatment as any for this purpose is to apply several coats of linseed oil with a spray gun. Mud mortar will smooth the walls but it takes considerable finesse to make lime mortar stick. For smooth plaster finishes, it will be most satisfactory to fasten chicken wire to the walls by means of short wire hooks and then plaster the wire.

For the inside walls it is customary to use smaller brick, or brick laid the narrow way. And while you are building the floors to the walls is a good time to begin some more figuring on the finishes for the inside walls. Whitewash rubs off. The common mud mortar will smooth up the walls so that paint will stick but the mud chips off easily leaving a spotted effect. Commercial plaster will not stick without special treatment.

Jim Has Paint Recipe

Jim Livingston, an expert who has constructed many adobe homes in Southern Arizona, has his own method of getting around that difficulty. From an encyclopedia of formulas he has taken a whitewash recipe with variations to suit the job. This mixture can be applied like whitewash, dries glossy white, will not rub off, and can be used as a base for paint or left as is and renewed as needed. It can be made in any color, and seems to be just what you'll need to help you figure things out so they will look right.

First, slack $\frac{1}{2}$ bushel of lime, using hot water, and strain through a screen of at least 16 mesh.

Add—6 pounds of salt dissolved in hot water; 3 pounds of rice boiled to a thin

Continued on page 24





DIGNITY

Photo by Wm. M. Pennington

"Feel" of the Desert

By John Stewart MacClary

JUDGE CLAH, as he was known, is said to have been one of the strongest native characters ever to have come from the San Juan district of the Navajo Indian reservation. As preserved in this Pennington photo-portrait the features of the old-time tribal judge bear eloquent testimony of the firm dignity he possessed.

The countenances of his two wives suggest that Judge Clah's firmness might not have been reserved for use in tribal courts of justice alone. It seems incredible that the Navajo name of this austere dignitary meant "Left-handed and curly-haired."



Everett Ruess was not the first human being to vanish in the grim desert wilderness—nor is it likely he will be the last. But because of the unusual character of this young man and the strange circumstances of his disappearance, there still remains after four years of fruitless search a widespread interest in this desert mystery. The accompanying picture of Everett was taken two years before his disappearance. The dog, Curly, was his companion on many trips.

"Say that I Kept My Dream"

BY HUGH LACY

WHEREVER poets, adventurers and wanderers of the Southwest gather, the story of Everett Ruess will be told. His name, like woodsmoke, conjures far horizons.

Everett left Kayenta, Arizona, November 11, 1934, to write, paint and explore among a group of ancient Indian cliff dwellings. His last letter to his parents in Los Angeles explained that he would be unable to communicate for ten weeks. Alone with his paints, books and two burros, he disappeared into what is probably the most uninhabited, unvisited section of the United States.

He never came back.

A sheepherder reported seeing him on November 19 near where Escalante Creek flows into the Colorado.

At the first alarm of his prolonged absence, volunteers organized searching parties, combed the hills and canyons for days. Signal fires were built, guns fired. Indians and scouts sought water holes for signs of his passing.

In Davis Canyon Everett's two burros were located, contentedly grazing as if he had just left them expecting shortly to return.

Then, one after another, the searching parties returned without Everett. True to his camping creed, "When I go, I leave no trace," he disappeared—into thin air.

The desert claimed Everett Ruess. Writer, adventurer and artist, the desert's trails were his roads to romance. His paintings captured the black-shadowed desolation of cliff dwellings. His poetry told of wind and cliff ledge. He sang of the wasteland's moods. Everett belonged to the desert. And in the end, it claimed him.

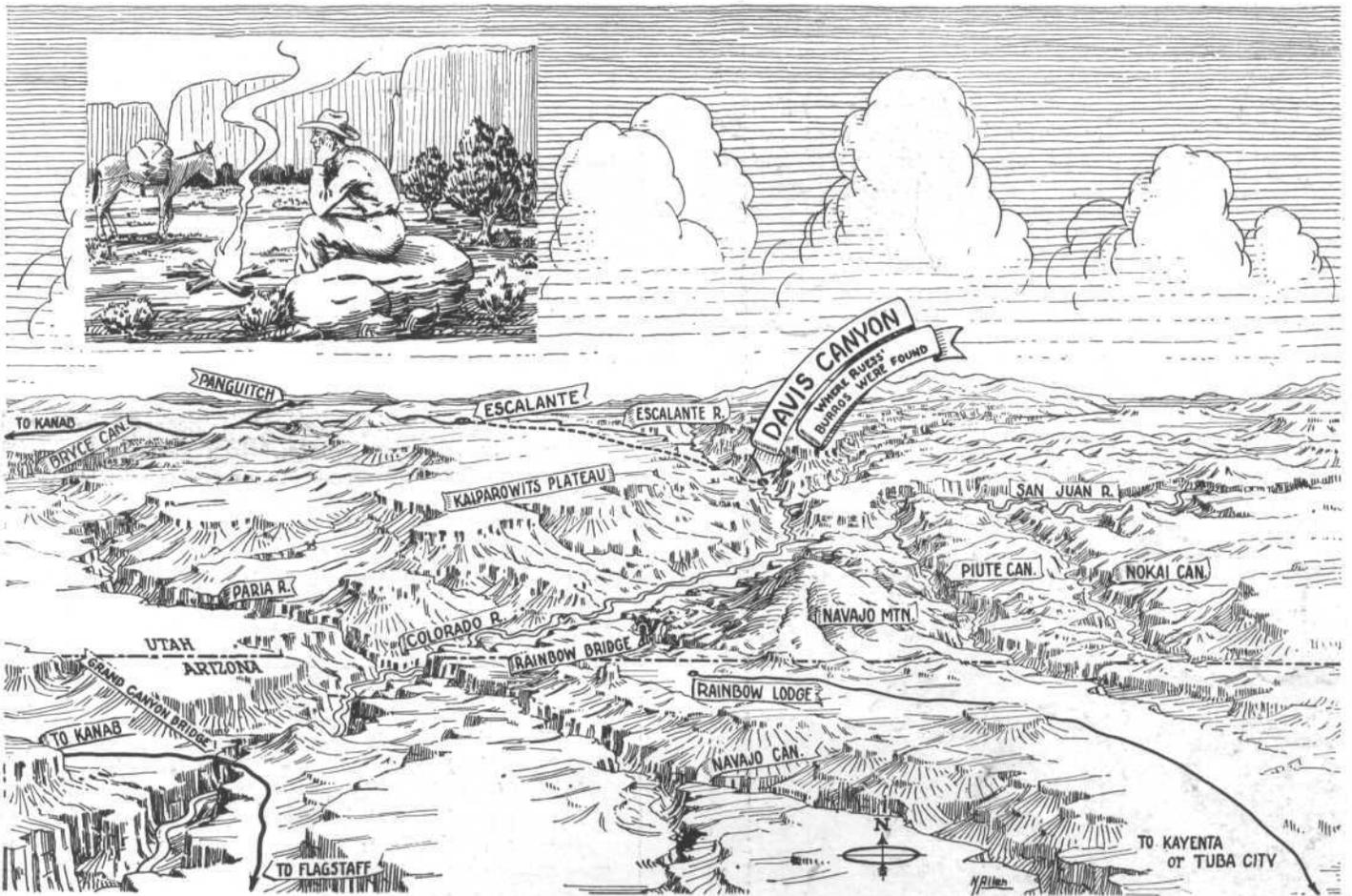
He was one of the earth's oddlings—one of the wandering few who deny restraint and scorn inhibition. His life was a

SON!

Somewhere your eyes light up to beauty near or far;
Somewhere your spirit lives where kindred spirits are.
Along the paths of loneliness your feet, rough-shod,
Through canyons dark and steep and treacherous have trod.
Across the windy desert-stretch you found your way,
An Indian hogan sheltered you at close of day.
Up winding, rugged trails you eagerly have gone
To watch the mystery of stars and vibrant dawn.
Brave storm-tossed trees companioned you, bright wayside
flowers

Faint tinkle of the burro-bells, bold granite towers,
Remembered melodies, and chanted poetry.
Somehow your thoughts are winging through the clouds to me.

—by Everett's Mother, Stella Knight Ruess.



quest for the new and the fresh. Beauty was a dream. He pursued his dream into desert solitudes—there with the singing wind to chant his final song.

Everett's quest began early—and ended early. As a child he turned from toys to explore color and rhyme. Woodcarving, clay modeling and sketching occupied his formative years in New York and near Chicago. From this early background grew his versatility in the arts—media through which he later interpreted the multihued desert.

At 12 Everett found his element—writing. He wrote inquiring essays, haunting verse; he began a literary diary. The diary matured into travel-worn, adventure-laden tomes. Wind and rain added marks to the penciled pages, scrawled by the light of many campfires.

At 15 Everett was a member of Mrs. Snow Longley Housh's 1929 creative poetry class at the Los Angeles High School. An earlier spur to verse writing occurred with his winning Mrs. Marguerite Ball Dickson's book, "Tumbleweeds" as an award for his Indian poem, "The Relic," written while a student at Valparaiso High School, Indiana. The silence of wilderness nights during his desert vagabondage was broken by his chant of remembered songs—poems that (in his diaries) he stated lifted his spirits and renewed his courage.

Even in early years the wild called Everett. The ocean's restlessness matched his own; mountains lured him; the desert fascinated him. His poems were of space, wind, sand, and sage.

And then, at 18 his hope-dream of distance crystallized. He wrote his last boyish essay. In part—

"One night, long ago, while I tossed restlessly upon my bed, an idea crystallized within me . . . My brain was busied with tense imaginings . . . In my mind I conjured up a

thousand forgotten cities, left behind by the years; sheer grey mountains; mile upon mile of bare, unfriendly desert; cold lakes . . . jungles filled with deadly snakes, immense butterflies, brilliant colors, fever and death. I swam in coral-tinted waters. Through insufferable heat and incessant downpours I plodded forward.

"On bleak, windswept coasts . . . I pitched my camps. On the banks of the sluggish Amazon I built my fires . . . I tramped alone through wildernesses . . . On storm-lashed islands I stood, surveying far-off mountain peaks. Then I camped beneath them in shadowed valleys, watching the sunset . . . These are the things I saw and the experiences I lived through that night long past. Now it is night again—the night before I go. Once more I think of that which lies ahead.

"Bitter pain is in store for me, but I shall bear it. Beauty beyond all power to convey shall be mine . . . Death may await me . . . Not through cynicism and ennui will I be easy prey. And regardless of all that may befall, let me not be found to lack an understanding of the inscrutable humor of it all."

That was Everett's farewell to boyhood and home.

He journeyed by horse and burro in Arizona, New Mexico, Utah, and Colorado during 1931, '32 and '34. Through the summers of '30 and '34 he trekked the length and breadth of Sequoia and Yosemite Parks and the High Sierra. As he wandered he sang remembered themes from the great operas and symphonies. He read, wrote, painted and thought, and was formulating a philosophy to meet the exigencies of his artist-vagabond existence.

