

Desert

DECEMBER, 1953 . . . 35 Cents



A FIELD GUIDE TO ROCKS AND MINERALS

By FREDERICK H. POUGH, Curator of Minerals, American Museum of Natural History

YOU HAVE BEEN WAITING FOR THIS BOOK—Contains 234 photographs, 72 in full color, and a simplified Field Guide to identification. Every mineral the Rockhound is likely to encounter is described in detail. This is the most important new book that has ever been printed for the rockhound and gem hunter. This book

will be available for delivery October 20, 1953. Send us your advance order now. You will receive a receipt and acknowledgment of order. This will be the best CHRISTMAS GIFT you could get for any mineral collector.

PRE-PUBLICATION PRICE ONLY \$3.75 postage prepaid

NEW FREE 56 PAGE 1953 MIDYEAR PRICE LIST

This catalog is the same as our 1952 Fall Catalog. It is 8½"x11" in size and it is profusely illustrated. Your shopping will be made easy — order by mail or visit our shop to select your gifts. This catalog lists Gem Cutting Equipment, Grinding Wheels, Diamond Blades, Sanding Cloth, and Polishing Powders, Jewelry Making Tools, Sterling Silver Sheet and Wire, Blank Ring Mountings, Jewelry Findings such as Earwires,

Bails, Locket Loops, Chain by the foot, Bezel Wire, etc. Field Trip Books and Books of all kinds on Minerals, Gems, Jewelry Making, Prospecting, Uranium, etc.

Fluorescent Lamps, Fluorescent Minerals, Geiger Counters, Uranium Samples, Magnifiers, Scales, Templates, etc.

Services Offered to You Are: Expert Gem Stone Cutting, Custom Jewelry Making and Repair.

Dealers please ask for wholesale discount sheets

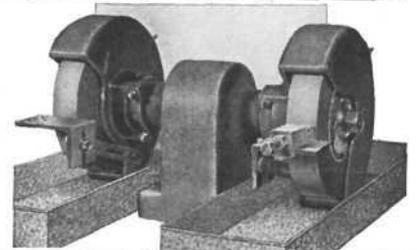
POLY ARBORS AT NEW LOW PRICES

illustration at right shows

1—POLY D12 Arbor.....	\$19.95	1—Dresser Rest	2.25
2—Cast Splash Shields.....	15.00	1—Jig Block DIAMOND	
1—100 Grit Wheel 8"x1½".....	7.25	DRESSER	10.90
1—200 Grit Wheel 8"x1½".....	8.25	2—Galvanized Splash Pans....	5.50

TOTAL VALUE \$69.10

SPECIAL COMBINATION PRICE \$62.00



*More Brilliant.
More Fire ..
than the Diamond!*

YOU WILL BE WEARING RAINBOWS

When you wear jewelry set with TITANIA. Gems of synthetic TITANIA have five times more ability than the diamond to break light into its component colors producing a magnificent rainbow effect. These magnificent gems can be set in mountings you may now have from which you have lost the original stone.

Visit Our Shop and See Ladies' and Men's Rings Set with Titania. A Large Stock of Titania Earwires Is Also Available.

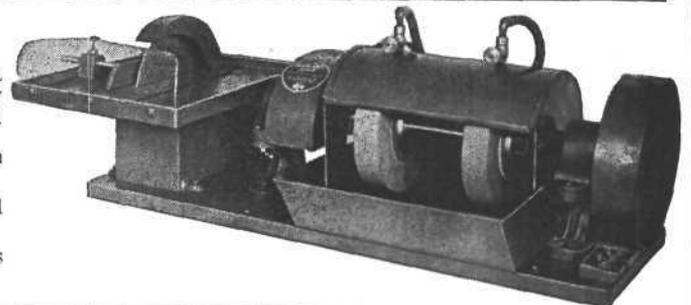
FREE LAPIDARY LESSONS

With the purchase of cabochon or facet cutting equipment having a value of \$85.00 or more, an experienced lapidary will give you a lesson in gemstone cutting in his own shop.

Model E-10 Gem Stone Cutter—\$139.75 F.O.B. Pasadena
Add \$3.00 crating for out-of-town shipments

Note: Trim saw has a vise (not illustrated) with lateral adjustment for slabbing.

This unit and other HIGHLAND PARK EQUIPMENT is fully described in our 56 page free catalog.



LET'S GET ACQUAINTED OFFER
18" Rhodium Plated Sterling Silver or yellow Gold Filled Neck chains
2 for \$1.00 or \$4.50 per doz.
plus 20% Fed. E. Tax

ESTWING ALL STEEL ROCKHOUND PICKS

Gift Model—Polished\$4.10
Regular Black Finish\$3.85

Allow 3 lbs. Shipping weight

COLORED BRAZILIAN AGATES—Superb Blue, Green, Yellow, Black, Carnelian. Choice slab any color \$1. Ask for our approval selection.
SNOWFLAKE JADE—Wyoming. Beautiful Green Nephrite that can be polished to a high gloss free from undercutting. Select slab 2 sq. in. \$1.
BRAZILIAN AMETHYST CRYSTALS with polished terminations—\$3 ea.
MAGNIFICENT BLUE TIGEREYE—A slab of 3 sq. in. for only \$1.
INCA ROSE RHODOCHROSITE—Argentina. Banded Rose, cream, pink 2 sq. in.—\$1.00.

GOLDEN FLEECE TIGEREYE—Superb quality, 3 sq. in. slab for only \$1.
\$2.20 STERLING PENDANT FRAME S-164. Summer special \$1.00 ea.
OFFER No. 7A—1 gross Assorted Jump Rings—Sterling silver or Gold filled. \$1.75 per gross—boxed.

Add 20% Fed. Tax to above items

GRIEGER'S • 1633 E. WALNUT ST. • PASADENA 4, CALIFORNIA

OPEN FRIDAY AND SATURDAY ONLY 8:30 A.M. UNTIL 5:00 P.M.

PHONE: SY. 6-6423

DESERT CALENDAR

- December 1-30—Special exhibit, Indian beadwork and porcupine quill work. Southwest Museum, Highland Park, Los Angeles, California.
- December 5-6—Dons Club Trek to Flagstaff, Sunset Crater and Walnut Canyon. From Phoenix, Arizona.
- December 10-12 — Pilgrimage and celebration by Tortugas Indians, Las Cruces, New Mexico.
- December 11-12—Annual Utah Turkey Show, Salt Lake City.
- December 12 — *Matachines*, Indian ceremonial. Jemez Pueblo, New Mexico.
- December 12—Feast Day of Nuestra Senora de Guadalupe. Celebrated on eve (Dec. 11) in Taos, Santa Fe and smaller New Mexican villages.
- December 13—Dons Club Trek to Wickenburg. From Phoenix, Arizona.
- December 13—Desert Sun Ranchers Rodeo, Wickenburg, Arizona.
- December 16-24 — Posadas, nightly pageant-processions depicting search for lodgings by Mary and Joseph in Jerusalem. Mesilla, New Mexico.
- December 20—Dons Club Trek to Fort McDowell. From Phoenix, Arizona.
- December 20-January 1 — Nativity scene in Climax Canyon, near Raton, New Mexico.
- December 24 — Christmas Eve in Spanish villages in New Mexico. Bonfires for *El Santo Nino*, The Christ Child, lighted before houses, in streets and before candle-lit *Nacimientos*, Nativity scenes.
- December 24 — Ceremonial dance, San Ildefonso Pueblo, New Mexico.
- December 24—Night procession with cedar torches, San Felipe, Laguna and Isleta pueblos, New Mexico. Ceremonial dances after midnight mass in mission churches.
- December 25 — Deer Dance, Taos Pueblo, New Mexico.
- December 25-28—Ceremonial dances, Jemez, Santo Domingo, Tesuque, Santa Clara and other New Mexican pueblos.
- December 26 — Turtle Dance, San Juan Pueblo, New Mexico.
- December 27—Desert Sun Ranchers Rodeo, Wickenburg, Arizona.
- December 31—Deer Dance, Sandia Pueblo, New Mexico.
- December 31—Annual Pegleg Smith Liars Contest, Borrego Valley, Cal.
- January 1-3 — Desert Peaks Section, Southern California Sierra Club climb of Rabbit Peak in Santa Rosa Mountains, California. Rendezvous at Borrego Springs.



Volume 16	DECEMBER, 1953	Number 12
COVER	Vernon Bricker of the Texas Big Bend country and his burros. Photo by Josef Muench of Santa Barbara, California.	
CALENDAR	December events on the desert	3
POETRY	The Desert is Willing to Wait, and other poems .	4
CONSERVATION	Graveyard of the Dinosaurs By RANDALL HENDERSON	5
FICTION	Hard Rock Shorty of Death Valley	9
HISTORY	Johnny Shoshone of Death Valley By A. B. CHRISTMAN	10
GHOST TOWN	When the Troopers Came to Nevada By NELL MURBARGER	12
DESERT QUIZ	A test of your desert knowledge	16
PHOTOGRAPHY	Pictures of the Month	17
LOST MINE	Lost Desert Queen Mine, by W. R. HILLERY . .	18
LIARS CONTEST	Woman's Whopper Wins Prize	18
FIELD TRIP	Gem Stones in the Peloncillos By FENTON TAYLOR	19
CLOSE-UPS	About those who write for Desert	22
PERSONALITY	Last of the Mountain Men By GASTON BURRIDGE	23
CHRISTMAS	Life on the Desert By MARJORIE FRANK	25
LETTERS	Comment from Desert's readers	26
NEWS	From Here and There on the Desert	28
MINING	Current news of desert mines	33
HOBBY	Gems and Minerals	34
LAPIDARY	Amateur Gem Cutter, by LELANDE QUICK . .	41
INDEX	Contents of Desert for 1953	42
COMMENT	Just Between You and Me, by the Editor . . .	46
BOOKS	Reviews of Southwestern literature	47

The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1953 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

RANDALL HENDERSON, Editor
BESS STACY, Business Manager

MARGARET GERKE, Associate Editor
EVONNE RIDDELL, Circulation Manager

Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

SUBSCRIPTION RATES

One Year.....\$3.50 Two Years.....\$6.00

Canadian Subscriptions 25c Extra, Foreign 50c Extra

Subscriptions to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With P. O. D. Order No. 19687

Address Correspondence to Desert Magazine, Palm Desert, California



All-American canal, Imperial Valley, California. Photo courtesy U.S. Reclamation Bureau.

AUTUMN RAIN

By MARGARET HORMELL

North Palm Springs, California
 The wind has brought the desert rain
 And left the mountain tops in snow!
 Superbly does the sunlight stain
 Those chastened spots where chaff has
 lain

Like bolts of calico.
 Yet, on my roof the rain's diffuse;
 I do not pray for it to cease,
 Nor make of weather an excuse,
 Or ample reason, to induce
 My seeking sheltered peace.
 I could retire into a nook,
 Or curl beside my cozy fire
 And read a rare and cherished book,
 Or savory beans and bacon cook
 Much to my heart's desire;
 But, time enough to seek my lair,
 To read my book, or dreams revive;
 Wind, rain, and sun and snow, you're
 there!
 I feel you in my eyes and hair,
 And thank God I'm alive!

TEMPTATION

By MILDRED BREEDLOVE
 Las Vegas, Nevada

Don't tempt me with those bare bewitching
 hills
 That change their colors with the time of
 day.
 My heart belongs where frogs and whip-
 poorwills
 Find pools and moss and willows when they
 play.
 Don't tell me that they wear a purple dress
 Before the sun has found its way to noon,
 Nor say their pinks and mauves and browns
 express
 The desert's moods from July until June.
 I like my hills to wear a cloak of green,
 And I prefer my meadows clothed with hay;
 With brooks and creeks and rivers in be-
 tween;
 A countryside where birds and squirrels
 play.
 My heart might yield with one more desert
 scene,
 And when I leave, it might decide to stay.

The Desert is Willing to Wait

By ALICE N. THORNTON
 Burbank, California

The desert is waiting beyond the canal,
 As the water is changing the scene
 Converting mirages to orchards and fields
 And to gardens, productive and green.

The greasewood and juniper, cactus and
 sage,
 With the dust, and the glare, and the heat,
 The desert's own allies are biding their time
 In a strategy hard to defeat.

The desert is waiting to take back its own,
 And it doesn't need much of a chance
 If water, and men, and machinery fail
 To consolidate every advance.

Though wider and greener the fields seem
 to spread,
 As the water runs early and late,
 The desert has all of the time that there is
 And the desert is willing to wait.

ABORIGINES

By GRACE BARKER WILSON
 Kirtland, New Mexico

The moon shines white along the desert
 road,
 And all the far horizon is a mist
 Of shadows, dusky blue. In the star-kissed
 Long distances the night time has bestowed
 A few earth scattered lights to mark the
 abode
 Of Indian desert-dwellers, who exist
 Untouched by modern science. Magic breeds
 The strength that from their lonely lives
 has flowed.
 Yet through the times of want and drouth
 and heat,
 The Redmen eke their solitary way
 Untouched by modern science. Magic breeds
 For them the spell of desert still complete.
 They to their ancient gods at moon-time
 pray
 With dance and song for their few daily
 needs.

LONGING

By MRS. MARY PERDEW
 Santa Ana, California
 For peace of long, quiet days
 Sun kissed and restful,
 Sweep of the morning breeze
 Tangy and zestful,
 Brilliance of moonlit nights
 Stardust and silver,
 Scent of mesquite and sage
 Wind off the river,
 Marvel of springtime bloom
 All the land glowing,
 Gay colored blossom tide
 Fragrantly flowing,
 Call of wild geese at night
 Homesick and yearning—
 As desert hearts who roam
 Long for returning.

SMOKE TREE

By ELWOOD CRITTENDEN
 Twentynine Palms, California

Oh! strange gray bush of sandy space
 With bright and spiny smoky lace,
 Why did God plant you 'way out there
 To waste your beauty on desert air?

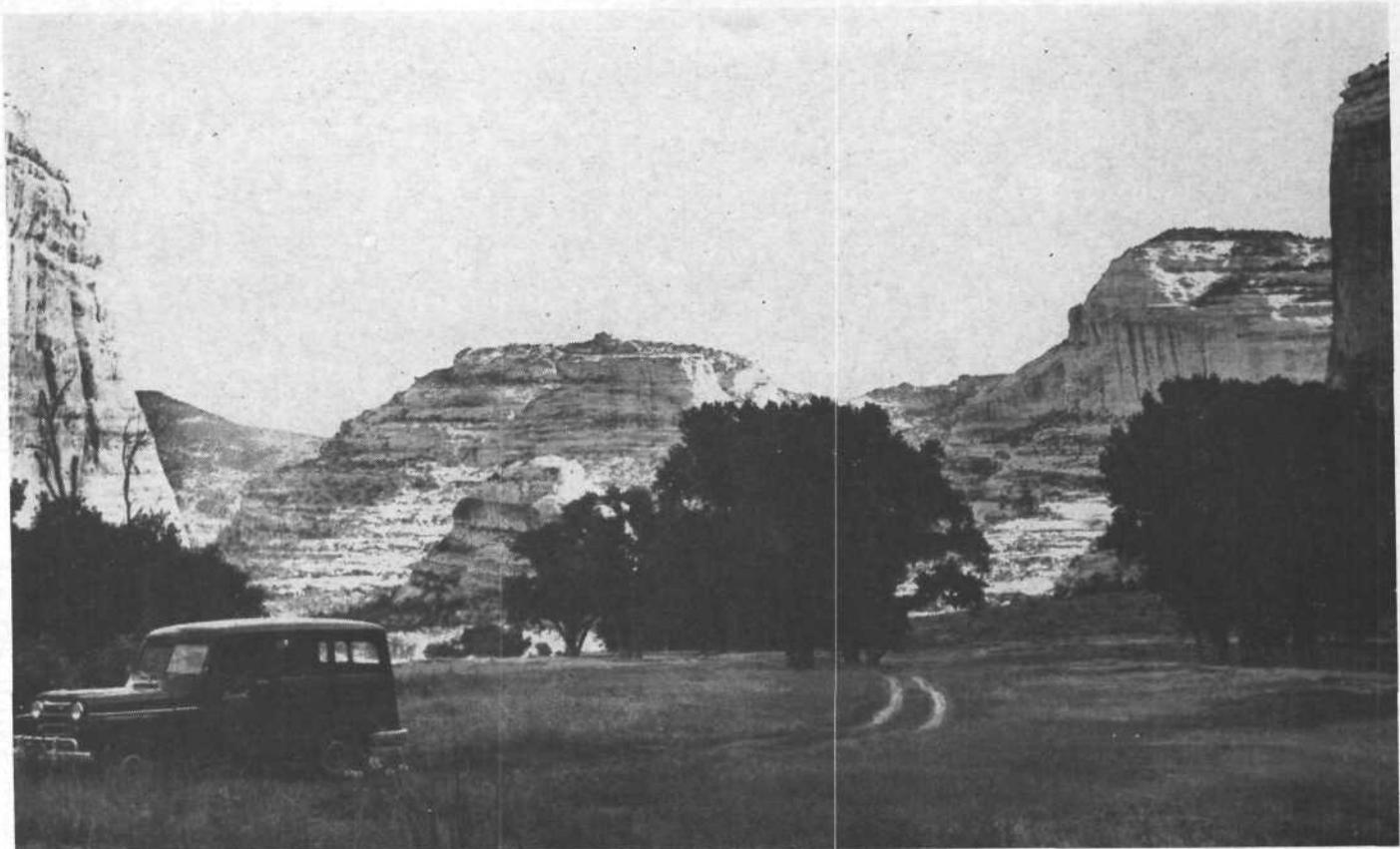
Is it for those brave souls who wander
 Seeking health and peace out yonder,
 Or because in this vast wasteland
 We need a touch of the Master hand?

The Same Power

By TANYA SOUTH

The same Power guiding you and me
 Is growing apples on a tree,
 And making mountains, mice and
 bears,
 And rolling tumbleweed and hares.

And one thing else, I'll have you
 know,
 This Power is doing here below:
 It's drawing us, through heart and
 mind,
 Toward greater love for all mankind.



Echo Park at the junction of the Green and Yampa Rivers. A section of Steamboat Rock is at the left. If Echo Park Dam is built all this natural park will be submerged.

Graveyard of The Dinosaurs

Since 1872 when the first National Park was established at Yellowstone, the Park and Monument areas of the United States have been held inviolate against the encroachment of commercial enterprise, with the exception of such concessions as are necessary to accommodate the visitors to these recreational areas. But today the pressure of minority groups who would break down this precedent has become so great that a former Secretary of Interior gave tentative approval to a project which would put two huge dams in the Dinosaur National Monument. Fortunately, the final decision has not yet been made, and private citizens and conservation groups are waging a vigorous fight against the commercialization of the Monument. Here is a brief report on the factors involved in this controversy.

By RANDALL HENDERSON
Map by Norton Allen

ONE EVENING in mid-August this year Cyria and I camped in a lovely natural park where the Green River meets the Yampa River in northeastern Utah. It was late afternoon when we arrived, but the desert sun was still above the horizon and we welcomed the shade of the spreading boxelder trees which grow profusely in this little meadow known as Echo Park — or to the local residents, as Pat's Hole.

We had driven down in our Jeep station wagon over a rather tortuous road from the headquarters of the Dinosaur National Monument near

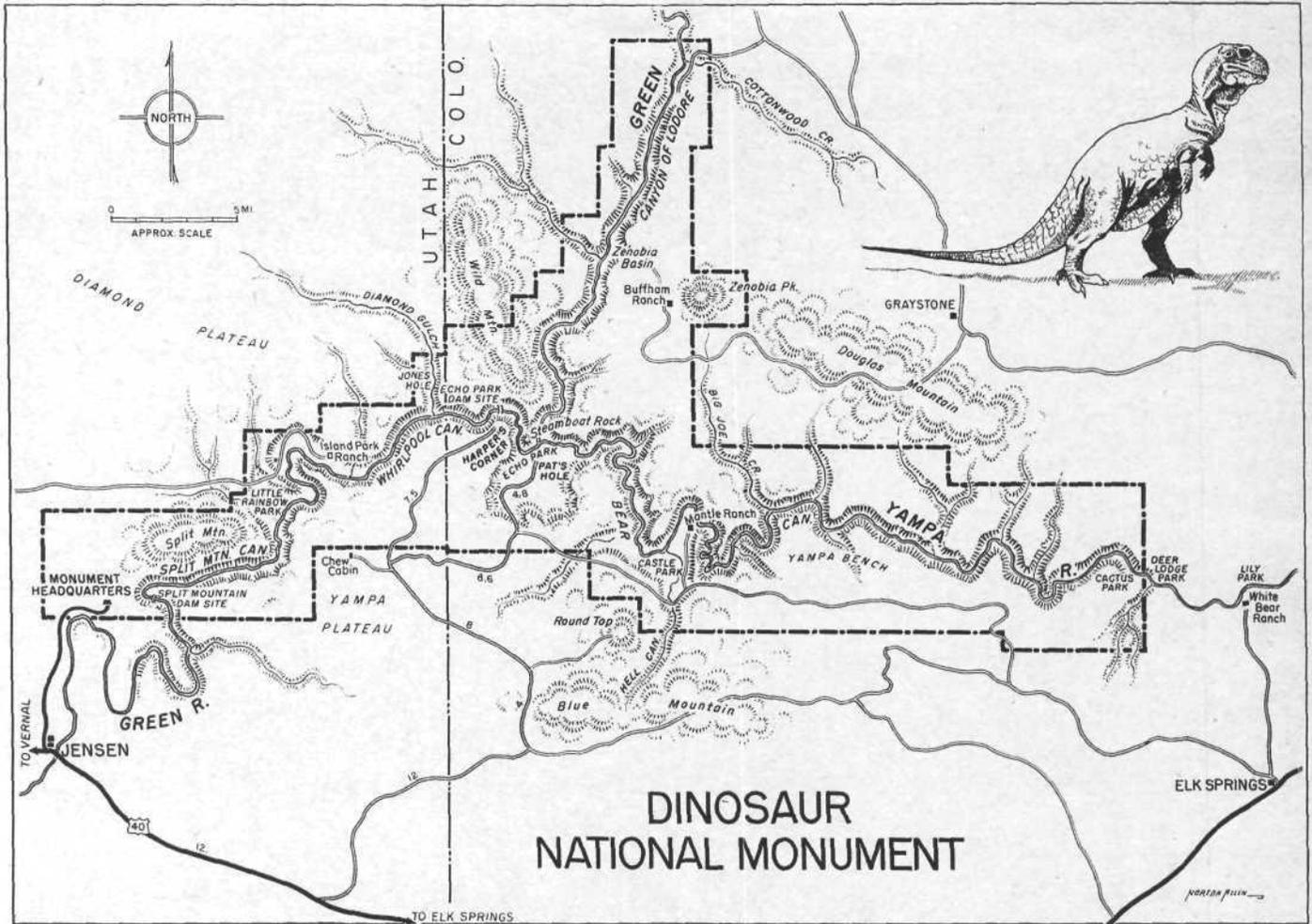
Jensen, 52 miles away. Echo Park is within the Monument.

There was an ample supply of deadwood here and in many years of camping I have never cooked an open-fire meal in a place of such complete serenity. Towering walls of rock rose to a height of several hundred feet all around us. We were the only occupants of this remote little park in the heart of the Colorado desert wilderness, and the world and its conflicts seemed so far away they belonged to another planet. Here were peace and beauty, undisturbed by men or machines.

We were not the first to camp in

this delightful spot. Major John Wesley Powell and his Colorado River explorers spent three days here in June, 1869. It was they who gave this place its name. Major Powell wrote:

"At the point where the Bear, or with greater correctness, the Yampa River enters the Green, the river runs along a rock about 700 feet high and a mile long . . . The river has worn out hollow domes in this sandstone rock, and standing opposite, your words are repeated with a strange clearness but softened, mellow tone. Conversation in a loud key is transformed into magical music. You can hardly



DINOSAUR NATIONAL MONUMENT

believe 'tis the echo of your own voice . . . ”

Of course Cyria and I, from under the boxelders across the river began talking to the big rock — Steamboat Rock it is called. Never have I heard echoes come back so clearly. We could repeat a sentence of six or seven words, and immediately the great block of sandstone gave us back our words with a mellowness that was flattering to our own vocal chords.

Just three miles downstream from Steamboat Rock is the site where the Reclamation Bureau proposes to build a great dam. When former Secretary of Interior Oscar L. Chapman gave his tentative approval to the Echo Park dam in 1950, there was a storm of protest from conservation groups all over the nation. The lake behind the dam would extend 63 miles upstream in the Green River and 46 miles up the Yampa. Steamboat rock would be half submerged.

It was because of the controversy which centers around this reclamation proposal that we made the Dinosaur National Monument the goal of our 1953 summer camping trip. I wanted to become better acquainted with the factors involved in the dam project.

The arguments for and against the dam were presented at a public hear-

ing in Washington in April, 1950. Representatives from Utah, proponents of the dam, took the position that since the Colorado River Compact of 1922 had allotted 7,500,000 acre feet of stream flow in the Colorado River and its tributaries to the upper basin states of Utah, Colorado, Wyoming and New Mexico, it was necessary that a series of dams be erected to utilize the water for power and irrigation purposes.

Reclamation Bureau engineers presented tentative plans for 10 reservoirs in the upper basin states which eventually would solve the problem of water storage. These projects were at Echo Park, Flaming Gorge, Curecanti, Martinez, Glen Canyon, Gray Canyon, Bridgeport, Crystal, Split Mountain and Cross Mountain. Echo Park was named as one of the first to be built.

Newton Drury, then Director of the National Park Service, opposed the construction on the broad ground that Congress from 1872 until the present time has consistently adhered to the policy that the national parks be held inviolate against the invasion of commercial enterprise which would destroy their recreational and cultural values.

Other opponents of the project, including the Sierra Club of California, the Isaak Walton League, The Wilder-

ness Society, the Wildlife Management Institute and the National Parks Association, gave testimony in behalf of their contention that the nation needs more national parks for recreation rather than less, and that the Green and Yampa river country in the Dinosaur National Monument has great scenic and recreational values which should not be lost.

Major General U. S. Grant III, for 42 years an officer of the U. S. Army's corps of engineers, aligned himself with the opponents of the project and presented figures in support of his assertion that dams could be built elsewhere at lower cost and greater efficiency than at Echo Park.

There the matter stands today. Utah interests are expected to press diligently for the construction of the Echo Park dam, but Congress has taken no action and there is now a new Secretary of Interior in Washington. The final decision is yet to be made.

Cyria and I spent the night on the bank of the stream opposite Steamboat rock, and the next morning motored to a high point known as Harper's Corner from which we could look down on the Park and the surrounding region from above.

If it is true, as General Grant testified, that the needs of the upper basin

states can be adequately served by dams elsewhere in the Colorado and its tributaries, it would be a tragic thing to bring in hordes of bulldozers and drilling teams to start slashing and mutilating this lovely region, and cluttering it with power lines and private concessions.

Juniper trees bordered the road as we followed the ridge route to Harper's Corner. The primitive character of this region was illustrated as we drove along the road when a mountain lion emerged from a sheltering cove and bounded up through the boulders and trees that covered the slope not over 50 feet from our car. Several times during the morning, sage chickens meandered across the road ahead of us. A forest ranger later told us that lions are quite common in this area.

