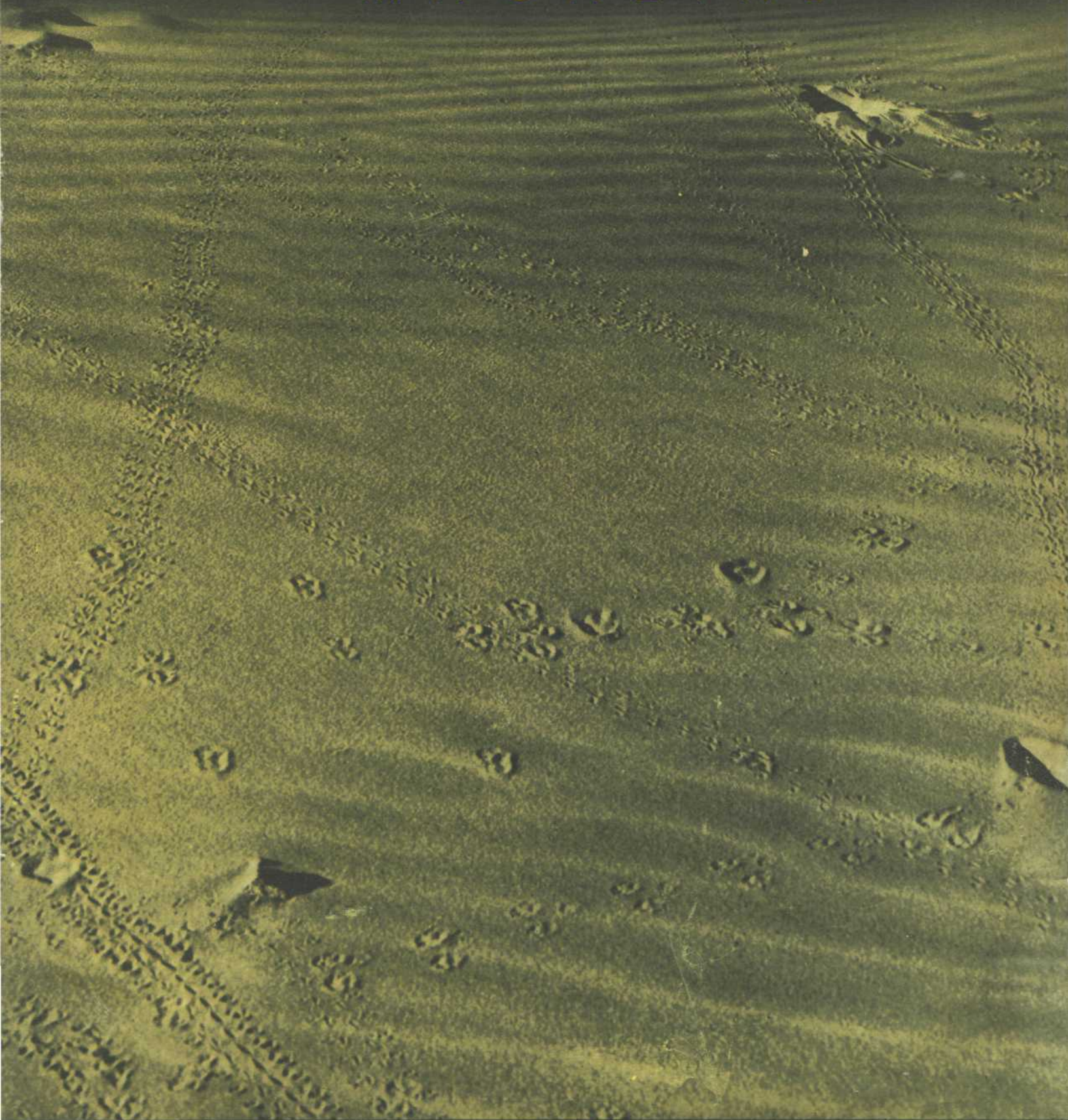


THE

Desert

M A G A Z I N E



SEPTEMBER, 1942

25 CENTS

LETTERS...

Indian Covers Preferred . . .

Alhambra, California

Dear Mr. Henderson:

Since the arrival of the August number of Desert with its interesting Navajo cover, one of the best, I have been looking over again the covers of past issues. It seems to me that throughout the nearly five years of its existence Desert Magazine has set a remarkable standard in covers and these seem to fall into a few distinct classes.

The group which I find most attractive are the six I will call the Indian human interest group. Pueblo Boy, Weaver, Navajo Medicine Man, In Navajo Land, Navajo Youth and the last number, Navajo.

Next is a group of three headed by Desert Charlie, then Baby Burro and Arizona. Then comes that outstanding group of Indian country scenes, Shiprock, Rainbow Bridge, Montezuma's Castle, Death Valley and Betatakin Ruins.

But I often turn back and feast my eyes on the cover of No. 1, Vol. 1 and after nearly five years that first cover seems to stand in a class by itself, in artistry, coloring and desert interest the best of all.

Please don't think I even pretend to be an authority on art or magazine covers. I like Desert Magazine and all its covers and think the whole series makes a really outstanding collection, one any publisher might well be proud of.

May your standard never grow less and your subscription list exceed your fondest expectations.

WILL H. THRALL

"Mosquito Rock" . . .

Boulder City, Nevada

Dear Mr. Henderson:

I wish to point out an error in the July issue of Desert Magazine. Mr. Jerome's description of Elephant Rock is quite accurate, but the photograph in question is not of the "Elephant Rock." I think "Mosquito Rock" is more descriptive of the formation shown. This rock, strangely enough, is some four or five miles from the Elephant Rock in the same Valley of Fire. It may be seen by continuing on the road described by Mr. Jerome approximately two miles beyond the Mouse Tank Trail. It is to the left of the road, instead of the right, just over the crest of the last fiery ridge. The photograph was taken looking toward the Virgin river arm of Lake Mead, which could be seen except for the hill in the background. Perhaps this is why Mr. Jerome thought the negative had been reversed.

I have driven far into British Columbia, and have seen parts of Wyoming, Colorado, and every state west of the Rockies. I have viewed that summation of all grandeur: the Grand Canyon; but, I was still much impressed with the Valley of Fire. It appears to have been created in a moment of wildest abandon. The abundant petroglyphs, so intimate of the men who lived there long ago, seem doubly thought-provoking in that setting of weird shapes and startling color.

Being a newcomer to southern Nevada, I am not writing as a booster for this locality. I do so in appreciation of your splendid magazine. Mrs. Parker joins me in wishing you continued success with it.

FRED W. PARKER

To Keep the Records Straight . . .

Quartzsite, Arizona

Gentlemen:

I am not a critic, but just to keep things straight, on the Yerington page in your June issue, you have a sketch of a man and a windlass. The rope runs on the beam in the wrong direction as to the position of the man. Also in the caption under the picture on page 37, "Hammering gold to free it from silver, etc."—the silver and the gold are not separate, but mixed.

J. R. CURRIER

On Skinning Rattlers . . .

Los Gatos, California

Dear Editors:

I read your story "Rattlesnake Skins Are My Hobby" with more than usual interest.

For more than 40 years I have been killing rattlesnakes, and skinning them. Four years ago on the 15th of September I killed a large rattler. On skinning it I found four young rattlers, each encased in a tough membrane. The snakes varied in size from four to seven inches, each being complete as to shape of head, fangs, and button.

I use a different system in skinning my rattlers. My method is to lay them bottom side up and cut them open with a heavy pair of scissors before skinning.

Several times the persistent call of a jay has located a rattler for me. Positively the only good word I have for a jay.

IDA RAILEY

More About the Havasupai . . .

Blythe, California

Compañero:

I appreciate your choice of words and their arrangements when you write: "Neither tribal legend nor the research of archaeologists have told us when and why the Havasupai Indians migrated to the majestic Havasu canyon."

Old Captain Navajo, who was not a Navajo, told me that they came from the Walapais; that they pulled out after a three-day tribal conference when the tribe was divided over the matter of tribal tradition in regard to squaws being allowed to cohabit with men of other races or tribes. They went down into that canyon, not because it was majestic, but for protection.

Captain Navajo told me that once the Navajo Indians tossed three of the Supai bucks off into the canyon just to see what they would look like after they landed, 3,000 feet below.

The man who did that mining work in the canyon was Adam Chunning. He stopped with me for a week during a snow storm. That was 50 years ago and he was on his way to do his assessment work.

In 1889 the la grippe, after killing many Russians, started eastward around the world. In January, 1890, Bill Bass and I procured some quinine, after which Bill paid the Supais a visit to see if they had lived through the epidemic. Bill found them taking the hot water vs. ice water treatment. I presume they would practically all have died if Bill hadn't taken charge. Later in the spring of 1890 the entire tribe came out and camped near me on top of the plateau. As nearly as I could estimate there were between 60 and 80 of them at the time.

ED. F. WILLIAMS

Neither Rubber Nor Gas . . .

Payson, Utah

Gentlemen:

Welcome the articles of Charles Kelly in D.M. He sure knows his Utah, and should have many more descriptions for us.

With him and Marshal South, well, you will have me on your list for life. Glad Marshal has his burros. No rubber shortage will bother him now.

DR. L. D. PFOUTS

Honoring "Shady" Myrick . . .

Carson City, Nevada

Dear Sir:

I was mildly surprised at the use of the word "Myrickite" in your item, "Identity of Opalite," in the July issue of Desert.

I had always associated the word with a golden variety of chalcedony, and somehow still believe the name originated from "Shady" Myrick.

Shady lived at Lead Springs, California, near the head of Panamint Valley, about 1922, when I knew him. When I visited his camp at that time he told me about the golden chalcedony he had found, and stated:

"I'm sorry Mac, but I haven't got a specimen now, but it was the most beautiful thing you ever saw—and they're going to name it 'myrickite.'"

Since then, whenever I have seen any of the opals or agates, I have thought of Shady's "myrickite," but have never taken the trouble to look it up until I read your item. Am unable to find the name in Dana or Kraus, so assume it is somewhat restricted to local use.

However, this brings to mind Shady's story, as I remember it.

G. L. MCINTYRE

G.L.M.—I think you are correct in assuming Myrickite was named for "Shady" Myrick. In his "Quartz Family Minerals" Dake merely uses the name as a synonym for opalite. —R.H.

Weather

FROM PHOENIX BUREAU

Temperatures—	Degrees
Mean for July	92.7
Normal for July	89.8
High on July 6	116.0
Low on July 15	70.0
Rain—	Inches
Total for July	1.24
Normal for July	1.07
Weather—	
Days clear	19
Days partly cloudy	10
Days cloudy	2
Percentage of possible sunshine	88

E. L. FELTON, Meteorologist.

FROM YUMA BUREAU

Temperatures—	Degrees
Mean for July	94.2
(Exceeded only once since 1878.)	
Normal for July	90.8
High on July 7	117.0
Low on July 19	73.0
Rain—	Inches
Total for July	0.08
Normal for July	0.18
Weather—	
Days clear	29
Days partly cloudy	2
Days cloudy	0
Sunshine, 98 percent, 426 hours of sunshine out of a possible 437 hours.	

Colorado river—Discharge from Boulder dam averaged around 20,000 second feet. Storage during the month was nearly stationary.

JAMES H. GORDON, Meteorologist.

DESERT Calendar

AUG. 28-29 Annual horse show, municipal stadium, Ogden, Utah.

AUG. 29-30 Rocky Mountain Federation of mineral societies annual convention at Salt Lake City, Utah.

SEPT. 2-5 Salt Lake county fair, Murray, Utah. E. O. Brothers, manager.

1-27 Two exhibitions at Museum of Northern Arizona, Flagstaff: Ancient Life in the Rocks of Arizona and Geography for an Arizona Tourist.

5-6 230th Annual Fiesta, Santa Fe, New Mexico, commemorating delivery of the villa from the Indians in 1693. Includes ceremony "Burning of Zozobra," Conquistadores Ball, DeVargas Pageant, Candlelight procession, Roof show and crowning of Fiesta Queen at La Fonda hotel.

6 Harvest dance, San Ildefonso Pueblo, New Mexico.

7 Annual rodeo, Grants, New Mexico. Mark Elkins, chairman.

10 Tajique Fiesta, Tajique, New Mexico.

13 Torreon Fiesta, Torreon, New Mexico.

15 Manzano Fiesta, Manzano, New Mexico.

15 Mexican colony celebration of Mexican Independence, Roswell, New Mexico.

16 Mexican Independence celebration at Socorro, New Mexico.

19 Annual fiesta and dance, Laguna Indian pueblo, New Mexico.

25-27 Annual rodeo, Hot Springs, New Mexico.

27-OCT. 4 New Mexico State Fair, Albuquerque.

28-29 Taos County Fair and San Geronimo fiesta, Taos, New Mexico.

29 Annual fiesta, Feast Day of San Miguel, Socorro, New Mexico.

• • •

ARIZONA HUNTING SEASONS

Deer: North of Gila river, except Pinal mountains in Gila and Pinal counties, Oct. 16-Nov. 15; south of Gila river and including the Pinal mountains, Nov. 1-Nov. 30 on white tail deer; Nov. 16-30 on desert mule deer.

Turkey and Bear: Open north of Gila river only; corresponds to deer season.

Deer: In Kaibab forest limited to 1,000 permits, Nov. 1-15.

Antelope: Sept. 19-Oct. 3; limited permits.

Elk: Nov. 1-30, special permits as well as regular hunting licenses.

Squirrel: Fort valley refuge north of Flagstaff open Aug. 16-Nov. 15.



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RANDALL HENDERSON, Editor. LUCILE HARRIS, Associate Editor.

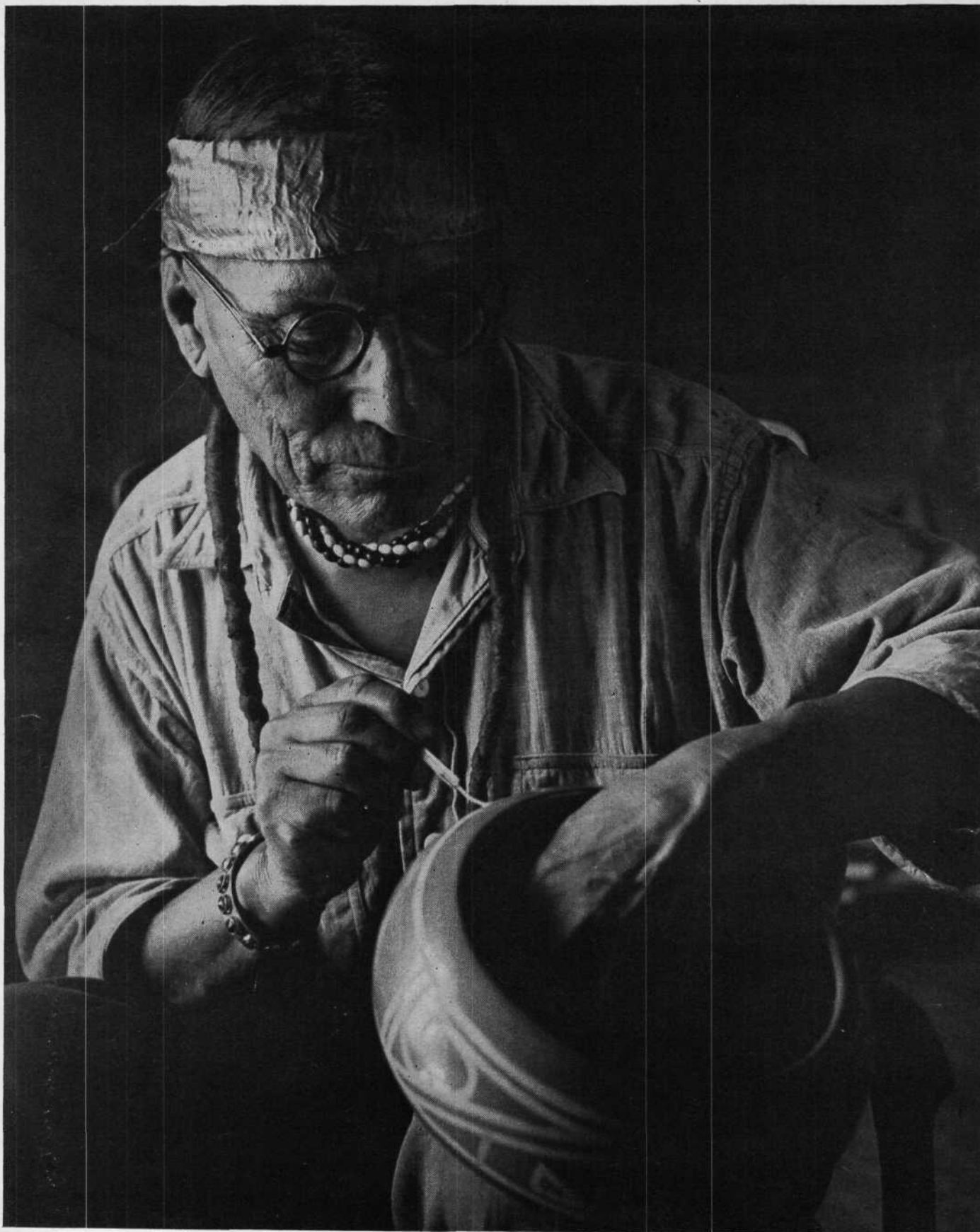
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Master Pottery Maker

By FRED H. RAGSDALE

Los Angeles, California

This fine portrait of a San Ildefonso Pueblo Indian potter is winner of first prize in Desert Magazine's July photographic contest. Taken with a Rolliflex camera. Plus X film, no filter.

When it was announced in February that Japanese evacuees from the Pacific coast would be relocated on tribal lands of the Colorado River Indians, there were protests, both from the Indians and from sympathetic white sources. But it was a war measure, and the objections were overruled. Largest of the Japanese relocation communities is on the Colorado River Indian reservation near Parker, Arizona, where housing for 20,000 evacuees has been erected in the heart of a desert mesquite forest. And if you want to know how this project is working out, here are some of the answers.

Refuge on the Colorado

By RANDALL HENDERSON

"I WISH you would write an editorial against putting the Japanese on Indian reservations. That is one of the most unforgivable things we have ever done to the Indians. They are defenseless, therefore they are saddled with the Japs."

This paragraph is from a letter written to me by a friend in Washington several weeks ago.

It raises a question which has been in the minds of many Desert Magazine readers since it was announced early this year that all Japanese were to be evacuated from certain coastal areas, and that many of them were to be relocated on Indian lands.

I did not write the editorial for the reason that the resettlement of Japanese on Indian lands for the duration of the war is part of America's all-out effort. It was not a time to criticise unless there was a constructive end to be gained.

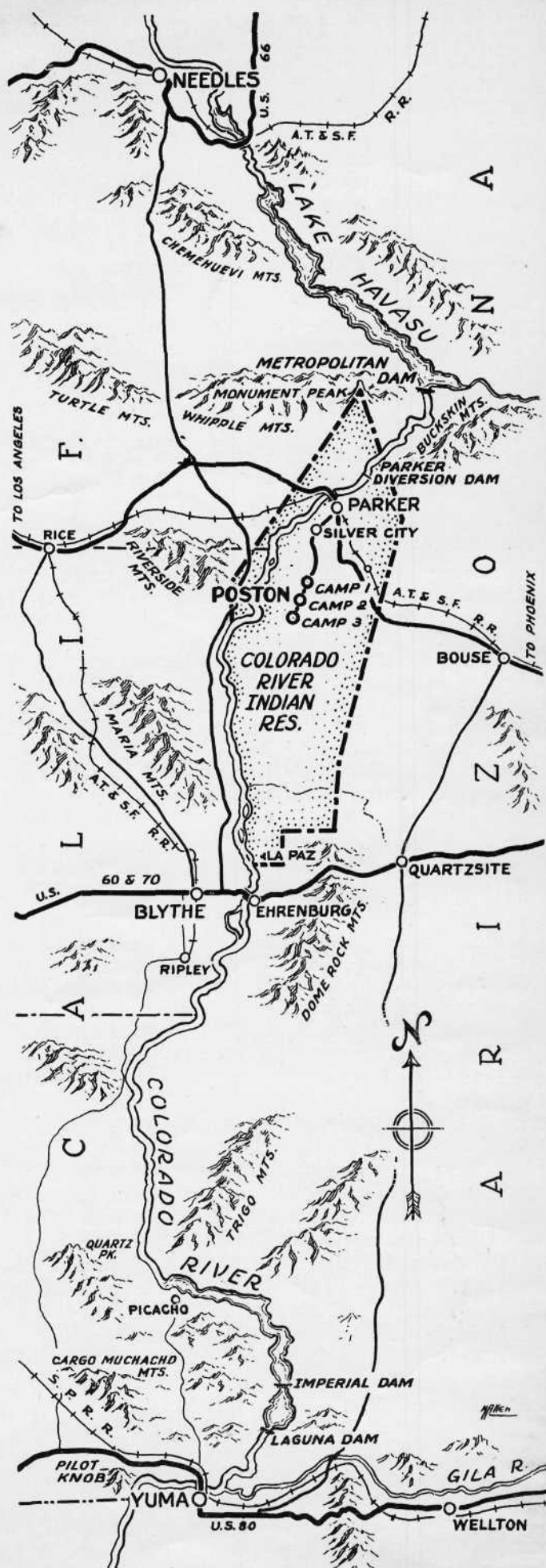
However, I decided to find out for myself from first hand sources just how this Japanese relocation program is working out. There is a three-fold interest involved—the interest of America at war with Japan, the interest of the Indians whose lands are being occupied, and the interest of the Japanese themselves.

The largest of all the Japanese relocation centers is on the desert—deep in the mesquite jungles of the Colorado River Indian reservation that lies along the Colorado river below Parker. And that is where I went for information.

With permits from the War Relocation Authority and the Bureau of Indian affairs, I visited the Colorado River Relocation Center early in July. There I found Americans and Japanese working in close cooperation and doing a job that has many amazing aspects.

Consider the task of building a city for 20,000 people—the third largest city in Arizona—with all the problems of housing, water, power, sewerage, policing, fire control and transportation, within a period of three months. And keep in mind that the city is located 17 miles from the nearest railroad and more than 300 miles from its wholesale distributing center, in the heart of a desert wilderness where there were neither roads, power nor communication lines, nor any organization set up to provide these essentials. It was truly a gigantic undertaking.

The Japanese Center on the Colorado river is named Poston, honoring Charles D. Poston, first territorial delegate and often called the "Father of Arizona." The name Poston really covers



three towns. Camp 1 is built to house 10,000 Japanese plus several hundred Anglo-American officials who are directing the project. Camp 2, three miles farther down the valley accommodates 5,000 people, and Camp 3, another three miles south is the same size as Camp 2.

From Parker I drove over a paved road to Silver City where the administration and school buildings of the Colorado River Indian reservation are located. Beyond this point a well-maintained gravel road extends to the three Poston camps.

Army engineers laid out the townsites and directed the construction. The building job was done by the Del E. Webb Construction company under contract. The Army Signal corps strung the communication lines. The Provost Marshal's office provided two companies—less than 500 soldiers—for guard duty. The Indian Service receives the evacuees and operates the relocation centers which popularly are referred to as "camps." The erection of housing and facilities for a community of 20,000 was not a new problem for army engineers or for private construction companies. Jobs of no less magnitude were done both in World War I and again in the present emergency. But they were built to house soldiers, adults whose loyalty to the American flag was never in question, and who moved in under long-established rules of order and discipline. They set up camp under veteran officers trained for such an emergency.

But here was a new problem in human relations: Twenty thousand Japanese, ranging in age from a few days to 80-odd years, the older generation aliens, the younger people Americans—all of them members of a race whose national leaders had been guilty of an atrocious act of treachery against their adopted country. In occupational pursuits they ranged from laborers in the vegetable fields to highly successful merchants. Some of them could not speak English. Others had graduated with honors from American colleges. Some of them had sons serving in the United States army and navy. Others formerly had been members of the Japanese military caste—may still be, for that matter. They all came to Poston on a common level.

It was a mass movement that has no parallel in American history, nor any precedent on which to base a new code of rules.

As project director, to handle this unknown problem, the Indian Service brought in W. Wade Head, agent for the last six years on the Papago reservation at Sells, Arizona. Head is a graduate of the University of Oklahoma with a fine record both in and previous to his federal service. He has youth, a cool head, and a fine understanding of human nature. Every hour of every day he has important decisions to make—decisions that never before confronted an Indian Service official.

As assistants, the Indian Bureau brought specialists from many places—Nell Findley from Honolulu where she has been doing educational work among the Japanese for many years, to direct the department of health, recreation and education; H. A. Mathieson to assume the huge task of making the colony self-supporting on the thousands of acres of rich silt land that surrounds Poston; Russell Fister to organize and manage the cooperatively owned and operated Japanese stores and shops to serve 20,000 people; Dr. Leo Schnurr to establish a hospital and direct medical work; Ted Haas, attorney, to help the Japanese set up their own self-government; Norris James, a San Francisco newspaperman to take over as press officer and sponsor the publication of a daily newspaper, written and edited by the Japanese in the English language.

There are a score or more of these departmental directors and assistants, each a specialist in one of the many fields of community activity. They are there to lead and organize the Japanese in a self-contained community in which the Japanese themselves will supply the manual effort and fill subordinate positions. They have a versatile army of workers to draw from.

In the camp are highly skilled Japanese in every trade and business and profession.

Isamu Noguchi is a noted Japanese sculptor. He came to Poston from New York—came voluntarily. He wanted to help America solve this problem. When I visited his apartment he was working on an exquisite bust in marble. That is his recreation. His project job is landscape planning for the new city on the desert. On the walls at the administration building is a beautifully designed sketch of the Poston of the future with parks, gardens and vine-covered cottages—if there is time and the means to carry out the project. Noguchi drew the plan.

