

THE

Desert

M A G A Z I N E



JUNE, 1940

25 CENTS

LETTERS

Vista, California

Dear Mr. Henderson:

Your Desert Magazine is "TOPS." My file is complete including the November, 1937 issue. I place your magazine at the top of my magazine list. It fills a long-felt want to thousands of us who thrill at the sight and feel of

the DESERT. In "Desert" we "See the Desert First" and we need not open the covers for our first glimpse.

I bought two copies of your January 1940 issue so that I might frame the burro picture for my den and still keep my file intact. Mr. Henderson, that cover really talks.

Continue your "Letters" and "Just Between You and Me" departments and in between, your judgment is O. K. with me. Short fact stories and no continued articles as we just simply couldn't wait for the next issue. Many of us would like to see an occasional article on desert ornithology as the habitat of many of our most picturesque birds is the desert country.

Respectfully,

F. A. McDONALD.

Phoenix, Arizona

Dear Mr. Henderson:

We would like to claim the cover picture, which you credited to us, in the May issue, but honesty forbids. Someone else is the lucky photographer and he must be a good one. We think it's a swell job.

We enjoy Marshal South's article on roasting mesal hearts. Hope you will run more articles about things to eat off the desert—such as jams made from saguaro fruits, etc. I am saving them.

CLAIRE AND RALPH PROCTOR.

So—that puts us in a pickle. If you didn't take that yucca picture we used for a May cover, who did? We do not seem to have the name of the photographer in our files. Will the rightful owner please "confess." It was an exceptionally fine photograph and we would like to give due credit.

—R. H.

Alhambra, California

Desert Magazine:

Please send me your February '39 issue with the map of the opal field. The first issue of your magazine I read was April. Since then I have secured the May issue and don't believe I will miss any from now on. It is swell!

Am very much of an amateur at gem collecting, but made the trip as suggested in your April issue (Barstow field) last Sunday. Even after a month, imagine our surprise to find not only scads of rocks still there, but also six other cars. I am much tempted to become one of your "rockhounds."

I wish to thank you for a very pleasant outing. Working indoors as I do I need these trips. After May first I plan to divide my time between "rockhounding" and fishing.

J. G. POTE.

Belton, Texas

Dear Mr. Henderson:

In one of your recent issues I read where some one wants to do away with the ghost towns. I say shame on them for entertaining such a thought. Those old towns should be preserved as a reminder of the courage and sacrifice of our early pioneers. Those people who came to the desert when it was a wilderness have made it possible for Americans today to live in this western country unmolested.

I visited my daughter in 1938 and had an opportunity to visit the old stage station near Yuma. It is sad to see it crumbling away. How I wish it could tell me some of the joys and sorrows of the people who came that way long ago. Those people were brave. The ghost towns should be preserved as a tribute to their hardihood.

MRS. WALTER HALL.

Los Angeles, California

Dear Sir:

In a few issues back of The Desert Magazine, I was amused by your diplomatic answer to someone's inquiry as to the location of Marshal South's desert hacienda.

Having homesteaded on the Mojave desert more than 20 years ago, ranching and cruising around the arid country off and on ever since, I think I can understand why Mr. South does not relish having strange visitors, lusty admirers of his literary ability and ardent worshipers of the wide open spaces though they may be.

Not that desert folk as a rule, particularly intelligent ones, are unsociable, but so often we find that city dwellers are very thoughtless when visiting on the desert. Many times I have had them drop in and eat me out of grub without ever thinking what a serious inconvenience it put me to, or the financial problem it caused.

LEE STROBEL.

Can Air Conditioning Increase Your Profits?

Frigidaire's Sensational Profit Analyzer will give you the answer in 15 minutes. Get the vital facts today!

FRIGIDAIRE Unit Air Conditioner

Makes Money for Businessmen Everywhere

- Attracts customers and increases business by providing cool, clean, comfortable surroundings.
- Requires minimum of floor space.
- Quickly and easily installed.
- Fits into present interiors.
- Completely movable.
- Extremely economical to operate.
- Unusually large cooling capacity.
- Entirely self-contained.
- Provides all functions of air conditioning—cools, dehumidifies, filters, circulates air—easily equipped for heating and ventilating.
- Built by General Motors, world's leading manufacturer of mechanical cooling equipment.



Get a profit analysis of your business today

Call in the Expert—Call in FRIGIDAIRE

Edgar Bros. Company

Imperial Valley's Oldest Established Business Firm

DESERT Calendar

- JUNE 1 Flower show of Victor Valley Woman's club, Victorville, Calif.
- 3-9 National Association of Motor Vehicle commissioners meets in Albuquerque, New Mexico.
- 3-6 University of Arizona's first Country Life conference, Tucson. Miss Delphine Dawson, director.
- 4-7 Pioneer Days celebration, Clovis, New Mexico.
- 4-7 Intermountain Junior Fat Stock show, Salt Lake City, Utah.
- 7-9 Annual conference of Young Men's and Young Women's Mutual Improvement associations, units of Latter Day Saints church, Salt Lake City, Utah.
- 8 Corn Dance at Taos Pueblo, New Mexico.
- 8-10 State convention of 20-30 clubs at Winslow, Arizona.
- 9 Close of two week showing at Flagstaff Museum of Northern Arizona of Southwestern Types, sketches by Eben F. Comins of Washington, D. C.
- 9-11 District Forty convention, International Lions Clubs of New Mexico, at Santa Fe. J. E. Tipton, chairman.
- 12-26 Exhibits of Arizona Landscapes in oil by Robert Atwood of Phoenix, at Museum of Northern Arizona, Flagstaff.
- 14-16 Nevada Peace Officers' Association in 5th annual meet at Ely. John Duarte of Winnemucca, state president.
- 15 Covered wagon caravan and race ending in Ruidoso, New Mexico.
- 15-16 Lulac (League of United Latin American Citizens) national convention, Santa Fe, New Mexico. Herman G. Baca, chairman. Gov. John E. Miles, Senator Dennis Chavez, Manuel Lujan, principal speakers.
- 15-16 Free Cactus show, Manchester Playground, 8800 South Hoover Street, Los Angeles, California.
- 18-19 Meeting of Navajo Progressive League in Winslow, Arizona.
- 20-22 American Legion state convention in Santa Fe, New Mexico. Ray C. Andrew, chairman.
- 21-23 First Arizona convention of Scouts, Flagstaff.
- 22 A day in Old Lincoln celebration at Lincoln, New Mexico, to be climaxed with presentation of "Sure Fire," play based on life of Billy the Kid. Staged in Lincoln county courthouse and jail where many of the Kid's escapades took place, and principal role enacted by artist Peter Hurd of San Patricio.
- 24 St. John the Baptist's Day at San Juan Pueblo and Acoma Pueblo, New Mexico.

THE ENTRADA, dramatization by Thomas Wood Stevens of Coronado's Expedition in the Southwest in 1540, will be presented in the following New Mexico cities this month: Albuquerque June 1 (also May 29-31), Clovis, June 5-6, Raton 22-23, Santa Fe 28-30.



Volume 3

JUNE, 1940

Number 8

COVER	Night Blooming Cereus, photo by Ivan B. Mardis, Tucson, Arizona.
LETTERS	Comment from Desert Magazine readers Inside cover
CALENDAR	June events on the desert 1
PHOTOGRAPHY	Prize winning pictures in April 2
PERSONALITY	"Old Bill Ashurst's Kid" By MRS. WHITE MOUNTAIN SMITH 3
TREASURE	Lost Native Silver Mine By JOHN D. MITCHELL 6
GEMS	On the Trail of Gem Rock in Utah By JOHN W. HILTON 7
HOME-MAKING	They Live in an Ancient Ruin By MARY JANE NICHOLS 11
HISTORY	Forgotten Tragedy of Carriso Creek By EDWARD H. DAVIS 15
BOTANY	Bluebells of the Desert By MARY BEAL 18
DIARY	May at Yaquitepec By MARSHALL SOUTH 19
ARTIST	Painter With a Packsack By JOHN W. HILTON 21
DISCOVERY	We Found the Ancient Tower of Haskhek'izh By RICHARD VAN VALKENBURGH 22
PHOTOGRAPHY	Don't Face the Camera! By NATT NOYES DODGE 25
QUIZ	A Test of Your Desert Knowledge 28
HOBBY	CACTI — Edited by LUCILE HARRIS 30
MINING	Briefs from the desert region 32
HOBBY	Gems and Minerals—Edited by ARTHUR EATON 33
NEWS	Here and There on the Desert 36
LANDMARK	Indian Watch Tower — By A. R. HIPKOE 38
BOOKS	HOT IRONS, and other reviews 40
PLACE NAMES	Origin of names in the Southwest 42
CONTRIBUTORS	Writers of the Desert 43
COMMENT	Just Between You and Me — By the Editor 44
POETRY	GILA MONSTER, and other poems 45

The Desert Magazine is published monthly by the Desert Publishing Company, 636 State Street, El Centro, California. Entered as second class matter October 11, 1937, at the post office at El Centro, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1940 by the Desert Publishing Company. Permission to reproduce contents must be secured from the editor in writing.

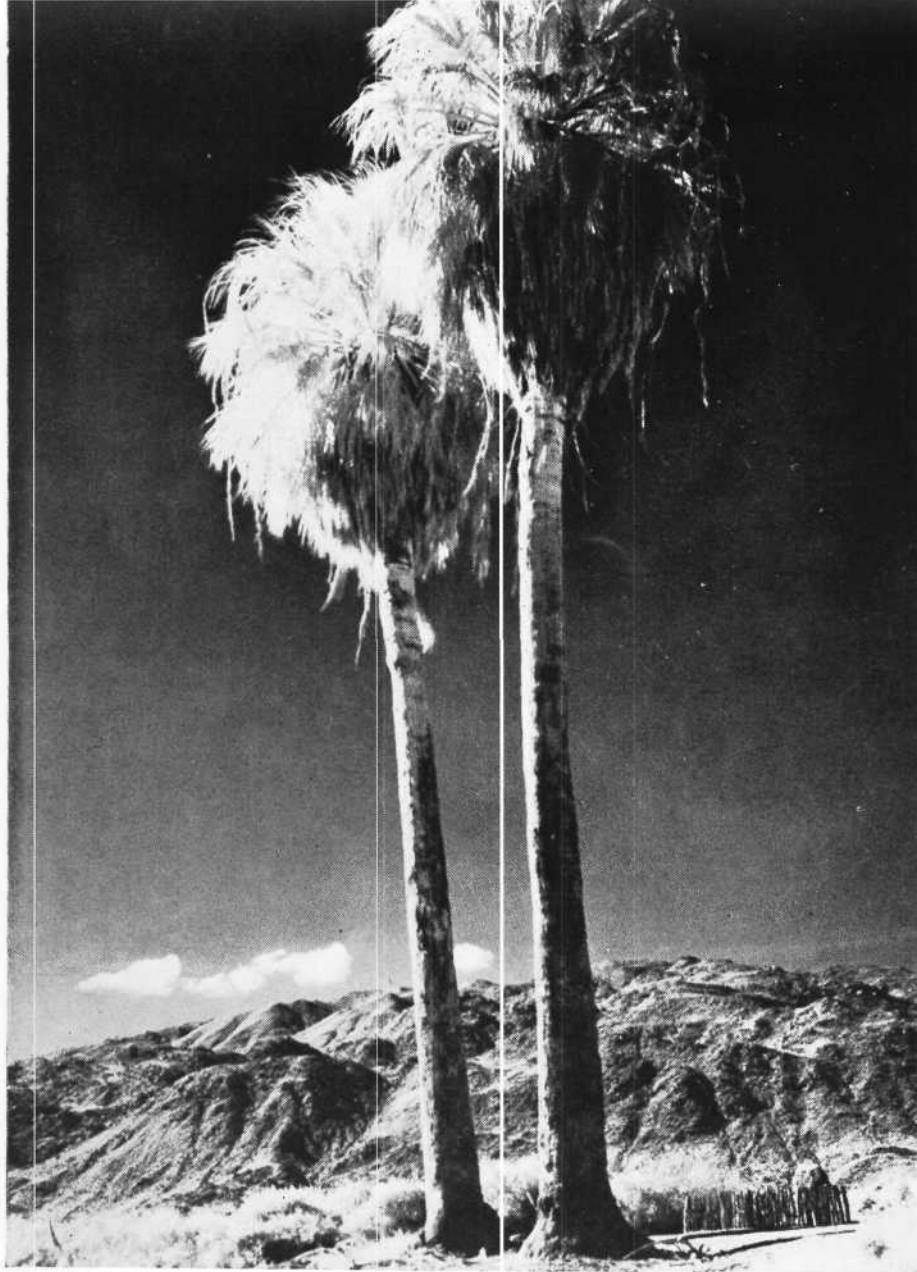
RANDALL HENDERSON, Editor.

TAZEWELL H. LAMB and LUCILE HARRIS, Associate Editors.

Eugene A. LaMont, Advertising representative
327 S. Towne Ave., Los Angeles, California. Phone MI 6441.

Manuscripts and photographs submitted must be accompanied by full return postage. The Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised for their safety. Subscribers should send notice of change of address to the circulation department by the fifth of the month preceding issue.

SUBSCRIPTION RATES: 1 year \$2.50 — 2 years \$4.00 — 3 years \$5.00
GIFT SUBSCRIPTIONS: 1 subscription \$2.50 — two \$4.00 — three \$5.00
Canadian subscribers 25c extra, foreign 50c extra
Address subscription letters to Desert Magazine, El Centro, California



Peace

By LESTER SELSON
Los Angeles, California

Awarded first prize in the monthly photographic contest conducted by the Desert Magazine. Taken with an Eastman kodak, 116.

Special Merit

The following photographs were judged to have unusual merit:

"Western Horned Owls" by George McClellan Bradt, Tucson, Arizona.

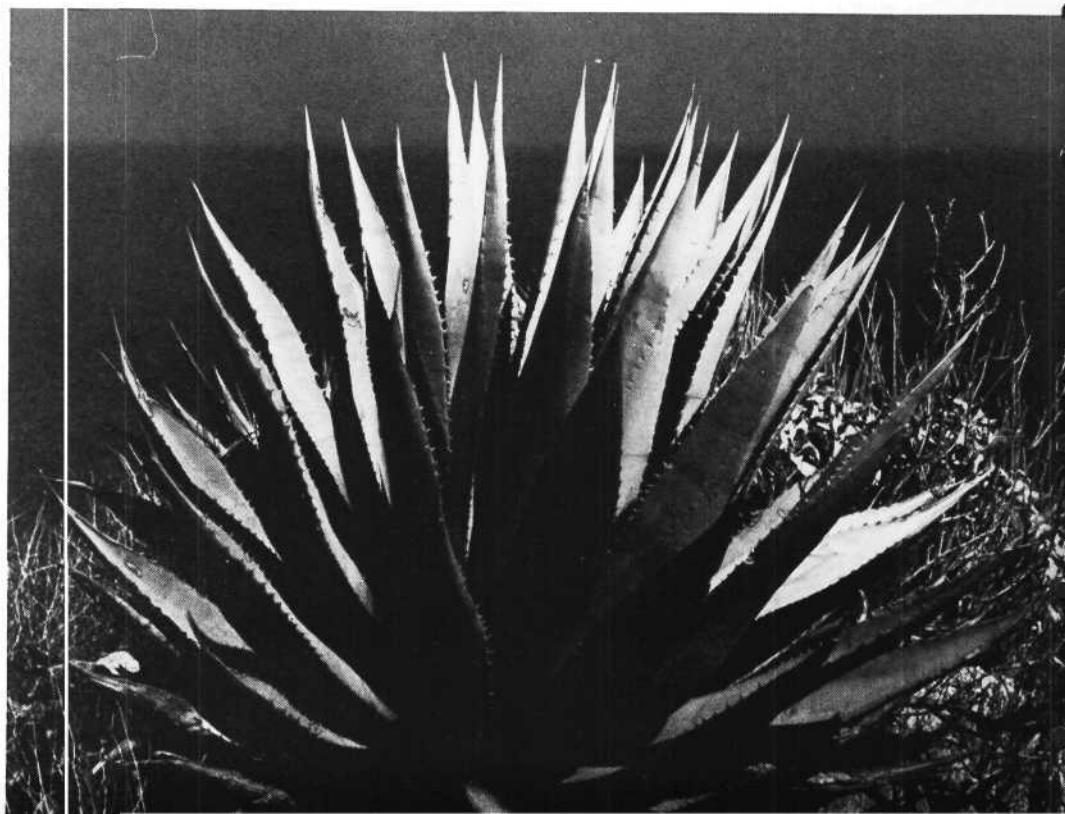
"Lone Palm" by Les Hamm, San Diego, California.

"Elephant Tree" by George Bergstrom, Los Angeles, Calif.

Radiance

By WALTER FORD
Los Angeles, California

Second prize winner in the April contest. Taken with a Contax camera, Panatomic X film, exposure 1/50 sec., 6:3, at 4 p. m. in March. Orange filter.



As a boy Henry Ashurst rode range in northern Arizona, and wore boots that were the envy of all the cowhands. But Henry didn't like punching cattle. He wanted to be where people could hear him talk. And so he left the ranch and started along the hard road that eventually led to the United States senate. His critics say he can talk more and say less than any public figure in the national capital — but they all agree he can talk, most eloquently. Here is a revealing story of Arizona's senior senator—told by a woman who has known him for many years.

"Old Bill Ashurst's Kid"

By MRS. WHITE MOUNTAIN SMITH

HERE was a sound of a cowbell among the pines, and up the trail came a flybitten old grey mare with a slab-sided colt making ineffective efforts to eat his supper on the move. Behind her struggled a remuda of six or eight horses in charge of a lone cowboy. He bunched his stock under a clump of trees, untied his bedroll and came awkwardly toward the campfire.

"Old Bill Ashurst's kid" somebody murmured, and that's one of the first records we have of Henry Fountain Ashurst, Senior Senator for Arizona. An old timer shifted his quid of tobacco and painstakingly tried to draw a word picture of young Ashurst for me the other day.

"He looked in those days like what I always pictured Abe Lincoln. He was about eighteen, not any older, stood something over six feet and was as thin as a range steer after a hard winter. His hands and feet were too big and his clothes too little. Even his scuffed chaps were half a foot too short. But when one's eyes traveled from the chaps up to the top of that thin frame there was something about his eyes that stopped any funny remarks which might have been forming." He stopped and thought awhile, and then went on.

"Anything else lacking in his outfit was made up for by his boots. Say, you should have seen those boots—fourteen dollars they cost, and they were worth every cent of it to Henry. They had three-inch underslung heels with a two-bit piece screwed into each heel, and no matter what position young Ashurst assumed those boots were always 'histed' where no eye could miss them!"

By those bootstraps, or similar ones, Henry Fountain Ashurst, son of pioneer parents, uneducated and sorely lacking in worldly goods, elevated himself to an honored position in the United States Senate, and has kept that post for 27 years. His is a unique distinction—he is the only United States senator with neither a predecessor nor a successor!

Born September 13, 1874, on a windswept Nevada range beside the wagon holding all the family possessions, this son of the desert is the senate leader in its fight to promote America and to keep free of foreign intrigues and entanglements.

I asked Mr. Ashurst recently what he considered his outstanding work. He said: "America and my efforts to make it possible for every citizen to have at least a fair chance to earn a livelihood."

It's difficult to give an adequate word sketch of this cowboy who, by determination and industry, advanced himself



Senator Ashurst.

COPYRIGHT PHOTO, HARRIS & EWING.

from an humble place in the cattle country to an honored seat under the dome of the capital at Washington. Time magazine in 1931 attempted it but with all that glib organ's ability to coin words and phrases, it left untouched and unsaid the real things that endear Henry Ashurst to his own people. According to Time: "His tall figure, his shiny black hair, his resounding rhetoric, his theatrical by-play with black corded glasses, have misled many an observer to mistake him for a Shakespearean actor. The peak of studied elegance of manner, if there is such a thing, is reached by Senator Ashurst!"

There is scarcely an important paper published in the United States that hasn't had a try at analyzing and explaining him. One smothers a smile at the plaintive wail of a reporter who followed and questioned and listened and learned, as he thought, all about this senator's attitude on a certain question. He went back to his paper all pepped up to write a whiz-bang article, and found he had nothing definite to say! "In order to appreciate how empty an Ashurst speech often is, his hearers must go away from the spell of his golden voice and the vigor of his magnetic personality and think about the substance of his statements. It is revealing to do as a reporter must do—go back to the office and set down in brief form exactly what he *has* said. Disillusionment is apt to follow. For such a process reveals that very little has been said in those eloquent talks of his. He can talk endlessly and delightfully and say nothing."

That's all very true. But do not make the mistake of think-

ing the senator cannot come quickly and speedily to the point when necessary. He has very definite aims and principles, and once committed there's no side-tracking him, as his opponents have found to their dismay.

As chairman of the judiciary committee, one of the most powerful bodies of the senate, he exerts unmeasured influence on the laws of the nation. When he rises to address the senate there is no slow dribble of bored listeners making their way to cloak rooms and hiding places. Rather the word goes out that he is speaking and his co-workers fill their places to listen.

Last March I was making my unhurried way to a gallery seat in the senate chamber just to look down on that august body and rest my tired feet. The crabby old doorkeeper reached out and literally jerked me through the door and thrust me into a seat. "Hurry up! Don't you know Senator Ashurst is speaking!" If one of those veteran custodians of law and order gets excited over any sort of a speaker, he has to be good! And he is—this "master of genteel sarcasm, of consummate courtesy in debate, and the exponent of humor which sparkles like a flawless white diamond." It is said by other senators that Ashurst was the only member of their body who could stop Huey Long in a debate.

In 1875 William Ashurst, father of Henry, located on a ranch a few miles out of a little camp town now known as



*Grave of Henry Ashurst's father
near Grand Canyon*

Flagstaff. Arizona was a territory and there were no schools in the northern area. No pioneer ever had a smooth path in conquering the wilderness, the prairie or the desert, and the Ashurst family was no exception. Both parents, though uneducated themselves, were determined their children should have every advantage possible. It was necessary to import tutors for the boys and to a great extent the impressionable Henry took on the characteristics of his teachers. The first of this trio was a cultured lad from Maryland with a hobby for dipping into early American history. Aaron Burr happened to be one of his particular enthusiasms and today Ashurst has collected enough notes and personal anecdotes about that brilliant but misguided man to fill several

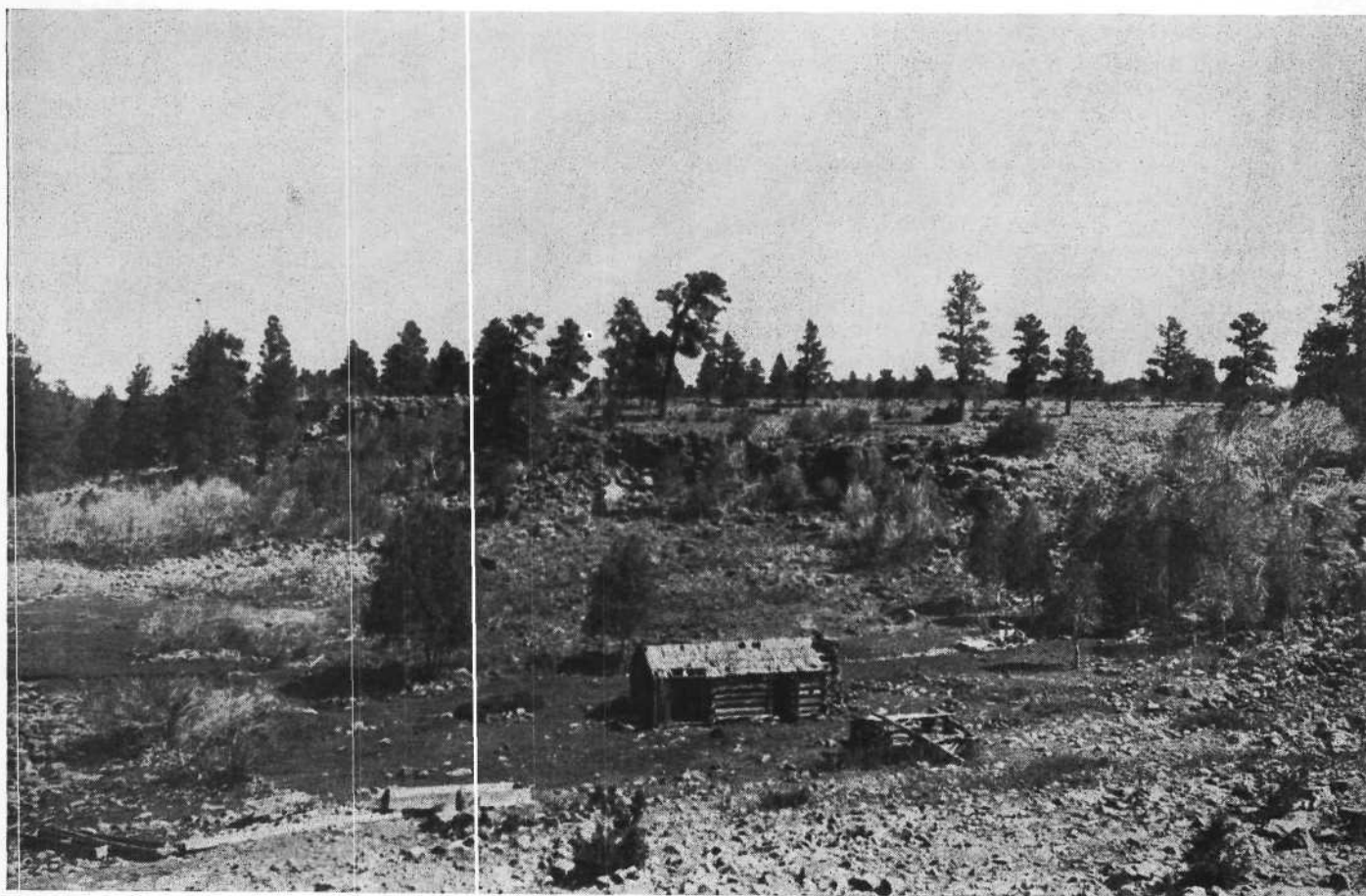
huge volumes. From this teacher, too, southerner though he was, he inherited a firm and loyal devotion to Abraham Lincoln whom he considers to be the greatest American of all time.

The next teacher was a warm hearted sentimental Irishman, full of the dreamy ideals and fanciful superstitions of his race. He sowed the seeds of poetry and music in the hearts of his young charges and seems to have been the first one to bring to young Henry's attention the value of words. After his reign ended came an Englishman to direct the groping young minds. They found his cockney accent quite fascinating and soon began to shed their own h's all over the ranch, whereupon he was dismissed and the family moved to Flagstaff where a school of sorts had been organized.

Today, Arizona's Teachers college with its impressive red sandstone buildings, stands as a monument to the efforts of Ashurst, and its auditorium has been named in his honor.

This frontier cowtown exactly suited Henry Ashurst. He disliked the ranch and all its appurtenances. But here he could hang around the court house and law office and hear plenty of words in heated arguments between learned men. Often he would go out alone into the pines and rocks at the base of San Francisco mountains and with a fine memory for what had been said, rehearse the oratory of the debaters.

Last year White Mountain, Senator



Old Ashurst ranch in the Mogollon mountains in Northern Arizona

Ashurst and I rode together along U. S. highway 66 which passes through his old cattle range and he pointed out a ruined cook house and different camp sites where he had spent unhappy boyhood days.

"Here is where we camped near the ruins of the old stage station. My father's cattle ranged all over this country and I was always sent out with the cowboys to check up on the herd. I think my long suffering father hoped some time I'd learn to keep both my thoughts and the dogies corralled instead of letting them run wild while I made impassioned speeches to unappreciative cows or addressed fiery appeals to inattentive junipers. From my earliest boyhood I wanted to be with people and I wanted to talk so they'd turn to me and listen. Words have always been living burning symbols to me, with which to construct a highway to the goal of my desires."

It may, or may not be a coincidence, but when young Henry was ten years old he laboriously printed these words on the first page on his blue backed speller: "HENRY FOUNTAIN ASHURST, UNITED STATES SENATOR." That old worn book is the prize volume in his library today.

The will power that has always been his main asset carried him swiftly toward his goal. When he was 18 he got the job of turnkey at the Flagstaff jail. That was no sinecure, for Arizona in those days harbored some of the toughest outlaws of the nation. They were stagecoach robbers, cattle thieves, gunmen of the first order, and yet this stripling was entrusted to keep such criminals safely locked away from further temptation.

In due time he was undersheriff and admitted to the bar and sent to Phoenix to represent Coconino county in the Territorial legislature. Coconino county then elected him district attorney, but when four years were up he refused to accept the office again. "I want to defend my fellowmen and not condemn them."

For five years Ashurst practiced law among his neighbors and friends. When statehood was granted to Arizona in 1912 he was unanimously elected by the state legislature to represent the Painted Desert state in Washington.