We returned that afternoon to Monument headquarters in a little canyon six miles from Jensen. From Jess Lombard, superintendent of the Monument since 1944, and from the studies of Wm. Lee Stokes whose booklet *Dinosaur National Monument, Past and Present* has been published by the U. S. Printing Office, I learned the story of the unusual deposit of fossilized dinosaur skeletons found in this place.

Stokes' story, based on the research of geologists, goes back to the Jurassic period of earth history—a period which according to the best estimates of scientists occupied the interval from 127 to 152 million years ago. At that time the region of the present Rock Mountains was a vast unbroken plain which reached from central Utah to where the Mississippi now flows. The climate was mild and moist and the lush vegetation made it the grazing area both for the huge vegetarians of the prehistoric monster world, and the carnivorous animals which preyed on the vegetable-eaters.

At one time, for reasons which remain a complete mystery, some destructive element brought death to a large number of these prehistoric beasts in one locality. It may have been a sudden flood due to a river changing its course, or they may have died from suffocation due to clouds of volcanic dust, or perhaps they were the victims of a bacterial plague. No one knows.

But whatever the cause, there was a period of wholesale destruction. The carcasses of the beasts fell or were washed into a large stream and eventually lodged on sandbars or shallow banks. Mud, sand and gravel soon submerged them, and in the bones entombed in water-saturated sediments,



Superintendent Jess Lombard, for 10 years the custodian of Dinosaur National Monument.

that process of cell replacement known as petrification began.

It is estimated that at some time during the intervening millions of years the deposits of sediment and the wrinkling and folding of the earth's crust buried these skeletons thousands of feet beneath the surface of the ground. Later the forces of erosion set in, and at about the time these skeletons emerged from their ancient tombs some curious white men came along and discovered bits of fossilized bone exposed on the slopes above the Green River.

The original discoverer of the fossil bones will probably remain unknown, but O. A. Peterson reported them in 1892, and in 1909 Dr. Earl Douglass,

excavating for the Carnegie Museum of Pittsburgh, uncovered what developed into the main deposit of fossils.

Under his direction prior to 1922 a score of almost complete skeletons were recovered and sent to the Carnegie Museum. In 1923 and 1924 the University of Utah continued the exploration and recovered the complete or partial skeletons of several more dinosaurs.

In the meantime, in October, 1915, President Woodrow Wilson issued a proclamation setting aside 80 acres as the Dinosaur National Monument. In July, 1938, upon the petition of the people of Utah and elsewhere, President Franklin D. Roosevelt enlarged



Above—Headquarters of the Dinosaur National Monument near Jensen, Utah, where a temporary museum has been installed.

Below—At the dinosaur quarry where a temporary building has been erected to protect a 40-foot dinosaur skeleton which will be fully exposed in place as a permanent exhibit when the project is completed.

the Monument to 203,885 acres, including the Echo Park site.

The graveyard of the dinosaurs is at a much higher elevation than the proposed Echo Park dam, hence the preservation of the fossil remains is not a factor in the Echo Park Dam controversy.

It is not known how many skeletal remains are yet to be excavated as little work has been done in the way of recovery since 1925. However, an appropriation of \$12,000 was made by the last Congress to resume some activity there.

In the meantime the Park Service has erected a large sheet-iron building

along a rock face where a 40-foot skeleton is partly exposed. According to Jess Lombard it is planned eventually to have a museum at this place, with a partly exposed cross-section of a prehistoric dinosaur skeleton in place in its sedimentary matrix as the central feature of the exhibit.

Only two or three thousand visitors registered annually at the Monument headquarters before 1952, but the controversy over the Echo Park dam project stimulated much interest, as evidenced by the 12,318 registrations during the fiscal year which ended June 30 this year.

The Park rangers have an interest-

ing exhibit in the temporary museum at their headquarters, and have built a half mile of trail to the main dinosaur graveyard where fossil bones may be seen in the exposed walls of the dinosaur quarry.

The deposit of fossilized dinosaur bones is just one of many unusual and interesting features of the Dinosaur Monument as enlarged by former President Roosevelt. Upstream along the Yampa River is another of those delightful natural parks similar to Echo Park. Known as Castle Park, it is the ranch home of Mr. and Mrs. Charley Mantle. In this area archeologists have found a rich field for research into the lives of the prehistoric Indians who occupied this region.

With the cooperation of the Mantles and under authority of the National Park Service the University of Colorado made extensive excavations here during the 'forties, and the results were published under the title *The Archeology of Castle Park, Dinosaur National Monument*. (*Desert Magazine*, April '48.)

Lodore Canyon, in the Green River above its junction with the Yampa was described in the various diaries of the Powell expedition as a gorgeous sector of rapids and whirlpools. It was at Disaster Falls in Lodore that the first Powell expedition in 1869 lost one of its boats, the *No Name*. Also in this canyon is the Hell's Half Mile where the Powell voyagers had to make the "worst and roughest portage" of their journey.

Improved boats today have made the running of these rapids much safer than in Powell's Day. Bus and Don Hatch of Vernal and Salt Lake City make chartered boat trips through Lodore Canyon and down the Yampa every summer. Last summer 190 men, women and children made boat runs through these canyons under the sponsorship of the Sierra Club of California, and plans are in the making for another expedition next summer.

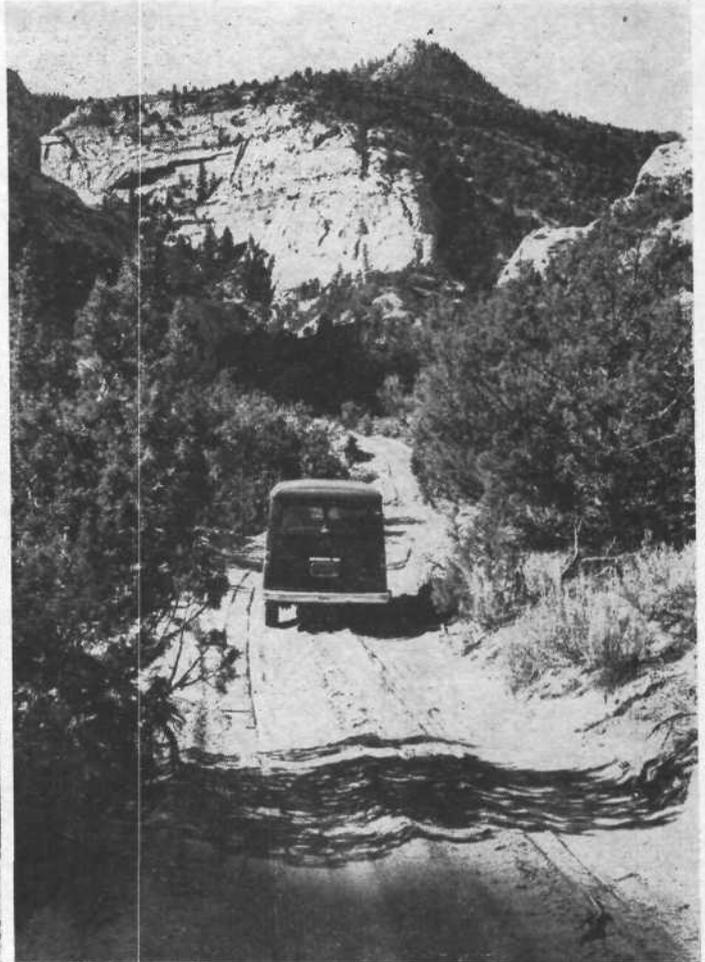
The Lodore Canyon voyage is for those who like the thrill of riding cascading water and an occasional ducking. The Yampa Canyon run is a fascinating ride through the heart of the Dinosaur National Monument without undue hazards.

Both of these rivers are bordered by fantastic rock formations. It is a photographer's paradise. It is one of the few remaining recreational areas in the West which have not yet become overcrowded with tourist and picnic parties.

Much of both the scenic and recreational value in this region would be lost if huge dams were installed at Echo Park, and farther down stream



In Dinosaur National Monument where one road leads down to the river level at Pat's Hole, and the other is a scenic drive to Harper's Point overlooking the Green and Yampa Rivers.



A scenic road leads down the canyon to Pat's Hole, named for Pat Lynch who lived there for many years during the last century. The Hole actually is a grassy meadow shaded with boxelder trees.

within the Monument at Split Mountain.

The act of Congress which created the National Park Service defined its duties as "to conserve the scenery and the natural and historical objects and the wildlife therein, and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."

That mandate is quite clear. The Park rangers work zealously to carry out their directive—and in doing so they are protecting the rights of all American citizens.

The time may come when the American continent will be so overpopulated and the food supply so scarce that it will seem necessary to break down the precedent which until now has protected the parks from commercial encroachment. But that day is far distant. Over-production rather than under-production is the economic problem that plagues the federal administration today.

In the meantime, as population increases, there will be need for more

and more recreational areas—and the Dinosaur National Monument extending across the Utah-Colorado state line

should be retained in its unspoiled natural beauty both for this and for future generations.

Hard Rock Shorty OF DEATH VALLEY



Death Valley was having one of its periodic wind storms when the tourists drove up in front of Inferno store to have their gas tank filled.

Hard Rock Shorty was seated on the bench under the lean-to porch with his hat pulled down to his ears to keep it from blowing away.

"Have many of these wind storms?" one of the dudes asked.

"Shucks, man, this ain't no wind storm. Jest a little breeze like we have nearly every day. Yu have to go up in Windy Pass in the Panamints to find out what a real wind is like.

"Three-four years ago I wuz up there doin' some prospectin'.

Got together a little pile o' wood an' finally got the coffee to boilin'. Then I set it on a rock to cool while I fried the eggs.

"About that time one of them blasts o' wind come along and blowed the fire right out from under the fryin' pan. Blowed 'er away all in one heap so I kept after it tryin' to keep that fryin' pan over the fire tu git my supper cooked.

"I usually like my eggs over easy, but by the time I got one side done I wuz all tired out so I let 'er go at that. Had to walk four miles back to the coffee pot."

Johnny Shoshone of Death Valley

By A. B. CHRISTMAN

ACCORDING TO Johnny Shoshone, he was born "in valley in hole," that is, in a cave at the base of the Panamints. His birth apparently occurred in the winter since his tribe of Indians, part of the Panamint Indians of the Shoshone nation, spent their summers in the high country gathering pinyons and stalking big-horn sheep, and their winters in Death Valley.

Johnny lived to witness most of the remarkable changes that have transpired in the turbulent history of Death Valley. He saw, among other things, the first borax moved in the 1880s by the 20-mule teams. He has known all the famous prospectors of the valley, and indeed did some successful prospecting himself, discovering an area that produced millions in gold—but not for its discoverer.

But the real story of Johnny Shoshone is not in what he saw and achieved, but rather in his unique personality and simple philosophy which make him a distinct individualist—a man who flaunted present standards; took without thanks what he needed yet ignored what he could not use; a man who was proud but not arrogant; who was loved by the people of Death Valley for his simplicity.

It is estimated that Johnny was born around 1860, for he remembered helping his mother wash dishes for workers at the charcoal kilns of Wildrose canyon. These kilns (still standing) produced charcoal for the Modoc mine in the late '60s. Originally named Tumbusi, it was probably at the kilns that he acquired the name Johnny. Since there were other "Johnnys" he also became known as Shoshone Johnny. Still later when he needed a name for his children the name was reversed to Johnny Shoshone.

On almost any winter day you could see Johnny lounging in the shade of the Furnace Creek Ranch of Death Valley curiously watching camera-toting visitors. Although it is comfortably warm there in the winter, Johnny regularly wore two pairs of trousers, both hung low. A beat-up hat and a vest completed his typical dress. Following a stroke several years ago, he

usually walked with a cane, occasionally found crutches necessary.

When he met old friends Johnny might give them a friendly nod, or he might turn his back and walk away. Why? No one but Johnny knew the answer to that question. He only talked when he felt like it—and to him there was no discourtesy in being indifferent toward long-time friends. In general his indifference was directed more to women than men; one of his most common remarks was, "white squaw talk too much!"

Johnny's thinking was to the point, hence his comments were not dulled by social censorships. During the years of CCC work in Death Valley, he philosophically observed the changed social life of the area, the friendships between Indian girls and the CCC workers. Years later when a visitor saw a red-headed Indian, she inquired, "Halfbreed?" Answered Johnny, "No! Half-CCC."

Johnny's attitude toward work could best be understood in terms of his ancestry. There were no middlemen among early Death Valley Indians; what was needed was taken directly. They followed the line of least resistance: to the mountains in the summer, the Valley in the winter. The Panamint Shoshones were hearty, rugged people, yet they were peaceful in that they elected to eke out a living in a barren area rather than fight other Indians in order to hold more productive soils. In substance, the late elder of the Indians lived by the same philosophy. His needs were filled from the easiest sources. He gave no thanks to other men for nature's gifts to all men. He found food yesterday and today so he did not worry about tomorrow. This attitude partly explains why Johnny was not concerned about his million-dollar give away.

There are various versions of the story of how Johnny gave away his rights to the Shoshone-Montgomery mine near Rhyolite. The truth is hard to determine largely because Johnny would nod in agreement to practically anything that sounded like a good story about him. It is known that around the turn of the century Johnny located the area where the mine was

With the death of Johnny Shoshone on October 20, Death Valley lost another of those colorful pioneers whose characters were as rugged as the land in which they made their homes. Here is the story of an Indian who witnessed the transition of his desert homeland from a place once shunned by white men to a popular winter mecca for travelers—and who adapted himself very gracefully to the change.

later located and that he did make his "mark" that transferred his rights to prospector Bob Montgomery. According to the most popular version Johnny received a few dollars and a pair of overalls. Better authority has it that he received a wagon, a suit of clothes, and \$100 for his rights to the mine that Montgomery later sold for three millions.

Bob Montgomery once promised that as long as he lived Johnny would never have to worry about money. Years later things were not going well for Johnny so he went to Montgomery and reminded him of the promise, whereupon, Johnny was given a job. His relatives heard he was working and moved in on him in mass. Shortly thereafter, Johnny resigned his job, explaining, "No work, broke and hungry. Work, broke and hungry! No work!"

Johnny tackled many different jobs, usually just long enough to fill the immediate money problem. He generally trusted the white men to give him what a job was worth. On one occasion a temporary employer became concerned some months afterward about the wages he had paid Johnny so he forwarded \$10 by a mutual friend. In the meantime, Johnny had found it necessary to seek work from his Cousin George, the famous George Hansen who until his death about 7 years ago at an estimated 106 years was the oldest Valley Indian. As a boy he witnessed the first crossing of Death Valley by white men. Stories of Johnny and George Hansen are frequently mixed and it is suspected Johnny encouraged this confusion. After much pleading on Johnny's part, his cousin gave him a job shearing sheep on the condition that Johnny would stick with the job to completion. Everything went fine until the overdue \$10 arrived. Johnny immediately left his cousin and a half-sheared sheep.

But having money in his pocket has not been the only reason Johnny would leave a job. Once while digging ditches for the Furnace Creek date farm, one of the leading executives of the Borax company was being taken on a tour of the establishment. As the foreman escorted the executive through the gar-

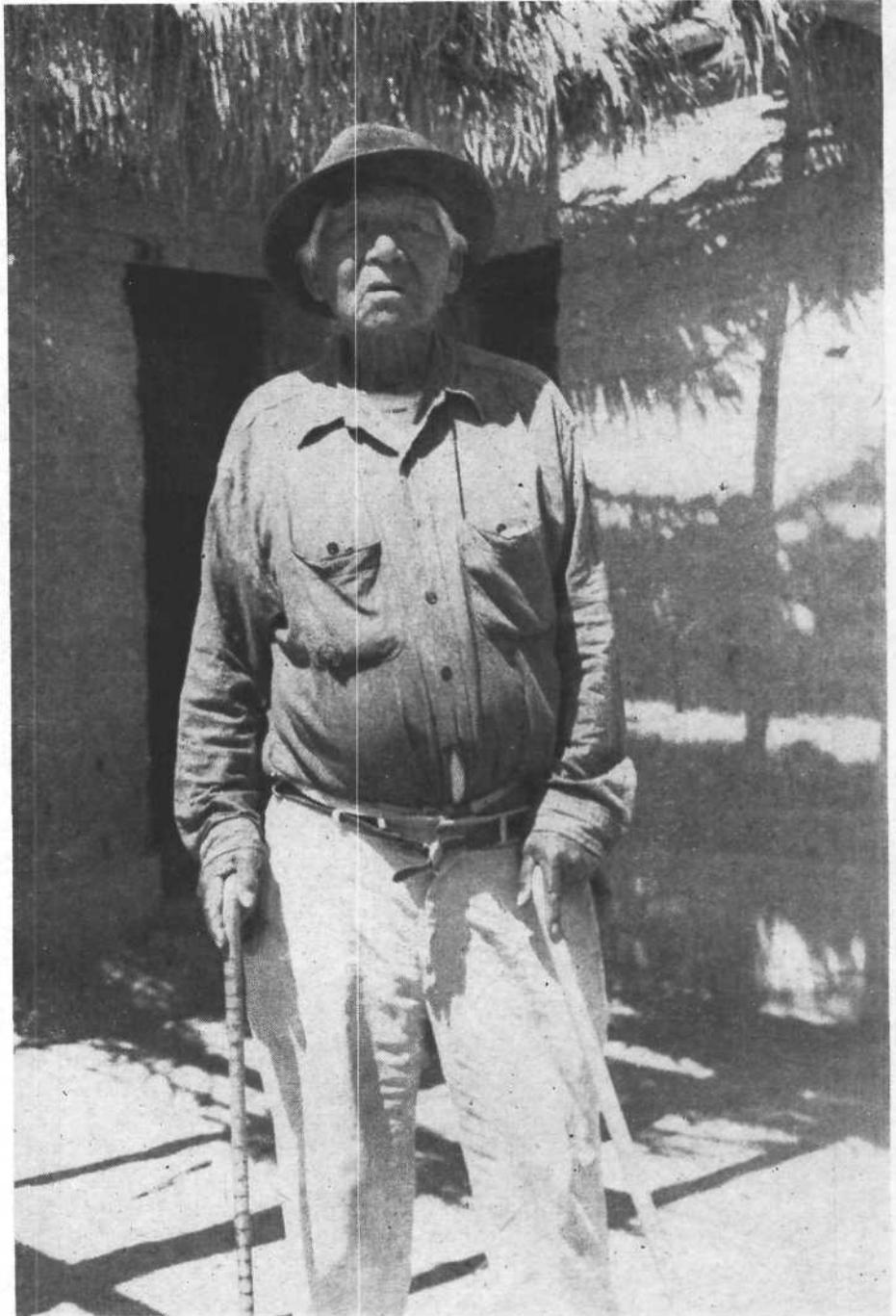
dens the slow-motion tempo of Johnny's work was noticed by the executive, much to the embarrassment of the foreman. Hoping Johnny would assume a more workmanlike posture, the foreman jumped into the ditch and took Johnny's shovel, saying he would demonstrate to Johnny how it should be done. At this Johnny walked indignantly from the scene saying in a matter-of-fact tone, "You do it good!"

For many years, Johnny and the other Indians of the Valley would migrate in summer to a camp back of the Wildrose charcoal kilns as their ancestors had. In contrast to their forefathers, they were largely dependent on white friends for food. In accepting gifts from benefactors, Johnny would place himself in a conspicuous place where he would watch, never help, the benefactors unload the supplies. Unless watched himself, he would take for his own use the candy sent for the children. Especially irritating to him were the cans of unlabeled food donated by Trona merchants. Seeing these, he would cry, "Where the picture? Where the picture? Want tomatoes; get peaches! Why no picture?"

Before the penetration of cars into Indian life, Johnny and his group of about 40 Indians made their annual journey up the Panamints with burros, of which about 30 belonged to Johnny. These he would turn loose near the home of one of his benefactors, whose sleep was disturbed by bells on the donkeys. The friend asked Johnny the reason of the bells. Johnny explained, "So we hear 'em, find 'em!" "But why," asked the friend, "do you herd them to my place?" Johnny's factual answer, "Ding dong all night no good for Johnny's sleep!" The same benefactor once jokingly spoke to Johnny in terms intended to gain an impression of what would happen if the tables were turned. He told Johnny his luck had turned, he had no money, no friends other than Johnny, nothing to eat. Johnny looked at him coldly and pointed to the ground, "Grass pretty high!"

Around 1936, Johnny traded his burros for a 1910 Packard. However, once having been top burro man he felt he had a special interest in all burros. He continued to claim all burros running loose and some that weren't. A photographer once showed Johnny his picture to see what his reaction would be on seeing his own image on paper. The reaction was violent. Stormed Johnny, pointing at his own image and the image of burros in the picture, "That man steal my burros!"

In his late years, Johnny had two



Johnny Shoshone, late patriarch of Death Valley Indians and a favorite character of winter tourists.

important strikes: the old-age pension and tourists with cameras. He was one of the most photographed of American Indians. This is a bit strange since his "color" was in his language, philosophy, and manners rather than in his appearance. His commercial interest in photography started quite innocently. A visitor inquired if he would mind posing. Johnny blinked a bit as if surprised at the request, then sounded off, "Ya, ya, oui, oui, si, si, sure, two bits (later, four bits)." The comment put him in business.

Ordinarily he made no bid for the posing business. However, when a prospector with burros and cart sud-

denly monopolized the trade, Johnny went into action. After some meditation he rushed from the doors of the Furnace Creek Ranch store with a Hollywood war whoop and dressed with long feather headdress. The spectacle put him back in business. After making enough to meet his immediate needs, Johnny reverted to his usual conservative dress.

Johnny is not the last of the Death Valley Tribe of Shoshone Indians, nor will his passing erase the memory of those hardy pioneers who, like Shorty Harris, have given color and virility to that great arid waste known as the Mojave Desert.



Fort Churchill, Nevada, from the northeast. Buildings, left to right, are the camp hospital, subsistence store, quartermaster's store and commandant's office and telegraph station. Soldiers' barracks in rear.

When the Troopers Came to Nevada

By NELL MURBARGER
Photos by the author
Map by Norton Allen

WITH THE warm breeze of a July evening ruffling through the sage and fanning the coals of my dying supper fire, I leaned back against the old adobe wall and let my eyes stray over the silent flat around me.

It was incredibly still. Now and then, the glowing embers of the fire would crackle feebly and send forth a little shower of bright sparks, and a few grains of dry sand would loosen their hold on the old walls and rattle downward. Otherwise, there was not a whisper in all the great soft darkness, from the old graveyard on the hill to the weather-beaten guardhouse where I was camped. The old Army garrison of Fort Churchill slept—a crumbling skeleton of what had been the military headquarters of Territorial Nevada.

It was a chance meeting with Charles Stewart, San Francisco attorney and a son of Col. Joseph Stewart, builder and first commander of Fort Churchill, that first stirred my interest in the old garrison and started me delving into its scattered history—a quest I have now pursued for nearly 15 years.

Like other frontier Army posts where so much of the history of the West lies buried, much of Churchill's story was recorded only in the smoke of lonely campfires and the dust of the old parade ground. The sons of the men who served there are now grown old, and every year finds their ranks thinning. Even the War Department has on file no returns of the post for the years 1863 to 1865; nor is there any known record that the creation of Fort Churchill military reserve was ever confirmed by executive order.

Fort Churchill was established July

To protect wagon trains traveling the old Simpson Trail, main emigrant route across Territorial Nevada, an adobe fort was built on the banks of the Carson River and commissioned in 1860. Its parade grounds long silent and its neglected buildings returning to dust, old Fort Churchill is now a ghost. But Nell Murbarger makes it live again in this story, recalling the past glory of one of the main garrisons in Uncle Sam's bulwark against the Indians.

20, 1860, the answer to a need for protection made obvious by the events of the several years preceding.

Beginning in 1848 and continuing into the 1850s, goldseekers by tens of thousands had passed through Utah Territory en route to California. By the middle '50s, a few settlers were beginning to collect in fertile valleys at the eastern base of the Sierra Nevada. These first comers lived in general harmony with the Indians. It was not until the great rush to the Comstock in 1859-60 that tribes of Western Utah Territory realized their hunting grounds and homeland were being systematically torn from their grasp by these white interlopers.

That their protest should have been registered in the form of violence was inevitable.

Sporadic attacks had been made on wagon trains and isolated settlements; but the chain of events leading to Churchill's founding, had stemmed from the burning of Williams Station.

Situated on the old emigrant trail, about ten miles northeast of the present site of the fort, was a prosperous trading post operated by three brothers from Maine—James, Oscar and David Williams.

Early in May, 1860, the elder brother—James—was called away on business. During his absence, the young men remaining at the station are said to have kidnapped two Indian girls and to have held them captive for several days.

Seething in resentment at this indignity, warriors of the girls' tribe attacked the station. Before their departure, all occupants—including Oscar and David Williams, Sam Sullivan, James Fleming, and a man listed only as Dutch Phil—lay dead; and the station had been burned to the ground.

Word of the massacre spread rapidly through the Carson Valley and to Virginia City. On May 9, at the Buckland ranch on the Carson, there was organized a volunteer posse of 105 men who set forth in pursuit of the raiders.

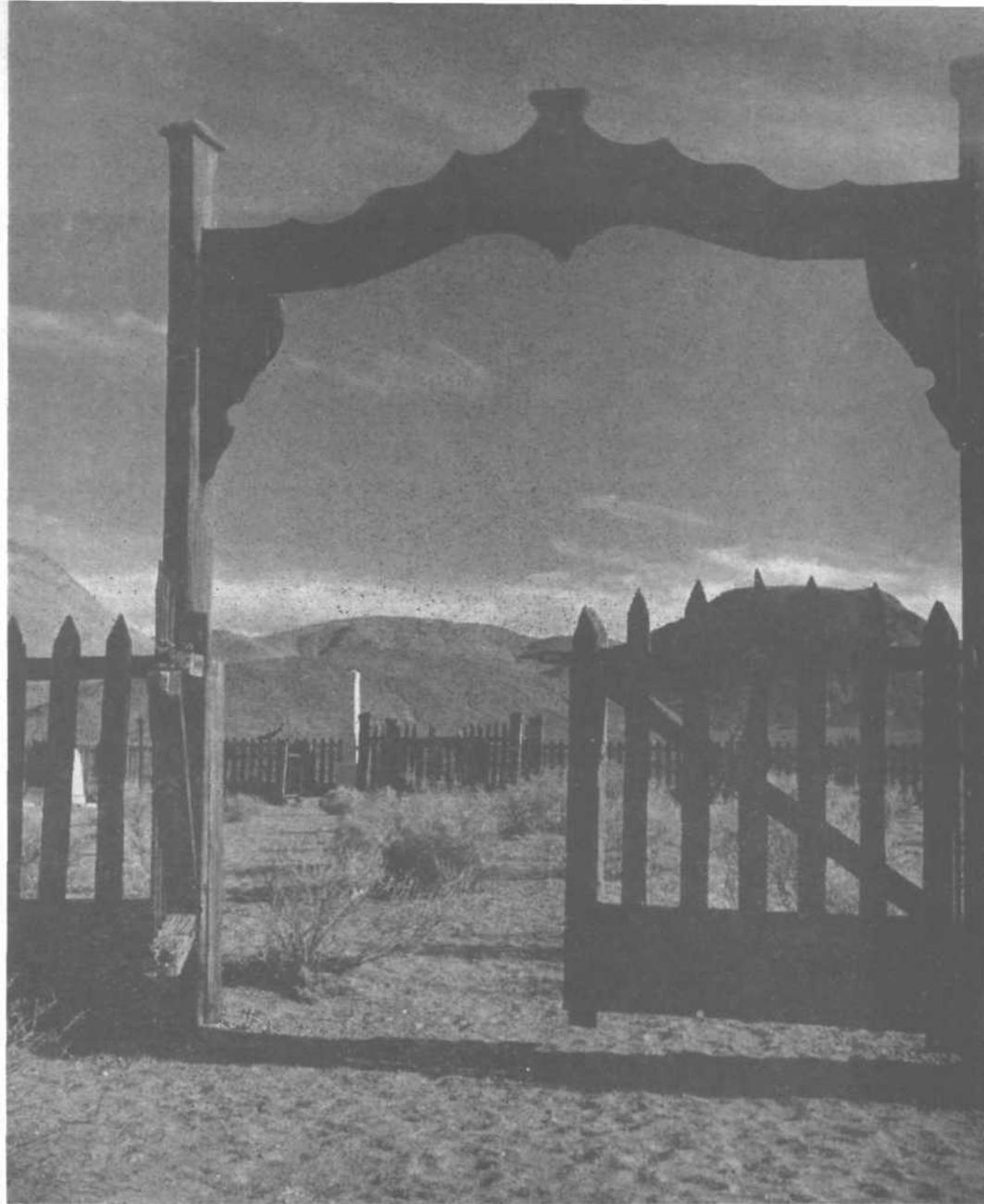
Of the bravery and good intentions of this volunteer force there can be no question; nor can there be any doubt that their military strategy was tragically bad.