"Tets" Iwasaki is a graduate of California School of Technology. His diploma hangs on the wall of his one-room apartment at Poston. He is the city's new electrician.

Shigeru Imamura was a trusted employe of the Imperial Irrigation district in California, largest in the United States. Now he is water-master for the irrigation project at Poston. Mabel Ota was an assistant librarian in Los Angeles. She and a group of helpers have nearly 4,000 books and hundreds of magazines—all donated—classified according to approved library methods on rough board shelves in the long barracks room that has been set aside for the purpose. There are 500 library patrons a day.

Marvel Maeda, a graduate of San Diego state teachers college, is secretary to Director Head. She will join the teaching staff when school opens this fall. Harvey Tanaka was a paper salesman in Imperial Valley—and he has been assigned to the marketing organization in Poston. And so it goes. There are skilled and willing workers for every job.

There is a well-equipped hospital at Poston now. But during the first few days, before all the medical supplies arrived, the hospital cases were handled in temporary barracks. When the first appendectomy came in Dr. Schnurr happened to be away on an important mission. It was an emergency case and the American nurses were in a quandary. Could they trust the Japanese surgeons newly attached to the staff with so important a surgical operation—or should they wait for instructions from Dr. Schnurr?

Drs. Y. Wakatake and Henry Sumida calmly assured the head nurse they could do the operation. Reluctantly, she gave consent. They did not have much with which to work. But they did a job that won the respect of the entire staff, Americans and Japanese alike.

At the time I visited the settlement there were 9,000 Japanese in Camp 1 and 2,000 in Camp 2. They are still arriving from assembly centers all over California—Los Angeles, Santa Barbara, Merced, Fresno, Salinas, Imperial Valley.

Five hundred recruits arrived from San Joaquin valley one day while I was there. They came by special train from Parker. They were met with a fleet of trucks loaned by the CCC. Arriving at Camp 2 they waited in line for their assignment to quarters. A cot was issued to each one, and a tick to be filled with straw for a mattress. They came with only the personal belongings they could carry with them.

Quarters consist of long barracks buildings, each 20x100 feet, built of wood, sealed outside with roofing paper and inside with plasterboard. There are three partitions in each building, making four 20x25-foot rooms. From five to nine persons occupy a room. The normal is six, but where the family is large they are permitted to remain together. The Japanese form their own housing groups. It is the policy of the administration to keep regimentation to a minimum.

Five hundred soldiers are stationed at Poston but their duties scarcely touch the lives of the Japanese. They stand guard at the

incoming roads to make sure visitors have proper permits and they patrol certain areas where contractors' materials are stored.

There is no guard line around the camps as a whole. It would take an army division to do an effective job of picketing any one of the camps. The Japanese understand they are to remain on the reservation—but the reservation is nearly 50 miles long and 14 miles wide. There really is nothing to keep an internee from running away if he wants to go—that is, nothing except many miles of hot arid desert extending in all directions beyond the forest of mesquite, cottonwood and willows which covers the valley.

They are not treated as prisoners. Nor do they regard themselves as such. So far, not a single desertion has been recorded. Openly, there is no evidence of hostility. The great majority of those in camp discuss their plight in a philosophic tone: "We are here. It probably is for the best. And so we will accept it as cheerfully as we can."

Soon after arrival each Japanese 16 years and older is given an opportunity to enlist in the War Relocation Work corps.

After enlistment they are assigned to work groups and paid a monthly wage of \$12 for unskilled, \$16 for skilled workers and \$19 for executive and professional services. The doctors who performed the appendectomy are in the \$19 class. Among the Japanese there is some criticism of the wage differentials. Administration officials are discussing the feasibility of a flat rate for all.

In addition to this pay, which covers a 44-hour week, they receive their food, water, electricity, heat in winter, and it is planned to issue work clothes to certain types of laborers where wear and tear is severe.

An opportunity has been given all Japanese to sign up for return to Japan if and when transportation can be arranged. So far 120 members of the camp have asked for repatriation.

The unit of administration at Poston is the block. In each block there are 14 apartment houses, a dining room, recreation hall, latrine buildings with showers for men and women, laundry and ironing room. Wide parking area surrounds each unit of four blocks, designed as a fire break. Each block has its Japanese manager who represents it in matters of community administration.

Original block managers were appointed by the official staff, but on July 21 the first election was held in Poston Camp 1 at which managers were elected by secret ballot by the Japanese themselves. The 36 block managers now form an administrative council with mayor, fire chief, police chief—all the functionaries of a normal American city.

Each day a long caravan of trucks rolls into camp, bringing the many tons of food required for so large a population. Most of the food supplies are bought through the army quartermaster department in Los Angeles. A cook and helpers are named in each block. As far as possible the Japanese are given what they want to eat, within the limitations of a plain substantial menu. An Anglo-American dietician would be appalled at the amount of starch they consume. Rice of course is the staple, with tea the most popular drink.

Good cooks are notoriously temperamental, and the Japanese are no exception. Earl Best, chief steward, is often called upon to referee the disputes that develop in the mess halls. Sometimes the argument is between the chef and his dishwashers. At other times it springs from menus that do not suit all the customers. Bring together a group of American merchants, farmers, auto-mechanics and day laborers and set them down at a table to eat the same family style dinner, and you would have the same problems Best has to deal with in the community mess halls at Poston. The average cost of food for one person is 37 cents a day. Cooks, waiters and flunkies are all on the camp payroll at \$12 or \$16 a month, according to rated skill.

At one corner of the townsite Frank Kuwahara, head nursery-



With legal guidance from the Indian Service, the Japanese at Poston are setting up their own self-government. On July 21 the evacuees elected their own "block" leaders to represent them on an all-Japanese city council. The Japanese girl, blindfolded, is drawing names from a hat to determine the order in which the names of candidates would appear on the official ballot. In the background, center, is Ted Haas, Indian Service attorney, who arranged the election according to traditional American procedure. At his left, Norris James, press representative of the WRA.

man, is pampering 55,000 baby guayule plants shipped from Salinas for test plantings in Parker valley. They are now taking root in hastily built arrowweed ramadas, but as soon as irrigation laterals are completed, will be planted in various types of soil in experimental fields. Guayule is a native of the Chihuahua desert and no one knows yet just how well it will grow and produce rubber in the bottom lands along the Colorado river.

Army engineers found a fine stratum of water at a depth of 118 feet in Parker valley. Huge tanks were built and Poston is well supplied with domestic water.

Irrigation water arrived in a newly constructed canal from Parker diversion dam July 4. Additional canals are being laid out for the reclamation of as much of Parker valley's 100,000 acres as time will permit. Time in this case will be determined by the duration of the war. There is no finer soil than the sandy loam of these Colorado river bottom lands. It is the same silt that grows huge crops of cantaloupes, lettuce, alfalfa and flax in Palo Verde and Yuma valleys.

The first 40-acre field had been cleared and leveled for planting July 15. Mammoth bulldozers were yanking mesquite trees out by the roots and the leveling crew was following close behind. There is plenty of man-power and skill for a speedy job of reclaiming this valley, but tractors and tools are limited, and progress will depend on the availability of farm machinery. The goal is 20,000 acres the first year.

First plantings will be vegetables to supply the table needs of the colonists. They are eager for the day to come when they will be growing their own food. Some of the Japanese who arrived in camp the latter part of May already have little patches of radishes growing around their quarters, watered by hand from the domestic faucet.

Church services are conducted by Japanese and American missionaries of the Christian, Catholic and Buddhist denomination. Japanese may worship where and how they please—with

the exception that Shintoism, the pagan creed of the warrior clan in Japan, is barred.

Stores and shops, still limited in stocks and crude in fixtures, are being operated by Poston Community Enterprises. Russell Fister, director of these commercial enterprises has two stores and three cold drink huts, beauty parlors, barber shops, and is organizing shoe, radio and watch repair shops. From the Japanese population he has drawn managers, clerks, soda jerks and all the help necessary for operation. These commercial projects are on a non-profit basis. That is, the profit goes into the Japanese community fund where it is expended for recreational and civic activities. The first store opened May 11 and did a gross business of \$11.75 that day. Average receipts now exceed \$2,000 a day. Since the total merchandise on the shelves seldom exceeds \$5,000 this is a merchant's dream of fast turn-over.

Dr. Willard Beatty, director of education in the office of Indian Affairs at Washington spent July in camp getting facilities organized to take care of 6,000 school students this fall. Plans include elementary, high school and college.

The Indian department hasn't enough teachers to fill so great a need. Japanese girls with normal school training are being enlisted to supplement the Anglo-American instructors. Since most of the Japanese came from California, the state board of education in that state is lending books for the classrooms.

A city of 20,000 without a newspaper would be a strange phenomenon in United States—and Poston has its Press-Bulletin. It is just a two-page mimeographed journal, comes out every day except Monday and has a staff organization which is a counterpart of a full-fledged daily paper.

Director of the journalistic activities at Poston is Norris James, affable young man whose title is assistant in charge of project reports, but who performs the usual duties of a press and intelligence officer. He has assembled an enthusiastic staff of young Japanese reporters and columnists, and is holding in reserve a crew of linotype operators, printers and pressmen for the day when Poston Community Enterprises may be able to undertake the printing of a newspaper.

What do the Indians of the Colorado River Indian reservation think about this invasion of their tribal lands?

They do not like it!

There are 900 Indians on the reservation, which extends along the Colorado river from Monument peak on the north to old La Paz on the south. Most of it is on the Arizona side. The reservation, ceded to the Indians by treaty with United States, includes three tribes. About 60 percent are Mojaves, 35 percent Chemehuevis and 5 percent Yumas. Only a small fraction of their rich valley has been reclaimed.

In 1910 the federal government allotted 10 acres to each man, woman and child, and installed a pumping plant to lift water from the Colorado river for irrigation. This allotment plan would have been fine if no Indian ever died. But after a few deaths and marriages had taken place the Indian service officials found themselves hopelessly involved in trying to divide fractional tracts between heirs and in-laws. The arithmetic became too complicated even for the white man. And so congress amended the plan and gave each family 50 acres.

For the most part, Colorado river Indians are not energetic farmers, and few of them ever developed the full area of their allotments. Some of them were permitted to lease to white tenants, but the greater part of Parker valley has remained virgin mesquite land, not even accessible by road. The Japanese centers are many miles from the nearest Indian rancho.

I do not know what passed between Secretary Ickes, John Collier of the Indian Bureau, and officials of the War Relocation Authority when confronted with the problem of putting a Japanese relocation camp on these reservation lands—but it was a problem that called for a prompt decision. Gen. John L.

DeWitt of the west coast military zone had to have a place for Japanese evacuees without delay.

The answer was a memorandum agreement between the Department of Interior, representing the Indians, and the WRA, which gave the latter authority to move in and take possession of undeveloped portions of Parker valley. In behalf of the Indians it was stipulated that the WRA must vacate the land within six months after the war ended—and that all buildings, improvements, canals and appurtenances of the project should revert to the Indians without cost.

Under this agreement the Indians appear to have everything to gain and nothing to lose. You and I would figure it that way. It would have been a gift from heaven if the early settlers in Palo Verde or Yuma or Imperial or Salt River valleys could have moved in on lands already leveled and under irrigation—without cost to themselves.

But the Indian mind has a somewhat different slant. There is historical basis for his feeling that once the white man moves in and takes possession, his holdings are gone forever.

And what does he want with all that farmland anyway? He can raise what he needs on his five-acre patch. He would rather have the mesquite forest—the original valley of the Colorado where his ancestors hunted and fought and lived and were content—in its natural state.

Right or wrong, he is against this whole deal. The white man and his Japanese proteges are cluttering up his reservation with roads and power lines and telephone poles and buildings. They are chopping down the trees of his ancestral hunting ground. They are bringing smoke and noise, and for all he knows eventually there will come a parade of tourists prying into his humble dwelling and trying to take pictures of everything in sight.

That is the Indian's side of the story.

It is a 1942 version of the same conflict that has been going on since the first white settlers landed on the New England coast.

One thing can be said in behalf of the white men who came to this part of the New World. He never at any time enslaved the Indian. And perhaps that is a better fate than would befall him if America and its allies were to lose this war.

If the lands are returned to the Colorado River Indians, in accordance with Secretary Ickes' agreement, they will have made no greater sacrifice than other Americans are making in this emergency.

Generally speaking, I found a friendly atmosphere prevailing at Poston. Wade Head and his associates are strongly imbued with the pioneer spirit. They are out on a new frontier reclaiming virgin land. It is a task that has always brought out the best in Americans—courage, patience, energy, enthusiasm. They are putting all these things into their job.

They are dealing with two very distinct groups of Japanese: The issei, the older generation of men and women born in Japan who have never acquired American citizenship. Most of them are past 50. The larger group is the nisei, the second generation who by reason of their birth in United States are American citizens. A majority of them are under 35. They seldom speak Japanese except when talking with their elders. They are the product of American schools and have adapted themselves to a rather remarkable degree to American ways.

Around the headquarters offices are scores of clattering typewriters, most of them operated by young Japanese—competent, courteous and friendly. There may be resentment in the hearts of some of the elders, but there is little evidence of it among the nisei.

Pioneering on the desert frontier is never a bed of roses, but the Japanese at Poston are being treated well—and for the most part they are responding with the characteristic politeness of the well-bred Japanese. I can only hope that Americans interned in Japan are faring as well, and that the atmosphere in the American internment camps in Japan is as cordial as at Poston.



More rains would follow, the grass would grow again, and all would be well.

Call him a pagan if you wish, but the Navajo has no less faith in the miraculous power of his religion than does the Christian or the Moham-medan. And if you wonder why the Indian clings so tenaciously to the creed of his fathers, you will perhaps understand a little better when you have read this story.

Rain Sing

By CHARLES KELLY
Illustration by John Hansen

WE HAD shoveled our way through miles of hot red sand to reach the most isolated trading post near the Utah-Arizona line. Bill Campbell and I were making our first trip into the Navajo country and had selected as our objective a section far removed from the path of tourist travel.

Harry Goulding and his wife "Mike" seemed glad to see us. Few visitors ever reached his lonely post. Monument Valley had not yet been discovered by Hollywood and the trails leading into it were all but impassable. We told Harry why we had come and he laid out a pack trip for us that included some of the finest scenery in the West.

"Can you guide us?" we asked.
"No," he replied, "I've got to go out tomorrow for supplies. But I can get you a good Navajo guide. His name's Leon Cly, and he's been to school. Speaks good English. He knows the country and can show you what you want to see. He's gone to a rain sing today, but he'll be back tomorrow."

"A rain sing?" I asked. "What's that?"
"Well now," Harry replied, "you fellows may have noticed that down in these parts we have mighty little rain. There's no running streams and few springs. The Indians depend almost entirely on sheep for their living and the only things they have to trade here is wool or blankets

woven from wool. When it doesn't rain the grass dies and the sheep go hungry. If it's dry for a long spell the sheep die and the Indians starve.

"It gets dry nearly every summer about this time, and the Indians start praying for rain. They don't pray like white men, asking God to do this and that. They have long chants handed down from prehistoric times, which must be repeated word for word without error. They sing their prayers. The chants last four days. They hire a medicine man to put on the ceremony and all the people in this district gather to help sing for rain."

"Do they ever get rain?" I asked.

"Do they get rain? I'll say they do! They always get it sometime before the end of the fourth day. Sometimes only a little shower, sometimes a cloudburst, but they always get it. As long as I've been in the country they've never failed."

"Do you believe their singing has anything to do with it?"

"Well, all I know is just what I see. Maybe the medicine men have studied the weather and know just when to start in order to get rain in four days. If they do they're wizards. Maybe the rain comes in answer to their prayers. I'm not one to say it doesn't. But I've seen them get rain so

often that I always pay my share to hire the medicine man and figure it's a good investment. If the sheep die I don't do any business. I'm not superstitious but I like to see it rain just as much as the Indians.

"There's a rain sing going on now over in the next valley. Maybe your guide will take you there, but I doubt it. Up here among the 'long-hairs' they don't like to have white men horning in on their ceremonies and I don't encourage it. They take their religion seriously and I admire them for it. They haven't been spoiled by a lot of crack-brained Bible pounders."

Next day Leon Cly showed up at the post and the trader arranged with him to take us on a pack trip. Leon was about 20 years old, rather small and thin. He spoke English all right, but as little as he possibly could. We couldn't get much more out of him than "yes" and "no," but his friendly smile assured us we'd get along all right. Harry explained to him what we wanted to see, and with those instructions we started.

Some people say the Indian has no appreciation of scenery as such. Leon proved they are mistaken: He chose shots for us to photograph that have never been improved by many subsequent visits. He showed us natural bridges, chimney-holes in the rocks, petroglyphs, fossils, footprints of triassic animals, cliff dwellings, and pure scenery until we were dizzy. He seldom spoke, but whenever he got off his horse we knew there was something worth while to be seen. Among the most welcome things he showed us were water-holes tucked away in the most unexpected places.

On the third day out we descended into a big, circular valley. From the rim we had seen a herd of horses, a group of people and a large hogan. Our water bags were dry so I suggested we ride over to the gathering and get water.

"No," said Leon, "this is rain sing. You go on. I get water and catch up."

The sing was being held at Nez-bit-suey's hogan. We wanted to visit the ceremony and hear the chants, but Leon didn't want us to go, so we curbed our curiosity and rode on.

An hour later Leon came with the water bags. Bill and I poured about a gallon down our parched throats. We were in a position to appreciate the importance of water in that dry land.

"How many days have they been singing?" I asked our guide.

"Today fourth day," he said.

I looked at the sky significantly. There wasn't a cloud in sight nor a breath of wind. Leon grinned, sensing my unspoken

question. He wasn't worried; there were still three hours left before the end of the prescribed four days.

We plodded along through the sand. It was unmercifully hot. The horses were tired and so were we. Leon slept in the saddle as he rode, but his heels automatically continued to beat a tattoo on his horse's ribs. I shut my eyes against the sun's glare, reflected from the orange sand, and tried to doze.

We had gone two or three miles and were approaching the end of the valley when we were suddenly startled by the sharp report of a thunderclap. Hardly believing my senses I turned in the saddle and was amazed to see, hanging in the sky, a big white thunderhead, where but

a short time before had been nothing but clear blue. It was the only cloud in sight and as I looked it began to rain on the group assembled at the rain sing!

We watched, fascinated, until the cloud dissipated itself. It rained nowhere else in the valley. The singers were soaked with a good heavy shower, a token that their prayers had been heard by "those above." More rains would follow, the grass would grow again, and all would be well.

"Look!" I shouted excitedly. "It's raining right on Nez-bit-suey's hogan!"

"Sure," said Leon Cly with a broad grin.

He had known all along it would rain. It always does.

Cash for Your Desert Experience . . .

Desert Magazine wants true experience stories from the desert—stories of adventure, exploration or unusual discovery, or perhaps about an unusual character, or a strange coincident.

In accordance with announcement made last month, a cash prize of \$25.00 will be awarded for the best story of approximately 1,500 words. An unlimited number of \$10.00 second prizes will be given those who do not qualify for first place. Every acceptable story sent in will be paid for and published in a future issue of Desert Magazine.

Charles Kelly's story "Rain Sing" in this issue is typical of the kind of stories desired. However, the subjects may include mining, travel, archaeology, mountain climbing, wild animal life, desert personalities, etc. The field is unlimited.

Contestants are asked to observe the following rules in submitting their manuscripts:

All manuscripts must be typewritten, on one side of the page only.

Entries should be addressed to Editor Desert Magazine, El Centro, California, and must reach this office by September 1, 1942, to qualify for the awards.

If good sharp 5x7 or larger pictures are available, an extra \$2.00 will be paid for each photograph accepted. Pictures are not essential, however.

Writers must be prepared to supply confirmation as to the authenticity of their stories. Only true experiences are wanted, either your own, or one with which you are personally familiar.

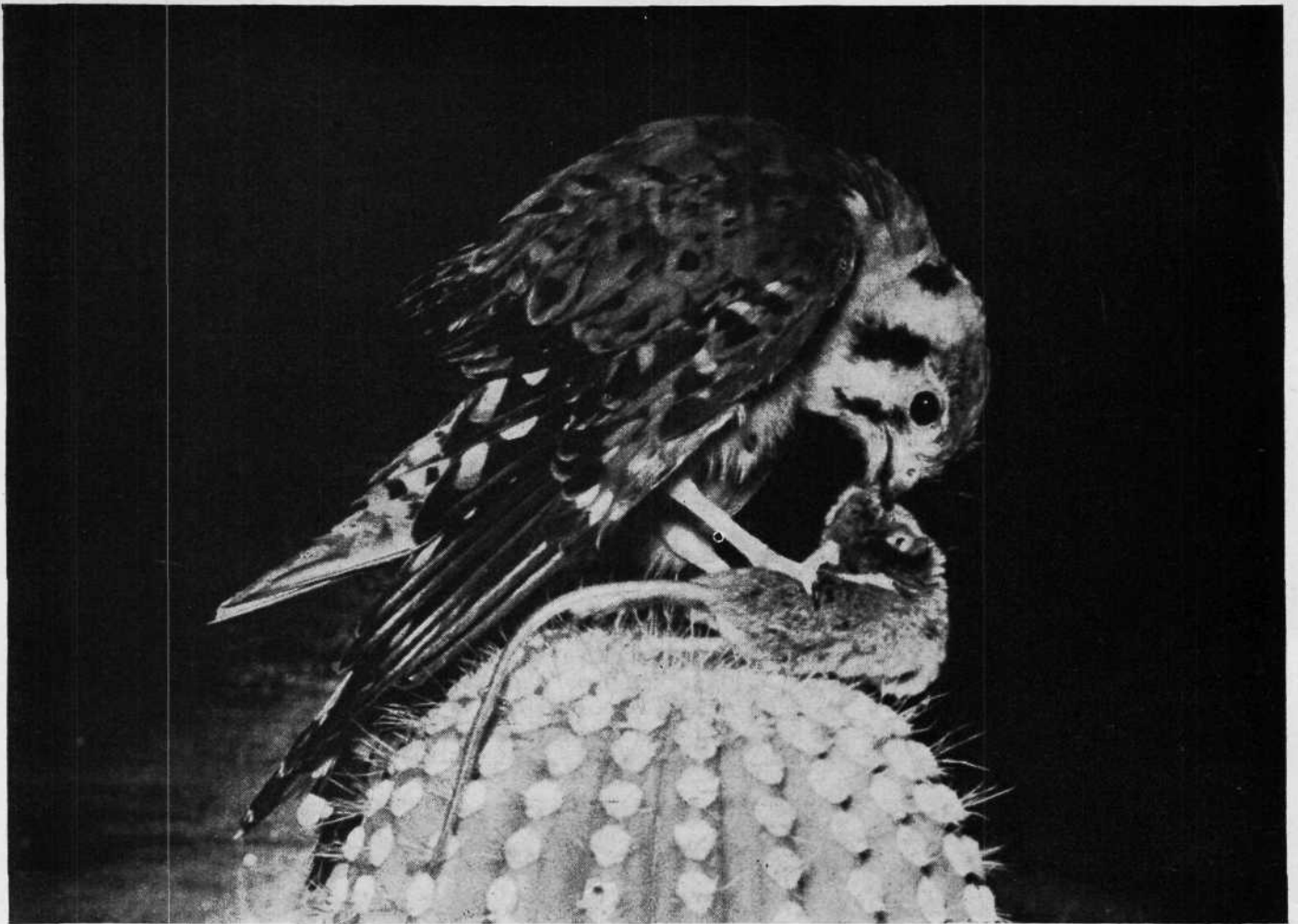
All stories must be essentially of the desert, and the scene is limited to Arizona, Nevada, Utah, New Mexico and the desert area of California.

True names of those involved must be given, although with the knowledge of the judges, fictitious names may be substituted in special cases.

If the story has appeared previously in print, this fact and the time and name of the medium in which it appeared should be given.

All readers of Desert Magazine are invited to submit manuscripts.

Judging will be done by the staff of Desert Magazine, and the decision of the judges will be final. Unaccepted manuscripts will be returned if accompanied by return postage.



The hawk flew to the top of a saguaro and consumed the entire rodent, meat, skin and bones.

Hawk of the Wastelands

Although often regarded by desert homesteaders as an enemy to be killed on sight, the Desert Sparrow Hawk has many points in his favor. While it is true it sometimes feeds on other birds, including young poultry, its main diet is rodents, reptiles and insects. Here is a close-up study of the bird, by a man who knows it intimately.

By GEORGE McCLELLAN BRADT

THE first time I realized how unjustly the Desert Sparrow Hawk, along with the rest of the great hawk tribe, is judged by man, was on a sunny desert morning last October.

On a barbed wire fence not ten feet apart a Sparrow Hawk and a Gambel Sparrow sat side by side. While the hawk easily could have caught the other bird, apparently such a thought never entered its head. Instead, the hawk kept his jet-black falcon eyes fixed on the desert floor, while the sparrow continued unconcernedly to sun himself.

What a revealing picture it was. Here was a hawk, generally considered a killer of small birds, not even trying to capture

one of the very individuals for which he had been named. It was all very perplexing, but I was not kept in suspense for long.

Suddenly the falcon rose into the air, flew a few yards toward the mesquite under which I was hiding, and then with slate-blue wings held close to its body dove straight at a gopher mound. A yellow foot armed with black talons shot forward and seized a small body crouching in the dust. The target of that deadly aerial attack was a little desert mouse.

The victim never knew what had happened. The force of the blow and a quick twist of spinal cord by notched beak ended the rodent's earthly worries. Then with

both feet tightly holding the limp body the Sparrow Hawk flew to the top of a high saguaro.

There on the giant cactus the hawk had its breakfast. With one foot on the mouse and the other holding fast to the saguaro the falcon began tearing its victim into small bites. Bones, fur, flesh, everything in fact, was consumed in the short space of 10 minutes. But as one mouse does not constitute a full meal for a Sparrow Hawk the hunter looked about for more food.