In January, 1886, Benjamin Harrison, then a senator from Indiana introduced a bill to have the Grand Canyon made a national park. The move was defeated. Then in 1919 Senator Ashurst took up the fight and made such a stirring plea that his bill passed both branches of Congress and the park was established. Near the rim, shaded by towering pines is a grave—the resting place of William Ashurst, father of Henry. Deep in the canyon was a mine where the older Ashurst used to spend days working. When he failed to come out on an appointed day



This picture of Henry Ashurst was taken about the time he began his public career.

a searching party found him dead at the base of a cliff. True to tradition he clung to life long enough after the fall to remove his boots, and place his hat under his head as though preparing for sleep. He was brought out on the back of a mule and buried at the head of the trail. When his grave was in the path of a needed road the son had his father's body removed to the park cemetery to lie there with Capt. John Hance and other old time lovers of the canyon. No towering marble shaft marks his grave, but instead a great granite boulder with a copper plate gives all the story that is necessary.

Happily married Senator Ashurst took little part in the social life of Washington. When an obscure and lingering illness struck Mrs. Ashurst it was no sacrifice for him to leave his office at close of day and shut the world outside his home while he sat beside her bedside. Months and years passed while he gave her untiring devotion and love. When the battle was lost he brought her home to slumber on a hill near Prescott.

Senator Ashurst neither smokes, nor dances and when he closes his office door he leaves the affairs of state inside. His evenings are spent in his library or

at the theatre. He is called upon often as a banquet speaker. Invariably, before the evening is ended, he has something to say about his beloved desert: "In my land is a real desert where the raw and pitiless sun comes down as a scorching flail; where the sand reflects the heat and distresses the eye of the traveler and where little dew or moisture is deposited, but where a wind hot as a furnace blast sometimes blows from the south. My forbears were in the advance guard that helped to turn that desert into a land of plenty."

Will C. Barnes rode the range with Henry when they were boys, and later in life won his own place in the realm of literature. I sat with Mr. Barnes at a banquet just before his death and we spoke of Senator Ashurst.

"Henry is doubtless one of the most brilliant statesmen since the hectic days of the revolution. He sways men to his way of thinking just as did Daniel Webster and Patrick Henry. But regardless of my keen admiration for him and appreciation of his high position he will always be 'Old Bill Ashurst's kid' to me and I'll see him following the chuck wagon, his eyes on the far horizon and his head in the clouds. Here is a letter I just had from him."

He brought forth a crumpled sheet of paper, penned in the unmistakable handwriting of Henry Ashurst:

"Dear Old Friend: Surely you had the soul of a poet when you divined how much the desert sage means to me, and took time in this feverish world to send a sprig of the same. It revived memories of that fascinating long ago when we drove the thundering herds over my beloved Arizona."

On an August day last year White Mountain and I drove the senator from the Petrified Forest to Prescott. As we slowed down now and then so he could point out scenes of his youth I saw that this was a real homecoming to him. In Flagstaff he asked us to stop for a few minutes and while we waited for him to complete his business I wandered into a hardware store. There was the senator boyishly gloating over half a dozen pocket knives he had just bought. He looked up rather sheepishly.

"There's a few old cowhands that look to me to keep them in pocket knives. I'll be seeing them around here and I want to be ready. A good knife is mighty important to a cowboy!"

As I said before, reams have been written in national magazines about Henry Fountain Ashurst. He has been damned and canonized, but the most revealing opinion of all came to me from an old cowboy who has known him for 50 years—

"Henry's all right!"



John Connors saw immediately that the old miner had a valuable specimen of silver.

Lost Native Silver Mine

According to legend there is a rich silver deposit awaiting the finder along Carrizo creek in southern Arizona. Like most of the lost mines of the Southwest, it was discovered originally by Indians. Here is the story—you can make your own appraisal of its truth.

By JOHN D. MITCHELL

Illustration by Gene Knight

IN 1848 when Major Heintzelman opened headquarters in Tubac in southern Arizona and started operations at the old Cerro Colorado silver mine located about 25 miles northwest of there, Opeta Indians living in the vicinity frequently appeared at the store with large nuggets of native silver. No one knew where the Indians found the rich ore, but the supply seemed to be unlimited.

When the Apache Indians started raiding the small ranches and mining camps in southern Arizona, the Opetas ceased making their prospecting trips to the south of the Tumacacori mission and Tubac and remained close to the post which was protected by soldiers. The mines were forced to close in the early sixties when the soldiers were withdrawn to fight in the Civil war.

For a long period none of the silver nuggets were seen. Then one day in the early 80s an old prospector walked into the saloon and gambling house of John Connors in Nogales and laid a large

piece of native silver on the bar. Connors had been a miner for a number of years and had done some prospecting on his own account and immediately recognized the silver specimen as being valuable. The old prospector, when questioned by Connors, stated that he purchased the nugget from an old Opeta Indian living up on the Santa Cruz river near the little town of Tubac.

The Indian said the nugget had been picked up by him while hunting deer along Carrizo creek south of the Tascosa mountains and that there was much more where that came from. This Indian farmer evidently did not think the nugget was valuable for it was purchased for a few dollars. Connors purchased the specimen and agreed to grubstake the old prospector for a trip into the Carrizo creek country to search for the source of the silver.

The Apache Indians were on the war-path again and Connors realizing the danger of sending an old man out alone on a long trip induced him to take a

younger man along. The two set out with their burros and camp outfit and were not heard from for several weeks. Then the younger man grew tired and returned alone to Nogales.

Weeks and months passed and then one day the old man appeared with his four burros loaded down with ore that was almost pure silver. The prospector told Connors that after the younger man left he prospected farther along Carrizo creek toward the Mexican line and found the ground sprinkled with the large nuggets which had evidently eroded from an outcropping of kaolin (called caliche by the Indians and Mexicans).

After having the silver assayed Connors divided the returns equally between the old man and himself and made the necessary arrangements to return to the location and work the rich find.

The old man, elated over his sudden good fortune, spent his money freely at the bars and gambling tables and on the

Continued on page 31

Last month John Hilton went into southwestern Utah on a scouting trip for the Desert Magazine to see what he could find that would interest the mineral collectors. He found some rough trails—but thanks to the help of a friendly guide, he also located a place where agatized wood is weathering out of the colorful sandstone of the Bryce canyon region. Here's a trip that may interest those who are now planning their summer vacations.

On the Trail of Gem Rock in Utah

By JOHN W. HILTON

WHEN Father Francisco Escalante reached the banks of the Paria river on his historic journey through southern Utah, he little dreamed that some day modern explorers of the clan known as rockhounds instead of seeking a short route from Santa Fe to Monterey, would follow part of his trail in quest of colored bits of petrified wood.

This was an unexplored region—as far as the white man was concerned—when Father Escalante arrived here in 1776. And it hasn't changed much from that day to this. It is still a virgin area where none but the hardest of travelers go.

There are semi-precious gem stones in this region—but the real thrill of a trip down the Paria is the rugged undisturbed wilderness—the silence and the majesty of one of the wildest and most colorful areas in the entire United States.

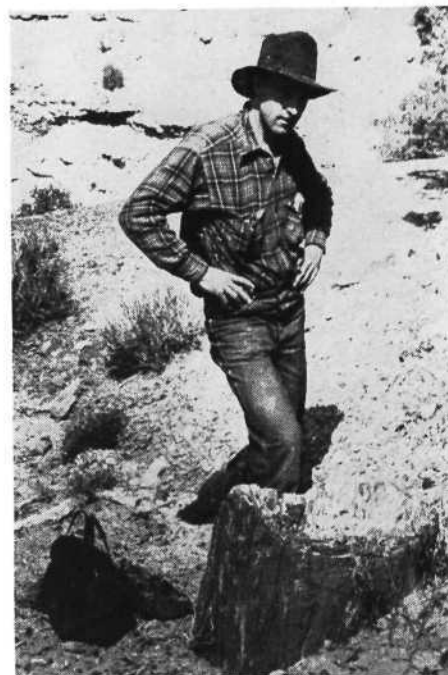
I went there on a scouting trip for the Desert Magazine—at the invitation of a man who knows this region perhaps better than any other. My guide was Her-

man Pollock of Ruby's Inn, and before going on with my story I want the readers to become better acquainted with this young man.

Herman is a cowboy by training—but he is much more than that. He has never been content just to hunt cattle in the rugged hills and silent canyons of this region. He is interested in the geology, the fossils, the minerals and the evidence of ancient Indian habitation. His work has given him an unusually fine opportunity to observe the interesting phenomena of this region, and he has made the most of it.

His fine knowledge of the area eventually created a demand for his services as a guide, especially for scientific expeditions in this area. His association with men of science and his unusual capacity to absorb and retain the information passed along by his employers on these trips have given him a fine education in geology and mineralogy.

He has made good use of this knowl-



Herman Pollock, who accompanied John Hilton on this field trip, and a stump of petrified wood found in the Bryce canyon region.

edge and frequently is called upon to give lectures to the visitors at Ruby's Inn. Incidentally, Herman and his guitar and cowboy songs provide pleasing campfire entertainment. He is virtually a one-man bureau of information regarding the Bryce canyon country.

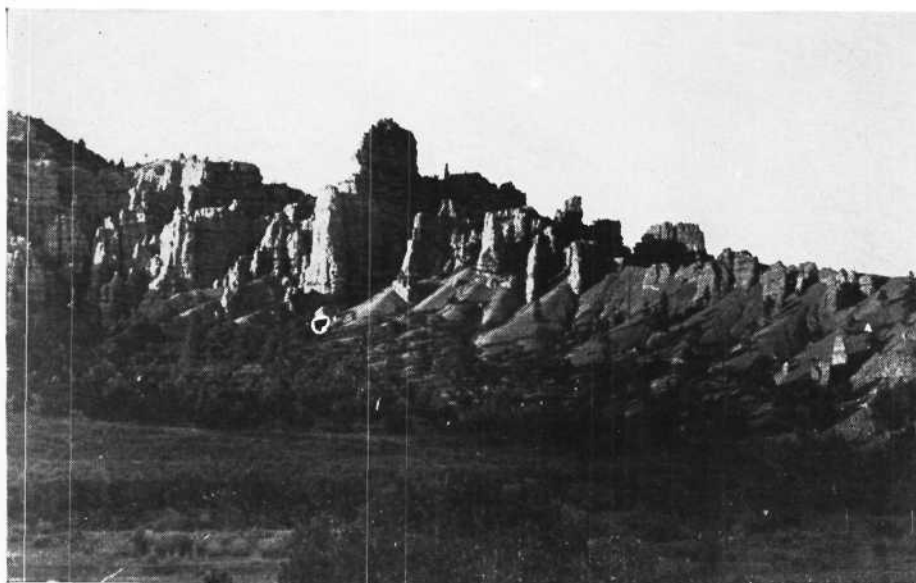
On this trip my father and I found Herman at Ruby's Inn—which, by the way, is the name of a post office as well as a popular caravansary. You'll find it on the Utah map.

We left the Inn early in a morning late in April—with our car amply provisioned with water, extra gasoline—and a shovel.

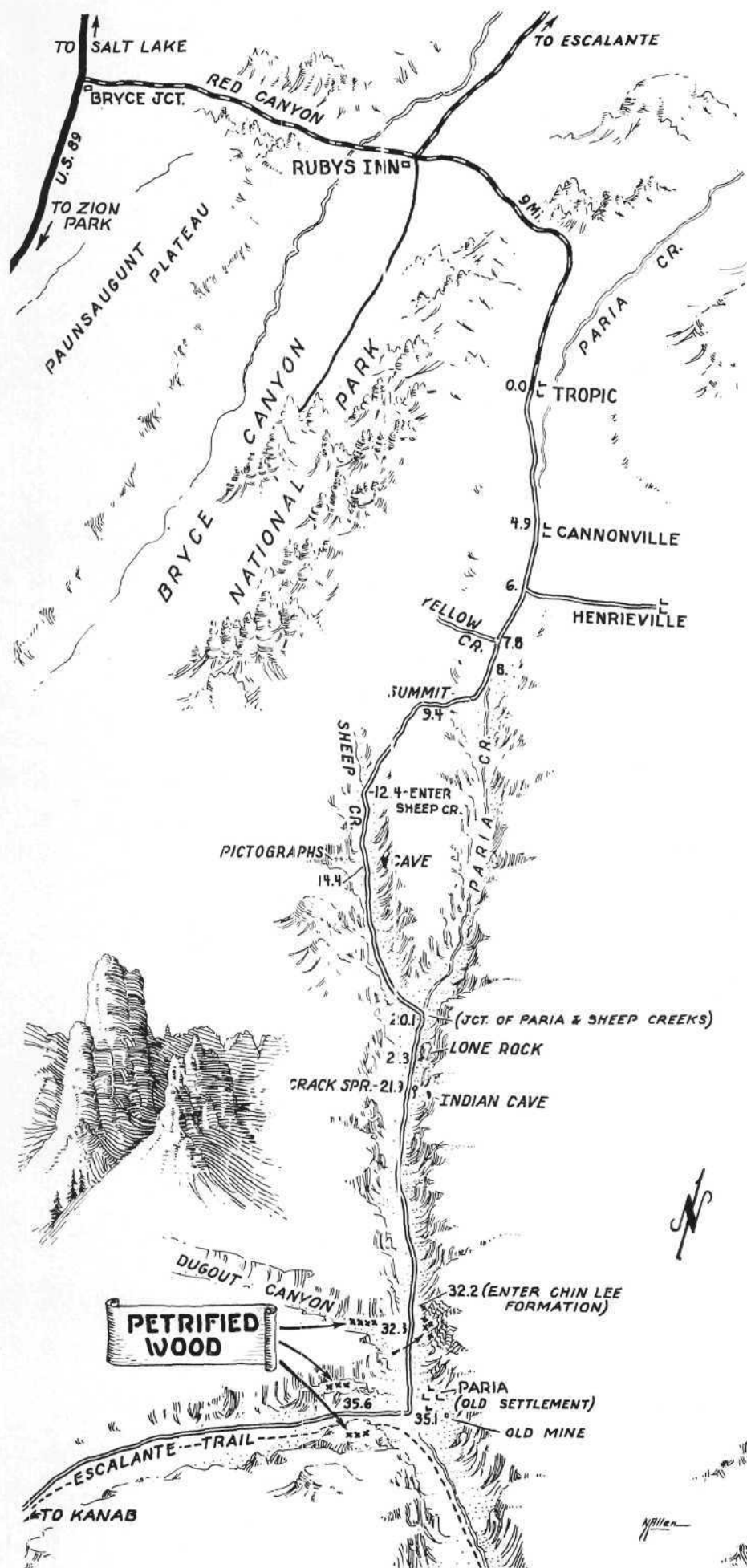
From the plateau where Ruby's Inn is located, we dropped down a rather steep grade and there got our first glimpse of the color and sculpturing which has made the Bryce canyon region famous. Pollock explained that this red material is a sedimentary known as Wasatch limestone, and is the last of the great bed of sedimentaries which form the high country of southern Utah and northern Arizona.

He said there are 15 distinct geologic eras represented in the layers of sedimentary material exposed between the summit of Bryce canyon and the floor of Grand Canyon. We soon learned that each of these strata has definite characteristics easily distinguishable. Some of them contain fossils and petrification whereas others are barren of such matter.

In a few miles we entered the old Mormon settlement of Cannonville. This and other small villages nestling at the foot of giant cliffs or in the yawning mouths of vermillion canyons throughout southern Utah, always impress me with



Spires and pinnacles of beautifully colored sandstone make this region a delight to the camper and vacationist.



a deep sense of appreciation for the faith and courage of these Mormon people. The simplicity and peace of these old settlements with their rows of friendly shade trees help one forget the troubled outside world where men kill their fellows and even in free America are engaged in a fierce economic war for the sustenance of life.

Leaving Cannonville we turned to the right on a road that eventually led us over a low summit and then down into the depths of Sheep canyon. Herman explained that we were in the same Navajo sandstone formation as constitutes the massive walls of Zion canyon. It is the largest and thickest body of limestone in North America.

As we continued down the canyon the walls closed in and deepened, becoming more majestic at every turn. Finally, we rounded a bend and there directly before us was a massive butte that somewhat resembles the Great White Throne of Zion park. This Navajo sandstone, which sometimes reaches a depth of 4000 feet, erodes into the most fantastic forms to be seen in the Southwest.

The early morning sunlight, coming in shafts through the breaks in the walls, lighted up clumps of newly-leaved cottonwoods on the floor of the canyon at some of the wider bends as we descended, producing effects that would delight the eye of an artist.

We stopped at one point and hiked up a side canyon to where the rocks were decorated with pictographs left by prehistoric Indians—probably of the basket-maker period. There were odd triangular figures of men and women in stiff poses, evidently intended to represent a ceremonial dance. The fine rich coloring of the paintings blended beautifully with the sandstone walls.

As the canyon deepened we saw less of the white Navajo sandstone. Finally the white disappeared and a different formation was seen at the bottom of the canyon. This is the Wingate sandstone, and it differs from the Navajo above in that it is stratified in layers as narrow as six inches. The Wingate stone is red, and soon we were in flaming red walls that offered a new thrill at every turn.

At one point we rounded a bend and came upon a huge monument of the red stone emerging from the bed of the creek. This is known locally as Lone rock. It is large at the top and tapers at the bottom. Gradually the stream is cutting it away at the base—and its years are numbered. Many caves were seen along the canyon walls, and at one point a very fine natural bridge was visible above us on the left.

Herman pointed out the remains of ancient cliff dwellings at several points. Not much remains of the ancient walls, laid up with rock and red mud, but occasionally a visitor finds broken pottery

and dried corncobs. Archaeologists already have explored this region.

We came to Crack spring, where a flow of good water appears out of the canyon wall. It is a waterhole well known to prospectors and cattlemen and trappers.

As we continued down the canyon a new formation appeared. We remarked about the lovely coloring of this material and Herman explained that it is the Chin Lee clays, and it is from these clay beds in certain areas that the finest petrified wood is weathering out.

As this formation became more exposed it occurred in bright colored bands of striking beauty. It made me think of the serapes worn by the Indians in Mexico. The colors fade into one another in a most artistic manner.

Eventually we came to where a tributary called Dugout canyon flows into the Paria. Herman said that cloudbursts in this tributary frequently bring down pieces of petrified wood, and so I swung the car toward the mouth of the canyon. Herman made some mild remark about getting stuck—but all I could see ahead was a stretch of sand such as I am accustomed to traveling.

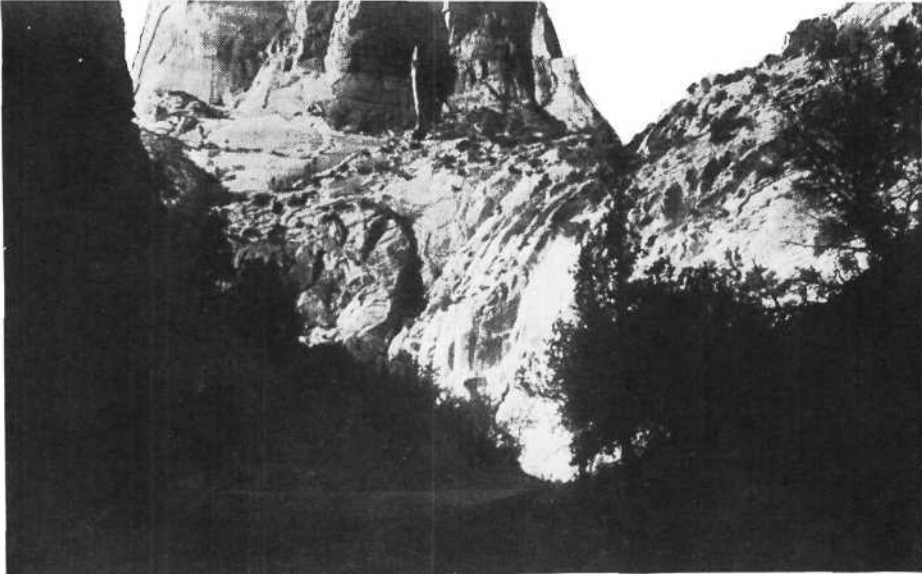
Then suddenly I felt the wheels of the car sinking. I stepped on the gas—but it was no use. We were mired, and when I got out I was amazed to discover we were in mud. The sand was merely a windblown layer over a treacherous bog that was a perfect trap for an unwary desert rat to whom sand is sand and nothing more.

Well, we had a shovel, and there were plenty of flat rocks with which to build a trail to back out of the mud. We had nearly completed this part of the job when a rider appeared coming from down the canyon, and at the same time a car came in sight above. They arrived about the same time, and Herman knew them all. Their offer of help was gladly accepted, and soon we were on solid ground again.

We found some rather nice specimens of petrified wood near the mouth of this canyon. Farther up Herman said there were some logs in place in the Chin Lee clay, but our time was limited as we had decided to take the old Escalante trail out.

Just below Dugout canyon we passed the remains of an older ranch and beyond that what was left of the old town of Paria. This was one of the early Mormon settlements in this region but it is now virtually abandoned. Placer mining operations were attempted here at one time, and some of the heavy machinery still remains. It must have been a laborious job transporting it down the tortuous stream bed.

Turning right at Paria we were at last on the historic Escalante trail, where it entered Paria canyon—or at least this is



"Turning a sharp bend in Sheep creek we discovered directly before us a huge sandstone butte that somewhat resembles the Great White Throne in Zion canyon."

the only feasible point for many miles up and down the canyon where the padre could have reached the stream bed, and historians generally regard this as the correct route.

A half mile from the old townsite Herman suggested we stop. Here he said we would find petrified wood. Parking the car beside the road at the base of a low hill, we climbed to the summit and found the ground strewn with small pieces of beautifully colored fossil wood, some of it equal or superior to the wood found in Arizona.

There are few large logs in this area, and directly across the road from this hill is a rather large one capped with a reddish colored "puddingstone" conglomerate of a comparatively recent period. There were other larger logs but not of good cutting material.

Our two outstanding finds were light pink agatized wood with black and white markings, and some petrified pieces with

small but brilliant smoky quartz crystals in the crevices.

To really explore this country it is advisable to plan an overnight camp under the stars. There is too much of interest to be covered in a single day. For that matter, weeks could be spent here in interesting sidetrips along the Paria and its tributaries.

I can think of no finer vacation for the rockhound than a trip to beautiful Zion and Bryce national parks, culminating in camping excursions of from two days to two weeks in the canyon of Paria and its branches. Water and wood are plentiful, there are shady groves of cottonwood trees, and a country abounding in interest to the mineralogist, the botanist or the historian.

We cannot all be Father Escalantes, nor Herman Pollocks, but with the limited time and means at our disposal we can do a bit of exploring for ourselves in a region full of interest for those who glory in the rough trails and inconveniences of a remote desert wilderness.

POSTSCRIPT

When John Hilton forwarded this manuscript to the Desert Magazine from Utah, he attached a note which I believe will be no less interesting to Desert Magazine readers than to the staff.—R. H.

DEAR RANDALL:

I think it would be advisable to run some sort of a boxed warning with this story stating that this is no trip for amateur desert drivers and inexperienced campers. The road isn't dangerous but it might be rather difficult or impassable to people not accustomed to desert driving. Also, it might be stated that Herman Pollock is available for guide service either on one-day trips or overnight pack trips.

I don't know whether you know it or not but Ruby of the Inn is Reuben C. Syrett. They called him Ruby for short and the name stuck. He says he was forced into the tourist business while proving up on his homestead. People would get stuck on the bad roads and ask for overnight lodging. He would roll his bed out on the floor and sell them his room for the night. This led to getting extra beds—and he says he has kept himself broke buying them ever since.

He really has quite a spot here, and it is very artistic and clean, and rates are moderate. It's three a. m. and I'm signing off after a big day.

JOHN.



The mail box is 15 miles away on Highway 89 and the postman only comes three times a week—so mail day is quite an event for Corky and Davy Jones.



Ancient inhabitants, if they could see it, would be rather amazed at what has happened to their old home. This is the combination living and bedroom and is reached from the outside by a ladder, built after the prehistoric fashion.

They Live in an Ancient Ruin

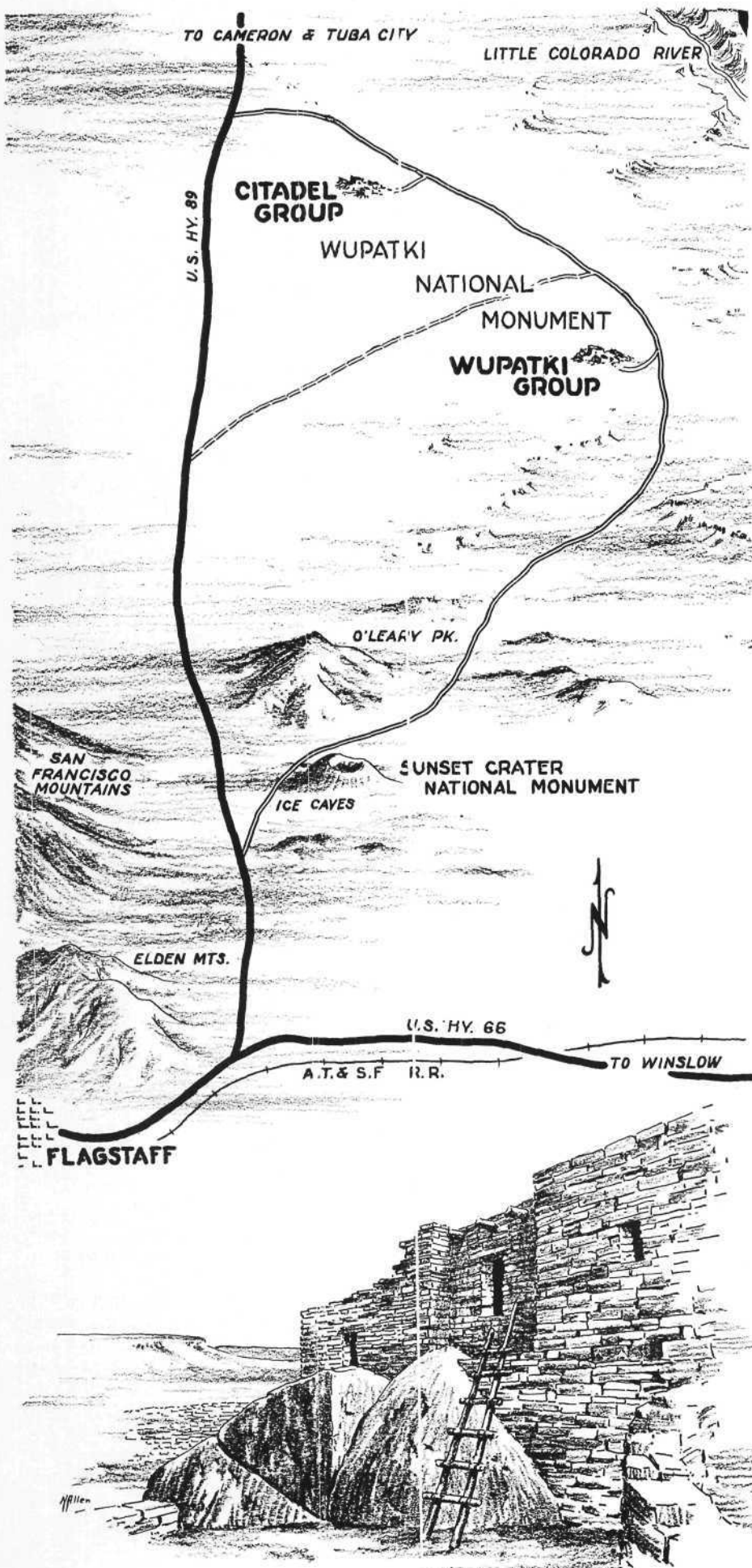
By MARY JANE NICHOLS
Photographs by Tad Nichols

Park Ranger David Jones and his wife, Courtney, have to climb a wobbly ladder to get into their home. They haul their drinking water five miles, get their mail but three times a week and their only neighbors are Navajo Indians—but their compensation for these inconveniences is the romance of living in the oldest inhabited dwelling in the United States. Here is an intimate story of two people whom you will pity or envy according to how much pioneering blood still flows in your veins.

ROLLING along on highway 89 just north of Flagstaff we passed through a divide in the mountains, the pine trees opened up and framed a view of desert plateau sloping to the distant Little Colorado basin. Down across Deadman's flat we approached the turn-off to Wupatki national monument. Passengers in a car behind stared at us wondering when we turned to the east on the rough cinder road. Had they but known that 15 miles away lay the oldest inhabited house in the United States, in spite of the claims of St. Augustine, Florida and old Santa Fe!