Everett's last letter to his brother, Waldo, said, ". . . as to when I revisit civilization, it will not be soon. I have not tired of the wilderness . . . I prefer the saddle to the street



A friendly hiker who met Everett with his dog and pack burro on the trail took this picture and sent it to the boy's parents.

car, and the star-sprinkled sky to the roof, the obscure and difficult leading into the unknown . . . It is enough that I am surrounded with beauty . . . This has been a full, rich year. I have left no strange or delightful thing undone that I wanted to do."

In Arizona he rode broncos, branded calves and explored cliff dwellings, where as he wrote, "The dim and silent centuries invade." In 1934 he worked with University of California archeologists excavating near Kayenta. He was the only white man to be painted that year by the Hopis for their traditional Antelope Dance. He spoke Navajo and sang Indian songs. Once with a painted brave he chanted prayer-songs at the bedside of a sick Indian girl.

As he traveled he sold or traded blockprints and watercolors.

He endured stoically—like a good Indian—the hardships of his lonely life.

Among the earth's wastelands he found nepenthe for what he termed "an undercurrent of restlessness and wild longing." He often said, "I too, long for that inner stillness, but I have yet more of the wild songs of youth to sing."

Alone in an immensity of drifting sand and fingerlike peaks, Everett forgot the passage of time. He forgot that civilization

awaited his return. Everett forgot all but the mystery laden voice of the wind, promising to reveal to him the secrecies of distance. Here was the beauty he sought. He absorbed the mauve and pastel splendor, climbed cliffs, explored, forgetting to return . . .

So far as is known, Everett did not live to see his 21st birthday, March 28, 1935. Numerous theories fail to explain his disappearance. Only the wind to which he was pledged (at 15 he wrote the poem, "I Have Given the Wind My Pledge,") knows the answer to the riddle.

Strangely prophetic, these lines from his "Wilderness Song:"

"Say that I starved; that I was lost and weary;

That I was burned and blinded by the desert sun;

Footsore, thirsty, sick with strange diseases;

Lonely and wet and cold, but that I kept my dream!"

A small insurance policy on Everett's life has been turned into an annuity. Each year, while his parents live, boys and girls of the southwestern states that Everett traversed will be invited to compete for honors in the arts he loved. So in his silence he will live on creatively.

His parents express the hope that more mothers and fathers may establish similar living memorials to sons and daughters whose life songs break after a stanza.

And so to Everett. He kept his dream!

NEW SEARCH MAY BE ORGANIZED

Since the foregoing story of Everett Ruess was written, the Desert Magazine has received the following letter from the author, Hugh Lacy, throwing some additional light on the strange disappearance of the Ruess boy.

The Desert Magazine

El Centro, California,

Dear Mr. Henderson:

Several new clues have come to light since my story about Everett Ruess was written.

A San Francisco feature writer, who covered the search for Everett for United Press, is now gathering more information and is hot on the case, hoping to solve the mystery.

Several interested persons in recent correspondence with the Ruess family brought to light that there are two Wilson's mesas. Wilson's mesa was one of the points Everett intended taking in on the trip during which he was lost. Only one Wilson's mesa was searched. As a result, interest in the search has been renewed, although at present the parents have not had sufficient time to authenticate the existence of another Wilson's mesa. I checked maps with several Los Angeles librarians and could find only one. Then I called a Los Angeles geologist who has explored that area and he assured me there are two. The second, he said, according to the U. S. Geological Survey index, is near La Salle mountain.

Another searching expedition may be organized. Also, reports from different sources have recently reached the parents of three different youths seen in the desert, any one of whom may have been young Ruess. One woman identified a picture of him as a boy she had seen last year.

I would like to suggest that anyone possessing information in any way pertinent to the case write to me at 141 Milna Avenue, Whittier, California.

Cordially yours,
HUGH M. LACY.

Story of the Range Told in Branding Irons

By RAYMOND F. LAW

MANY years ago a young Texas cowboy named Burk Burnett sat in a poker game one night, and by luck and skill managed to acquire most of the money on the table.

The final hand was played. Burnett's principal opponent, a wealthy cattleman, said:

"I'll bet my ranch and cattle against your pile."

Burnett called, showed four sixes, and won the ranch. The next day he started marking the cattle with a new brand, 6666.

The history of the western cattle country is full of such incidents, and the man who can tell you about them is John P. Hale. At his home in Mesa, Arizona, he has a collection of more than 300 branding irons, and when he relates their stories you can almost smell the burning hair as the hot metal sears the side of a struggling calf. For him the history of the Southwest is written on the hides of cattle and horses.

In eight years Hale's hobby has made him an authority on branding irons. It started when he was made chairman of a Masonic banquet given in honor of an old westerner, Jack Fraser of Mesa, who once had 476,000 acres of land and a large number of cattle. Hale got a bunch of Fraser's JF branding irons and decorated the banquet room with them. The idea clicked, and Fraser was so pleased he gave Hale one of the irons. That laid the foundation of the world's finest collection of those utilitarian but symbolic tools of the range.

The collection grew until it now includes items from any famous western ranch you can name, and from outfits in Canada, Mexico, South America, Hawaii, New Zealand, Australia, and in fact, wherever cattle are raised.

Hale gathers irons and runs down their histories when he isn't occupied with the life insurance business, which he says takes most of his time. But he manages to get around a good deal to give informal talks about his irons, and is in his element at cattlemen's meetings. His ability as a hobbyist of the first order was recognized last fall when he was called to



John P. Hale, 34-year-old life insurance man of Mesa, Arizona, who collects cattle branding irons as a hobby. He has more than 300 irons, the largest collection of its kind known.

New York for a radio broadcast on his collection.

"In choosing a hobby, be sure to pick one in which your wife is interested," he advises. "It was many months before my wife would let me bring an iron into the house. Now she goes to the cattlemen's conventions with me, helps me explore old corrals and barns, and criticizes my letters and literary efforts. My daughter had a hard time in kindergarten learning the difference between the letters of the alphabet and cow brand symbols."

Red hot irons have been used for centuries to sear symbols of ownership on the hides of cattle. Disputes over such "coats of arms" of the range account for many an incident of cattle rustling, lynching and gun-play in the annals of the Old West.

"The brands of the western cowmen are marks of esteem which comprise an

BRANDS

that belong to well known names in the cattle industry.

Will Rogers



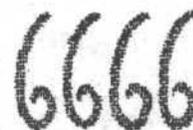
Jack Fraser



Duke of Windsor



Burk Burnett



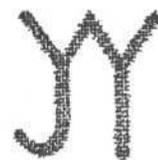
*King Ranch
(Texas)*



Stephen F. Austin



John W. Young

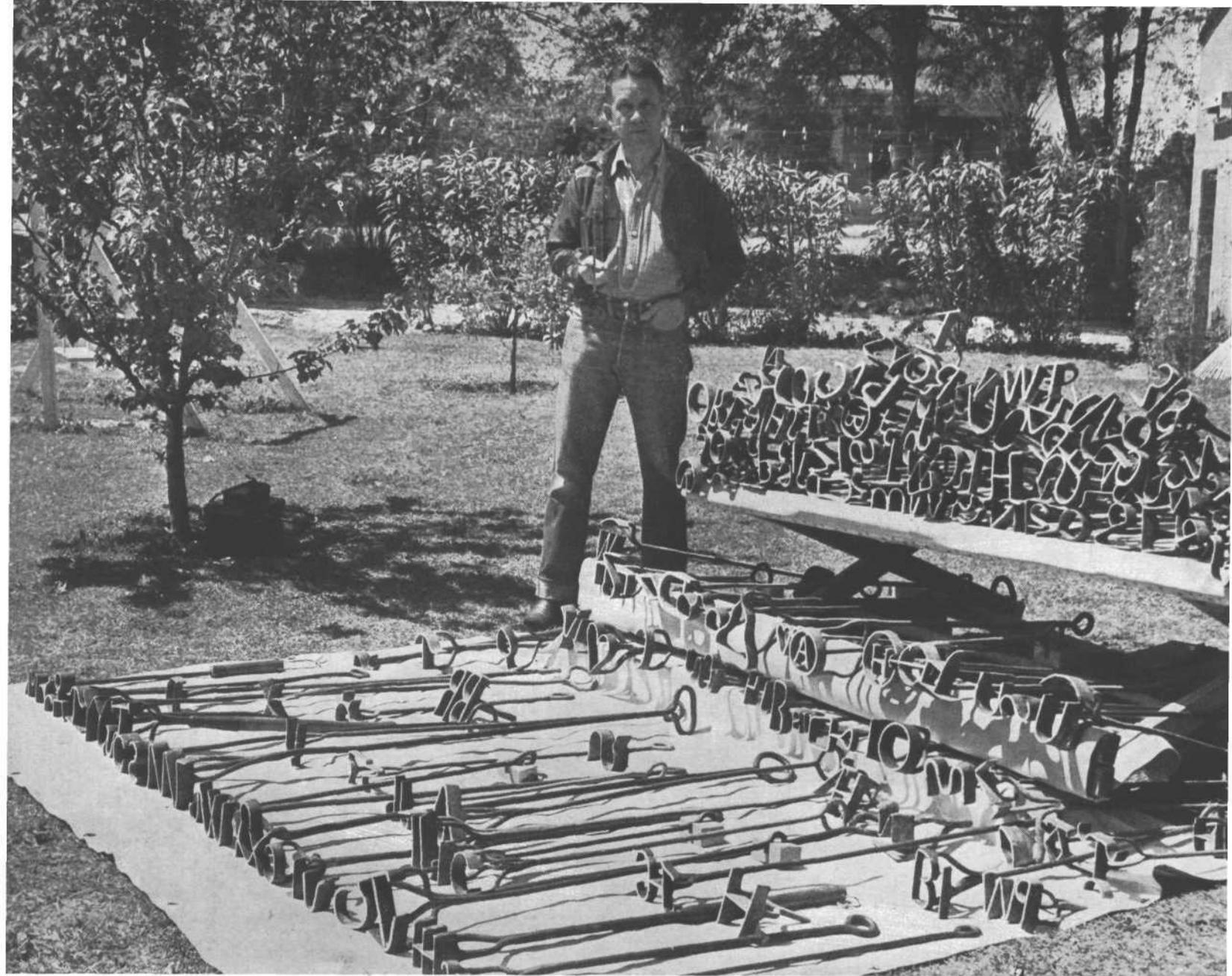


*Miller-Lux
(California)*



*Santa Marguerita
(California)*





These irons, actually used to brand cattle in all parts of the world, are evidence of the persistency—and diplomacy—with which John P. Hale has pursued his hobby. Linked with every iron is a story, and a composite of these stories would be a thrilling history of the cattle industry.

historical index," said Hale. "Treasured as only feudal lords of an earlier age guarded their heraldic devices and coats of arms, these irons have been handed down from generation to generation. The weird symbols seared on the hides of countless cattle that roam the American ranges today have made and are making history. Though the most accomplished linguist would be at a loss trying to read them, they are an open book to the most illiterate cowhand who ever cursed a barb wire fence."