On the fence below, the Gambel Sparrow continued to sit sleepily in the sun. The hawk kept looking in the little bird's direction and I felt sure that this time he would attack his "natural" prey. I did

not have long to wait for action. For almost immediately winged death struck again. Straight for the fence and sparrow sped the hawk. But in mid-air halfway to the fence the attack was halted. For a split-second the falcon hung motionless in space, then darted up and forward to grab an invisible something in the air. Banking steeply the bird returned to its perch.

With binoculars trained on the cactus I sought the reason for the mysterious maneuvering. Again settled at its breakfast table the Sparrow Hawk started on the second course—a large grey grasshopper. I almost laughed out loud when I saw the little bird bring its right foot, which clutched the insect, up to its beak and begin eating the grasshopper as if it were a drum-stick or lamb chop. It was almost human.

So it was I learned that the Sparrow Hawk is not only misnamed but is even one of the most beneficial of all the hawks. Over four-fifths of its food is made up of insects and rodents, the other one-fifth is composed of frogs, snakes, and small birds. When we see one of these little hunters perched on a saguaro or telegraph pole, or soaring over cactus and creosote, let us remember that among hawks, as among men, there may be individuals that do ill, but that on the whole all hawks of whatever species do a vast, though unappreciated, amount of good, and should always be considered and treated as allies and true friends to man.

Last March I had one other first-hand experience with the Desert Sparrow Hawk. Hoping to find a Saguaro Screech Owl in one of the many cavities dug by Gila Woodpeckers in the giant cacti, I climbed a 30-foot specimen and reached into a hole near the top, to encounter five warm eggs. Just as I did so a strange windy whirring sound made me look skyward and I saw diving straight at my head an object that resembled more than anything else a small bomb. I ducked quickly, clutching at the same time the saguaro's trunk, spines notwithstanding. The diver missed me by a few inches. It was a Sparrow Hawk—and a mad one at that. I had discovered its nest and it had come to defend the eggs. I hurried down, not wishing to harm them by keeping the parent birds away too long, and also to get away from the small but determined fighter.

A week later I again dared the fury of the Sparrow Hawks. This time the nest contained in place of five eggs, five balls of white fuzz. Once more I was attacked, but by two hawks instead of one. The assaults merely were intended to frighten me away, I am sure, for it is doubtful whether the birds would really strike. But all the same it did give me a queer feeling about the scalp. The little birds were a pretty picture. All hawks are hatched, not naked like many birds, but covered with a thick

coat of white down. In time this gives way to the true feathers and then only are the little fellows able to fly.

My last visit to the nest was made two weeks later. I did not need a ladder to see the young birds on this occasion. The diminutive hunters-to-be were now fully feathered and quite "passable" flyers. Three were males with slate-blue wings and black spotted buffy breast feathers, the other two were the females with chestnut wings and breast feathers finely

streaked with light brown. The typically falconine heads of both sexes were marked with distinctive black patches on chin, cheeks, and nape. From the limbs of mesquite and palo verde the tiny falcons would fly in frantic pursuit of grasshoppers and lizards, but with little success. The parent birds stayed close by, however, and fed the little ones regularly until the day came when each flew away alone to live and hunt in their new and beautiful desert world.

DESERT QUIZ

Here's another lesson in the School of the Desert Rat. Questions in this list call for a wide variety of information, all pertaining to the Great American Desert. To make a perfect score you have to know something about the history of the Southwest, its geography, botany, zoology, mineralogy and Indian life. But it is an interesting test, and a good course of instruction for the tenderfoot. The average person will not get 10 correct answers. A seasoned desert rat will score 15, and only those super-humans known as Sand Dune Sages will exceed 15. The answers are on page 24.

- 1—Coolest clothing to wear on the desert is—
Green..... White..... Olive drab..... Yellow.....
- 2—Ancestral home of the Chemehuevi Indians is— In New Mexico.....
Cocopah mountains..... Along the Colorado river..... In Tonto basin of Arizona.....
- 3—Among the native trees of the desert Southwest, the best for shade purposes is the— Mesquite..... Palm..... Joshua tree..... Palo Verde.....
- 4—Author of the famous stories about the frog that never learned to swim was— Isaac Walton..... Frank Dobie..... Oren Arnold.....
Dick Wick Hall.....
- 5—Obsidian is— Metamorphic rock..... Igneous rock.....
Sedimentary rock.....
- 6—Hank Monk was a— Bandit..... Mountain man..... Indian Scout.....
Stage driver.....
- 7—To enter scenic Oak Creek canyon from the north you would leave Highway 66 at— Flagstaff..... Winslow..... Ashfork..... Williams.....
- 8—The squash blossom hairdress is worn by Hopi Indian girls— Only at the annual snake dance..... To mark their engagement.....
As evidence they are ready for marriage..... When in mourning.....
- 9—Correct spelling of one of the best known national monuments in Arizona is— Chiracuacua..... Chiricua..... Chiruchua..... Chiricahua.....
- 10—In firing their pottery the pueblo Indian women of the Southwest generally use— Dry aspen..... Dry manure..... Cedar wood..... Coal.....
- 11—Walls of the ancient cliff dwellings found in the Southwest generally are built of— Rough hewn logs..... Stone..... Adobe bricks.....
Sticks plastered with mud.....
- 12—Mature fruit of the Saguaro cactus is.....
Red..... Golden brown..... Light green..... Pink and green.....
- 13—True onyx is a variety of—
Agate..... Calcite..... Gypsum..... Mica.....
- 14—Palm Springs is at the base of which mountain—
San Gorgonio..... Santa Rosa..... San Ysidro..... San Jacinto.....
- 15—The stream which Major Powell called the Dirty Devil is now known as—
Virgin river..... Cataract creek..... Fremont creek.....
Little Colorado river.....
- 16—The state which lies northwest of the famous "Four Corners" is—
Utah..... Nevada..... Wyoming..... Colorado.....
- 17—Carlsbad caverns are in—
Texas..... Colorado..... New Mexico..... Arizona.....
- 18—Climbing over the desert rocks you discover a vug. In it you would look for— Indian pottery..... A desert tortoise..... Crystals.....
A pack rat's debris.....
- 19—Going by the most direct paved route from Indio, California, to Wickenburg, Arizona, you would cross the Colorado river at—
Ehrenberg..... Parker..... Yuma..... Needles.....
- 20—Highest mountain visible from the desert is in—
Arizona..... New Mexico..... Utah..... California.....

Last month Marshal South told of the addition of two burros to his little desert homestead on top of Ghost mountain. The burros helped with the work—but they also created a new problem for the South family. The cisterns, filled only by the rainwater that falls at long intervals on the roof of the South cabin, simply do not hold enough water to supply two burros, two goats, and the five members of the South family. And so the animals had to be sent away to distant pastures. This month Marshal tells of some of the advantages and disadvantages of summer heat on the desert.

Desert Refuge

By MARSHAL SOUTH

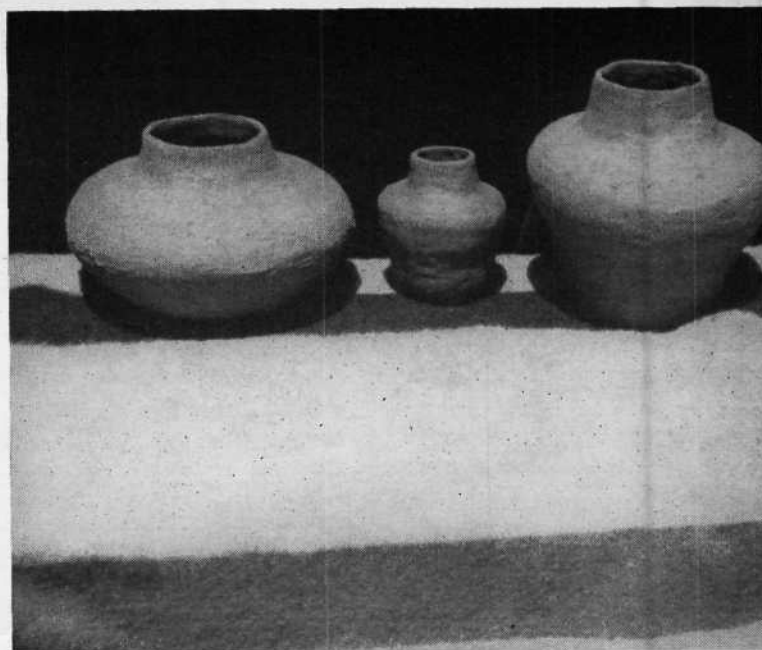
IT IS hot. As I sit in the shade and tap the keys of the typewriter, our whole desert world, clear to the distant rim of the horizon, is a shimmering glare of sunlight. Something of the same summer blaze that prevails in the Yaqui country of Mexico, and in the lands of the Seris Indians, who range the island of Tiburon and the adjacent mainland. Such light is hard on unaccustomed eyes. Just as the primitive foods of the desert are hard on unaccustomed stomachs.

But there is a priceless compensation for every hardship the desert has to offer. The compensation is freedom, and wide range; liberty of body and of mind. And these things are part of the desert dwellers' fiber and bone.

For over 400 years the Yaqui has fought fiercely against his "civilized" aggressors—who have sought to rob him of his freedom. A wild land, a savage land, a land of mountains and rocks is the homeland of the Yaqui. A desert land. Such locations breed fierce love of freedom. It is the people of the mountains who fight on—and survive. The ease-pampered dwellers of the lush lowlands too often bow the neck to the yoke of the conqueror.

Desert heat is a strange thing. Not nearly so fearsome as the story-writers would have us believe. But one must use the practical commonsense of the desert Indian in dealing with it. It does not take kindly to "high-pressure" exertion and "hustle." One must respect the very real power of the desert sun. Early morning and late evening are the periods for work. For the rest of the day, the shade—and it is surprising how tiny a patch of shade will suffice. "The shadow of a great rock in a weary land," wrote the prophet long, long ago. And there is a peculiar appreciation of the words by all dwellers of the wasteland. The writer of them dwelt in a desert land; he knew whereof he spoke.

And desert heat plays strange pranks sometimes. In the vicinity of Ghost mountain we have come, several times, into areas of those uncanny heat pockets, which, for want of a better term (never having encountered any previous writing concerning them) I call "desert vacuums." These phenomena are not frequent. But when one runs into them they are terrifyingly real. Sometimes you walk into them and sometimes they seem to form, without warning, around you. There is nothing to see; no hint of a change. But of a sudden you are oppressed by a sense of heaviness and dizziness. Every muscle and fiber of the body seems suddenly changed to lead. Every motion, every movement becomes difficult. The head swims and the solid earth goes round in dizzy circles. You are gripped with a very real fear of fainting. About all you can do is to stagger to the nearest patch of shade—if any bush or rock offers it—and sit down. Usually, after a bit, the air condition passes. Or mayhap



This is the type of pottery made by the Souths for their own kitchenware. It is made to use, not to sell, and although crude, is very serviceable.

you recover enough strength to plod on and pass beyond the area of the "pocket." The whole thing is uncanny. But it is no myth. I have had the same story from several hardened desert dwellers. I have had testimony to the effect that animals—even semi-wild desert cattle—are susceptible to the numbing lethargy which these "pockets" induce.

Explanation? Well, I have not much to offer by way of explanation. My personal theory is that the hot dry air rising from the heated desert is, by the contour of certain sections of the terrain, sucked into funnels, something on the order of the centers of cyclonic storms. And these "vacuum" centers in some way rob the atmosphere of ingredients necessary to life . . . possibly oxygen. Hence the feeling of collapse when one walks into them. This theory may be all wrong. But the matter is worthy of study. The several cases on record where old prospectors have been found dead beside full canteens of water, suggests that under certain extreme conditions these mysterious "vacuum" pockets may be deadly.

Air pockets are however so infrequent that thought of them need deter no one from summer trips. Other tricks of the sun are equally unexpected. I recall that once, while packing up a load of supplies along the steep foot trail that leads to the crest of Ghost mountain, I was startled by a very distinct whiff of smoke. I stopped instantly and, after the manner of the savage or the four-footed creatures of the wilds, sniffed the air carefully. One's nose becomes very sensitive to odors in the wilderness and scents carry—tobacco smoke, for instance, can often be detected over long distances, sometimes as far as two miles.

In this instance I was baffled. The smell of smoke was there. But from whence did it come? All points of the compass seemed to give the same reaction. Possibly, I told myself, Tanya, on the summit of the mountain, had tossed an old woolen rag into the stove.

So I went on. But presently to my amazement I not only smelled smoke but actually saw smoke. It was all around me in thin spirals. My pack was afire.

Hastily I backed up to a convenient rock and disentangled myself from the pack straps. Yes, it was afire. A small woolen blanket, used as a back-pad, was smouldering merrily. But there had been no matches in the pack; nothing to start a fire. What could have caused it?

Then, as I worked, smothering out the burning cloth, the

explanation dawned on me. There was a glass jug full of water among the articles I was carrying up. The summer sun, striking through the curved, water filled glass, had acted as it would have done through a lens. It was only about nine o'clock in the morning. But the sun was hot. It had actually set the pack afire. Glass bottles around Yaquitepec, since that day, have been regarded with suspicion. And we have ceased to scoff at the old story of the prospector who, packing a load of powder on his back, was blown up and killed—just because he had a magnifying glass stuck under one of the straps of his load.

There is abundant charm to desert summer, though. Much more than enough to outweigh any trifling tricks and discomforts that the heat may bring. Colors glow in the far reaches of the wastelands and the glint of mirage is weird on the white sands of every distant wash.

Tarantula hawks—those gay dashing wasps—sail through the warm still air above the junipers and around the crests of the dead mesquite stalks. Sinister, romantic fellows. With their orange wings and shining black bodies they always remind us of conventional devils from the operas . . . black velvet tights and scarlet cloak complete. They are a tough breed of freebooters and seem to have few enemies.

Once I saw a lizard make a dash and snap an alighted tarantula hawk in his mouth. But before I could reach the spot the big lizard dropped his prey. I had just a glimpse of a shiny black insect and his jaunty cloak scuttling to safety under a low thicket of ramarillo bushes, while the lizard moved away more slowly. Had he been stabbed by some jeweled dagger? Possibly. It must have been a keen dagger. These wasteland lizards are not soft in constitution. Even the small ones think nothing of dining upon savage black bees.

The garden has dried up. A few wisps of dead leaves, scorched now to a crisp brownness beneath the contempt of even our nibbling goats, are all that remain to remind us of the crisp salads which it so lately yielded. The main water cistern is dry. And so far the great white thunderheads which sail the blue vault above Yaquitepec have spilled no fresh rain upon us. Water is too valuable now for gardens. We have moved our two burros to distant pasturage, where they will remain till the rains have filled our cisterns again. Rudyard and Victoria shed a few tears as they took sorrowful leave of them. And even Rider, now right hand man of Yaquitepec, was downcast. But water is water. Until our supply is replenished we do not dare dole out, even the comparatively small amount that the burros require. Even Conchita and Juanita—our two active little goats—are not allowed to waste the precious fluid.

One advantage of our Ghost mountain weather is that it is never constant. Even in summer. And stretches of glowing heat are sandwiched with spells when the sunglow is tempered with the drive of a cool, fragrant wind. Such days are the cream of summer. And on such days Rider, who is eagerly interested in bugs, butterflies, rock specimens and every natural thing, usually persuades me to go on a hike somewhere. "We might find a spring, you know" is his most artfully used argument.

Well, we have never found the spring. But we do find all manner of other things. Last week we found a grim rocky hill where our predecessors, the Indian dwellers of the wasteland, had probably staged more than one sanguinary encounter with their enemies. A humble little "Gibraltar" of the desert. A few piled walls of stones in strategic points. A few caves walled and loopholed, in which defenders could crouch. But in the silence of the desert, as I scrambled about the mute evidences of some Indian "greatest war of history" I reflected that a man could be killed just as dead by an obsidian pointed arrow as by the most expensive weapon of modern science. And that the heartaches and misery of war are neither lessened nor increased by the methods employed.

The ancient slew with an arrow or a club. We in our vaunted civilization hurl death from the skies. But death is death. And grief is grief. It makes no difference what the setting or the period. Or how "barbaric" or "civilized" the actors in the drama. Man is commonly reputed to have come a long way upward out of savagery. Sometimes it gives one pause to wonder if he has not forgotten, in his scramble for culture, the most important ingredient of life. We have electric iceboxes and radios; we have airplanes and marvelous cannon. We can shout the price of soap or the latest quotation of the stock exchange around the world. "But what shall it profit a man if he gain the whole world and lose his own soul?"

ESSENTIALS

*How simple are the needs of man!
A little warmth, a little food,
A little faith in God's good plan,
A tolerance—and brotherhood.
Whate'er the creed, this truth still holds:
God has all dominance of Powers,
And all eternity enfolds
This life of ours.*

—Tanya South.

Sixth Dam in Colorado

KINGMAN, ARIZONA—Construction work will be started on the sixth dam in the lower Colorado river—Davis dam at Bullshead canyon—within the next 30 days, according to the statement of H. F. Bahmeier, reclamation bureau engineer in charge.

Bahmeier, acting immediately upon receipt here of notice that the Utah Construction company had signed and returned the contract to the bureau of reclamation, ordered the contractor to proceed with construction. According to the terms of the contract, the contractor has 30 days in which to begin operations.

The contract was awarded to the Utah Construction company in July. The company's bid was \$18,966,392. There was only one other bidder.

A tentative schedule of work furnished the local office of the bureau of reclamation by the contractor places the start of construction September 1.

No announcement of the location of the contractor's campsite has been made here. Because the government camp has been located on the Arizona side of the Colorado river about two miles below the site of the project, it is generally thought the contractor also will build in this state.

It is believed Kingman will be named by the contractor as the railhead for the project. The state highway department has been reconstructing portions of the highway during recent months and announced plans to pave it throughout.

Davis dam, the third largest earth- and rock-filled dam undertaken by the bureau of reclamation, will be 200 feet high, 1,600 feet long and contain 4,230,000 cubic yards of material. The power plant will consist of four generating units of 45,000 kilowatts capacity each and will be located on the Arizona side of the river.

Together with power supplied by Boulder and Parker dams, Davis dam will help supply electrical energy to the war industries of the Southwest. Its completion is scheduled in 1945.

The five dams previously completed in the Colorado are Laguna, built as a diversion dam for the Yuma irrigation project; Imperial dam, to divert water for the all-American canal; Parker dam, to divert water for the Colorado River Indian reservation; Metropolitan dam, to serve the Metropolitan water district, and Boulder dam.

Horned Toad

By JOSEPHINE GAMBLE
Chatsworth, California

Little horned toad in the sun,
If I move I know you'll run
Like a streak across the sand.
There! I have you in my hand;
I won't hurt you, let me see
How you run so fast from me.
Short thick legs and coat of mail,
Pointed ruff and stubby tail
Like your fearsome ancestor
Saurian or Dinosaur—
In the sand I think you're cute,
You're a Dragon Lilliput.

A DESERT SUNRISE

By ALTA L. SKELLY
Silver City, New Mexico

The sleepy morning blinks his eyes
From the glare of yellow and red
Which is streaming over the mountain top
As he slowly creeps out of bed.
Then he flings his golden banners
Through the mists of violet and blue,
These are his early messengers
Bringing a day to you.

MOJAVE TWILIGHT

By RUTH WINN SEALS
Mojave, California

Sand, and grease-wood, and silence;
Then a coyote's wailing cry.
And grey-fringed, crimson, shadows,
In a turquoise western sky.

And bright in the darkening ether,
By God's own hand flung far,
O'er Soledad's sharp shoulder,
Gleams the fair young evening star.

INLAND BREEZE

By GRACE CULBERTSON
San Diego, California

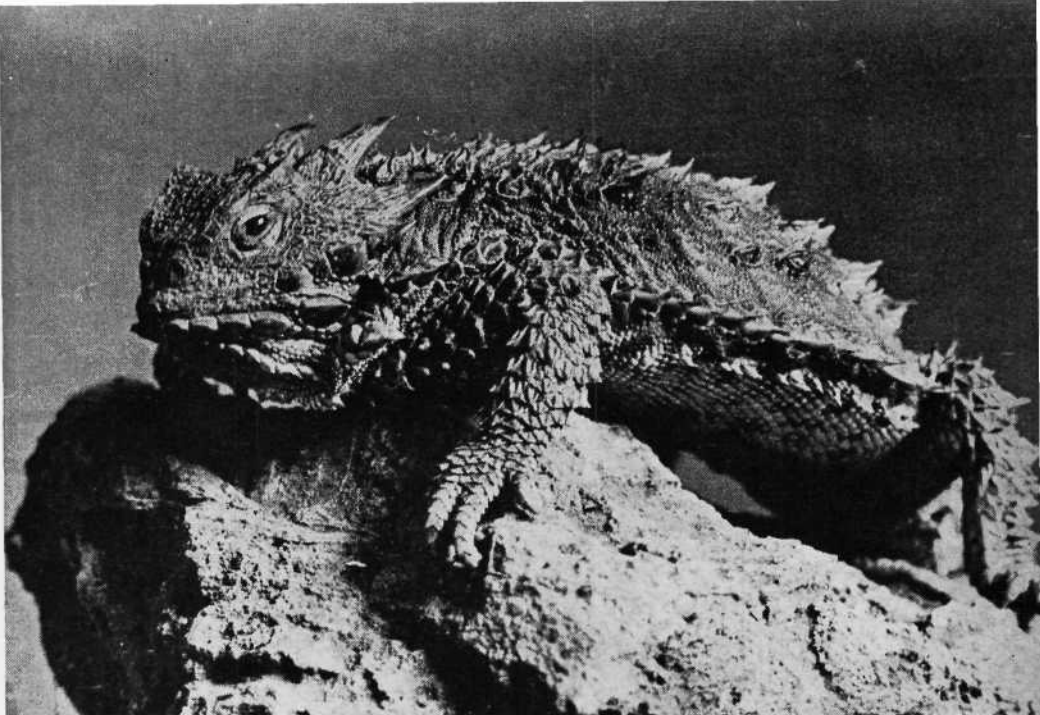
Here where white fogs roll in from sundrenched
seas,
And light is silver-screened by sea-sprayed mist,
Where filmy, floating veils hide as they list
A mountain range, a tower, a fringe of trees.
There is a warfare ever fought by these,
The lordly seas that willing shores have kissed,
And desert winds that like old loves persist
And whisper secrets through a landblown
breeze.
We rest content beside our sapphire sea;
And yet when comes a day of desert air,
The old embrace of inland sands we feel:
Far plains are calling, as the blind are we
When first they find lost things and fair,
For branded bright the desert sets its seal.

TAPESTRY

By DORIS C. PRIESTLEY
Pomona, California

A tapestry I'll weave for you
Of mesquite bush and purple sage!
Of chaparral and shadows blue!
Of granite from a by-gone age!
Perhaps no eye but yours and mine
Will ever see this pattern's grace!
No other heart may e'er enshrine
The awesome beauty of this place!

Some Titan of the long ago
This temple built. In reverence here
We gaze, for at the last, we know
When you and I depart this sphere,
These rocks will stand; Symbolic might!
Eternal, timeless emblems, they
Will greet the morn, bow to the night
Tomorrow—just as yesterday!



Photograph by Charles Webber.

GHOST OF HOPE DREAMS

By MARION KEE NICHOLS
Casa Grande, Arizona

I know a little desert spot,
Never once have I forgot,
Where I would dwell in heaven's light
From sun-kissed morn, to mist-kissed night
And have you with me ever.

Here is desert cactus growing,
Here the desert winds soft blowing,
Here the desert's rich perfume
Of flowering smoke trees' sweet bloom,
Deep clusters, violet, like your eyes,
Ghost of hope-dreams, sweet paradise.

AMBITION

By LOUISE DARDENELLE
Los Angeles, California

One thing I long to be—and it may seem
To you my friend a wild fantastic dream,
Or product of a vain frustrated mind
Craving expression. But today I find
I'm seeking a new high. Though I stand here
And look from this bright peak of my career,
It's something more than *that*—please under-
stand—
To be a desert rat down on the sand.

A desert rat . . . Ah yes. I close my eyes
That I may all the better visualize
Myself as part of that great landscape where
The purple mountains trail off into air.
There learn to *live*! And knowing at a glance
The names of desert rocks and cactus plants
Become a sage with infinite power to see . . .
Ah that's it. That is what I want to be.

To be a desert rat. Yes that one thought
Consumes my being. And I care not what
It takes to get me there. My fingers fly
At self-inflicted tasks that may supply
The things I need or works that may remune
Enough of filthy lucre that I soon
Can fair afford to leave this play for fame
And be a desert rat—without a name.

CREED OF THE DESERT

By JUNE LEMERT PAXTON
Yucca Valley, California

Jackrabbit said to cottontail,
"Our forage is getting low;
Since humans have by far too much,
I wonder why they treat us so."

GOLD IS NOT YELLOW

By GLORIA GRAY
Corpus Christi, Texas

Gold is not yellow.
Yellow is the color of brushed curls
Caught in a sunlit ecstasy.
Yellow is the hue of butter,
Or a field of daffodils
Wafting on a summer lea.
Yellow is for peace and youth
And all things warm and good.

Gold is symbolic of man's
Avarice and pettiness,
Of sleepless, tortured nights,
Of sunless days spent
Within the bowels of the earth
Away from light and laughter
Eyes rent with blindness
To the normal ways of living from the soil.

Gold is the hue of hardness wretched toil
That yields minutest particles of dust,
Bearing the heaviness of a broken heart
The hue of a copper penny rust.
Look once again, I beg of you,
Gold is not yellow as you've heard it said,
But an ugly brown and streaked
With deep and crimsoned-red.