Bouncing along eastward we passed

by the Citadel, the ruin of an ancient Indian pueblo standing on the summit of a hill. On through the junipers the road came abruptly to the edge of a black volcanic mesa and dropped off into red sandstone country. To the north the colors of the Painted desert unfolded before our eyes; to the east red rock blended with red rock, concealing from us the pueblo ruin of Wupatki, which we knew to be there. At last Tad stopped the car at a "park here" sign. On a narrow promontory projecting into the barranca below us stood a deserted-looking pueblo ruin made of the same red sandstone as the ground on which it stood. Hopefully



we scanned the pueblo for a sign of life. Somewhere in this prehistoric dwelling lived Courtney and David Jones. We had known them in school at Tucson as Corky and Davy.

The cheery welcome which greeted us as we approached a ladder on the west side of the ruin made us feel much relieved, for it had seemed that we were intruding on the solitude of a sacred antiquity.

David Jones is the custodian of the Wupatki national monument, and he and Courtney dwell in tiny rooms in the prehistoric pueblo—faithfully reconstructed by the U. S. park service.

There is no other home just like it—and our first adventure was a personally conducted tour of inspection. Whitewash brightened the plaster walls; furniture and coverings for the smoke holes and doorway helped modernize the apartment. In the niches of the natural boulder wall Corky had placed Indian bowls and trinkets, reminiscent of ancient times. The unique T-shaped doorway attracted our attention. Bending over, Corky put her hands on the arms of the "T" and easily swung through the opening into the kitchen-dining room. "Be sure and duck when you go through these doorways," Davy advised. As do all visitors, we expressed surprise at seeing a water faucet, the Flamo gas stove, and the Electrolux refrigerator. "I find things easy now compared to those first months," Corky admitted. In the days that followed I became increasingly amazed at her idea of finding things easy.

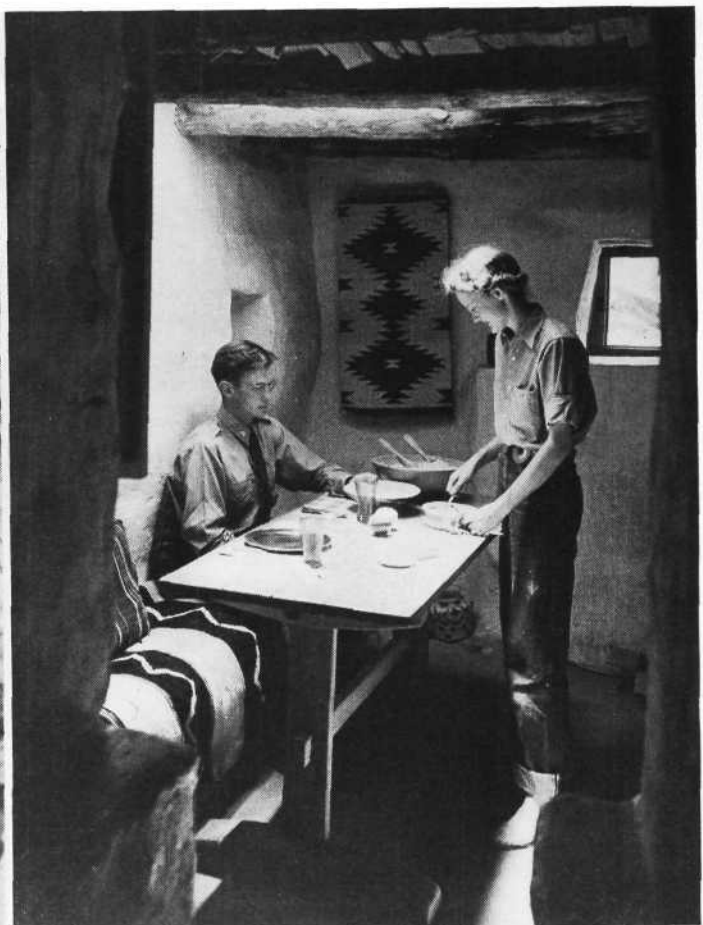
The fall of 1937 Davy had been put in charge of Wupatki national monument, one of the "lone posts" of the Southwestern monuments division. He had passed the civil service examination in archaeology and secured appointment in the service. Wupatki was his first assignment. He had met Corky on a University of Arizona archaeological expedition the summer of '35 and it was then that the four of us became friends. Early in May, 1938, Corky and Davy began their life at Wupatki.

"Keeping up with the Joneses" meant full days and fascinating ones. Six a. m. was the usual breakfast hour, though frequently it was earlier—and less frequently later. There was much to do to carry on just daily living. Davy had to be in uniform ready to guide visitors by eight o'clock and their unique apartment had to be made presentable.

So, bright and early every morning Davy climbed down the ladder carrying garbage can and waste basket and, invariably, numerous odds and ends to be stored in a shack a quarter of a mile away. Once a week the 50-gallon drum in the wall next the kitchen had to be filled with water he hauled from a



Corky Jones has a morning chat on her "front porch" with a Navajo woman and her son who walked a mile and a half to pay her a visit. They are her closest neighbors.



This is the kitchen and dining room. The picture was taken through a narrow passage in the wall which leads to the living room.

spring. By means of a hand pump he forced the water from the truck up through the hose to the drum.

During the warm months the barrel on the shower house had to be kept filled. Because of limited space in the ruin, their food supply was replenished from the storehouse shack, and if Corky forgot to tell Davy to bring the things she wanted, it meant a half mile walk for her. She never seemed to mind. One of Davy's many duties was to keep the roofs of the ruin in good repair, but, regardless of his efforts, rainy days were always accompanied by numerous leaks. Road repair was part of his line of duty and frequently he found it necessary to aid some inexperienced visitor stuck in the cinders.

As ranger in charge of a remote post with hundreds of ruins in the 35,000 acres, he learned to be jack-of-all-trades. Besides guiding visitors about the monument, official business required numerous reports and surveys of the many phases of the monument area. He also took charge of a U. S. weather bureau station.

By lamp light in the evening Davy did his clerical work and studying. Some days visitor travel was so continuous that meals were long delayed and had to be eaten

at odd times. Yet there were other days when but one or two cars would arrive.

There are many kinds of people in the human family—and sooner or later they all come to Wupatki. Their interests and demands are a constant challenge to Davy.

He wondered why some of them come there at all—so disinterested and unresponsive did they seem. Yet the majority find this monument a fascinating place, and many of them advance theories which, while not always plausible, are at least novel.

The various questions about the birds, animals, plants, rocks, trails, etc., have caused Davy to spend long hours in study. He likes to know all the answers. At least, when the questions are reasonable.

There are times, however, when self-control is more important than knowledge. For instance a certain party, immediately after arrival at the ruin asked directions to the nearest highway—and became quite irate when told they would have to return over the road on which they came in. It is quite a tax on the custodian to make that kind of visitor enjoy his stay at the monument.

I remember one day when a man had

quite an argument with his wife before he could get her to leave their car for a trip through the ruins. But he finally succeeded, and she exclaimed afterward, "Why I wouldn't have missed this for anything."

The ancient ladders which lead to some of the doorways are quite safe—but rather wobbly. From long practice Davy takes them quite nimbly, but to some of the visitors they are a hazardous adventure. Sometimes the bolder ones start down them forward—but change their mind when the poles begin to jitter, and then awkwardly and gingerly turn around.

At times Corky helped guide, vividly picturing, in her own way, the once thriving population of 800 years ago. To most visitors, the life of this modern young couple, in sharp contrast to the antiquity of the setting, holds as much interest as Wupatki pueblo and its ancient civilization. Corky came to live in Wupatki as a bride. Those early months presented many trials, but the romance of living in an isolated prehistoric pueblo compensated for the discomforts. Often have I heard her say, "Anyway, now the Flamo stove replaces that smoking gasoline thing, and we have an Electrolux, which



To some of the visitors at Wupatki the ladders are quite an adventure. They are modeled after those originally used by the Indians.

really beats the damp rag method! I am getting good at tossing out the dishwasher too, even in a high gale, but I respect the lowly drain as I never did before."

She still thinks the ladder entrance to their home fun, even when returning from their weekly trip to Flagstaff laden with supplies. Corky admits that the frequent interruptions of curious people taxed her severely at first, but now she takes it all as part of living in a ruin, truly the oldest inhabited house in the United States.

Most of the visitors are surprised at finding anyone living there, a fact we could easily understand. One day, as Corky and Davy were eating lunch, a child suddenly appeared in the doorway. He looked around in utter amazement,

then leaning out the door he cried: "Mama, come quick! People *live* here."

Quite often visitors are startled when greeted from the Jones' entrance above their heads. Hearing voices one morning, Corky stepped out and welcomed guests. They jumped in surprise and said: "Well, so *you* got here too! We didn't think anyone else would ever come over those awful roads to this desolate spot." Typical of rangers' wives, Corky does her part for the park service without pay. She too keeps records, nature notes principally, and writes articles for the Southwestern Monuments monthly report.

Most unique in the life at Wupatki is the relationship the Jones have with the Navajo living in the monument area.

Their nearest neighbors, the Peshlakai family, have become interesting likable friends. To Corky and Davy the Indian is no longer an uncultured, poker-faced curiosity. They have learned that the Navajo have a fine sense of humor. Clyde Peshlakai likes to talk about John Collier. One day Corky asked "What is the bird on that bush?" Clyde replied wistfully, "Rainbird, but I guess we get 'nother one. This one not very much good, not bring rain, so John Collier gonna take't away, send out good rainbird."

In her little apartment Corky has a loom which Clyde's wife, Sally, helped her erect. Learning to weave rugs as the Navajo do it is not a simple operation. But when she gets into difficulty Corky goes to the Navajo camp for expert advice.

With the help of Sally and her sister Katherine, who does the interpreting, Corky finally has learned how to carry through the weft pattern in changing colors. It is needless to say she is very proud of the rug which she carded, spun, dyed and wove all herself.

I remember an afternoon when Davy spent three hours with a group of Navajo from the monument area. It took statesmanship and diplomacy to settle their problems, and to explain the intricacies of federal laws to the puzzled Indians.

To Corky and Davy life at Wupatki has brought many unique experiences and valuable interests. Away from the so-called advantages of modern civilization, which our generation thinks so necessary, they are busier and happier than most young couples.

Before the Jones were assigned to this post the Wupatki was occupied by Sallie and Jimmie Brewer, former custodians, who also were newlyweds.

When the penetrating winds of winter have set in, however, bringing with them new hardships, the Jones have gladly followed orders to report to headquarters at Casa Grande Monument in Southern Arizona for the winter season. Yet, after a week of civilization, luxuriating in hot baths, electric lights, gay parties, movies, and even the morning paper at breakfast, both Corky and Davy have a genuine longing to return to the peace of their little 800-year-old apartment.

But this year they were overjoyed at the orders of permanent all-year residency at Wupatki national monument, to them the best monument in the Southwest. Soon they will be enjoying the convenience of a government house, which the park service is building for them. Yet, strangely enough, Corky and Davy truly regret the approach of the end of their life in the ruin.



Forgotten Tragedy of Carriso Creek

By EDWARD H. DAVIS

FIFTY-EIGHT years ago, a tragedy was enacted on the banks of Carriso creek near the site of the old Carriso stage station in San Diego county, California. A young cowboy, suspected of the theft of cattle, was shot and killed by an Arizona sheriff.

Where he fell, his companions buried

the body and covered the spot with a mound of boulders to keep the coyotes from devouring the remains.

Today there is little to distinguish this place from a thousand other lonely graves which dot the Colorado and Mojave deserts. There is no sculptured monument or wooden cross—just a sim-

ple pile of rocks with a crudely inscribed boulder as a headstone. It reads: FRANK FOX, KILLED 1882.

I first saw this grave in 1896. It was just a few hundred feet west of the stage station, not far from the road where the Butterfield drivers swung their stages

This picture of the ruins of old Carriso stage station was taken in 1901 by James A. Jasper, supervisor of San Diego county at that time. It was Jasper who installed the water trough. Since then the walls of the old station have entirely disappeared and water may be gotten only from the cienega in the creek bottom.



around the bluff as they headed for the next relay at Vallecito.

There was tragedy in that brief inscription, and I wanted to know the story. Later I met Will Dyche, who was a witness of the shooting of young Fox, and from him and Jim Knight, foreman, and the vaqueros at the Warner ranch I learned the full details. Here is the tale as they told it:

Frank Fox and his older brother Will, well mounted and each with a six gun belted to his waist, had followed the well marked trail of a large bunch of feeder cattle, being driven from the Empire ranch in Arizona, across the Colorado river and desert to the Warner ranch in California.

The boys caught up with the outfit at Cameron Lake, in what is now the Imperial valley, just as it was bedding down for the night. Their horses were well spent as they had been pushing them hard for several days.

They sought out Tom Turner, foreman in charge and asked if they could help with the stock for their grub until they reached Warner's. They gave their names as Will and Frank Thompson and said they were on their way to Los Angeles where they had the promise of jobs. They had heard about the band of cattle at Yuma, had followed the trail and hurried to overtake them.

After considerable questioning, Turner said, "All right kids, hit the chuck wagon over there and the cook will fill you up."

After supper the newcomers staked their horses to trees that had some mesquite beans underneath, unlashed their blankets from the saddles, rolled themselves up in them and were soon fast asleep.

There were about 1,000 head of young

stock in this drive, with 12 or 14 vaqueros, mostly Mexican. They had reached Cameron lake, half way across the Southern California desert, after days of hot and sandy traveling with scant feed and less water. Both cattle and horses were leg weary. Cameron lake (long since vanished) was a small lagoon of muddy water left in a depression by the annual overflow of the Colorado river and was suitable to drink, if one was not too fastidious about the dead cows bogged in the sticky mud in their mad rush to slake their thirst. Three or four night herders constantly circled the stock to keep them from straying. There was little feed at Cameron, mostly leaves of mesquite trees, and the cattle were uneasy.

A dry camp was made the next night and the boys were put on night herd with several other cowboys to keep the thirsty and uneasy cattle from turning back. The boys proved top hands on the drive and each was expert enough to do a man's work. They were good natured, and knowing their job they became general favorites with the other punchers, especially the Mexican vaqueros, with whom they could talk in their own language.

At midnight they were relieved, when the graveyard shift took their places.

Long before daybreak, the cook had breakfast of hot coffee, biscuits and jerky ready and the cattle were on their way amid much bawling. Cattle can smell water many miles and they knew they were headed for it, so they required no urging. They made good time on an easy trail, avoiding the badlands, and reached Carriso creek about noon where they soon slaked their thirst and began feeding in the green cienega.

The water, though slightly alkaline,

was abundant and the cienega in the creek bottom afforded ample pasturage for horses and cattle.

The men made camp near the ruins of the old stage station and rested for the balance of the day in preparation for the many weary miles of desert still ahead of them before Warner ranch could be reached.

The saddles and blankets were pulled off the horses and mules, who immediately slipped over the bank and sank their muzzles deep into the flowing stream. The sun shone from a cloudless sky. A lone raven flew overhead examining the outfit. The cook with a couple of helpers rustled wood and prepared the midday meal. The men lounged around the chuck wagon to take advantage of the scanty shade.

Will Dyche and another ranch hand from Warner's had reached Carriso that morning with a band of fresh saddle horses, as the Arizona saddle stock was worn out. The two Thompson boys were sitting on the edge of the chuck wagon swinging their legs, when a team of black horses and buggy drove up. A man jumped out of the vehicle and without a word went directly to the boys and pulled their guns from their scabbards. It was all done so quickly there was no time for protest. Frank the younger brother immediately grabbed a tin cup, slipped to the ground and made a run for the bank, only a short distance away, as if for a drink of water. Slankert, the man from the buggy, pulled his gun and shot the boy through the back. The bullet passed through his heart and he fell headlong and died almost instantly.

Slankert put handcuffs on Will and then walked over and turned Frank over. A widening patch of blood showed where the revolver bullet had done its deadly work.

Taken entirely by surprise, for a few minutes Will could not realize that his brother was dead. But as he became conscious of the full import of his loss he burst into a paroxysm of grief terrible to witness. He acted like one demented, swearing and cursing his brother's killer and making futile efforts to get at him. He dared Slankert to kill him and said as soon as he was free, all his life would be devoted to tracking him down and killing him. He begged for a gun and then broke into heart-breaking sobs.

As the cattlemen recovered from their surprise, Turner walked menacingly to Slankert who had been joined by Culp, his brother-in-law, and looking him fiercely in the eye, demanded what in hell he meant by killing one of his hands.

This picture of Edward H. Davis, writer of the accompanying story, was taken beside the Frank Fox grave within the past year.



Turner was a big strapping Texan, wore two guns and was noted as one of the most daring fighters in southern Arizona.

Slankert pulled back his coat with one hand, while his other was resting on his gun, and displayed a sheriff's silver badge. Slankert said he was a deputy sheriff from Cochise county, Arizona, and that the boys had belonged to a notorious band of outlaws. He had been following their trail for three weeks. The boys, he said, had been stealing horses and had shot it out with officers near Phoenix, wounding one of them. Even the horses they were now riding, were stolen animals.

The officer had reached Yuma just two days after the boys left, and fearing to lose them if he followed, he decided to try and head them off. He had taken the train from Yuma to Colton, then to Temecula where he got his brother-in-law, Culp and team to drive him to Warner's, Mason valley, Vallecito and on to Carriso. Since the boys had eluded him so many times, he had decided to take no chances. If the boy had submitted quietly, all would have been well, but he chose to try to escape and he himself was the only one to blame. He produced warrants of arrest duly made out and signed to show his authority.

Frank had become a great favorite with the men on the drive, always willing to do his full share, and the cowhands gathered around the speaker were furious. They needed only a word from Turner to make short work of the deputies.

Turner spoke to the brother: "Will, what have you to say?"

It was a hair-trigger moment, Slankert and Culp stood on either side of the boy, hands resting close to their revolvers. More than a dozen wild cowhands were in a menacing circle, all of them armed and some with hands on their holsters. Turner, in the center, faced the deputies with set jaw and cold eyes. The body of the slain boy was sprawled on the sand a few yards away. The sun beat down out of a cloudless sky.

It was evident that if shooting started both officers would be killed, but probably not before they had taken some of the cowboys with them.

Then Will Fox began speaking, in answer to the foreman's question. He told his story slowly, in a choked voice.

"Our name is Fox, not Thompson as I told you. Frank and I had been drawn into a band of desperadoes, not of our own free will, but because we had been unintentional witnesses of some of their depredations and we had to take our choice of joining the band or of being killed, so we joined.

"We had been with them, always under strict watch, for several months, had camped with them in their secret caves



This crude headstone, inscribed by the companions of Frank Fox, remained on the grave near Carriso stage station for more than half a century. Then, within the last few months, it disappeared—presumably taken by some one for a rock garden or private museum.

The removal of this headstone is a violation of the traditional code of honor of the desert country. Those persons who took the stone perhaps are not aware that it was a treasured relic of the old West, and that it cannot be exhibited publicly without bringing the stigma of vandalism on any who have it in their possession.

That fine fraternity of American citizens who would preserve and perpetuate the natural and historic landmarks of this region, will join with the Desert Magazine in this appeal for the immediate replacement of this monument.

The guilt or innocence of Frank Fox does not enter into the consideration. If he were guilty he paid the supreme penalty for his crime—and that is enough. His grave is a desert landmark that deserves the same protection as all other historic monuments on the public domain.

It is hoped that this appeal will reach those responsible for this desecration, and that without more ado the headstone will be returned to its proper place.

in the deep canyons of the desert mountains and joined in stealing horses and cattle until lately, when they ran off a large band of horses and headed for Mexico. The officers and a posse of cattlemen had become so hot on our trail, the men scattered, each one for himself. Frank and I headed for California to get away from the gang and become straight and honest. We knew these fellows were close on our trail. We thought we had given them the slip on the Gila, but it seems not.

"Boys, you and Mr. Turner have been mighty good to Frank and me and I want to thank you. I am sorry this happened in your camp and I wouldn't want you to get in trouble on account of it. I

wouldn't want you to touch these murderers because it would deprive me of the pleasure of running them down and killing them, for as sure as the sun shines on the dead body of my murdered brother and before you as witnesses, I swear to kill Slankert as soon as I am free."

The older officer spoke up—"Say kid, you've sure been shootin' off that mouth of yours a plenty. Now, as we've got some distance to travel, you can climb in that wagon and hit the back trail."

"What are you going to do with that dead boy?" asked Turner.

"Why, he's all right. He can't get

Continued on page 29

This month Mary Beal presents the more common varieties of one of the desert's largest flowering families—the Bluebell or *Phacelia*. These vividly colored blossoms are especially conspicuous during the flowering season, partly because of their graceful form but mainly because Mother Nature sprinkled the desert more generously with whites and yellows and reds than with blue-tinted blossoms.

Bluebells on the Desert

By MARY BEAL

OCCASIONALLY the bolder members of this pretty desert family may be seen along the roadside, nodding their graceful heads to passing motorists—but more likely you'll find them in the sheltered protection of rocky nooks or under the spreading branches of the larger shrubs that grow in the canyons.

Bluebell is the common name for these flowers, but the botanists have christened them *Phacelia minor* var. *campanularia*.

In the desert floral arrangement there are many, many yellows, numerous whites, and a great variety of pinks and reds and lavenders—but the deep vivid blue coloring of the *Phacelia* is reserved exclusively for this genus.

They range quite generally over the desert region, but there are two places in the Mojave desert of California where I have found them especially numerous — along a narrow rocky canyon in the Newberry mountains and on the east flank of the Providence mountains where the pinkish-yellow tufa of the bajada provides a striking background for the vivid shades of the Bluebell.

The genus *Phacelia* has many desert representatives, some of them rarely seen. Following are some of the more common varieties:



Fiddle-neck Phacelia



Desert Bluebell

Phacelia minor* var. *campanularia

The deep blue coloring of the petals is set off by white stamens and white dots in the throat. The stout reddish stem, usually sparingly branched near the base, is 5 to 18 inches high, the whole plant clothed with stiff spreading hairs, very glandular and sticky. The round or broadly ovate leaves are often red or bronze, with red veins and scalloped or toothed margins. The flowers are an inch or more long, widely bell-shaped. Their rich color and shapely form are alluring but you will be wise to carry them in your heart rather than in your hand. The harsh herbage leaves a persistent brown stain and is irritating enough to cause a prickling rash on sensitive skins. The Bluebells are found in Mojave and Colorado desert ranges.

Phacelia tanacetifolia

Commonly known as Fiddle-Neck, supplying much of the blue accent on the flowery mantle adorning the spring landscape of the Arizona, Mojave and western Colorado deserts. I know many stretches where nearly every bush befriends a Fiddle-Neck and along the roadside their abundant blue delights the eye. The stout main stem, 1 to 2 feet or more high, has several branches, the herbage scantily clothed with stiff spreading white hairs. The pinnate leaves, more or less lobed, are fern-like. The lavender or blue flowers are disposed in dense coiled racemes elongating with age. The much-exserted stamens and narrow sepals, thickly beset with long bristly hairs, furnish easy identification.

Phacelia fremontii

Delightfully winsome is the Fremont *Phacelia*, quite delicate in form. With several or no branches from the base, 3 to 12 inches high, erect or spreading, the herbage clothed with soft hairs, scattered glands on the upper parts. Mostly

Continued on page 20

There are no movies or bridge clubs on the secluded heights of Ghost mountain—but Tanya and Marshal South and their two boys have found that the wild birds and animals of the desert make entertaining neighbors. In his diary this month Marshal gives interesting new glimpses of their daily life in this peaceful desert region.

DESERT DIARY

By MARSHAL SOUTH

May at Yaquitepec

By MARSHAL SOUTH

AWAY down on the lowland desert the herbage on the dry lake beds is a wine-rusty brown, and through the brilliant sunshine that floods the crest of Ghost mountain comes the drowsy cooing of mourning doves. These May days are pleasant ones at Yaquitepec; days when it is good to be alive for the sheer joy of living; when the skin tingles to the soft touch of the warm desert wind and the heart seems to lift eagerly to all the magic of spring.

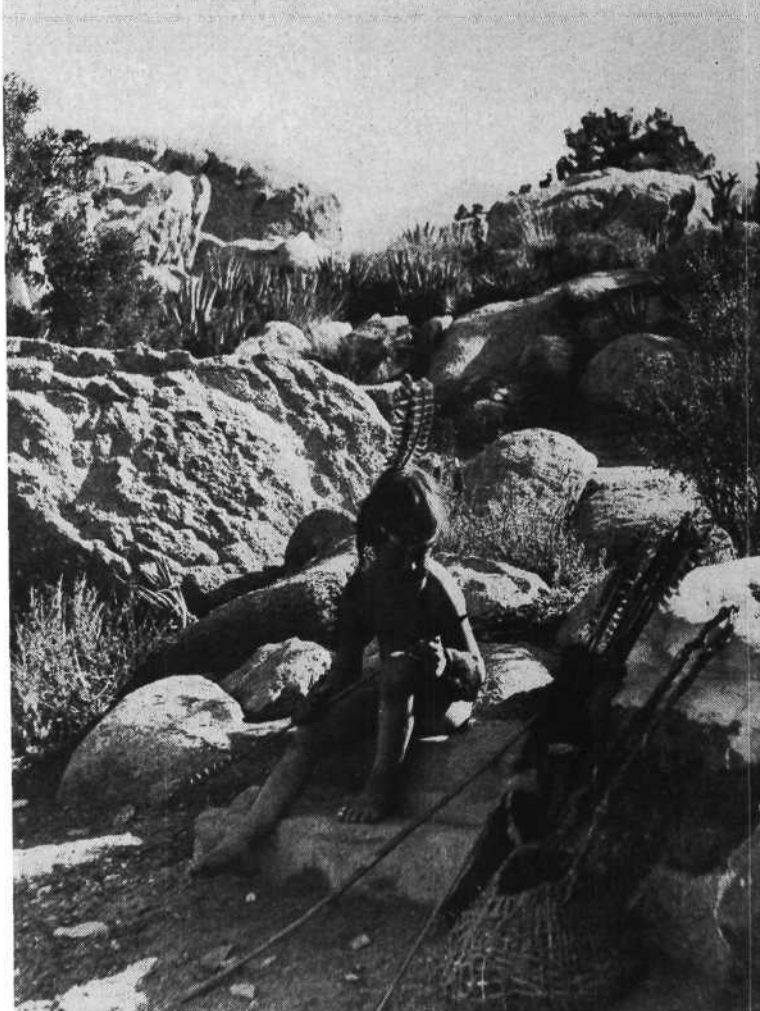
Man is a strange animal. He is usually so busy making a living that he has no time to live. The birds and four-footed creatures are wiser. They have not saddled themselves with a host of taboos and fetishes and bogie men—of their own creating—to rob their lives of joy and make bleak their every moment with worry.

The little red-roofed bird house in the summit of the juniper tree by our water cisterns is occupied again. Just as we were preparing breakfast this morning 7-year-old Rider rushed in with the news that the two fly-catchers were back. They have a lease on the little house and come every season to nest in it. This year they were a few days late, and we had wondered.

But here they were at last, and as happy to arrive, it seemed, as we were to see them. Cheerful, trustful little birds — and full of remarks. "*Chee-kwerk!*" and "*T-quip!*" Such a popping in and out of the round entrance hole of their box! Such a raising of crests and side-cocking of heads as they fly here and there about it, perching on the juniper twigs and examining it from every side. "My dear, do you think that horrid wren has been snooping around here while we have been away?" "No, no, darling! I'm sure she hasn't! Everything is exactly as we left it."

Rider said that he thought the "Mrs. bird" looked a bit older this year. And she cocked her head at him severely and said "*T-churrr!*"

We have quite a few nest boxes hidden away in the thick summits of our junipers. Most of them are made from the hollowed butts of long-dead mesquites. The birds appreciate them. But the boxes have to weather a bit and become part of the scenery before they will move into them. All except the wren—who actually *does* spend her time occasionally exploring the fly-catchers' cottage when the occupants are away. But she has better sense than to attempt to nest there. She has a house of her own in the juniper just behind the wood pile. The day Rider and I installed the hollowed mesquite butt for her home she sat on the tip of a neighboring tree and watched us. And ten minutes after it was in place she was busily lugging twigs and leaves into it and making herself very comfortable. She may be temperamental—but not in the



Seven-year-old Rider South casts a critical eye over the arrows he and his father have made—after the pattern of those used by ancient Indians on Ghost mountain.

matter of houses. She wanted a new one with all the gloss still on it.

All kinds of birds come to Ghost mountain. They like the peace and quiet here—and the utter security. And a great many of them have discovered the little bowl of water, hidden in the shade of a low-branched juniper, which we keep filled for the benefit of all our resident birds, including our tame chukker partridges. Many a thirsty wanderer has slipped gratefully down through the interlaced branches to drink at that hidden bowl—and flown away happily after flinging us an appreciative trill of song.