Having pursued their quarry to a point on the Truckee River, near Pyramid Lake, the entire party of volunteers—heads up and flags flying—rode boldly into a trap.

How many whites were slain is a point on which existing records are not in agreement. Figures quoted range from a low of 45 men to a high of 66, including Major William Ormsby, leader of the expedition. The extent of Indian losses is unknown.

In all that area between the Rockies and the Sierra Nevada, this was the first major conflict between white men and Indians, and news of the battle threw panic into the residents of Western Utah Territory. Women and children hastily gathered in stout buildings for protection against the wholesale attack that was believed imminent. Guards were posted; volunteer militia groups were organized in every fledgling settlement, and urgent appeals for military support were dispatched to General Clark at Alcatraz, then commander of the Army's Pacific Coast division.

Help from this source was quickly forthcoming. On May 31, 1860, there assembled at the present site of Wads-



Fort Churchill cemetery. Bodies of 50 soldiers were removed in 1880 for reburial at Carson City and San Francisco.

worth, Nevada, more than 750 men. Included were eight companies of infantry and six companies of cavalry. Nevada volunteers under Col. Jack Hays, and a detachment of United States infantry and artillery comprising 207 men under Capt. Joseph Stewart, of California. Due to previous experience as an Indian fighter, Colonel Hays was named commander of the expedition.

Two days later, near the scene of Major Ormsby's earlier defeat, this well-disciplined force met an army of 300 mounted braves. Despite vicious fighting, losses were held to a minimum—only three soldiers being slain in the engagement.

With the Indian forces dispersed and the uprising apparently quelled, Captain Stewart and his regulars established along the Truckee River a temporary earthworks known as Fort Haven. Colonel Hays and his volun-

teers returned in triumph to Virginia City.

In filing his report with the War Department, Colonel Hays recommended the establishing of a permanent fort on the main emigrant route, the Simpson Trail. As feasible location for such a post, he suggested a point on the Carson River, near Sam Buckland's ranch, approximately 20 miles east of Virginia City.

Authorization for such a post was immediately forthcoming. Colonel Hays' suggestion was followed in regard to location, and on July 20, 1860, Capt. Stewart established the new garrison, naming it in honor of his friend, Capt. Charles C. Churchill, of the Fourth U. S. Artillery.

Fort Churchill had been born.

The location seemed fortuitous. From the heart of a desert valley lying at 4250 feet elevation and surrounded by higher mountains had been carved

moment than the Lincoln-Douglas presidential election of 1860. "Lincoln's elected," newspaper boys shouted in the streets of Sacramento and San Francisco—only seven days after ballots were tabulated. By virtue of the Pony Express, Fred Bee's little telegraph line and a magic instrument in the commandant's office at a remote military outpost, an astounding new speed record had been established in long-distance communication.

The need for more rapid communication soon became imperative, and work on transcontinental lines was spurred. In the record time of 110 days, Pacific Telegraph Company set poles and stretched line over the hundreds of miles of desert and mountains between Fort Kearny and Salt Lake City. Meanwhile, Overland Telegraph was moving east from Fort Churchill across the Great Basin to Salt Lake, where the two lines joined. The first transcontinental message was transmitted in the autumn of 1861.

With this event, the Pony Express bowed out of the picture forever, and a thrilling phase of Fort Churchill's career came to a close.

Soon after outbreak of the Civil war, the fort on the Carson was enlarged—both in facilities and personnel. It now became a recruiting station for Union forces and a prison camp for Southern sympathizers. When Col. Patrick E. Connor assumed command of the military district of Nevada, in August, 1862, Fort Churchill was designated by him as military headquarters of the Territory. In this capacity the desert garrison continued to function throughout the war.

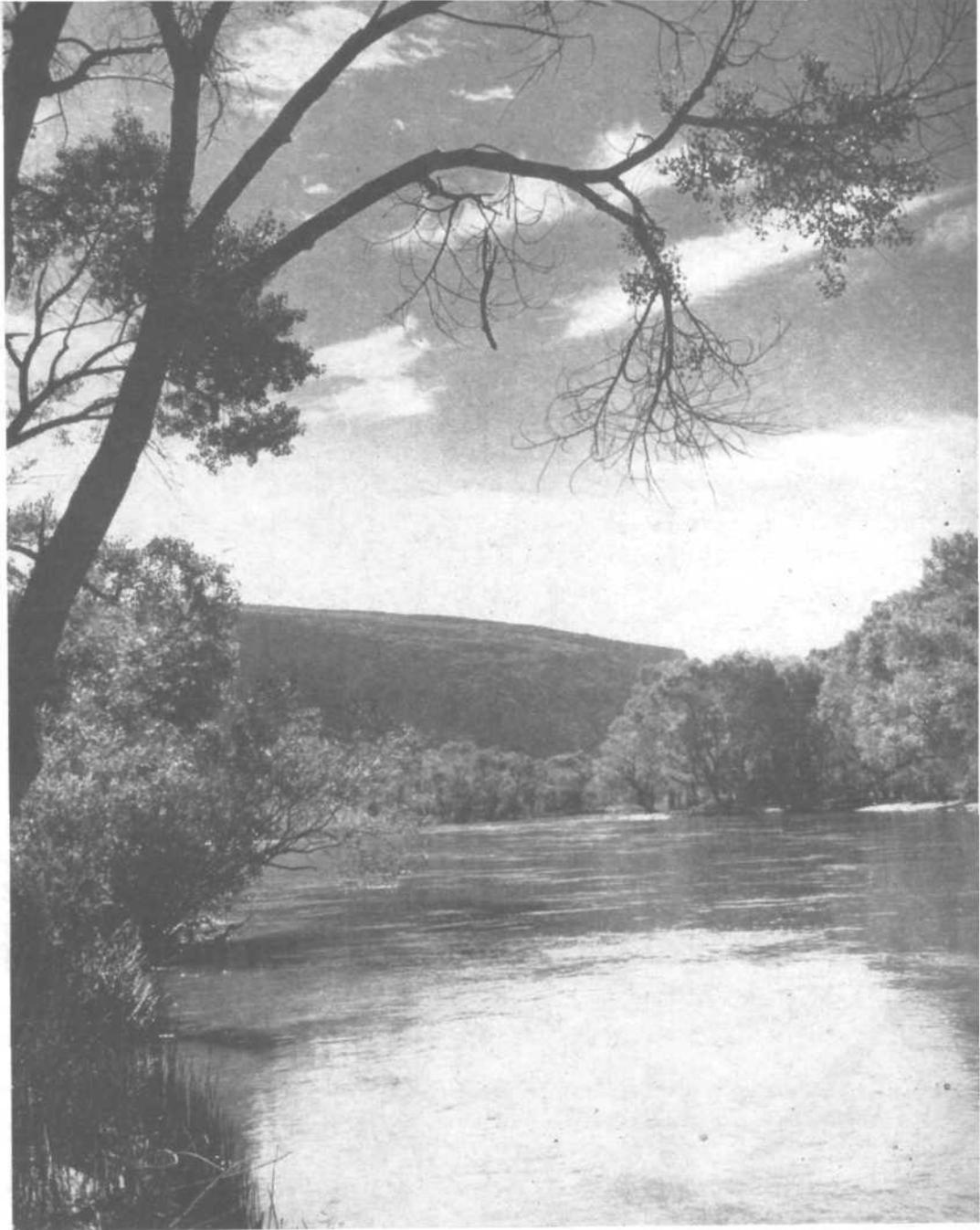
In 1869 the nation was binding its wounds. The day of Indian troubles seemed largely past. Completion of the Pacific Railroad, that spring, had retired the horse-drawn stages of the Overland Mail. Even the empire building emigrant was turning from covered wagons to the greater speed and comfort of the rails.

A magnificent era was drawing to a close—and with it would end the colorful career of the greatest military fort in Nevada's history.

On September 29, 1869, the last company of troops took leave of Fort Churchill. Early in 1871, the garrison's buildings were ordered sold at auction to the highest bidder.

And what more natural than this bidder should be Sam Buckland?

Long before commissioning of the fort, Sam Buckland's ranch had been an institution in Utah Territory. It had been a popular stop on the emigrant trail, a Pony Express station.



The Carson River, bordered by cottonwoods and willows, bisects the old military reservation and flows within a few hundred yards of Fort Churchill.

With the organization of Nevada Territory, in 1861, it had become the first seat of Churchill County, a capacity in which it had served for two years. The fort, to meet military requirements, had been established "one mile and one rod" from the ranch; but throughout the life of the garrison, Buckland's had provided the safety valve for the troops, supplying such refreshments as Uncle Sam's reservation denied them.

And now that Fort Churchill was officially abandoned, Sam Buckland bought its assorted improvements—several hundred thousand dollars' worth in original cost—for the sum of \$750!

Buildings were systematically stripped of their salvageable material. Timbers and roofs, windows and floors and

doors—even the huge circular staircases in the officers' quarters—were removed for sale and re-use.

Deprived of their protecting roofs, the old adobes began to yield to the elements. Snow and wind and rain and frost took their toll. Weakened walls collapsed, adobe bricks disintegrated and returned their dust to the desert. And, at last, only ruins remained.

Even the old burial ground on the hill was robbed of its dead, the bodies being exhumed in 1880 for re-interment at Carson City and San Francisco. Only the weed-grown graves of a few civilians were left in the lonely little Valhalla.

With the removal of her military dead, Fort Churchill became a place of neglect. From the War Department,

the land passed to the General Land Office, and on to the State of Nevada. Nevada, in turn, gave it to Sagebrush Chapter, Daughters of the American Revolution.

In 1935, the Civilian Conservation Corps was given the task of clearing away tons of accumulated litter and fallen adobe. Buildings still standing were repaired, insofar as practicable, and there was erected a new structure intended for eventual use by a resident custodian, and as a museum to house historical relics. Camping and picnicking facilities were installed along the river and a swimming pool provided.

With completion of this program of rehabilitation, Fort Churchill was turned over to Nevada State Park Commission for future administration and care. Later, the old shrine was designated officially as a state park.

In Nevada, unfortunately, the granting of state park status bestows title alone, and little in the way of improvement or protection. This is not the fault of the State Park Commission. From the day of its inception in 1935, this board has been served by men of highest calibre; but state legislators—one session after another—have consistently pared the park budget to the bone.

Denied funds for even the barest needs of operation, the park board has been forced to stand idly by while park areas of the state succumb to deterioration and neglect. Nowhere is this unfortunate situation more obvious than at Churchill, where a complete absence of maintenance and repair, together with vandalism, have left the fine old garrison tottering on the brink of oblivion.

With each year the walls of the dying fort are a little more crumbled, the sage on the parade grounds grown a little higher. Now and then, night-fall brings to the old garrison some lonely wayfarer, like myself. He spreads his bedroll and cooks his supper beside one of the old buildings; and perhaps he spends the last hour of daylight ranging over the parade ground, seeking mementos of that long-ago occupation; bits of old harness leather and metal buttons, broken crockery and square nails, and broken dreams.

In the old graveyard on the hill, a shattered marble slab marks the last resting place of Samuel Sanford Buckland, now 70 years in his grave—Sam Buckland, who emigrated west from Ohio and established a ranch on the Carson River when Nevada Territory was yet unborn. In the little fenced

plot beside the old pioneer, lies his wife, Eliza, and five of their children—all of whom preceded him in death.

On the old-fashioned stone marker at the head of Eliza's grave, appear these lines:

*Shed not for her the bitter tear,
Nor give thy heart to vain regret;
'Tis but the casket that lies here,
The gem that filled it, sparkles yet.*
The same lines might serve as an epitaph for Old Fort Churchill, herself.

Desert Quiz

The monthly class in desert history, geography, botany, Indians and general lore will now come to order. This month's questions cover nearly every phase of desert interest—information that the well-informed desert reader or traveler should know. A score of 12 to 14 is fair, 15 to 17 good, 18 or over excellent. The answers are on page 24.

- 1—The gem stone most commonly used by the Navajo silversmiths in making their jewelry is—Agate . . . Garnet . . . Turquoise . . . Jasper . . .
- 2—The first name of Pegleg Smith for whom a famous legendary lost mine was named was — Thomas . . . Jedediah . . . John . . . Hiram . . .
- 3—The flower of the rabbit bush is—Pink . . . Red . . . White . . . Yellow . . .
- 4—Two of the following dams are not in the Colorado River—Elephant Butte . . . Roosevelt . . . Davis . . . Hoover . . .
- 5—When a Navajo Indian refers to a *Bilakana* he is speaking of—A white American . . . An Indian trader . . . A balky horse . . . A pack saddle . . .
- 6—In fencing the range country of the Southwest, the cattlemen most commonly use—Two strands of barbed wire . . . Three strands . . . Four strands . . . Five strands . . .
- 7—Keams Canyon Indian agency is Indian Bureau headquarters for the —Zunis . . . Hopis . . . Utes . . . Hualpais . . .
- 8—Ubehebe Crater is in—Yellowstone National Park . . . The lava country of New Mexico . . . Death Valley . . . The shore of Pyramid Lake . . .
- 9—Bill Williams Mountain is located in—Arizona . . . New Mexico . . . Utah . . . California . . .
- 10—The Indian Chief, Palma, who befriended Juan Bautista de Anza and his first colony of California settlers was a—Mojave Indian . . . Yuma . . . Papago . . . Apache . . .
- 11—The first camel train was brought across the Great American Desert by Lieut. W. F. Beale . . . Jacob Hamblin . . . Kit Carson . . . Gen. Kearny . . .
- 12—Going from Flagstaff to Jerome, Arizona, the most direct paved route would be through — Sedona . . . Showlow . . . Apache Junction . . . Cameron . . .
- 13—Tombstone, Arizona, at the height of its mining boom, produced mostly—Gold . . . Copper . . . Silver . . . Cinnabar . . .
- 14—The Penitentes are a—Religious sect in New Mexico . . . An Indian tribe in Utah . . . A prehistoric tribe of sun-worshippers . . . The occupants of a monastery in California . . .
- 15—Pumice stone is often used for desert building because of its—Light weight . . . Abundance in the desert region . . . Unusual coloring . . . Insulation value . . .
- 16—Tinajas Altas is the name of a historic watering place on the—Camino del Diablo in Southern Arizona . . . Santa Fe Trail . . . Butterfield stage route . . . Mormon Trail to Utah . . .
- 17—The tallest tree native to the Southern California desert is—the Mesquite . . . Joshua Tree . . . Ironwood . . . Washingtonia palm . . .
- 18—If you were looking northeast toward the Sangre de Cristo Mountains you would most likely be in—Tucson . . . Santa Fe . . . Las Vegas, Nevada . . . Salt Lake City . . .
- 19—If a Hopi Indian gave you some piki you would—Eat it . . . Wear it around your neck as a souvenir . . . Plant it in the flower garden . . . Hang it in your home as a wall decoration . . .
- 20—Ruth, Nevada, is famous for its—Production of gold . . . Open pit copper mine . . . Mineral springs . . . High grade silver ore . . .

PICTURES OF THE MONTH . . .

Indian Girl . . .

Sunbeam Chism, Nevada Indian girl, posed on her horse for Andrew Crofut of Reno to help him win first prize in Desert Magazine's October photo contest. Crofut used a 4x5 Speed Graphic camera, super XX film, 1/100 second at f. 16.



Palm Canyon . . .

In March, A. Wiederseder of Altadena, California, hiked up Palm Canyon, near Palm Springs, and found this idyllic spot. The picture, taken with a 5x7 Cycle Graphic camera on panchromatic film, was awarded second prize by Desert's Picture of the Month judges.

LOST DESERT QUEEN MINE

The New Yorker had dug rich values from his Desert Queen Mine in Cathedral Canyon, near Cathedral City, California. But when the lost claim was re-located 40 years later, the gold was gone. The only value left in the peacock ore on the abandoned dump was its beauty—and many specimens still garnish the rock gardens and cactus beds of Cathedral City homes.

By W. R. HILLERY

ABOUT 1889, a young New Yorker outfitted in San Bernardino, California, for a prospecting trip. Following the mountains down to the desert, he spent many months on both sides of the upper Coachella Valley, searching the canyons and draws of the San Bernardinos, the San Jacintos and the Santa Rosas.

Finally, in the Santa Rosa range, he found a promising outcrop of ore and staked his claim to the "Desert Queen." He needed supplies to work his mine and these he procured at Banning, a small community in the San Gorgonio Pass, about 40 miles distant.

It took the New Yorker and his supply-laden burros three days to wind down out of the pass to the sandy road that snaked its way among the few scattered shacks comprising Palm Springs, then on about six miles farther southeast to Cathedral Canyon, at the present site of Cathedral City. Up the canyon his switchback trail led along the east wall several miles to his claim.

The Desert Queen was never officially recorded. To do so would have meant a trip to the county seat then at San Diego, a hard, long trek over the mountains to the coast. Riverside County had not yet been created.

The young prospector worked hard, and a sizeable dump had accumulated by the time personal obligations compelled him to return east. Just what these obligations were is not known, but they held the claim holder in the east the rest of his life, and he never was able to return to his rich Desert Queen.

On his deathbed, the New Yorker passed on to a relative a crude map and the story of his rich mine in California. Inside the tunnel, he said, would be found a folding pick, a wooden wheelbarrow with a wooden wheel and various other items.



One day in 1928, shortly after the founding of Cathedral City, two villagers, Wilbur "Slim" Larrison and Charley Cruncleton, were riding horseback up the canyon when one of them noticed a faint trail leading up the east wall. Having sure-footed horses, they decided to follow the almost obliterated path and suddenly came upon the long unvisited Desert Queen. They had seen numerous prospect holes before and, after casually inspecting the mining implements and wandering about for a few minutes, they remounted their horses and headed back for Cathedral City. The incident was soon forgotten.

Several years passed. One evening Slim sat in camp in the Devils Garden area, listening to an old prospector, G. R. Hicks, tell the story of a lost mine. He gave only casual interest as Hicks told of the easterner who a few years before had developed car trouble just as he was passing Hicks' Morongo

Valley cabin. While repairs were being made, the stranger and Hicks chatted. Eventually the conversation ran to mountains and mines, and the stranger produced a map which, he said, his father had received from a relative on his deathbed. He repeated to Hicks the story of the lost Desert Queen.

Weary months of search followed in which Hicks joined. But the map was so sketchy that the stranger gave up and returned to his home in the east without finding any clue to the lost mine in Cathedral Canyon.

When Hicks, in the course of his story, mentioned the folding pick and wheelbarrow, Slim jumped into action, remembering the prospect hole he and his companion had stumbled on a few years before.

Excitedly, he told Hicks his suspicion that the chance-found claim and the lost Desert Queen were one and the same. The two men struck camp and, visions of wealth before them, hurried across the valley to Cathedral City and on to the long lost mine.

They found it without any difficulty and took samples to be assayed. But the ore proved to be quite ordinary—not rich enough to warrant any development at all. Hicks and Larrison, their dreams of riches gone, returned disappointed to Cathedral City.

A group of Indians later relocated the claim and worked it briefly as the Eloisa. Some beautiful peacock ore lies on the abandoned dump, but the only use made of it is to garnish cactus beds and potted patio plants in Cathedral City homes.

Woman's Whopper Wins Prize

BORREGO SPRINGS—More than 200 male liars were put to shame this year, when a San Diego woman walked off with first place honors in the Seventh Annual Pegleg Smith Liars Contest held at Borrego Springs in October.

Mrs. Roxie Bane is the first woman to win the event. Her whopper concerned a fabulous blood red ruby found by Pegleg Smith during his search for the black nugget gold deposit he had discovered and lost.

"Clutching the immense ruby, Pegleg headed back for civilization in high excitement," Mrs. Bane related. "For days he trudged on, dead tired but too

elated to rest, until one night he sighted a campfire on the top of a hill. It was cool and damp and hordes of huge mosquitos attacked him, until by the time he staggered into the stranger's camp he was near collapse.

"The stranger revived him and Pegleg decided to show his rescuer the wonderful ruby. But when he drew the huge stone from his knapsack, his heart sank—it was only a rose quartz rock of no value.

"Closer inspection revealed the holes left by the mosquitos' beaks where they had sucked the blood from the once-fabulous gem."

Gem Stones in the Peloncillos

By FENTON TAYLOR
Photos by the Author
Map by Norton Allen

AS THE Gila River crosses the New Mexico border into Arizona, it is already turning northward to circle around the Peloncillo Mountains, a barrier of upturned peaks, buttes, and hills.

Entering the gorge it dug between the Peloncillo and the Gila Ranges, the river turns southwest to roar between steep basalt walls until it flows into the peaceful Gila Valley, whose fertile lands its harnessed waters have made productive farms.

This area of mountains and hills held within the bow of the river occupies a special place in my heart, for here one spring afternoon a few years ago, I picked up a piece of "petrified wax." Delving into the secret of this strange rock eventually turned me into an avid rockhound.

I had driven the family out that way to see if many poppies were blooming, but the flowers were as scarce as the rains had been that season. We were roaming the hills, the children eagerly hunting rocks, for they were enthusiastic rockhounds long before their Dad.

Suddenly I spied beneath a small mesquite an odd white stone half buried in the soil. Never before had I noticed anything like this. Dragging it from its resting place, I held in my hand a fan-shaped rock nearly the size of my palm. The smooth swirls and convolutions of translucent substance forming the stone were of a highly waxy luster. I was astonished at its luminescent beauty.

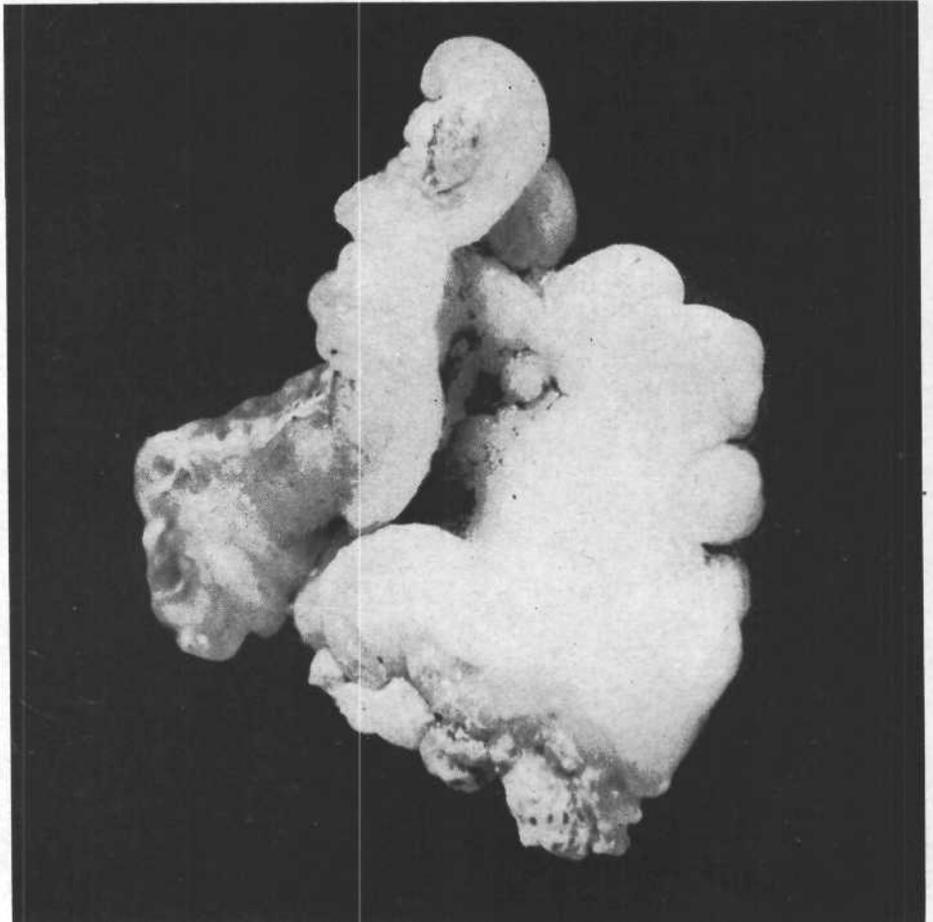
"This looks like paraffin wax," I thought and tried cutting it with my knife to no avail. I took my piece of "petrified wax," home for closer study.

Thus was a new rockhound born! Later, after I had studied about the quartz family minerals and had ascertained the true identity of my unusual piece of chalcedony, I discovered that it fluoresced a beautiful light green under the short wave lamp, making it an even more valuable specimen for my embryo collection.

Many times since then I have gone chalcedony hunting in the "bow area" as I call it. It is a wonderful place for the rockhound.

One time while on a field trip with a group of mineral club members, I started toward a small hill. A companion asked which way I was going. After I told him, he assured me, "I've

Over a wide area on the slopes of the Peloncillo Range in eastern Arizona Fenton Taylor has found many varieties of the stones that are sought by collectors. While chalcedony is most prevalent, there are geodes, obsidian nodules and several members of the agate family. For those who prefer a scenic landscape for their field trip outings, this is a trip worth while.



This is the piece of "petrified wax"—actually a chalcedony rose—which lured the author into the hobby of rock collecting. This was found in the field described in this story.

already been over that hill. You won't find anything there."

Having had experience in following others before, I knew he was mistaken. No single individual can find everything. I have retraced my own steps and found wonderful specimens that I missed the first time over. On up the hill I went to find three small agates of excellent cutting quality and they all made fine cabochons.