WIND-IN-HAIR AND THE CRICKET

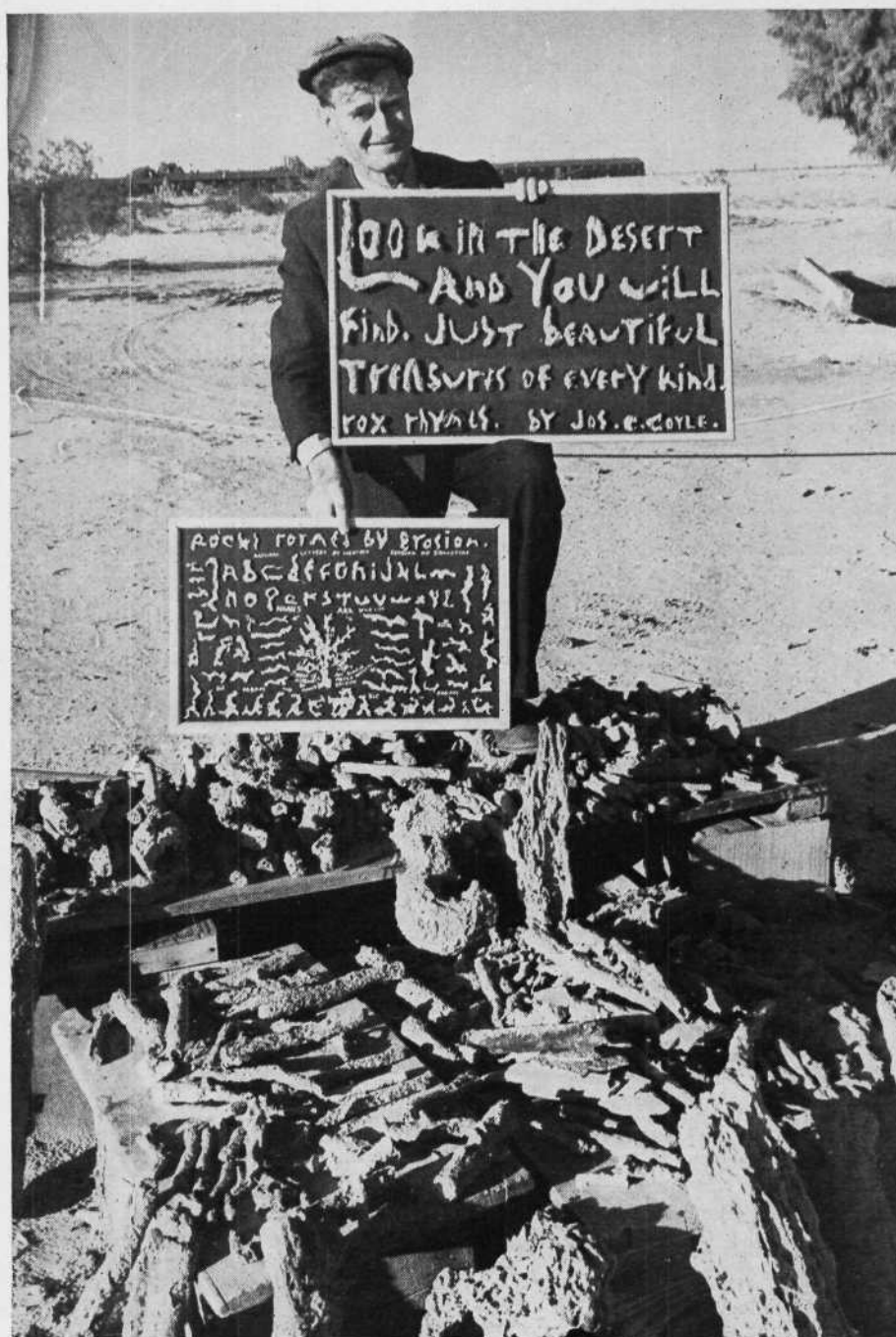
By IRENE BRUCE
Reno Nevada

Little Wind-in-hair went walking,
Up and down the sand dunes stalking
Crickets in the slanting sun.
Hunting game was splendid fun,
'Til the dunes had shed their pink,
And he saw the red sun sink.

Shadow came and touched his head.
Looking back he saw it spread
From the lake up to the hill.
Coyote's call was long and shrill.
Little Wind-in-hair was lost;
Both his feet were cold as frost!

Fast feet ran on darkened land.
"Wait," said Cricket from the sand.
Feet began to falter, when,
"Wait," again it whispered then.
Wind-in-hair stood still, and soon
Saw the rising mother moon.

As her face grew round and bright
Shadow on the sage went white.
Then she smiled at Wind-in-hair,
Took his hand right then and there,
Marched him swiftly home again,
To the Cricket's glad refrain.



Jos. C. Coyle and some of the odd sandstone concretions he has found on Yuma mesa.

Nature's A B C's on the Yuma Mesa

By JOS. C. COYLE

AT SOME time back in the glacial age, when Yuma mesa was young, and great hairy mammoths and other prehistoric beasts stalked its sandy wastes, the letters of the alphabet and

many other strangely shaped stones began to grow there. They still do. With my family I live among them. We have found some in our very door yard. On the walls of our home are plaques of verse and other

Some humans roam the desert in search of gold, others in quest of gem stones or rare botanical specimens or strange animal life. But when Jos. Coyle and members of his family go out on a desert trek their loot is for letters of the alphabet, formed in stone. They have been quite successful in the pursuit of this strange hobby, as you will know when you read Mr. Coyle's story of his five-year hunt for the A B C's that Nature has created in sandstone.

written composition, of from one to 30 words, using every letter of the alphabet. All are of natural stone, formed by a process of nature from sand and calcium. The original alphabet.

Some letters are rare. During five years of patient weekend exploration we have accumulated just two good Gs, and a limited number of Ms and Ws. Many Es are required in writing things, consequently some of them are not too good, but others are almost faultless. The remaining letters of the alphabet are found frequently, although no two are quite alike. We have plenty of As and several each of Q, X and Z. Most Esses are slow in curvature, but we have some that are excellent. A couple of the Ms are outlined on a background of thin sandstone (perhaps by termites) as one writes with a cake frosting in a squirt gun. I glued the background to the plywood plaque and blacked it out with school board slating.

After trying other finishes I learned the black slating doesn't reflect light in photographing, and is best as a background for the rock specimens, most of which are grey. However, specimens do not adhere to it well so I glue them to the plywood then paint around them. In forming written compositions I endeavor to select those which match best in color and size. The backs of some require a little grinding against another stone to secure enough gluing surface, and occasionally I break off the end of a specimen to make it match the others in size. Otherwise the letters are as I find them in the desert.

Looking at them in amazement one neighbor said, "Assembled they make a very striking display. Lying singly in the desert they were just rocks to those who may have glimpsed them in passing by." In the scramble for man-made treasures perhaps no one even saw them until we came along and stumbled over the key to nature's treasure chest. A writer's imagination, a rockhound's nose, and a love of nature mixed with curiosity and poured over a lot of spare time leg work proved the open sesame to this hobby. It has brought us real enjoyment.

For the entire family often takes part in the weekend rock hunt. With a jug of water, and lunch if we expect to stay all day,

I first noticed the strange looking formations during evening walks near home, primarily looking for float agates—which still are grist to our mill. I soon had several good Ls, which letter is most plentiful. Soon enough other letters were in the bag to spell a few simple words. Then the hunt was on. At first the search was confined to certain low hummocks of sand, such as drift about clumps of growing mesquite and other desert shrubbery. They are covered with stone fragments closely resembling round sticks. I discovered that some of these had assumed strange shapes. I have three flat specimens, almost identical in shape and size, very much like atomizers. Another was obviously a root bulb, for the stems show plainly. Several are strikingly like long-toed cowboy boots. There is a spear head, with a portion of the shaft, numerous crosses, loops, whorls. A 1½ inch root 30 inches long shows ter-

Once in a great while I found a letter, but I little dreamed of ever acquiring the complete alphabet. It soon became apparent that they have formed only within a limited area and about a certain elevation above the sea. They are underground as well as on the surface and a kangaroo rat may kick one out of his burrow, or a rain or sandstorm may uncover it. I have screened a few nice letters from an open pit, dug in a likely spot. The second, and even a third trip over an area is often more fruitful than the first—when I am eager and move too rapidly. Moving toward the sun, when it is low and shadows of pebbles stand out, the specimens are easier to find.

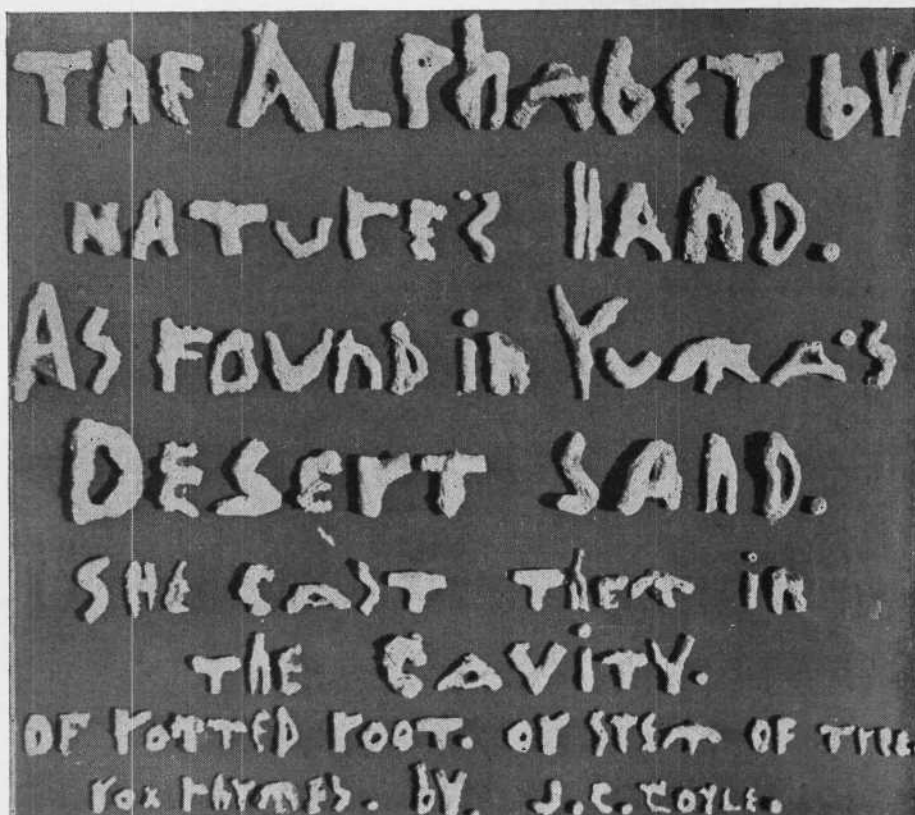
The weekly rock hunts brought to light so many strange shapes, aside from the alphabet, that I began assembling the smaller of these also on plywood, with molding around the edges. Browsing along the mesa rim one day I suddenly

In a slightly different type of eroded formation I have collected similar strange shapes, but no letters. They are fatter and of finer texture than the stones described above. A five-inch piece is eroded to the form of a hollow log. On it I mounted a row of birds and animals. At one end a rabbit has run out—at the other is the little dog chasing it through the log. All this requires some degree of imagination—but there's no monopoly on that. Try my plan with your light rock specimens. You'll like it.

In exploring the mesa I found in some places large fragments of the sand-lime replacement of what obviously were once logs and stumps of trees. Stone stumps sometimes have roots radiating from them. I found a 1½ inch root five feet long of



SEPTEMBER, 1942



sandstone. Logs and stumps are usually hollow shells. In the top of one stump was what looked like the footprint of a great beast. At first I thought it had been a ball of mud collected on an animal's foot and then cast off to finally harden into rock. The formation is of varying hardness and color, but I have no doubt most of it was once wood or other vegetation.

This is borne out by the report of a well known geologist to whom I sent samples and photographs. He said the specimens were sand, cemented and hardened by calcium-laden water. Sand had filled the cavities left by decomposed roots or stems and the lime-bearing water had solidified it. Gnarled and knotted roots and limbs, then, provided the original forms for these strange casts.

Later, in an open cut eight feet deep, I found the entire process he described unmistakably illustrated. Near the surface is a stratum of compacted red sand, laced with streaks of limestone. Somehow, desert plants send their roots through this caliche-like material into the sand beneath. There I found green roots, dead roots, other dead roots with a shell of sand collecting around them as the fiber rotted away. There were roots entirely replaced by sand but so soft they crumbled when picked up. Still others had hardened into concretions like those in my collection.

The tire restrictions have not interfered with our hunting. This is one hobby that can be pursued only on foot—we've roamed over 40,000 acres and walked hundreds of miles during the last five years in building our collection. And they were happy miles, out here on the Arizona desert—every one of them.

NEVILLS COMPLETES 4th TRIP THROUGH CANYON

Completing his fourth trip through the rapids of Grand Canyon, Norman Nevills with a party of six men and two boys arrived at Boulder City August 1. This was the 19th successful expedition to make the voyage since Powell made his memorable exploration trip in 1869.

The start of this trip was at Lee's Ferry where the party left July 15. A two day stop was made at Phantom ranch for rest and supplies. Dr. Harold Bryant, superintendent of Grand Canyon national park met them at that place.

Two boys who were on the trip were Bruce Wilson, 13, and Garth Marston, 16. Bruce was the youngest person ever to make the trip. Both boys were accompanied by their fathers.

At the head of Lake Mead, 110 miles from Boulder dam the voyagers reached the camp of a party of government engineers who are working on plans for controlling the silt which is filling the upper part of the lake.

The boats were lined around Hermit creek and Lava Falls rapids. One of the boats capsized in lining Lava Falls, pinning E. A. Hudson of Banning beneath. But he was promptly pulled out by other members of the party. This was the only serious threat to the safety of the expedition members.

Nevills has established an unusual record in making four trips without loss of life or boat. He is planning his next expedition in October from Moab, Utah, to Lee's Ferry.

Sez Hard Rock Shorty of Death Valley

By LON GARRISON



"Arguments," offered Hard Rock Shorty, "is as unpredictable as women. There ain't no tellin' which way they'll go next. Me, I've been in some o' the gol-dingdest, jaw bustin' arguments you ever run into. An' I was right ever' time, or at least I could o' won ever' time, if the other feller'd only stick to the subject."

Hard Rock shook his head sadly over the unprincipled methods of argumentation used by some of his opponents.

"One winter in the early days I was livin' here in Inferno an' a Irishman moved into the place next door. That guy was plumb contumacious. He'd argue over the time the stage'd ought to come in or over the weather. His favorite topic was religion, though women an' how to raise kids was close seconds.

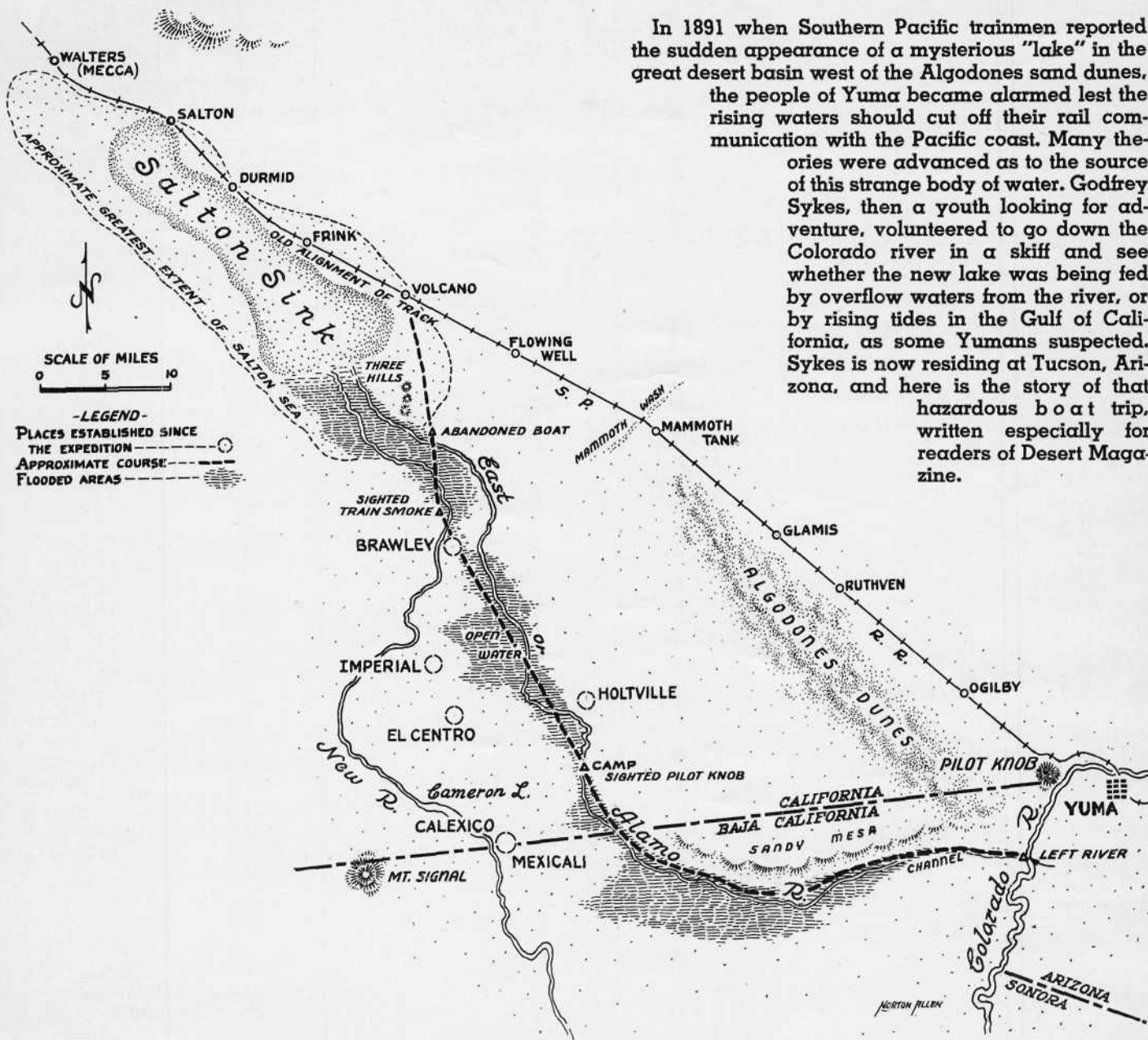
"He'd another bad habit, an' that was borrowin'. He'd borrow anythin' in sight an' keep it 'til it was wore out an' then he'd tell you to come get it back an' he'd borrow a new one off o' somebody else. Natcherlly this got 'im into arguments an' he'd argue 'til the tother guy was blue in the face an' give up in self defense. Best example o' his idea o' logic come up the time he borrowed the tea kettle from Old Man Perkins.

"Perk was a right handy catch-as-catch-can arguer hisself an' down to the post office one day he hopped on this Irishman about keepin' this tea kettle until it was busted an' sendin' it home all wore out. The Irishman was caught flat-footed for a minute but he recovered quick. He come right back with one o' his samples o' logic an' it stopped Perk colder'n yesterday's mush.

"'Yer wrong on three counts,' says the Irishman. 'In the first place I never had yer damned old tea kettle. In the second place, it was busted when I got it. In the third place it was all right when I sent 'er home!'"

By Boat to the Lake of Mystery

In 1891 when Southern Pacific trainmen reported the sudden appearance of a mysterious "lake" in the great desert basin west of the Algodones sand dunes, the people of Yuma became alarmed lest the rising waters should cut off their rail communication with the Pacific coast. Many theories were advanced as to the source of this strange body of water. Godfrey Sykes, then a youth looking for adventure, volunteered to go down the Colorado river in a skiff and see whether the new lake was being fed by overflow waters from the river, or by rising tides in the Gulf of California, as some Yumans suspected. Sykes is now residing at Tucson, Arizona, and here is the story of that hazardous boat trip, written especially for readers of *Desert Magazine*.



By GODFREY SYKES
Illustrations by Norton Allen

FIFTY-ONE years ago last spring I was stranded in Yuma, Arizona, temporarily minus almost everything except a robust appetite and a keen desire to undertake whatever might offer in the way of adventure, provided there was a substantial grub-stake attached to it.

I had just returned with a companion from a rather strenuous cruise on the little known upper end of the Gulf of California. We had played with the tidal-bore, or "burro" as the natives called it, some heavy weather, and sundry boisterous tide-rips. Disaster had overtaken us by the ac-

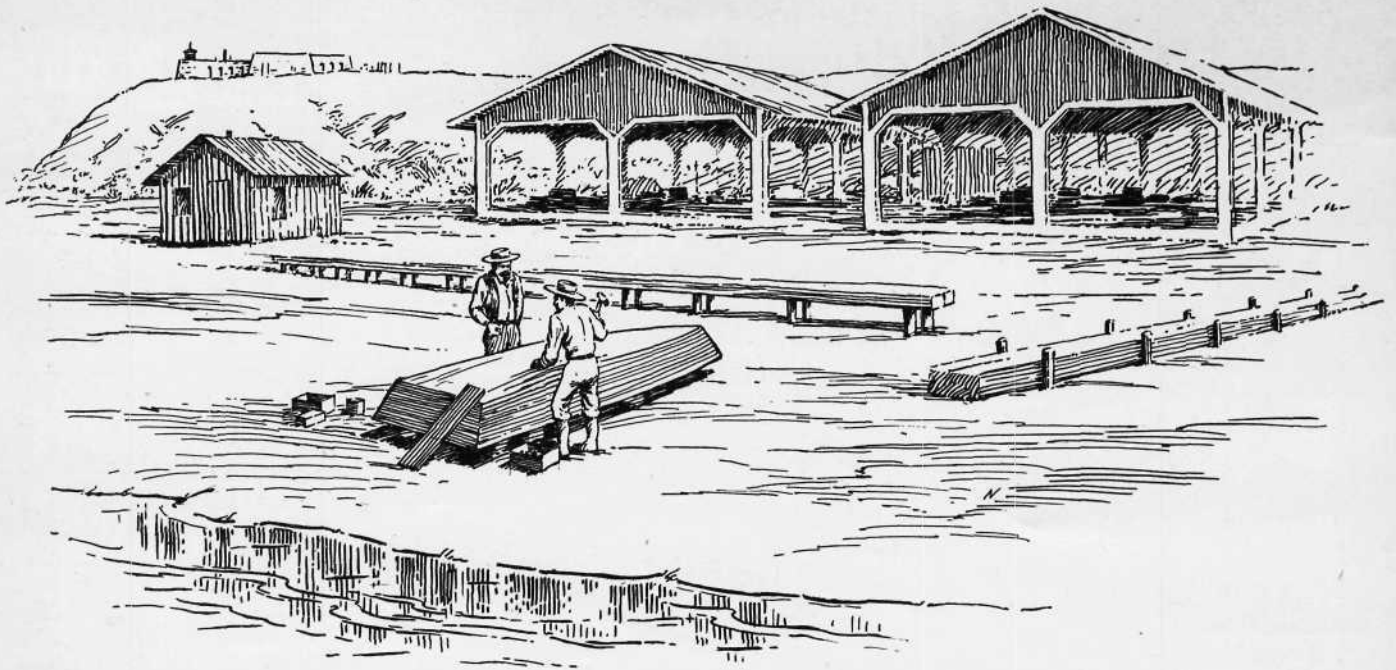
cidental burning of our boat one night when we were camped ashore. This catastrophe had left us with practically nothing to eat except a few kerosene-soaked hard-tack biscuits, and with about 200 miles of inhospitable desert intervening between our burnt boat and the nearest Chinese restaurant in Yuma.

However, the walk was accomplished with the help of the additional calories obtained from some fortunately discovered oysters, a small coyote, and a fish caught by a fluke, supplemented by a notable feed of frioles given to us by some Mexican hunters whom we encountered in the tule-brakes of the Colorado delta.

My partner lost his shoes in the fire

and was practically barefooted. He had come along bravely, however, and we reached Yuma with nothing except the tattered clothes we wore, a few dollars in our pockets and some very liberal ideas as to the quantity of food we could consume. By the time we had filled ourselves to capacity our pockets were about empty. We wondered what to do next.

My companion, with acute recollections of the dry and hungry days we had passed through, decided to stay for awhile in close proximity to the flesh-pots, and accepted a position as assistant cook at a lunch-counter. This left me alone with the remnants of my hunger, a still unsatisfied ambition to do more exploring, but



Two large sheds were the warehouses of the steamship company which operated at Yuma before the railroad came. The little cabin on the left was originally at Port Ysabel at the mouth of the Colorado but was brought to Yuma on a barge when the ship-yard was abandoned. This sketch by Norton Allen is based on Godfrey Sykes' recollection of the Yuma waterfront in 1891.

extremely limited resources for undertaking anything of the kind.

Yuma at that time was passing through a period of stagnation, with no interests except the railroad and the river, which crossed each other at its northwest corner. It still retained some of the tang and traditions of a seaport, although its seaborne commerce had terminated 15 years earlier, when the Southern Pacific railroad crossed the Colorado and short-circuited the earlier trade route around Cape San Lucas and up the gulf to the head of tide-water.

During the earlier territorial days in Arizona, practically all supplies from the outside world had come in by way of this circuitous sea and river route. The navigation of the lower river from salt-water to Yuma always had been a nightmare to the steamboat pilots. With the coming of the railroad they not only abandoned but apparently had made haste to forget this entire region. Occasional trips upstream from Yuma with local freight to mining camps and other small settlements was all that remained of river traffic.

The winter of 1890-91 had been an extremely wet one throughout central and southern Arizona. When the flood-waters of the normally dry rivers and washes had united to fill the Salt river and the Gila, the result was a flash-flood of unprecedented volume which had poured into the Colorado, and almost removed the town of Yuma from the map.