But high monarch above all our orioles and sparrows and wrens and shrikes and road-runners and ravens and hosts of other birds is our condor. Ghost mountain has its California condor. He does not live here. But his home is somewhere within easy cruising range. And he pays us fairly frequent visits of inspection, passing by high up in the turquoise sky, the distinctive white patches under his great wings clearly visible as he sails over our heads. A mighty bird, a survivor of a species that is almost extinct. There is a thrill in watching this royal voyager of the air whose tribe was once numerous—and whose great feather quills made such handy receptacles for the storing of gold dust.

This year there was water to spare for the making of adobe mud, and we have taken advantage of it. Mud is one of the simple and fundamental things. Being humbler and less obtrusive than water civilization has treated it with greater scorn. But in spite of uptilted noses, mud manages quietly to persist. And if you stop to think, you will realize that today's empires—like those of the past—are still built *on* mud and *of* mud. It is true we camouflage it by fancy names, such as

"plaster" and "cement" and a score of other genteel sounding titles. But these masqueraders are nothing more than glorified compounds of the same mixture of earth constituents and water as was used by the first savage to daub the chinks of his pole and reed dwelling. Good honest mud is as fundamental as life itself. And what a joy to work with! He who has not felt the thrilling, clinging touch of mud upon his hands; felt the oozy squelch of it between his bare toes and seen the honest brown wall or the coat of moist, satisfying plaster grow under his labor, has missed something of existence.

Our mud on Ghost mountain is composed of the ruin of weathered granite rocks, of the age-accumulated rot of dead mesquites and of the wind blown dust of the far leagues of desert. Yet it stands up to the weather startlingly well. Two years ago I made a temporary wall of mesquite poles, chinking and plastering them with a hastily mixed mud that had but little fibre in it and far too great a content of quartz gravel. Nowhere was that sketchy pole-and-plaster wall more than three inches thick. It was put up for an emergency. I did not expect it to stand up more than three or four months—certainly not through the rains of winter.

Yet it is still standing. Gales have hammered it, fierce rainstorms have charged over the summit of Ghost mountain and deluged it again and again with torrents of hissing water. It has sagged a little. Some of the poles are now bare to the weather, and in one or two places there are small gaps in it. But it is still standing defiantly. I have given up wondering when it will fall. I am hoping now that it will continue to stand up until the 18-inch wall of solid adobe—which is now creeping slowly up outside of it—has reached the top. Mud! . . . mud and water—and the labor of bare hands and feet! Thus was mighty Babylon built.

There is a tremendous amount of material in an 8-foot high adobe wall that is 18 inches thick. It consumes a lot of earth and a lot of water. Sometimes we reflect, as we splash on buckets of water and, barefoot, puddle the sticky mixture, just how hard and how slow it was to build our first structures of mud. Our first bake-oven in particular. It is still standing—a low, dome shaped Indian oven of mud. For that we carried water up the mountain on our backs—after first hauling it 14 miles across the desert. That oven wasn't very big, naturally. But it baked to perfection. Sometimes we still bake in it. Slowly the mesquites among which it was first built have been rooted out and the rocks that crowded about it have been smashed up and rolled aside. Soon the growing roof of the house will cover the old oven and walls will surround it. It will be a part of the new kitchen. It has long since been supplanted by a much more elaborate adobe cook-stove. But we intend to keep the old oven—and to bake in it sometimes. It brings back precious memories.

Hummingbirds shuttle and whiz between the bursting yellow buds of the tall swaying mesquite shoots, and across the warm gravel come whiptail lizards, ready to flash into lightning bursts of speed should anything disturb their endless, bloodhound-like tracking.

It is hard to click the typewriter these days. It takes real will power. Even Tanya, the energetic, stops often to sit in the sun and watch the desert distances with dreamy eyes. Rider and Rudyard roll happily on a rug beside the stocky little squaw-tea bush that breaks the white stretch of wind-blown gravel in front of the house. Sometimes they squabble noisily and at others they just lie and speculate about the wheeling buzzards that describe effortless circles far overhead. I catch a chance remark:

"There will," Rider tells his young understudy, with mysterious importance "be honey-an'-wholewheat cookies for supper."

Bluebells on the Desert . . .

Continued from page 18

basal are the attractive, rather fleshy leaves, deeply cut into oblong lobes. The widely open flowers are ½ inch or more across, in rather dense racemes curved at tip, the lavender or lilac-blue corolla centered by clear yellow throat. You are apt to meet them wherever you go on mesas, foothills and mountains of the Inyo and Mojave desert, Nevada, Utah and Arizona.

Phacelia distans

Vervenia was the Spanish-American name, euphonious enough to be perpetuated. Somewhat resembling the Fiddle-Neck except the flowers are larger and widely bell-shaped, murky white, blue or violet with pale center and stamens barely or not quite exerted. Rather brittle and straggly, the herbage finely downy and with scattered stiff hairs, somewhat glandular, the fern-like leaves rather finely lobed. Quite frequent in the California deserts, Arizona and Nevada.

Phacelia hispida

The Caterpillar Phacelia is bristly with long stiff hairs. The pinnate leaves have deeply-lobed leaflets and the bell-shaped flowers are pale-blue or lavender, the stamens slightly exerted. Look for it on foothill and mountain slopes of the Inyo, Mojave and western Colorado deserts.

Phacelia crenulata

Commonly called Wild Heliotrope, which is fair enough for looks but not for odor, its harsh herbage being rankly ill-smelling, though the blossoms are fragrant. Erectly stout-stemmed, hairy and glandular, 6 to 18 inches high with few to many branches, the oblong leaves with rounded lobes. The open-campanulate flowers in close racemes are deep blue-violet or purplish-blue, the purple stamens and pistil much exerted. Frequent on mesas, mountain slopes and valleys of the Inyo, central and east Mojave and Colorado deserts, Nevada and Arizona.

Phacelia calthifolia

The whole plant very sticky-hairy, 4 to 10 inches or more high, the stout erect stem branching from the base, closely beset with conspicuous dark glands, which stain brown everything they touch. The round scalloped leaves are an inch or two long, the clear bright-purple flowers open bell shape. Found in washes of the east Mojave desert, quite abundant in the Death Valley region and especially attractive nestling at the base of the yellow hills of Golden canyon.

Phacelia pedicellata

Erect, sturdy and branching, ½ to 1 foot or more high, hairy and glandular, with roundish leaves palmately lobed, white or pale-blue flowers in short dense racemes on rather long thread-like pedicels. Found in canyons and washes of the Colorado and east Mojave deserts and Death Valley region.

. . . .

PROFUSE COLOR IN OAK CREEK CANYON . . .

Visitors in northern Arizona during May, June and July will not only enjoy a fine display of wild flowers, but will have access to the herbarium now in preparation at Arizona state teachers college in Flagstaff. Fresh wild flowers will be continuously displayed from May 15, both at the college and the Museum of northern Arizona. An herbarium is also maintained at the museum.

One of the best wild flower areas for the latter part of May and June is Oak creek canyon, just south of Flagstaff. The earlier bloomers are penstemon, Mexican locust, verbenas, wallflowers and thimble berries. Spring beauties and mountain bells grow in the higher levels. The middle of May will see yellow columbine, yellow monkey flower and blue and white violets.

Blossoming in the San Francisco peaks is expected to begin about June 15.

In these days of surrealism and other jitterbug innovations in the world of art, it is refreshing to meet a painter who not only persists in doing canvases that the ordinary garden variety of human being can understand and appreciate, but who is an active crusader for sanity in the studio. This month the *Desert Magazine* presents Fritioff Persson—who paints desert pictures that do not have to be “explained.” The accompanying illustration is a halftone reproduction of Persson’s painting, “The Storm.”

Painter With a Packsack

By JOHN W. HILTON

IF you should be tramping a remote part of the Coachella or Borrego deserts in Southern California some day, and come suddenly upon a very large man working diligently on a very small painting—the probability is that you would be meeting Fritioff Persson.

There are very practical reasons why Persson’s field sketches are of the thumb-nail size.

He is not one of those artists who blossom along the desert roadsides in spring, equipped with a gaudy beach umbrella and several hundred pounds of paraphernalia and accessories.

Modest by nature, he prefers to work undistracted by a passing parade of motorists. And he has an aversion to those roadside scenes where it is necessary to gaze through a foreground of telephone wires and poles and tourists and trucks—and imagine they “just ain’t there.”

He has learned from an intimate acquaintance with the desert that the most fascinating pictures generally are far removed from the paved thoroughfares.

And so he strikes off across the mesas and arroyos with his paint box and lunch and canteen in a packsack, and when his long-legged stride brings him to a bit of true desert that appeals to his artist’s eye, that is where he stops. It may be many miles from his car.

Another advantage of the small field sketch is the time element. Lights and

shadows change so rapidly that the artist, to get the true feel of the subject, must work fast or return to the same spot day after day. And so the canvas Fritioff Persson sets up for his initial sketch is small—very small in inches, but large in conception. Later, the full-size painting is made in his studio with the aid of an excellent memory and a fine knowledge of desert subjects.

If you were to meet this artist when he is not at his work, you probably would not associate him with the fine crafts-

manship which bears his name. More likely he would be taken for a park ranger—with his military bearing and his khaki clothes.

The military bearing comes natural for Persson served in the Canadian army through the World war. It was while still in the service after the Armistice was signed that he sold his first paintings.

He was stationed in a rural section of northern England. The charming countryside and quaint thatch-roofed houses stirred the artist in him and his leisure time was spent in sketching. Then he learned there was a market for these sketches. The people who lived in the houses were anxious to buy the pictures of their own homes.

Persson laughs today as he describes his experience—standing at the door of an English cottage, hat in one hand and a scarcely dry water-color in the other, offering his work to the lady of the house.

Back in New York he enrolled at the Art Student’s League, and later spent some time painting around Providence. Later he went to Florida. He liked the climate, but found nothing there that interested him from an artist’s standpoint.

It was not until he came West that he began to work in earnest. At Grand Canyon he met some of the finest landscape artists in the contemporary field. The beauty and the bigness of the gorge had a tremendous appeal for him—and he



Fritioff Persson

Continued on page 31



Red Woman, aged grandmother of the Navajo, first told Richard Van Valkenburgh about the Navajo watchtowers in 1935. But it was not until four years later that he discovered the actual location of one of these Indian fortresses, and had an opportunity to verify the story. Here is an unwritten chapter in Navajo history — published for the first time.

This photograph shows the ancient log ladder which Van Valkenburgh found still in place when he rediscovered this old Navajo fortress.

We Found the Ancient Tower of Haskhek'izh

By RICHARD VAN VALKENBURGH
Sketches by Charles Keetsie Shirley,
Navajo artist.

PERCHED high on a windswept and isolated sandstone crag far above the barren badlands sloping off into the Chaco river in New Mexico is an old Navajo watchtower, which, as far as scientific records show, had never been seen by white men prior to our discovery in 1939.

My first knowledge of the existence of the old tower came in 1935, when I was gathering historical material about Dinethah, the old Navajo country located in the mountainous regions of Rio Arriba

and Sandoval counties in northern New Mexico.

With my interpreter, Dannie Bia, I was visiting the centenarian, Red Woman. Her summer camp was under the cottonwoods lining the Chinlee wash 15 miles north of Chinlee, Arizona.

One afternoon, while we were lounging under the shade of the ramada, the wrinkled old woman told us the story of a renowned Navajo watchtower in Dinethah. Her maternal grandfather, Haskhenezh, Tall Warrior, had once helped Haskhek'izh, Spotted Warrior, defend this tower against the Spaniards and Utes.

She said the tower could be identified

by three petroglyphs graven under a rock ledge in the tower site. One was a jagged line, one was the St. Andrew's cross, and the other was a jagged line with expanding ends.

When I asked her about the location, she gave a fanshaped wave of her hand to the east as she said, "How would I know? I was never there. My grandfather

As the Utes started up the slopes on which the tower was located, the Navajo rolled huge boulders down on them.



told that it was five days' hard ride into the rising sun to 'Atsa'tasi'ah, the mesa of the hanging pot. The crag on which the watchtower was built stands as the western extension of this mesa."

Red Woman died soon after our visit. During the next year, every time I went into the eastern Navajo country, I made inquiry among my Indian friends about the tower of Haskhek'izh, but gained not a single clue.

In 1939, while we were checking some of Charley Bohanan's old Navajo sites and adding some new ones to our survey map, I kept an ear open for information. Bohanan had worked for me as a field man in the autumn of 1937. For two years I had waited for the opportunity to visit a large watchtower and citadel which he had mapped and reported as being in a remote place.



gorgeous panorama was spread out before us. The landscape for endless miles was a jumbled mass of badlands tinted in a hundred soft pastel shades. Deep canyons slashed the region. Whirlwinds snatched up colored dust and spiraled from the serrated wastes toward the heavens. The world famous Painted desert does not excel this region in scenic beauty. This is the headwaters of the Chaco river.

Leandro Sam and Khin'a'anih Nezh awaited us as they rested and smoked under a gnarled pine tree. Leandro pursed his lips southward as he said, "There lies the mesa we Navajo call the Hanging pot. The watchtower of the old people lies out there in the west—on top of that isolated crag that stands so high and lonesome."

Hanging Pot mesa! The name flashed through my mind. This was the mesa that Red Woman had mentioned when she told the story of Haskhek'izh's watchtower! Possibly we were on the right trail at last?

We skirted the canyon heads and struggled through the powdery earth of the eroded areas. Paleontologists have told me that there are excellent deposits of fossil mammals embedded in these formations.

Soon, we were at the base of the steepest and slickest talus slide I have ever seen. The rock was loose and the scant vegetation was not firmly enough rooted to give secure hand grips. High above and silhouetted against the powdery-blue

sky were outlined the ragged walls of the tower.

It was all teeth and toe-nails to make the climb. It seemed as if every step forward slipped two backwards. It is a funny feeling to stand teetering with a clump of brush in one hand and your feet slipping back in the loose earth. After much puffing and sweating, we struggled to the saddle that linked Hanging Pot mesa with the tower crag.

Two crudely notched piñon logs showed us the way into the tower. No human hand had moved them since the Navajo had abandoned this fortress. We climbed the old logs with misgivings but they bore our weight. When we had scaled the last ladder, we stood in the gap in the stone walls that was once the entrance into the tower.

I sat down on a fallen wall and studied what lay before me. Pottery shards told by their color and decoration that the Navajo had been trading with the Acoma people. There were a half-dozen crumpled hogans. These were encompassed by a rock and log wall which skirted the sheer edge of the crag. I looked under a small rock overhang. There seemed to be the dim outlines of a series of petroglyphs. Stooping for a closer inspection I saw there, carved on the smooth sandstone wall the symbols described by Red Woman in 1935. We had found the legendary watchtower of Haskhek'izh!

Khin'a'anih knew what tools had been used to make the glyphs. Some medicine man of long ago had taken a sharp bladed knife or arrowpoint of chalcedony and scratched out the symbols. Khin'a'

I was visiting my old friends, Jim and Ann Counselor at their trading post and ranch, 28 miles west of Cuba, New Mexico. They are both enthusiastic explorers of the Indian country and were keen to make the trip with me.

With a local Navajo guide, Leandro Sam, and my best historical informant, Khin'a'anih Nezh, we traveled west from Counselor's little settlement on state highway 55. Soon we reached the camp of the local Navajo headman, Comanche. After a short visit at the jacal squatting between the highway and the 'dobe banks of the Blanco canyon, we left the road and headed due south. Jim took us over a wagon trail that wound through the aromatic junipers.

Deep barrancas checked our travel by automobile. The Navajo struck out in their queer pigeon-toed gait. They guided us over a sheep trail that gradually ascended. When we reached the summit a



Navajo Indian in the headdress of the "old people"

anih Nezh answered my unspoken question.

"The jagged line is the Navajo symbol of Male Lightning. That means danger to anyone entering this place unless he is a friend. The cross that is our symbol for a star is that which old time Navajo cut on their moccasin soles to show their clansmen that friends had passed ahead. The other—Hosteen Tsoh, you have seen before. It is that which Hasthin Dijolih, the medicine man, painted upon the forehead of Hasthin Frank's wife during the Red Ant ceremony at White Clay, Arizona. It is the mark of the Ant People."

I looked around the tower. Nature had formed two shelves. The hogans had been built on the lower and larger shelf. They were of the old forked-stick type. Three juniper logs with forks had been placed south, west and north. At the top the forks were interlocked to form a tripod. Two stringers ran parallel to two upright sandstone slabs which had been laid in the east. The slabs marked the door. They are not used by the Navajo of today. Medicine men sing about them in the hogan songs of the Blessing Side ceremonies.

I climbed another series of notched logs. They had been carefully laid in a crevice. They led to the upper shelf. On this narrow ledge there lay the remains of a watchtower. Associated with it were the ruins of the watchman's hogan.

While I sat there looking over the greater part of northern New Mexico, I reconstructed the story that Red Woman had told me:

"Djiniyah, my grandfather Haskhenezh told me this when I was a little girl.

"Haskhek'izh built 12 watch towers two old men's lives ago. That is 150 years of American counting. The tower on Hanging Pot mesa was the headquarters of Haskhek'izh, the chief of all the eastern Navajo.

"For many years the Spanish and the Navajo kept the peace. Then some of the

young Navajo warriors killed two shepherds near Santa Fe and ran off many hundreds of sheep. Soldiers started to march toward the Navajo country.

"In those days the Utes and Spaniards were good friends. The Utes had their tepees pitched on the banks of the Los Piños river in what is now southern Colorado.

"Hearing that the Spaniards planned to attack them, the Navajo sent out spies. When the Spanish marched from the east and the Utes rode from the north, smoke signals were sent up from the mountain tops to warn the Navajo that the enemies were coming.

"Haskhek'izh made the Navajo work day and night to repair the tower and lay in water and supplies. They worked like ants carrying and caching their possessions in safe places. In a few days the Navajo camps in the lowlands were deserted. Even the springs were covered up with dirt and brush.

"A large war party of Navajo under another chief called Na'a'sisih, the Gopher, ambushed the Spaniards as they stopped to get water at the Ojo de Espiritu Santu on the west side of the Jemez mountains. The survivors of the ambush were chased back to the protection of Jemez pueblo.

"The Utes rode south on their old trail. This trail came up the Largo canyon from the San Juan river and passed through the old Navajo country to the Rio Grande settlements. Navajo spies, hidden along the trail, passed the news along by making cries like coyotes and hoot owls. When they passed the tower at the mouth of the Rincon Largo, smoke signals were sent up, and the people in Haskhek'izh's tower knew they were coming. The notched-log ladders were pulled up.

"One morning, just as the grey was turning to blue, the watchman of the tower spied something moving in the trees. Looking sharper, he saw that they were horses, and that they had eagle feathers tied to their tails. He knew then that the Utes were around.

"With a big whoop - - - eé eé! oh! oh! the Utes attacked! They started to climb up to the tower. They were brave fighters. Navajo arrows filled the air. Great boulders bounded down the steep slopes and crashed off into the underbrush. A few Utes sneaked to the saddle between the tower and Hanging Pot mesa and started to shoot with the muskets the Spanish had given them. The balls bounced off the stone walls. In a short time, they were lying on the ground with the Navajo arrows sticking out of them like porcupine quills.

"The Utes tried again and again. They were always driven back. They taunted the Navajo and called them bad names. They said that the Navajo were cowards



Ute Indian of the period of this story.

and afraid to come out of the tower and fight. The Navajo said, 'You come up here and we will fight you.'

"They stayed there 12 days. The Navajo food was getting scarce and only one jar of water was left. On the 12th evening just as the blue was turning to black, they heard a great noise below them. They saw a big band of Navajo attacking the Utes from all sides. After a fierce fight, the Navajo killed most of the Utes and chased the survivors north across the San Juan river. The people in the tower learned that the Navajo who had helped them were the people of Hasthin Ma'idishgizh, from the Canyon de Chelly.

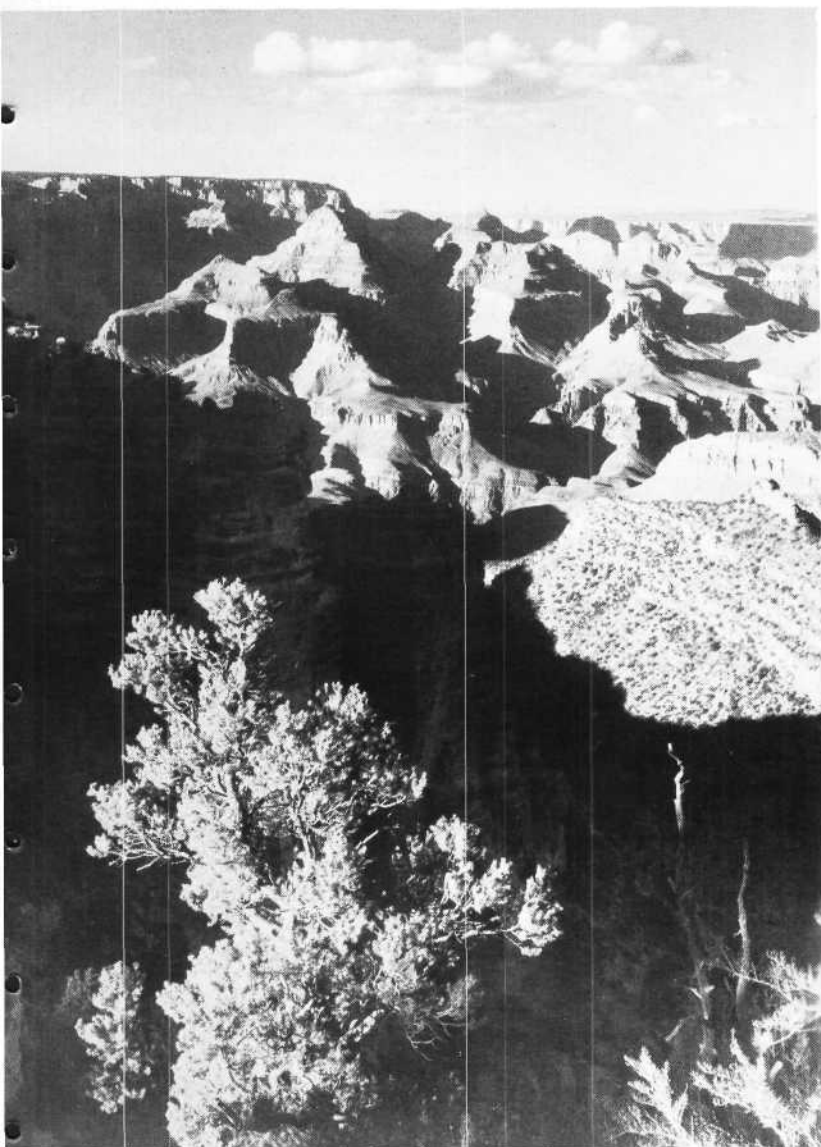
"My grandfather was tired of fighting the Utes and Spanish. He took his four wives and their children and went with Hosteen Ma'idishgizh to settle with his people. My mother was the daughter of his first wife. When he was an old man, he used to ride his horse over to Haskhek'izh's tower. He had become a medicine man and went there to get bones from the scattered skeletons of the Utes. He used them in the n'thah, War dance, which the Navajo today call the Squaw dance."

Once again the unwritten history of the Navajo proves to be remarkably accurate.

It was evening when we followed the setting sun toward the smooth ribbon of the highway. While we threaded our way through the trees and rocks, we talked of the vast country that the tribesmen called Dinethah, the old Navajo country.

It is a country filled with scenic beauty. In the vast tree carpeted mesas slashed by unnamed canyons there is always quiet and solitude. Old Indian trails worn deep into the rock traverse the country and many watchtowers similar to that of Haskhek'izh's are found on the high mesa rims. Few white people have penetrated this region. Little has changed here since Red Woman's grandfather helped defend Haskhek'izh's watchtower. It is to be hoped that the old home of the Navajo will remain forever as we left it in the summer of 1939.

Do your Grand Canyon pictures look like THIS? OR THIS?



Kolb Bros. photograph



Photographer unknown

Enemy No. 1 of the amateur photographers at Grand Canyon, says Natt Dodge, is — HAZE. But there are also a number of other invisible little imps that seem to put a jinx on the lens when the camera is pointed toward the world's greatest gorge. Here are some simple suggestions for improving their photography—not only at Grand Canyon but wherever pictures are taken.

By NATT NOYES DODGE

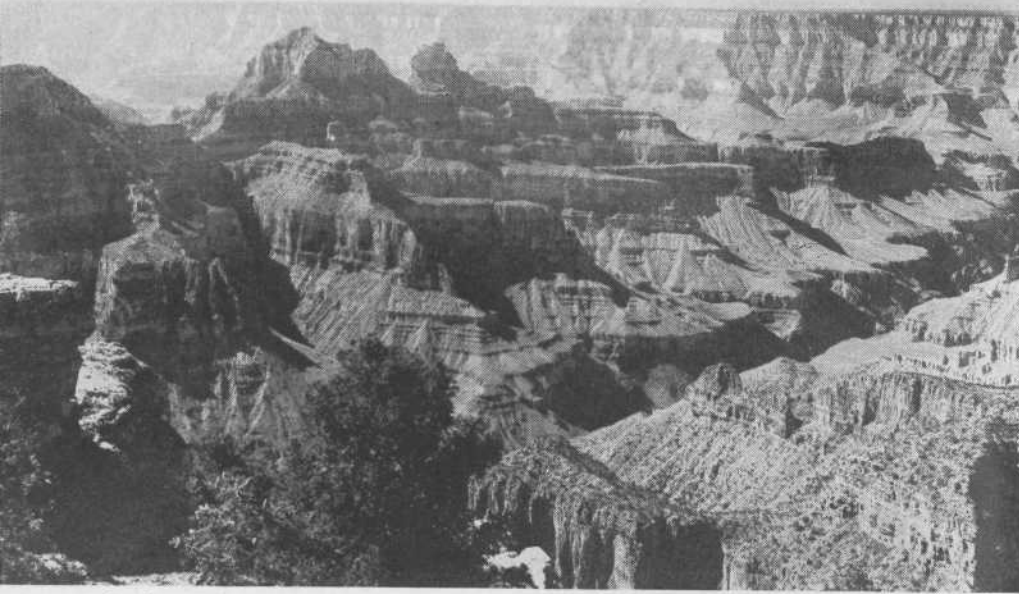
Don't Face the Camera!

WE have all seen beautiful and spectacular photographs of the Grand Canyon. It is therefore particularly disheartening to come home from this greatest of nature's gorges to find that the breathtaking views seen through our finders have become dull and flat commonplace photographic prints. It was undoubtedly a disappointed shutter clicker who made the classic remark, "Grand Canyon is the world's biggest washout; I wouldn't give a snap for it."

It may be some consolation to learn

that the Grand Canyon has proved to be a slap in the lens to many a confident photographer as well as a veritable Waterloo to the great majority of snapshooters, many thousands of whom annually lay down a film barrage upon the colossal chasm only to learn later that practically all of their shots were duds. The person who called the Grand Canyon a "photographer's paradise" was probably a film manufacturer.

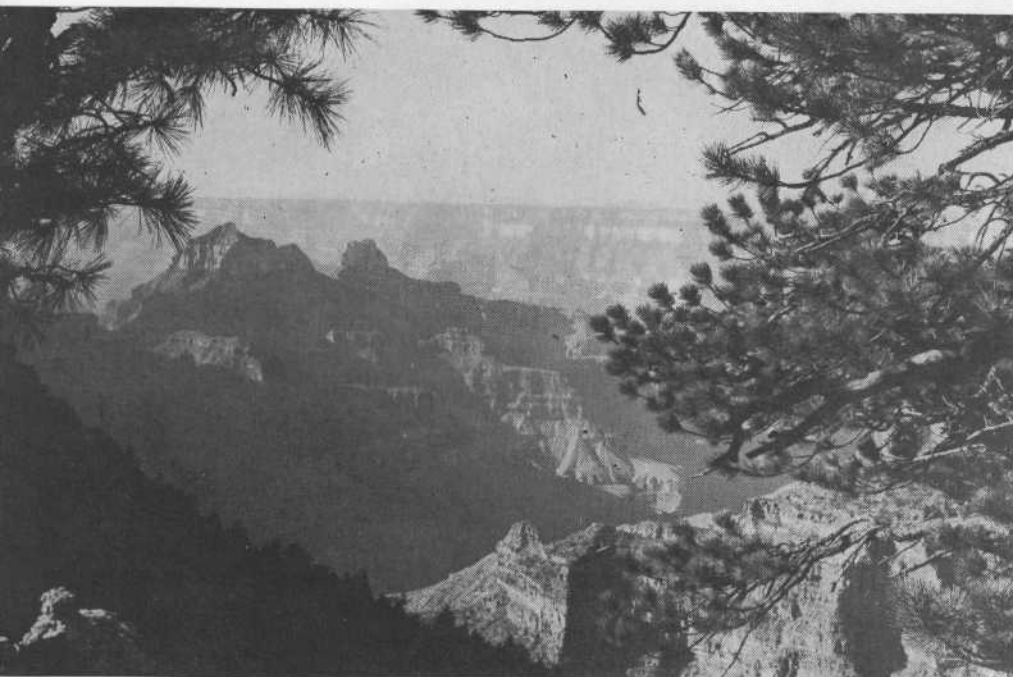
If the great majority of amateur photographers fail to get good pictures of the Grand Canyon, there must be a rea-



A fairly good picture from a technical standpoint, but would have been greatly improved by some fluffy clouds and a foliage frame.