Two types of branding irons are commonly used. The stamp iron burns, with one impression, the entire symbol. The running iron is heated and used by the cowboy to draw a free-hand insignia which often calls for considerable skill. Brands are useful in fixing ownership of cattle because once applied they cannot be

removed. True, they may be changed, but that is difficult to do successfully in this day of fenced areas.

In the early days of the cattle industry in the Southwest, brands sometimes covered the whole side of an animal, running from shoulder to hip. They were easily read at a distance and were difficult to change. Now, with the value of the hides taken into consideration, most brands cover an area six inches square or less.

Cattle owners select their brands carefully, and when recorded they become legal evidence of livestock ownership. Often the initials of the owner or of the name of the ranch are used, but sometimes considerable imagination and artistic feeling are displayed.

Brands take the form of letters, numerals, squares, triangles, diamonds, quar-

ter circles, bars, crosses, hearts and countless miscellaneous shapes. Hale points to brands in his collection showing a rocking chair, a pair of spectacles, a hoof print, andiron, wrench, rake, pitchfork and star.

One of his most interesting irons is that owned by the late Will Rogers, the world's most famous cowboy.

Rogers called his brand the "Dog Iron" because it looks like an andiron or fire dog. He started in the cattle business in 1890 with a herd of 65 dogies, given him by his father, Clem Rogers. Will's venture succeeded, and he scorched the dog iron on a good-sized herd before selling out and going to Argentina to punch cows. Later he went to South Africa, about the time of the Boer War.

In the early 1900s land in the Indian



Territory, now Oklahoma, was thrown open for settlement by homesteaders, and that marked the end of most large cow outfits in the region. The Rogers ranch at Oolagah once included more than 200 sections of land, but now has dwindled to about 1700 acres. When Will returned from his travels, activity at the ranch had languished, so he took his lariat and cowboy lingo to the stage to start the theatrical phase of his career.

Will's father branded his cattle CV and his horses J4. Will often mentioned with pride these brands and his own in his talks and newspaper writings. He was born in the old double log house which still serves as the ranch headquarters. Herb McSpadden, now manager, was assigned the job of rebuilding the long neglected property. He found one of the old dog irons on the place, and knowing its history, continued to use it on cattle. Knowing Will's interest, he branded a few ponies with it and sent the iron to his boss, then living in Beverly Hills, California.

Hale is full of such stories, illustrated by items in his collection.

Problem of Diplomacy

It took a couple of years of letter writing to get the brand of the Duke of Windsor's EP Ranch in Calgary, Alberta. All the Duke's cattle carry EP branded on the ribs. His horses are adorned with a three-feather brand which is a symbol of the crest of the Principality of Wales, three ostrich feathers. The Duke bought the ranch in 1919 while he was Prince of Wales.

The brand of the largest ranch in the world today, the King Ranch in Texas, is in the Hale collection, and Hale can tell you all about that vast cattle domain. In pre-Civil War days, Robert E. Lee, while stationed with the U. S. cavalry in Brownsville, Texas, formed a friendship with a steambot pilot named Richard King, who was interested in cattle. Lee predicted a promising future for that part of the country as a cattle area, and his prophecy came true. King was attracted by the vast ranges covered with abundant feed, the mild climate and cheap labor. He first bought the Santa Gertrudis ranch, and by hard work and shrewd management made it a valuable property. More land was added until the King Ranch today embraces nearly 1,000,000 acres, over which 75,000 cattle graze. These vast herds are branded with the "Running W" and are cared for by 350 Mexican vaqueros. The place is modern in every way, operated in a scientific manner, and is a cowman's dream come true.

Vast as the King Ranch is, there was

once one three times as large. Lands were plentiful when the Lone Star state was new, but there was no money to erect a state capitol. In exchange for 3,000,000 acres, embracing ten counties, the Capitol Syndicate Company gave the state enough money to build a capitol, and the largest ranch ever to exist in the United States came into being. Thousands of cattle branded XIT grazed over this great area in the Panhandle section. XIT, once the best known of all American brands, meant "Ten in Texas," that is, ten counties.

Arizona, too, once had a vast cattle domain, about a million acres smaller than the XIT. The Hashknife outfit of the Aztec Cattle Company in northern Arizona got its name from the cattle brand which resembled an old kitchen chopping knife. The original cattle were unloaded at Holbrook and Flagstaff in 1886, sent from over-grazed Texas ranges by the Continental Cattle Company.

Tough Cows in Texas

The late Will C. Barnes, an authority on cattle history, who ran cattle in that country at the time, is quoted by Hale as declaring "Those Texas cows could stand more grief, use less food, drink less water, and bear more calves than any cows that ever wore a brand. The owners also brought with them a bunch of men of equal meanness, wildness and ability to survive almost anything in the way of hardships and sheriffs."

Hashknife riders engaged in many a cattle feud and sheep-cattle war of the day. For several years the outfit flourished, records showing 16,000 calves were branded during the season of 1888. In time the range was grazed off, and years of drought and hard winters depleted the herds. In 1900 the remaining stock was shipped away. The brand has fallen into disuse except on a few cows near Winslow owned by Babbit Brothers.

Few of the great ranches of early cattle days exist in their original form and dimensions. Vast acreages have been broken up into small holdings, and the free and open ranges have been fenced into pastures. Modern homes and barns have replaced the temporary camps used by cowpunchers of a generation or two ago. Rangeland feuds are no more, and cooperative marketing has been developed.

But they still grow cattle in the vast spaces of the Southwest, and as long as there are cattle there will be brands. Hale may not have all of them, but he comes nearer that goal than any other person has come.



"--An' then it started rainin' ashes out on the Pacific"

CARLYLE ELLIS of Hollywood won the Desert Magazine's Hot Air Contest in July. And here is the yarn he told about a certain summer day out on the Mojave desert of California:

AT the end of a long hot journey across the parched floor of one of those Mojave desert dry lakes I came at last to a tepid pool of water with a lone cottonwood tree growing beside it. Lounging in the shade was another wanderer—an ancient and sun-dried nomad of the desert.

"Kind of warm," I remarked by way of introduction as I slumped to the ground beside him.

"Beg to differ, stranger," he answered promptly. "I'd call this practically cold. This durned desert ain't what she used to be. Why I remember one day, sittin' right in this spot, maybe 50 years ago—no, 60—"

The cottonwood shade was soothing. There was the promise of a good story—so I reached in my pocket for my pipe and indicated I was ready to listen.

"See them miles of bare desert? Used to be covered with thick mesquite growin' around a purty lake. Folks have been wondering for years what became of them

trees. Well, I can tell 'em. I saw it happen. Only livin' man that did, I guess."

I had heard about that mesquite—and had been told it was grubbed out by a homesteader who filed on the land. But I said nothing.

"Let me tell you," he went on with his story. "That *was* a hot day! I sat watching this here lake dry up in two or three hours, leavin' nothing but a big spring in a 10-foot hole over there in the middle. Then the sun got into that hole an' purty soon the spring begun to steam. In no time there was a jet of hot spray spoutin' up like a geyser, maybe 50 feet, maybe a hundred.

"But it got hotter still and I own I felt kinda scary. So I climb up that butte you see over there and holed into an old Indian cave and looked out over the valley. I was just in time.

"You know, when air gets hot it rises. That air sure was hot and the hotter she got the faster she riz. The up-draft was the worst I ever wish to see and gettin' worse. First it began pickin' up dead leaves and dust and twigs. Then when it pulled up all the loose stuff it began draggin' at that there mesquite brush.

"Stranger, you'd hardly believe it if it wasn't me tellin' you, but that there up-draft began loosenin' up the younger trees and before you'd say, 'Scat, you durn coyote!' some o' them trees got free. Gory, how they did sail!

"But that ain't the worst. The trees was soon comin' out o' that sand like hair on a mangy dog—whole acres at a time—then by the mile. And they didn't just sail off down the valley. They went straight up—millions of them, till they made the biggest blackest cloud you ever saw."

The old man bit off a fresh quid and came to rest.

"Did they come down again?" I asked, fearing that he had run down.

"Stranger," said he impressively. "That's the queerest part of it. I'm the only livin' soul who can answer that question and, seein' it's you, I'll do it. A few weeks later I read in the paper about a rain of volcanic ashes a thousand miles or so off the coast and that made me double sure. You see, them there trees was so crowded and tossed about up in that cloud that they just nachurly rubbed together till the friction set 'em on fire and first thing you know the whole

caboodle was blazin' like hades. After that the heat, of course, just held them up there till they was teetotally consoomed."

Gratefully I handed the old codger my canteen and there was a silence.

"That's a remarkable story," I said. "Has it ever been printed?"

He wiped his mouth with the back of his hand, and the canteen with a horny palm before handing it back.

"No sir, it ain't," he said at last. "I set out to be an author once, but I found out my mistake. The trouble was I never could get beyond the plain, unvarnished facts. My maw realized that.

"My son, she says to me when I talked about authoring, 'the trouble with you is,' she says, 'You ain't got no imagination.'"

HOUSE OF 'DOBE

Continued from page 16

paste and strained; 1/2 pound powdered Spanish Whiting dissolved in hot water; 1 pound best grade glue dissolved to a thin mixture with hot water.

Keep this solution warm, add 5 gallons of hot water and stir well. Let it stand for three or four days before using. When using, heat by setting the can in a tub of hot water, taking care not to scorch it. Strain again as used and apply with a whitewash brush.

To make a more crusty surface, add one quart dry cement during the first mixing.

To color, add dry pigment—rust, green, or whatever you wish and it is best to add at the time of the first mixing.

That seems to be about all but the chimney. In the new home he is building near Three Rivers, California, Livingston is adding a beautiful fireplace of adobe brick, but taking care that all the fire box and flue linings are of fire brick or clay. The same caution should guide you in planning any type of smoke stack. Regulation terra cotta tile should be used inside the adobe—just in case.

A few little things like the wiring and plumbing you should have figured out as you went along. Then, hang up a string of chili peppers and you're ready to start moving in.

If your figuring included keeping an expense account, the experience of other builders would indicate that the cost of your home should be about the same as if you had used other materials, provided you pay yourself wages. The big saving possible is due to the fact that you, being unskilled and possibly otherwise unemployed, can do most of the work yourself, keeping material costs to a minimum.

And from then on, to you "adobe" will still be mud—but a glorified sort of mud. In fact, you'll probably end up by figuring that you're immensely proud of your "Homespun Homestead."

Weather

JULY REPORT FROM U. S. BUREAU AT PHOENIX

Temperatures—	Degrees
Mean for month	90.3
Normal for July	89.8
High on July 31st	112.
Low on July 5th	67.
Rain—	Inches
Total for month	0.25
Normal for July	1.07
Weather—	
Days clear	24
Days partly cloudy	5
Days cloudy	2
G. K. GREENING, Meteorologist.	