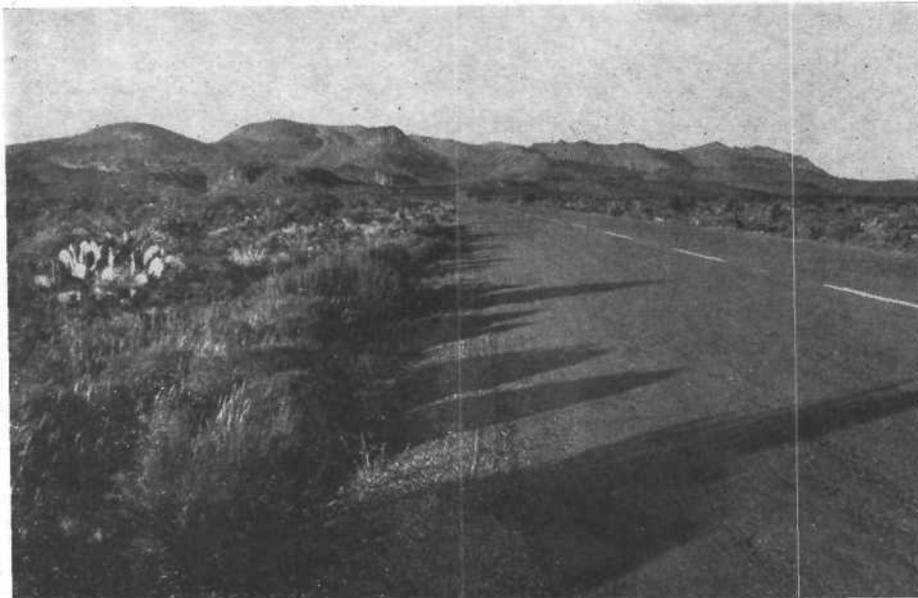
The bow area with its variety of gem materials is easily accessible, for the newly completed segment of Highway 666 from the Gila Valley to the Clifton-Morenci district runs almost directly through the center of the collecting area. From Safford, the business center of the valley, it is just a short drive until a person can start looking up and down the hills and in the

draws for chalcedony, some of it the precious fire type, agates of great variety, and black obsidian nodules.

The broad new pavement leaves Highway 70 about 10 miles east of Safford. Leading to the northeast, it is a straight stretch of road for the first few miles as it points to the upper end of the Peloncillo Mountains.

Highway 666 now follows the route of an old toll road built in 1899 by Francisco Montes and three friends, Victoriano Corrasco, Andres Serna, and Emilo Lopera.

Montes came to Arizona from the Rio Grande country in 1873 and settled in the small town of San Jose, situated at the head of the Gila Valley. Because it was built near the ruins of an Indian village, San Jose is sometimes called Pueblo Viejo.



Above—Going east from Safford, Highway 666 follows an old toll road through the Peloncillo Mountains—making an easy access route to the collecting field. There is fair hunting on both sides of this highway for many miles. The Peloncillos are in the background.

Below—Edith and Melvin, the author's children, in an area where the ground is strewn with bits of white chalcedony.

Shortly after reaching his new home, Montes helped build the San Jose canal to divert river water to the farms. He and his neighbors began raising many crops, and soon they had a surplus of hay, grain, corn and pumpkins.

At that time, Clifton was a booming mining town. Top prices were offered for garden produce. The farmers of San Jose loaded their wagons and took their surplus to this top paying market.

Then it was a three-day journey to Clifton, for the many sharp canyons of the Peloncillo Mountains made a direct route difficult. The first day's travel took the wagons to Ash Spring. Over the hills to Sheldon and the Gila River was the second day's journey.

On the third day they followed the river to Guthrie, labored up an arroyo for a few miles, and finally angled over a steep mountain to strike the San Francisco River at Ward Canyon just below Clifton.

To save such a round-about trip home, the freighters discovered they could cross the river at Guthrie and climb the steep slope past Guthrie Peak. It was a tough pull, but when they reached the summit, they had down-hill grade the rest of the way home, saving both time and miles.

As Montes was making this trip, he conceived the idea of a toll road. With his three friends, axes, shovels, and pickaxes, they carved a road through the mountains that was

scarcely more than a trail around the hillsides and up the grade toward Thumb Butte, a tiny knoll that is a prominent landmark close to the summit of the climb.

Using scrap lumber and tin, they built a toll station on a hill that gave them a good view of the road in both directions. Mexican folks gave it the name of La Grita.

Toll charges were 50 cents for each team and 10 cents for each horse with a rider. At the end of the first day of operation, the new station keeper and the receipts disappeared, undoubtedly heading for the Mexican border. After this incident, Montes operated the station himself.

Not long after the road was opened, the price for teams was lowered to 30 cents. Operations went along smoothly. Finally, after a series of trades, Montes lost his original partners and gained a new one, Jose Gonzales.

One of the tasks of the station keeper was to watch the road for toll dodgers. Montes used a telescope to look for approaching riders or teams. If he saw a rider begin to circle the toll station, he would mount his horse, head off the rider, and collect the fee.

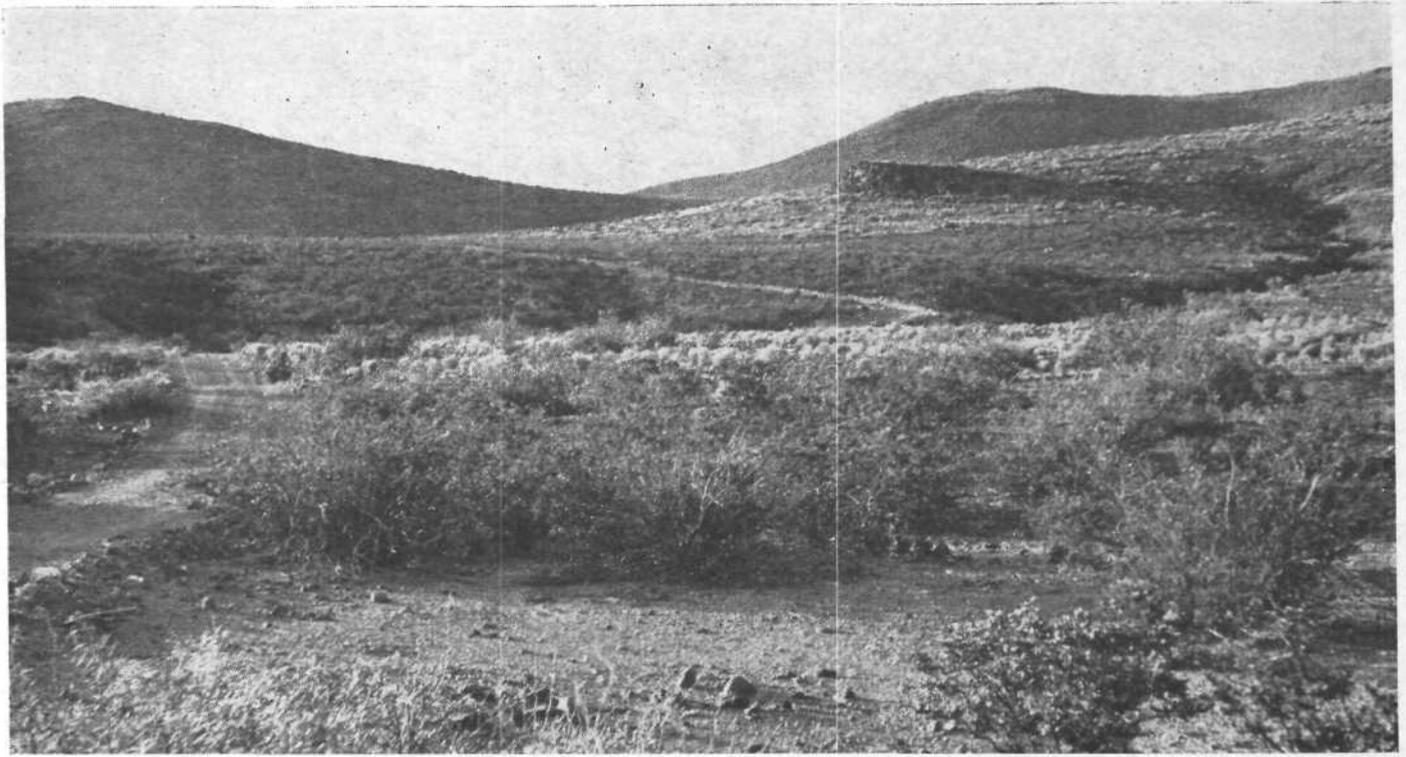
After about three or four years Montes sold his share of the road to Luther Green who opened stage service over the route. Green soon sold out to Morg Merrill and Ben Clark.

The toll road was in use until 1919 when the new Safford-Clifton highway was completed by means of convict labor under the direction of Lamar Cobb, the state engineer. Built chiefly as a scenic road, the new highway consisted mostly of narrow dugway winding through the canyons and around the northern slopes of the Peloncillos. Many people labeled this road "Cobb's Folly" for it sacrificed convenience for beauty.

Collecting along Highway 66 can begin at almost any place a person wishes to stop. Good agate and chalcedony specimens are scattered far and wide along its length up to the mountains.

All this material is float, of course, having been washed in and deposited by the Gila River as it carved canyons and countless gullies. Hiking off the road a few hundred yards in a big semi-circle will usually net the best results. I've never made such a circle and returned to the car empty handed.

Early morning or late afternoon is the best time to hunt agates and chalcedony, for the slanting rays of the sun are caught up in a distinctive glow by these quartz stones to make them stand out in sharp contrast to their neighbors.



General view of the large chalcidony deposit. The best hunting is just below the ledge in the right center of the picture.

About eight miles from the junction, the old highway comes up abruptly against the new right-of-way fence. It is beyond travel now, but it winds among a cluster of low lying hills to the west that have yielded some of the finest green moss agates of the area. Although they are not so spectacular as the ones from Montana, their patterns are such that they will make choice cabochons.

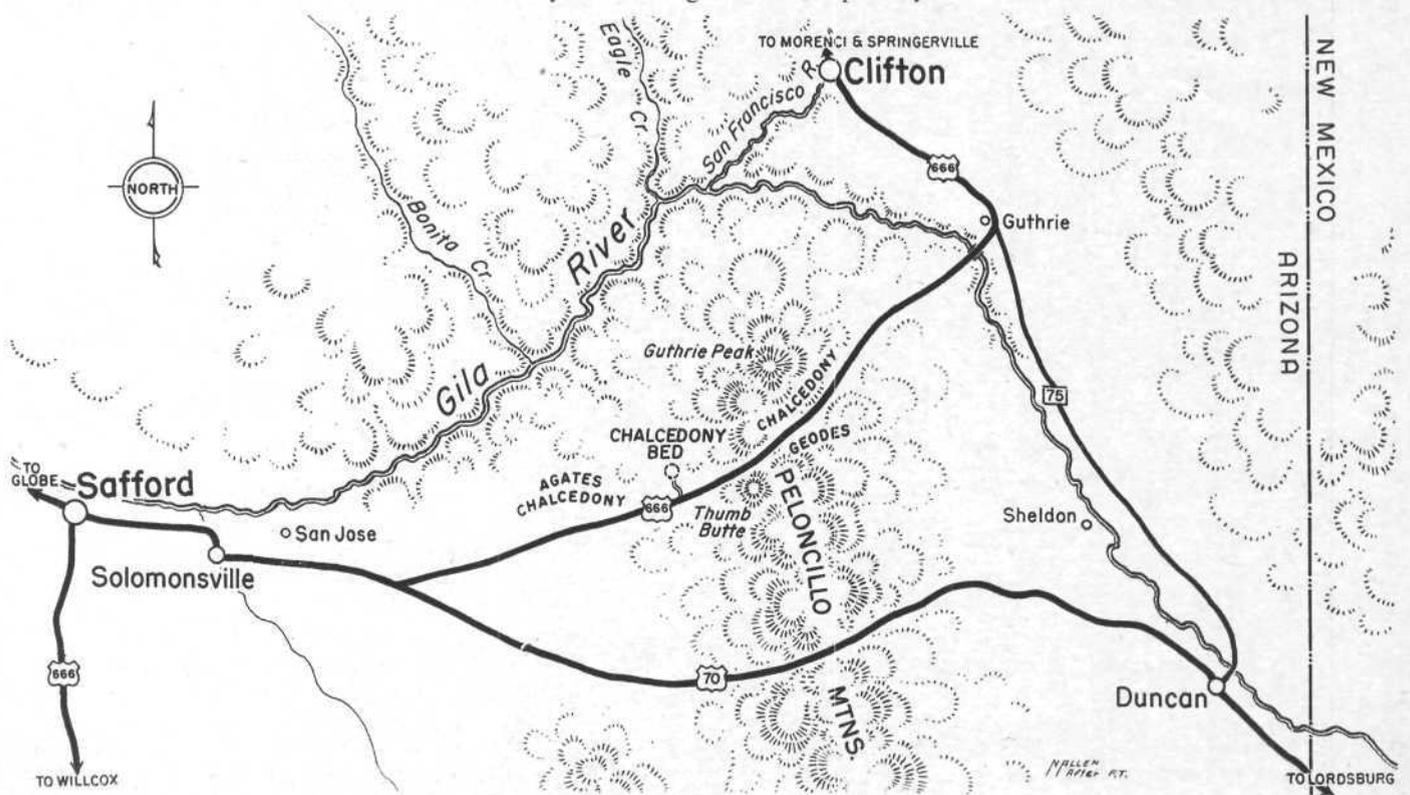
A wash cuts around the north side of this hill cluster. Its banks offer good hunting. The rocky stream beds seldom have anything to offer. At one place the course divides to make an island of a few acres of land covered with creosote brush and prickly pear. This island has yielded some very fine brown and red moss agates accented with inclusions of pale blue agate.

Anywhere along the road, especially

in the hills to the west which slope toward the Gila River, the rockhound will find interesting collecting. I heard the report that one collector found a section of petrified palm root here.

In this section of the bow area members of the Gila Valley Mineral Society once conducted a night field trip, a most unique and successful hunt for fluorescent chalcidony.

Scattered over these hills are small



obsidian nodules known as Apache tears. Appearing dead black, most of these pieces are translucent to transparent, and when cut and polished exhibit a lustrous dark beauty that catches the light in a deep, ripe-olive sheen.

Four miles beyond this area, as the highway winds in ascent up the mountain slope, a pipe and wire gate admits a seldom traveled road through the fence to the north. This is the entrance to the big chalcidony field.

For a mile and six-tenths the road winds over the hills, through a wash finally to top a sloping hill immediately beneath a basalt ledge. Here is chalcidony galore — chalcidony of all shapes, sizes, color; huge white chunks, waxy delicate pieces, thumb sized carnelian nodules, and red fragments.

Tiny chalcidony roses are widely scattered. Finding matching pairs of these roses for earrings is a painstaking task but most rewarding for the woman who wishes to add some unique pieces to her jewelry box.

Prize of the field is the occasional piece of fire chalcidony which careful study and cutting will turn into a cabochon nearly rivaling the opal for color play. One stone that I cut from this material shows red, lavender, gold, bronze, and satin green color as it is turned in the light.

On these expeditions my children never fail to rout out a horned toad. On our last trip they found one that was exactly the same shade of reddish brown as the rocks among which it lived.

A person can easily spend a full day in this one location, but back on the highway toward Thumb Butte it crosses to the right side, rounding a hill spotted with cedars. This is nodule and geode country, not large specimens but containing interesting crystals and exhibiting, in some cases, a pale apricot fluorescence.

Just beyond this point the road reaches the summit. Here, to the left again, is another chalcidony deposit, not so good as the first one, but offering fine material to the diligent searcher.

Then the paved way dips down the grade up which Francisco Montes and his comrades labored their wagons. In sweeping curves it drops to the new bridge spanning the Gila River and joins State Highway 75. In the distance a white smoke plume marks the tall smelter chimney of Morenci.

Yes, the bow area is dear to my heart. It has a variety of gem stones and beautiful scenery. I've never spent a day there that I have not gone home with my heart as full as my knapsack.

THE *Desert* MAGAZINE CLOSE-UPS

Marjorie Frank used her Life-on-the-Desert prize check from *Desert Magazine* to send a Happy Easter—"complete with chocolate bunnies"—to her Navajo friends of the *ta chii nii* clan. Miss Frank's winning story, which appears in this issue, tells of a Christmas vacation spent with the Indian family in their hogan in Steamboat Canyon, Arizona.

It was in 1945, on a visit with her parents from Buffalo, New York, that Marjorie first came to know the West. She was fascinated with the country and, after graduation from a California college, returned to the Navajo reservation as a teacher.

She came to know her Navajo pupils and to love them. "They came from all parts of the reservation to accept the privilege of attending school," she remembers. She chaperoned some of the youngsters home at vacation time, met their families and knew the warm hospitality of their simple hogans.

In 1950, Miss Frank left the Indian

Service to accept a position with the Albuquerque city school system.

Gaston Burrige, author of "Last of the Mountain Men," the story of Ben Lilly which appears in this issue, was born February 24, 1906, in southern Michigan, in the little Indian town of Tecumseh on the banks of the Raisin River.

Burrige early learned to love the outdoors, and he spent many boyhood hours roaming the woods, canoeing down the Raisin, exploring the wilderness areas near his home.

He came to Southern California in 1927 and went into business with his father. In 1951, the business was sold, and Burrige returned to his hobby, painting and writing, for a living. He lives in Downey, California.

Robert N. Carlile, who recounted his homesteading troubles with the government in his *Life on the Desert* story (October, 1953), reports he has received some compensation for the loss of his Mojave Desert tract. "In early September," he writes, "I received a check compensating me for returning all rights to the homestead to the United States government. The amount of the check just covered my cash investment."

The Desert in Winter . . .

Whipped white clouds marching across a vivid blue sky, color and form bold and true in the clear air, desert flora lush after a rain or stark against a blanket of snow—in winter the desert landscape is perfect for the photographer. Any amateur who is familiar with his camera and knows the elementary rules of good composition can get a good picture—and possibly win a prize in *Desert Magazine's* Picture-of-the-Month contest.

Entries for the December contest must be in the *Desert Magazine* office, Palm Desert, California, by December 20, and the winning prints will appear in the February issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the *Desert Magazine* office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. *Desert Magazine* requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from *Desert's* editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

Last of the Mountain Men

Ben Lilly was a Mountain Man—one of those rugged frontiersmen who trapped and hunted the Southwest mountain country for predators and game. Lilly's prey were lions and bears, the "varmint" he believed he was "appointed by God" to exterminate. Here is the story of a master trailsmen and hunter whose name has become legend in the Blue River country of Arizona and New Mexico.

By GASTON BURRIDGE
Portrait Sketch by the Author

IF BEN LILLY had lived 100 years earlier, had been one of the Southwest's first Mountain Men instead of its last, by now he would be as famous as Kit Carson, Bill Williams, Jim Bridger or Uncle Dick Wooton. Ben Lilly had what it took.

Some say he was the greatest hunter America ever produced. He hunted the Blue River country of Arizona and New Mexico, and in the foothills of New Mexico's Mogollon Mountains is a monument to his memory. A greater monument lies in the memories of several men still living who knew him, old-timers from Needles to Denver, from Sonora to Idaho.

Five years before Lilly came to the Gila River watershed in 1912, he guided Teddy Roosevelt on a Louisiana hunting trip. Roosevelt extolled his abilities in an account of that trip. Lilly's achievements also are recorded in several books and technical works on mountain lions and bears. His biographer is J. Frank Dobie in *The Ben Lilly Legend*.

Even before manhood, hunting had become a way of life with Lilly. He claimed he was "appointed by God" to rid the lands he hunted of "varmint." He was employed as a predatory animal hunter several times and for extended periods by the U. S. Biological Survey, but most of the time he hunted on his own, collecting bounties from counties and states. Bounty rewards accumulated and it has been reliably reported that when Lilly died in 1936, despite the bank failures of the 1930s he still possessed almost \$15,000 in savings. Others, also claiming to have known Lilly well, dispute this, arguing he was nearly penniless when he passed away. It is known that, toward the end of his days, Lilly's mind began to wander, and he could not remember in which banks his funds lay.



Ben Lilly, last of the Mountain Men. Sketch after a photograph by John Strickrott.

Benjamin Vernon Lilly was born December 31, 1856, in Wilcox County, Alabama. He came to Arizona in 1912, headquartering first at Tommy Cospo's ranch on Blue River, just below "The Box," where the Blue has gnawed a 700-foot gash down through the Mogollon Rim. The next 15 years of cougar and bear hunting were the happiest and most productive of Lilly's life, according to his own account.

My investigations of Ben Lilly had

only begun when I became aware of the fact that all who wrote or talked to me about him referred to "Mr. Lilly," never "Old Man Lilly," "Old Ben," or even "Ben."

I asked Mark Musgrave, who probably knew Lilly as well as any man, about it. Musgrave said there was just something about Lilly that required a mister. Ben was soft spoken, with a decided Southern accent. His eyes were very blue, deep-set and steady. Under six feet tall, he was stocky and

strong. His cheeks were full, round and rosy beneath a rich golden tan, his beard full and wavy, his carriage dignified. Despite his rough exterior, he presented a distinguished appearance. Ben never smoked, never swore nor drank; but all who knew him saw he was every inch a man, and those who didn't know him soon guessed it.

I asked Musgrave how he rated Lilly, who hunted the Blue country after the hostile Indians had gone, with earlier Mountain Men. Musgrave's answer was unqualified and immediate: "Unquestionably as good as any of them."

Ben Lilly was without fear. This he proved time and time again in hand-to-paw combat with bears. And his stamina matched his courage. His body was a set of steel-trap springs, tough, resilient, fatigueless. He could, and did, go days with nothing more than a bit of cornmeal while on a fresh trail. Lilly would trail an animal to the end, literally wearing out his prey, before he would give up. Only such a man could have bagged 650 mountain lions and bears in 15 years after the once-abundant game had been thinned out by others.

Ben Lilly knew lions and bears. He would not be on the trail of a lion long before he could tell its sex, its approximate age, whether it was on its regular beat or was new to the vicinity, whether it was hungry and looking for food or was just out for a stroll. If it happened to be a female, he could tell whether she carried kittens and, if so, about when the young were due. He read these facts from tracks examined minutely, from stray hairs caught on bushes, from beds of the animals, scratch marks left on trees and "scratch-piles" or "lion markers." Lilly was a master trailer whose ability was exceeded by none and equalled by few.

Everywhere Lilly went, he walked. It was said he could out-walk a horse. In a country of sheer 100-foot leaps of red sandstone, of yawning slits with brush clinging to their vertical sides, of heavy stands of agave and pine, it is not difficult to understand why he chose to travel afoot. He said a horse would only be in his way.

Early in middle life Lilly became deaf—so deaf he could not hear his hounds bark "treed." Deafness ordinarily would mean the end of a man's hunting days. But Ben Lilly was no ordinary man. He overcame his handicap by tying a lead hound to his belt and letting the dog take him to the others that had treed or cornered his prey. Lilly's hounds were trained to stay with the game until he came, no matter how long that might be—five hours or five days!

Once, following his lead hound to the pack, Lilly was pulled over a cliff by the excited animal. In the canyon below he found the dog uninjured, but himself with a broken leg. Calmly, Lilly set his own leg, reached for a fallen limb as a splint, bound the leg in place with strips of his shirt, then crawled on all fours back to his camp. There he remained, alone, the several days necessary for his leg to set enough to allow a burro-back ride to better facilities.

Lilly never hunted on Sunday. Hunting was his way of life, but it was a six-days-a-week proposition with him. Even though he was close to a lion on Saturday night, he would call off his dogs until Monday morning. He never hunted on Sunday unless he forgot to keep track of the days, inadvertently letting a Sabbath slip by without proper respects. In such cases, when he discovered his error, he took the next day off, asking the Lord's forgiveness with prayers and meditation.

Throughout his life, the Bible was Lilly's constant companion. He would read it for hours while in camp, and he often carried a copy in his slim pack while on the trail. He not only read and studied the Good Book, but he quoted from it often and aptly. Such quotations lent to his speech a quaint and folksy quality.

Along with devotions, Sunday was also wash day for clothes and person. In freezing winter weather Lilly would leave his campfire, strip off his clothing, and, ax in hand, walk to the pool or stream near his camp. Breaking the ice, he would plunge in. Often he took snow baths by sitting naked in a snow bank and rubbing himself clean with handfuls of snow.

Lilly slept outdoors all year around—and on the ground. He said a house smelled "rancid" and that he'd catch cold if he slept inside. Musgrave told me he met Lilly one afternoon at one of the latter's camps. To show Musgrave how good he felt, Ben ran to the top of a high hill 100 yards away and back again. He was then past 70.

There have been claims that Ben Lilly was an artist. I have seen reproductions of his work, and I don't think so. I don't think he thought so either. He did have a unique way of signing his checks, often written on bark, paper bag scraps or newspaper margins. These strange checks were always honored, for their signature was unmistakable. It consisted of a drawing of a honey bee followed by the letter "V" and a drawing of a lily—B. V. Lilly.

Ben Lilly's hobby was making knives. His ancestors were iron workers, but his knife-making probably

owed less to heredity than to the desire for a knife he could not buy. Most of the blades were forged from cast-off horseshoers' rasps, worn-out or broken heavy saw blades, old auto springs, hay rake teeth. Double-edged, his knives had a backward sweep he liked to call "the Lilly hook." He had definite reasons for this shape, determined by many years of using knives at close quarters. Some of his blades were 18 inches long.

There are a great many stories about Ben Lilly and his exploits. Every old-time Southwesterner has at least one Lilly anecdote. In the bear stories there appears some confusion as to which kind of bear goes with which story — black bear or grizzly. The black or brown or cinnamon bear still lumbers about many parts of the Southwest. The grizzly is gone—and Ben Lilly helped vanquish it.

It is virtually impossible to prove or disprove even a small number of these tales now. It is believed, however, that anything Ben Lilly wrote was as near the truth as he could make it, though, in a crowd, he could "draw the long bow" pretty far.

Ben Lilly died December 17, 1936, in Buckhorn, New Mexico, at the age of nearly 80. He wished to spend his last days among those pined mountains and picturesque canyons he had grown to love so well. He wanted to meet death there, some night beneath a dusky cedar, some day along a sun-flecked trail. But Ben Lilly had too many friends thoughtful of his comfort. So he died in bed, at the Grant County Farm.

Legend, like the silvery threads of a cobweb, is already weaving its pattern across Ben Lilly's name. In a few more years all who knew him personally will have gone, and only the legend will remain of this last of the Mountain Men of the great Southwest.

ANSWERS TO DESERT QUIZ

Questions are on page 16

- 1—Turquoise.
- 2—Thomas.
- 3—Yellow.
- 4—Roosevelt and Elephant Butte dams are not in the Colorado.
- 5—A white American.
- 6—Four strands.
- 7—Hopi Indian agency.
- 8—Death Valley.
- 9—Arizona.
- 10—Yuma Indian.
- 11—Lieut. W. F. Beale.
- 12—Sedona.
- 13—Silver.
- 14—A religious sect in New Mexico.
- 15—Insulation value.
- 16—Camino del Diablo.
- 17—Washingtonia Palm.
- 18—Santa Fe.
- 19—Piki is Hopi bread.
- 20—Open pit copper mine.

LIFE ON THE DESERT

By MARJORIE FRANK

When Marjorie Frank and her companion accepted an invitation to spend Christmas on the Navajo reservation, they decided to bring some of their own yuletide traditions to their Indian friends. Here is a gay, heartwarming story of a bi-cultural American Christmas.