Sidelighting here gives depth and perspective, clouds in the distance break the horizon but the composition is not good.



Excellent sidelighting and very effective framing to focus attention on the massive formation. Use of a filter to eliminate the haze would have made this picture above average class.

son. There is. In fact there are a half dozen of them, the majority of which are not obvious to the average visitor. Any one of these is sufficient to dampen the ardor of the most enthusiastic amateur, and when they gang up on the unwary camera addict who has only a few hours or a day to spend at the Canyon, it is little wonder that his silver cloud of remembrance receives a dark lining of muddy prints. It seems fairly safe to say, then, that the average snapshotting tourist who gets a set of contrast prints with clear-cut definition in which he is thoroughly satisfied is either very, very lucky, or else he can class himself as a number one scenic photographer.

But now let's get down to business and discuss the principal reasons for all of these photographic disappointments. We can then learn what may be done to overcome the difficulties if we visit the canyon again and decide to take our camera along.

In the first place, the Grand Canyon is BIG! Because Nature constructed it on such a huge scale, and because all of its chasms and below-eye-level mountain ranges occur in this same majestic proportion, the visitor cannot grasp its immensity. When he is told that the canyon is one mile deep, 10 miles wide, and 217 miles long; or when he is taken out to one of the points from which he may see the Colorado river and told that that tiny ribbon far below, imprisoned between the sheer black walls of the inner gorge, is 300 feet wide and carries an average of one million tons of sand and mud past that point every 24 hours, it is still impossible for him to realize the size.

The trouble lies in the fact that within the whole sweep of space, there is nothing familiar which he may use for comparison. It has been suggested that the Empire State building, tallest structure built by man, be moved out from New York City and set up in the bottom of the Canyon to provide a basis for contrast. One major drawback to the proposal is that, unless the site were carefully selected, it would be impossible to see the building from the Canyon rim as it would be hidden by the precipitous cliffs of the inner gorge. Four Empire State buildings, one atop another, would be required to reach from the bottom of the canyon to the level of the north rim.

But what does size have to do with photographic failures? Just this; the canyon is so big that when you try to crowd the several hundred square miles of spectacular scenery that you scan from one viewpoint upon the 10 or 15 square inches of the average negative, something important gets lost in the process. You have reversed the customary practice and have made molehills out of mountains.

Molehills are a disappointment, even to photographers.

Size plays another role in blasting the hopes of a camera enthusiast because of the distance between his lens and the formations he is trying to capture on the film. He does not realize it, but he is attempting to photograph objects from five to 50 miles away, a project which he has probably never before undertaken. This permits haze, Enemy number one of the distance photographer, to get in its deadly work. In certain lights this haze, so characteristic of the Grand Canyon, is plainly visible. In other lights it does not make its presence known but it is there nevertheless—an invisible screen, which filters out some of the light rays reflected from the majestic canyon formations so that only a weak image is recorded on the sensitive film. Particularly during the middle of the day, haze causes the mighty cliffs and terraced walls of the great gorge to retreat into an ethereal semi-visibility without depth or perspective which, although glamorous, is utterly beyond the ken of celluloid and silver. Because of this "flatness," the experts fold up their cameras and devote the middle of the day to their darkroom work. Which brings up the matter of shadows.

Without its shadow the Grand Canyon, as a photographic subject, is hopeless. Shadows bring out depth and distance. They etch terraces, outline masses, and trace the delicate details of cliff and chasm and rim thereby providing that essential element of every successful canyon photograph — contrast. Shadows make the Grand Canyon photographable.

Unfortunately, few amateur photographers avoid the pitfalls of size and haze, and flatness. Those lucky or wise enough not to attempt to carry home the whole canyon on one picture, and sufficiently fortunate to do their snapshooting when early morning or late afternoon sun provides suitable sidelighting with the essential contrast of sunlight and shadow, usually get good pictures. But there are two other factors which must be considered before really excellent photographs are possible.

One of these is color. This, for the black-and-white (and most of us are still in that stage of the game) offers a dangerous stumbling block. The reds and browns and purples and yellows in the stratified rock of the canyon provide a striking contrast to the eye—but these contrasting hues are largely lost to the colorblind film behind the lens.

Color encourages us to expect the various strata, making up the terraces of the canyon walls, to stand out from one another in the finished print as they do in our vision. Many disappointees fail to lay the blame for unsatisfactory results at the right door. Thus the better pictures, the ones we see in magazines and on the waiting room walls of railroad



Here a red filter eliminated haze and secured pleasing cloud effect, but lack of sidelighting makes picture flat, and composition is poor.



A filter has eliminated haze, but unbroken horizon, lack of shadow contrast, and effort to take in too much canyon, make it a poor shot.



This fine study in highlights and shadows was secured with an infra-red film by Josef Muench, pictorial photographer at Santa Barbara, California.

and bus depots, are made by men who understand the use of filters, and by this barrier many novices are turned aside. Without its colors, the canyon would still be grand, but without the contrast which these colors provide, a photograph of it may be drab indeed.

The artistic element of composition, so essential to better photography everywhere, is particularly difficult to obtain at the Grand Canyon because of the unbroken, flat horizon line that dominates the region. Clouds do much to relieve it, but, except during the summer rainy season, clouds are the exception rather than the rule in sunny Arizona. When present, they have an exasperating habit of being in the wrong part of the sky. Trees or their branches may be used to soften or conceal that harsh, straight horizon which some of the bolder cameramen eliminate by leaving all sky out of their pictures. In some cases a human figure in the picture will aid the composition, provide a measuring stick to show magnitude, or draw attention to the center of interest. But, unforgivable sin, never have the figure facing the camera. It is no compliment to the canyon to turn your figure's back toward it. Good composition may be made an ally worthy of the consideration of any photographer, amateur or professional.

One final problem, and one by no means limited to the Grand Canyon but characteristic of the arid section of the great West, is that of over exposure. In the filtered sunshine of coastal areas, much less light reaches the earth to be reflected through our lenses. Inhabitants of the more humid sections of our country are accustomed to making longer exposures than may be safely given in the high, dry plateau lands of northern Arizona. Thus many negatives taken home by Grand Canyon visitors suffer from over exposure.

It would seem from the pessimistic tone of the foregoing that the photographic cards of the Grand Canyon are rather thoroughly stacked against the tourist-snapshooter and that, unless he is lucky, he stands little chance of getting a satisfactory picture of the Grand Canyon and would be much better off to leave his camera at home. But the situation is not really as bad as that, for by following a few simple rules as summarized in the following, results may be obtained which will be well worth the extra time and effort expended.

1—Select spectacular portions of the scene rather than attempting to crowd the whole canyon into the picture. Build your composition around individual masses rather than trying to record small details.

2—Make use of sidelighting by being on the rim with your camera in the hours following sunrise and just preceding sun-

TRUE OR FALSE

You have to really know your Southwest to score high in this puzzle. It is a test that covers a broad field of knowledge—history, geography, botany, zoology, Indian life, and lore of the desert. If you get 10 correct answers you know more about the desert than two-thirds of the people who live on it. If you can answer 15 of the questions you are qualified to follow a pack burro and call yourself a Desert Rat. A score of more than 15 — well, no one but a Sand Dune Sage could do as well. Answers are on page 41.

- 1—One of the most poisonous insects on the desert is the tarantula.
True..... False.....
- 2—Prescott was the first capital of Arizona territory.
True..... False.....
- 3—The Smoke tree in the southwest generally blossoms in June.
True..... False.....
- 4—Laguna dam was erected to deliver Colorado river water to the Imperial valley of California. True..... False.....
- 5—The land where Nogales, Arizona is located was acquired by the United States in the Gadsden Purchase. True..... False.....
- 6—In certain parts of the southwest the white ocotillo is more common than the red. True..... False.....
- 7—El Tovar hotel at Grand Canyon was named in honor of the first Spanish conquistador to visit the Hopi mesa. True..... False.....
- 8—Panamint range is on the east side of Death Valley.
True..... False.....
- 9—Winnemucca, Nevada was named for a famous Pahute Indian chief.
True..... False.....
- 10—Over a long period of years the waters in the Great Salt Lake have been gradually rising. True..... False.....
- 11—First turquoise mines now in New Mexico were opened by the Spanish invaders. True..... False.....
- 12—The agave, or wild century plant, of the southwest generally dies after its first flowering. True..... False.....
- 13—An arrastre was a tool used by the Spaniards for hewing logs.
True..... False.....
- 14—A sidewinder is seldom more than two feet long. True..... False.....
- 15—The break in the Colorado river which filled the Salton sea in 1905-06 occurred in Mexico. True..... False.....
- 16—The Saguaro cactus and Joshua tree are never found growing together in the same locality. True..... False.....
- 17—Brigham Young brought the first Mormon colonists to Utah after the civil war. True..... False.....
- 18—The Mojave river of California is a tributary of the Colorado river.
True..... False.....
- 19—The book "Mesa, Canyon and Pueblo" was written by Charles F. Lummis.
True..... False.....
- 20—Tortoise found in the southwestern desert are hatched from eggs.
True..... False.....

set. Remember that only with shadows can you obtain the contrast so necessary to a true rendition of the depth and grandeur of the majestic scene.

3—Be prepared to cut the haze (whether visible or not) with a rather heavy filter over your lens. Use a K filter for orthochromatic (Plenichrome, Verichrome, etc.) film, and an A filter for the panchromatic films. Be sure to increase time to compensate for the filter factor.

4—Use a dependable exposure meter. If you do not have one, look up one you can rent or borrow. Inquiry at the information desk of the national park service headquarters on either rim should put you on the track of one and will also provide you with valuable information as to suitable times to visit the various view points for best photographic results.

5—Take pains in composing your pictures with particular care to eliminate as much horizontal skyline as possible. Clouds and tree branches are great aids to composition. Shifting the camera a few inches may mean the difference between a poorly and a well composed picture.

6—Don't snap promiscuously. One good negative is worth a dozen rolls of failures.

Although strict obedience of the foregoing rules cannot be guaranteed to produce 100 percent satisfactory results, the average camera fan who follows them carefully may confidently expect a much higher standard of excellence in his pictures than he would have had without this knowledge based upon photographic experience at Grand Canyon.

Forgotten Tragedy . . .

Continued from page 17

away now and in a week there won't be enough of him left to tell that any one has been here. We're none of your fancy undertakers from Tucson." With this remark and a scornful laugh, the deputies left, driving the team with the handcuffed boy between them.

There were muttered oaths in the circle of cowboys as the officers drove along and if Turner had so much as nodded his head or raised his hand, the deputies would have been left for the coyotes and buzzards. But they were officers of the law in the performance of their sworn duty, and Turner's better judgment prevented further bloodshed.

The foreman turned to his men and said, "Round up the horses and let's get moving. The cattle are filled up and rested. We have fresh horse stock and I do not wish to stay where Frank was killed. You Jose, and five more of your companions bury the boy after we leave and you can follow us later."

The Mexicans dug a shallow grave with a shovel that had been left them. There was no lumber to build a coffin, no minister, no priest in this distant corner of the desert, but the cowboys removed their sombreros and reverently crossing themselves, uttered a prayer for the repose of the boy's soul. Carefully rolling him in his blanket, covering him well, he was lowered into the grave, which was immediately filled and many boulders placed on top.

And there in that lonely and silent desert the remains of Frank Fox have rested to this day. The walls of the old adobe stage station have long since crumbled to the ground and there remains little today to identify the spot where this desert tragedy was enacted—except the mound of boulders on the bank of Carriso creek.

SEQUEL

Will Fox was released from the old Yuma penitentiary after serving four years. I visited this prison before it was abandoned—a fortress with stone walls four feet thick, with many of the cells blasted out of solid rock. There was a yard enclosed within the walls where the inmates, some of them the worst criminals in the United States, were permitted to exercise. Above on each of the four corners was a sentry box where guards armed with loaded rifles stood constantly on duty.

Will Fox went immediately to the Empire ranch in eastern Arizona and discussed matters with the ranch hands. He came there with his mind made up to kill Slankert, but the cowboys on the ranch advised him against it. They told him if he went through with his plan he would either swing for it or be a fugitive from

Sez Hard Rock Shorty of . . . Death Valley

By LON GARRISON



"Skiin'? Shucks," commented Hard Rock Shorty, "skiin' down sand dunes ain't nothin' new. Been done for years. Usta do it myself. Even seen one guy run away from the sheriff that way."

Hard Rock chuckled a bit in reminiscence while he collected his thoughts on the subject.

"Yes sir—Old Marty Mullins'd been in ever' jug in the county. He just couldn't leave red-eye alone an' after that he couldn't keep still. He was tossed in the calaboose over at Amargosa one day, an' still havin' about half a snoot full he thought it was funny to konk the sheriff with a goboon an' skip out. He headed out acrost country towards Inferno with a little posse after 'im.

"He was way ahead an' goin' good when he come out on top o' that big hill just above town here. It's all sand, kind o' steep, an' Marty started skatin' down slick as grease on a skillet handle. First thing he knowed he was really slidin'. He just come boomin' down the hill. The soles o' his shoes got so hot they melted the silica in the sand an' pretty soon he'd long strips o' glass on 'is feet. They was regular glass skis. He got up speed like a locomotive, an' come skyrocketin' into town an' was past the store here afore we much more'n seen 'im.

"Our deputy sheriff lived tother side o' town an' first thing Marty knowed he was headed right for the sheriff's office. He couldn't steer—he couldn't stop. Ker-Blam! He hit the sheriff's door, busted it down an' tumbled right in. The sheriff was settin' at his desk an' he looks up an' says—

"'Uh huh—breakin' an' enterin'—drunk an' disorderly. Marty Mullins, you'll stay so long this time you'll take root an' grow!'

Marty tried explainin' about them silica skis but they was all busted up an' he couldn't find 'em.

"'Yup,' says the sheriff, 'you musta had powerful stuff this time.' So he waltzed old Marty off to the iron cage in the back room."

Prizes to Amateur Photographers

Each month the Desert Magazine offers two cash prizes for the best camera pictures submitted by amateur photographers. The first award is \$5.00 and the second \$3.00.

Pictures are limited to desert subjects, but there is no restriction as to the residence of the photographer. Entries may include Indian pictures, rock formations, flowers and wild animals, canyons, trees, water holes—in fact everything that belongs to the desert country.

Following are the rules governing the photographic contest:

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

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

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

4—Prints must be in black and white, 3 1/4 x 5 1/2 or larger, and must be on glossy paper.

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

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

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

Contest Editor, Desert Magazine, El Centro, California.

the law the rest of his life. The brief satisfaction in killing his brother's slayer would not be worth the cost.

At first he would not listen—but he remained at the ranch several days brooding over his problem. In the end he

agreed to lay off the officer. Whether or not he would have kept this resolution if Slankert and he had met is problematical—but so far as the records show the killing of his brother was never avenged by his hand.

E. H. D.

Take a **BOOK** on your Vacation

Interesting fiction . . . Southwest history . . . illustrated guides to help make your vacation more enjoyable.

HISTORY AND GENERAL

- WITH FATHER KINO ON THE TRAIL, by Frank C. Lockwood. Published by University of Arizona. Paper bound, 142 pages and map 50c
- ARIZONA PLACE NAMES, by Will C. Barnes. Published by University of Arizona. Paper bound, 603 pages \$1.50
- ARIZONA AND ITS HERITAGE. University of Arizona publication. Paper bound. 291 pages \$1.50
- MIMES AND MINERS. Historical study of the theater in Tombstone. By Eugene Willson. University of Arizona publication. Paper bound. 207 pages.... \$1.00
- TREE RINGS AND CHRONOLOGY. By A. E. Douglass. Published by University of Arizona. Paper bound. 36 pages 50c
- HOT IRONS: Heraldry of the range. By Oren Arnold and John P. Hale. 242 pages \$2.50

GUIDES

- GRAND CANYON COUNTRY, M. R. Tillotson and Frank J. Taylor. A thoroughly accurate handbook of information covering geology, wildlife, history and recreation. 108 pages \$1.00
- DAYS IN THE PAINTED DESERT and the San Francisco mountains, a guide, by Harold S. Colton and Frank C. Baxter. Maps, flora, fauna, geology and archaeology. 113 pages \$1.00
- GUIDE TO SOUTHWESTERN NATIONAL MONUMENTS. Authoritative guide to the 26 Southwest Monuments, including personnel, location, area and facilities. Summary of history and archaeological work. Map and 29 excellent photos. 30c

CARTOON GUIDES

- CARTOON GUIDE OF CALIFORNIA, Reg Manning. Accurate and informative. Cartoon map. 138 pages \$1.00
- CARTOON GUIDE OF ARIZONA, Reg Manning. There's a laugh in every mile as you tour Arizona with this humorist. Map. 122 pages \$1.00
- CARTOON GUIDE OF THE BOULDER DAM COUNTRY, Reg Manning. Map. 50 pages 50c
- CARTOON GUIDE OF NEW MEXICO, T. M. Pearce, with illustrations by James Hall. 108 pages of amusement about this fascinating state \$1.00

Prices above postpaid in U. S. A.
3% sales tax added for buyers in California.

DESERT CRAFTS SHOP

636 State Street — — El Centro, Calif.

C A C T I

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

LUCILE HARRIS, Editor.

FIELD TRIPPERS FIND MANY CACTI IN BLOSSOM

Camping in the heart of one of the most interesting cactus areas in Southern California, a field party including members of both the Southwest Cactus Growers and the Southern California Cactus Exchange spent the weekend of April 20 and 21 in the Joshua Tree national monument south of Twentynine Palms. The trip was arranged by George Olin of the Southwest organization, and the Exchange members were invited guests.

The peak of wild flower blooming and prelude to the cactus season combined to make a memorable weekend. Rambles around the Wonderland of Rocks near the Split Rock campsite and an afternoon trip to Hidden valley produced many discoveries during the first day. The highlight was the finding of *Phellosperma tetrancistra* in fruit, their corky little seeds being examined with great interest.

Competing for brilliance were the blossoms of *Echinocereus engelmannii* and *E. mojavensis*. Neither had reached the peak of its season but the royal purple-magenta and the glowing red flowers frequently startled observers as they climbed about the rocks or drove along criss-cross roads in the monument. The mound-like clumps of both species were studded with buds which should culminate in masses of color during the middle and latter part of May.

The bright rose pink of *Opuntia basilaris* was often seen at a great distance, both on the level stretches and in rock crevices. It was near the height of its blooming, being somewhat earlier than the *Echinocereus*. A good cristate specimen was observed and photographed.

Low spreading patches of *Opuntia parishii*, almost indistinguishable from the environment, grew occasionally in the flat sandy areas. So well is it concealed by its form and coloring that one not aware of its habitat could easily walk right into its mass of stout grey spines. There were as yet no indications of bloom.

Almost missing from the landscape was one species which formerly had been plentiful—the lovely little *Coryphantha deserti*. It was found only occasionally among the rocks. Its regrettable disappearance is another spur to the strong conservation plea of the cacti lover.

The low rocky range east of Keys ranch road was the goal Sunday of those interested in photographing *Opuntia chlorotica*, a handsome tree-like species growing several feet high among huge granite boulders. Some of the finest specimens of the previously mention-

ed species occurred with it. One *phellosperma* in fruit was found hidden under dried brush.

Ferocactus acanthodes and *Echinocactus polycephalous*, not blooming, were both found but not commonly. *Opuntia echinocarpa* was one of the most conspicuous growths in the landscape. Its blooming period is also a good deal later.

Of frequent occurrence in this area was *Opuntia ramosissima*, with many and long spines but along the Quail Springs-Twenty-nine Palms road almost spineless and of a purplish red color.

Cacti clansmen are loyal to their chosen subject, but the blooming of the other wild flowers was so spectacular that even the most ardent collector expressed a genuine interest in them. The scores of species in the height of blossoming were too numerous to list, but among those most responsible for color throughout the monument were blue lupin, yellow malacothrix, white chaenactis, gold-fields, coreopsis, white tidy tips and blue chia sage.

Representing the Growers on the trip were Mrs. Florence Cariss, Ted Taylor, Waldie Abercrombie, George Olin and the families of Harry Beam, Roy Miller and Charles Place. Among the Exchange members were the president, Harold Doty, and Jack Ginter with their families, and William Bright.

...

What the Cactus Clan is doing in . . .

Los Angeles, California . . .

Annual free cactus show sponsored by Southwest Cactus Growers, June 15 and 16 at Manchester Playground, 8800 South Hoover street. Charles A. Place, show manager.

...

Seattle, Washington . . .

Washington Cactus and Succulent society, completing second year, has concentrated on new nomenclature and Borg's classification.

Far removed from the cactus belt, there are possibly 3 species in the state, according to Mrs. Harry H. Lewis. *Opuntia fragilis* grows on islands of the San Juan group and blooms in late June or July. Hillsides pink with flowers of *Pediocactus simpsonii* var. *robustior* are found along the Ellensburg-Vantage road early in May. *Opuntia polyacantha* grows along canyon walls between Ellensburg and Yakima. Its variable blossoms also appear in early May.

...

Houston, Texas . . .

Persons making a collection of native wild flowers for the herbarium are invited to exchange specimens with the American Botanical Exchange, 611 West Pierce avenue, Houston, Texas. Regulations and list of offerings free on request.

TEXAS SPECIALS . . . POSTPAID

- 10 Plants (each different) \$1.00
15 Plants (each different) 1.50
20 Plants (each different) 2.00

Lophophora williamsii, *Astrophytum asterias*, *Thelocactus bicolor* in each collection.

Fitzpatrick Cactus Gardens
EDINBURG, TEXAS

Lost Silver Mine . . .

Continued from page 6

day set for the departure for the mine he failed to appear. A searching party was started and the dead body of the prospector was discovered back of a warehouse owned by Connors. It had been a cold night and he had died from effects of drink and exposure.

Connors made several trips to the Carizo creek country but was unable to find any trace of the silver nuggets or the kaolin outcrop from which they evidently had eroded. The famous Planchas de Plata silver mine is located just across the border in Sonora and only a few miles south of the spot where the nuggets were reported to have been found by the old man. It is a historical fact that at the Planchas de Plata many nuggets of native silver were found by the Spaniards. One nugget weighed 2700 pounds. Many other weighed from 25 to 250 pounds each. But the source of the four burro-loads of rich ore remains to this day a secret shrouded in mystery.

Weather

FROM PHOENIX BUREAU

Temperatures—		Degrees
Mean for month	.....	70.0
Normal for April	.....	67.0
High on April 13	.....	95.0
Low on April 2	.....	47.0
Rain—		Inches
Total for month	.....	0.09
Normal for April	.....	0.40
Weather—		
Days clear	.....	10
Days partly cloudy	.....	10
Days cloudy	.....	10

J. M. LANNING, Meteorologist.

FROM YUMA BUREAU

Temperatures—		Degrees
Mean for month	.....	72.2
Normal for April	.....	69.5
High on April 12	.....	102.0
Low on April 3	.....	50.0
Rain—		Inches
Total for month	.....	0.00
71-year average for April	.....	0.10
Weather—		
Days clear	.....	27
Days partly cloudy	.....	3
Days cloudy	.....	0

Sunshine 96 per cent (373 hours of sunshine out of possible 390 hours).

Colorado river — April discharge at Grand Canyon 690,000 acre feet. Release from Boulder dam 615,000 acre feet. Estimated storage April 30 behind Boulder dam 22,150,000 acre feet. Increased release planned for April was called off.

PAINTER WITH A PACK SACK . . .

Continued from page 21

knew he never could go back to the subject matter of his earlier days.

He is 43 now, and the last two years have been spent almost entirely painting in the Mojave and Colorado deserts. It is here he has done his best work—and here he expects to remain.

Fritioff Persson is one of those old fashioned artists—or perhaps new-fashioned—who believe that art can be in-

teresting and modern without being insane or disgusting. He scorns the jitterbug school of modern art. It is because of his firm adherence to this viewpoint that he became a charter member of the national Society for Sanity in Art. He is now treasurer and an active crusader for the cause in the Los Angeles branch of the organization.

His time is divided between the desert and Los Angeles—but his real work is in the arid region and the finished paintings he has hanging in museums and galleries testify to his fine appreciation of the real beauty to be found in the desert.

HOW TO SEE BOTH FAIRS FOR \$90

It seems like no matter how many times we tell folks about this travel bargain, they still won't believe us. So here goes again . . .

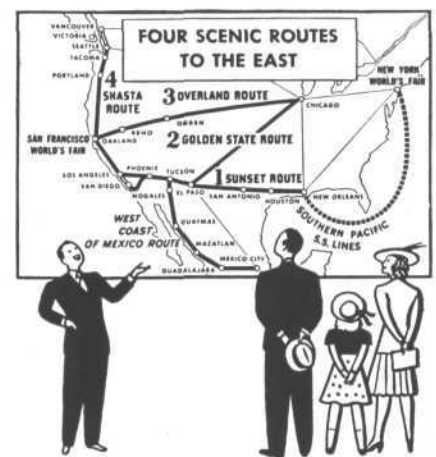
Starting from *anywhere* on the Coast, you can enjoy a "Grand Circle Tour" of the United States, including both San Francisco and New York, for only \$90 round



trip in chair cars and coaches or \$135 round trip in standard Pullmans (plus \$45 for a lower berth all the way or \$34.50 for an upper)!

For example, you can travel from your home town to San Francisco on Southern Pacific

Overland Route and on to New York (direct or via Montreal). See the great New York World's Fair with its spectacular Trylon and Perisphere, Aquacade, Futurama and all the other sights. Add Boston and Portland, Maine, to your trip for no extra cost, if you wish. Then return on our Sunset Route via romantic New Orleans, or Golden State Route through the Mexican Border country and El Paso.



and see the new World's Fair on Treasure Island (May 25 to September 29). Then speed straight to Chicago on Southern Pacific's

There's no "catch" in this bargain. Any S. P. agent will gladly arrange such a "Grand Circle Tour" for you.

Southern Pacific

SEA BREEZES OCEAN
WAVES IN COOL
CALIFORNIA
PLUS



The service of a Hotel . .
the informality of an
apartment. Pay by DAY,
WEEK, or MONTH.

CHOICE LOCATIONS

11 choice Hollywood and Wilshire locations. Whether you want the Wilshire shopping center or, perhaps, the radio center in Hollywood. Whatever your preference, you can find a Pepperdine Hotel apartment at the price you want to pay. Many with garages, coffee shops, and desk service, yet you can cook your meals and entertain, if you prefer.

ASBURY 2505 W. 6th St.



EX 4151

M. KUHLMAN,
Manager

New dining room.
Sand sun decks.
Soft water. Garage.
Central location.
Singles \$65 to \$90.
Doubles \$90. to
\$135. Daily from \$4

OTHER HOTEL APARTMENTS

The Lido, 6500 Yucca HO 2961
Gramercy, 634 So. Gramercy DR. 1281
Marsden, 1745 N. Gramercy, HO. 3981
Canterbury, 1746 N. Cherokee, GR. 4171
Cromwell, 418 S. Normandie, DR. 2261.
St. George, 1245 N. Vine, HO 1911.



Wm. PENN
HOTEL

2208 W. 8th St.

Walter Darney
Manager

Located in the beautiful Westlake district completely out of noise and traffic. No Bar. \$2.00 singles, two in room \$2.50, twin beds \$3 and \$3.50. Also family rates and low permanent rates. Write for descriptive folder

PEPPERDINE FOUNDATION

EX. 1105 Rentals 2208 W. 8th

LOS ANGELES CALIFORNIA

Mines and Mining . .

In the first census of the nation's mining industry since 1930, Uncle Sam is collecting facts and figures. Questionnaires answered by producers of copper, lead, zinc, iron, gold, silver and other quarried products will be studied, state and national reports issued.

Searchlight, Nevada

He saved the life of his friend, so Carl Myers, Searchlight miner, receives a medal from the United States bureau of mines. Myers and his partner had set a series of shots underground in the mine where they were working. First blast came before both could climb to safety. Myers' companion was knocked unconscious. Myers had made his way out of the drift, up the shaft to safety. Despite the imminent danger of subsequent explosions, he went down again to carry out the injured man.

Albuquerque, New Mexico . . .

Feature of a fiesta celebrating the long record of the San Pedro gold mine in the Sandia mountains, a 60 piece Albuquerque symphony orchestra scheduled for May its final concert of the season, to be given in the mine itself. Acoustics in the old stope, a quarter of a mile inside the workings, are said to be perfect. San Pedro is owned by John Raskob, jr., was operated in ancient days by Spaniards.

Winnemucca, Nevada . . .