There were no levees worthy of the name to impede the flood, and as nearly all the saloons and other places of business along the main street, were constructed of adobes, willow poles, saguaro-ribs, and

dried mud, with heavy earth roofs, they melted away like sugar.

But the inhabitants of Yuma were cheerful and optimistic souls. They quickly salvaged what they could from the flood, and started to rebuild. Reconstruction was well under way when my companion and I reached Yuma.

Other troubles appeared to be in prospect, however. Trainmen on the run between Salton and Volcano, reported they had seen a steadily-increasing expanse of water glittering in the sun in the great basin in the California desert 60 miles west of Yuma.

As the railroad tracks were known to be more than 200 feet below sea level, and as the Gulf of California seemed to be the most likely source of water coming into this area, there was concern lest the rising inland lake should submerge the tracks and thus sever all rail connections between Yuma and its trading centers on the coast.

The lowest part of the basin, southwestward from the railroad, was salty and marshy. Flood waters had appeared from somewhere from time to time, constituting what was originally known as the Big Lagoon, and later as the Salton Lagoon. The last appearance of a lake of any considerable area had been about 25 years earlier. Memories generally are short in virgin or newly settled regions, and the records of such earlier appearance generally had been forgotten or overlooked by the excited citizens of Yuma, who so recently had lost most of their property and other possessions to the invading waters of the river.

Many theories were advanced as to where this latest prospective menace to their future prosperity might be coming

from, and what it might portend in the way of another major disaster.

The townsfolk who were not too busily engaged with excavating their belongings from the debris of their earth roofs, spent much time sitting on what was left of the ship-launching ways on the river bank and considered the matter in all its bearings. "If," said some, "somebody could go down into that God-forsaken country below the Mexican line and explore around for awhile, he might find out something about it."

It was thought possible by some that the water might be coming directly from high tides in the gulf of California. Others thought that mysterious underground channels might be feeding the lake. Among the many ideas advanced was that summer storms in Baja California might be responsible.

The most reasonable theory, however, was that the late flood in the Colorado would explain the whole thing. Water was known to overflow the right bank of the river below the Mexican border and disappear in a westerly direction, during periods of flood. It was also known that the old stage-road to San Diego had been menaced and blocked by flood-waters several times under similar conditions. So on the whole the river theorists had rather the best of it, and it was the consensus of river-bank assemblies that explorers in one or more light skiffs ought to drop down the river to the overflow region and follow the escaping water as far as possible. Perhaps this would solve the mystery.

The situation appeared to call for an explorer, a boat, and an outfit of supplies. Since exploring was my business I began



When Imperial Valley was reclaimed, rock-reveted levees were built along the west bank of the Colorado to keep flood waters from breaking through and inundating the basin. The two pictures above, taken from approximately the same point, show how the mighty power of the river occasionally breached these levees. Photos by Hetzel, El Centro.

to enlarge upon my own qualifications in that line. I admitted that at the moment I had no boat. But I could easily build one if the necessary lumber was provided. Food and supplies for a trip which could hardly exceed 200 miles would not call for very heavy expenditure. I pointed out that definite information as to the origin of the invading water would be very comforting to a community which had just undergone one catastrophe and did not know from what source the next one might be coming.

My talk proved to be effective and I was given authority to get what lumber was needed for a boat. I borrowed a few tools from the "ship-yard" and built a light skiff on the river bank. A co-explorer soon turned up. He was supposed to know something of the country to the southwest, as he had been a station hand at one or more of the abandoned stage-

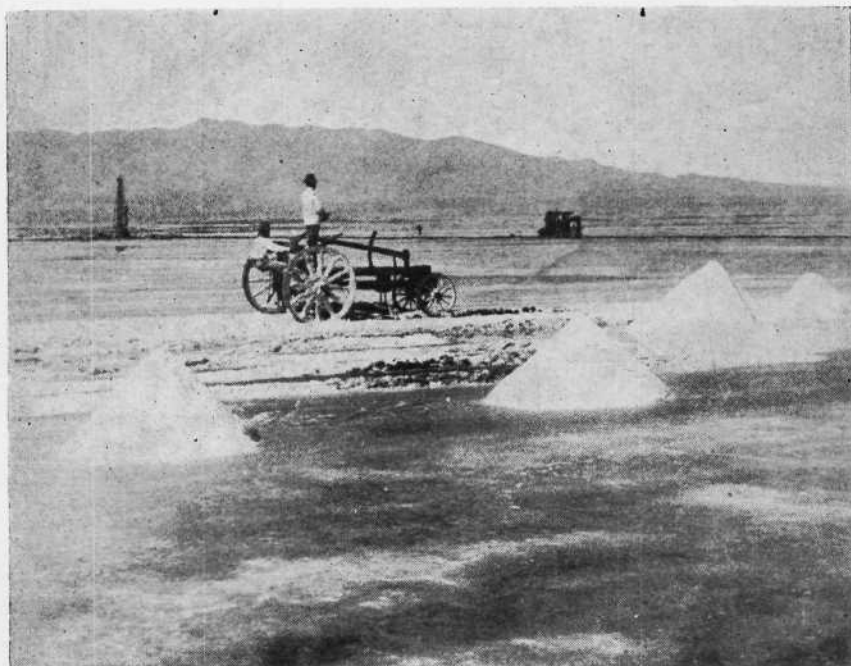
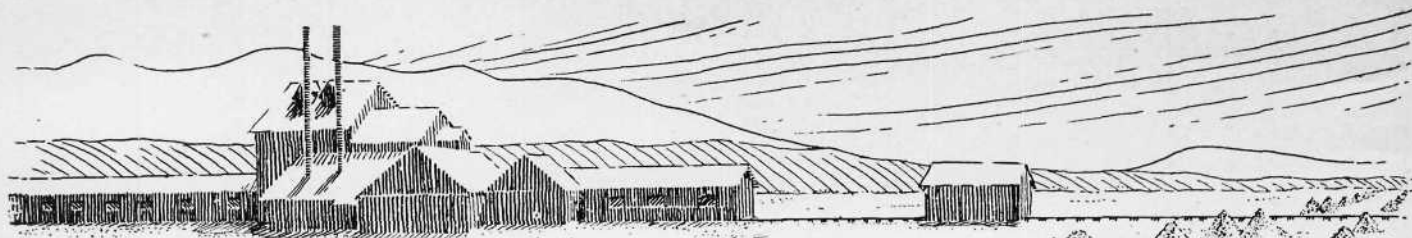
stations during the Overland Stage days. Later his knowledge proved to be almost worthless, however, for his distance marks along the old stage route were now either destroyed or submerged beneath the muddy Colorado river.



Tex was a good companion, but had an aversion to wading.

The generous townsfolk of Yuma contributed enthusiastically to outfitting the expedition, and we cast off from the piles of debris at the foot of the main street with our little boat loaded almost to capacity with food supplies. Salvaged food from the late flood figured quite largely in the menus of Yumans during the period of digging-out and reconstruction. There was a certain element of chance in this method of preparing meals, as labels and other identifying markings had been washed off most cans and one seldom knew what the can-opener would bring forth for the next course. Our abundantly stocked larder enabled us to be very fastidious. We tossed overboard such cans as were not to our taste or which did not harmonize with the menu we had planned.

Below the Mexican border we found that heavy overflow had taken place during the late flood, especially over the



This is the old salt works that was operated on the floor of the Salton sink about 1900, and until inundated by the flood of 1905.

western bank. The whole region showed evidence of the flood in contrast to the placid river I had leisurely passed down two or three months previously. Willow and poplar trees had been uprooted by the thousand along both banks, and piled up into disorderly heaps and windrows. Brush and driftwood blocked and masked the broad openings through which the flood waters had poured at the height of the flood. Much water was still escaping under some of these drift piles. It took us two days to find a navigable channel which appeared to be sufficiently well defined to take us through the river bank obstructions and in the direction we wanted to go. We realized later that we had been fortunate in hitting upon this particular one, for water soon began to enter it from both sides and it became more easily navigable and better defined as we went along. We had, indeed, blundered into the main feeder of the Alamo creek, about which we had heard vague rumors in Yuma from former stage drivers and others.

Although the whole region we were about to explore was at that time practically unknown except to the Cocopah Indians and a few of these old stage drivers, the Rio Alamo was recognized as being one of its more irrational features. It was reputed to have its source (as it actually did) anywhere over a large, indefinite, brush-covered wilderness, to disappear at

length into the torrid and trackless desert.

We began to congratulate ourselves upon having discovered a plain and obviously main channel. We celebrated by making first camp on a muddy bank and opening some of those grab-bag cans. But our problem was not to be as simple as we imagined.

The water was falling, as was evidenced by higher watermarks on brush and trees. Next day no bare ground could be seen except distant sandhills on the north, glimpsed occasionally through the brush.

Slight current with a westerly flow was noted, but soon we began to encounter



shoals on which our skiff grounded. Getting clear of these involved going overboard and wading around in quest of a deeper channel. I discovered that my companion, although a likable campmate, did not belong to an aquatic or even amphibian genus. He preferred to stay in the boat and do his sounding with a pole.

We spent two days scouting through this submerged wilderness, breaking our

way through brushy barriers and trying to follow the trend of the water. At length we began to detect a definite set towards the northwest and soon found patches of dry, or at least only muddy ground around us.

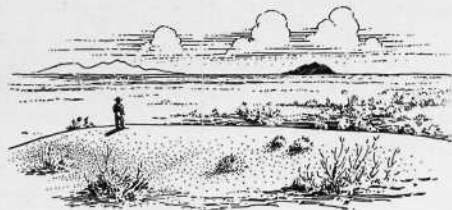
We still caught occasional glimpses of the sandy mesa which we had been seeing through the brush. The channel continued for some miles, with a rapid current in places. The banks were dry in a few places, giving us our first opportunity since leaving the main river, to set foot upon solid ground. We therefore made a camp ashore, scraped off some of the accumulation of mud, investigated a few more problematical air-tights, and cooked some real food.

We had only the vaguest idea as to our whereabouts, because it had been impossible to keep an accurate, or even approximate, check on either our course or our straight line distance from the last known point on the river.

We climbed a low sand ridge near our semi-dry camp, and were able from this slightly higher look-out, to get a glimpse of Pilot Knob. We knew that this was about six miles due west of Yuma, and it now appeared to be at least 30 or 40 miles away from us, and bore well to the south of east. This confirmed our guess that we had really swung around a corner and might eventually, if our present luck continued, run out into the trainmen's lake.

Our luck appeared to be intermittent, however, for we shortly became involved in another region of shallow water and exceedingly soft and tenacious mud. We tried to hold to a northwesterly course, as the water appeared to be ebbing away in that general direction, but our chief difficulty lay in the unpredictable nature of the terrain. We had worked so vigorously at our cargo of hermetically-sealed conundrums and other provisions, as to reduce our draught to about two inches when we were overboard in the mud, but even so we were continually running aground when trying to make our way from one

small pond of navigable water to the next one. It was while we were busily engaged in this rather tiring game of push and pull, that we first caught sight of the plumes of smoke from trains on the railroad. The



Climbing the sand dunes we could see Pilot Knob in the distance.

smoke appeared to be a long distance away but it undoubtedly was train smoke and therefore evidence of human activity, the first we had seen since leaving the waterfront at Yuma.

We supposed that having at last sighted railroad smoke, we would eventually reach the railroad itself and having finished our exploration of the navigable desert, tie up our skiff to a bridge timber or something, flag down a passing train and return to Yuma and our grub-stakers in triumph.

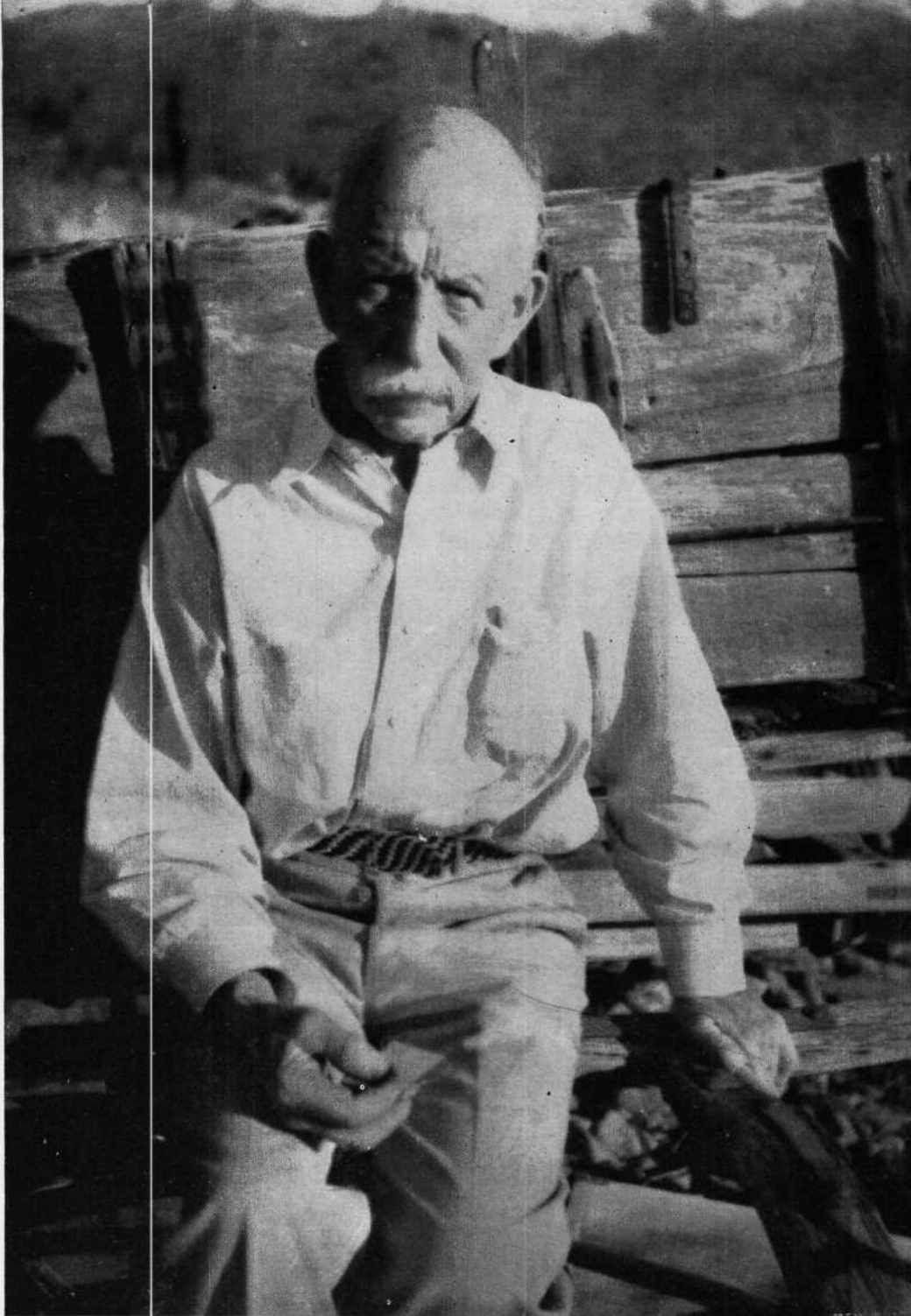
This was far from how matters turned out, however, for navigable water became harder and still harder to find, and mud more universal and more tenacious. At length we decided to abandon our northwesterly course and make our way directly toward the point over beyond the northern horizon at which we had observed two plumes of smoke meet and pass. This, of course, indicated a side-track and perhaps a desert station or section house.

From our disadvantageous situation of minus elevation in the mud and water, we could see practically nothing of our surroundings beyond a few hundred yards, but the outlook for further voyaging in any direction was not promising.

It was in the early afternoon of a particularly strenuous day of mud-fighting that we decided to change our course and head more to the north. But we made little progress by nightfall. We camped partly in the skiff and partly in the mud, sustaining ourselves as best we could with the remains of a pot of cold frijoles and hopes for a better and less viscid region to travel through on the morrow.

We discovered, when making the more northerly course, that we were now traveling at an angle across the drainage. This was obvious both from the occasional accumulations of stranded drift, and the trend of the mud banks and shoals.

Our progress was slow but we were heartened from time to time by other plumes of train smoke which we imagined were less distant. We also had another opportunity to check our direction by the meeting and passing of two plumes dead ahead.



Godfrey Sykes, veteran geographer of the desert, standing beside the ancient wagon in which he camped on the site of El Centro in 1905.

It became plain during the afternoon, however, that the desert was ceasing to be navigable, and that there was very little more water, although plenty of mud, between us and our goal. So we made camp once more upon a little island of comparatively solid ground, and considered what we should do next.

It was plain that we could not carry or

drag our skiff to the railroad, and we were both unwilling to attempt to return to Yuma by the way we had come. We had at least determined how the water reached the heart of the desert, and we wished to reach the railroad in order to prove it.

The only alternative, therefore, was to abandon our skiff and complete our voyage on foot. She looked very forlorn as we left her at daylight on the following morning and waded away across the mud. We left an oar upright at each end to serve as beacons in case we returned to her. Our feelings were much as though we had been summarily evicted from our happy home, for she had at least afforded us a comparatively dry substance to sit down upon oc-



asionally and a rigid edge to hold on to when knee-deep in the surrounding scenery.

The wading and walking was very heavy for the first two or three miles. Then we reached ordinary soft loamy desert surface. We had a canteen, which we had filled with the least muddy water available before leaving the boat. We sighted the telegraph poles along the railroad about noon and diverged slightly from our course toward a small station building which we saw soon afterwards. This proved to be Volcano, but it was unoccupied at the time. However, an east-bound freight train came along and we flagged it down and climbed aboard. It was the railroad custom in those days to pick up stray wayfarers at desert side-tracks where no water was available.

The trainmen, having heard of our expedition in Yuma, were much interested in our account of our muddy trip and as the afternoon sun was low in the west we climbed up on top of the caboose and saw the glitter to the south and southwest. As far as we could judge, the muddy areas were indistinguishable at that distance from the water surfaces. We guessed at the position of our abandoned boat as some 12 to 15 miles from Volcano. This was also the substance of our report to our friends in Yuma.

The town was continuing to make satisfactory progress in removing the traces of the thorough laundering it had undergone, and goods with identifying labels were again on the shelves in stores and behind bars. The river had dropped to a low stage during our absence.

It was not until the end of June, our voyage of discovery having been made in March, that the appearance of water in a steadily increasing quantity quite close to the railroad, again roused public attention to the possibility of radical changes in the geography of the region.

The summer flood runoff was higher than normal, and as the collecting channels between the river and the basin had been thoroughly scoured by the unprecedented winter freshet, the flood-water had an unobstructed route to follow. The size of the lake increased very rapidly.

The source of the water being now fully understood, several other expeditions set sail from Yuma during the early autumn upon voyages of discovery and adventure through these newly developed waterways.

Backed by metropolitan newspapers and other sources of abundant funds, two or three were equipped with guides, boatmen, camp-cooks, and competent exploration correspondents, who discovered and described many dangers and alarming features in the region which we, with our limited opportunities for observation, had missed. Accounts of hair-breadth escapes from Gila monsters, venomous snakes, and other dangerous reptiles; from bottomless

quicksands, and from the thousand and one recognized perils incidental to travel in any desert, even if semi-navigable, began to appear that autumn in newspapers and popular magazines. Geologists, geographers, and other scientific men were asked for their opinions upon the possibilities of the "new lake in the desert," and interest and excitement ran high until it was realized that the inflowing water again had been cut off by the fall of the river and that evaporation was rapidly removing that which already had reached the basin.

A series of years followed in which the Colorado river behaved itself reasonably well and hardly rose at any time to the "over-bank" stage. "The lake of 1891" was gradually forgotten and the area which it had covered reverted to its usual state of super-aridity.

It was 14 years later, in 1905, that the flood waters of the Colorado river again broke over into the Salton basin and formed the inland sea now known to all Southern California travelers. In the meantime 10,000 settlers had arrived in the basin and an irrigation canal was bringing Colorado water to their lands. The catastrophe of 1905 was due to a series of unfortunate circumstances—some slap-stick engineering, the procrastination of Mexican officialdom, and a series of abnormal winter floods in the river.

I was a member of the first party to circumnavigate and explore this remarkable body of water. The expedition, carried out for the purposes of scientific research, was on the lake at the time of the final closure of the break in the bank of the Colorado through which the entire river had been pouring for several months. It had reached a maximum length of nearly 50 miles and width of approximately 17. We found by sounding that it was at one point more than 80 feet in depth. Recession due to evaporation and seepage began to take place immediately after the inflow from the river was cut off, and at the present time it is scarcely more than one-fifth of the maximum area, although a certain amount of water is diverted into it from the irrigation system.

During the period of maximum inflow in 1906 the gentle basin slopes down which my partner and I sailed and waded in 1891, were eroded and torn to pieces by the volume of this later and far greater invasion, which excavated two great ravines down the lines of the natural drainage to the basin floor.

I happened to be passing through the basin, which was just beginning to be generally identified as the Imperial Valley, with a team in January, 1906. I made some effort to find the remains of our abandoned skiff, but without success. To the best of my knowledge our forlorn little boat, with the two oars stuck up as markers, was never seen again.

In the casual manner of the earlier West

my co-explorer and I drifted apart shortly after our return to Yuma, and I never saw or heard of him afterwards. His name I never knew. To me, as to the man on the street in that enchanting town where everybody was known by a nickname, he was simply "Tex," "Beer-keg Tex," to identify him as a member of the genus who might generally be found seated upon a beer-keg outside a saloon door. He had been an excellent camp-mate but an indifferent wader in mud. But our tastes in the consumption of unmarked canned goods had been satisfactorily similar. He was doubtless equally unaware of my name. To him I was simply "Red," or upon more formal occasions, "Cap."

• • •

PYRAMID LAKE LANDS ARE RESTORED TO INDIANS

Ending a legal controversy which has been in progress for many years, the circuit court of appeals in the ninth district has ordered restored to the Paiute Indians of the Pyramid Lake reservation certain lands claimed by white squatters.

Some of the lands in dispute have been occupied as long as 80 years, but the court held that they properly belonged to the Indians, and should be restored to them.

"An old injustice to these Indians has been righted," commented Indian Commissioner John Collier. "This decision should strengthen respect for Indian property rights in quarters that have too often failed to distinguish between Indian possessions and public domain.

"That the federal government, through the department of justice and the courts, has thus finally redressed a wrong of long standing committed against a group of desperately needy Indians is a heartening sign to those who now look to our government to vindicate the freedom of oppressed peoples on a world-wide battle-front."

ANSWERS TO DESERT QUIZ

Questions on page 12.

- 1—White.
- 2—Along the Colorado river.
- 3—Mesquite.
- 4—Dick Wick Hall.
- 5—Igneous rock.
- 6—Stage driver.
- 7—Flagstaff.
- 8—As evidence they are ready for marriage.
- 9—Chiricahua.
- 10—Dry manure.
- 11—Stone.
- 12—Red.
- 13—Agate.
- 14—San Jacinto.
- 15—Fremont creek.
- 16—Utah.
- 17—New Mexico.
- 18—Crystals.
- 19—Ehrenberg.
- 20—Mt. Whitney in California.



Specimens of malachite, azurite, chrysocolla and brochantite were found on this field trip to the old mine dumps in southern Arizona. Left to right—Gene Yoakum, E. K. Brown, Peggy and Frank Wright.

Fairy Crystals From an Old Mine Dump

Readers of *Desert Magazine* will recall the interesting story of the petrified Ginkgo wood written by Bertha G. Brown in the issue of August, 1940. More recently the Browns have lived in southern Arizona where E. K. is an engineer in defense work. There, prowling around the old mine dumps, they found many colorful specimens of copper ore, among them the drab boulder with its elfin-like crystals of brochantite described in this story.

By BERTHA G. BROWN

IT WAS John Sebring, city clerk at Tombstone, Arizona, who told me about the old mine dumps in the Courtland district. It is a copper field, and chrysocolla was just one of many types of specimens to be found there, he said. At least, they were there when he last visited the place six years ago.

With such a field trip in prospect, I began studying up on copper ores. From various mining books and bulletins I read what I could find about chalcopryite and chalcocite, the two most common copper ore minerals; bornite, sometimes called "peacock copper" because of its iridescence; malachite and azurite, so familiar to all collectors; cuprite, the ruby red member of the copper family, when found in crystal form—glowing like multitudinous candle lights, and chrysocolla, the beautiful Nile green to sky-blue copper ore

that is hard enough in some forms to polish well, and is sought by all collectors.

The day came for our trip to Courtland. My companions were my husband, E. K., who was employed in engineering work in southern Arizona, and Frank and Peggy Wright, a couple of our rocknut friends.

We left Highway 80 at the south edge of Tombstone on the road going east across a desert sink that ends with the uplift of the Dragoon mountains. From the deserted mining town of Gleeson we kept to the road that parallels a telephone line, and came into South Courtland. It is an old camp, with just a few weather-worn houses set down between bleak hills. Scores of mine and prospect holes, like bleary eyes, peered at us out of the mists of the productive past—and beyond, into the uncertainty of an empty future.

A fence, with well padlocked gate, had

been built around the property on which the old power house stands. "Never trespass needlessly . . ." is part of our rock collector's creed, so we took two hours to look up Gene Yoakum, custodian of the dormant El Dorados. He readily opened the gate, all the time advising us as to the scarcity of good material.

"Chrysocolla? There isn't much worth picking up. Lots of others have been here before and those who came first got the best." What he said was no doubt true, but we kept adding colorful specimens to our bags. There was nothing of outstanding quality, but we found some very pretty stones.

Later we drove over a knoll to North Courtland, once terminal of the railroad to Douglas where ore was shipped for smelting. Long ago the rails were salvaged but the old roadbed is easily discerned. Peggy and I walked along this, picking up bits of colorful ore.