FROM YUMA BUREAU

Temperatures—	Degrees
Mean for month	90.6
Normal for July	90.8
High on July 31st	112.
Low on July 6th	63.
Rain—	Inches
Total for month	0.18
69-year average for July	0.18
Weather—	
Days clear	24
Days partly cloudy	7
Days cloudy	0
Sunshine 95 percent (416 hours of sunshine out of possible 437 hours).	
Colorado river—	
July discharge at Grand Canyon, 1,747,000 acre-feet. Discharge at Parker, 599,900 acre-feet. Estimated storage behind Boulder dam August 1st, 23,200,000 acre-feet.	
L. C. WALTON, Meteorologist.	

LETTERS..

Inglewood, California

Dear Mr. McKenney:

Your interesting magazine once more at hand, which, as always, has been enjoyed.

We believe we have a name that might be applied to Geo. L. Wing's plant, but this must necessarily be considered tentative as identification of plant material takes much more with which to work than a picture and the description offered.

Echinopsis eyriesii var. *rosea* may be the proper title for the plant in question. This variety is presumed to be a hybrid between two very interesting South American species of cacti, the characteristics of which vary sufficiently to allow much variation in the hybrids produced. *Echinopsis eyriesii*, one of the parents was described in 1830 and was used as the type on which the genus *Echinopsis* was erected. This plant which has been known to attain to a height of two feet under careful cultivation, has very short dark spines, white flowers and dark green body. *Echinopsis multiplex*, the other parent, is more globular in shape, spines yellow or light brown, up to an inch in length, deep pink flowers and light green body. This species was described in 1837. These are thought to be two of the first South American species to be introduced into the United States, no doubt being imported by the padres, as they are often found growing in the gardens of the missions.

The generic name is from the Greek, meaning hedgehog appearing, which gives it its common name of Hedgehog Cactus. As these are easy of culture, thrive with a minimum of care, are among the freest bloomers (although inclined to produce these in one grand spectacle as shown in the picture) we consider them one of the best for cactus gardens if given sufficient water and a little shade. At the time "The Cactaceae" by Drs. Britton and Rose was published there were twenty-eight species in this genus. Since that time botanical exploration has added several others.

As the identification of these plants is of intense interest to me, I have prepared a few notes on the subject which your readers might find of interest. We would be pleased to answer any inquiry regarding cactus if a stamped addressed envelope is enclosed.

D. C. HUMMEL
(Hummel's Exotic Gardens)

Indio, California

Dear Sir:

I happened to get the last issue of "Desert Magazine" (the first I had seen) and saw an item about "Whispering Mountain," in Arizona near Flagstaff. It should be Whispering Mountain. Either you or Mr. Miller misspelled the name. Mr. Harrison Conrad and I were very good friends and I happened to be with him when the discovery was made.

GEO. W. HULSEY.

• • •

Shafter, California

Dear Mr. Henderson:

The back issues of Desert arrived in yesterday's mail. They have all been carefully examined and partially read. Allow me to assure you that I have seen nothing of better style or greater interest and value published in California. Desert is certainly a bright sheet among the many pulp, fiction, and worse-than-fiction magazines with which the news stands of today are flooded. May it receive the universal support to which it is entitled.

F. F. LATTA.

• • •

Hillside, Arizona

Dear Sir:

Maybe you haven't inquired of the right parties regarding the "coyote pack." I am not disputing your word that they are more or less individualists but I have seen them in bunches of as many as seven grown ones, and three or four together is a common sight.

I have lived in Arizona 16 years and all of that time was spent in riding the range in cow work and other outdoor work along with lion hunting and quite a bit of coyote trapping. I have had them chase hounds off a lion trail, not one coyote but several. I have had them chase my cur dog in the house. I have seen them do teamwork on jackrabbits on several different occasions, and at one time we saw seven coyotes come by our front door running, and every one yapping at the top of his voice.

Now if you can't find an incident among these that could be called a pack, I want you to explain just how many is a pack.

We enjoy your magazine.

RAY. J. CRAVEY.

Caliente, Nevada

Dear Editor, Desert Magazine:

That Utah editor who won the prize for being the biggest liar is pretty good. But if that friend of his, Ebenezer Brown, ever brings his bees down here to Caliente he'll have to fit 'em with insulated pads on their feet before they can even go out and collect vaseline from the bushes around here. We had a feller out here with a lot of bees once, and he went out of business because the stuff they brought in set fire to the beehives and burnt everything up.

MIKE ZENA.

• • •

Los Angeles, California

Dear Mr. Henderson:

A few weeks ago I saw an article in the daily papers by the district attorney of Inyo county stating that the wild burros were not protected by the game laws of California, and that vandals were fencing off the water holes and killing the burros and processing them for chicken feed.

Scum of this variety has already done too much damage to our desert country and I believe we should do something at once to protect these lovable animals and put a stop for all time to such contemptible practices. I should like to contribute my share. A good stiff penalty should be the fate of such people.

ART SCRUGGS.

• • •

Garnet, California

Dear Randall:

Permit me to write a few lines from a spot on the desert where the sun is shining and the temperature is over 100. How much over 100 we desert rats never notice or care.

But we don't like newcomers to try to change our place names or the spelling of them.

We have here a hidden depression in the desert where man and burro have dropped in out of the wind and heat to get a drink of water and a bit of shade for many years. For obvious reasons this is called "Willow Hole." But every once in a while some white collar comes along and wants to change it to "Willow Springs"—as being more poetic and aristocratic.

So, along the same line of thought, please stick to Chuckawalla. Every old-timer pronounces it that way. These men who have dug for water, made roads, fought winds and lived with the snakes and the heat are the men who should name the places in their own country. And Chuckawalla is one of them, in spite of Webster's dictionary and a lot of office map-makers who never saw a desert.

CABOT YERXA.
(Two Bunch Palms)



Pancho Contento on his way to Calexico, where he always finds the best for the least.

Si, Si, the

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Angelus De Anza

HOTEL

Padre of the Uncharted Desert

Continued from page 5

nando and the mountain passes to the great basin of the lower San Joaquin.

Here he wandered in a northerly direction among the Yokut villages. He sat with them and after convincing them he was no evil man on a slave raiding expedition, became almost as one of them. From a round granite pestle he duly licked a nauseating dose of powdered wild tobacco and shell lime. His Franciscan stomach accepted this heathenish stuff better than did his Mojave companion who became violently ill, to the great glee of the Yokut hosts.

On May 10, Garces turned from the valley and nine days later he stood once more upon the low banks of the Colorado river, ready to begin an arduous journey of exploration to the east.

On June 5, 1776, began his memorable trek to the Hopi country. This time he sought a shorter road to the Spanish villages of the Rio Grande.

Two weeks later after passing through the country of the Hualpai, the stout hearted friar edged with hesitant step down an incredibly steep trail along the sheer wall of a "horrible abyss," Cataract Canyon, where dwelt the Havasupai people, on a valley floor 2000 feet from the rim.

He made the descent by means of hand and foot holds cut in the rock and a wooden ladder part of the way. He stayed five days among the canyon dwellers and on June 25 set out with his Havasupai guides for Oraibi.

Two hundred and thirty-six years before Garces, a small band of mailed Spaniards had stood in awe upon the banks of the mightiest canyon in North America and on June 26, 1776 Garces, the wandering priest, stood spell bound beside the same colorful chasm. He was the first European ever to approach the canyon from the west.

He hastened on, over the old Indian trade trail to the Hopi villages. He crossed the Colorado Chiquito near the mouth of Moencopi Wash and swinging east northeast arrived at Oraibi on July 2.

Here Garces was rebuffed by the usually friendly Hopituh. They feared the magic of his compass and his other articles. They feared the power of his religion. Garces camped alone in the dusty streets of Oraibi beside his smouldering fire of corn stalks that he had lighted with his burning lens. After spending a few days in this inhospitable region he retraced his steps to the Colorado where he arrived on August 14, crossing the river not far from the site of old Laguna

de la Paz of the gold rush days of the 1860s. Thence he went down stream and set off via the Gila for San Xavier del Bac, where he arrived September 17, 1776.

About the end of August 1779, Garces, under orders from Comandante General Teodoro de la Croix, went in company with two soldiers and one other person to his old stamping ground along the Colorado river.

It took courage to remain month after month in a place where every day the signs of Indian rebellion grew stronger and stronger. Death on naked feet stalked closer and closer to the Spaniards. The winter of discontent wore away. With the spring of 1781 came Capitan Fernando Xavier de Rivera y Moncada with a party of 40 recruits for the Alta California settlements. Some of these went forward to California, some returned to Sonora but the capitan and 12 of his men remained to fall victims of the Yuma war clubs.

The storm burst on the morning of July 17, 1781. The vengeful Yumas took full toll for all the indignities they had suffered at the hands of the ignorant, greedy Sonoran settlers. Garces was preaching in his little chapel on the hill of La Concepcion. He and his companion Padre Antonio Barraneche, a young priest on his first mission, were momentarily spared. At the little settlement of San Pedro and San Pablo de Bicuner, eight miles down stream near Pilot Knob, Padres Juan Diaz and Matias Moreno died in their tracks and were left where they fell. Of the entire colony of soldiers and settlers 50 were clubbed to death. Women and children were taken prisoner and held for ransom. Houses and churches were sacked and burned.

On July 19, in spite of Capitan Palma's protests, Garces and Barraneche perished under the heavy potato masher shaped Yuma clubs. Their bodies were buried by a friendly Yuma woman. Later, on December 10, she no doubt directed a military searching party who came to bury the remains and avenge the death of their countrymen, to the spot where the two priests were resting in their shallow sandy grave.

The bodies of the padres were placed in one box and carried on mule back into the Altar Valley to the peaceful church of San Pedro y San Pablo de Tubutama on the hill and there buried on the Epistle side of the high main altar. There they rested for 13 years until they were again disinterred and reburied with much pomp in the mother church at Queretaro, Mexico on July 19, 1794. There, to this day lie the remains of Father Garces, the pioneer priest of our California deserts.

Possessed

Give my desert back to me—
 Leave its glittering sands.
 Leave its flowers wild and free
 Untouched by greedy hands.

Let no shadow cast its wraith
 Except the cactus growing—
 Wedded with undying faith
 To desert winds hot blowing.

Leave my desert still and sweet
 Beneath a star pierced sky
 Where sea of sand and mountains meet
 And coyote lifts its cry.

By FLORENCE R. CORBY
 Los Angeles, California

Let the smoke trees' murky cloud
 Break the sun's fierce thrall
 And tumbleweed's ghostly shroud
 Whisper at my wall.

Let the mountains' purple veil
 And moon through silver mist
 Bear mute witness to the tale
 Of two who met—and kissed.

Go your way, you roving man—
 Time erases your small makes,
 Forget this place if you can—
 The desert keeps what once it takes.