ANNIE, A FELLOW university student, and I had accepted the invitation of a family of the *ta chii nii* clan to spend Christmas week with them in their isolated hogan in Steamboat Canyon, Arizona.

We spent busy days making cookies and decorating them with gay colored icings. Dolls, wagons, ear muffs and other toys were added to our Christmas shopping list, along with oranges, apples and cheese. We had heard that the Navajos were fond of cheese, and later were glad we had added it to our gifts when we saw the delight with which *shima sani*, old grandmother, sampled each variety.

Christmas parcels, food, sleeping bags, blankets, oil and other necessities packed, our holiday adventure began. Through Grants, New Mexico, Gallup, and Window Rock, Arizona, we traveled to Steamboat Canyon. Just beyond the trading post, our car skidded into a deep snowdrift. Try as we might, we couldn't extricate it, and we decided to walk the seven miles to the hogan of our friend, Denet Tsosie Begay.

As protection from frostbite, we bound our feet with heavy cloths. The make-shift galoshes slowed our pace, but they did help to insulate against the cold. Later our friends told us that, according to Navajo legend, "if one is seen walking in the summer sun with feet bound as ours, the lizards will laugh."

With the approach of daylight, a thin streak of smoke became visible, and we knew that food and rest and a warm fire were near. The family dogs already had seen us coming—although we were yet two miles from camp—and their wild barks aroused the entire household.

A burlap sack draped the entrance to the hogan. We entered and met Juanita Begay, wife of one of the medicine men of the *ta chii nii* clan. She wore a scarlet velvet blouse and a skirt of green silk. In the far corner of the hogan lay two cradle boards. Seven months earlier, Juanita had been blessed with the birth of twins.

That day we became better acquainted with our hosts, and that evening we heard the Navajo legend of Steamboat Canyon.

Steamboat Canyon's English name comes from a huge boat-shaped rock formation at its entrance. The Navajos call the canyon *ho yeeh*, which means "a very spooky place."

"Many many moons ago," relates Navajo legend, "the animal people lived in this world as humans. One lean year, when the streams were dry and the pinyon trees bare, the animal people were directed by their gods to travel eastward where food would be plentiful. When the people reached *naa a dii* canyon, one of them, Big Dragon, went into a cave. He never was seen again. Next night they camped at *shash bi to*, or Bear Spring. During the night, Bear disappeared. Though they never saw him again, the animal people followed his muddy footprints to the spring. At the next night's stop, Little Dragon was lost. To this day, a spring that never runs dry marks the spot of his disappearance."

The Navajos still believe that sheep and goats disappear at *ho yeeh*, the "spooky" spring.

That night we slept on several thicknesses of sheepskins and found it to be a soft and comfortable bed. We arose early next morning to begin our hunt for a Christmas tree. We found a small fir, about four feet tall, and dragged it back to the hogan.

Ordinarily the Navajo does not celebrate Christmas. But Annie and I had decided to bring some of our Christmas traditions and holiday cheer to our friends.

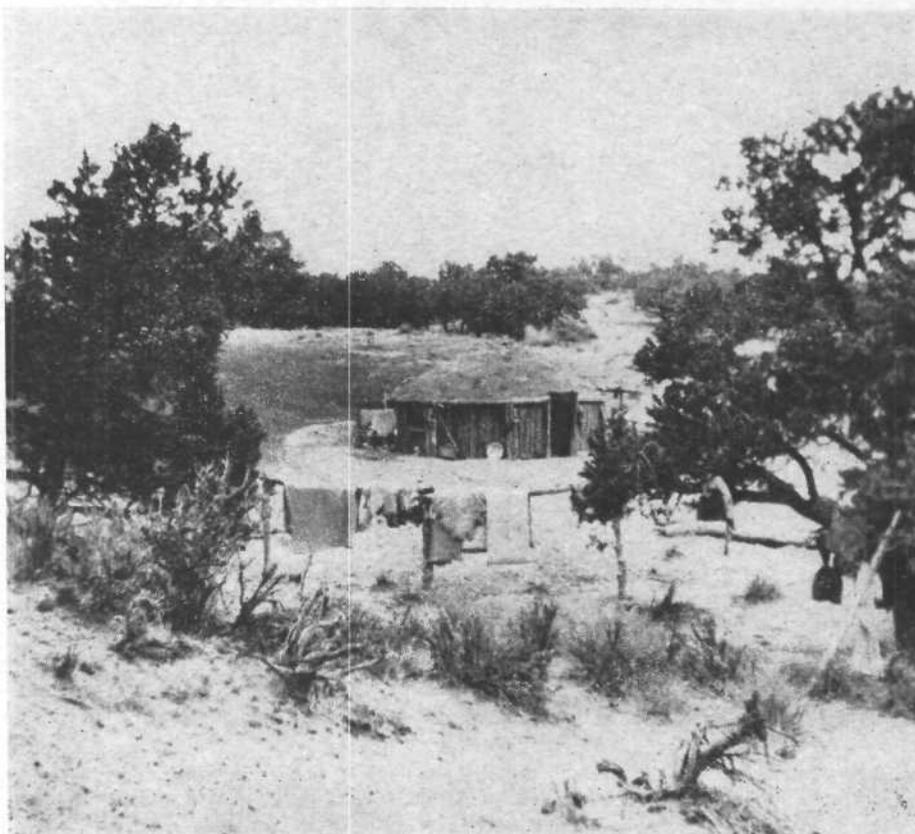
News of our planned Christmas Eve party spread rapidly. Throughout the day, visitors arrived from all sections of Steamboat Canyon. The women wore full skirts of bright satin or velvet, most of them trimmed with brightly colored bands. Since this was a festive occasion, they wore their turquoise and leather belts handsomely buckled.

All day long, wagons arrived and the women set up camp. By sunset, pots of mutton stew were cooking on open fires.

Within the hogan, Annie and I were busily trimming the Christmas tree, hanging assorted cookies, popcorn strands and wisps of sheep wool on its green branches. Near us, some of the women were cooking mutton, others were frying bread in large skillets while still others prepared blue corn meal stew.

Annie and I watched with apprehen-

Hogan of Denet Tsosie Begay, medicine man of the ta chii nii clan, where the author and her friend spent the Christmas holiday she writes about in this story.



sion the preparation of the latter. Cedar leaves were placed in a basket and burned over an open fire, their ashes saved and carefully placed in a small container. Meanwhile, dried yellow corn was ground on the metate into a fine meal. The cedar ashes then were slowly sprinkled into a bowl of boiling water to be poured over the corn meal. Upon stirring, the once yellowish mixture took on a blue-green color. The paste formed was rolled into small round balls approximately an inch in diameter, and these "dumplings" were placed in a kettle of water and cooked until a blue broth was formed.

Annie and I didn't relish the idea of eating blue broth, but we found to our surprise that it was quite tasty. We also enjoyed the mutton stew and fried bread.

After supper, our Christmas celebration began.

First, the Navajo men sang. Two teams were matched against each other. The group which could sing louder and longer won the prize—a large bag of oranges.

After the Navajo songs, Annie and I told the story of the Christ Child in English, waiting while each sentence was translated into Navajo. We answered our Navajo friends' questions about the Christian way of celebrating Christmas and sang Christmas carols—"Silent Night," "O Come All Ye Faithful" and others. Some of the children who had learned the words in government school joined their voices to ours.

Then we watched while the men played a favorite winter game, the "Shoe Game." Four empty shoes faced each team. Hiding its actions with a blanket, one team placed a small ball in the toe of one shoe. Their opponents had to guess in which shoe it lay. Wagers—from bridles, saddle blankets and turquoise to hatbands and scarves—were placed on the play, and gambling songs sung. Score was kept by yucca strands. When one team had lost its 51 strands, the game was ended.

Throughout the game, jokes and buffoonery kept us laughing. Although we could not understand much of what was said, Annie and I enjoyed the wild antics and stunts which took place.

After our Christmas Eve celebration had ended, we crawled into our sleeping bags in the hogan. The twigs of cedar still crackled in the fire, and through the smoke hole opening we could see a portion of the winter sky's myriad of stars.

We went to sleep happy, filled with the warmth of Christmas cheer and the friendliness and hospitality of our Indian friends.

LETTERS

Crossing the Border . . .

Ajo, Arizona

Desert:

August *Desert Magazine* reported, on page 31: "A tourist card good for six months and costing \$5.00 now may be used for as many visits to Mexico as the tourist desires. In the past, each separate entry called for a new card."

And in "Mexican Tour for Motorists" in the October issue, Randall Henderson says an American can go as far as San Felipe—100 miles into Mexico—for 72 hours without charge.

I live at Ajo, Arizona, and frequently drive to Puerto Penasco—Rocky Point—only 60 miles from the border at Sonoyta. Yet each entry costs me \$3.00, and I must relinquish my card upon re-entering the United States. The border officials seem to know nothing about a \$5.00 card or any free trip.

Are Mexicali and Tijuana the only ports where such special entry might be made?

NEAL CARTER

The tourist set-up in the customs district in Arizona differs from that along the California border — and the charges are higher in the Arizona district. Mexicali and Tijuana are designated "free zones" by the Mexican government and get a number of special concessions from the customs department — mainly because of the heavy traffic and large sums of money spent by American tourists in Baja California.—R.H.

The Deputy Sheriff's Advice . . .

Whittier, California

Desert:

Early in the century, when I was a young man, my search for employment took me into an isolated mining camp in Inyo County, California.

The camp still retained the lusty atmosphere of the Old West. There weren't many houses. The miners either lived in the bunkhouse or devised makeshift shelters from scrap material. The camp had no entertainment except as provided in the dilapidated saloon, relic of a still earlier period, to which the men resorted every evening to drink, play poker or swap stories around the stove in an atmosphere heavy with tobacco smoke and the odor of stale beer.

In that old barroom I met an unforgettable character who gave me a bit of advice I have followed to this day.

With time on my hands, nothing to

read and no companion, I had entered the saloon. On my right was a bar presided over by a bald, one-eyed character of European extraction who responded to the name "Smitty." In front of the bar was a card table and a half dozen chairs, reinforced with bailing wire, which were occupied by players deeply intent on the game. The room was lighted by several smoky kerosene lamps. Standing under one of these, reading a newspaper, was a man whose bearing, as well as his dress, set him apart from the others. He wore a kind of military uniform, with a stetson hat and riding boots. At once I knew him to be the Deputy Sheriff.

I walked up to the card game and stood looking over the shoulder of one of the players. For several minutes the game proceeded in silence. Then I felt a gentle hand on my shoulder. Turning, I looked into the steel-blue eyes and kindly smile of the Deputy Sheriff. Motioning me over to a corner of the room, he said, "Lad, I want to speak to you."

And what he said was this: "Lad, you are not a poker player. You never can be. You are not the type. Get out of the game and stay out, and never take a hand! If you will take my advice, the day will come when you will be glad you did."

Then with a kindly smile on his firm jaw, he set his stetson on his head and said, "Lad, remember! — and goodnight." He stepped quickly out into the windy darkness. Soon I heard the retreating hoofbeats of his horse.

Several times in the years since then I have had occasion to pass through a smudgy room in a mining camp where a game of poker was in progress and have paused a moment to look on. Each time I have felt again the hand on my shoulder, looked again into kindly eyes and heard the words: "Remember, lad, never take a hand."

And I never did.

PAUL J. LINSLEY

Wonderful Wyoming . . .

Lynwood, California

Desert:

You've done it! Reached into old Wyoming to bring us South Pass City.

There's a heap of historical interest in the South Pass area — and Fred Stratton could relate most of it. He was born and reared in Lander, near South Pass City, and knows the country well.

Thanks for taking us back to wonderful Wyoming. Please, some more?

CHRIS MALATIN
M. C. WALLING
LOTTIE BEATTIE

Olla in a Yucca Ring . . .

Chula Vista, California

Desert:

Everyone in my family — to our youngest, three-year-old Paul — is a desert fan, and we frequently pack up our camping equipment and head across the mountains for a weekend outing.

Last May we took one of our regular trips into the Pinyon Mountain range a few miles east of Julian. It is a favorite destination of ours; it isn't too far to travel, and the boys have found several arrowheads and many pottery sherds in the vicinity.

On this particular trip, we had wonderful weather, and the morning landscape was magnificent! Yuccas were in full bloom, and the wild bees were having a field day gathering pollen. Returning to camp Sunday, after a pre-breakfast hike, my oldest son and I came upon an unusually fine stand of yuccas. Five plants were grouped in a circle, and their flower stalks were immense. We hurried back to camp to get our cameras, and the rest of the family returned with us to see the yucca group.

My daughter, Lois Ann, wanted a snapshot of me standing next to the flowering plants. Thinking to play a joke on her, I slipped inside the yucca circle while her back was turned.

It was I who was surprised! Inside the clump of yuccas, as good as the day it was placed there more than 100 years ago, lay an Indian olla. A little desert mouse had made his home inside, and it was filled with nut shells and refuse.

We all were thrilled. On the way home, we took turns holding the olla gently on our laps, so that it wouldn't risk injury from a chuckhole or bump.

The olla stands 18 inches high and has a 12-inch diameter. We took it to the San Diego Museum of Man and were told it was between 150 and 200 years old, made by an expert craftsman of the Diegueno tribe.

We found the olla in the area 4.3 miles south of Scissors Crossing on State Highway 78 and approximately 5 miles east. There are any number of grinding stones and pottery fragments in the vicinity.

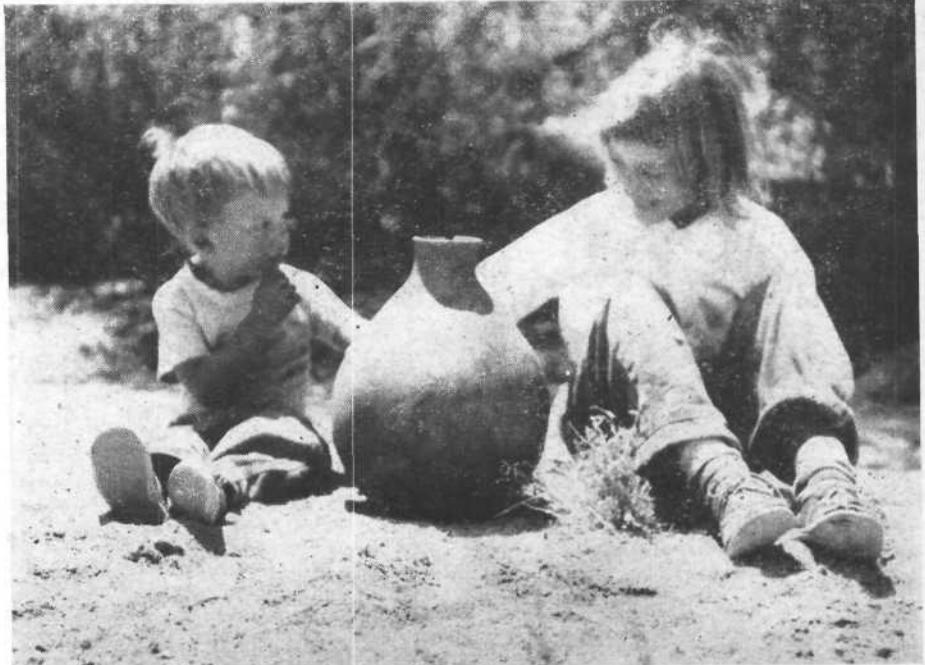
REY BARNHART

Greasewood Confusion . . .

Temple City, California

Desert:

I have made some study of California native shrubs and was puzzled by the editorial in September's *Desert Magazine* in which creosote bush is called "greasewood." I also have noticed creosote thus nicknamed in other *Desert* stories.



Lois Ann and Paul Barnhart with ancient Indian olla found in a clump of yuccas in the Pinyon range east of Earthquake Valley in San Diego County, California.

F. E. McMinn in his *Illustrated Manual of California Shrubs* lists *Adenostoma fasciculatum* as "chamise or greasewood" and calls it "one of the most common shrubs of the California chaparral."

Francis Fultz in *The Elfin Forest* says "greasewood or chamise, *Adenostoma fasciculatum*, forms more than one-third of the elfin forest cover."

This, then, is what I have with some assurance been calling "greasewood." Now I am confused.

ALICE C. SHELDON

Although no botanist I know lists Larrea divaricata as greasewood, to most desert dwellers greasewood it is—and few of them know it by any other name. Edmund Jaeger's L. divaricata is listed in his Desert Wild Flowers only as creosote bush. The plant he lists as greasewood or cat-erpillar greasewood or black greasewood is Sarcobatus vermiculatus, which in California appears only in Death Valley. The botanists are inclined to discourage the use of greasewood as a common name for L. divaricata, preferring that it be called Larrea. But I am afraid they are fighting a losing battle. Common usage on the desert generally takes precedence over the textbooks.

—R.H.

She Remembers Harquahala . . .

Camarillo, California

Desert:

I was much interested in the May issue, with Jay Ransom's story on the old Harquahala Mine in Arizona. We lived there in 1896.

My husband was night man in the cyanide plant at the Harquahala. The tailings were treated with cyanide to recover the gold.

I remember Tom Murphy, the superintendent; Charley Curtis, Sabin Seece, Appleby, Parks, Butler, Molthrup and others. I would like to hear from some of the old crowd, if they are still around.

MRS. E. J. HOWARD



WHAT EVERY MAN WANTS:

This clever Map, Blue-print Reader measures all distances on any flat surface . . . has dozens of uses . . .

Tax and Postpaid \$2.75

MARSHUTZ OPTICAL CO.

531 So. Olive St. Est. 1887 Los Angeles

SAN JUAN and COLORADO RIVER EXPEDITIONS

Enjoy exploration, safe adventure and scenic beauty in the gorgeous canyons of Utah and Arizona. Staunch boats, experienced rivermen. For 1954 summer schedule or charter trips anytime write to—

J. FRANK WRIGHT

MEXICAN HAT EXPEDITIONS

Blanding, Utah

Here and There on the Desert



Add
LONG LASTING BEAUTY
to your pool with protective
INERTOL RAMUCENAMEL!

Looks like—feels like tile. Waterproof, rubber base, true sun-fast colors. Not affected by lime, resistant to heat and cold. Won't crack or peel. Lasts far longer, looks far better than ordinary swimming pool paints.

Write for colorful literature on painting of swimming pools. Include your name, address AND size of your pool. Dept. 1

Inertol
Product
INERTOL CO., INC.
27 SOUTH PARK • SAN FRANCISCO 7



In Death Valley

Enjoy this luxurious desert oasis for rest, quiet, recreation: golf, tennis, riding, swimming, touring, and exploring. Sunny days, cool nights. Excellent highways. For folders and reservations write 5310 Death Valley Hotel Co., Death Valley, Calif. Or phone Furnace Creek Inn at Death Valley. Or call your local travel agencies.

Special discount
Nov. 22 to Dec. 19



1000 TRAVEL SCENES
COLOR SLIDES
FOR YOUR
VACATION RECORD
FREE LIST.
SAMPLES 30c WRITE TODAY
SPECIAL OFFER

To introduce readers of **DESERT** to our 2"x2" **COLOR SLIDES** for home projection, we are offering a **FREE** 20 page catalog and a **FREE** sample color slide. Our color pictures are on many subjects, such as Travel, Science, Nature, National Parks and the southwest. Write today to—

KELLY D. CHODA
BOX 588 STANFORD, CALIF.
We'll send your Free slide and catalog promptly

ARIZONA

Quacks on the Reservation . . .

WINDOW ROCK—Navajo tribesmen are concerned over the alleged practice of fake medicine men who are incorporating plains Indian tribal ceremonies into Navajo religious rites. Some Navajo families have paid money for signs that proved only slightly related to ancient tribal religious practices. Howard Gorman, councilman from Ganado, cited one example of a woman who used ventriloquism in a feather dance to make her audience believe the feathers were dictating a cure for an illness. The tribal council has voted to prosecute makers of bad medicine.—*Phoenix Gazette*.

Seek Park Site Land . . .

PHOENIX—Phoenix city administration officials have made application for title to two parcels of Phoenix Indian School land which have been offered for sale by the federal government. They hope to trade city-owned land on which Luke Air Base is situated for the school property, which would be developed as municipal recreation areas. The two tracts—one 22 acres and the other 11 acres—are located on the south bank of Phoenix's Grand Canal.—*Phoenix Gazette*.

Chapel in Desert Opens . . .

COOLIDGE—Hopes and plans of many years were realized by Rev. Earl M. Ward and Mrs. Ward when the Desert Chapel at the "End of the Trail" opened in October. End of the Trail is the Wards' homestead 12 miles east of Coolidge. They first conceived the idea of a chapel when they came to Arizona in 1930; foundations were laid 12 years ago. Besides the chapel, there are picnic grounds and a dining hall. Although Rev. Mr. Ward is pastor of the Coolidge Community Church, the Desert Chapel project is not identified with any particular denomination. All churches and congregations in the area are invited to make use of its facilities.—*Phoenix Gazette*.

DESERT HOME AND INCOME

10 acres, spring water, with 3 furn. cottages. 3300 ft. elevation, dry healthful climate, neighbors, growing community. Near famous Apple Valley Ranchos. Price \$10,000, terms.

WM. E. MILLER, owner
614 No. Lemon Azusa, California

Rustlers in Hopiland . . .

FLAGSTAFF—Cattle rustlers are active in the Hopi area. Willie Coin, Hopi Indian employed at the Museum of Northern Arizona, reported the rustling centers around the Dennebito area. He urged all cattle buyers and meat buyers to report to the Hopi Agency at Keams Canyon any H6 branded cattle offered to them for sale.—*Coconino Sun*.

Plan Gadsden Purchase Fete . . .

TUCSON—One hundredth anniversary of the Gadsden Purchase, which added most of Southern Arizona and part of New Mexico to the United States, will be celebrated early in spring by four Arizona cities—Tucson, Yuma, Gila Bend and Douglas. Special commemorative stamps will be issued December 15 in Tucson also to mark the centennial. The Gadsden Purchase was negotiated by James Gadsden of South Carolina, a railroad tycoon who envisioned a line to the Pacific Coast through what was then partly Mexican territory.—*Phoenix Gazette*.

"Keep Arizona Green" Pays Off . . .

FLAGSTAFF—The "Keep Arizona Green" forest fire prevention program sponsored by the state's lumbering industry, is paying off in reduction of man-caused fires, according to Freeman Schultz, chairman of the Keep America Green Association. The Keep Green program has been underway in Arizona a little more than two years. During that time, Schultz said, the number of man-caused forest fires has declined materially despite unusually hazardous conditions due to lack of rainfall. The Association has centered its main efforts on an education program, pointing out the necessity for visitors entering the forests to exercise extreme caution with fire at all times.—*Coconino Sun*.

Book on First Arizonans . . .

AJO—Publication of *First Inhabitants of Arizona and the Southwest* by Dr. Byron Cummings marked the 93rd birthday of the patriarch of Southwestern archeologists. The volume is the culmination of more than 50 years of scientific research and field work done by Dr. Cummings while he was professor of archeology at the universities of Utah and Arizona. *First Inhabitants* is illustrated with 100 pages of black and white photographs and 29 color plates. It is the second volume to be published by Dr. Cummings in the past year.—*Ajo Copper News*.

Heads Indian Bureau Survey . . .

WASHINGTON—Arizona banker Walter R. Bimson has been named chairman of a six-man committee to make a survey of proposed reorganization of the U. S. Bureau of Indian Affairs. Announcement of the appointment came from Raymond Davis, an assistant to Secretary of Interior Douglas McKay, who said Bimson was chosen because "we wanted a sound, business-minded look at the bureau." The group, composed of three business executives and three Interior Department administrators, began an intensive study of the Indian Bureau October 15.—*Yuma Daily Sun*.

CALIFORNIA

Canyon Open to Public . . .

PALM SPRINGS—Palm and Andreas Canyons were officially opened to the public for the 1953-54 season October 15 and will be open daily from 9 a.m. to 5 p.m. Many improvements have been completed in the canyons, and several more are underway. The road to Andreas Canyon has been repaired and underbrush has been cleared away to create new recreational areas. The parking area on Hermit's Bench in Palm Canyon is being cleared and improved and trees damaged in the 1938 fire are being removed. Plans for moving the toll gate to the road fork leading to the two canyons have been completed and construction was scheduled to start immediately. Mrs. Maria Trujillo has been hired as gate keeper for the Agua Caliente tribe, on whose reservation the scenic canyon area lies.—*Desert Sun*.

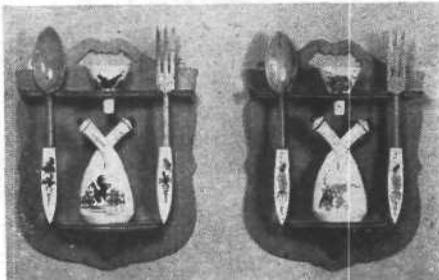
Famed Fireman Retires . . .

DEATH VALLEY—After 55 years of service, R. P. Hinze, 69, last working survivor of Death Valley Scotty's record-breaking Santa Fe train ride from Los Angeles to Chicago in 1905, has retired. Hinze was fireman on the "Coyote Special" on the Raton, New Mexico, to La Junta, Colorado, leg of Scotty's trip. The train held for 30 years its Los Angeles-Chicago record of 44 hours and 54 minutes, broken only with the advent of diesel locomotives.—*Las Vegas Review-Journal*.

Johnny Shoshone Is Dead . . .

FURNACE CREEK—Johnny Shoshone, famed Death Valley Indian, died at Furnace Creek October 21 from effects of a stroke suffered a week earlier. His age was estimated at 90 years. He was well known to visitors at Furnace Creek Inn and Ranch and had been on hand to greet them daily in recent years. He was buried in the old Indian cemetery just below the Inn.—*Los Angeles Times*.

SOUTHWEST SHOPPING GUIDE



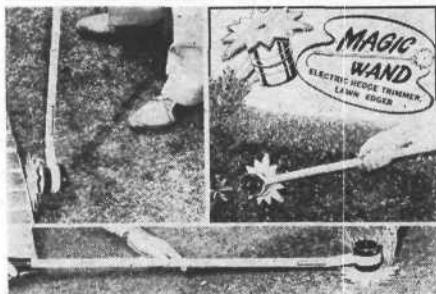
SALAD AID SET & WALL RACK

A most helpful aid to Salad Tossers, such a decorative wall piece! Rack made of imported Beechwood 14" high. Hand decorated ceramic combination Oil & Vinegar Cruet, Ceramic Funnel and Ceramic Handled Imported Beechwood Fork & Spoon. Choice of Rooster or Grape Pattern. An ideal gift—send your gift cards and we mail for you. This entire set priced at only \$4.00 postage and tax included — PAPPY'S COUNTRY STORE — Palm Springs 2, California.



GIFTS WITH A LIFT

Artist Gerard Curtis Delano has faithfully captured the brilliant beauty of the richly romantic desert country of the Southwest in his famed paintings of the Navajo. Now, authentic full-color prints beautifully reproduced from the \$10,000 originals. Mounted in read-to-frame 23"x19" mats, postpaid \$5. No. C.O.D.s please. Shown above, "Navajo Shepherdess." Folder with other gift items free. DELANO STUDIOS, Suite D-2, 31 E. 18th Ave., Denver 2, Colorado.