In a pickle jar Stanley Gordon of Willow creek brought to town 37 ounces of gold nuggets and dust, valued roughly at \$1295. One nugget weighed nine ounces, seven pennyweight. It was worth \$325. Gordon is quoted as saying he worked 10 days to get the pickle-jar of gold.

Salt Lake City, Utah . . .

Federal bureau of mines intermountain experiment station was to be dedicated May 20 with Harold L. Ickes, secretary of the interior, top speaker. Other speakers: R. R. Sayres, acting director of the mines bureau; Dr. George Thomas, president of the university of Utah; Governor Henry H. Blood and A. G. Mackenzie, secretary of the Utah chapter of the American mining congress. Guests will inspect the various laboratories and demonstrations of work being done in the \$380,000 building. Joint sessions are scheduled for the American mining congress and local sections of the American institute of mining and metallurgical engineers, of the American Chemical society and other groups interested in metallurgical research.

Blythe, California . . .

Seven men representing U. S. Smelting, Refining and Mining company of Salt Lake City, are making geological examination and drilling tests in the 7000-acre Arizona Drift placer field seven miles southeast of here. Claims under option by the Utah concern are owned by La Posa development company, H. J. Waters of Quartzite, president. La Posa is treating about 75 tons of gravel daily, in its annual report says gravel treated last year had average gold content of \$4.05 a yard and \$1.75 was lost in tailings. A shaft 140 feet deep reaches to a placer gravel channel 150 feet wide and six feet thick.

Phoenix, Arizona . . .

Officials of the state department of mineral resources are attending a series of meetings with district councils of the Arizona Small Mine Operators association. Object is to give state headquarters better understanding of local problems and opportunities in all mining districts of Arizona. Charles F. Willis, state secretary A. S. M. O. A., says the conferences are popular with association members.

Globe, Arizona . . .

Phelps Dodge corporation has sold the famous Old Dominion mine to Miami Copper company for \$100,000, the property to be used as an auxiliary water source. Old Dominion started its history in 1870 as a silver mine, became a copper producer about 30 years later. In 1907, 2900 men were employed. The number dropped to 800 in 1931. After 20 years operation the Old Dominion smelter closed in 1924, concentrates then going to Miami for smelting. Ore was high grade, but it cost too much to keep the mine free of water. The mine was closed in October 1931. Since then chief activity has been the job of supplying the city of Globe with water.

Nevada City, Nevada . . .

Mining in Nevada county 75 years ago has been studied by W. P. Davis of Valley gold mines, for historical review of local gold production. In 1865, according to Davis, more than 3000 men were working in this county's quartz and placer mines. Today 2500 are employed. Wages for hard-rock miners in 1865 averaged \$3. per day, less than 3/5 of today's scale. Few miners were paid more than \$1000 annually then. Average yearly wage now is about \$1800.

Payson, Arizona . . .

Two shifts are working daily at the Ord mercury mine on Salt creek, where the mill is being reconditioned to handle larger tonnage. Daily capacity has been 30 tons of ore.

Randsburg, California . . .

Under the constable's hammer the White mine in the Stringer district south of here was sold the other day for \$1525. Once the property brought \$250,000 under lease and bond to one of the partners in the Yellow Aster.

HEADQUARTERS FOR

HIKER'S SUPPLIES

- Bass Hiking Shoes. • Canvas Shoes.
- Sleeping Bags. • Air mattresses.
- Knapsacks. • Light Weight Tents.
- Coleman Camp Stoves. • Clothing.
- And Hundreds of other Items.

Van Degrieff's Hike Shop

607 W. 7th St. — Los Angeles, Calif.

Gems and Minerals

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

—ARTHUR L. EATON, Editor—

SPARKLING MINERAL EXHIBIT SEEN AT SANTA BARBARA

Resolutions condemning the practice of gathering mineral specimens in truckloads, and urging members on their field trips to respect private property, were among the highlights of the fifth annual convention of the California Federation of Mineral societies at Santa Barbara April 20-21.

An unusually fine collection of specimens was assembled for the inspection of those who attended the convention, including both private and commercial exhibits. Among the interesting items were a 35-pound topaz from Brazil and an extensive display of iron kidney ore from Cumberland, England.

The convention opened Saturday morning at eight with registration of members and guests in the corridor of Santa Barbara's beautiful museum of Natural History. Five hundred and twenty registered the first day, and Sunday's attendance was greater.

The museum auditorium was devoted to the federation exhibits. Several cold quartz lights were arranged with automatic switches so that observers could see how the minerals looked with and without the ultra violet ray. Besides minerals, black locust wood was shown to be fluorescent. Fossils from Imperial Valley were discovered to fluoresce, some bright green and others yellowish pink. A majority of the collectors are by now familiar with black light, but nevertheless get as much thrill out of it as do those seeing the living colors of fluorescent minerals for the first time.

Mineralogical societies in all parts of California sent exhibits. The individual and society exhibits were augmented by interesting commercial displays. Warner and Grieger of Pasadena showed the huge topaz crystal and the framed "scenery" pictures constructed of polished and uncut tourmaline crystals from San Diego county. E. P. Mattheson of Arizona had copper from the Bisbee mines, beautiful chrysocolla and rare chalcotrichite. There were agate nodules from several localities, and opalized wood from Nevada. Stewart and Calvert had Mexican minerals on display.

Some unusual mountings appeared. Sequoia club has done excellent silver work. Albert Quinsel of Santa Barbara has set polished stones as centers in carved wood flowers, using buckthorn, cascara and other native shrubs.

Interest is increasing in agate nodules, called thunder eggs. Indian legend has it that these spherical stones are the eggs of the Thunder Bird—hence the name. When cut and polished, thunder eggs disclose centers of picturesque beauty. It takes little imagination to see ocean caves and landscapes. Perhaps the most unique "picture" was a realistic map of the United States in the Imperial Valley club's collection. As it was a California rock, however, Florida was omitted.

Probably the most active people at the convention were the "swappers." Many rocks changed ownership.

Both days, from 10 in the morning till 4:30 p. m., Fred Young of Portland, Francis Sperisen of San Francisco, and Jess Abernathy of San Gabriel conducted a lapidary round table, answering polishing problems and demonstrating cutting, polishing of cabochons and flat surfaces, and the shaping of spheres.

The delegates held their annual meeting and election of officers at a luncheon in the Margaret Baylor Inn Saturday noon. Ernest Chapman, president, presided. The Golden Bear nugget was on view at the luncheon. It is now paid for in full, and becomes the property of the federation. The delegates voted that the Nugget be kept in a safe place and displayed only by permission of the board of directors.

The officers elected for the coming year are: C. D. Woodhouse, Santa Barbara, president; Paul Van der Eike, Bakersfield, vice-president; Kenneth D. Garner, San Bernardino, secretary-treasurer (re-elected).

Unanimously accepted was the invitation of East Bay Mineral society of Oakland to meet in Oakland for the 1941 convention.

The social event of the convention was the annual banquet held in the Restaurant del Paseo Saturday evening. At this time the new officers were installed. Mrs. John Melhase, wife of the late John Melhase, one of the founders of the California Federation of Mineralogical societies was introduced to the group.

Mr. Maher, mayor of Santa Barbara, gave the address of welcome. Ernest Chapman, retiring president, received a gift of appreciation from the society. He recounted the history of the Golden Bear nugget and awarded prizes to winning amateurs. An interesting and profitable mineral auction concluded the meeting.

OAKLAND PLANNING BIG CONCLAVE NEXT YEAR

According to a letter from Olin J. Bell, president of the East Bay Mineral society at Oakland, which will be host club to the California federation in 1941, plans already have been started to make the event outstanding. Bell writes:

"While it is yet too early to make a definite statement, from the way the straws are beginning to blow I would not be at all surprised to see the coming convention turn into a Pacific coast conclave. Happily we are able to house and handle almost any sized convention, so there are no problems in that respect.

"The exact dates of the convention are to be decided in the next few days, probably near the end of April or the first of May."

STAUROLITE FOUND IN UTAH MOUNTAINS

Frank Beckwith, editor of the Delta, Utah, Chronicle, writes that "Fairy stones" (staurolites) are found near Topaz mountain, 50 miles northwest of Delta. These crystals occur only on or near old mountains, and Topaz mountain is a hill of rhyolite formed in early geologic time.

Staurolites are not plentiful in the Topaz mountain district. Those found have been of the double Greek cross variety, averaging less than an inch in diameter. Most of them are completely weathered from the matrix.

Visitors in Beckwith's office are prone to believe that his fairy cross is a fake—that is, not a natural formation but something he himself has made.



Jewel Craft Inc.

Expert Gem Cutting

Hand-Made Jewelry
to fit your gems.

704 S. San Pedro — Los Angeles, California

OREGON QUARTZ MINERALS

Private collector must sell accumulations and duplicates—agates, Jaspers, Tree Casts, Geodes, Nodules, Very Colorful. Sawed Halves or Slabs any thickness from 1" to 6" diameter—Polished or unpolished. Sent on approval if desired or if in Portland look me up. Save yourself time and costs of trips to deserts as my materials are all selected. Can furnish in rough from 10c to \$1.00 pound, F. O. B. Portland.

E. H. ROCKWELL

2503 N. E. 41st Avenue
PORTLAND, OREGON

MINERALS & THEIR STORIES

24 different economic minerals in very attractive box with a 48 page booklet of stories of these minerals at \$1.25, postage paid.

PROSPECTOR'S SET — 50 SPECIMENS
in 1x1" compartments in sturdy, cloth covered, hinged lid box for \$2.00, postage 25c. Visitors say our store has the largest stock of minerals, the best display and lowest prices west of the Rockies.

Headquarters for fluorescent lights and minerals.

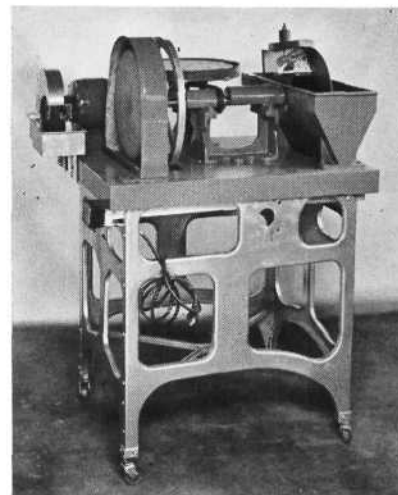
STORE OPEN ON AFTERNOONS ONLY
INCLUDING SUNDAY BUT CLOSED ON MONDAYS.

PACIFIC MINERAL MART
637 Redondo Ave. Long Beach, Calif.

CRAWFORD'S

COMPLETE

COMBINATION SAW, LAPING
AND POLISHING MACHINE



Complete Machine \$100.00
(Plus Tax in California)

F. H. CRAWFORD

WRITE FOR DETAILS — — —

922 N. Golden West Avenue
ARCADIA, CALIFORNIA

MINERALIGHT

Special 6-Volt Portable Sets for field use and the prospecting and mining of . . .

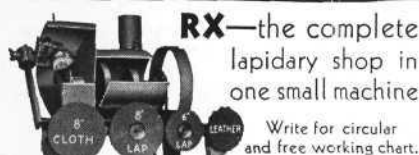
SCHHEELITE

This high power source of Black Light causes the fluorescence of more than 100 minerals.

—Send for new catalog and free list of fluorescent minerals. Dept. G-17.

ULTRA-VIOLET PRODUCTS INC.

6158 Santa Monica Blvd., Los Angeles, Cal.



RX—the complete lapidary shop in one small machine

Write for circular and free working chart.

W. A. FELKER 3521 Emerald St., Torrance, California

INVESTIGATE

BEFORE INVESTING IN LAPIDARY MACHINERY

If you are interested in doing gem cutting and specimen polishing, we invite you to inspect our complete line of machinery.

VRECO DIAMOND SAW UNIT

Complete sawing outfit with 12 inch diamond saw and motor. Operating costs 1c per sq. inch of sawed surface.

\$39.50 F. O. B. Pasadena

If you have never seen a diamond saw demonstrated, you have a thrill in store for you. Average cutting time 1 minute per square inch.

COMPLETE LAPIDARY BENCH

Includes diamond saw, 2 grinding wheels, 2 sanders, polishing buff and motor. All built on one bench. All supplies included.

\$154.50 F. O. B. Pasadena

BEGINNERS GEM CUTTING OUTFIT

Grinding wheel, sanders, and buffs. Complete with motor.

\$50.00 F. O. B. Pasadena

COVINGTON LAPPING UNITS

See these units demonstrated at our display room. All units available from our stock. These lapping units available with sphere cutting attachments. This interesting phase of gem cutting will be demonstrated on request.

Also a complete stock of grinding wheels, sanding cloth, polishing compounds, and saw blades. List on request.

SPECIAL ZIRCON OFFER

White, Blue, and Golden Zircons at least 1 carat each. Facet cut brilliant and fiery gems.

3 cut gems for \$1.00

25c GRAB BAG SPECIALS

White, blue, or golden Zircon facet cut gems of 1/2 - 3/4 carats. Facet Cut Green Arizona Peridot. Red or Yellow Tiger Eye—polished spec. Polished Howlite Nodule-California. Polished specimen Arizona Turquoise. Facet cut 1/16" Green Garnet. Polished Oregon Thunder Egg. Petrified Wood Limb—end polished. Holbrook Stony Meteorite. Generous piece Gem Tiger Eye. California Lapis for cutting. Banded Brazilian Agate for cabochons.

25c Each or

14 different items for \$3.00

When you are in Pasadena be sure to visit our shop. Ninita Parkway is one block east of the intersection of Hill Avenue and San Pasqual Streets.

Warner and Grieger

405 Ninita Parkway — Pasadena, Calif.

AMONG THE ROCK HUNTERS

Recent excavations of Indian burials in Arizona have yielded a few small copper bells, evidently traded from old Mexico. The tiny bells are of pre-Columbus type.

"First organized Mineralogical societies must build firm foundations so that those who come after may build as high as they wish." — John Melhase, first president of California Federation of Mineralogical societies.

W. I. Stewart, of Glamis, California recently found some large specimens of semi-translucent agate. It is not all distinctly of gem quality, but brilliant red lines make some of it quite attractive.

Some Imperial valley fossil shells are highly fluorescent.

Harry Winson will exhibit the famous two million dollar diamond Mineral day at the New York fair.

Frank Garaventa, Carson City, Nevada, has been appointed by the governor to make collections of Nevada minerals to be exhibited at the New York and San Francisco fairs.

Avery Eaton, Box 353, Holtville, California, wishes to trade Imperial Valley fossils for fossils from other parts of the country.

An interesting formation was discovered recently by "Happy" Sharp, collector and dealer, and W. C. Davis of San Diego. The specimens are being displayed at "Happy's" place just west of Jacumba, California. They closely resemble fossil barnacles. A chemical test, however, proves the specimens to be pure calcite. A strong hand lens shows them to be formed of half rounded blades of calcite, grouped in such a way as to have a more than superficial resemblance to the sea shells. Also, one can easily see dog tooth spar crystals between the layers of a broken blade.

Ralph Sorin, of the California highway department sent in some fine calcite crystals, which were found just south of Dixieland. These crystals are of the dog-tooth spar variety, but their chief interest for many will be found in the fact that most of them are complete, doubly terminated scalenohedrons. Dog-tooth spar is common in the desert, but single, perfect, and doubly terminated crystals are rare.

Roger and Philip Griffin, two Holtville high school boys, made an interesting find near Glamis, California. In small cavities in the Basalt lava were clusters of tiny quartz crystals. These are as clear and colorless as the finest "Herkimer Diamonds." Their luster is very brilliant. In the space of one or two square inches, there are at least one hundred slender, fine crystals, some of them having rare shapes, such as twins, etc.

Plainfield Mineralogical society is defraying the expenses of distributing correspondence paper to all members of the committee for Mineral day at the New York World's fair.

San Diego Mineralogical society and the Imperial Valley club are planning joint field trips. The valley group will go to the mountains during hot weather, and the coast society will visit the valley in the winter.

Gem Collectors club of Seattle, Washington, has elected the following officers: Lew D. Leader, president; E. K. Brown, vice president; Mrs. Lloyd L. Roberson, secretary; Miss Bernice Baes, treasurer; M. H. Strouse, director.

Kern County Mineral society has elected the following officers: Wiley O'Guinn, president; Leo Jarvis, vice president; Glendon J. Rodgers, secretary; Dr. M. J. Groesbeck, director; Joe Rountree, curator; T. V. Little, field scout. Their delegates to the Santa Barbara convention were Paul Van der Eike and T. V. Little. Van der Eike was elected vice-president of the Federation. At the April meeting of the society a representative of the State forestry department gave an illustrated talk on conservation. April field trip was made to Erskine creek section.

MONTANA PROFESSOR DISPLAYS INTERESTING COLLECTION

H. E. Murdock, professor of agricultural engineering at Montana state college, who recently addressed the Montana society of Natural and Earth Sciences on fluorescence, has an interesting and varied collection of Indian artifacts, fossil bones, rocks and other curios in his home in Bozeman, Montana. He has a basement room arranged to display Indian material and fluorescent minerals. This "cave," entered through a small aperture, contains two Indian burials and other Indian trophies, besides many fluorescent rocks.

Murdock's collection was started over 50 years ago in the moundbuilder territory of Ohio. Ten years later Indian material was obtained near Aztec, New Mexico, but most of the Indian relics were gathered in Arizona. The beautiful "picture rocks" came from the Horseshoe hills of Gallatin valley.

Mineral Day World's Fair

Mineral Day at the New York 1940 fair is June 17. The purpose of Mineral Day is to create more interest in the subject of mineralogy and allied earth sciences. The event is non-commercial. It will publicize the mineral resources of each state and the countries of the western hemisphere, with special emphasis on the place raw geologic materials have in the economic system; gems and mineral oddities; and strategic minerals for national defense.

Fair visitors are divided into three groups: fans, non-scientific curious and engineers, chemists etc., so the program will offer scientific entertainment for collectors and something of broad general interest for others.

BIRTHSTONES

June — Pearl

Chemically pearls are very humble, being only aragonite, a form of limestone. Their luster is due to light refraction from the edges of alternate layers of aragonite and membrane. Pearls appear in 12 distinct colors, and often with a sheen and luster which are so beautiful that they place these gem stones among the most precious of all stones.

Since prehistoric times, pearls have been regarded as the stones peculiarly fitted by Nature to adorn feminine beauty. Nearly every reigning beauty of all time has had her rings and necklaces of faultless pearls.

Other stones frequently used as birthstones for June are agate and moonstone.

Cogitations . . .

Of a Rockhound

● Rockhounds loves nacheral scenery as they dislikes to see it cluttered up with tin cans an eggshells n' such. True rockhounds always cleans up their campgrounds, burning papers n' burying other junk. It sorta spoils the delight o' the outdoors to be confronted with a mess of garbage where you wants to pitch your tent. An it seems that careless campers dumps or leaves their trash in all the beautifulest spots. Its almost tragic to have that exalted "we were the first" feeling shattered by a sardine can.

● It ain't like the flu ner measles, but it sure is catchin. You maybe gets it from a bug bite, or through your eyes an ears. Anyhow, "Rockhounditis" is a disease that's goin roun, an once you has it, recovery is practically uncertain. It gets in yur blood an yu can't shake it. Yu don't wantta. Rockhounditis is infectious. Yu don't hardly have to get near a rockhoun but what yu takes it, an it impels yu to leave yur comfortable home an hunt rocks. Yu begins to wish yu didn't have to work, an yu spends more n' more of your spare time crawling over the scenery. Howsoever, Rockhounditis is one of the pleasantest maladies.

● Rockhouns is just about the honestest people ther is. They'd no more think uv takin the other fella's specimens than as if the rocks was locked up in the Kentuck place where Uncle Sam guards his gold. Every rockhoun knows his own specimens most bettern he does his own childurn, an each rockhoun does such individual work polishin that he don't need no trademark.

GEM MART

Advertising rate 5 cents a word,
\$1.00 minimum an issue

SIX GOOD FLUORESCENTS—Sweetwater Agate, Eden Valley Wood, Dakeite, Wernerie, Autunite, Opal. All prepaid, with list of minerals, for \$1.25. Wyoming Minerals, Box 266, Laramie, Wyoming.

AGATES, Jaspers, opalized and agatized woods, thunder eggs, polka dot, coprolites, and other specimens. Three pound box \$1.25 postpaid. Jay Ransom, Aberdeen, Wash.

ROUGH AUSTRALIAN OPAL. Direct to you. The low rate of exchange of the British Pound Sterling enables us to offer Opals suitable for cutting ring sets from One Dollar up. Fine quality cut opals to responsible parties on approval. Satisfaction or refund. Please add postage 15c all orders. Plomosa Gem Co., Box 145, San Gabriel, Calif.

(1) STAR SAPPHIRE cutting pebbles, crystals Ceylon, 10c, 25c, 50c each. (2) Green Smithsonite for cutting and specimens, Cabochon size 50c - \$1.00, from old find. (3) Tri-state (Joplin) district, select specimens extra fine, 50c up. Stamp for lists. Will buy fine cutting material. Glenn H. Hodson, 711 Prospect, Elmhurst, Illinois.

FRIENDS.—We'd rather make friends than money. Everything for the Collector or Lapidary. Prices to suit all. Lapidary and silverwork to order. Write The Colorado Gem Co., Bayfield, Colorado.

Misnamed Minerals

"Arizona Rubies"

In recent years, the public has been given false ideas of identity and value by the use of the above term. True rubies of gem quality are not found in Arizona. The stone sold under the name of "Arizona ruby" is a red pyrope garnet usually of good quality but of inferior value.

Fine rubies come mostly from Burma or Ceylon, in Asia. They are pure alumina or corundum, of the sapphire family. Their hardness is nine, while "Arizona rubies" or garnets are only slightly above seven. Real rubies are doubly refractive. The term "Arizona ruby" is misleading and its use hardly can be sanctioned from the standpoint of business ethics.

• • •

THOUSAND OF HOBBYISTS VISIT SALTON SEA FIELD

Since the publication of John Hilton's map and story of the gypsum and alabaster field north of Salton sea, in the March '40 issue of the Desert Magazine, literally thousands of collectors have visited this field.

Most of the gypsum crystals on the surface in the area close to the North shore highway have been picked up. However, for those who do not mind hiking farther afield excellent specimens of the golden fluorescent gypsum may still be found. There is still much alabaster in this area and it hardly is likely this will be exhausted as the veins extend to considerable depth. Little loose material is available, however.

The extrusive veins and outcroppings in this area will prove interesting to the real student of mineralogy. For the collector, however, who merely is looking for a sackful of specimens for the rock garden, the field will prove disappointing.

As was stated in Hilton's original story, this field is of no interest to the commercial collector. Rather, it offers the amateur hobbyist the opportunity for an enjoyable day in the desert sunshine—and a few samples of rather novel material.

• • •

SUPERSTITION

The pearl fishers of Borneo save every ninth pearl, put the pearls in a bottle with twice their number of grains of rice, and stopper the bottle with the finger of a dead man. The pearl fishers believe that, under these conditions, the pearls will produce offspring.

• • •

ROCKHOUN'S WIFE

BY LEO DE CELLES

(Dedicated to Laura De Celles, his wife)

It's tough to be a rockhoun's wife,
Believe you me I've led the life,
He goes out often to hunt for rocks,
While I'm left home to mend his sox.

He leaves home early and comes back late,
He fails to kiss me at the gate.
He always says "When I come back
I'll bring you rubies in my sack."

"Oh, yeah!" thinks I, "I wish 'twere true"
But it isn't, I'm tellin' you.
I have my rubies yet to see.

If you're a rockhoun's wife, you'll agree
with me.

(Mrs. De Celles found this on the kitchen sink one morning after her husband had left at 4:30 a. m. on a collecting trip)

GEM MOUNTINGS

I have just installed complete new gem cutting and polishing outfit. Now equipped to cut, polish and mount your favorite gem stones. Gems made into RINGS, BROOCHES, or BRACELETS with antique or Sterling Silver mountings. Write for estimate cost.

ROY OLIVER

621 Main Street — El Centro, California

LEARN to POLISH GEMS

Send for our free catalog on information in regards lapidary supplies, rough cutting material, drilling stones, diamond saws and blank mountings.

SMITH AGATE SHOP

228 S. W. Alder St. Portland, Oregon

COVINGTON'S



16" LAP UNIT

Comes assembled ready to use. Table has strong steel angle legs and motor bracket. 16" balanced lap plate is removable so you may have separate plate for each grit. (Less motor)

\$34.90

Dealers Wanted

COVINGTON MACHINE SHOP
REDLANDS CALIFORNIA

CANADIAN MINERAL SPECIMENS

Tantalite, xls in Microcline \$2.50
Electrum, in gold ore 2.50
Loadstone magnetite 2.50
Only the best. Send for my complete list.

L. C. DeKOCK
KENORA, ONTARIO, CANADA

IN BUSINESS FOR YOUR PLEASURE . . .

MOJAVE DESERT ROCKS AND MINERALS

FOR SALE: Lapidary equipment, ULTRA VIOLET Lamps, the Mineralight, and Shannon, Crude Gem Material, Cut Gems, Polished Specimens.

• A Fine ULTRA-VIOLET display free, also a Free Rock and Mineral display, Will trade.

CLARENCE H. DILLON

Box 1813, Route 1, Barstow, California
5 miles southwest of Barstow on highway 66

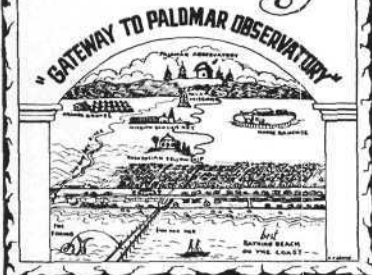
HILTON'S Art and Gem Shop

JOHN W. HILTON, Owner

ON U. S. Highway 99, Ten
Miles South of Indio

ACROSS FROM VALERIE JEAN DATE
SHOP. P. O. ADDRESS, THERMAL, CALIF.

Oceanside, Calif.



VACATION AT OCEANSIDE this summer — a delightful city of homes. Two miles of sandy beaches for bathing. Surf, deep sea, pier and nearby lake fishing. Also the home of the old San Luis Rey and Pala Missions.

Come for a week, the summer or to make your home in this modern, thriving community.

For further details or folder, write —
CHAMBER OF COMMERCE
Oceanside, California



Our Customers are asked to
watch for New Appliance
Announcements.

NEV-CAL ELECTRIC

(Pioneer Power Company)

WESTCRAFT



A Luxurious Home Anywhere . . .

The great outdoors is more enjoyable if you live in comfort! New models 16, 18, and 21 ft. long. Travel the modern, streamlined Westcraft way!

WRITE FOR FREE CATALOG

ADDRESS DEPT. G

GEORGE T. HALL

SO. CALIFORNIA DISTRIBUTOR

5614 West Washington

Los Angeles — — — California

HERE AND THERE

. . . on the Desert

ARIZONA

Grand Canyon . . .

Legendary dwarf horses actually live in a tributary of the Grand Canyon, says Jack Tooker, railroad engineer. Tooker reports he trapped two of the tiny animals in a canyon 20 miles west of here. Arthur Beloit of Buckeye, Arizona confirms Tooker's account of the capture. Beloit says he inspected and measured the horses. A mare, he said, was between 6 and 7 years old, weighed 80 pounds and was 30 inches tall. Her colt was just under one year old, weighed 19 pounds and was 14 or 15 inches tall. National park service officials are investigating. Skeptical scientists have made several unsuccessful expeditions in search of the midgit horses.

Flagstaff . . .

By presidential proclamation 115,000 acres of the Grand Canyon national monument will be returned to the public domain. The area comprises about one-half of the monument acreage north of the Colorado river in Mohave county, will be included in Arizona grazing district No. 1, according to Senator Carl Hayden.

Tucson . . .

Bones of a prehistoric mastodon have been uncovered on the Papago Indian reservation west of here. Lower jaw with teeth in place, bones of a foreleg and ribs have been exposed. Earth covers remainder of this skeleton of an extinct species of elephant which may have lived in an age when this region of southwestern desert was a land of bogs and marshes left when an ocean dried up. Papago Indians say the mastodon hypnotized people, then ate them. The beast was destroyed by "Little Etoi," if you believe a Papago legend which relates that Etoi was eaten but cut out the monster's heart and then crawled out through a hole he carved in the mastodon's side.

Phoenix . . .

Arizona's Colorado river commission announces tentative agreement with California and Nevada on division of the river's waters. If Arizona ratifies the Santa Fe compact and the agreement is approved by three state legislatures and by Congress, an 18-year-old water war will end.

Springerville . . .

Gustav Becker, 83-year-old pioneer of Springerville, Arizona, died May 2 following injuries received when he was struck by one of his own trucks driven by his nephew. Becker came to eastern Arizona in 1876 and among the early day adventures attributed to him is a personal encounter with Ike Clanton in which the notorious Arizona badman got the worst of it. The Becker Mercantile company founded by Gustav and his brother as a little trading post, is now one of the largest business institutions in eastern Arizona.