Then, out of the ghostly calmness of the place came a war whoop from E. K. That could mean only one thing—he had made a real find.

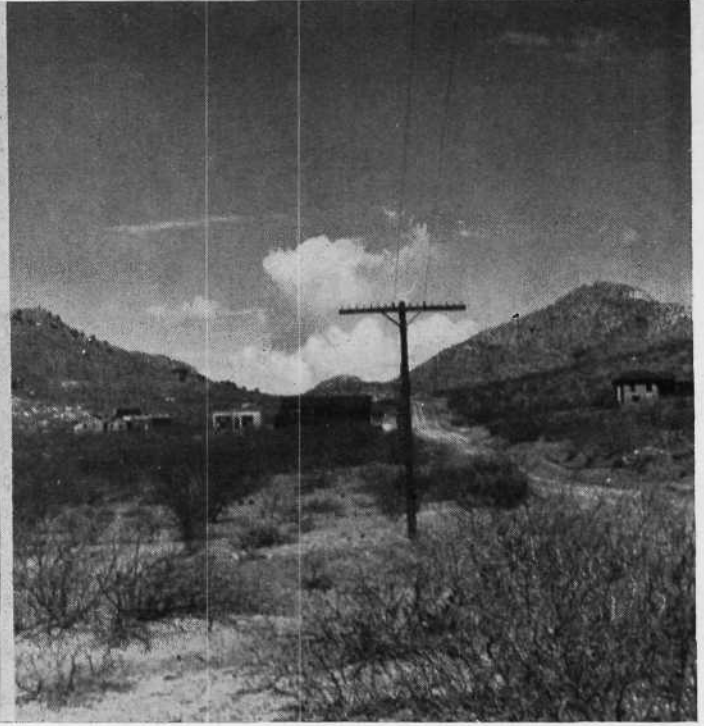
We rushed up a hill-sized dump of old mine rubble. His pick was resting on a boulder about 16 inches in diameter. The rock looked dull—nothing to inspire enthusiasm. For more careful examination I reached for my prospector's glass and knelt beside the boulder.

Sure enough, there was the glory of mineral bloom. Tiny vugs, pockets in the matrix material, were filled to running over with emerald green crystals, so delicately elfin it seemed a breath might blow them away. Gay Tom Thumbs, symmetrically arranged in outward position, external evidence of definite internal structure, bristling, microscopic and vitreous.

The boulder was heavy, the crystals



Magnified picture of the lacy crystals of brochantite as they occur in vugs in the rock matrix.



This is the road that runs along the telephone line into South Courtland—ghost town of the old copper days.

frangible and the car far away. We decided to break off ragged edges to make lugging easier. This revealed the manifold beauty of newly exposed crystals, with freshness of morning dew, springing out into fan shapes like rutilated needles.

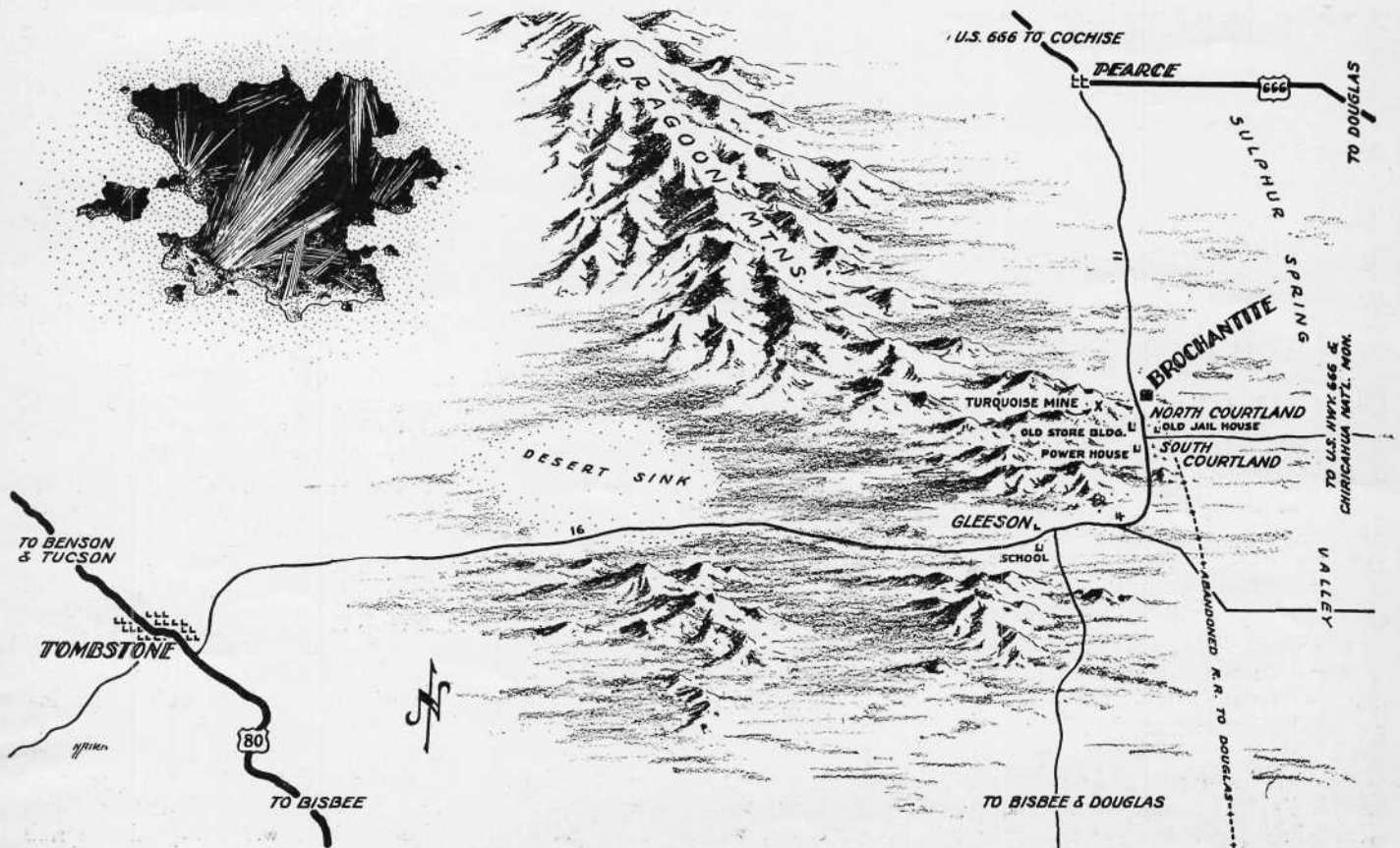
Previously we had picked up ore with green and blue crystals intermingled. This

we knew was the closely associating malachite and azurite. The color of the newly-found crystals was the same shade of green as the malachite. E. K. jumped to quick conclusion.

"I'm positive they are malachite."

"Yes," I answered, falling into like error, "the tiniest I ever hope to see."

A week later I was in the Bank of Bisbee, where are housed the collections of minerals owned by M. J. Cunningham, vice-president of the institution. Mr. Cunningham has lived in Bisbee since its earliest days and has been collecting mineral specimens for 45 years. Crowding his cabinets is the cream of the mines, much



The Silent Vulture

By MARTIN MORTENSEN
Verdi, Nevada

Winner of second prize in the July photographic contest sponsored by Desert Magazine is this view of an unusual rock formation, located 25 miles north of Reno, Nevada, on the Red Rock road. Taken with an Eastman Kodak, $3\frac{1}{4}\times5\frac{1}{2}$. Lens 6.3, Speed 1/50 F16.

Special Merit

The following photos were judged to have special merit:

"Male and Female Bloom of Date Palm," by G. L. Kronmiller, Los Angeles, California.

"Joshua Blossom," by Virgil Ford, Trona, California.

"Night Blooming Cereus," by Eldean Olsen, Santa Monica, California.

of it gathered when mine operations were in the oxide zones. One magnificent specimen was given him by a miner called Malachite Bill. This gift is massive, reniform (kidney-like) of structure and weighs 45 pounds. It is now valued at one thousand dollars. In a cabinet by itself, it looks for the world like an immense green spotted turtle standing guard over all the other precious beauties.

I moved from case to case feasting my eyes on the finest collection of copper specimens I have ever seen. Of a sudden, a group of hair-like crystals caught my attention—they were exactly like the Courtland find. Suppressing undue pride, I said:

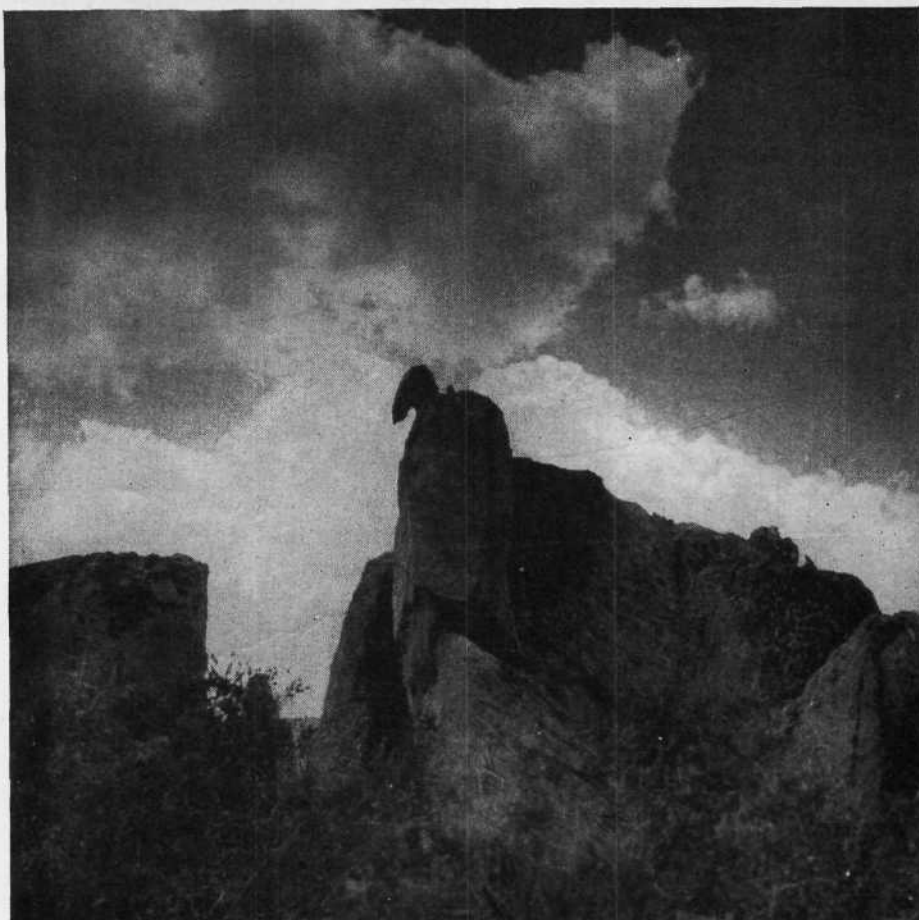
"We have malachite crystals like those." Mr. Cunningham glanced at the specimen indicated.

"Brochantite," he said, "very rare."

Although upset over my mistake, I was grateful for the correction.

Nowhere, except in Dana and the bulletins issued by the Arizona bureau of mines, have I been able to find brochantite— $\text{Cu}_4(\text{OH})_6\text{SO}_4$ —mentioned. In *Geology and Ore Deposits of Tombstone District* it is recorded as "a rare constituent of copper ore." F. W. Galbraith, in *Minerals of Arizona* states it is found in seven Arizona counties, making no mention of rarity. However, he does mention 15 other copper ores, difficult of name and astonishing in affiliation, as "very rare." Robert Heineman, mineralogist, Arizona bureau of mines, says:

"Brochantite is not an unusual mineral, but nicely crystallized specimens have value among collectors or for museum purposes." It is found in masses of reniform structure, is a sulphate of copper (malachite is a carbonate), was first found



in the Ural mountains and was named for a Frenchman, Brochan de Villeris.

And so we have added brochantite to our collection—and we are sure it is correctly labelled. That was by no means all that we found on the old Courtland dumps. Our trip that day yielded massive malachite, drusy chrysocolla and lovely azurite crystals.

Mine dumps are scattered all over the hills in that area, and most of them have

been abandoned long ago. In fact the only fence or trespass signs we encountered were at the old power house.

But even if we had found no specimens, I can think of no more interesting place to explore around for a day than these old copper-laden hills where the men of an earlier day worked and dreamed and dug for wealth, and then passed on, leaving time and the elements to heal the scars on the desert landscape.

Prizes to Amateur Photographers

Each month the Desert Magazine offers cash awards of \$5.00 and \$3.00 for first and second place winners in an amateur photographic contest. The staff also reserves the right to buy any non-winning pictures.

Pictures submitted in the contest are limited to desert subjects, but there is no restriction as to the residence of the photographer. Subjects may include Indian pictures, plant and animal life of the desert, rock formations—in fact everything that belongs essentially to the desert country.

Following are the rules governing the photographic contest:

1—Pictures submitted in the September

contest must be received at the Desert Magazine office by September 20.

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

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

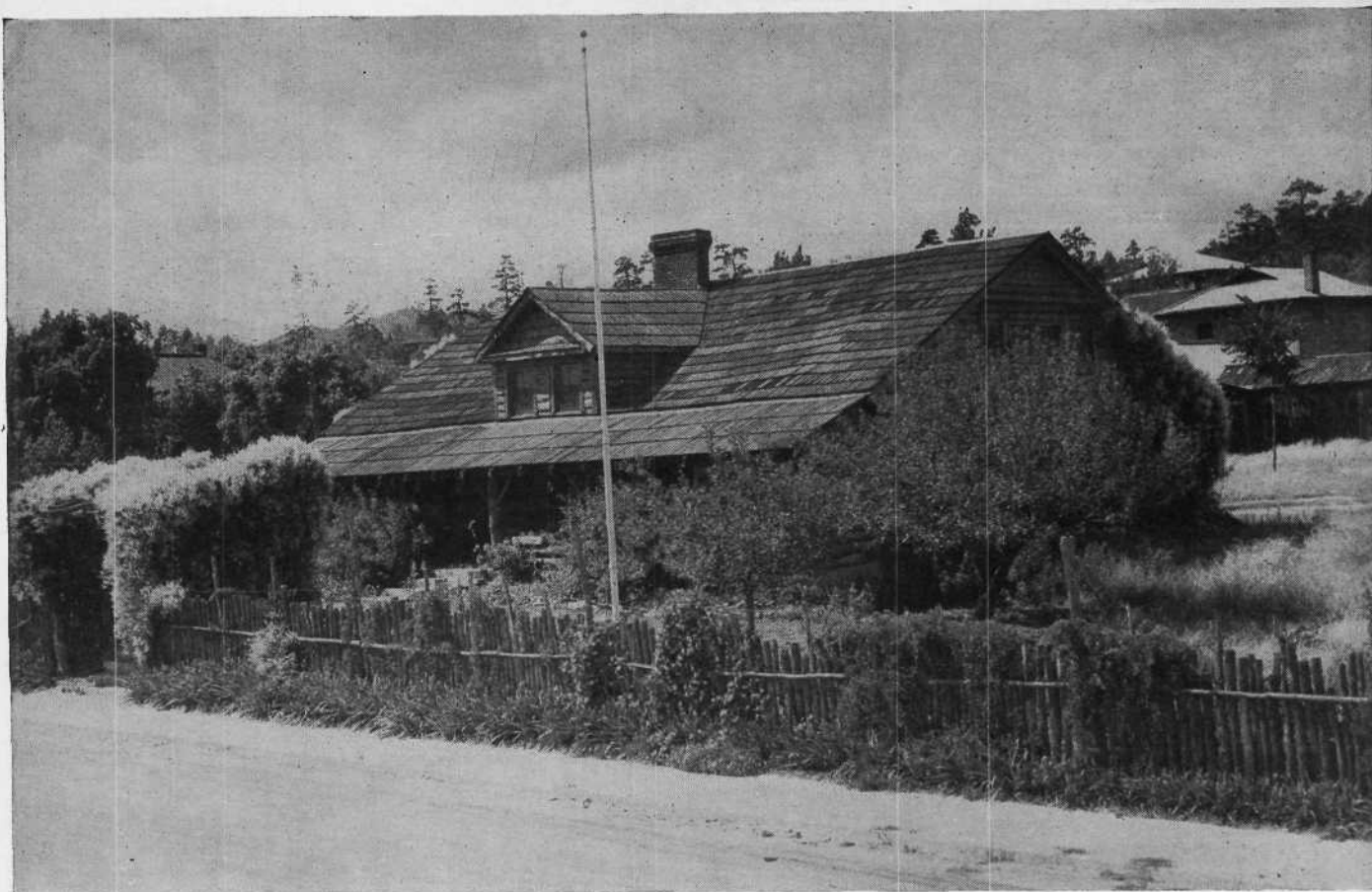
4—Prints must be in black and white, $3\frac{1}{4}\times5\frac{1}{2}$ or larger, and must be on glossy paper.

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

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

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

Contest Editor, Desert Magazine, El Centro, California.



OLD GOVERNOR'S MANSION

Grace P. McElwain of Clovis, California. She identified the accompanying picture as the Old Governor's Mansion, first territorial capitol building of Arizona, located at Prescott. Mrs. McElwain's story of the construction and present status of the building follows:

By GRACE P. McELWAIN

JULY'S landmark picture in Desert Magazine is the Old Governor's Mansion, located in Prescott, Yavapai county, Arizona. It occupies the same grounds as the Sharlot M. Hall museum, over which she is custodian. The buildings and grounds occupy about one half a city block, and are three blocks from the center of the city.

In the fall of 1863, the Hon. John N. Goodwin, Arizona's first governor, and his party, selected Prescott as capital of the new territory. Soon after, with the aid of his secretary, Richard McCormick, the governor built this comfortable dwelling of hewn pine logs roofed with shakes. The architecture of the Old Mansion is Spanish ranch-house type, with porch extending the full length of the front. The original building had dirt floors and no glass in the window spaces until some time later, when McCormick, on his return from an eastern trip, brought back glass from St. Louis. Hand-wrought square nails costing nearly two dollars a pound

were used in the building. The first floor consisted of four rooms with a large attic. This attic space was used as sleeping quarters for men and visitors. The size of the structure was about 40 by 50, and it was erected at an estimated cost of \$6,000 dollars.

Built on a slight elevation west of Granite creek, the Old Mansion overlooked the scattered dwellings of the village. The natural beauty of its setting was enhanced by the circling pine clad hills, with Granite mountain to the northwest and the rugged Thumb butte to the west. The first legislature met here in January of 1864, as well as all succeeding sessions until 1867, when the capital was moved to Tucson.

At that time the Old Mansion passed into private ownership, and was clapboarded and remodeled. A few years ago the City of Prescott acquired title to this property. Through the untiring efforts of Miss Hall and other interested persons, it was restored as nearly as possible to its

original appearance. The sidings were removed and the roof recovered with hand-made shakes. The later partitions were removed, leaving the original four large rooms which now house the relics and treasures of early days. A fireplace on either side of the main partition which has been opened up is used occasionally. There has been added a small annex for Indian relics.

Space on the grounds is given for the old stage-coach used to carry the mail in the early days, and the dinkey wood-fired engine that ran between Congress Junction and Congress mine, which produced over \$7,000,000. The credit for the pioneer fashioned stockade fence which protects the buildings and grounds goes to Miss Hall. The outer border of iris, fitting so well with the entire scene, were also planted by her. A silver lace vine covers the arched gateway and blooms profusely all summer long. Native flora such as Arizona cypress and white fir and many old fashioned flowers are found in garden plots surrounding the buildings. The cherry-red rose growing at the east entrance of the Old Mansion covers almost the entire side of the house, and was brought by Margaret McCormick when she came from New Jersey as a bride. This rose bush is a living memorial to Mrs. McCormick since her sad and early death the year following her arrival, from childhood.

HERE AND THERE... on the Desert

ARIZONA

County Seeks Dam Money . . .

KINGMAN—Mohave county board of supervisors launched a battle to secure a "fair share" of the \$15,000,000 to be paid by the federal government to Arizona in lieu of taxes on Boulder dam when the board of supervisors appointed Charles P. Elmer and E. Elmo Bollinger, attorneys to represent the county. Mohave county officials maintain that money given by the government should be divided as it would be if it were taxes.

Rattler Next? . . .

CHANDLER — Mrs. Wilford Phelps doesn't know why certain desert reptiles have invaded her home, but she is hopeful that a rattler won't be the next visitor. A few days ago she found a fair sized lizard on her screen porch. Then a short time after, while cleaning the house, she reached up on top of a book-case only to grab a large gopher snake.

Museum Receives Collection . . .

FLAGSTAFF—The Museum of Northern Arizona has been presented with the entire Indian collection of Mrs. Helen E. S. Meade, who recently sold her home on the Fort Valley road north of Flagstaff. The gift includes over 400 pieces of prehistoric and modern Indian pottery, 100 baskets and other material. A special exhibit of the collection will be made.

Source for Medicines . . .

TUCSON—Although Southwestern desert plants are a potential source for medicines now cut off by war, it would take 25 years to make the country self-sufficient in these medicines, according to Dr. R. E. Marker, professor of organic chemistry at Pennsylvania state college. The big problem would be development of a cheap processing system, he pointed out.

Monuments Chief Named . . .

COOLIDGE—Charles A. Richey has been named superintendent of southwestern national monuments, with headquarters here. He replaces Hugh M. Miller, who has been acting superintendent and who last December was assigned to national park service office in Washington. Mr. Richey has been assistant superintendent at southwestern national monuments headquarters since 1940.

Sells Rubber Heels . . .

FLAGSTAFF—When Little Sand Foot, four-year-old Hopi boy, son of "Quanni," heard about the rubber salvage drive, he selected a pair of shoes, pulled the rubber heels off, sold them and then bought some candy with the penny he received from the sale. But his mother's shoes were without heels because of his patriotism.

Largest Navajo Rug . . .

ORAIBI—The senate office building in Washington will soon display in its halls the largest Navajo rug in the world. The piece measures 21 feet by 37 feet and weighs 240 pounds. It was made by the wife of "The Man Who Wouldn't Talk." The weaver, a little squaw weighing 115 pounds, made the rug for Lorenzo Hubbell, who displayed it at his Oraibi trading post. It took two years to make.

Herman W. Sipe, 50, for seven years farm agent of U. S. Indian service at Sacaton, died at Casa Grande, July 25, following a heart attack.

Repeated stings from a scorpion hidden in the bathing suit of Darrell Boyle, 12, caused his death a short time after at a Mesa hospital.

Arizona harbors more grasshoppers than any other state, including 282 species and varieties, according to the University of Arizona.

La Fiesta de Los Vaqueros, for 19 years a nationally known mid-winter rodeo and the Tucson livestock show, nine years old, will not be held next year because of the war.

Mrs. Buelah L. Head has been named superintendent of the Sells agency of Papago Indians in southern Arizona left vacant when her husband resigned to accept a position in a war resettlement project. More women are being employed in the Indian service administrative department than ever before.

Ending a career as teacher in the Havasupai Indian reservation on the floor of the Grand Canyon, Mrs. Mildred Kelso Shaffer, died at her home in Phoenix recently.

The Arizona state fair commission has voted unanimously to abandon plans for the 1942 fair. Action was taken at a meeting with ninth service command and the western land frontier sector of the western defense command.

Dr. Arthur J. Matthews, president emeritus of Arizona state teachers college at Tempe and dean of Arizona educators died July 20 in Long Beach. He had served as a teacher for 60 years and was 82 years old.

Columbus P. Giragi, well-known Arizona publisher, has purchased his fourth newspaper, the Snowflake Herald.

Under a cooperative program worked out by the city of Phoenix and the Arizona museum, the home of Darrell Duppa, who gave Phoenix its name, will be preserved as a showplace. Repair work is contemplated.

CALIFORNIA

Vandals Destroy Cairn . . .

BANNING—Two Redlands men, Thomas P. Elliott and Wayne Strickland on hiking to

DESERT SOUVENIR

A four-color picture suitable for framing shows the Covered Wagon Train of '68 crossing the desert; now on display at Knott's Berry Place, Highway 39, two miles from Buena Park out of Los Angeles 22 miles. This remarkable oil painting 20x60 feet took over one year to complete. A copy will be mailed you together with the special souvenir edition of our Western Magazine jam-packed with original drawings and pictures and complete description of Ghost Town and Knott's Berry Place. Both will be mailed with current issue of our 32-page magazine for 25 cents postpaid in the U. S. A. Thousands have already viewed this great work of art and acclaim it a wonderful contribution to the history of the West. Admission is without charge whether you stay for the chicken dinner and boysenberry pie or not. Send 25 cents for all three: picture, souvenir and current issue to Ghost Town News, Buena Park, California.

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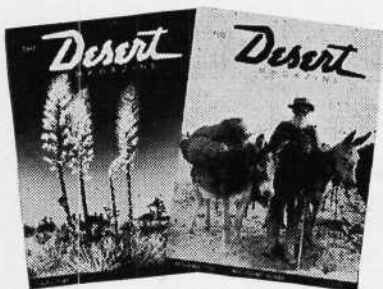
GEORGE T. HALL

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the top of Mt. San Geronio recently discovered that the cairn atop the peak had been scattered and the cache within destroyed. Elliott and Strickland rebuilt the monument while they were on the 11,485-foot mountain.

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Medicinal Plants . . .

CALEXICO—The Imperial Valley is agriculturally sound for the production of oil producing plants, needed for medicines and essences of which 95 percent were imported prior to the war, according to Monroe C. Kidder, director of drug and oil plant development for the California polytechnic school at San Luis Obispo. Kidder recently discussed production of these plants with valley representatives at a meeting held in Calexico, where it was revealed that L. G. Goar, superintendent of the Meloland experiment station had been conducting investigations into several plants, whose seeds produce oil. Most of these plants, however, are not adaptable to large-scale farming methods.