ELECTRIC LAWN EDGER AND HEDGE CLIPPER

Still the most practical lightweight electric hedge clipper for gardeners, homeowners, caretakers. Will trim any hedge, bush or will prune trees. Ideally suited for edging lawns or trimming under trees, bushes, fences, in and around flower beds, rocks, etc. Does away with all scissor jobs. Guar. Finest const. Home type, \$19.95. Heavy-duty \$27.95. (Plus taxes if any.) See your dealer or write APEX MFG. Laboratories, 964 Mission St., So. Pasadena, California.



DELICACIES FROM CALIFORNIA

Luscious gifts from the heart of California! Three pounds of hand picked walnut-stuffed Calimyrna figs; apricots; peaches; dates — decorated with genuine glaze cherries, pineapple, grapefruit strips or tangerines. Comes in durable plastic Lazy Susan (illustrated) or genuine Redwood Nutbowl with Mallet. We gift-wrap, enclose gift card and mail anywhere in U.S. for only \$5.95. Rush gift list, choice of container, check or M.O. Offer closes Dec. 15. DAVELLS, Dept 60, P.O. Box 1572, Fresno 16, California.

Parks Pending Border Decision . . .

BLYTHE—The fact that there is no boundary line between California and Arizona is complicating the California State Division of Beaches and Parks plan to establish four new state parks along the Colorado River. The two states are separated by the serpentine Colorado River, which continually is cutting new channels for itself. The State Lands Commission has urged that nothing be done about the parks until the recently-created California-Arizona Boundary Commission decides where the division line runs. The parks proposal has met violent opposition from California sportsmen who face loss of a large area of hunting ground if the no-hunting recreational areas are established.—*Los Angeles Times*.

No-Hunting Rule Stands . . .

BORREGO SPRINGS—The State Parks Commission has rejected appeals by sportsmen groups to relax its traditional no-hunting rule in parks. "Parks are wildlife refuges," the commission stated, "where all living things are preserved for the enjoyment of the public through observation. Preservation of the parks attracts millions of visitors annually and allowance of hunting in state parks would create a difficult policing problem." Turned down specifically was a request to permit hunting in the 400,000-acre Anza Desert State Park. The commission did, however, agree to further studies to determine whether the park is too large, as sportsmen argue.—*Los Angeles Times*.

THE DESERT TRADING POST

Classified Advertising in This Section Costs 10c a Word, \$1.50 Minimum Per Issue

BOOKS — MAGAZINES

BOOKS FOUND—Any title! Free worldwide book search service. Any book, new or old, Western Americana a specialty. Lowest price. Send wants today! International Bookfinders, Box 3003-D, Beverly Hills, California.

BOOKS ON GEMS — Rare, old, out-of-print books in many languages. Stamp for list. Willems, Box 1515, Chicago 90.

MAGAZINES—Back issues and out of print books. Cherokee Bookshop, 1656 Cherokee, Hollywood 28, California.

FOR SALE: Desert Magazines. Several complete years. Some single copies. Write for further information. Mrs. Carrie E. Sackriter, P. O. Box 52, Meadow Vista, California.

INDIAN GOODS

RENDEZVOUS FOR COLLECTORS of old Indian Artifacts as well as the finest of new rugs, blankets, jewelry, pottery and ceremonial things. We have a large selection of Rio Grande textiles once owned by former famous collectors, Zane Grey, Irving Cobb, Professor Gay of Yale and others. A hearty welcome to all interested in the Indian and his Arts and Crafts. We buy old Indian collections. Daniels Indian Trading Post, 16299 Foothill Blvd., Fontana, California.

6 PERFECT ANCIENT FLINT arrowheads \$2.00. Fine grooved stone tomahawk \$3.00. Grooved granite war club \$2.00. Perfect peace pipe \$5.00. 6 fine bird arrows \$2.00. 2 flint knives \$1.00, 6" to 7". Perfect spearhead \$7.00. All offers \$20.00. List Free. Lear's, Glenwood, Arkansas.

INDIAN ANTIQUES—The nation's largest exclusive Indian handicraft stock. If it is not Indian handmade I do not handle it. War Bonnets, buckskin beaded garments, Navajo pawn, baskets, Kachinas, hundreds of items too numerous to mention. Pat Read, Indian Trader, Lawrence, Kansas.

INDIAN PICTURES from the Pacific Northwest, Alaska, British Columbia, Washington and Oregon. Coast Indians, mountain, plateau, Fraser River and the Columbia River. Chiefs, squaws, papooses, Indian maids and bucks; fishing, parading, boating, smelting, portraits, full dress, camping and others. All in glossy black and white postcard size. Send \$1.00 for ten pictures and list. State preference. Moise Penning, Klamath, California.

INDIAN BOOKLETS of all types. Write desires or send for sample. Arrow Service, Box 14, Bonner Springs, Kansas.

REAL ESTATE

FOR SALE: 3 very very nice cottages, 3 years old, first class construction. Lot 200x150, fully fenced, well landscaped. Fruit, shade trees, shrubs. Good water, view, splendid location, healthful climate. Live in 1, rent 2. Near Apple Valley. \$22,500.00. Substantial down payment. Ellis Gardens, Box 574, Lucerne Valley, California.

HERE IS YOUR DESERT dream home! Lovely, 2-bedroom homes surrounded by blossoming and fruitful citrus trees. \$12,500. Close to desert and mountains. Write or call. Phone 76-4702, P.O. Box 33, Palm Desert, California. House of Roy, Lois & George Merrill Roy, Realtors.

SKI IN DEATH VALLEY: Did you know you could buy a private piece of property in Death Valley Monument? Fine skiing possibilities. 160 acres. 7000 ft. elevation. Spring water. Marvelous site on summit for lodge. See Badwater and Mt. McKinley from there. Write or phone: MacDonald Realty Company, Realtors, 900 Brundage Lane. Phone 5-2456, Bakersfield, California.

FOR SALE: Mobilgas Station, Garage, Cafe, air conditioned; 5 rental units, going business. Ocotillo Wells, San Diego County, Route 78. Also want partner to promote new town. Ocotillo Wells Inn, Star Route, Borrego Springs, California.

NEW FOUR ROOM HOME: Furnished, Lake Mead, electricity, fishing, hunting, sunshine. Write York, Box 111, Overton, Nevada.

VIEW ACRES: With water works. Desert foothills, 3000 ft. elevation. Dry sunny climate. A wonderful place to live. Battelle. Foothill Road, Lucerne Valley, Calif.

COACHELLA VALLEY: One desert acre near Box Canyon. Has Domestic water. Price \$1000.00 or will trade. Beautiful landscaped home built on a rare sand dune surrounded by ten acres young Ruby Blush grapefruit trees. Price \$47,000. Cattle Ranch, house, well, fences, loading chute, more than 150 acres rich, heavy ground. Owner forced to abandon this place, will sell at less than \$250 per acre. Diversified 200 acres, view of Salton Sea, fine for early vegetables, citrus, grapes. Total price \$90,000. Easy terms. Write Ronald L. Johnson (Realtor), Thermal, California.

UNUSUAL opportunity to acquire your own ranch. 40 acres near Cima, California near Nevada state line. Just \$995 full price. Only \$25 down, \$22 per month. 30 day money back guarantee. Act now! Pon & Co., Box 546, Azusa, California.

BUSINESS OPPORTUNITY

ANYONE HAVING OR WANTING to start Rock Shop—430 pieces made up jewelry plus gem and specimen stuff in abundance. \$2500 cash. You can't go wrong on this one. Bob McCulley, Box 12, Cedarville, California.

RAISE ORCHIDS—at home. Big profits—fascinating. Year 'round any climate. No greenhouse. Instructions, including blooming-size orchid plant, sent for no-risk examination. Free details. Flowerland, 4622-JC Wilshire, Los Angeles 5, Calif.

IMPORT-EXPORT! Opportunity profitable, world-wide, mail-order business from home, without capital, or travel abroad. Established World Trader ships instructions for no-risk examination. Experience unnecessary. Free details. Mellinger. 98C, Los Angeles, California.

WANTED—Partner to prospect in Alaska next summer, share expenses. Prefer single man aged 35 to 45. Write Rene Delval, 386 N. 20th St., Battle Creek, Michigan.

MISCELLANEOUS

PAN GOLD: 75 spots in 25 California counties for placer gold. Township, range, elevation, geological formation. Possible health, happiness, hideaway, hunt, hike, fish, camp. Pan and tweezers pick yellow golden nuggets. \$1.00, Box 42132 Los Angeles, California. Also panning pans \$2.25, \$2.75. Nugget tweezers \$1.00. Leather dust poke \$1.00.

GOLD PROSPECTING CATALOG—Listing, placer and lode maps, steel gold pans, mining and mineral books, books on lost mines, pocket magnifying glasses, mineral collection sets, blueprints of dry washers and wet washers you can build yourself. Catalog and Gold Panning Lesson — Free. Old Prospector, Box 729, Desk 5, Lodi, California.

FOR THE VACATION EXPERIENCE of a lifetime, it's a Desert Adventure. Write for further information and schedule. Gritzner's, Mesa 3, Arizona.

DESERT TEA. One pound one dollar postpaid. Greasewood Greenhouses. Lenwood, Barstow, California.

SCENIC KODACHROME SLIDES: Southwestern Desert country, Indians, National Parks, Mexico. Catalogue 10c. Jack Breed, RFD-4, Georgetown, Mass.

SILVERY DESERT HOLLY PLANTS: One dollar each postpaid. Greasewood Greenhouses, Lenwood, Barstow, Calif.

FIND YOUR OWN beautiful Gold nuggets! It's fun! Beginners' illustrated instruction book! \$1.00. Gold pan, \$2.00. Where to go? Gold placer maps. Southern California, Nevada, Arizona, \$1.00 each state. All three maps \$2.00. Desert Jim, Box 604, Stockton, California.

REQUEST OUR LATEST LIST of irresistible quality minerals, books, magazines, Mineralights, Geiger counters, Rockhound specials and lapidary equipment. Five cents, please. Gritzner's Minerals, Mesa 3, Arizona.

NEW, BEAUTIFUL and Charming—Not just a picture frame but a frame made for your particular picture. Soft shades of natural colored pigments gathered in colorful Arizona and Utah add enchantment to color prints and oils. Work guaranteed. For information write Christy Klohr, P. O. Box 301, Yucaipa, Calif.

GOLD! GOLD! GOLD! Sensational true story of the famous Lost Dutchman Gold Mine and the legends of Superstition Mountain. Illustrated by author with actual paintings made in the haunts of the famous old hidden mine. Mailed postpaid to any address in America. \$1.00. Palo Verde Studio, 2206 W. Jackson, Phoenix, Arizona.

JEEP OWNERS NOTICE. Heavy duty rear bumper for civilian jeeps. Drilled for trailer hitch. Complete with bolts, simple installation. Can be adapted to carry jeep cans. Black. Price \$18.95. Write or drive by. Frank E. Moulton, Jr., 15617 So. Harris Ave., Compton, Calif.

DISCOVER GOLD! How to make simple tests for gold. Complete instruction 25c. Box 52, Culver City, California.

Damages Rise Faster than Sea . . .

INDIO—Suits filed against Imperial Irrigation District and Coachella Valley County Water District, claiming property damage from rising waters of the Salton Sea, totaled \$640,500 with filing of a \$200,000 suit by George H. Crosby. The latest suit seeks \$100,000 for current damages by inundation and an additional \$100,000 for "anticipated" damages. District engineers hold that they are not responsible for rises in the Salton Sea, which is the sump hole of a large enclosed basin.

NEVADA

Few Pine Nuts This Year . . .

AUSTIN—An extremely dry summer has left a poor crop of pine nuts for Nevada gatherers. The cones are spotty and cores only partly filled. However, in a few places, where the trees grow close to a spring or stream, some good nuts are available.—*Reese River Reveille*.

The Desert Trading Post

NEW CALIFORNIA State Topographic Map 64x90", \$2.50. Lost mines of 10 Southwestern states, with map, \$1.75. Sectionized County maps: San Bernardino, Riverside, \$1.00 each. Inyo, Mono, Kern, Los Angeles, 75 cents each. Imperial, San Diego, 50c each. Westwide Maps Co., 114½ W. Third St., Los Angeles, California.

A NEW RAZOR BLADE—of surgical steel, out-performs all. Cheap. Free sample. R. S. Hanson, Box 283, Savanna, Illinois.

GOLDAK MINERAL DETECTOR (\$145 new) and Army Mine Detector. Both \$135. Seghers, 920 Jefferson Ave., Redwood City, California.

TRADERS-DEALERS: Specialized, quick mimeograph service. Send copy, quotation submitted. Prices reasonable. Arrow Service, Box 14, Bonner Springs, Kansas.

RANCHERO Vivid-Colored Coasters. Adds warmth and rainbow-tinted cheer to banquet, dinner and snack tables. Skillfully handcrafted. 1 doz. for \$3.75 ppd. Also, Ranchero matted oval-shaped trays in flattering colors to match. Handwoven. \$3.75 each ppd. Spanish Spur Trading Post, Box 111, Mesilla, New Mexico.

SEND FOR: List of dried floral materials for arrangements, home decorating. Mel Capper, Box 70, Palm Springs, California.

GHOST TOWN ITEMS: Sun-colored glass, amethyst to royal purple; ghost railroads material, tickets; limited odd items from camps of the '60s. Write your interest—Box 64-D, Smith, Nevada.

SPANISH AMOLE ROOTS — Ideal for shampooing hair, leaving it silky, fluffy and soft. For centuries, during Spanish colonial times, chic señoritas used it to bring out the natural gloss, and add charm and romance to their hairdo. Two pounds, including directions—\$3.75. Spanish Spur Trading Post, Box 111, Mesilla, N. M.

Nevada to Ask More Water . . .

CARSON CITY—In its impending intervention in the California-Arizona battle over Colorado River water, Nevada is expected to ask that between 500,000 and 600,000 acre feet of river water be allocated for the state's use. Nevada presently is receiving only 300,000 acre feet annually. Senator George Malone of Nevada has introduced a bill asking 900,000 annual acre feet for his state, but the Nevada Colorado River Commission is not expected to seek that much water. —*Pioche Record*.

Fish Information, Please . . .

LAS VEGAS—Nevada State Fish and Game Commission has issued a request to anglers in the Lake Mead and Lake Mojave area to report all tagged or fin-clipped fish. Cooperation of the sportsmen is needed in a survey to determine growth, movements and survival of game fish. Information wanted includes species, tag number (found on either upper or lower jaw) or missing fin if fin-clipped, total length of fish and location and date caught. Reports should be given to boat landing attendants or mailed to the Nevada Fish and Game Commission, P. O. Box 678, Reno, Nevada. —*Las Vegas Review-Journal*.

Continue Sheep Death Probe . . .

LAS VEGAS — Atomic Energy Commission experts have failed to reach a decision on the exact cause of death of a large number of sheep from a strange malady last spring and are continuing their investigation. The sheep had been grazed near the atomic proving grounds and it has been feared that their deaths may have resulted from atomic radiations. This has not yet been proved or refuted. Tissues from the victims are being studied.

Fish Lake Valley Survey . . .

TONOPAH—Legal title to the land they have been occupying and tilling may be in sight for Fish Lake Valley settlers. A federal survey of the southern end of the valley was begun in October. The settlers are confident that the ground will be classified as suitable for agriculture, since they have already proved in practice that a wide variety of crops can be grown on it. They were served eviction notices last summer after being accused of trespassing on government lands to which E. L. Cord, wealthy rancher, held grazing rights. Unofficial reports indicate the Bureau of Land Management has reversed its previous stand and is willing to grant land entries to the homesteaders. "Before we came here," one settler, a veteran, explained, "the land was barren except for worthless desert brush. It's been a long hard

pull, but we're gradually beginning to produce crops—and if they'll let us alone, the day will come when we will have many acres under cultivation."—*Tonopah Times-Bonanza*.

NEW MEXICO

Indian Tribes Ban Liquor . . .

ALBUQUERQUE—In September, voters of New Mexico approved a proposed amendment to the state constitution doing away with the ban on selling liquor to Indians. But tribal chiefs are not so prone to allow "fire water" on their reservations. "A man should drink good water to live a long time and not other things which make him a maniac wanting to fight," said leaders of Taos Pueblo as they turned thumbs down on selling or possessing liquor on their reservation. "Repeal of the law does not automatically teach people how to drink moderately," added Merle Garcia of Acoma Pueblo as his people, too, banished reservation drinking.—*New Mexican*.

Charges Indian Crisis . . .

SANTA FE — "A sudden end of federal safeguards that protect Indian self-government and ancient homelands can neither enlarge Indian citizenry nor remedy widespread Indian poverty, ill health and ignorance," Oliver La Farge of Santa Fe, president of the Association of American Indians said in flailing Congress for its Indian policy. La Farge asserted the most acute crisis the Indian has ever faced has been created by abrupt revocation of federal protections and services in an attempt to solve the Indian problem. He said this "abandonment of legal responsibility" brought about by a "profound misunderstanding" of the true needs of the Indian, threatens to destroy the tribesmen's rights, property and hopes for progress.

Enjoy the West in Your Own Home!

with beautiful 2x2

KODACHROME SLIDES

These professionally photographed slides truly capture the natural scenic beauty of our Western Wonderland. Their superb detail, composition, and color reproduction are unequalled anywhere in the world, yet are offered to you at lowest prices for slides on Kodachrome film.

Determine the quality of West-View slides *before* purchasing by simply sending for a Western "Slide Tour" (18 slides and text) ON APPROVAL, indicating which Western National Park you would be most interested in seeing. No minimum purchase.

Among the "Slide Tours" currently being offered: Death Valley, Bryce Canyon, Grand Canyon, Zion, Arches Nat'l Monument, Petrified Forest, and Monument Valley.

WRITE TODAY FOR YOUR FIRST APPROVAL SET AND FREE SLIDE CATALOG

WEST-VIEW

1518 Montana Dept. D Santa Monica, Cal.



Navajo Bears Hunted . . .

GALLUP — A Navajo seldom will kill a bear, believing the animal contains the spirit of his dead grandmother. Only in extreme cases, for instance when a bear is molesting his sheep, will the Indian consider killing it. Then he usually asks a white man to do the shooting. If he assists in the removal of the animal and accidentally touches the bear, a special ceremony must be performed to cleanse him. Because of this belief, bears have increased on the reservation, particularly in the Choiska Mountains and the Washington Pass area on the Arizona-New Mexico border. To thin them out, an October bear hunting season was opened on the reservation, New Mexico and Arizona hunters paying \$10 each for special licenses.—*Phoenix Gazette*.

Traders Face Rent Hikes . . .

GALLUP — Operators of trading posts on the Navajo Indian reservation in New Mexico and Arizona may have their rent raised. The Navajo Tribal Council is considering a proposal to increase the rental charged traders from the present one-quarter of one percent per sale to two percent of gross sales. The proposal also would give the tribe title to buildings and improvements on sites occupied by traders and limit the number of trading posts owned by one person or company to three.—*New Mexican*.

WASHINGTON—Felix Cohen, 46, attorney who specialized in representing Indian tribes, died October 19 in Washington. Among his clients were the All-Pueblo Council of New Mexico and the San Carlos, Apache and Hua-

lapai tribes of Arizona. He was the author of *Handbook of Federal Indian Law*, recognized as the standard text in that field.

UTAH

Indians on Easy Street . . .

FORT DUCHESNE — Oil in the last seven years has meant \$4,722,000 to members of the Ute Indian tribe, the Fort Duchesne agency has figured. Nearly half that amount, \$2,156,000 was received by the Utes during fiscal 1953; proceeds to the tribes and individual Indian families on allotted lands totaled \$1,141,000 during fiscal 1952. The Utes had 109,017 acres of their reservations under lease as of October 1. The funds which the Indians have received represent payment of bonus money for right to lease, rentals at \$1.25 an acre annually and 12½ percent royalties from oil production.—*Salt Lake Tribune*.

Need New Arches Entrance . . .

MOAB—Increased travel to Arches National Monument is making imperative construction of a new entrance road. Surveys for the additional entrance were made in 1947 and in 1951, but construction was never authorized. The proposed road would extend from monument headquarters into the "window" section which includes two of the area's most spectacular natural wonders, Turret Arch and Double Arch. Approximately 27,514 visitors registered at the monument between January 1 and September 25, 1953.—*Moab Times-Independent*.

Misses Welfare Checks . . .

GRANTS — A Navajo woman in the Grants area has become uranium rich but pension poor. She collected approximately \$18,000 during the past two years from ore taken from her claim. She complained bitterly, however, when she noticed her relief checks had stopped coming in.

Turkey Industry Revolution . . .

SALT LAKE CITY — America's turkey industry is experiencing its greatest revolution since the broad-breasted bronze became the popular turkey a few years ago, members of the Norbest Turkey Growers' Association heard at their annual convention here. New processing methods are lowering operating costs, making a product that is more acceptable to the consumer, giving a better grade turkey with a better yield at lower processing expense. Herbert Beyers, Norbest general manager, also noted a strong trend toward "oven-ready" turkeys and small "fryer-roaster" turkeys.—*Salt Lake Tribune*.

Asks Dinosaur Protection . . .

WASHINGTON—Director Conrad L. Wirth of the National Park Service has announced he "believes firmly" that the Utah Echo Park Dam should not be built, and he has sent a recommendation to Secretary of Interior Douglas McKay to that effect. Wirth said he was hopeful that a satisfactory alternative dam site could be found, so that Utah could get its reclamation project and still preserve Dinosaur National Monument and open up more of its wonders to the public. The Park Service claims that construction of Echo Park Dam would flood a portion of Dinosaur and possibly open the door for future invasion of federal parks and monuments areas.—*Salt Lake Tribune*.

Porcupines Threaten Trees . . .

CEDAR CITY—Utah's porcupine population is again getting out of hand. The quilled rodents are being seen in greater numbers than ever before along the lowlands and in the forested areas of the state. Fish and Game Department officials and other land management agencies urge hunters to destroy the timber and browse damagers, pointing out that, contrary to popular belief, they are not protected by game laws. An over-population of porcupines means serious damage to future timber supplies and range lands. One of the rodents can ruin many young trees, circling the main trunk and cutting the bark.—*Iron County Record*.

Water Flows in Tunnel . . .

SALT LAKE CITY — Bringing water from the Colorado Basin into Salt Lake Valley, the \$9 million Duchesne Tunnel was opened late in October. The six-mile tunnel brings water from the North Fork of the Duchesne River into Provo River which carries it into Deer Creek Reservoir, Salt Lake City's greatest reserve supply. The new facility assures Salt Lake of an adequate water supply, even during long dry spells. Sufficient water will be allowed to continue down the natural course of the North Fork past the diversion point to support fish in the stream.—*Salt Lake Tribune*.

White-on-Green for Utah Cars . . .

SALT LAKE CITY — Production has started in the new Utah State Prison plant of Utah's white-on-green 1954 automobile license plates. Except for color, the plates are similar to their 1953 predecessors, except that the state and year are now below the numbers instead of above. The new plant at Point-of-the-Mountain has a capacity of 2000 sets a day.—*Salt Lake Tribune*.

Looking for a PUBLISHER?

Do you have a book-length manuscript you would like to have published? Learn about our unusual plan whereby your book can be published, promoted and distributed on a professional basis. We consider all types of work—fiction, biography, poetry, scholarly and religious books, etc. New authors welcome. For more information, write for valuable booklet D. It's free.

VANTAGE PRESS, INC.
6356 Hollywood Blvd., Hollywood 28, Calif.
Main Office: New York 1, N. Y.

"EVERYTHING FOR THE HIKER"

SLEEPING BAGS
AIR MATTRESSES
SMALL TENTS

and many other items

VAN DEGRIFT'S HIKE HUT

717 West Seventh Street
LOS ANGELES 14, CALIFORNIA

MINES and MINING

Grand Junction, Colorado . . .

Domestic uranium mining is growing faster than mills can handle the ore, according to Sheldon P. Wimpfen, manager of the Atomic Energy Commission's operations office at Grand Junction. More than 500 mining properties currently are shipping uranium ore to market in the western part of the United States alone. About 475 of these are private operations, Wimpfen said, and the remainder are operated under lease from the AEC. A recent survey conducted by the AEC, Wimpfen added, showed that uranium mining profits range from \$5 to \$29 a ton, but that uranium mining costs range from \$8 to \$28 a ton, making continued bonus payment plans necessary if high production of the atomic material is to be continued.—*San Juan Record*.

Panguitch, Utah . . .

Irven Bates of Tonopah, Nevada, has leased the extensive deposits of diatomaceous earth filed on by a group of ten men from Panguitch and Hatch. Bates plans immediate exploration to determine commercial possibilities of the deposits, located near Hillside, between Hatch and Panguitch.—*Garfield County News*.

San Manuel, Arizona . . .

A new railroad is expected to be in operation by 1955 to serve the San Manuel copper mining development in Southern Arizona. Frank Sarver, Magma Copper Company general manager, said the San Manuel Arizona Railroad will extend 23 miles from Hayden to the mine site near Tiger. It will branch off the Arizona Eastern line owned by Southern Pacific, following the San Pedro River to Mammoth. The town of San Manuel is being built around the huge copper mining development. The first commercial stores in the community were scheduled to open November 1.—*Yuma Daily Sun*.

Moab, Utah . . .

Big Indian Mines, Inc., has announced the proving by diamond drilling operations of the ore body first discovered on its Maimie Claim. Twenty holes have been dug, all showing ore, with varying thickness and composite assays running from .13 to .22 uranium oxide. The average depth of ore from the surface is 300 feet, and approximately 375,000 tons of commercial ore has been outlined.—*Moab Times-Independent*.

Albuquerque, New Mexico . . .

Discovery of another source of columbite, used for tips on mine drilling bits, has been reported near Petaca in Rio Arriba County, New Mexico. A new firm, Tungsten Consolidated, began mining operations in June and has shipped several thousand pounds of the ore to Pennsylvania for processing.—*Mining Record*.

Nevada City, California . . .

Ireland Yuba Mines, Inc., one of the oldest gold producers in the Alleghany area, is expected to return to production soon. The mine, which has a history dating back to 1860, was closed at the beginning of World War II. It has produced more than \$350,000 in gold. Virgil Church, superintendent, reports new mine rails, pipe and a compressor were moved in recently, and the properties, located two miles east of Alleghany, soon would be completely electrified.—*Battle Mountain Scout*.

Brawley, California . . .

Lloyd Pitchford and Grover Burgoyne of Brawley have located a large deposit of high grade amphibole asbestos and plan immediate development. The property is located between Niland and Mecca north of Brawley.

Austin, Nevada . . .

The Kingston gold-silver mine in Kingston Canyon and its new mill, both inactive for two years, will be put into operation again. Gordon Sheckler and associates have taken a lease on the property.—*Battle Mountain Scout*.

Tonopah, Nevada . . .

Summit King's quest for ore at the 550-foot level paid off in October when the 100-foot diagonal crosscut burst through the footwall of what Superintendent Frank Kennicott predicts will prove "a good sized vein." Running 100 parts silver to one part gold, the vein is a continuation of the one hit earlier this year at the 300-foot level. The strike is in virgin territory, an encouraging sign to miners.—*Tonopah Times-Bonanza*.

Monticello, Utah . . .