Flagstaff . . .

From June 29 to August 10, the northern Arizona geological summer school will be held at the L. F. Brady camp at the foot of Elden mountain five miles east of here. Sponsored by the museum of northern Arizona and the state teachers college, the school will be open to male students. Special field and laboratory assignments, field trips and required reading are scheduled.

Seligman . . .

One of the largest ranches in the southwest, the 275,000-acre Double O, has been bought by the Tovrea Packing company of Phoenix. Price was "in excess" of \$250,000, according to Phil E. Tovrea, president of the packing company. Northern boundary of the ranch extends for 22 miles along the Santa Fe between Seligman and Pica. The property is completely fenced and cross fenced and it is 252 miles around its fence line boundaries. Seven thousand head of Tovrea cattle will be ranging on the Double O by June 1.

Tucson . . .

In 20th annual meeting, southwestern division of the American association for the advancement of science elected C. V. Newsom, of the university of New Mexico, to serve as president. More than 200 scientists came from five states to attend the sessions here. Among papers presented was a report by Frank Cummings Hibben of Albuquerque, on discovery of evidences of prehistoric man along with remains of sloth, mastodon, mammoth, horse and camel in the Sandia cave near Bernalillo, N.M. Ethnologists listened to speakers who declared it a "pity and a shame" that the United States has waited so long to realize the importance of studying "economics, social and political setup," of the Indians. W. W. Hill said government jobs and regular wages for the Navajos mean "the earnings have been spent on useless luxuries like silk shirts and cars they can't afford."

CALIFORNIA

Barstow . . .

Driest area on the North American continent is between Death Valley and Mexico, the region including the Mojave and Colorado deserts. This is the finding of Dr. W. Gorczynski, who has made studies for the university of California on aridity in the southwestern sections of the United States. Abrupt increase in aridity coefficient is noted in travel from the Pacific coast to desert points. Avalon on Catalina Island has an aridity of only 2 per cent; Calexico and Yuma over 40 per cent; at Bagdad on the Mojave aridity is 70 per cent. California's Bagdad is drier than the Australian desert with 60 per cent and within 10 per cent of the Arabian desert's 80.

Calexico . . .

Rescued after being lost on the desert four thirsty days in Mexico south of here, 70-year-old Mrs. Bessie Bowman wants to resume her search for fabled Spanish treasure. During her wanderings on her recent quest for gold, the aged woman says the only water she drank came from the pulp of barrel cacti. Louis Selby, mining man, had an ancient map purporting to show where a mission padre buried treasure more than 10 years ago. Their expedition came to grief when their automobile broke down.

Brawley . . .

Western Air Express has filed application in Washington for authorization to operate two new routes, from San Diego to Phoenix and Imperial airport to Los Angeles. WAE president William Coulter says morning and night schedules are proposed for air mail, passengers and express.

Indio . . .

United date growers association of Coachella valley will sponsor an exhibit of dates at the Golden Gate exposition in San Francisco opening May 25. A booth in agricultural hall will be devoted entirely to Coachella products.

Independence . . .

Two of the original 20-mule team borax wagons of famous Death Valley days are on their way across the continent to be displayed at the New York World's fair. In 1917 "Borax Bill," mule skinner extraordinary, drove one of these wagon trains from Oakland eastward, reaching New York two years later. Each wagon weighs 7800 pounds, has a load capacity of 30,000 pounds of borax and carries a 1200-gallon water tank. Water was needed for men and mules on the 162-mile haul from Death Valley borax deposits to the then nearest railroad point at Mojave in the years when the 20-mule teams captured public attention.

Palm Springs . . .

Fire believed to have started from a cigarette dropped by a Sunday visitor roared out of control in scenic Palm Canyon April 21. Before the flames were subdued the Cregar Indian trading post was destroyed, four persons were injured and dozens of sightseers were compelled to climb to high ridges for safety. Many of the stately palms in the canyon were burned when windfanned flame touched their dry skirts.

Holtville . . .

Bones found in a drain ditch near here have been identified as remains of the extinct river horse, which lived in this region about three quarters of a million years ago. Identification was made by Johann Wolfgang von Goethe, II, according to the Holtville Tribune.

Niland . . .

Building material has been placed at the site of a proposed dry ice plant about three miles west of here on the main line of the Southern Pacific rr. It is announced that the plant will have a daily capacity of 100 tons. The operating company owns 2200 acres of land in the vicinity, says it has three wells producing carbon monoxide, from which dry ice is made.

NEW MEXICO

Santa Fe . . .

Commemorating the 2,000-mile march of the Mormon battalion of infantry from Leavenworth to San Diego in 1846, a 22-foot column will be dedicated May 30 on Highway 85, thirty miles south of here. The monument was built of stone gathered from all parts of New Mexico, bears a bronze plaque, is six feet square at the base. A cast iron wagon wheel tops the shaft.

Albuquerque . . .

New Mexico's illiteracy rate of 13 per cent will drop to 9 per cent in the 1940 census, predicts Dr. J. T. Reid of the state university.

Seboyetita . . .

In April the people of this community—its name means "little, little onion"—in a gala fiesta celebrated the burying of the hatchet with their ancient enemies the Navajo and their alliance of many years standing with the Laguna Indians. Often the Lagunas came to aid of the villagers when the Navajo swept down in fierce raids. Differences with the Navajo continued until as recently as 1933, when a boundary dispute was finally settled.

Anthony . . .

After May 1 Anthony will belong to two states. Post office department decrees the official address thenceforth will be "Anthony, N. M.—Tex." The town is on the state line north of El Paso.

Silver City . . .

"One of the outstanding successful business groups of the country." That's how the Indian bureau describes the Jicarilla Apaches of New Mexico. In recently approved leases to permit oil drilling on the reservation, 733 members of the tribe pooled individual holdings. Income from any oil discovery will be tribal property. At present most of the tribe's money comes from stock raising.

Santa Fe . . .

School children here gave a party in honor of Rex, a collie who helped to rescue one of them. When little Charles Childers was lost on the desert of Rowe mesa, the dog's barking directed searchers to the child. Rex was presented with a medal, a collar and a case of dog food.

Hot Springs . . .

Contracts for sale of half the power output from the Elephant Butte hydroelectric project on the Rio Grande here have been approved by the reclamation bureau. El Paso will take 40,000,000 kwh annually for 20 years. Las Cruces engages to use 6,000,000 kwh each year for the same period. El Paso will pay \$140,000 a year.

NEVADA

Boulder City . . .

This model town built by the government will have a new high school. Secretary of the interior Harold L. Ickes has awarded a contract for construction of the building, to cost \$50,444. Boulder City was founded to provide homes for the army of workers during construction of Boulder dam, and now ushers hundreds of thousands of visitors annually to that great structure across the Colorado river.

Tonopah . . .

Nevada apparently has lost its chance to win favorable action on a proposal to establish an army air corps bombing range in Nye county. Army officials announce selection of a million acre area in western Utah south of Bonneville flats to be used for army bombers practice. A part of the approved location is said to be owned by the state of Utah, most of it is under control of the department of the interior. Col. Clarence Tinker of the war department board, is quoted as saying the range is rectangular, 35 miles wide and 60 miles long. Utah has agreed to trade 225,000 acres in the range to Uncle Sam for an equal parcel of land in another part of the state.

UTAH

Salt Lake City . . .

The state park board has taken action to protect Utah's paleontological and archaeological riches. Permits will be required before any scientific excavation work may be undertaken and these permits will be limited to highly qualified applicants.

Cedar City . . .

Organization of the Cedar City aviation club has been completed with election of President Wendel H. Paulson. Richard Bates will be flight manager and instructor.

Delta . . .

Thirty-six trees have been planted and a fence has been built around the pioneer monument at old Fort Deseret. Improvement of the old landmark was sponsored by the Deseret Camp, Daughters of Utah Pioneers.

COOLED BY REFRIGERATION

*Plan your Desert trip
for a stop at . . .*

Barbara Worth Hotel



*World famous
hotel in the heart
of the desert at
EL CENTRO,
CALIFORNIA*

200 cool luxurious rooms where there is always quiet and relaxation for the traveler

— RATES FROM \$2.50 —

BARBARA WORTH HOTEL created in the atmosphere of Harold Bell Wright's famous novel of the same name, is the ideal overnight stop on the long desert span between Phoenix and Los Angeles.

— Garage in connection —

Barbara Worth Hotel

El Centro — — — — — California

FRED FERGUSON, Manager

ATTENTION VISITORS TO RAINBOW NATURAL BRIDGE NATIONAL MONUMENT

RAINBOW LODGE is a quiet, comfortable retreat for those who visit nature's magnificent rock arch. Good food and cabin accommodations are available at reasonable prices.

Located at the base of Navajo mountain where you leave your car and take pack trail to Rainbow Bridge.

FOR INFORMATION OR FOLDER, write
RAINBOW LODGE
TONALEA, ARIZONA

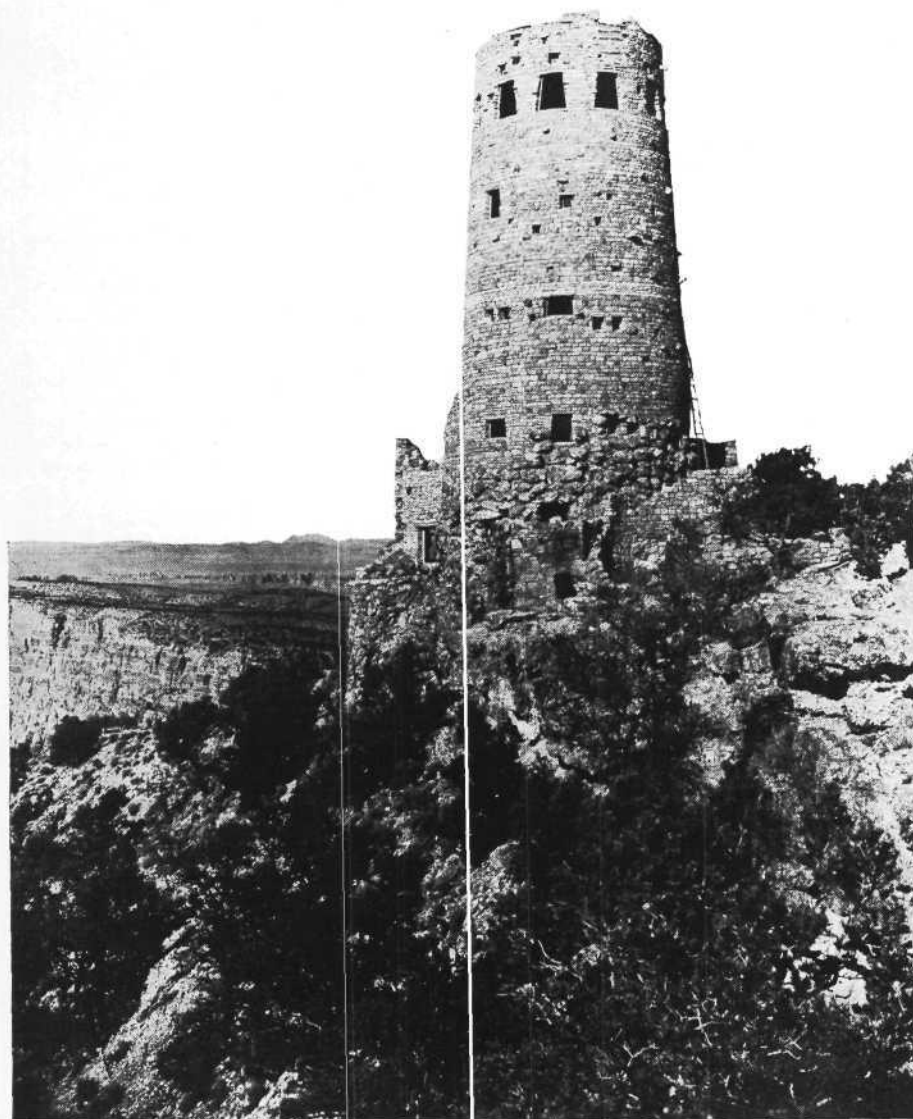
NEVILLS GRAND CANYON TRIP TO START JUNE 19

With Norman Nevills as skipper, a three-boat expedition is scheduled to leave Green River, Wyoming, June 19 for the 1940 Nevills expedition down the Green and Colorado rivers through Grand Canyon.

Two women are to be included in this year's trip—Mrs. Nevills, wife of Norman, and Mildred E. Baker of Buffalo, N. Y. Other members of the party will be Barry Goldwater of Phoenix, Albert D. Runkle of Tucson, B. W. Bleason of Salt Lake City, Dr. Hugh Cutler of the Missouri botanical gardens, Charles W. Larabee of Kansas City, John S. Southworth of Glendale, California and Del Reed.

Indian Watch Tower

Winner of the April Landmarks contest of the Desert Magazine is A. R. Hipkoe of Winslow, Arizona. He identified the accompanying picture as the Indian Watch tower on the south rim of Grand Canyon at Desert View, and among the many entries sent in to the Desert Magazine his manuscript was judged the most informative. He received a \$5.00 cash award for his entry, and the text is printed on this page.



By A. R. HIPKOE

THE Giant Tower shown in the landmark photograph in the April number of the Desert Magazine is the Indian Watch Tower at Desert View on Navajo point, on the south rim of the Grand Canyon in the Grand Canyon national park.

It is situated near the eastern boundary of the park on State Highway 64, 25 miles east of Grand Canyon village or 32 miles west of U. S. Highway 89 at Cameron.

The tower was built in 1932-33 by the Atchison, Topeka and Santa Fe railway company and is used by the Fred Harvey company for the entertainment of

tourists. It was designed by Miss Mary E. J. Colter, talented interior decorator and architect for the latter company. Miss Colter's genius has created a masterpiece of construction, for, while the tower is framed with steel and concrete, so well have these materials been concealed with weathered native stone facing and interior finish, that it might easily be mistaken for a structure hundreds of years old. In the masonry walls are realistic cracks and at the top of an ancient ladder is a doorway which appears to have been hastily filled with stones not too well matched.

Before planning the building a thor-

ough study was made of ancient ruins and modern pueblos in order to arrive at a suitable style of architecture. It is patterned after the towers in Mesa Verde park, Hovenweep, and other localities of the desert country, ruins of which are still in existence. A temporary wooden tower was first erected to determine the proper height for the masonry tower, which was then built in keeping with the surroundings and high enough to afford the best views.

The tower is 67 feet high, 30 feet in diameter at the base and 24 feet at the top. A winding stairway inside the wall leads to the upper landings, and in each floor above the second is a circular opening. At the base of this well is a large Navajo sand painting. Inside, the walls are finished to represent adobe mud on which are painted Indian designs made to appear old and smoke covered. This work was done by the Hopi artist Fred Kaboti from the village of Shungopovi.

The view of the tower is from the west, along the rim of the canyon. In the background is the sheer wall of the Grand Canyon and beyond is the canyon of the Little Colorado river. At the base of the tower, hidden from view in the picture, is the kiva, a circular room 40 feet across. Supporting the roof of this room, are logs laid across corners to form a low dome in the fashion of the ancient kivas. Here one may lounge amid rare Indian relics and enjoy the ever changing lights on the Grand Canyon.

A Hopi Indian guide is on hand to enlighten visitors on points of interest. From the kiva and the tower, may be seen, beside the Grand Canyon, the Painted Desert, the Vermillion Cliffs, the San Francisco peaks, the Kaibab Forest, and many other miles of gorgeous scenery.

Headquarters for America's Best Bass Fishing

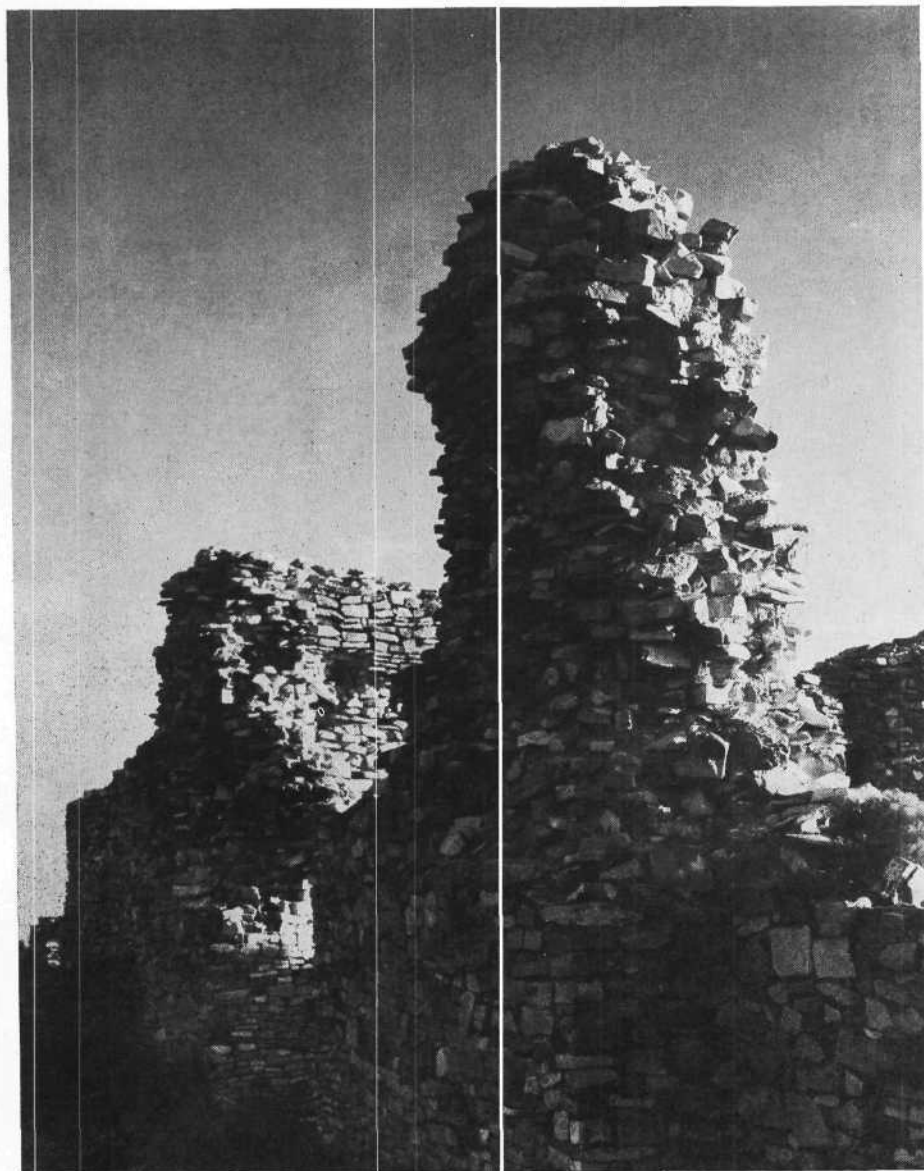
LAKE MEAD is the fisherman's paradise . . . fine catches of big mouth bass may be made the year 'round. HAVASU LAKE too, is a haven for trout and bass.

BOULDER DAM

Kingman is a natural stop-over for tourist and traveler enroute to Boulder Dam. Fine hotels and auto courts are available here at the junction where 93 joins U. S. 66.

— WRITE FOR FREE FOLDER —
**MOHAVE COUNTY
CHAMBER OF COMMERCE**
KINGMAN — ARIZONA

Who Can Identify This Picture? ---From Somewhere in New Mexico



Prize Contest Announcement

Near the center of New Mexico this ancient pile of masonry is located. It is a spot visited by many people who are interested in the relics left by an earlier civilization.

Readers of the Desert Magazine should be better acquainted with the story of these old ruins, and in order to obtain as much information as can be covered in 500 words, the Desert Magazine will offer a cash prize of \$5.00 to the person who sends in the best manuscript.

Entrants in this contest should give exact location, accessibility and mileages by highway, the present status of the ruins—whether privately owned or under

public protection—and as much historical and other detail as possible.

Manuscripts are limited to 500 words, and must be in the office of the Desert Magazine by June 20, 1940. The winning story, as determined by the magazine staff, will be published in the August number of this publication.

• • •

Photographs used in the May number of the Desert Magazine in connection with the Helldorado program at Las Vegas, Nevada, were taken by Glenn A. Davis of the Vegas Studio and Camera shop.

THE SPIRIT OF

76

by JOHN CLINTON



* * *
"Show me," I said when they started talking of what "Traffic Nerves" do to you. And the boss, who's that kind of a boss, *did!*

* * *
They had me drive a car through traffic. While I drove they had a gadget strapped around me to measure my pulse. In the back seat were a couple of psychologists with a lapful of dinguses that looked like a radio. My pulse was registered in a red line on paper.

* * *
Well, I got caught at a signal, and had to pull over while the usual ambulance went screaming up the street, and got stuck back of the guy who always drives eight miles an hour in the middle of the traffic lane — and so on!

* * *
The pay-off sure convinced me! It'd convince anybody! There on a paper was a record of what my pulse did! The psychologist explained that increase of my ticker meant faster consumption of nervous energy. Thus, with my two pretty big blue eyes, I've actually seen what "Traffic Nerves" can do to you!



* * *
So what?

* * *
So this—Union Oil's opened a Traffic Clinic to study how to cut down "Traffic Nerves." And they've published a swell book—32 pages with pictures—telling what you can do to reduce consumption of nervous energy. I'll bet you find hints in there you never thought of before! Anyway I did! The book's free at any Union Oil Station. Just ask!



* * *
No room left to tell you about the NEW 76 Gasoline that Union engineers have developed to help you lick Traffic Nerves. But it's at all Union Stations, now. Try it! It'll make your motor think it's Christmas!

UNION OIL COMPANY

HOT IRONS

Heraldry of the Range

By

OREN ARNOLD and

JOHN P. HALE

Here is the first and only book in its field: the history of cattle branding in the West, the meanings of the brands, their origins, the romantic stories behind them—in an absorbing narrative. (Illus.)

\$2.50 all bookstores

or direct from

The MACMILLAN COMPANY

60 Fifth Avenue — New York City

SUBSCRIBE TO

Hoofs and Horns

To Keep Abreast of the **RODEO GAME** and its **HAPPENINGS** —

Its news about Rodeos and Roundups is the most authoritative of any published in America. Rodeo Association bulletin and Cowboy's Turtle Association news are published monthly.

Those who enjoy poetry of the Old West will revel in the abundance of truly typical poetry that appears in each issue of Hoofs and Horns. You'll like Hoofs and Horns!

Each issue is generously illustrated with pictures of the people and places that are important to the current and past history of the Range country. Don't miss a single copy!

Subscription Rates

1 YEAR \$1.00	2 YEARS \$1.50
3 YEARS \$2.00	5 YEARS \$3.50

MONEY MUST ACCOMPANY THIS ORDER

SEND NAME AND ADDRESS TO

HOOFS and HORNS

P. O. Box 790

Tucson, Arizona

Call Ahead
TO MAKE SURE
SAVE TIME-MILES
DISAPPOINTMENT

SOUTHERN CALIFORNIA TELEPHONE COMPANY



BOOKS OF YESTERDAY AND TODAY

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

BRANDING IRONS TELL THE STORY OF THE RANGE

John P. Hale's hobby is collecting branding irons—he has them from all over the world. Oren Arnold's profession is writing—he is one of Arizona's best known authors.

And now Hale and Arnold, the hobbyist and the writer, have gotten together and produced **HOT IRONS** — a book which presents a new and highly entertaining picture of the stock-raising industry in the Southwest. The book came from the press of The MacMillan company, New York, in April this year.

The walls of Hale's home at Mesa, Arizona, are hung with hundreds of branding irons, and behind each iron is a story. Arnold has woven these stories into a volume that is both authentic history and absorbing romance.

Those brands which are burned into the hides of young range stock each season have played a vital part in western drama. Sometimes it was a tragic part—but the cowboys had to have their fun, and the branding iron has also made its contribution to the comedy of the western frontier.

The book is factual—but the facts are never presented in drab array. Arnold evidently sensed that he had a new and fascinating subject when he undertook the writing of this book—and he has given it a lively readable style that will make it interesting reading both on and off the range. 242 pages. \$2.50.

MAN SHOULD LIVE IN HARMONY WITH NATURE

Mary Hunter Austin worked harder to live poetry than to write it. That evaluation is expressive of her life's philosophy as interpreted by her biographer, Thomas Matthews Pearce in **THE BELOVED HOUSE**, published April 15 by Caxton Printers, Caldwell, Idaho.

The Beloved House, or Casa Querida, which she built in Santa Fe, New Mexico, was a symbol of her philosophy—which was a striving to reconcile man's social being with the laws of nature. All her literary output was directed toward establishing man's harmony with his earth environment.

Through his acquaintance with Mrs. Austin and her friends and through his careful analysis of her diverse writings, Mr. Pearce has arrived at a critical estimate of Mary Austin as prophet, feminist, naturalist, poet, storyteller and woman of genius.

His findings are both satisfying and provocative. The reader feels that he has

a genuine understanding of Mary Austin's purpose in life. At the same time there is stimulated the desire to discover her beliefs in her own words, because her philosophy is one lived rather than read about, and the characters in her books lived toward her ideals. Her creed was best expressed in such works as *Lost Borders*, *Land of Journey's Ending*, *The Arrowmaker*, *Christ in Italy*, *The Flock*, *The Basket Woman*. *Earth Horizon*, the autobiography written two years before her death in 1934, is a synthesis of the many facets of her life.

The ashes of Mary Austin lie in a native rock vault high on the peak of Picacho, overlooking the valley of Santa Fe as it stretches to the surrounding heights and to the clouds above the *Sangre de Cristos*—to the *Earth Horizon*. And rising with the peaks in the estimate of her biographer will be the stature of Mary Austin as it finds its true height in the American scene. Gold-stamped cloth binding, 20 photos, bibliography, notes, index. 239 pages. \$3.50.

WRITTEN BY ONE WHO KNOWS THE SOUTHWEST

The Southwest is too big and its population and pursuits too diverse to be completely covered in a single volume. And so Erna Fergusson in **OUR SOUTHWEST**, from the Alfred A. Knopf press in April '40, has selected certain important communities and personages and phases of the region for presentation in her book.

She defines the Southwest geographically as being the region south of the Mason and Dixon line extended to the Pacific, and between the Sierra Nevadas of California and the Balcones fault in Texas.

Chapters are devoted to Fort Worth, San Antonio, El Paso, Tucson, Phoenix, Prescott, Gallup, Albuquerque. But it is not mere chamber of commerce ballyhoo. Erna Fergusson is herself a true Southwesterner, who has traveled widely and who sees her neighbors through objective eyes, and writes of them with deep understanding.

Of special interest is her sketch of Fred Harvey, who came to the desert country when it was a place to be feared and shunned, and who not only brought to this wilderness the conveniences and luxuries of civilization, but pioneered in creating a widespread market for Indian arts and crafts.

Erna Fergusson is a loyal conservationist in everything that pertains to the Southwest, and is unsparing in her criti-

The DESERT MAGAZINE

cism of the despoilers, whether it be the stockman who overgrazes the range or the missionary whose misguided efforts have created confusion on the reservations.

Our Southwest is a factual book, an informative guide for both the native Southwesterner and newcomers — but it is much more than that. It is a penetrating study of Southwestern culture, written in clear and entertaining style. Illustrated with photographs by Ruth Frank and others. Maps and index. 376 pages. \$3.50

HERE'S THE WAY TO MORE AND PRETTIER GARDENS

GARDENING FOR FUN is a gay and practical handbook for everyone in California and the Southwest who wants to get more pleasure out of his garden. Written by Jean-Marie Consigny in collaboration with Charles Palmer and published this spring by George Palmer Putnam, Inc., this garden guide will be especially helpful to the novice and the newcomer to the West.

Emphasis is placed on the need for choosing drought-resistant plants because, as the author states, the greatest danger in this area is not winter freezing but summer aridity.

Although the gardener will find all his traditional favorites listed, Miss Consigny favors the native flowers, shrubs and trees for the drier areas. They have the hardiness and drought-resistance

which help make a successful garden without too much effort.

Being a landscape architect, the author has her ideas about planning gardens, and she has planned a type for nearly everyone—a Very Personal Paradise, The Carefree Garden, The Cutting Garden, Beach and Hillside Gardens, What to do With Your Patio.

There's a section on Care and Feeding, with chapters on soils, planting, irrigation and pruning, protecting the plants, and a chapter each on lawns and roses.

The climate zone map of California (with Calexico and Barstow representing their sections), frequent tables and charts, monthly color and chore calendars and botanical index are helpful additions. Whimsical decorations by Lynette Arouni accord with Miss Consigny's style. Cloth bound, 249 pages. \$2.50.

PIONEERS PUBLISH HISTORY OF SAN XAVIER MISSION

Another worthy contribution to the American Guide Series is MISSION SAN XAVIER DEL BAC, published in

March by Hastings House under the sponsorship of Arizona Pioneers' Historical society of Tucson.