DESERT SERFS (i. e. "Rats")

By CHAS. W. PATCH
 RENO, NEVADA

Born of the heat—the sand—and silence—
 Bred of persistence and a stoical calm;
 Lost in the desert's trackless reaches—
 Seeking for colors with questing palm;
 Sacrificing comfort and human relations—
 Living on hope with hunger's fierce urge;
 Faith in the future to solve each question—
 Fatalists all with fanatical surge;
 Dreaming of wealth in fantastic figures—
 Grubbing for gold in diabolical land;
 Gambling life at the altar of Midas—
 Spawn of the desert—SERFS of the sand.

SAGE

By NELL MURBARGER
 COSTA MESA, CALIFORNIA

Crocus, daffodils and pinks;
 Smilax, hollyhocks,
 Larkspur, rose and mignonette,
 Candytuft and stocks,
 Nodding in the summer sun
 On my garden stage—
 O! How I loved the gentle flowers
 Before I knew the sage!

Before I'd glimpsed a Joshua tree
 Or smelled the rich perfume
 Of manzanita's waxy bells
 Or saw the mesquite bloom.
 Before the yucca's spiny hands
 Had clasped the heart of me
 Where chaparral and cactus fields
 Went sloping to the sea.

I never realized its hold
 Until that fatal day,
 When I left my desert land
 Flowering, where it lay . . .
 Once again the gentle flowers
 Reign my garden stage,
 But . . . Who could thrill to violets
 Who once had known the sage?

TREK

By MARTY HALE
 STEUBENVILLE, OHIO

Some of life's roads are smooth highways,
 Most of 'em's pleasant enough,
 But out of the lanes and the byways
 I picked a road that was rough;
 Rocky, it was, with sand-holes,
 Rutted by storm and rain,
 But I couldn't quit its ugliness
 And pick out my trail again;
 So I stuck to the rocks and the boulders,
 And one day it came to me
 That a Something sweet and lovely
 Was walking the trail with me.
 It made the load seem lighter,
 The rocks and the bumps grew small,
 And the ruts that It helped me over
 I never saw at all!
 So with your hand to help me,
 I clambered on and on—
 Then, YOU slipped away in the shadows,
 And the Something Sweet was gone.
 Out of that dusk glows a memory,
 Tender, sweet, and true—
 A toast to the day I traveled
 Those few short miles—with you.

WILL BUY place in high desert country, preferably Nevada. Should have cabin accommodations for about twelve, shade trees and water, off the highway, with excellent view of mountains. Must NOT be near town. Might build my own if you have acreage that meets specifications. Write fully. Box No. 55., Desert Magazine, El Centro, California.



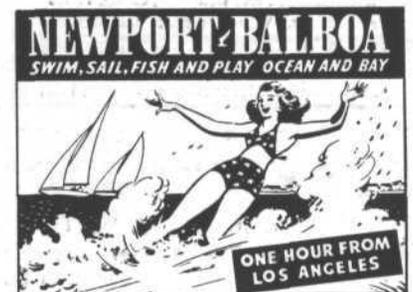
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Here and There

... ON THE DESERT

ARIZONA

Tombstone ...

Ed Schieffelin, who founded Tombstone in 1878, stirs uneasily in his grave these days as Hollywood weighs an offer by which the whole town would be sold to the movies for \$75,000. Walter H. Cole, editor of the Tombstone Epitaph, is credited with having canvassed the village, found property owners in favor of his proposal to sell the community to the film folks as a permanent site for location to be used in making western pictures.

Winslow ...

Arizona Highway patrolmen have received orders to enforce strictly the state law prohibiting political stickers on windshields or windows of automobiles. Enacted in 1922, Section 1622 of the Revised Code says it is unlawful for a person to drive any vehicle on a highway with any sign, poster or other non-transparent material on the front windshield, sidewings, side or rear windows, other than a certificate or paper required to be so displayed by law. Violation is a misdemeanor.

Phoenix ...

Right of Indians to fish and hunt in Arizona is championed by Frank E. Flynn, U.S. Attorney. Flynn has filed suit in Arizona's Supreme court challenging state law which denies fishing and hunting licenses to Indians and prohibits the red man from pursuing fish or game while off the reservations. Court is asked to order State Game Warden William H. Sawtelle to accept \$3.50 and issue a license to Cecil Begay, Keams canyon, Navajo.

Ganado ...

Similarity between the Mandarin dialect of the Chinese and the language of the Navajo Indian gives strong support to the theory that the New Mexico and Arizona tribes migrated from China, according to Dr. H. Carroll Whitener, chief of the Navajo language school at the Presbyterian mission here. Discoveries are being made daily to substantiate the belief that Navajo are of Chinese origin, Dr. Whitener declares. Chinese characters have been found carved in Canyon de Chelly.

Yuma ...

Secretary Ickes of the interior department has designated 6,000,000 acres of public domain in Maricopa and Yuma counties as Arizona grazing district No. 3. Creation of the new district, urged by livestock men of southwestern Arizona, brings under federal range area 9,500,000 acres of the 13,000,000 acres of public domain in the state. Protection of mountain sheep in the region is part of the administrative program, Ickes said.

Tucson ...

Southwestern dog owners were warned by A. A. Nichol, University of Arizona ecologist, to keep their dogs away from a deadly poisonous variety of desert toad which causes them to die a sudden agonizing death. The lethal toad bearing poison glands on his back, is very fat, weighing up to two pounds, and comes out of the ground after summer rains. It is not to be confused with the small harmless "spade toad."

Casa Grande ...

Arizona's cotton acreage in cultivation July 1 totals 212,000 acres, compared with 299,000 acres in 1937, says a report from the U. S. department of agriculture. In short staple are 171,000 acres, in American-Egyptian cotton 41,000. Last year there were 278,000 acres of short staple, 20,500 of American-Egyptian. Maricopa county leads in cotton acreage, Pinal is second. National figures show a decrease of nearly 20 per cent from last year's crop, the 1938 total 26,904,000 acres.

CALIFORNIA

Palm Springs ...

Under a ruling by Federal Judge Leon Yankwich Indian lands here must be held for the tribesmen by the United States government. Property in question has become very valuable with development of this desert winter resort. Eighteen Indians sued to compel issuance of patents in their favor covering land they had designated. Suits were brought under congressional enactment of 1891 giving discretionary power to the secretary of the interior to allot property to individual Indians capable of managing land separately. Judge Yankwich said his decree would defend the Palm Springs Indians against spoliation "even by their fellow tribesmen."

Desert Center ...

Riverside county surveyor A. C. Fulmor is extending into Imperial county survey of a road from U. S. 60 west of Hopkins Well to Niland. Already instructed to complete the survey and obtain rights of way for the new highway from the point where it leaves U. S. 60 to the Imperial line, Fulmor was assigned to finish the job after Supervisor B. M. Graham of Imperial county submitted a request to Riverside county supervisors. The new road is a link in the Four-States highway from Canada to Mexico.

Needles ...

To explore the Colorado river between Boulder and Parker dams, F. M. Francis, old-time riverman, has built a shallow draft, flat bottomed boat successfully launched here. Francis says the craft will draw five inches of water when light. Loaded to five-ton capacity it is expected to draw not more than 12 inches.

Borax Lake ...

America's "dawn man" of 15,000 years ago left relics uncovered on the shore of this salty lake by scientists of the Carnegie institution and the Southwest Museum. Mark Raymond Harrington, head of the archeological expedition, at the end of two weeks digging, reported discoveries representing four prehistoric cultures. Oldest finds were crudest of tools, none of which had handles. Weapons were chipped out of glasslike volcanic rock called obsidian. The "dawn man" knew how to keep warm in the glacial wastes of 15,000 years ago. Remains of one of his bonfires were unearthed.

Palm Springs ...

Commission and reappointment to serve here for another year have been received by H. H. Quackenbush, special officer of the Indian Bureau in charge of the Palm Springs Indian reservation.

Indio . . .

W. E. Callahan Construction company is "walking" one of its huge 18-yard bucket draglines across the desert sandhills of eastern Imperial county toward Gray's well, where digging will start soon on the Coachella branch of the All-American canal. The huge excavating machine moves on its own tracklaying device, advances about two miles in two eight-hour shifts, preceded by two tractors preparing the way across country. Work at Imperial Dam, on the All-American canal is practically completed and water will be turned soon into the first section of the canal for the purpose of seasoning the 22-mile section from the intake to Pilot Knob. Entire 80 miles of the country's biggest irrigation canal will be ready for operation next year.

Blythe . . .

Reclamation of Parker valley in Arizona under a \$10,000,000 program of the department of the interior will develop 85,000 acres in an irrigation project for the Colorado River Indian reservation, Clyde H. Gensler, reservation superintendent, told 145 members of the Lions club here. Headgate Dam construction work has been started, will be finished in 18 months. The project to be completed in 10 years, should support a population of 20,000, the official declared.

NEVADA

Fallon . . .

Prospectors here have traded burros for boats. Lake Mead, backing up through hitherto inaccessible canyons, turns the fairy waters of shimmering mirages into reality. Grizzled desert rats who once followed their plodding donkeys into the desert now load beans and bacon into small craft and shove off for a gold hunt. Eugene York has gone streamlined along with automobiles and newspapers, built a steel motor launch, all parts of its frame electrically welded, the craft equipped with modern prospecting outfit, powered with 125-horsepower motor.

Las Vegas . . .

Everybody knows a fisherman likes to lie—under a shady tree. Dr. William C. Harper and Ed. Brown of Overton say fish have the same habit. Here's their story and they stick to it: They went fishing where Lake Mead now covers the historic town of St. Thomas. They located cottonwood trees, about 45 feet high, which for years shaded Hugh Lord's garage on the main street of St. Thomas. These big trees are under water, except for about six inches of the top branches, which stick up out of the lake. As soon as the anglers dangled their lines through the cottonwoods' branches they began to haul in fish. They showed a big catch of bass and catfish weighing from two to three pounds each.

Winnemucca . . .

Establishment of a museum at Carson City to preserve pioneer Nevada railroad relics is sponsored by the California-Nevada railroad historical society.

Boulder City . . .

Separation Rapids, 115 miles upstream in the Colorado river, is the point now marking headwaters of Boulder lake, reclamation bureau engineers announce. The reservoir behind Boulder dam has a surface elevation of more than 1172 feet above sea level and is still rising. Depth of water above old river bed is 352 feet and lake surface is within 60 feet of the roadway topping the dam. River flow at Grand Canyon reached a season peak of 105,000 second feet on June 8, since then has fallen off rapidly.

Winnemucca . . .

Louis Butler, 42, Mountain City miner, panned for gold and found minted metal. Louis was astonished, washing a pan in Cornwall Creek, when his eye fell on a California half-dollar gold coin. Dated 1860, in excellent condition, perhaps it was lost by a placer miner who worked the stream long years ago. The gold piece is less than half the size of a dime, bears the picture of a bear, "California Gold" and "1/2" on one side, an Indian head and 13 stars, with the date on the other.