Joshua Forest Burned . . .

TWENTYNINE PALMS—Hundreds of Joshua trees were destroyed and Peter Mahrt, national park service employee and a resident of Twentynine Palms died early in June when overcome by smoke from a blaze that swept through part of the Joshua tree national monument.

Pelican on Desert Visit . . .

INDIO—Seven days of life under Colorado desert sunshine at Indio apparently proved enough for a pelican, who took quick leave of Police Chief Pat Cunningham when that officer was driving him to a ranch reservoir. Mr. Cunningham en route to the ranch had tire trouble and when he got out to remedy the situation, he also put the pelican out. The bird sauntered about for a moment, then lifted himself into the air to disappear.

Prosperous Date Season . . .

COACHELLA—Date growers of Coachella valley appeared headed towards one of the finest seasons in years, when it was revealed early this month that buyers were in the field offering as much as eight and nine cents a pound for orchard-run dates. In the last five years the price has not exceeded six and a quarter cents. Crop prospects are good.

Hazel Norona, who has been operating Hazel's Town Tavern in Wilmington, plans to open a desert lodge on Twentynine Palms highway, featuring an outdoor swimming pool and riding ponies and with deluxe cabins for the accommodation of guests.

NEVADA

T. & T. Rails Removed . . .

TONOPAH—All rails of the Tonopah and Tidewater railroad between Crucero, California, and Beatty, Nevada, a distance of 144 miles, will be removed from the roadbed to be used in the nation's war effort. The

federal government has ordered removal of the property since the railroad has not been in operation for several months.

Nevada Leads Drive . . .

CARSON CITY—Nevada may have the smallest population, but its per capita rubber collection record exceeds all other states of the Union with 30.13 pounds. Total rubber gathered in Nevada amounted to 1,657 tons.

Camp Sites Ready . . .

LAS VEGAS—The United States forest service has prepared tent and trailer camp sites on Charleston mountain for the summer campers. Sites are now ready for free occupancy in Kyle and Lee canyons in the shade of tall Ponderosa pines.

Cloudburst Danger Told . . .

LAS VEGAS—Newcomers to Las Vegas who have placed their trailers and tents in dry washes have been warned by John Hall public health engineer of Clark county department of health, to move out of the gullies. Cloudbursts which strike in the mountains often send a wall of water, sometimes several feet deep, swirling down washes without warning, the official said.

Old Ranch Sold . . .

WINNEMUCCA — McCleary Timber company of McCleary, Washington, has purchased the Quarter Circle A ranch from Mrs. Francis B. Law including 5,000 head of cattle, 300 horses and 28,000 acres of deeded land, exclusive of extensive range and old water rights. The Quarter Circle A is one of the largest and oldest ranches of Humboldt county.

NEW MEXICO

Good Piñon Crop . . .

GALLUP—Piñon trees of the high plateau show promise of a good crop this year if more rain comes by frost time, it is indicated by men who have traveled throughout western New Mexico and eastern Arizona. Railroad officials declare that railroad facilities will be able to care for the crop despite defense shipments since most piñons are shipped east while most defense freight is sent west.

Wool Supplied Navajo . . .

KAYENTA—The government is paying five cents above average per pound price for long staple Navajo wool, badly needed by weavers, it is reported. But in the Kayenta, Shonto and Navajo mountain regions of Navajo grazing country where Indians have not crossed their long-haired sheep with dense wooled rambouillet bucks, only a limited supply of light, long staple best suited for weaving is available.



The Angelus Hotel

Unusually large and airy rooms, furnished with a type, size, and grade of furniture seldom found in modern hotels. Your choice of double or twin beds, all with deluxe inner spring mattresses and box springs, thus guaranteeing the acme of comfort and luxury.

RATES: Room with private bath—\$2.00-\$2.50-\$3.00, one or two persons. Without private bath, \$1.50-\$2.00, one or two persons

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LOS ANGELES

A. C. Berghoff, Proprietor—Harry J. Wall, Manager

Peanuts Purchased . . .

PORTALES—McCasland bonded warehouse, agent for the federal government, has purchased 750,000 pounds of peanuts. Shipment, largest ever sent from Portales valley, required 23 freight cars. A crop of 10,000,000 pounds is indicated.

Co-Ed Cotton Pickers . . .

LAS CRUCES—Girls at the state college here do not shrink from cotton picking work. Two co-ed editors of the campus newspaper have endorsed plan to put college girls to work in the fields and a campus poll showed that they were backed up in this action by other co-eds.

White Sands Desert . . .

ALAMOGORDO—White Sands national monument, 600 square miles of snow white gypsum dunes, is ideally suited to the working out of problems of war camouflage in winter snows. The 50-foot high dunes are also available to train soldiers in ski problems. In the monument, nature has already worked out an efficient camouflage system, where even the crickets are white, blending in with the marching dunes.

Eastern New Mexico fair board officials have decided to cancel the annual event, but will submit the proposal to the Roswell Merchants association for final action.

By late August, Sam McCue, secretary of the New Mexico cattle sanitary board expects to have ready for distribution a supplemental brand book in which 35,000 additional cattle markings will be listed.

UTAH

Chinchilla Farm Started . . .

VERNAL—S. D. Pearce of Lynwood, California, and a former resident of Vernal has shipped 11 pairs of chinchillas valued at \$24,000 to Ashley valley, where he will raise the animals.

Mt. Timpanogos Climb . . .

PROVO—More than 300 hikers climbed to the top of Mt. Timpanogos in the thirty-first annual hike up the Wasatch mountain peak despite rain and unfavorable weather conditions. Another 500 or 1,000 persons climbed as far as Emerald lake, where they erected a cairn in honor of BYU students and others now in armed services.

Buffalo Reported Seen . . .

DUCHESNE—A buffalo has been reported in Avitiquin area by Angus Ingram, sheep owner of Nephi and his herders. They told Forest Ranger Julian Thomas they saw the animal while running their sheep. Previously a buffalo had been reported in Willow creek nearby.

Fossils Uncovered . . .

VERNAL—A primitive elephant fossil discovered on the C. M. Vaughn ranch on the slopes of Douglas mountain is said to be the ancestor of present day elephants and first cousin of mammoth of prehistoric times. Dr. LeRoy Kay, former resident of Vernal, headed the group of naturalists from Carnegie museum, Pittsburgh, who found the fossil.

Rail Landmark Taken . . .

BRIGHAM CITY—Construction crews have started pulling up rails and ties on the historic 123-mile stretch between Corinne and

the Nevada line including that section crossing Promontory point, where 73 years ago Governor Leland Stanford drove the "golden" spike completing the first transcontinental railroad. Rails and ties will be used by the U. S. navy to extend present and anticipated naval switch yards at supply depots.

Giant Lizard Bites Keeper . . .

SALT LAKE CITY—While trying to force an iguana to eat, Benjamin Cox was bitten on the finger by the lizard. Iguanas must be forced to eat whenever held in captivity. Thirst, however, being too strong for the reptile, keepers find no difficulty in giving it a drink.

Utah state agricultural commission has advocated elimination of the state fair this year in support of the nation's war effort.

Daniel B. Beard, son of late Dan Beard, who was internationally famous as the founder of the Boy Scouts of America, has assumed custodianship of Dinosaur national monument, replacing Harold Ratcliff, who has gone to Santa Fe office of national park service.

Center of the Scenic
MOJAVE EMPIRE

BARSTOW

... California ...

ROAD TO VICTORY . . .

While the boys of America are shouldering guns and cold steel to meet Hitler and Hirohito and their blood-gory legions in a fight to the finish, the Imperial Irrigation District and all of its employees is likewise completing a most important link in the battle behind the lines waged by agriculture and industry.

Ever since water entering the Imperial Valley began flowing through the All-American Canal when the cut-over was made from the Mexican system last winter, Irrigation District officials have continued to expand their canal and drainage systems so that America might have FOOD FOR FREEDOM.

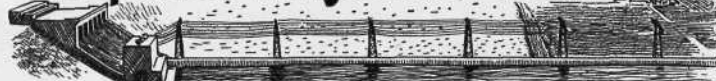
Through its efforts today there are thriving fields producing crops for the armies of the United Nations. FROM SUN-BLESSED IMPERIAL VALLEY LANDS ROLL TONS OF VEGETABLES, MELONS

AND GRAINS, INCLUDING RICE, FLAX, SUGAR BEETS, WHEAT, BARLEY, TOMATOES, LETTUCE AND ALFALFA so that soldiers in American encampments, so that American soldiers in encampments abroad, and so that soldiers and civilians of allied nations may eat and fight on to see a brighter world.

At the same time electricity from All-American Canal power projects is playing an equally important part to make the nearly 2,000 Imperial Valley farms more efficient in producing this vital food for a nation at war. Cheap electricity, produced in ever-increasing quantities lights and operates machinery in the farm home.

In addition All-American power goes to aid construction and operation of Camp Dunlap—the Salton Sea Seaplane Base at Sandy Beach—Camp Seeley—and the C. A. A. Airways radio station.

Imperial Irrigation District



Use Your Own Power—Make it Pay for the All American Canal

Writers of the Desert . . .

PROBABLY no living man knows the delta of the Colorado river better than GODFREY SYKES. He has traveled and explored it both as a scientist and for the love of adventure—as readers of Desert Magazine will discover when they read his story of his 1891 expedition to Salton sea in this issue.

Sykes, now in his 'eighties, has been cowboy, freighter, railroad man, civil, mechanical and metallurgical engineer, cartographer and writer during over 50 years of active life in the Southwest. In the summer of 1925 he drove an old car over the Camino del Diablo, the most waterless trail in the Great American desert—and then wrote a paper for the American Geographical society on human resistance to extreme heat. He was alone on the trip and when he became stuck in the sand and while he labored bareheaded in 115-degree temperatures to free his car he kept a careful record of his reactions. He would shovel sand almost to the point of collapse, then calmly make a record of his pulse, the temperature and amount of water consumed, and then lie in the shade to recuperate for another session with the shovel.

His book *The Colorado Delta*, published by the Carnegie institution in 1937, represents 45 years of careful study of the

stream and its eccentricities, and is the most exhaustive study of this area yet made.

Sykes has lived for many years in Tucson. He does not travel as much as in former years, but continues an active interest in everything pertaining to the scientific phase of the desert country. He has promised to write the story of his Camino del Diablo experiences for Desert Magazine readers.

. . .

The average motorist approaching Yuma, Arizona, from the east on Highway 80 would see hardly anything to exclaim about on the vast expanse of desert that comprises the Yuma mesa. To the casual observer it is just another drab section of the desert.

But JOS. C. COYLE confirmed what every desert rat knows—that there is something odd and interesting on every square mile of arid terrain—when he went out on this rather ordinary-looking desert and discovered a natural alphabet in stone, as described in this issue of Desert Magazine.

Thirteen years ago Coyle left his job on the railroad to live in a little shack on the Yuma mesa and do free-lance writing. His stories have appeared in several publications of national circulation. More recent-

ly he has acquired a little ranch near the Gila river where he and his family will have space and water enough to raise most of their own foodstuffs, with perhaps a surplus for the market.

. . .

DICK FREEMAN, whose exceptional photography has been missing from the pages of Desert Magazine the last few months, has a good alibi. Dick is a master electrician who had given up his craft to become a free lance writer and photographer. But when the airplane factories began calling for experts, he decided that he could contribute more to the war effort as an electrician than as a writer—and so he is working long hours in defense.

. . .

Not satisfied that guayule is the best answer to America's rubber problem, JOHN HILTON is spending much of his time these days in experimental gardens where he is propagating a shrub which he believes will produce as much rubber in 14 months as guayule yields in four or five years. Between times John is guiding army officers to remote corners of the desert to acquaint them with trails and waterholes.

. . .

J. D. LAUDERMILK'S story of the ancient sloths in Rampart cave in Nevada recently has been accepted by the editors and will appear in an early issue of Desert Magazine. Also another of RICHARD VAN VALKENBERGH'S interesting stories of Navajo life and customs is scheduled for the October issue.

FREAK ROCK IN CALIFORNIA

Who can identify this picture?



PRIZE CONTEST ANNOUNCEMENT . . .

Somewhere on the California desert this unusual rock stands as a monument to the erosive action of wind and water down through the ages. It is a rock you'll always remember if you have passed along the desert trail that comes this way.

For the information of those Desert Magazine readers not familiar with this landmark—and in preparation for the days when desert travel and exploration will again become a popular pastime for motorists—a prize of \$5.00 will be awarded the reader who sends in the most complete and accurate description of the rock.

Manuscripts should include data as to the location, accessibility by highway, and all available information as to dimensions, geology, etc. Entries in the contest are limited to 500 words, and to be eligible for the prize must reach the Desert Magazine office in El Centro, California, not later than September 20, 1942. The winning story will be published in our November issue.

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 collectors.

—ARTHUR L. EATON, Editor—

SALT LAKE MEETING TO INCLUDE FIELD TRIPS

Field trips will be included in the program planned for visitors at the convention of the Rocky Mountain Federation of Mineral societies in Salt Lake City August 29-30.

Visiting collectors are requested to register at the Union building at the University of Utah campus. Free facilities for trailers and cars will be available at the university stadium.

Saturday is to be devoted to displays, trading, business meetings and lectures, and optional field trips will be arranged for Sunday.

Programs or other information may be obtained by writing A. Reeves, 628 Dooly building, or Mrs. C. W. Lockerbie, 223 West 9th South, both in Salt Lake City.

LONG BEACH HOLDS ANNUAL POTLUCK DINNER

Long Beach mineralogical society is starting the institution of an annual potluck supper, at which they hope to see all those who have ever been associated with the society present. The 1942 potluck was booted about from pillar to post, and the address changed several times on account of war needs, and finally held in Silverado park, on Santa Fe avenue. The supper followed the ancient procedure of each one bringing a hot covered dish, a salad, pie, or anything else good. Startling announcement: Among other things the committee furnished SUGAR.

The speaker of the evening was Victor Arceciaga. In addition, an exhibit of material gathered and work done the past year was a feature of the evening. Members Potter, Cutler, Rochford and Vonder Ahe brought samples of materials gathered in the Chocolate mountains and Leadpipe springs trips, as well as specimens from the Trona area. Each member felt obligated to bring at least one sample of his handiwork, or some specimen garnered during the past year.

Long Beach has instituted a somewhat altered variety of the now famous grab bag. Each member who has a box full of duplicate specimens around the house donates one or several to the grab bag. This adds many dollars to the common fund. But, of course, there are times when the grab box is none too full, and a little urging is necessary to fill it up again.

MANY FINE EXHIBITS SHOWN AT FULLERTON

Among many interesting and novel exhibits at the West Coast Mineral show at Fullerton, California, July 17-19, was a two-foot slab of Shattuckite that involved 29 hours of cutting, exhibited by D. P. Leonard of Santa Ana.

Other exhibits which attracted special attention were those of Albert Stovall of Fullerton with an unusual specimen of petrified palm; the educational exhibit entered by Bertha Crane and her daughter Helen of Santa Ana, and the entries of Don Ivers, Charles Stewart, Lee Seabridge, Walter Craig, A. Johnston, Marion Speer and W. Nelson Whittemore.

According to President Chas. Knowlton, the exhibits were necessarily limited by war considerations, but they were of unusually high quality, and the sponsors and visitors alike were highly pleased with the showing.

COLORFUL MINERALS

SODALITE

Sodalite is one of the minerals which will add color, or rather colors, to any collection. It is best known as a brilliant deep blue form of feldspar, but it can be found in grey, greenish, yellow, lavender and even light red. Its hardness of about six, and ability to take and keep a fine polish, make it a favorite with amateur gem cutters. It was first found at Bancroft, Ontario, and sold in England as "princess marble," although it is in no way related to true marble. It is commonly massive and can be used to cut cabochons, or for bookends or other large, decorative purposes. In the United States sodalite occurs in Kennebec county, Maine, and Essex county, Massachusetts; and in Canada it has been found in the provinces of Quebec, Ontario, and British Columbia.

ROCKHOUNDS HAVE TROUBLE WITH THEIR SPELLING

The word fluorescence—note the spelling—seems to offer as many difficulties to dealers and collectors as it does to others. During the present month we have noticed it in print several times spelled fluorescence, and fluorescence. Dana spells the word correctly "Fluorescence." It is taken from the name of the well known mineral fluorite, in which this remarkable quality was first noticed.

P. S.—Charles S. Knowlton, program chairman of West Coast mineral society, asks: "Why should we use the terms fluorescent and phosphorescent when we could use the words 'fluo' and 'fosfo'? It would save a lot of space, everyone would know what is meant, and would know how to spell the words besides."

A WOULD-BE ROCKHOUND'S LAMENT

By ALICE CARRY DICKEY
Dinuba, California

I'd never taken solo trips
Like other fellows do;
And then I thought "Well darn my cats"
I'll pioneer some too.

I'd heard of all those lovely rocks,
And seen what rockhounds show.
And thought, I'll have a fine display
And maybe make some dough.

I took advice from all the "hounds,"
The road maps plainly marked.
I started out and traveled far
And then my car I parked.

I looked for crystals all day long,
And nothing did I find.
But not discouraged started out
To find another kind.

This time twas garnets
"Yes," they said, "they're plentiful out there."
And so I hunted, but I couldn't
Find them anywhere.

And thus my whole vacation through,
I hunted all alone.
I wonder why those rockhounds
Always find such lovely stone.

Find hidden values

NEW MODELS

GREATER EFFICIENCY
HIGHER INTENSITY
LIGHTER WEIGHT

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CLOSE-OUT BARGAIN . . .

"POLISHED OREGON THUNDER EGGS"

The purchase of a huge collection of these popular selling Agate Nodules makes it possible for us to offer a "real buy." For only \$1.00 plus postage on 2 lbs. you will receive TWO POLISHED THUNDER EGG halves each having a surface area of 5-6 sq. inches. This price is actually less than the cost of sawing and polishing of the specimens. These are all first quality specimens. Larger sizes are available at \$1.00, \$1.50, and \$2.00 each.

SEND FOR YOUR FREE COPY of our 10th ANNIVERSARY CATALOG

This lists and describes our large selection of PREFORM CABOCHON BLANKS, sawed slabs of semi-precious gem materials, fluorescent lights, and

"MINERALS FROM THE FOUR CORNERS OF THE EARTH"

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405 NINITA PARKWAY

Ninita Parkway is one block east of the intersection of So. Hill Ave. and San Pasqual Sts.

Our phone number is SYcamore 6-6423.

PASADENA, CALIFORNIA

MINERAL BOOKS...

There's no more fascinating a hobby than collecting minerals. For your education so that you can thoroughly enjoy this study, Desert Magazine has a complete list of books, a few of which are given below.

THE ART OF GEM CUTTING, complete second edition, Fred S. Young, gem-mologist. Contains information on cabochon cutting, facet cutting, methods to test stones, the value of gem stones and useful lapidary notes. Index. 112 pages. ... \$2.00

GETTING ACQUAINTED WITH MINERALS, G. L. English. Fine introduction to mineralogy. 258 illus., 324 pp \$2.50

HANDBOOK FOR THE AMATEUR LAPIDARY, J. H. Howard. One of the best guides for the beginner, 140 pages. Good illustration \$2.00

QUARTZ FAMILY MINERALS, Dake, etc. New and authoritative handbook for the mineral collector. Illustrated. 304 pp \$2.50

DESCRIPTIVE LIST of the new minerals 1892 to 1938, G. L. English. For advanced collectors. 258 pp \$3.00

Mailed Postpaid

Add 3% tax in California

THE Desert MAGAZINE

El Centro, California

AMONG THE ROCK HUNTERS

The Orange Belt mineralogical society held its July meeting at the home of Dr. and Mrs. D. H. Clark at Cypress Circle, Redlands, Sunday evening, July 19. Forty-five members and friends enjoyed a covered dish supper. Mr. and Mrs. Elvin Bond of the Long Beach society were guests. Howard Fletcher spoke on his recent trip to Colorado, and Dr. Clark spoke on the petrification of wood. Every one enjoyed viewing Dr. Clark's magnificent collection of polished woods and other specimens.

Northern California mineral society reports that its blow pipe class ended with the two June sessions. Several classes having to do with the earth sciences will be started in the autumn. One of the most popular sessions is laboratory night, where each student or member can pursue his own particular interest, and also enjoy contact with others who have similar interests.

Dr. Gilke, instructor in Sacramento junior college, addressed the Sacramento mineral society on the subject: "Strategic minerals of the United States." In spite of loss of members through the war emergency, 36 members in eight cars made the 60-mile field trip to the Placerville area for quartz crystals.

Mineralogical society of Southern California has elected the following officers: W. J. Rodekohl, president; Morris Ebersole, vice-president; Ralph Dietz, secretary; L. W. Vance, treasurer; David B. Scott, Earl Calvert, Willard Perkin, H. G. Kirkpatrick, John Grieger, Kenneth Reed, and Don George, directors.

All members who attended the 11th annual dinner and exhibit of the Mineralogical society of Southern California will remember the affair for a long time. Eight classes of displays drew awards: general mineral collections, crystals, polished slabs and flats, polished petrified wood, cabochons, novelties, fossils and rock types. First place drew a blue ribbon, second place, red, and third place, white. Judges were Ernest Chapman, former president of the California federation, John Grieger, and K. N. Reed. Earl Calvert, Charles Huffman and John Grieger were in charge of exhibits. The meeting was held at Altadena golf club.

Kenneth Garner, secretary of the California federation announces that regardless of the cancellation of the annual convention, there is no moratorium on regular federation expenses, such as printing mineral notes and news, etc. More than half of the societies have not paid their federation dues for 1942. The amount is 10 cents a member, and the assessment of five cents a member levied at the November, 1941, meeting of the board of directors. All dues should be sent directly to Garner at 397-B 17th street, San Bernardino.

Thomas Warren, president of Ultra Violet Products, Inc., of Los Angeles, addressed the Santa Monica gemological society at its annual meeting on the subject of "The fluorescence of minerals." Warren demonstrated with a fluorescent light the brilliant colors displayed by many minerals, and showed the importance of fluorescence in locating tungsten and other strategic minerals.

Gold in silicified wood has been found in two or three localities recently. Dr. V. P. Giannella, of the Mackey school of mines, Reno, Nevada, describes one occurrence. The trees grew in central Nevada, during the miocene age, and were broken down by volcanic activity. At a later period, hot magmatic water arose through the surrounding rocks to deposit gold and silicify the wood. This occurrence is in Pershing county, Nevada, near Broken Hills, in the southern end of the Desatoya mountains. The second find was in Yuma county, Arizona, where narrow veins of virgin gold were deposited in petrified ironwood, in the same manner, probably, as in the Nevada deposits.

F. A. Markley of San Ysidro, California, is one of the few prospectors who are willing and able to brave the heat of Death Valley to do their prospecting even in the summer time. With the temperature at 130 or more, Markley says that "one does not mind the heat much after the first two or three days." The hills around Death Valley are far from being worked out, and the floor of the valley still contains many minerals and crystals which are interesting to the rockhound, but midsummer is not the best time for a tenderfoot visitor.

It has frequently been reported that the fluorescence of "chalcedony roses" is due solely to the thin coating of whitish common opal which almost always appears on the surface. A recent experiment proves this to be entirely untrue. The thin coating of common opal was completely removed in a bath of hot oxalic acid solution. When the translucent rose, free from all outside coatings, was placed under the cold quartz light, it fluoresced even more beautifully than before.

Oregon Agate and Mineral society at Portland is holding only one meeting a month at present. The last meeting was a picnic with 75 members present. No field trips are scheduled for this summer.

GEM MART

ADVERTISING RATE
5c a Word — Minimum \$1.00

Silver (small, crystallized) 25c to \$1.00. Sterling lady's ring with good Montana agate—Special \$1.25 postpaid. Flathead Museum, Rollins, Montana.

Palm woods, jaspers, chalcedonys, agate nodules and geodes, also polished and unpolished slabs, a few cabochons and other gem rocks. Valley Art Shoppe, 21108 Devonshire Blvd., Chatsworth, Calif.

AGATES, Jaspers, Opalized and Agatized woods, Thunder eggs, polka dot and other specimens. Three pound assortment \$1.50 postpaid. Glass floats, price list on request. Jay Ransom, Aberdeen, Wash.

WANTED: Western Minerals, crystallized or rare. Will buy or exchange for Franklin, N. J., Minerals. John S. Albanese, Post Office Box 281, Newark, N. J.

ZIRCONS—OPALS—CAMEOS—3 Genuine diamond cut Zircons (total 2½ carat) \$2.75. Twelve Genuine Opals \$1.50. Twelve Genuine Cameos \$2.50. B. Lowe, Box 311, St. Louis, Mo.

10 Tiny perfect Indian bird arrows of translucent chalcedony for a dollar bill. 100 ancient arrows \$3.00. List Free. Lear Howell, Glenwood, Arkansas.

Cypress knees, 50c each. Gourd dippers, 35c each. Abalone shells, 50c each. Chambered Nautilus shell, \$7.50. Express or postage extra. C. R. Harding, West Fork, Ark.

Twenty-five cents for big specimen. I pay freight. Virgin valley opal, three dollars. Stibnite included crystal, very rare, two dollars. Bottle opal chips, one dollar. Mexican opals, one-fifty and up. See the new Desert Rats nest, 2667 East Colorado, East Pasadena, Calif.

SPECIAL \$3.00 COMBINATION, rough Cabochon material, suitable for cutting, Amazonite, New Mexico Moonstone, Sunstone, Moss Agate, 5 Lake Superior Agates, Turquoise, Opal. Also large variety AUSTRALIAN BOULDER OPAL specimens showing vivid flashes of red, green and blue—priced from 25c to \$1.00. Frederick J. Essig & Co., 162 N. State St., Chicago, Ills.