San Xavier, nine miles south of Tucson, Arizona is considered one of the most beautiful of the Spanish missions. Its architecture is illustrated in detail by 32 full page photographs in soft gravure.

The text relates the story of the mission from its founding in 1700 to the present day, and supplements the illustrations. Cloth bound, 58 pages. \$1.00.

INVESTIGATE

the investment possibilities in land and commercial enterprises at Yuma, Arizona. For complete information write the

**YUMA COUNTY
CHAMBER OF COMMERCE**

The Desert Trading Post

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

POINTS OF INTEREST

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

NOVELTIES

INDIAN RELICS. Beadwork. Coins. Minerals. Books. Dolls. Old Glass. Old West Photos. Miniatures. Weapons. Catalogue 5c. Vernon Lemley, Osborne, Kansas.

MAPS

BLACKBURN MAPS of Southern California desert region. San Bernardino county 28x42 inches \$1.00; San Diego county 24x28 inches 50c; Imperial county 19x24 inches 50c. Postpaid. Add 3% sales tax in California. DESERT CRAFTS SHOP, 636 State Street, El Centro, California.

LIVESTOCK

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

MAGAZINES

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

BOOKS

BOOKS for gem and mineral collectors. May be obtained by addressing Desert Crafts Shop, 636 State St., El Centro, California.

BOOKS

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

SUBSCRIBE TO

THE DANA MAGAZINE

"Lifelong Learning Program"

- Add to your knowledge of minerals.
- Study to secure employment.
- Prepare for a better position by *subscribing*

— To —

THE DANA MAGAZINE

The Official Organ of

The Dana Mineral Societies

National Dana Clubs

Federated Science Societies

RATES: 1 year \$2.00

Single copy 20c

Address

THE DANA MAGAZINE

426 Metropolitan Bldg.,
LOS ANGELES, CALIFORNIA

TRUE OR FALSE ANSWERS

Questions on page 28.

- 1—False. The tarantula bite is hardly as serious as a bee sting.
- 2—True.
- 3—True.
- 4—False. Laguna dam was built as a diversion dam for the Yuma irrigation system.
- 5—True.
- 6—False. White ocotillo is very rare in the Southwest.
- 7—True.
- 8—False. Panamint range is on the west side of Death Valley.
- 9—True.
- 10—False. The waters of the lake over a long period have been gradually receding.
- 11—False. Indians opened the first turquoise mines in the area now known as New Mexico.
- 12—True.
- 13—False. An arrastre is a crude mill for grinding ore.
- 14—True.
- 15—True.
- 16—False. In western Arizona the two grow together over a large area.
- 17—False. Brigham Young's first trek to Utah was in 1847.
- 18—False. The Mojave river ends in a series of lakes which are generally dry.
- 19—True.
- 20—True.

EVERYTHING FOR THE HORSEMAN
"THE WORLD'S FINEST"
 PLAIN AND SILVER MOUNTED
SADDLES

Featuring special silver-mounted, square-skirted Saddle, including bridle, bit, reins, collar and Corona blanket



\$595

• ILLUSTRATED MODEL

Original designer and maker of the famous Edward H. Bohlin Hollywood Silver Buckles and Silver-Mounted Saddles !!

BOOTS, BELTS, JACKETS, SPURS, SOMBREROS, SHIRTS, CHAPS, FRONTIER PANTS.

— ALSO FINE ENGLISH EQUIPMENT —

EDWARD H. BOHLIN

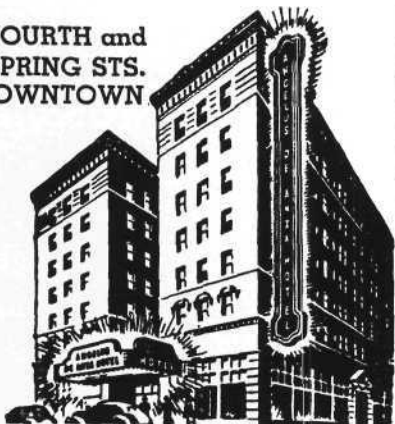
5760 Sunset Boulevard, Hollywood, Calif.
 TELEPHONE GLADSTONE 0275

Valley Branch: 12354 Ventura Blvd.
 TELEPHONE SUNSET 2-3377

In the Center of Downtown

LOS ANGELES

FOURTH and
 SPRING STS.
 DOWNTOWN



Right in the center of activities . . .
 . . . a quiet, comfortable hotel home . . . 200 rooms

From \$2 with Private Bath from \$125

Angelus De Anza
 HOTEL

Desert Place Names

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

ARIZONA

CHRISTOPHER CREEK

Gila county
 About 27 miles northeast of Payson. Heads at large spring under Mogollon rim, empties into Tonto creek from east. Named for a Frenchman, Isador Christopher, first settler on this creek. "In the Apache raid July 1882 Indians came to this ranch. Christopher was away and they burned his two log houses. U. S. troops came up while fire still burned. Christopher had killed a bear the day before, skinned and hung it in one of the cabins. Soldiers supposed the remains to be those of Christopher killed and burned by the Apaches." This is quoted from a letter written by F. W. Croxen. Local settlers according to Barnes, afterwards claimed that the soldiers buried the remains with due solemnity as those of a human. Those old timers loved to joke about the army people, Barnes adds.

DUPPA BUTTE

Coconino county
 On west wall of Grand Canyon about five miles southeast of Point Imperial. "Named for Dryan P. D. Duppa, known as Darrell Duppa of English birth, who settled in Arizona 1863. Little is known of Duppa's early history. John McDerwin, one of his intimate friends, writes: "Was in the English army reaching the rank of Colonel. Fought a duel with a brother officer, resigned and found his way to Arizona. Was said to receive \$3,000 from home every quarter. Lived in the Salt river valley, then moved to Agua Fria where he ran the stage station for some time." Bourke describes this station as a most unattractive place bare of every comfort, with only the most primitive furnishings. Banta says Duppa spoke perfect English and half a dozen other languages, "reading Latin, Greek, etc." In a written contract Duppa is described as "Darrell Duppa, Halsingbourne House, county of Kent, England." It was Duppa who suggested names for Phoenix and Tempe. His name was first on enumerator's list for Phoenix district of U. S. Census report 1870. His age was given as "36 years. Born in France." Tucson Citizen March 30, 1872 says Duppa was attacked by Apaches and badly wounded at his Agua Fria ranch March 24, 1872. He died in Phoenix and a headstone was erected over his grave by the D. A. R. in 1910.

CALIFORNIA

WINGATE PASS

Inyo county
 About five miles wide and 10 miles long, connecting Death Valley and Panamint valley. In the 1880s named Windy gap, when it was part of the borax route, "because there was always a wind here to flatten the mules' long ears and fling dust and gravel into the faces of swamper and drivers," says the W. P. A. guide to Death Valley. Wingate pass is one of the natural entrances to Death Valley, but winter rains tear up the roads on its slopes. After the day of wagon freighting there remained no reason for a main route through this gateway. In 1923 a monorail was built over the pass by promoters of a deposit of Epsom salts to convey the salts to the railroad at Trona 30 miles to the west. The rail was mounted on long wooden legs, carried two cars, one on each side. A tractor dragged the cars uphill and down to the railroad.

Among other hindrances to successful operation, it was found that the salts contained too much desert dust. The works were closed but the monorail's wooden legs still stand.

GRAPEVINE CANYON

San Diego county
 From the summit of the divide east of Warner's between the Pacific slope and the Salton basin, this canyon drops to the desert 800 feet within two miles over a narrow crooked road used now mostly by patrolmen guarding power transmission lines. The canyon was named for profusion of wild grapevines growing along its sides. Grapevine spring rises in a small cienega where hard rock cuts across the bottom of the canyon. The water flows over two waterfalls about 15 or 20 feet high, passing through a gorge a few feet wide into the more open valley below. This is the highest altitude (3500 feet) at which a geological survey party exploring the Colorado desert observed mesquite, "much higher than its usual zone of occurrence."

NEVADA

BUNKERVILLE

Clark county
 Farming settlement on Virgin river. First organized and settled in 1887. Named in honor of Edward Bunker, bishop of the Mormon church who was one of the founders of the community.

LUND

White Pine county
 Named in honor of Anthon H. Lund, prominent church official. This is a small farming settlement.

NEW MEXICO

COONEY

Socorro county
 James C. Cooney, scout and guide, for whom the town was named, discovered high grade silver and copper ore in the Mogollon mountains in 1875 while on a scouting expedition. In 1876, his term as a scout having expired, he organized a party for prospecting. Camps were established but they were attacked again and again by Apaches. Finally all locations except one were abandoned. Among camps reopened two years later was the celebrated Cooney mine, probably the richest in New Mexico. In April 1880 when Apache chief Victorio was raiding the southwest, several battles in which he engaged took place at the Cooney mines. James Cooney was killed in one of these fights. The property then reverted to his brother, Capt. M. Cooney of New Orleans who leased it to a nephew, Tom Cooney. Since that time it has changed hands several times. Present owner is the Mogollon Gold and Copper company.

UTAH

TORREY

Wayne county
 (Alt. 7,000; pop. 217). Named in honor of Col. Torrey of Wyoming who fought in the Spanish-American war. First called Poverty Flat.

CROYDON

Morgan county
 (Alt. 2538). Named for Croydon, county of Surrey, England, now known internationally for its famous air field. First called Lost creek, taking the name of a tributary of the Weber river. The creek was so named by Moses Tracy and Sidney Kelly, who became lost here in 1855 during a snow storm.

Writers of the Desert . . .

A new writer to a majority of Desert Magazine readers this month is MARY JANE NICHOLS of Tucson, Arizona, whose story of Corky and Davy Jones at Wupatki national monument will probably bring a flood of applications to the national park department for field duty in the ranger service.

Mrs. Nichols was born in Kansas City, Missouri. In 1931 she entered the University of Arizona, doing both undergraduate and graduate work in anthropology and its accompanying field trips. It was at the university that she met Tad Nichols who became her husband in 1937.

While her primary interest is in southwestern Indians, Mrs. Nichols is also a student of desert birds, and her report on bird life in the Wupatki monument was published in a park service bulletin. She is now working on a story of the sandcast silver work done by the Navajo Indians.

Probably few men in the Southwest have as intimate a knowledge of small Indian tribes of California, Arizona and northwestern Mexico as EDWARD H. DAVIS of Mesa Grande, California, who

has written the story of the forgotten tragedy at Carriso creek for the readers of the Desert Magazine this month.

Among the 'Chicero Indians of western San Diego county Davis is a ceremonial chief, known as Too-ka-muck. This honor was conferred upon him in 1907 in a solemn three-day ritual during which a golden eagle was "bewitched to death" by the medicine men of the tribe. Davis has been adopted into the Yuma tribe and is a medicine man to the Seris of Tiburon island in the Gulf of California.

Because of his intimate knowledge of the Indians Davis was employed for 15 years by the museum of the American Indian, Heye foundation, New York, collecting ethnological material among the lesser tribes of the extreme Southwest and the coast of Mexico.

Originally an architect and engineer by profession, Davis came by boat from New York to San Diego for his health in 1885. He was one of the architects in the construction of the Coronado hotel. In 1888 Mr. and Mrs. Davis moved to their ranch home at Mesa Grande, where he still lives.

After the ranch was well established

he began making saddle trips into the desert region. "Sometimes I drove stock down to winterfeed in the Borrego area," he recalls. "Each time I became more enamored of the desert. I was fascinated by the delicate pastel shades which glorify the rugged desert ranges at sunset. There was no human soul except myself. The world was a soundless void and three words to a certain extent can describe the desert — sun, sand and silence. You can imagine how this vast boundless space impressed a tenderfoot just released from the most densely populated city in America.

"At first it was appalling, and then the lure of the desert began to creep under my skin and I became an ardent devotee of the arid region. After these many years of camping on the desert, riding mule-back over almost impassable mountains for hundreds of miles, living on jerked beef and tortillas—these experiences, I believe, have qualified me to be known as a member of that drifting brotherhood known as desert rats."

HARRY OLIVER, author of the humorous sketches, "Desert Rough Cuts" and numerous newspaper features based on his homesteading experience in the Borrego valley, recently has been elected to honorary membership in the International Mark Twain society.

Why SWELTER IN THE HEAT

INSTALL AN EVAPORATIVE COOLER AND LIVE IN COMFORT THIS SUMMER

There is no reason why anyone living in dry, hot, and arid regions should "Sweater in the Heat." Real cooling comfort, like living at the seashore, can be had by installing an evaporative cooler. The cost is only a fraction of the cost of expensive air conditioning equipment, but the cooling results are amazing.

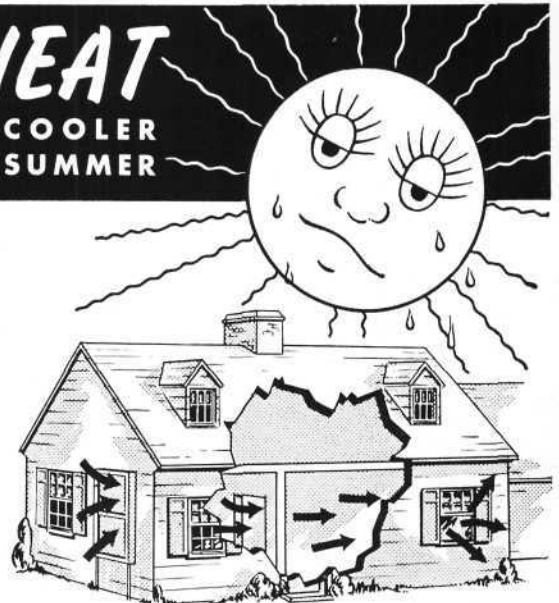
Thousands of evaporative coolers, equipped with Wagner cooling fan assemblies, are giving delightful cooling comfort in homes and offices in the hot, dry and arid parts of the country, and owners everywhere attest their high efficiency and low operating cost.

Evaporative coolers employ a very simple principle — absorption of heat through the evaporation of water — a principle well known in regions that are dry and where humidity conditions are relatively low.

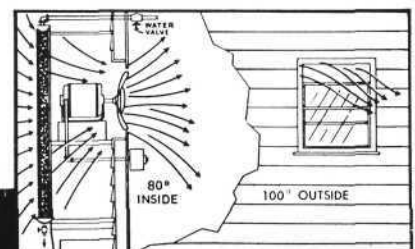
Don't go another summer without investigating the many comfort advantages of an evaporative cooler, equipped with a Wagner Cooling fan assembly. Your hardware dealer, electric dealer, electric power company, building supply house or your contractor will tell you all about them. You'll be surprised at their low cost.

WRITE FOR DESCRIPTIVE LITERATURE
Complete descriptive literature is yours for the asking. Write today and plan on living in comfort this summer. Prices as low as \$18.25 up.

The sketch at the right shows the typical method used in installing an evaporative cooling fan. Anyone handy with tools can do the job or your contractor can make the installation at a very reasonable price.



WAGNER EVAPORATE COOLING FAN ASSEMBLIES ARE EASY TO INSTALL



WAGNER ELECTRIC CORPORATION
1240 SOUTH HOPE STREET
LOS ANGELES, CALIF.



Just Between You and Me

By RANDALL HENDERSON

FOR many thousands of years Old Mother Nature with infinite patience built and carved and planted—and the thing she created was beautiful Palm canyon.

Then a careless human came along and in a few short hours changed the picture to one of utter desolation. Hundreds of native palm trees were charred beyond recognition in the fire which swept through the canyon in April.

Fortunately, fire does not always kill *Washingtonia* palms. A majority of the trees probably will grow new foliage, but it is hard to become reconciled to a catastrophe as inexcusable as this one.

This is the third disastrous fire in Southern California's palm oases in recent years. First it was Biskra palms in the Indio mud hills, then Corn springs in the Chuckawalla mountains, and now Palm canyon, the most picturesque of them all.

Laws are of little use in guarding these remote desert areas. It is always difficult to locate the culprit. The most effective protection that can be given these scenic areas is an aroused public opinion that will condemn every hint of vandalism anywhere and at any time.

* * *

I am grateful to Edmund C. Jaeger for the excellent handbook he has just written on desert wildflowers. It adds immeasurably to the pleasure of a trip on the desert to be able to call the flowers by their first names. They soon become old friends—but the kind of friends that never grow old. Each season they blossom forth with all the freshness and vigor of youth—and it is good for those of us who are acquiring some grey hairs and wrinkles to cultivate the acquaintance of youth—even wildflower youth.

* * *

If you ever go exploring around Borrego desert and come across a worm-eaten old wooden leg that looks as if it might have belonged to Pegleg Smith of the legendary lost gold mine, don't get excited about it. I've got one of those wooden legs too.

Mine came by express this week from my old friend Harry Oliver, who was an honest-to-goodness desert rat in the old days when he lived on his Borrego valley homestead and owned neither a razor nor a necktie.

The prospectors have been finding those old wooden legs in the Borrego country ever since Harry lived up that way. His neighbors say he had a hundred of them made up and properly aged—and then planted them in the hills.

Well, anyway, they make good souvenirs, even if Ol' Pegleg Smith would never recognize them. That's one more item for the rock garden.

* * *

"There ought to be a law," writes Mrs. Kate Gredler of Palm Springs, "compelling every American to go out and get acquainted with the desert country. Especially every office-holder (or seeker), every educator, preacher, teacher, public speaker, columnist, publisher and poet. This law should provide penalties against high speed, and compel stops for sunrises and sunsets, and also here and there to discover the beauty of the rocks, to look the flowers in their faces and the road-runner in his feathers. Folks really do not begin to know their desert until they have learned to stop along the way and stretch their eyes and let handfuls of golden sand run through their fingers—and shoes."

* * *

Desert days are growing warm and most of the flowers that blossom on the lowlands have gone into retirement for the season. But June will have its floral display. In every arroyo where the Smoke tree grows you will find great clusters of deep purple blossoms. Smoke tree waits until the others have given their exhibition—and then puts on a one-man show of its own. If you haven't seen the flowering of the Smoke tree at close range, you've missed one of the desert's most gorgeous exhibits.

* * *

If you have wondered, and perhaps tried to define that intangible thing that lures strong men and women to the desert region, you will share my gratitude to Erna Fergusson for a paragraph in her new book "Our Southwest." She wrote:

"The arid Southwest has always been too strong, too indomitable for most people. Those who can stand it have had to learn that man does not modify this country; it transforms him, deeply. Perhaps our generation will come to appreciate it as the country God remembered and saved for man's delight when he could mature enough to understand it. God armored it, as the migrating Easterner learned in his anguish, with thorns on the trees, stings and horns on the bugs and beasts. He fortified it with mountain ranges and trackless deserts. He filled it with such hazards as no legendary hero ever had to surmount. The Southwest can never be remade into a landscape that produces bread and butter. But it is infinitely productive of the imponderables so much needed by a world weary of getting and spending. It is a wilderness where man may get back to the essentials of being a man. It is magnificence forever rewarding to a man courageous enough to seek to renew his soul."

Gila Monster

BY JUNE HOUSTON
Tucson, Arizona

Photograph by Orville Arrington

He's orange and black, and he moves so slow,
The Gila Monster I mean, you know
The little fellow with beady eyes
Who looks around so wondrous wise,
It seems to me, he worries a lot
As to whether his poison is deadly or not,
Some say if he bites you you're sure to die,
Others say you'll get well bye 'n bye;
His bad reputation, it seems to me,
Is taken a little too seriously;
Now I don't advise you to make him a pet,
But please don't kill him, first chance you get,
He's almost a thing of the past you know,
This Gila Monster who moves so slow.

ENIGMA

BY JEAN McELRATH
Wells, Nevada

You see them here upon the street,
Of some far Western town,
Their hair and eyes are shining black
and skin not red, but brown,
You want to write and tell the folks—
to make your little brag,
But when you put your pen to work
you run into a snag.

A goose and mate are always geese.
But is papoose and plus—Papeese?
A mouse's litter's known as mice.
But no one calls these tots papice!
Two cactus should be termed cacti.
Papoose in plural's not papi.

You ask a cowboy on the street,
He quaintly answers, "Hell!
I tell you, Miss, it's just like this,
I never learned to spell!"

SMOKE TREES

BY KATE CRICHTON GREDLER
Palm Springs, California

They built no cairn to mark the lonely way
But, resting where the low-hung stars seemed
near,
Each night they lit an altar-fire of faith.
Each day
Drank from a grail of weariness and fear
The bright, new wine of courage. With
firm hands
On their scant platter, broke the bread of
hope
And pushed on bravely toward the fabled
lands.

Now in the desert where the water-courses
fail
The silvery vapors of the smoke tree rise
Like ghosts of their dead camp-fires. With
closed eyes
I hear the wagon-wheels along the trail.

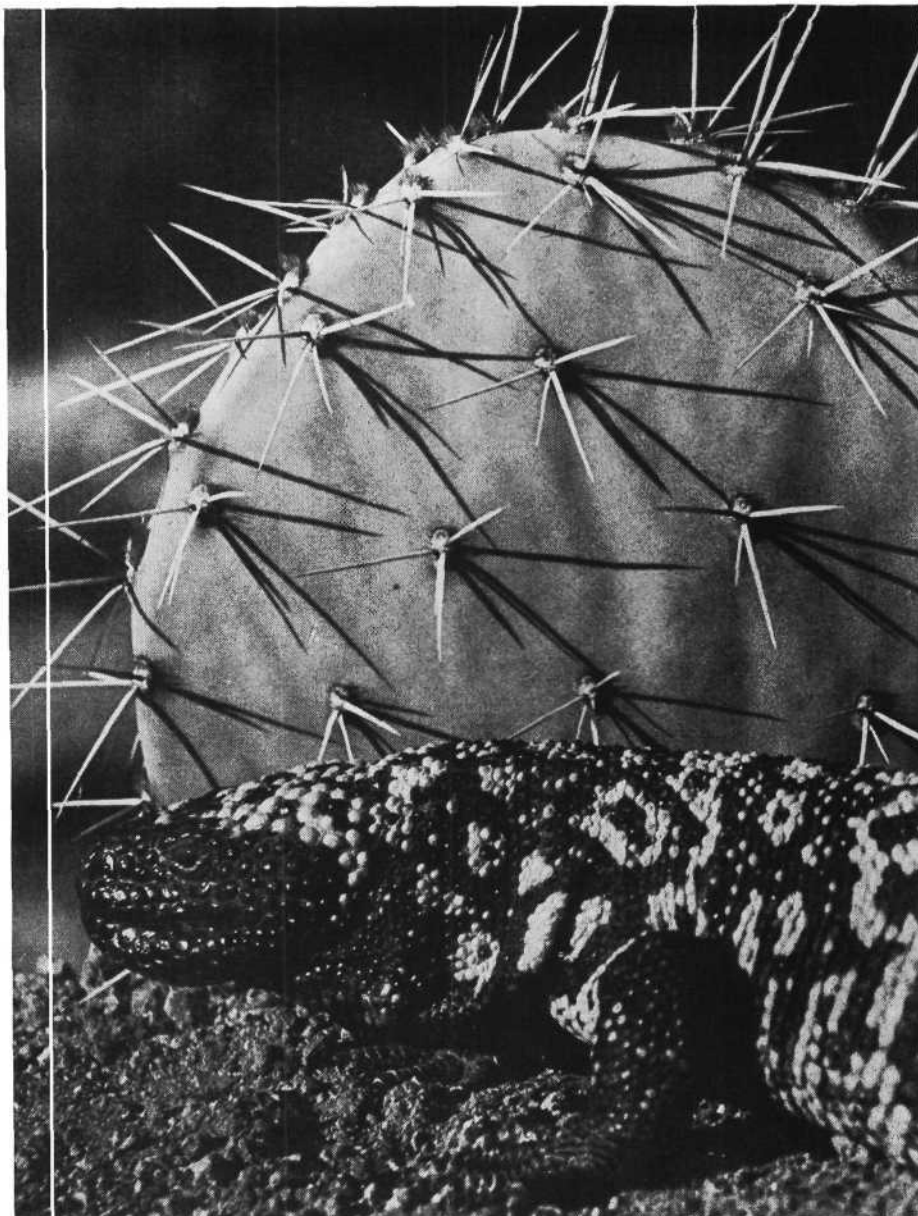
CAPTAIN OF MY SOUL

BY EVA CARPENTER IVERSEN
Encinitas, California

Today, I am the captain of my soul.
I tread the way toward the shining goal
Of heart's desire; and know full well that I
Shall win that guerdon in some bye-and-bye.

All day across the desert sand I went
And when night came returned in deep con-
tent
To humble home beside the surging sea:
My troubled heart at peace . . . as hearts
should be.

For, lo! The sea, the wasteland, and the hills
Have put to rout my sorrows and my ills:
Have welded life into harmonious whole.
Today . . . I am the captain of my soul.



DESERT WIND

BY ALICE WRIGHT PEELE
Simi, California

I miss the wind
Coming suddenly at night,
Coming with a cloud of dust
In the white moonlight.

I can do without
Heat waves shimmering on the sand,
Sunshine beating through the shade
Making freckles on my hand.

I will not grieve again
For the yellow fragrant flower,
For the bloom upon the greasewood
Sweet in its brief hour.

But I miss the wind
Fearing through the desert night,
Fearing through the helpless sage
In the white moonlight.

DESERT PAUSE

BY OLIVE McHUGH
Salt Lake City, Utah

A miracle of stillness is the desert night,
A world of silver in the white moonlight,
Where thoughts dispersed like rockets in the
skies
May gather till true meanings can arise.

TO A SMOKE TREE

BY GRACE CULBERTSON
San Diego, California

Let April wildflowers riot for an hour
And palo verde paint the Spring pure gold;
Let cacti sport a jeweled, starry flower,
And every shrub and plant its quaint bloom
hold;

But when the summer silence settles down
And cloistered lies the desert in the sun,
When winter-folk are flown to beach and
town,
Your purple reign of splendor is begun.
Oh, beautiful your stark and sculptured state,
Deprived of leaf, of aught but haloed grace,
And chaste your patterned stony stems that
wait

A resurrection in this barren place.
What embers smoldered in your self-sought
tomb

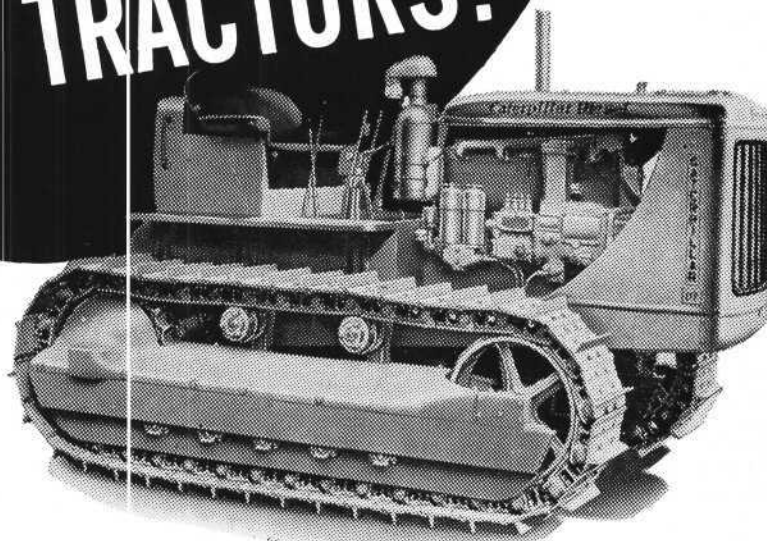
To flare so briefly in luxuriant bloom?

CREED OF THE DESERT

BY JUNE LEMERT PAXTON
Yucca Valley, California
The Ocotillos give a dance
And as they proudly sway and
prance,

They hold above each thorny head
A gaily lighted torch of red.

THE LATEST NEWS IN TRACTORS!



Let us
tell you
about

The New "Caterpillar"

DIESEL D7 TRACTOR

• From the pioneer builders of track-type tractors . . . comes this latest development in Diesel tractors!

Designed to do more work at bigger profits, the new "Caterpillar" Diesel D7 has increased horsepower . . . better construction . . . greater economy . . . a wider speed range . . . more comfort and ease for the operator.

True "Caterpillar" parts instantly available for every emergency. Factory-trained mechanics for your repair job.

The new Diesel D7 tractor is built to typical "Caterpillar" standards . . . of highest quality materials . . . by strictest methods of precision manufacture. Thus, assuring long working life and low upkeep costs.

Hitch your loads to this new 1940 "Caterpillar" pay-raiser! You'll find it'll outperform anything anywhere near its power class. We have all the facts!

CATERPILLAR

REG. U. S. PAT. OFF.

SEE YOUR "CATERPILLAR" DEALER

Ben Hulse Tractor and Equipment Co.

SALES AND SERVICE STORES IN YUMA, ARIZONA, EL CENTRO AND BRAWLEY, CALIFORNIA