NEW MEXICO

Albuquerque . . .

No change in present schedule of rates for public grazing on federal range lands in the west. This announcement from Washington affects 18,000 stockmen with 10,000,000 head of cattle, sheep, horses and goats running on 120,000,000 acres of public domain in 10 states. Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah and Wyoming are interested. Fees: Per head each month, cattle and horses, 5 cents; sheep and goats, 1 cent. Collections, \$1,000,000 annually, three-fourths returned to states and grazing districts.

Las Vegas . . .

"Buzz" Holmstrom, 28-year-old Oregon mechanic who made a one-man trip down the upper Colorado by boat to Boulder dam for the first time in history when he floated down the river last fall, will try it again. This time he will take along Amos Berg to write a book.

Taos . . .

Born here August 12, 1861, Charles Carson, son of Kit, famed pioneer Indian scout, died recently at La Junta, Colo. He spent most of his life in southern Colorado and Northern New Mexico, where Kit Carson became a legendary figure.

UTAH

Salt Lake City . . .

At this rate guide books will be adding soon a chapter on cruises down the Colorado river. On the heels of the Nevills party and its two feminine navigators, comes the story of four men in two collapsible boats, negotiating 150 miles of the stream from Hite, Utah, to Lee's Ferry, Arizona, in one week without mishap. Leader was Dr. L. F. H. Lowe, French instructor at Princeton university. Lowe's boating costume is a tip to what the well-dressed man will wear through the rapids: "Shorts and shoes."

Vernal . . .

Presidential decree has added 203,885 acres to the Dinosaur national monument in Colorado and Utah. The monument heretofore included only 80 acres, now takes on 318 square miles of new territory.

Salt Lake City . . .

"Not more than 15 per cent of the United States is adequately mapped. Ours is the most poorly mapped of the so-called progressive countries of the world today." Dr. William Bowie, formerly chief of the division of geodesy, U. S. Coast and geodetic survey, of Washington, D. C., speaking to the 68th annual convention of the American Society of Civil Engineers. Thomas C. Adams of the University of Utah told the engineers that the Colorado river compact—which Arizona has until now protested—"may well accomplish its objects and be beneficial to everyone."

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Sez Hard Rock Shorty

of
Death
Valley



By LON GARRISON

"Buffalo?" said Hard Rock Shorty. "Sure. They used to be lots of buffalo here. Moose an' deer too. Only fifty year since they disappeared. It was all on account o' them skeeters."

Hard Rock moved out of the sun into the shade of the store porch and proceeded to enlarge upon his statement.

"A feller from New Jersey started it all. He'd a little claim down to the lower end of the Valley, an' got so lonesome he sent back to New Jersey an' got some skeeters to give 'im somp'n to do. Climate down around Bad Water seemed to agree with 'em an' it wasn't long 'il they was big enough to take care o' themselves an' most anythin' else in the country besides.

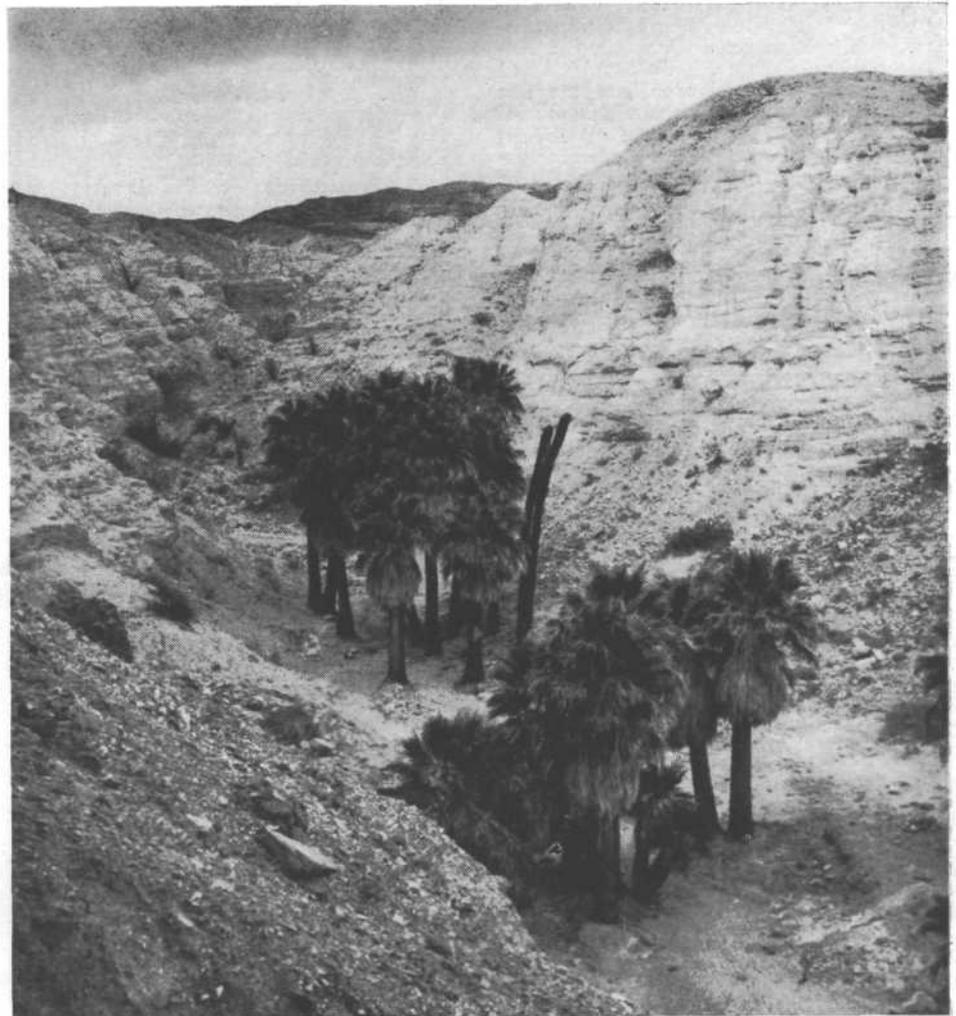
"Yup—they begin crossin' with buzzards an' road runners. Now sir, that was a combination! The zing o' the skeeter, the size an' eyesight o' the buzzard, an' the speed o' the road runner, an' they wasn't nothin' could get away from 'em. They just cleaned things out proper — moose, buffalo, an' all. They caught ever'thin' that flew an' run down ever'thin' that hadn't no wings.

"Not only that, it got so men wasn't safe 'less they carried guns—them skeeters sure got to be big devils. They was too big—they couldn't get enough to eat, an' that was what ended 'em. One day one o' their scouts come in an' reported a whole wagon train load of canned meat goin' up the Nevada side. They flew over an' raided it an' got so full they couldn't fly good. Comin' over the Funeral mountains they couldn't get the elevation an' all crashed into the side o' the hill.

"But the catastrophe came too late to save the buffalo—none left—nor none o' them big skeeters either."

Hidden Springs

This is the correct name of the oasis pictured below. Mrs. E. Thiel of Glendale, California, was the winner of the \$5.00 cash prize offered by the Desert Magazine for the best letter naming and describing this landmark. The winning answer is published below.



By MRS. E. THIEL

THE lovely picture in your July issue is without doubt that of Hidden Springs, a secluded spot in the foothills of the Orocopia mountains on the Colorado desert of Southern California.

This place can be reached from the old Mecca-Blythe highway. Approximately three miles east of Mecca turn southeast and follow the power line for about three miles then turn north along a sandy wash for five miles.

A short distance after reaching the point where the canyon becomes narrow with high walls on both sides is a little tributary canyon taking off to the left. There one has to leave the car and follow the tributary about 100 yards on foot. The trail leads through broken boulders

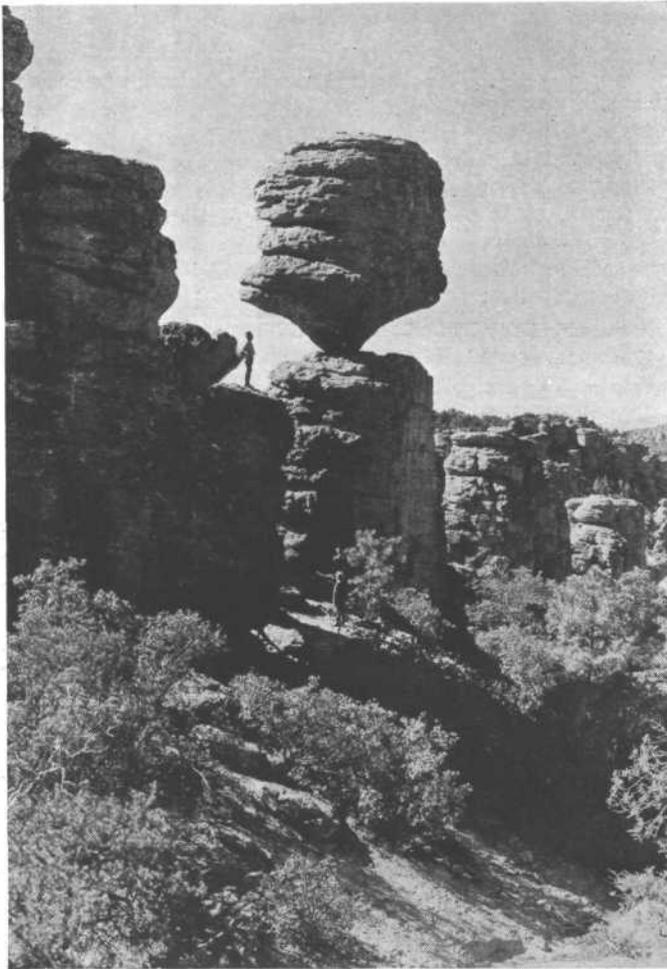
of conglomerate and at one place it is necessary to crawl on hands and knees through a narrow passageway.

As one emerges from the semi-darkness of the tunnel a surprising picture comes in view. There are two groups of palms numbering about 40—all of them native Washingtonia.

Under the upper group is a little spring about two by four feet in the clay-like ground. The water is fairly good and generally swarms of bees are there. The lower spring is usually dry but water can be obtained with a little digging. The palms are nicely grouped in a spectacular setting of multi-colored hills. The spring also may be reached by a short trail from Shaver's well. There are excellent camping spots in the main canyon.

The DESERT MAGAZINE

Who knows the location of this
ARIZONA LANDMARK?



FOR THE BEST ANSWER
—a \$5.00 AWARD

Somewhere in Arizona, in a place visited by many people every year, this striking rock formation is found. It is one of the landmarks of the desert—a striking creation of nature not likely to be forgotten by those who have seen it.

Since the purpose of the Desert Magazine is to help its readers become better acquainted with the scenic places in the desert area, a prize will be paid to the person who sends in the best descriptive story of not over 400 words about this rock.

Answers should give the exact location, how the place may be reached, automobile or railroad and any other information which would interest desert travelers.