More than 17,000 uranium mining claims have been filed to date in San Juan County, according to Mrs. Arvilla Warren, county clerk. The 17,000 claims would cover roughly two-thirds of a million acres of land.—*Moab Times-Independent*.

Monticello, Utah . . .

The Atomic Energy Commission has extended to March 31, 1962, the expiration date of the guaranteed minimum price schedule for Colorado Plateau uranium ores and to February 28, 1957, the time during which initial production of uranium ore from new mines will be eligible for bonus payments. Bonuses are made to new mining properties on each pound of uranium oxide in acceptable ores delivered to mills or commission buying stations up to 10,000 pounds. The price schedule provides guaranteed minimum base prices for the uranium oxide content of carnotite-type and roscoelite-type ores of the Colorado Plateau area. The time extensions were made to continue encouragement of domestic uranium production.—*San Juan Record*.

Shiprock, New Mexico . . .

Thomas Clani and John M. Yazzi, Navajo Indians of the Shiprock area, have shipped sufficient uranium ore to win the Atomic Energy Commission bonus of \$26,000 for bringing in a high grade tonnage producer. Their claim is in Monument Valley, Arizona.—*Moab Times-Independent*.

Ely, Nevada . . .

Kennecott Copper Corporation is pressing development of the Veteran copper deposit near the old townsite of Ruth, with full production scheduled in 1954. The ore body is 600 feet wide and 1400 feet long, located in the old Veteran mine, idle since 1914. Operations will be conducted by the open-pit method.—*Mining Record*.

Gabbs, Nevada . . .

Standard Slag Company, owner of the Stokes iron mine in the Gabbs district, now is developing the property to determine the extent of the ore body. The ore is high grade. The mine has been in operation since March, 1950, presently under the general management of R. O. Jones of Gabbs. F. W. Reinmiller is superintendent.—*California Mining Journal*.

Winnemucca, Nevada . . .

Electric pumping equipment is being installed at the Nevada Uranium Company mine in Rocky Canyon, high in the Humboldt range. Ed Bottomley, manager and treasurer of Nevada Uranium, announced installations will include a 15-kilowatt generator and a 10-horsepower centrifugal pump. The new equipment is expected to overcome a flooding condition that has brought production to a standstill.—*Territorial Enterprise*.

Covington DIAMOND BLADES

Treat yourself to the best.



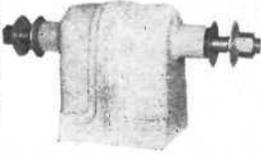
	Heavy-Duty Super-Chgd.	Super-Charged	Standard Charged
6"	\$	\$ 9.03	\$ 7.98
8"		11.50	10.44
10"		15.23	14.02
12"		22.26	18.53
14"		29.40	25.67
16"		32.76	29.08
18"	65.60	43.20	36.12
20"	77.95	51.97	39.84
24"	93.24	65.73	51.40
30"	149.62	125.73	State
36"	226.06	188.05	Arbor

sales tax in California. Size

Allow for Postage and Insurance

Covington Ball Bearing Grinder

and shields are furnished in 4 sizes and price ranges to suit your requirements. Water and grit proof.



COVINGTON 8" TRIM SAW



and motor are compact and do not splash. Save blades and clothing with this saw.

BUILD YOUR OWN LAP

and SAVE with a COVINGTON 12" or 16" Lap Kit. We furnish everything you need. Send for free catalog.



COVINGTON Multi-Feature 16" Lap Unit Does everything for you.

COVINGTON 12" 14" or 16" Power Feed Diamond Saws

SAVE BLADES

Send for New Catalog, IT'S FREE

COVINGTON LAPIDARY SUPPLY
Redlands, California

GEMS and MINERALS

GOOD CAMPING FACILITIES FOR 1954 CONVENTION GOERS

"This will be a 'camping' show," committee members of Coachella Valley Mineral Society and San Geronio Mineral and Gem Society promise visitors to the 1954 convention of the California Federation of Mineralogical Societies, to be held in Indio, California, March 26 to 28. The two Southern California societies will be co-hosts.

More than 25 acres of free camping area have been reserved at the Riverside National Date Festival fairgrounds, where the convention will be held. Campsites will be available under date palms and within easy walking distance of exhibit halls. Camping reservations, indicating number of people and space required, should be made with Clifton Carney, P.O. Box 411, Desert Center, California. Motels and hotels are handy for those who do not wish to camp.

Entertainment will include a pit barbecue instead of the customary banquet, exhibits, campfire programs, movies and seminars. Field trips will be conducted to the Hauser Beds for geodes, Coon Hollow for fire agate, Crystal Hill for quartz crystals and other localities.

SECOND ROCKHOUND POWWOW AT BOULDER BEACH PLANNED

Clark County Gem Collectors of Las Vegas, Nevada, are making plans for another four-day rockhound powwow at Boulder Beach the latter part of April, 1954. Twelve hundred rock fanciers from all over the country registered for the first powwow, held two years ago, and the Clark County hosts hope to have 1500 visitors next spring. A new field will be explored.

WHOLESALE, IMPORTERS AND RETAILERS

of fine mineral specimens, gems and gem materials. Represent Highland Park Mfg. Co. and other leading manufacturers. Wholesale distributor for The Carborundum Co. We maintain the most complete stock of mineral specimens, gems and gem materials in the country, and at the most reasonable prices. Visitors always welcome. Open week days 9 to 5.

SOUTHERN GEM & MINERAL CO.
2307 North Mesa (Highways 80 & 85)
Phone 2-2160 El Paso, Texas

OHIO CLUB ENTERS SECOND YEAR WITH NEW OFFICERS

Its first year completed under the leadership of President R. W. Downey, the Miami Valley Mineral and Gem Club, Fairborn, Ohio, entered its second year of activity with a new slate of officers. Robert J. Wenning of Dayton is president; William C. Downey of Springfield, vice-president; Mrs. James W. Riley of Springfield, secretary; Mrs. Joe Garner of Dayton, assistant secretary; Mrs. Harold St. John of Fairborn, treasurer, and Joe Garner, curator and display chairman. The club draws members from Columbus, Springfield, Piqua, Dayton, Cincinnati and Fairborn. Mrs. Riley reports plans for the year include field trips to Flint Ridge for chalcidony and jaspagate and to Clay Center for calcite, celestite and fluorite crystals.

GEMOLOGIST CONDUCTS CLASS FOR COLORADO ROCKHOUNDS

Richard M. Pearl, certified gemologist, is conducting a class in "Precious Stones in Colorado" for Colorado rockhounds. The class is being sponsored by Colorado Mineral Society and coordinated by its president, James Hurlbut. The eight-session series of lectures and demonstrations will cover physical properties of gem stones, tests for physical properties, occurrence and economic importance of gem stones and cutting and mounting stones into jewelry. First class was October 5.

NEW OFFICERS ELECTED BY ORANGE COAST SOCIETY

At the first fall meeting of Orange Coast Mineral and Lapidary Society, Costa Mesa, California, officers were elected to serve during the coming year. Harold St. Johns is president; Don Eggleston, vice-president; Mildred Snokelburg, secretary; and Jennie Silkwood, treasurer. C. A. Terry was speaker at the election meeting. His topic was "Micromounts."

Two speakers were on the opening fall program of Orange Belt Mineralogical Society, San Bernardino, California. William Smith of Riverside told of his summer collecting trip through Washington and Oregon. He showed one "bragging rock" from each stop on his itinerary. Second speaker was Col. W. J. Mills, owner of one of the most extensive carnelian fire agate collections and an authority on collecting, polishing and displaying fire agate. He emphasized the importance of keeping the stone cool while working it, to keep the fire.

ALTA INDUSTRIES

Mailing Address:
Box 19, Laveen Stage, Phoenix, Arizona
Location—7006 So. 19th Avenue

LAPIDARY EQUIPMENT

Lapidary Equipment Manufacture & Design
16-18 inch Power Feed Slabbing Saw
Belt Sanders & Trim Saws
(Send Postal for free literature)

LAPIDARY SUPPLIES — MINERALIGHTS

Send for FREE price list

CALIFORNIA HOUSE OF ROCKS

16208 S. Clark Ave., Bellflower, California
Open 10 a.m. to 7 p.m. Wed. till 9 p.m.
Closed Saturday and Sunday

Here Are The Gifts You've Been Looking For!

Petrified Wood, Moss Agate, Chrysocolla
Turquoise, Jade and Jasper Jewelry

HAND MADE IN STERLING SILVER

Bracelets, Rings, Necklaces, Earrings
and Brooches

SPECIALLY SELECTED STONES WITH
CHOICE COLORS AND PICTURES

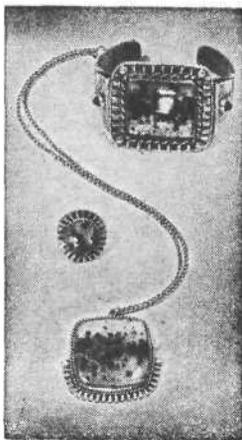
Write for Folder With Prices

ELLIOTT'S GEM SHOP

235 East Seaside Blvd. LONG BEACH 2, CALIF.

Across from West End of Municipal
Auditorium Grounds

Hours 10 A.M. to 9 P.M. Daily Except Monday



Strike it Rich!

Here's Real Fun! Find Strategic Minerals, Hidden Wealth with Ultra-Violet MINERALIGHT!

MINERALIGHT instantly locates, identifies vital minerals, saves hours of fruitless search. Invaluable for prospectors, miners, engineers and hobbyists, MINERALIGHT helps you find tungsten, uranium, mercury, zirconium and many other minerals now being sought for use in vital preparedness work. **ULTRA-VIOLET FLUORESCENCE STUDY IS AN INTERESTING AND PLEASANT HOBBY!** Even through you may not be interested professionally, you'll still find a great deal of fun and happiness when you make ultra-violet study and mineral sample collection your hobby.



MINERALIGHT SL-2537
All purpose lamp, operates on 110V AC, weighs only 1 lb. \$39.50



MODEL TH
Has bulb rated at 1000-2000 hours of use with 90-day guarantee. Includes a transformer with switch for continuous high efficiency. Price \$19.50. Model H is similar, same bulb, except has resistance cord instead of transformer. Approximately 1/2 the intensity of the TH. \$12.50



FIELD CASE No. 404
Contains special battery circuit for MINERALIGHT SL-2537 or SL-3660. Case holds lamp, batteries, built-in daylight viewer. \$19.50 (Plus Bats. \$5.00) Complete: SL-2537, 404 Case and 2 Batteries \$64.00.



MODEL M-12
Completely self-contained, battery operated, weighs only 3 1/4 lbs. \$39.75 plus battery (90¢)



MODEL SL-3660-LONG WAVE
110V AC unit. (Can be used as a portable unit for field work in conjunction with Carrying Case Nos. 303, 404, or 505.) Weight 1 lb. \$29.50



DISPLAY & EXHIBIT UNIT MODEL XX-15 LONG WAVE
A high quality 110V AC lamp giving excellent intensity and coverage for mineral sample exhibits and displays. Price \$37.75. Other multiple-tube models available.

Some materials fluoresce to short wave lengths and some to long wave lengths. Others will react to both wave lengths but with different color responses. Although practically all commercially important minerals (the ones that have real monetary value) are activated by short wave, many collectors specialize in the more unusual long wave minerals.

Ultra-Violet MINERALIGHT opens up new, strange worlds—gorgeous colors and reactions you never knew existed. Make this exciting hobby YOUR hobby!

LEARN TO RECOGNIZE VALUABLE MINERALS
When you use Ultra-Violet's MINERALIGHT, you want to be able to recognize the patterns and colors that samples fluoresce. Mineral sets, packaged in varied assortments of the various minerals you will encounter, are valuable aids. Ultra-Violet MINERALIGHT rays show them in all their exciting colors—permit you to recognize what you find in the field. Mineral sets are available at only \$2.50 per set of 10 specimens, carefully packaged in foam plastic.

See MINERALIGHT in Action! Your Dealer Has It!

Here is a partial list of the more than 500 Ultra-Violet MINERALIGHT dealers ready to serve you—coast to coast.

- | | | | | | |
|---|---|---|--|--|---|
| <p>ALASKA
Mineral Equip. Sales & Research
Box 1442, Fairbanks</p> <p>ARIZONA
Gritzner's Minerals
135 N. Sirrine St., Mesa
Pratt-Gilbert Hardware Co.
701 S. 7th St., Phoenix
Sam'l Hill Hardware Co.
142 S. Montezuma St., Prescott
Randolph Oak Creek Canyon Mineral Shop, Sedona
Mission Curlo Mart
4400 Mission Road, Tucson
Hazel E. Wright
30 Cochise Row, Warren</p> <p>ARKANSAS
House of Hobbies, Rt. 4
Hot Springs Nat'l. Park</p> <p>CALIFORNIA
Berkeley
Minerals Unlimited
1724 University Ave.
Big Pine
Bedell's Mercantile
118 N. Main St.
Bishop
Bishop Hardware & Sup. Co.
336 N. Main St.
Buena Park
Ghost Town Rock & Book Shop
Knott's Berry Farm
Canoga Park
Warren C. Bieber
7229 Remmet Ave.
Castro Valley
The Sterling Shop,
8679 Castro Valley Blvd.
Compton
Compton Rock Shop
1409 S. Long Beach Blvd.
Fresno
Pacific Mill & Mine Sup. Co.
530 Van Ness Ave.
Glendale
Pascoes
1414 W. Glenoaks
Lodi
Armstrong's
Rt. 2, Box 516
Long Beach
Elliott Gem & Mineral Shop
235 E. Seaside Blvd.
Gordon's Gem & Mineral Supplies
1850 E. Pac. Coast Hwy.
Mohave Sales, Inc.
1768 Atlantic Ave.</p> | <p>Los Angeles
Black Light Corp. of Los Angeles
5403 Santa Monica Blvd.
The Bradleys
4639 Crenshaw Blvd.
Engineers Syndicate, Ltd.
5011 Hollywood Blvd.
A. V. Herr Laboratory
5176 Hollywood Blvd.
Jasper Junction Lapidary
1112 Neola St.
J. J. Jewelecraft
2732 Colorado Blvd.
Mine & Mill Machinery Co.
310 E. 3rd St.
Shannon Luminous Materials Co.
7356 Sta. Monica Blvd.
Napa
Brandt's Rock & Gem Shop
1034-A Sonoma Hwy
Needles
McShan's Gem Shop
Highway 66
Orange Cove
Wm. M. Clingan.
Clingan's Jet.
Highway 180
Palo Alto
Fisher Research Labor., Inc.
1961 University Ave.
Pasadena
Grieger's
1633 E. Walnut St.
Paso Robles
Coast Counties Pump & Elec. Co.
1240 1/2 Park St.
Placerville
Enterprises Unlimited
Rt. 3, Box 143
Randsburg & Ridgecrest
W. A. Hankammer
Redlands
Covington Lapidary Engineering
1st & Hiway 99
Riverside
Hurrle's Gem Shop
3825 7th St.
Sacramento
MacClanahan & Son
3461 2nd Ave.
Ivan Ozden
520 56th St.
San Bernardino
Greenwood's
455 Third St.
San Carlos
Lloyd Underwood.
1027 E. San Carlos Ave.
San Diego
Gem Arts. 4286 Marlborough</p> | <p>Plummer's Minerals
4720 Point Loma Ave.
Superior Gems & Minerals
4665 Park Blvd.
San Francisco
Leo Kaufmann
729 Harrison St.
San Gabriel
Rainbow Gem Company
546 W. Mission Dr.
Sequel
Thompson's Mineral Studio
P.O. Box 124
South Pasadena
Dunham Economy Concentrator Co.
853 Mission St.
COLORADO
The Gem Exchange
Gem Village, Bayfield
Black Light Corp. of Colorado
209 Johnson Bldg., Denver
Riley's Reproduction
1540 Glenarm Place, Denver
Shelden's Minerals Agency
307 14th St., Denver
Eckert Mineral Research
112 E. Main St., Florence
Palmer's Lapidary & Fixit Shop
1503 N. College, Ft. Collins
Bernstein Brothers
104 N. Mechanic St., Pueblo
D. C.—Washington
Gem Lapidary
2006 Florida Ave. N.W., Washington, D.C.
FLORIDA
Rock & Shell Shop
2033 Red Road
Coral Gables
GEORGIA
Owen Hoffman
N. Alexander Ave., Washington
IDAHO
The Sawtooth Company
1115 Grove St., Boise
S. V. Higley
1718 Albion Ave., Burley
ILLINOIS
Tom Roberts Rock Shop
1006 S. Michigan Ave., Chicago
Ret R. Latta Lapidary Equip.
254 Pearl Ave., Loves Park
KENTUCKY
Ben E. Clement
Marion
Ancient Buried City
Wickliffe</p> | <p>LOUISIANA
Riley's
423 Crockett St., Shreveport
MASSACHUSETTS
Schortmann's Minerals
6 McKinley Ave., Easthampton
Quabbin Book House
Ware
MICHIGAN
Int'l. Stamp Bureau
125 W. Adams Ave., Detroit
MINNESOTA
Nokomis Lapidary & Watch Shop
3840 26th Ave. So., Minneapolis
MISSOURI
Asterley Ozark Shop
U.S. Hwy 61-67, De Soto
Crayen's Diamond Shop Co.
2008 Bryant Bldg., Kansas City
Cy Miller
110 E. 13th St., Kansas City
MONTANA
Yellowstone Agate Shop
Box 4, Hiway 89, Livingston
NEBRASKA
Hastings Typewriter Co.
518 W. 3rd St., Hastings
NEVADA
Toiyabe Supply Company
Gabbis
Woodfords Cash Store,
Woodfords, Calif.,
P.O. Gardnerville, Nev.
Arthur C. Terrill
15 Water St., Henderson
Rock Hollow,
Last Frontier Village
Las Vegas
Commercial Hardware Co.
500 E. 4th St., Reno
Nevada Gem Shop
335 East 4th, Reno
Nevada Mineral Laboratories
336 Morrill Ave., Reno
Tonopah Studio
P.O. Box 331, Tonopah
NEW JERSEY
Para Laboratory Sup. Co.
221 N. Hermitage Ave., Trenton
Westfield Lapidary & Sup. Co.
309 Hyslip Ave., Westfield</p> | <p>NEW MEXICO
New Mexico Minerals
11003 Central N.E., Albuquerque
Adobe Crafters
Rt. 2, Box 341, Santa Fe
NEW YORK
New York Laboratory Sup. Co., Inc.
78 Varick St., New York City
The Radiac Co., Inc.
489 5th Ave., New York City
Standard Scientific Sup. Corp.
34 W. 4th St., New York City
OHIO
Akron Lapidary Co.
1095 Chalker St., Akron
OREGON
The Rock Market
R. 1, Box 225, Eagle Point
The House of Guns
111 Washington St., Garibaldi
Hodge Podge Agate & Supply Shop
322 Hiway 99 S., Grants Pass
Wrightway Gemcrafters
P.O. Box 4, Hauser
Smith's Fluoreseents
Rm. 311-220 S.W. Alder, Portland
Dorothy's Gift Shop
4639 N. Stephens, Roseburg
White's Furniture
1218 M St., Sweet Home
PENNSYLVANIA
Lost Cave Mineral Shop
Lost Cave, Hellertown
TENNESSEE
Technical Products Company
19 N. Dunlap, Memphis
TEXAS
D & B Engineering Co., Inc.
1510 S. 14th St., Abilene
Odom's
Star Rt A, Box 32-C, Austin</p> | <p>Nixon Blue Print Co.
Wilson Tower,
Corpus Christi
Greene Brothers, Inc.
1812 Griffin, Dallas
Don A. Carpenter Co.
P.O. Box 1741, El Paso
Bell Reproduction Company
407 Throckmorton, Fort Worth
Ridgway's
615 Caroline St., Houston
Panther City Office Sup. Co.
315 N. Colorado, Midland
Farquhar's Rocks & Minerals
134 Hollenbeck, San Antonio
East Texas Photocopy Co.
308 N. Broadway St., Tyler
UTAH
Dr. H. T. Plumb
2400 Sunnyside Ave., Salt Lake City
WASHINGTON
Fulmer's Agate Shop
5212 Rainier Ave., Seattle
Prospector's Equipment Co.
2022 Third Ave., Seattle
C. M. Fassett Co.,
W. 7 Trent Ave., Spokane
Tacoma Lapidary Sup. Co.
631 St. Helens Ave., Tacoma
WISCONSIN
C-C Distributing Company
3104 W. Vliet St., Milwaukee
The House of Hobbies
721 W. Wisconsin, Milwaukee
The Stones Throw Rock Shop
221 S. Main St., Walworth
CANADA
Riley's Reproductions Ltd.
630 8th Ave. W., Calgary, Alta.
Milburns Gem Shop
1605 Trans-Canada Hwy., New Westminster, B.C.
Cave & Company Ltd.
567 Hornby St., Vancouver, B.C.
Sharpe Instruments Ltd.
6038 Yonge St., Newtonbrook, Toronto, Ont.</p> |
|---|---|---|--|--|---|



ULTRA-VIOLET PRODUCTS, INC.
145 Pasadena Ave., South Pasadena, Calif.

GEM MART

ADVERTISING RATE
10c a word . . . Minimum \$1.50

ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 Sutter, Modesto, California.

OPALS AND SAPPHIRES rough, direct from Australia. Cutting opal, 1 ounce \$5, \$10, \$20, \$30 and \$60. Blue sapphires, 1 ounce \$10, \$30, and \$60. Star sapphires, 12 stones \$10, \$20, and \$30, etc. Post free and insured. Send international money order, bank draft. Australian Gem Trading Co., 49 Elizabeth St., Melbourne, Australia. Free list of all Australian stones rough and cut, 16 pp.

GET YOUR COPY of "A Mineral Collector's Guide to Wonderful Wyoming." 25c. Gritzner's, Mesa 3, Arizona.

EXCHANGE VALUABLE STONES, plants and seeds for rough or polished stones. E. G. Benedict, Horticulturist, P.O. Box 128, V.A. Branch, Los Angeles 25, California.

ROCK SHOP: 24226 Hwy. 60, Sunnymead, California. Green glass with white balls 50c lb. Montana Agate 50c and \$1.00 lb. Jaspers 25c lb. Oregon Obsidian 25c lb.

ROCK COLLECTORS — Attention! The Trailer Rock Store is back. Same place, between Palm Springs and Palm Desert. Crystallized minerals my specialty. The Rockologist (Chuckawalla Slim), Box 181, Cathedral City, California.

FAIRBURN AGATES, field run \$2.00 lb. No. 1 grade priced individually \$3.50 to \$25.00. Sent on approval if requested. Also Teepee Canyon banded agates rough 60c lb. Slabs \$1.50 to \$5.00. The Rock House, Custer, South Dakota.

Pinon Incense . . .

Bring the delightful fragrance of the Pinyon Forest into your home or office. The burner is a miniature model of the outdoor baking ovens used by prehistoric Indians, and still in use in New Mexico pueblos. When the little cones of genuine pinyon pine are burned in this tiny oven the aroma is a breath of the outdoor Southwest.

Kills kitchen and bathroom odors and removes the smell of stale tobacco. Pueblo Indians burn pinyon for nasal and bronchial ailments.

Burner and 15 cones . . . \$1.50
Burner and 54 cones . . . 2.70
Extra cones, 36 for . . . 1.25

Postpaid to You

DESERT CRAFTS SHOP

Palm Desert, California

WANTED: Chalk grade Turquoise. Write complete details as to quality and price. P.O. Box 5171, Phoenix, Arizona.

PETRIFIED OYSTER SHELLS — Yuha Badlands, California, \$1.00 each. Apache tears, Superior, Arizona, small to walnut size, \$2.00 per pint. Postpaid, Thelma Villar, 124 S. Santa Anita, San Gabriel, California.

IRONWOOD ROCK SHOP: Now open at Nicholl's Warm Springs, 7 miles west of Blythe on Highway 60-70. The Beleals.

CHRISTMAS?—3 emeralds (genuine Urul Mountains). Cabochon cut, approximately 6 carats total. 1 matched set only. \$25 postpaid, insured. Frey Mineral Enterprises, Box 7, Richvale, California.

BEAUTIFUL ARAGONITE specimens — Banded \$2.00, \$5.00 each. Ask for list of many new types of rocks etc. now in stock. Jack The Rockhound, P. O. Box 245, Carbondale, Colorado.

ROCKHOUND PARADISE. Stop and see our display. Agates rough and slabs. No junk. Minerals, fluorescent minerals. Satisfaction guaranteed. Write for prices. P. G. Nichols, Prop., Sun Valley Trailer Park, 3922 No. Oracle Road, Tucson, Arizona.

WIRE GOLD on green Andesite. Olinghouse, Nevada. Inch specimens \$3 and \$5 each. Others \$10 and \$12. Specify quartz or Andesite matrix. Postpaid. Frey Minerals, Box 7, Richvale, Calif.

ROCK CORRAL—Stop at our Rock Corral and select your own material from one of the largest Rock and Mineral collections in the Southwest. Mail orders promptly filled, satisfaction guaranteed. 8 lbs. of selected top grade cutting material sent postpaid for \$6.00. 50 sq. inches of selected gemstone slabs for \$10 postpaid. Try our approval plan. We will send you postpaid 50 square inches of selected gemstone slabs, you keep all for \$10 or return part with 25c per inch for what you keep. We carry Ultra-Violet Mineralights, Geiger Counters, Lapidary Machinery, Polishing Powders, Crystolon Grits, sanding cloth, Templates, Cement, Dopping Wax, Books, etc. Write for price list. San Fernando Valley Rock Shop, 6329 Lindley Ave., Reseda, California.

Agate Jewelry Wholesale

Rings — Pendants — Tie Chains
Brooches — Ear Rings
Bracelets — Matched Sets
— Send stamp for price list No. 1 —

Blank Mountings

Rings — Ear Wires — Tie Chains
Cuff Links — Neck Chains
Bezel — Cleives — Shanks
Solder — Findings
— Send stamp for price list No. 2 —

O. R. JUNKINS & SON

440 N.W. Beach St.
NEWPORT, OREGON

GENUINE TURQUOISE: Natural color, blue and bluish green, cut and polished cabochons—25 carats (5 to 10 stones according to size) \$3.50 including tax, postpaid in U.S.A. Package 50 carats (10 to 20 cabochons) \$6.15 including tax, postpaid in U.S.A. Elliott Gem & Mineral Shop, 235 E. Seaside Blvd., Long Beach 2, California.

GRITZNER'S GEODE—"The friendly little mineral publication" is only \$1.00 a year. Gritzner's, Mesa 3, Arizona.

RADIOACTIVE ORE Collection: 6 wonderful different specimens in neat Redwood chest, \$2.00. Pretty Gold nugget, \$1.00, four nuggets, \$2.00, choice collection 12 nuggets, \$5.00. Uranium Prospector, Box 604, Stockton, Calif.

NEW MEXICO'S finest red Calcite for sale. Fluoresces strawberry red under short wave lamp. Rattlesnake Calcite, fluoresces pink and phosphoresces blue under short wave lamp. \$1.20 lb. postpaid or \$75.00 per 100 lbs., freight paid. Satisfaction guaranteed or money refunded. Tom Ellis, Rt. 2, Box 492, Waco, Texas.