100 GOOD GRADE Prehistoric Indian Arrowheads \$3.00. Mixed shapes and material. Ages old. List free. Lear Howell, Glenwood, Arkansas.

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Cogitations . . .

Of a Rockhound

By LOUISE EATON

• Maybe rockhounds can help Uncle Sam out by doin' jus' what they likes best to do—best, that is, exceptin' field trippin'. Seems therz a bottle neck in production because lots uv synthetic joolz is needed an' they don't get polished up fast enuf. These stones are used in makin' electric fixins for battleship enjines an' on air-plane instrument panels, etc.

• Enuf synthetic rubeez an' saffirz is bein' produced. That alone is quite a job. They'se made by fusin' pure unadulterated aluminum oxide in a flame made outta oxygen an' hydrogen. Color is put in the chrystals by addin' specks of chromium oxide to make 'em red, an' titanium oxide to make 'em blue. The Chrystals thus manufactured is called boules. The boules has to be cut an' polished to fit in place as bearings an' sutch.

• That's where the rockhouns cumz in. Why can't rockhouns put their cuttin' an' polishin' abilities to work for our country an' help abolish the present bottle-neck in production uv synthetick joolz, by cuttin' an' polishin' the needed stones. It could be dun by rockhouns all over the U. S. A.

Alma M. Bliss, secretary of the Searles Lake Gem and Mineral society at Trona, California, recently joined the staff of the Trona Argonaut.

A recent find of bassanite (not basanite) crystals in Imperial Valley, California, brings up the study of this rare form of gypsum. Bassanite is anhydrous gypsum, calcium sulphate, in the form of long slender needles. Previously, they had been reported as forming in parallel arrangement in cavities in lava thrown from Mount Vesuvius, in Italy. The desert crystals of bassanite are exactly like those from Vesuvius, except that they form as loose single crystals, instead of being fastened together in parallel arrangement. Not more than a dozen of these crystals have been reported to date. Bassanite can be turned into anhydrite, or anhydrous gypsum by bringing to red heat.

San Fernando Valley mineral society reports a total of 60 paid up members. Seven new members were accepted at the June meeting. Most of the meeting was turned over to W. D. Taylor, junior past president, who placed on exhibit his new cutting and polishing machinery, the greater part of it made by himself. W. Scott Lewis took the July meeting on a tour through Death Valley by means of his lecture and a new set of slides and specimens from the valley and other desert areas on display. Field trips are very uncertain on account of the closing of so many mineral areas to the public, and also the old bugaboo of no tires.

Dr. Thomas Clements, professor of geology at the University of Southern California, gave an illustrated lecture at the August 3 meeting of the Los Angeles Lapidary society. One hundred and sixty members and guests enjoyed his presentation of "The Emerald Mines of Muzo, Colombia." R. DeWitte Hagan, new president of the society, presided at the dinner meeting. Next meeting of the society is to be September 14.

Virginia Ashby of San Bernardino, California, was hostess to 21 members of the Orange Belt mineral society on Sunday evening, July 26, in her mountain cabin at Forest Home. All those present declared it to be one of the memorable events of the entire year. Kenneth Garner, secretary of the California state federation, gave an educational talk on the construction and management of the Basic Magnesium Plant, Inc., situated at Royson, Nevada, near Las Vegas, and the methods of ore handling.

East Bay mineral society recently chose the following as officers for the coming year: Julian Smith, 583 Durant, San Leandro, president; H. C. Mahoney, 1467 Seventy-Ninth street, Oakland, vice-president; Nathalie Forsythe, 1719 Allston way, Berkeley, secretary; George Higson, 923 E. 23rd street, Oakland, treasurer; F. W. Cochran, F. M. Osborn, W. G. La Rue, directors.

Searles Lake Gem and Mineral society at Trona is planning to sponsor a two-day hobby show in October, according to President Ann Pipkin. While all hobbies will be eligible for entry, it is expected the event will bring out an unusually fine display of minerals.

The June meeting of the East Bay mineral society at Oakland had the appearance of an old fashioned picnic. Tables were set in the rear of the auditorium of the Daniel Webster school with places for 100, and nearly all of them were filled. The cook in each household brought her favorite dish, and exchanged with others. William B. Pitts, one of the best known and best loved of lapidaries was present to talk to the society about the work of an amateur lapidary and to show his thin section slides of various minerals. He pointed out that the purpose is to show the mineral in its most beautiful state; not just to make a cabochon, or to make a flat, or to make a slide, but to get the most beauty possible from every specimen one works on. The highlight of the evening was the presentation to Mr. Pitts of an inscribed scroll making him an honorary life member of the society.

Walter W. Bradley, California state mineralogist, has just released the October, 1941, issue of the California journal of mines and geology. This issue is devoted largely to a detailed discussion of the mineral and petroleum resources of Humboldt county, California. But it also has detailed articles on tin in California, California quicksilver program of federal geological survey, tungsten resources, manganese, chrome, and several other minerals. These California division of mines bulletins are very interesting to every student and collector of minerals, and should be particularly so to any persons who wish to use their knowledge of essen-

tial minerals to help satisfy the pressing needs of Uncle Sam.

CALEDONITE

Among the rare and very beautiful minerals is caledonite, a hydrous sulphate of lead and copper. It takes its name from Caledonia, an old name for Scotland, where it was first found. This rare mineral forms tiny bluish green crystals in the orthorhombic system, which are often found coated on rocks or on other copper forms. Utah, New Mexico, Arizona, and California, as well as several foreign countries, have all furnished small numbers of these crystals, which readily add color and interest to any collection.

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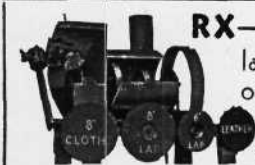
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and polishing equipment. Leland Quick, who conducts this department, is former president of the Los Angeles Lapidary society. He will be glad to answer questions in connections with your lapidary work. Queries should be addressed to Desert Magazine, El Centro, California.

By **LELANDE QUICK**

A modern battleship's engine room requires more than 4,000 gems. The fire-control mechanism and the navigation instruments each require another 100, and more than 100 jewels are used in the instrument panel of every big bomber.

These gems are synthetic but they have to be ground, and, believe it or not, the lack of gem grinders in America is one of the country's biggest bottlenecks at the moment. Our production has reached 1,000,000 karats a month which is about 10 percent of what we need. We used to import about 100,000,000 a year from Switzerland, Holland and France but since Adolf Schickelgruber has cast his greasy raincoat over Holland and France and bottled up Switzerland we are whistling for industrial gems.

The Union Carbide and Carbon corporation (Linde Air Products division, 30 E. 42nd St., N.Y.C.) are turning out the rough boules in sufficient quantity because they have the greatest supplies of hydrogen and oxygen essential to the manufacture of synthetic rubies, when chromium oxide is added, or synthetic sapphires when titanium oxide is added. Color is unimportant except that it makes the product easier to see, cut and assemble.

The boules, about the size of a large bullet, usually weigh about 200 karats. If you feel that you want to turn your hobby against the Japanese who grabbed nearly all the real gem mines in the world you can offer your talents in cutting the boules. Drop a line to Alan Magary, Materials Division, Branch L4, War Production Board, Washington, and tell him what equipment you have. He will tell you if your facilities are needed.

I have recently cut and polished some of the new "flowered" obsidian and I am delighted with it. It would be nice if something new like this very interesting material could be found every year or so. Every slab holds new possibilities because of the variety of flower effects. These orbicular spots look like clouds in a dark sky. Indeed I heard of one enterprising jeweler who mounted some large cabochon pins with tiny gold airplanes and called them "Shangri-La."

"New" materials are viewed with suspicion, as they should be, but such is the knowledge of gem testing today that fakes soon can be discovered. For a long time no new material has divided amateur lapidaries into two schools of opinion as rapidly and effectively as the "honey" obsidian recently offered for sale. I have cut and polished some of it and if it is glass it is beautiful glass. But it has distinct flow lines, so it probably is obsidian. This material is supposed to have come from Mexico.

I have seen Aztec razor blades of green obsidian. There are plenty of people who deride the idea of green obsidian and yet most museums display mirrors and knives made of it, taken from Indian excavations. All authorities list both brown and green obsidian, but many lapidaries claim there are no such varieties.

I recently talked with a fur grower returned from Tierra del Fuego, only 600 miles from Little America, who said he saw acres of brown obsidian but he was not interested in rocks at the time. That is a long way to go on a field trip (or with a commercial truck) but I surely would like to see some of the stuff—in the matrix. Until evidence is produced to the contrary I prefer to believe that the large colored cabochon I have with flow lines is "honey" obsidian and not "beer-bottle" obsidian.

DID YOU KNOW THAT . . .

- A gem of 8 hardness can be as much as 1,000 times as hard as one of 7 hardness. Therefore a topaz can be 1,000 times as hard as a citrine; a citrine 1,000 times as hard as an opal and an opal 1,000 times harder than lapis lazuli. This would make the topaz possibly a billion times harder than lapis although they are 8 and 5 in hardness respectively. A better system of determining hardness is needed. The differences between degrees of hardness are very unequal, however, as the difference between the diamond and ruby (10 and 9) is greater than the difference between the ruby and talc (9 and 1).
- While rubies and sapphires are both corundum, rubies are generally slightly softer.
- Aquamarine is harder than emerald.
- Amethyst becomes citrine when heated.
- The word "crystal" comes from the Greek word "crystallos," meaning ice.
- Real jet can be burned the same as coal.
- Onyx will effervesce when some acids are applied.

The "question and answer" department can not get going until the next issue as this copy had to be in three days after publication of the first announcement, which gave no time to gather an informative section.

Send us your ideas, short-cuts, questions, problems and constructive criticisms.

LAPIDARY HELPS AND HINTS . . .

If you are in a hurry and want to make your plaster of paris set fast mix a little salt with it. If you are really in a rush add a trace of glue.

When you desire to solder two pieces of silver put the solder on the heavier piece. Then heat from the side of the heavier piece and eliminate the danger of the solder bouncing or of the lighter piece bending or melting.

Here is a good fastener for nailing down your finished gems; use talc mixed with sodium silicate (water glass). It forms a rock-hard cement that will not chip.

Above suggestions were contributed by James Arnold of the Los Angeles Lapidary society and president of the Los Angeles Mineralogical society. Similar suggestions will be welcome; indeed they are needed, not so much by this magazine as by the vast fraternity of amateur gem cutters.

Tips for holding the grits on the lap wheel—Mix carborundum with oil; it holds well but is messy. Karo syrup works well but watch the ants! Glycerine is fine, but it costs more than the carborundum you save and they are both priority items now. Use Diesel fuel oil for "washing" rocks after using any of the foregoing mixtures.

In using pipe or pipe bushings for sphere cutting remember that the resulting sphere will be one third larger than the diameter of the pipe used.

Beware of the lettering used to indicate the hardness of grinding wheels. One large company starts with H for its hardest grade and works down to S for the softest and a large competitor letters just the opposite.

Mines and Mining . .

Salt Lake City . . .

America may be able to utilize its low grade tin-ore deposits if an electrical spray machine that washes metals from raw ores proves as successful in actual mining operations as it has in laboratory tests. Electronics research engineers at Westinghouse laboratory have perfected the machine. Electrical charges have been sprayed on ore assaying only 1½ percent tin with resulting concentrates that were 70 percent tin, an ore suitable for smelting. George W. Hewitt, Westinghouse electrophysicist developed the separator under the direction of G. W. Penney, manager of the electro-physics division of the company.

Battle Mountain, Nevada . . .

W. C. Rigg, president of Arizona Molybdenum corporation of Copper Creek, Arizona, has leased the Richmond and Rose Creek tungsten properties from the United States Vanadium corporation. The Richmond, an open-pit operation, is located in the Potosi mining district 48 miles northeast of Winnemucca, while the Rose Creek mine is located in the Rose Creek mining district, 12 miles southwest of Winnemucca. Full crews will be employed at both mines, to produce an anticipated 300 to 400 tons from the Richmond and 50 tons daily from the Rose Creek.

Washington, D. C .

War production board officials expect the new steel plant now being constructed at Geneva, Utah, to be in production not later than June 30, 1943. WPB has approved a new structural steel unit at the Columbia Steel company's Provo mill, estimated to cost \$11,500,000. This mill will not only turn out structural steel, but tube rounds, billets and shell steel for use in shipyards and munitions factories at various Pacific coast shipyards now handicapped by the lack of steel shipments by water.

Winnemucca, Nevada . . .

The Cordero mine, now Nevada's largest quicksilver producer, 13 miles southeast of McDermitt in Humboldt county, is turning out between 200 and 300 flasks each day and 100 tons of ore are passing through its furnaces during the same period. Although equipped with a furnace made to handle only 50 tons per day, the 100 tons are being pushed through by the inauguration of several improvements. James O. Greenan property in Humboldt county's Bottle Creek district followed second in the state with an output of more than 100 flasks in June.

Los Angeles, California . . .

Two southeastern California iron deposits will soon be yielding ore for steel plants in Southern California—the Henry J. Kaiser company plant at Fontana and the new steel works soon to be constructed at Azusa by the Pacific Coast Iron corporation. The Kaiser company assertedly has acquired the Vulcan iron mine properties on the Mojave desert near Kelso, which they are said to have purchased from Charles G. Jones of Los Angeles for \$125,000. The second plant which will utilize the Cladon-Hicks electrical furnace process will be supplied with ore from the vast Iron Mountain deposit in Riverside county.

Virginia City, Nevada . . .

The Comstock lode has paid off again. This time Jack Good and Charlie Machado have shipped 15 tons of gold and silver ore estimated to average \$1,000 to the ton, mixed with some low-grade material, to the Dayton mill. Ore was found in a tunnel driven into the hill at a point where the overburden had been removed. They operate a lease on a portion of the ground of the Consolidated Chollar Gould and Savage Mining company near Gold Hill.

Morenci, Arizona . . .

J. E. Morgan & Sons El Paso, Texas, have been awarded a \$2,650,000 contract for expansion of the electrolytic copper refinery of Phelps Dodge Refinery corporation at El Paso. Enlargement is part of \$28,000,000 Phelps Dodge expansion program to include an 80 percent increase in Morenci reduction plant.

Hawthorne, Nevada . . .

Gabbs Valley magnesite ore reduction plant of Basic Magnesium, Inc., went into production July 25, less than six months after ground was broken for the project. The plant designed to produce 2,000 tons daily, was erected by MacDonald Engineering company, of Chicago, and affiliated engineering and contracting groups. This plant adjacent to one of the largest deposits of magnesite ever developed, will provide magnesium oxide for the magnesium refining plant now nearing completion at Las Vegas.

Goldfield, Nevada . . .

Getchell gold mill will soon be treating between 250 and 300 tons of tungsten ore daily, it has been announced by officials of Getchell Mine, Inc. Operations are expected to begin this month at a newly-constructed unit capable of treating that amount of ore. Getchell mine is also one of Nevada's largest gold producers.

Randsburg, California . . .

The new strike made on the old Gold Coin claim by N. G. Simpson, H. B. Miller and N. G. Lynch has tested at 100 per ton in gold and an ounce of tungsten to each pound of pannings. The discovery is as yet untested for quality. The strike was made in virgin ground.

Salt Lake City, Utah . . .

Maximum production of lead and copper is planned by the Tintic Standard Mining company. Considerable development work has been completed and new equipment has been added. Ore produced at the company's property in the Tintic district last year totaled 116,463 tons, or 12,117 tons over 1940 total.

Carson City, Nevada . . .

Wayne McLeod, Nevada state surveyor general, has released a second edition of "How to Locate and Maintain Mining Claims." This pamphlet proved popular in the past.

Ivanpah, California . . .

A new tin discovery along the northern range of Ivanpah mountains is yielding high grade ores, according to reports. The strike assertedly was made along a granite-dacite contact where the tin occurs in the form of cassiterite. Specially selected samples are said to run as high as 30 percent tin.

Tucson, Arizona . . .

The University of Arizona's most popular publication, "Field Tests for the Common Metals," is off the press again in a revised eighth edition, its printing having reached in excess of 30,000 copies. The bulletin was first printed in 1919, and since has been reprinted in the whole or in part by mining publications throughout the world. It is widely used as a handbook by Arizona miners and prospectors because of its simplicity in setting forth the simple field tests for many metals and substances. It was written originally and has been rewritten through all of its editions by George R. Fansett, mining engineer of the Arizona bureau of mines.

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By RANDALL HENDERSON

THIRTY years ago I was a member of the U. S. Land Office surveying party which established the boundaries and set the quarter corners in the Colorado River Indian reservation at Parker, Arizona.

I went back there in July this year to see how my old friends, the Mojave and Chemehuevi Indians, were getting along with their new neighbors—the Japanese evacuees from the Pacific slope who have been located on their reservation for the duration of the war.

Frankly, the Indians are not very happy over this war-emergency invasion of their tribal domain. They are wondering if the land will ever be returned to them.

I feel that they have no cause for concern, as long as Secretary of Interior Harold Ickes and Indian Commissioner John Collier remain in the seat of authority at Washington. After the war is won there will be congressmen, no doubt, who will urge that the farmlands being reclaimed by the Japanese be turned over to ex-soldiers or other worthy white farmers.

But Ickes and Collier have given their pledge to the Indians—and I think highly enough of the integrity of these men to believe that they will move heaven and earth to fulfill that pledge.

* * *

I believe it was Ed. F. Williams of Blythe, who first suggested the Parker valley as a refuge for the evacuated Japanese. There were protests, of course. I understand some of Ed's friends haven't spoken to him since.

I've known Ed. Williams for 30 years. You seldom see his name in the headlines, but he has played a major role in the development of the lower Colorado river basin. Ed is my idea of the world's No. 1 altruist, and the worst farmer in Palo Verde valley. He has made millions for his neighbors—and has a hard time raising money to pay the taxes on his homestead every year.

I think his suggestion that the Japanese relocation center be placed in Parker valley was a happy solution for a tough problem.

* * *

Just for the sake of old times, I drove down into the virgin mesquite jungle one night and spread my bedroll in a little clearing.

A coyote sat in a thicket on the edge of the clearing and

watched me turn in. Years ago that river bottom was a natural range for the coyote tribe. I dropped off to sleep wondering why I had not heard any of them howl during the evening.

Then sometime in the night I was awakened suddenly by the most eerie serenade of coyote music I have ever heard. It sounded like millions of them. They were barking, more than howling. You've heard all the dogs in the neighborhood start barking at once. Well, multiply it by a thousand and you will have an idea of my desert serenade.

It wasn't unpleasant music at that. There is a falsetto wail to a coyote's bark that merely deepens the mystery of the desert night.

No doubt the coyote tribe shares the Indians' dislike for the invasion that has come to Parker valley.

* * *

I am aware there is a very strong sentiment in the United States today in favor of returning all Japanese to Japan as soon as practicable, and excluding them from this hemisphere.

But I am not sure it is the right answer. The chaos we are in is the fruit of distrust and hatred—of a vicious nationalism. From 1919 until December 7, 1941, our foreign policy was dictated very largely by isolationists—leaders who imagined that we could withdraw into our own little world and live apart from the troubles of the rest of mankind. But that policy brought us only grief.

There are men and women of integrity and goodwill in every race—just as there are scoundrels in every breed of men.

My conclusion is that the goal of lasting peace best can be attained by a horizontal separation of the good from the bad, rather than by vertical exclusions along national lines.

I wish that the peace terms after this war could be drafted by men like Abraham Lincoln—men who have that rare combination of a big heart and a hard head.

* * *

Hopi snake dancers will be holding their annual prayer for rain soon after this issue of *Desert* comes off the press. In behalf of the date growers on the California desert I would like to ask the Hopi to make it quite clear to their gods that they are seeking rain for Arizona only. Heavy showers in late August and early September play havoc with the maturing dates in California's Coachella valley. Date shipments from the far east are greatly reduced—and we need all we can produce this year. There's lots of sugar in them.

BOOKS OF YESTERDAY AND TODAY

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

RARE BOOK CREATED BY INDIAN SCHOOL STUDENTS

When the students of the Phoenix Indian school conceived the idea of a year book which would show their pride and interest in the cultures of their own people, rather than in their school alone, they opened the way to a new and effective means of preserving for all time, the Indian way of life.

THE NEW TRAIL is their traditional annual, but presented in its new form, it is more than that, more than just another book on Indians. It is the Indian of the Southwest—the Indian's own interpretation. Truly a book of creative writing and art, it follows no stereotyped pattern, but expresses their reflections and poetic reverence for the ways of their fathers and mothers.

The poems, legends, essays, songs and illustrations impart to the reader something of the rhythm and spirit of the people, blended with the beauty and dignity of their desert surroundings.

Unique and yet symbolic are the colored sections of the book which indicate tribal relationships. Lloyd Henri New and Willetto B. Antonio, young staff members, explain them in the introduction.

"The desert tribes," they write, "are represented in warm yellow sections, the Pima and Papago. The Maricopas who live very close to them, are linguistically and by custom more like the Colorado River tribes, the Yuma, Walapai, Cocopah, Mojave, Chemehuevi, of the cool blue green section. The virile Apache are shown in vermilion red. The pueblo Hopi, being the most unlike any other Arizona tribe are shown in white. Too few Navajo students come to this school to include a Navajo section, but it would have been a quieter red for them to show their close kin to the Apache."

There are the stories of San Juan Day, of Juanita, of Sons of the River, and of "Ah-hode" the Mojave maiden. There are the stories, too, of the family, of the "Tooze" Storage Basket, and of the games the children play.

A Day in the Desert, Pima Land, Home on the Walapai and the Mojave Bird Song are just a few of the poems and songs from which we glimpse their reverence for nature and for the powers of the universe.

The book is profusely illustrated with drawings and, in addition, there are seven illustrations, most of them in color, each done on a two-page fold, loose inserts, purposely unbound, so that they may be removed and framed without damage to the book itself.

Published by, and printed at, the Phoenix Indian school. Bibliography. Index. 158 pp. \$1.00. —Marie Lomas

LEGENDS OF FOUR TRIBES TOLD IN CHILDRENS' BOOK

White children will listen as wide-eyed as do little brown Southwestern Indian boys and girls to the legends of the Pima, Apache, Hopi and Yuma tribes gathered first-hand by Louise McKee and Richard Summers and recorded for children in DUSTY DESERT TALES. The book is dedicated to the authors' two daughters, Anna Louise and Amo Leona "who listened and were delighted." The philosophy of the tribes which creeps into the various versions of the story of creation and other legends such as "Where the Giant Cactus Comes From," will intrigue the older reader. Included are authentic Indian sketches by Powell Scott.

Published by The Caxton Printers, Caldwell, Idaho. 191 pages. \$2.50.

—Helen Smith

GLIMPSE INTO THE HEART OF MEXICO

THE DAYS OF OFELIA by Gertrude Diamant is the story of our desert neighbors to the south—Mexico's living people. In many ways, it is an extraordinary story for the author learns to know and understand these friends of another race, through a little girl, Ofelia Escoto. Ofelia and her 12 brothers and sisters, to be exact.

But the Escotos are not all. There are the Otomi Indians, the picturesque dances and the wedding rituals in Tehuantepec. There is the great lake of Texcoco, now a dry little Sahara with clouds of sand and dust, and the once glorified Tenochtitlan, the city Cortez looked upon—that too is gone. Great Indian cities have disappeared, but the author reflects, "the sad Indians remain."

Throughout the pages, the story depicts the flavor of Mexican life, its pathos, its humor and above all, its charm.

Houghton Mifflin Co., Boston. 1942. Illustrated. 226 pp. \$2.75.

TENDERFOOT MAKES GOOD IN THIS WESTERN YARN

Peter Stirling, just out of Yale, came west to become a cowhand. At the first ranch where he applied for work, near the Arizona-Mexican border, he is suspected of being implicated in the death of a cowboy who had been murdered a few hours previously.

That merely is the first of a fast-moving chain of incidents which makes him wish many times that he was back in the comfortable surroundings of his New York home.

But like all good western fiction heroes, Peter is a thoroughbred despite his city breeding, and when after a deadly gun fight, the sheriff puts him on the train and orders him to leave the country, he slips back into town and in the gun battle that follows, is vindicated.

This is an exceptionally well written "western" entitled THE TENDERFOOT, by W. H. B. Kent, published by The Macmillan company, \$2.00.

NOVEL OF THE RUSH TO WESTERN GOLD FIELDS

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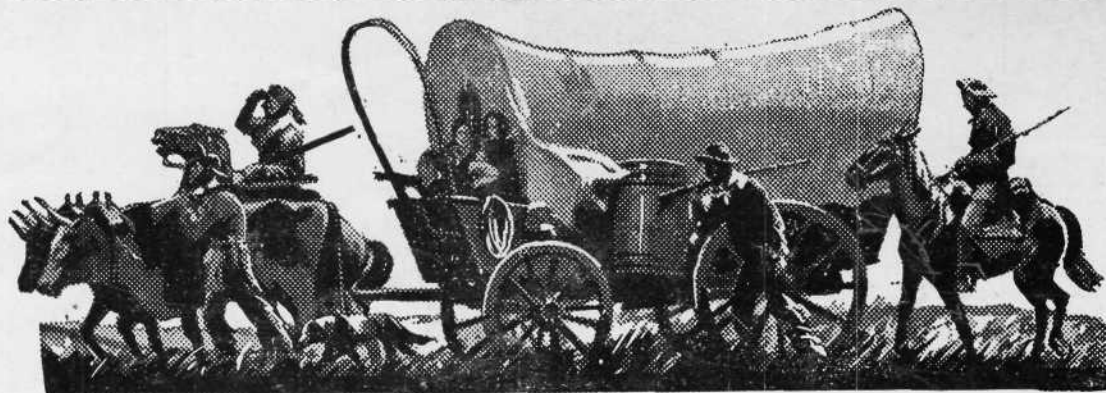
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