This contest is open to all readers of the Desert Magazine regardless of place of residence and entries must be in the office of the magazine not later than September 20, 1938. The winning answer will be published in the November number.

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WHY SEEK TO CHANGE THE AMERICAN INDIAN?

"I want to make clear, if I can, the difference between Indian and Indian, a distinction not always kept in mind by our government which has passed the same laws for . . . home-loving Pueblo people and roving Navajo, when the only connection between them was that their ancestors were all here before we were."

By an indirect but effective method Anna Wilmarth Ickes develops this central theme in MESA LAND, published by Houghton Mifflin company in 1933. It is augmented by each of the twelve chapters, in which are described the events after the coming of the white men, remains of prehistoric cultures, the artistry of the present day crafts, and the symbolic world of the Indian's religious life. Regarding the latter, the author tersely remarks that no Indian is so ignorant of his own religion as to worship the symbol itself. "A snake priest once told me that when the next white tourist asked him if he worshipped snakes he was going to tell him he did, because tourists seem so disappointed and incredulous when he said he didn't."

Indian Viewpoint Presented

The centuries of white rule, beginning in 1540 with the search for gold, are related in such a way that we grow acutely and uncomfortably aware of the cruel and futile methods of superimposing upon these ancient tribes a civilization to which they can never be made adaptable. Rather, the feeling that we need to understand them becomes a vital one. As Mrs. Ickes describes the dance rituals, with no hint of sensationalism but always from the standpoint of the performer, it is then that we can most nearly feel the spirit which moves the Indian himself.

"Perhaps one fascination offered by the Indian is that today and yesterday he fitted so perfectly into his environment and was an integral part of the picture, belonging, not superimposed . . . The grotesque is no longer grotesque in a land where the distant rains march across the horizon in lines as straight as his black, waist-long hair, and rainbows are as near as the symbol painted on his chin."

In summary Mrs. Ickes makes one of her few direct comments, the last sentence suggesting what she believes to be the only solution: "What is left of this mysterious race? Their arts which we are just beginning to understand and appreciate

and their ceremonies which we have ignorantly tried to suppress. And we audaciously try to make white men out of this remnant of unknown parentage, to teach their women to bake in our kitchens, their men to enter into competition in our industrial system. They may disappear under uniformed compulsions. But become like us? Never! The racial strain is too deep to be eradicated and too distinct to be assimilated. Mutual tolerance might effect a compromise and allow a civilization within a civilization to exist."

LUCILE HARRIS.

THEY FOUND BOTH HEALTH AND CHARM IN THE DESERT

" . . . It was for three or four minutes in the morning that I loved the desert best. Fresh from sleep I would slip out of bed, put on my bathrobe and slippers, and very softly open the kitchen door. There lay the desert, grave and still, wide as the universe, holy. Yes, that is the word for it: holy. Impelled by a sudden reverent fear of intrusion, I would lift an armful of wood from the pile near the door and withdraw. But I never forgot, nor shall I ever forget."

Zephine Humphrey, who wrote the above lines, came from her Vermont home to live on the Arizona desert while her husband recovered from his sciatica. The ailment was cured in four months, but that was long enough for Mrs. Humphrey to gather the material for a delightful travel narrative about the Southwest and its people. The book, CACTUS FOREST, was published this year by E. P. Dutton & Co., New York.

It is just a simple story of the people she met along the way and the places visited. She brought with her a friendly interest in everything and everybody—and the desert, as it always does for visitors who are thoughtful and sincere, gave back a generous portion of friendship and entertainment in return.

While in the West the Humphreys visited the Pacific coast and saw the Grand Canyon and Carlsbad caverns. The caverns made a deep impression on the author, as may be judged by her concluding remark, "I should like to suggest an amendment to our national Constitution obliging the United States government, including the supreme court, to go through the Carlsbad caverns together at least once a year."

R. H.

Writers of the Desert . .

UNTIL ARTHUR WOODWARD began writing historical sketches for the Desert Magazine such Indian chieftains as Irateba and Capitan Palma were regarded by most desert dwellers of today as more or less legendary figures whose place in history was very hazy at best.

Thanks to the research work of Woodward these old leaders of the Colorado river Indians have now been given a very definite place in the history of the desert—at least as far as readers of the Desert Magazine are concerned.

Woodward knows his history—otherwise he could not hold the title Curator of History at the Los Angeles Museum in Exposition park. But if any of the readers of his stories about the old-time



Arthur Woodward was asked for a picture—and this is the one he sent. No, he is not a tenderfoot on the desert. Presumably this picture was taken in Los Angeles and the overcoat is worn to advertise the summer climate there. Those Angelenos are that way

characters of the southwest desert have pictured him as a dignified "professor" who spends his days and nights delving into dusty archives of old libraries, they have misjudged him.

Woodward actually is a brisk young man who might easily be taken for a newspaper reporter on a metropolitan daily. In fact, he served a hitch as reporter on the New York Evening Journal in the days before he acquired his present job.

He is more than historian. At the University of California he majored in anthropology, and since then has con-

ducted archeological field expeditions in California, Arizona, Utah and Mexico.

Before he settled down to a definite place in the general field of scientific research, Woodward held many jobs. He was born in Iowa, which he refers to as "the place where all good Californians originated." He came to California with his parents at the age of nine and had just finished his preparatory schooling and returned to his native state to work at a railroad job while he studied art when a recruiting officer came along and signed him up for an enlistment in the world war.

"They looked at my teeth and said 'O. K.'" Woodward recalls. "Later I discovered that soldiers haven't had to use their molars to bite the ends off of paper cartridges since the civil war, but the regulations on teeth are just as strict as they were in those days."

"After the war," he goes on, "I returned home and did what every ex-soldier did — loafed awhile and found the war was over, and then tried to get work. I drove cattle, ranched a bit, but it never took. Went to San Francisco and worked for the U. S. Lighthouse Service, and then entered Berkeley where I studied history, anthropology and other odds and ends."

After finishing his schooling he went east to New York and did newspaper reporting. Later he returned to the coast and became identified with the museum and has been in that general field of work since then. He is 40 years old, is married and has a daughter 13.

Woodward holds the view that history can be made colorful and entertaining without sacrifice of accuracy—and that is the way he writes.

. . . .

The editors of Desert Magazine regard good pictures as no less important than well written text matter. Good contrast and clean, fine-grained prints are necessary for satisfactory halftone reproduction. Pictures should be on glossy paper, 5x7 or larger. Smaller prints may be submitted for selection, however. In judging pictures the main factors to be considered are: Sharpness, that is, perfect focus; contrast between subject and background, lighting and composition. The policy of the magazine is to use at least one human interest picture with each feature, and as many other views as space will permit.

Indian Tribes OF THE SOUTHWEST

BY MRS. "WHITE MOUNTAIN" SMITH

An informal story of the lives, customs, arts, and handicrafts of the Indians of Arizona and New Mexico, by the author of *I Married a Ranger* (\$1.00) and *Hopi Girl* (\$2.50)

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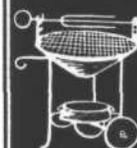
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DESERT PLACE NAMES

. . . Compiled by TRACY M. SCOTT . . .

For the historical data contained in this department, the Desert Magazine is indebted to the research work done by Miss Scott; to the late Will C. Barnes, author of "Arizona Place Names"; to Frances Rosser Brown of New Mexico and to Hugh O'Neil of Ogden, Utah.

ARIZONA

ADAIR Navajo county.
 About 2-1/2 miles west of Showlow on Fools Hollow. Mormon settlement established 1878. Called Fools Hollow because "Nobody but a fool would try to make a living there." After Wesley Adair, member of Company C, Mormon Battalion. He lived there for a time, then moved to Showlow. His son, Aaron, lived on the place for some years after that. (Will C. Barnes)

FORT BARRETT Maricopa county.
 Small fortification at White's Mill, Pima Village, on Gila River. Erected by California troops in April 1862. Named by General Carlton for Lieut. James Barrett, Company A, California volunteers, killed in fight with Confederate troops at Picacho. McClintock says: "At the Pima villages was a small post named Fort Barrett, after the first Union officer killed in the Arizona campaign. It was in reality only an earthwork thrown around a trading post."

CHEMEHUEVI VALLEY Mohave county.
 East side Colorado river below A. T. & S. F. R. R. "After the Indians, who according to Garces inhabited the valley in 1775," Hodge. Ives says, "Whipple named this valley after the Indians in 1853. It lies at the mouth of the Bill Williams fork, extending to the Needles."

FLORENCE Pinal county.
 Elevation 1493 feet. County seat. Levi Ruggles settled here as Indian agent in 1866. Elliott says Charles G. Mason built the first house. Town named by Governor Safford in honor of his sister. Poston writes: "Fair Florence wreathed in Gila green
 A city yet to be, I ween.
 For here, e'en more than at Tucson
 It's always, always afternoon."

CALIFORNIA

WARNERS San Diego county.
 Hot springs and rancho. Named after Jonathan Warner, who came to California in 1831. In 1840 he received a Spanish land grant of 40,000 acres. The original adobe is still standing. On the Emigrant Trail, it was a very popular resting place; later a station of the old Butterfield stage route established in 1858. In 1903 the Indians were evicted to make a popular resort of the springs which had been used by the Indians as medicinal waters many centuries before the coming of the white man.

HORSETHIEF CANYON San Bernardino county
 Near Cajon canyon. So called from the activities of Indian and Mexican horse thieves who from about 1830 and 1860 rounded up their loot here for grazing before crossing into the Mojave desert.

MOBLEY MEADOWS Imperial county
 Not a meadow, but a person. He was an Imperial county pioneer and first sheriff in 1907. He hung this sign: "County Jail. Keep out!"

BRIER Inyo county.
 Rev. J. W. Brier, wife and three children crossed Death Valley in 1849; arrived in Los Angeles the following year after extreme hardships and the Reverend held his first California services at the home of Col. J. G. Nichols. William Manly is credited with saying Mrs. Brier's fortitude saved the lives of the party crossing the desert. She later moved to Lodi and reached the age of ninety-two.

NEW MEXICO

RUIDOSO Lincoln county.
 Sp. "noisy." Built along Ruidoso river which rushes and tumbles noisily down the White mountain range. Winter pop. 300; summer 3000. County and national forest in which Ruidoso is located were named in honor of Abraham Lincoln.

ALAMOGORDO (ahl a mo gor'do) Otero county.
 Literally "large or thick poplar tree."

ARROYO PERICO (Ah ro yo pay ree'ko) Union county.
 Sp. "Winding or curly riverbed."

CAPILLO PEAK (cah pee yo) Valencia county.
 Sp., a child's cap; a small round cap, referring to shape of the mountain.

NEVADA

STOREY County.
 Formed November 25, 1861. Named for Fort Storey in Virginia City, built in 1860 at the outbreak of the Indian wars. Capt. Edward Faris Storey was killed by the Pahutes in 1860.

SEDAYE MOUNTAINS (sed'eye or sed'dey) Churchill county.
 Near Carson sink. Pahute word meaning "bad; no good; evil."

MOUNT ROSE Washoe county.
 Location of U. S. observatory. Named by Miss Rose Hickman of Washoe city.

UTAH

BOUNTIFUL (South, East and West) Davis county.
 Bountiful was a city in the Book of Mormon. West Bountiful was sometimes called Wood's Crossing.

GUNNISON San Pete county.
 Bluff and town. Town founded in 1860 by Jacob Hutchinson and named for Lieut. John W. Gunnison, U. S. topographer, killed with seven others by Indians October 26, 1853, while camped near the site of this town. The bluff is a prominent landmark near by.

MAUGHAN'S FORT Cache county.
 Settled by Peter Maughan on September 1, 1856, on site of present Wellsville. Maughan helped to organize Cache county, April 4, 1857. He died in May 1871.

Mines and Mining . .

Mojave, California . . .

Mrs. Josie Bishop has suffered severe nervous strain in many trying months since announcement of the discovery of radium on her claim near Red Rock Canyon, says the editor of the Mojave News, commenting on a letter he received from Mrs. Bishop. She wrote to the News: "The other papers sure balled things up, got me in trouble with my attorney, you were ok. I have not been well. As soon as the hot weather gets better the British Syndicate will bring their engineers here."

Quartzsite, Arizona . . .

Properties in the Plomosa placer district 10 miles southeast of here have been leased by the Universal Placer Mining corporation with an option to purchase at \$750,000. Terms of the lease, filed at Yuma with County recorder Vernon C. Wright, call for working a minimum of 5,000 cubic yards of placer gravel per month, with minimum operation of 30,000 cubic yards. The corporation, recently active near Wickenburg, runs dry washers, has its own diesel equipment, excavators and electric power plants.

Winnemucca, Nevada . . .

Floods of the past year have uncovered gold never before brought to light, prospectors believe as they wait for Sierra Nevada streams to subside to a level permitting them to reach gold bearing sand and gravel. Hal Draper, Nevada City assayer and metallurgist, predicts a record take for modern years. Especially optimistic are miners along the north fork of the Yuba, near Downieville.

Salt Lake City, Utah . . .

Famous open cut of Bingham, Utah, copper mine and mills at Garfield, resuming operations in August, after shutdown since June 16, gave employment to more than 5,000 men. Reopening of the world's largest open cut copper mine means also assured continued operation of the Garfield smelter of the American Smelting and Refining company. Shut down was caused by stagnant market and accumulating stocks of unsold metal.

Phoenix, Arizona . . .

Arizona's state tax commission, fixing valuations on 25 producing mines, lopped \$661,923 from the assessment rolls. Value of the properties was fixed at \$86,668,999. Increases were marked up on four major producers: Copper Queen and New Cornelia branches of Phelps-Dodge; Inspiration and Magma Copper Company. Twelve companies were marked up, nine were given cuts, two were taken from the tax list. New Cornelia at Ajo was stepped up to \$18,436,295, topping the book, with Copper Queen second at \$18,387,297.

Safford, Arizona . . .

Equipment with daily capacity of 3,000 cubic yards rough dirt is being installed for placer operations on the Gila river 10 miles northeast of here near the mouth of Bonita creek. Gila gravel at that point is estimated to run 60 cents and more per yard. The property was purchased by Schwimmer Mining company, headed by Fred E. Schwimmer of Detroit, Michigan.

Nogales, Arizona . . .

Alleged unfair restriction of the gold regulations act on miners of this area are under investigation by the U. S. treasury department. Hugo Miller, chairman of the Nogales council, Arizona Small Mine Operators, told government attorneys the gold act is so full of pitfalls for buyers that those who once bought gold along the border will no longer take a chance on federal prosecution for some infraction of the law. Result is according to Miller, Mexican bankers get \$35. American gold for \$16. an ounce.

Las Vegas, Nevada . . .

Old St. Thomas salt mine, believed to have been operated through 14 centuries at the base of Salt mountain, is cut off from the outside world by rising waters of Lake Mead. Scientists say the mine was worked by pueblo Indians as early as the beginning of the Fifth century. In more recent history the property was operated by the Bonelli family, who organized the Virgin River Salt company. Archeologists found there ancient digging tools, fashioned out of rocks tied together with thongs, used by Indians of early days.

Washington, D. C. . . .

California led in U. S. production of gold for 1937, with 1,169,491 ounces valued at \$40,932,200, according to figures released by the mint. National gold output for the year was 4,804,540 ounces, valued at \$168,158,900. This beats the 1915 record for value, because the price of gold was raised from \$20.67 per ounce in 1934 to \$35, but falls 83,000 ounces below the 1915 production. Idaho led silver producing states in 1937 with 19,556,118 ounces. Arizona turned in 344,060 ounces of gold during the year, valued at \$12,042,100; Nevada 204,903 ounces, \$9,538,600; New Mexico 43,354 ounces, \$1,517,400; Utah 311,843 ounces, \$10,918,000.

Salt Lake City, Utah . . .

Utah miners won increased wages in a two-year sliding scale contract signed with the union by every major operator in the state except the Utah copper company, according to E. M. Royle, union secretary. Minimums under the new contract are \$4. for smelter workers, \$4.25 for muckers and \$4.50 for miners. Former scale was \$3.50, \$3.75 and \$4.25. Nearly 5,000 workers are affected. Rates are based on 9-cent copper and proportionate lead price, with increases in wages as prices rise above a designated level.

Hobbs, New Mexico . . .

Continued activity in southeastern New Mexico's oil fields is reflected by the state oil conservation service commission's report that in one July week there were 13 locations and 10 completions. Ten locations were in Lea county, three in Eddy.

Virginia City, Nevada . . .

In its eightieth year the Comstock Lode continues to produce silver and gold, with a dozen companies and scores of leasers mining commercial ore, ten mills and cyanide plants in service, and monthly output estimated at \$150,000.



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Just Between You and Me

By Randall Henderson

ACROSS the malapai mesas bordering the Colorado river in many places one still may find well-defined trails which were the main highways of commerce and migration for the river Indians in the days before the white man came to the desert. Potsherd and chips of obsidian are picked up along these routes today.

Whenever I find one of these old trails there comes to my mind the picture of a grey-robed padre trudging along the footpath alone, or perhaps with an Indian companion. His was a life of unbearable hardship according to present day standards—or even the standards among civilized people of his own period.

On his long treks across the desert he was dependent for food on the goodwill of the tribesmen. Sometimes the supply was scant, generally it was dirty and unpalatable. Through the extreme heat of summer and the chilled air of winter nights he traveled trails that frequently were ankle deep in dust and sand. He slept where night found him, often with only clothes he wore for cover. His journeys led him to remote regions where the natives had never seen a white man. He preached a doctrine that could only be regarded as heresy by the medicine men of the Indian villages. He carried a spiritual message to pagans who did not even have a written language.

But physical discomfort and danger meant nothing to Father Francisco Garces. In his eyes burned the fire of a divine faith—he must save these unredeemed souls from the fire of hell. That was all that mattered.

His was the faith that builds empires and reclaims deserts. Perhaps there are those who feel that the salvation of those unkempt river Indians was not worth the sacrifice. But to Father Garces a human soul was a human soul, whether it belonged to one who was clothed in purple robes, or wore only a G-string.

I have a very high regard for the men and women who pioneered the desert—soldiers, trappers, miners, cowmen, engineers, farmers, builders and teachers—there were many fine characters among them. But in that temple of personal heroes which each of us has set up in his own inner consciousness, I place the good padre Garces above any of the others. He brought to the desert the finest gifts a human being can bestow on his fellow-man—faith, courage and love—and gave his life as a final sacrifice.

* * *

I haven't any desire to become involved in Arizona politics, but there are candidates running for office in the Cactus state this year for whom I wish all the bad luck in the world. I do not know their names—but I learned about them the other day when I picked up a Phoenix newspaper and saw a picture of a giant Saguaro with a half dozen candidates' placards nailed on the sides of it. I haven't lived in Arizona for several

years, but I still feel that I have a little equity in those magnificent Saguaros. And I want to register a protest against having them plastered up with campaign literature.

* * *

In New Mexico and Texas the old controversy regarding the death of Billy the Kid has been revived. According to historical record the Kid's bloody career came to an end when he was killed by Sheriff Pat Garrett at old Fort Sumner. A writer in the El Paso Times recently quoted the story of a man who said he met Billy the Kid many years later in Guadalajara, Mexico, and had a few drinks with him.

Not that it makes a lot of difference, but as far as I am concerned if Pat Garrett and the other old-timers who put the corpse in a box and buried it in the ground said it was the Kid, I believe them. Those frontiersmen of the early west may have had their faults—but they generally could shoot straight and talk straight—and did.

* * *

While the folks who live on the desert are having their vacations in the mountains or on the coast, the desert itself is also enjoying a summer recess. There are few visitors in the remote canyons and on the unpaved trails these days. Even the prospector with the dilapidated old car he bought to replace his burro has drifted to the higher altitudes.

In the meantime the winds are sweeping the arroyos clean of any debris that may have been left by last season's picnickers, and even the tracks of the invaders are being obliterated. In many of the mountainous areas midsummer rains already have scrubbed out new channels in the canyons, and before the middle of September there will have been cloud-bursts in many places to rearrange the landscape and perhaps uncover new rarities for the gem-hunter and collector of desert relics.

When cool weather comes in the fall the out-of-the-way places in the arid region will be waiting undisturbed for visiting explorers to come and experience all the thrills of a first discovery.

Do not curse the heat. This is old Mother Desert's house-cleaning time—while the guests are away.

* * *

Soon after this number of the Desert Magazine comes off the press I expect to be on my way to New Mexico to witness the Inter-Tribal Indian Ceremonial at Gallup. And if the high priest who sets the date for the annual Snake Dance in the Hopi villages receives the mental telegram I am trying to send him I will be able to include this show in my trip. Whether or not I see all the Indian dances, I hope the gods of sun and rain and fertility will hear the prayers of their Indian supplicants and send a bountiful harvest during the year to come.



Photo by G. E. Barrett

You find beauty in the most unexpected places—

On the crown of the formidable **Opuntia** grow blossoms of such rare and exquisite beauty that mere words fail to describe them . . . yet they rest among long barbed thorns in isolated desert wastes.

To seek out the beauty of the desert, to portray the colorful personalities and describe the constructive development of the desert—these are the aims of the Desert Magazine.

If you love the desert's beauty spots, like the way the Desert Magazine presents their charms, and want others to enjoy them, show your copy of the magazine to a friend and urge him or her to subscribe. Your encouragement will make a bigger and better magazine—and **our** family of common interests will grow.

THE *Desert*
MAGAZINE



Mr. Denham has been a successful rancher and contractor in Imperial Valley for many years — and he gives "Caterpillar" much credit for his success.

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