PONY BUTTE Thundereggs from the original Friday Ranch in Central Oregon. \$1.25 per pound and 5 pounds for \$5.00. Hastings Typewriter Co., Hastings, Neb.

BOOKS: Beginners to advanced. Gemology, mineralogy, geology, etc., Write today for free price list. Gem Finders, 859 North Ramona, Hawthorne, California.

FOR SALE: Beautiful purple petrified wood with uranium, pyrolusite, manganese. Nice sample \$1.00. Postage. Maggie Baker, Cameron, Arizona.

McSHAN'S GEM SHOP—open part time, or find us by directions on door. Cholla cactus wood a specialty, write for prices. 1 mile west on U. S. 66. Needles, California, Box 22.

AUSTRALIAN cutting fire opal, specimens, cutting material. H. A. Ivers, 1400 Hacienda Blvd., La Habra, California.

MINERAL SPECIMENS, cabochons and cutting material of all kinds, western jewelry. Beautiful travertine for book ends, paper weights, spheres etc. Write for prices. Eighteen miles south of Battle Mountain at Copper Canyon, John L. James, Box 495, Battle Mountain, Nev.

TONOPAH, Nevada, is where C. C. Boak lives, with his outstanding, scientific, world-wide collection of Mineral, Gem and semi-Gemstone species—spectacular crystal groups, etc. Visitors welcome. C. C. Boak, 511 Ellis St., Tonopah, Nevada.

ONYX BLANKS, unpolished, black 25c each; red, green, blue 35c each. Perfect cut titanium. Fine cutting and polishing at reasonable prices. Prompt attention to mail orders. Juchem Bros., 315 West 5th St., Los Angeles 13, California.

FIFTY MINERAL Specimens, 3/4-in. or over, boxed, identified, described, mounted. Postpaid \$4.00. Old Prospector, Box 729, Lodi, California.

DENDRITIC OPAL, Kansas, good polishing stone, only \$1.25 a pound. Hastings Typewriter Co., Hastings, Nebraska.

SEND \$2.00 for Surprise Package of 10 western specimens. Visit us at Western Minerals Rock Shop, 548 Nevada Highway, Boulder City, Nevada. Boxes and cards wholesale to dealers.

AMONG THE ROCK HUNTERS

Each month, *Rock Rustler's News*, organ of Minnesota Mineral Club, features a different gem or mineral. Opal was stone-of-the-month in October and appeared in a tinted sketch on the bulletin's masthead. Tolson Radloff described it in a feature story.

That members and guests might observe the lapidary process from rough stone to polished gem, several gemcutters from Pasadena Lapidary Society set up equipment and demonstrated techniques at a recent meeting.

The geology of Utah, in lecture and slides, was given by Norman Anderson, geology professor, at a meeting of Tacoma Agate Club, Tacoma, Washington. Displays featured Utah material.

March was the sixth anniversary issue of the El Paso Mineral Society bulletin, *The Voice of the El Paso Rockhounds*. H. L. Zollars has been editor since August, 1949, when he assumed the responsibility from J. W. Redding, first editor. The bulletin has grown from three pages to the present 16- to 18-page issues. Circulation is 175 monthly.

Some new uses for cabochons and polished slabs were suggested by Col. Powell in the October issue of *Rocks and Gems*, bulletin of San Fernando Valley Mineral and Gem Society, North Hollywood, California. He suggested using cones, discs and tear drops as pulls on blind cords or door or cupboard handles; cut and polished house numbers or place names; polished slabs as finger plates mounted on doors or set in the edges of tables or chairs; transparent slabs set in lamp shades.

Sal Strohmeier was named sweepstakes winner in Compton Gem and Mineral Club's photo contest. He also won the prize for the best individual shot. Other winners were Emily Henninger, most pictures; May Rose Backus, best group; and Mary Kilts, most humorous. They were awarded jewelry made and donated by club members.



PANCHO THE ROCKHOUND

says, "Write for our list of Gems, Minerals, and Cutting Materials. Also books on lapidary and equipment."

LAS PALMAS ANTIQUE SHOP
818 Ft. Stockton Dr.
San Diego 3, California

TREASURE HUNTERS

New type metals detector. Distinguishes metals from black magnetic sands. Ideal for locating gold nuggets, placer deposits. Detects metals under salt water. Locates coins, jewelry on beaches. Free from false detections. Each unit supplied with two different search coils. Ask for free literature.



GARDINER
ELECTRONICS
CO., DEPT. DM
2018 N. DAYTON
PHOENIX, ARIZ.

Members of Southwest Mineralogists were asked to bring their bragging rocks to the October meeting in Los Angeles, California. Informal discussion of the rocks would form the evening's program.

Old mines on the island of Cyprus, many of which were operated by the Phoenicians in 1500 B.C., were described by the Mineralogical Society of Southern California at a meeting in Pasadena. Speaker was James L. Bruce, vice president and consulting engineer for Cyprus Mines, Inc. He showed slides of the island and of mining operations. The mines produce gold, copper concentrates, silver and iron pyrite.

Gold panning was one of the entertainment features at the potluck picnic of Santa Barbara Mineralogical Society at Manning Park. Mrs. Phil Orr brought ore and equipment, and members took turns trying their luck. Afterward, Gordon Bowser conducted a silent auction.

First fall meeting of El Paso Mineral and Gem Society presented an extemporaneous talk by L. G. Howle on "Plant Life in Relation to Minerals."

Judging rules for competitive display and tips on improving exhibit arrangements were given Glendale Lapidary and Gem Society by Mrs. Adolphe Dosse of San Bernardino. The Glendale group had six cases of minerals and lapidary work in the recent Los Angeles County fair at Pomona, California.

Laura Tuteur showed slides from Canada at the October meeting of San Fernando Valley Mineral and Gem Society, North Hollywood, California.

MINERAL CATALOG AVAILABLE

Send 5c, cost of handling

If you want Fine and Rare Minerals, Ores, Fluorescents, Geiger Counters, Mineralights, Books, Ring Mounts, or advice, write to—

MINERALS UNLIMITED

1724 University Ave., Berkeley 3, California

FIRE OPAL MEXICO

Fine minerals, Aztec agate and other

CHOICE cutting materials

REQUEST FREE PRICE LIST

RALPH E. MUELLER & SON

1000 E. Camelback Phoenix, Arizona

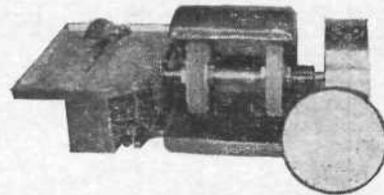
"OVERLOOKED FORTUNES"

In the Rarer Minerals

Find war minerals! Here are a few of the 40 or more strategic rarer minerals which you may be overlooking in the hills or in that mine or prospect hole: columbium, tantalum, uranium, vanadium, tungsten, nickel, cobalt, bismuth, palladium, iridium, osmium, platinum, rhodium, ruthenium, titanium, tin, molybdenum, selenium, germanium, manganese, cadmium, thallium, antimony, mercury, chromium, etc. Prices booming; many much more valuable than a gold mine: cassiterite now \$1000 a ton; bismuth \$1500 a ton; columbite \$2500 a ton; tantalite or microlite \$5000 a ton; tungsten \$3 pound; platinum \$90 ounce, etc. Now you can learn what they are, how to find, identify and cash in upon them. Send for free copy "overlooked fortunes"—it may lead to knowledge which may make you rich! A postcard will do.

Duke's Research Laboratory
Box 666, Dept. B, Hot Springs, New Mexico

Dolomite, quartz and barite crystals were found by rockhounds from Delver's Gem and Mineral Society, Downey, California, on a field trip to Livingston quarry. Some members also discovered specimens of curly and fuzzy gypsum, agate and marcasite.



ALLEN JUNIOR GEM CUTTER

A Complete Lapidary Shop
Only \$43.50

- Ideal for apartment house dwellers.
- Polish rocks into beautiful gems.
- Anyone can learn.
- Instructions included.

Write for Catalog, 25c

ALLEN LAPIDARY EQUIPMENT
COMPANY — Dept. D

3632 W. Slauson Ave., Los Angeles 43, Cal.
Phone Axminster 2-6206

HOBBIES ARE FUN Start Yours Today

(NOTICE—All our prices now include
Tax and Postage)

For the Gem Cutter

40 to 50 sq. in. assorted slabs.....	\$3.00
8 lbs. assorted chunk material.....	3.75
Burnite—(azurite, malachite & copper)	
Top grade, per lb.....	6.50
Lower grade, some cutting, lb.....	1.25
Slabs, top quality, per sq. in.....	.50
Jade—(Alaska), ½ lb.....	6.25
Slabs, per sq. inch.....	.96
Red Plume Agate (very beautiful), lb.....	12.00
Slabs (minimum 4"), per inch.....	1.50
Mexican Agate, per lb.....	3.50
Slabs (minimum 4"), per inch.....	.30
Tiger-eye—Golden, per lb.....	2.40
Slabs, per inch.....	.30
Amazonite (good color), per lb.....	5.00
Slabs, per inch.....	.50
Template, sizes marked for standard cuts	2.10
(Mounting catalog sent upon request)	

Rough Faceting Material

¼-lb. Sunstone.....	\$2.60
¼-lb. Peridot, (small xls.).....	5.00
¼-lb. Kunzite.....	3.80
¼-lb. Amethyst (very good color).....	6.20
¼-lb. Smoky quartz.....	3.80
¼-lb. Topaz (small xls.).....	2.90
¼-lb. Apatite (golden).....	6.20
¼-lb. Garnet.....	5.00
Bentoite Xl. (rare gem), each.....	4.70

For the Jewelry Maker and Collector

6 different ring stones.....	\$3.70
6 different brooch & pendant stones.....	7.30
6 different genuine faceted gems.....	7.30
6 different gen. faceted gems (larger)	12.00

CHRISTMAS SPECIALS

Faceted hearts, gen. amethyst or topaz citrine drilled and including studs, each.....	\$2.00
Pendant with chain, gold filled or s. silver with amethyst or topaz citrine hearts.....	3.75
Earrings to match, gold filled or s. silver for pierced or non-pierced ears.....	5.25
Agate marbles, genuine—large size.....	1.50
Small to medium sizes.....	1.00
Specimen boxes with 35 diff. minerals.....	1.90
with 70 diff. minerals.....	3.90
Bulk assortment of \$10.00 worth of mineral specimens, our choice for.....	6.75
(Satisfaction guaranteed or money refunded)	

DEALERS PRICE LIST AVAILABLE

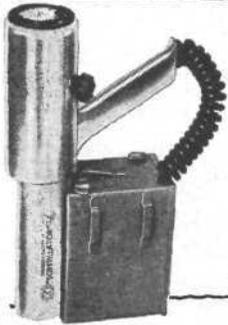
COAST GEMS

11669 Ferris Road El Monte, California

PRECISION RADIATION INSTRUMENTS

TAKES PRIDE IN
ANNOUNCING THE

"SCINTILLATOR"*



*Patent Pending

MODEL 111 Portable Scintillation Counter

• Made in the U. S. A. by Precision • 100 times the sensitivity of the best Geiger Counter • Suitable for aerial surveys or surveys from moving vehicles • Accuracy within 5% of $\frac{3}{4}$ full scale reading • Uses latest type RCA 6199 photomultiplier tube • Uses newest simplified circuit • Used by U. S. Geological Survey and the Atomic Energy Commission • Waterproof and tropicalized probe • Weight only 6 $\frac{1}{4}$ lbs. Probe 2 lbs. • Only two simple controls • Long battery life • Ranges .025, .05, .25, 1, 5 and 25 MR/HR.

Price Complete only **\$495.00**

Write for free catalog on the "Scintillator" and our complete line of Geiger Counters and metal locators.

DEALER INQUIRIES INVITED

PRECISION RADIATION INSTRUMENTS

2235DS South La Brea Ave.
Los Angeles 16, California

FAMOUS TEXAS PLUMES

Red Plume, Pom Pom and many other types of agate. Slabs on approval. Rough agate, 8 lb. mixture postpaid, \$5.00. Price list on request.

WOODWARD RANCH
17 miles So. on Hwy 118
Box 453, Alpine, Texas

Specializing in FINE FOREIGN GEMS AND MINERALS

Lapidary Equipment and Supplies
Gem drills—Jewelry tools—Sterling
Jewelry Mountings—Books—Mineralights

SUPERIOR GEMS & MINERALS

4665 Park Blvd., San Diego 16, California
Open 10:30 A.M. to 8:00 P.M.
Closed Sundays

EARLY NOTICE GIVEN OF SAN MATEO SHOW

Gem and Mineral Society of San Mateo County, California, has already set the spring dates for its 1954 show. The show will be held May 8 and 9 at the Fiesta Building, 25th Avenue and Pacific Boulevard, San Mateo.

The geode-cracking table at the Earth Science Club of Northern Illinois annual Fall Festival was one of the most popular demonstrations. Geodes from Mississippi River areas and nodules from the Coal City, Illinois, coal fields were split apart and the interesting halves given to those onlookers who wanted them.

Pasadena Lapidary Society invited Ruth Simpson of Southwest Museum to speak on its October program. Miss Simpson selected as her subject, "Prehistoric Rockhounds of the Western Desert."

Marie Almand showed her mineral slides to fellow members of Santa Fe Gem and Mineral Club, Santa Fe, New Mexico. Other club photographers showed slides taken on recent field trips.

Agate was the object of a Minnesota Mineral Club field trip to a gravel pit near Taylors Falls, northeast of St. Paul, Minnesota. Nate Stuvetro, tour director, said this would be the last outing before winter snows force all club activities indoors.

"Gem Evaluation" was Dr. Asher Havenhill's topic when he addressed a meeting of Fresno Gem and Mineral Society. He discussed sizes and qualities of precious and semiprecious gems, emphasizing shape, color and cutting. "Aquamarine and pink andalusite are two lively yet inexpensive gems," he pointed out, "and nice star sapphires, rubies and alexandrite may be bought at modest cost."

Douglas R. Brown brought a series of colored slides to the recent Sacramento Mineral Society meeting at which he appeared as guest speaker. Brown, geologist for the California State Department of Highways, spoke on "Travels in the Philippines."

San Gabriel Valley Lapidary Society gathered in Rosemead, California, to hear A. G. Ostergard's discussion of "Collecting Minerals in Mexico." The speaker illustrated his remarks with colored slides.

GEM STONES

Clean cabochon quality. One each of Amethyst, Utrine, Tourmaline, Aqua Marine, Garnet, Opalite, $\frac{1}{2}$ to 1" or larger \$1.00 postpaid.

LOST MOUNTAIN GEMS

P. O. Box 5012 Phoenix, Arizona

A trip through Anza Valley and the San Diego mountain country was scheduled for October by Shadow Mountain Gem and Mineral Society, Palm Desert, California. Members would search for tourmaline, beryl and kunzite.

An armchair tour of Southwestern deserts was enjoyed by members of Hollywood Lapidary and Mineral Society when Glenn and Dolly Elsfelder showed their collection of colored slides. Glenn is president of the group.

Gerald Backus, field trip chairman of Compton, California, Gem and Mineral Club, announced an October trip to Tick Canyon and hinted the November outing would be to Nipomo.

Nick Gessler was invited to speak on Inca metal and lapidary work at the October meeting of Long Beach Mineral and Gem Society. That month's field trip was planned to Kern Dry Lakes where members would search for petrified wood, palm root and crawfordite.

A joint trip by the rockhound group from Naval Ordnance Test Station at China Lake, California, and the San Jacinto-Hemet Rockhounds to the Cahuilla Mountains netted specimens of rose quartz, tourmaline and garnet.

Raymond Addison of San Jose, California, considers commercial casting sand too coarse, so he prepares his own for his sand casting work. He gave the recipe to the Gem and Mineral Society of San Mateo County when he addressed a meeting in Burlingame, California. The recipe calls for one gallon of ordinary friable garden soil sifted fine by tossing against (not shaking through) window screening; 4 or 5 ounces castor oil, 4 or 5 ounces of 30-weight machine oil and a small amount of lamp black added to gasoline to make two cups. Stir gasoline mixture with sand, set afire, stir and burn until sand will stand up when squeezed. When the process is completed, the sand should be dry enough to keep its shape but not oily enough to explode.

Memories of field trips to the Boron dry lakes, to Horse Canyon, Opal Mountain and Willow Creek entertained members of Delvers Gem and Mineral Society, Downey, California, as they viewed field trip slides of Ed Flutot. He also showed slides of Bryce Canyon.

The Sphere, organ of Hollywood Lapidary and Mineral Society, California, has a new series of cover designs, silk screened in full color. The October issue featured a study of a blossoming opuntia cactus done in beautifully blended shades of green, rose, blue and purple.

**BEFORE YOU BUY
SEND FOR OUR BIG FREE CATALOG**

The world-famous HILLQUIST LINE of lapidary equipment

LAPIDARY EQUIP. CO., 1545 W. 49 ST., SEATTLE 7, WASH.

HOW TO HAVE FUN WITH ROCKS GEMS AND MINERALS

since 1937—the rockhound's OWN magazine —featuring mapped field trips, gem cutting helps, silverwork and designs, mineral collecting helps and articles, many supplier ads, and all manner of material that will help you have more fun with rocks. Owned by over 75 organized clubs, the California Federation of Mineralogical Societies, GEMS AND MINERALS is written and edited for practicing gem cutters and rock collectors. It is the ONLY monthly magazine in the field publishing 12 full issues a year. Over 9,000 rock hobbyists already use and enjoy GEMS AND MINERALS, so will you. Send only \$3.00 for 12 monthly issues. Subscribe today.

GEMS AND MINERALS

Box 716B Palmdale, California

Colored slides of a society trip to Lehman Caves were shown members of Clark County Gem Collectors, Las Vegas, Nevada, on their recently-acquired screen and projector.

Minnie La Roche, field trip chairman of Fresno Gem and Mineral Society, Fresno, California, announced the November outing would be to San Simeon. Frank Glass was named trip leader.

A Mineral Collector's Guide to Wonderful Wyoming, the "Jade State" is the latest Gritzer Geode publication. It tells where to collect minerals, unusual rocks and semi-precious stones; describes national monuments, scenic areas and points of interest and offers information for the sportsman, traveler and rockhound.

Mrs. Claire Schroeder told fellow members of Los Angeles Lapidary Society about her summer trip to Alaska. She showed colored slides of points of interest.

Three-quarters of the cost of San Diego Lapidary Society's 1953 Christmas party was netted in rock sales at the recent pot-luck supper meeting.

A swap session followed informal vacation talks by members at the opening fall meeting of Colorado Mineral Society, Denver. This year the group has six new glass-top, table type display cases made by members Mr. and Mrs. Calvin Simmons, Fern and Olin Brown, Verna and Ernest Parshall, Helen and Cecil Louthan, Betty Wilklow and Jim Hurlbut. The cases were first used for society exhibits at the Denver Hobby Exposition in September.

The popular Pala region of San Diego County, California, was selected by Coachella Valley Mineral Society for its October field trip. The group planned to visit the Stewart Lithia and Mission mines for lepidolite and various types of tourmaline.

Mapping the places he visited on a blackboard, John Hufford related for Nebraska Mineral and Gem Club, Omaha, highlights of his trip to Yellowstone Park.

Georgia Mineral Society and Southern Appalachian Mineral Society staged a joint field trip to Cowee Creek near Franklin, Georgia. Working with screens in the creek, members found rubies, corundum crystals, rhodolite garnet, flashing mica, quartz and kyanite. Approximately 200 rockhounds joined the party, and presidents Nelson Severinghaus of Georgia Mineral Society and Col. Orville M. Hewitt of the Appalachian club termed it a complete success.

WANT TO COLLECT MINERALS?
Mineral Collectors Guide, 36-page illustrated booklet, explains how to go about it, principles of identification, mineralogical tests, how to set up and maintain your collection. \$1.00 postpaid.
Mineral Identification Aid
 A reference set of 110 accurately identified thumbnail size mineral specimens. Collection MC 102, \$7.50 (list, Rochester).
Embed Small Specimens in Clear Plastic
 Liquid plastic hardens to crystal-clear solid. Plastic kit contains materials, instructions, sample mineral and other specimens. Complete kit BPM 19, \$7.50 postpaid.
Free Catalogs: FM6d Mineral Specimens—352d Geological Collections—MS2d Geological Supplies.
Ward's Natural Science Establishment, Inc.
 P.O. Box 24, Beechwood Station
 Rochester 9, New York

Forest E. Layton recorded on colored slides the highlights of his trips to the Arctic with the Arctic Section of the U. S. Weather Bureau. He showed the pictures to Chicago Rocks and Minerals Society when he appeared as guest speaker. He also displayed Eskimo artifacts.

SPECIAL THIS MONTH
No. 75 BAROQUE CAP
 8 for \$1.00 Sterling silver—tax paid. Is cone shaped cap. Cement over baroque stones. Cement for 60c. Free 8½x11" illust. catalog other findings and mountings for asking. Box 26
DOCKSTADER'S La Crescenta, Calif.

Does Everything...
 SAWS SANDS GRINDS POLISHES CUTS SPHERES FACETS LAPS

 Only \$42.50 FOR SEATTLE
HILLQUIST Gemmaster
 *without meter.

COMPARE!
 Put the Hillquist Gemmaster beside any lapidary machine—cheaper, flimsy "gadgets" or units that sell at twice the price. Compare construction! Compare ease of operation! Compare how much you get for your money and you'll say, "I'll take the Gemmaster!"
 Here is a worthy companion for our larger and more expensive Hillquist Compact Lapidary Unit. The smaller in size, the Hillquist Gemmaster has many of the same features. It's all-metal with spun aluminum tub. You get a rugged, double-action rock clamp, not a puny little pebble pincher. You get a full 3" babbitt sleeve bearing and ball thrust bearing. You get a big 7" Super Speed diamond saw and all the equipment you need to go right to work.

USES ALL ACCESSORIES
 You can use all the regular Hillquist accessories with the Gemmaster: The Hillquist Faceter, Sphere Cutters, Laps, Drum and Disc Sanders, etc.

WRITE FOR FREE CATALOG
COMPLETE, READY TO USE! YOU GET ALL THIS—

 BIG 7" Diamond Saw • 6" x 1" Grinding Wheel • 6" Felt Buff • 6" Backing Wheel • 6" Disc Sander • Double-action Rock Clamp • Oil Feed Cup • Water Feed Hose & Clamp • Dop Sticks & Dop Wax • Polish, Compound, Etc.

BUILT FOR LONG SERVICE!
 No other low-cost lap unit gives you full 3" sleeve bearing, ball thrust bearing and pressure lubrication.
Lapidary EQUIPMENT CO. INC
 1545 WEST 49TH ST., SEATTLE 7, WASHINGTON

It Could Be There...

Prospecting with Modern Electronic Equipment, will help locate buried minerals, that the eye alone cannot see.

- The latest improved equipment by Detectron: For testing uranium ore this inexpensive high quality CLAIMSTAKER. \$ 37.50
- The Prospectors Pal, Model DG-2. Now more sensitive than ever, with three scale sensitivity meter. \$ 98.50
- Model DG-7. Same as above with separate, detached probe \$135.00
- The Nuclimeter, Model DR-290. Super sensitive Radiation Detector of extreme sensitivity, for ground, jeep, car, and Airplane survey.. \$45.00
- The light weight Detectron Model 27. Prospecting for metallic mineral, Gold and Silver included. (Depth Range 7 ft.)..... \$ 98.50
- The Deluxe Model 27—see cut above. Same as above with easy reading meter. \$110.00
- Model 711. Metal case, light weight, easy to carry, and with a depth range of 21 ft. \$138.50



Model DG-7

The above instruments carry a One Year Guarantee against defects in workmanship and materials

All prices are F.O.B. Compton, California

We stock a complete line of Ultra-Violet Mineralights, also gem and rock polishing equipment and supplies

COMPTON ROCK SHOP
 1409 South Long Beach Blvd., Dept. D.
 Compton, California

Open house every Tuesday Eve.
 Telephone Newmark 2-9096

The California Bureau of Mines movie, "Wind and Sand," was shown at an evening meeting of Dona Ana County Rockhound Club, Las Cruces, New Mexico. It explained how glass was made.

In the October issue of *Earth Science News*, bulletin of the Earth Science Club of Northern Illinois, Dr. F. L. Fleener writes about "Hardness" in the bulletin's series on "Mineral Identity."

"The lost wax process was perfected by Benvenuto Cellini, Italian goldsmith, in the 16th century," Robert W. Fine of Arlington Heights, Illinois, told members of Chicago Rocks and Minerals Society. Guest Speaker Fine demonstrated the construction of a model in wax, mounting of the sprue pins, painting the model with a plaster investment to eliminate possible air pockets and setting the model into a fireclay flask containing plaster investment material. In two hours the investment would be firm enough to

place into an electric oven, preheated to 800 or 900 degrees to eliminate wax mold and set the investment, and then increased to 1300 degrees for casting. The metal is brought to flowing heat for casting and the flask assembled in a centrifuge, forcing the metal into the mold.

Major project this year for Shadow Mountain Gem and Mineral Society, Palm Desert, California, will be the assembling of an educational display of rough and polished specimens of some one large mineral group. "Such a display," said President Byron S. Phillips, "would be a living, growing, evolving property of the society, starting with what we have available but subject to constant improvement and refinement over the years as we contribute of our private stocks and plan field trips to procure the type of specimens most needed to fill in the weak spots."

Jim and Alice Moore, members of San Diego Lapidary Society, told the group about their trek across Columbia, retracing the old trail of Balboa from San Miguel Bay on the Pacific to Santa Maria L'Antigua on the Atlantic. The Indians of the jungle country through which they passed are hostile and never before had allowed white men to traverse the trail. They were so impressed with Mrs. Moore, who was the first white woman they had ever seen, that they renamed the trail from *Camino del Sur* to *Camino del Alice* in her honor, and all topographic maps now mark the trail by that name.

New Low Prices On Earwires



101D 7mm Pad



50-L



50-F



5-A SHELL FRONT



10-A Half Ball



6-A 14 B Ball



C-100



F-100



2-AS Pad



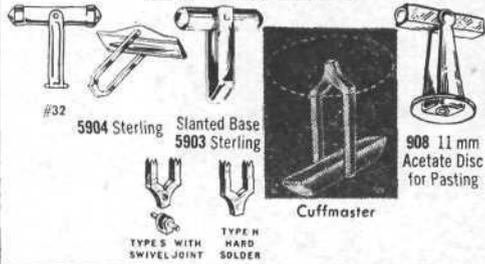
2-Pad



2-Pad & Peg

- No. 101D—Sterling Silver... 40c per pair, \$1.50 doz. Christmas Gift Special—\$1.00 doz., 3 doz. for \$2.50
- No. 4D—Sterling Silver... 40c per pair, \$1.50 doz. Christmas Gift Special—\$1.25 doz., 3 doz. for \$2.50
- No. 50L—Sterling Silver or Gold Filled... 70c per pair, \$2.50 doz. Christmas Gift Special, 3 doz. for \$5.95
- No. 50F—Sterling Silver only... 70c per pair, \$2.50 doz. Christmas Gift Special, 3 doz. for \$5.95
- No. 5A—Shell Front, Sterling Silver or Gold Filled... \$1.00 per pair, \$4.00 doz. Christmas Gift Special, 3 doz. for \$9.45
- No. 5A—Shell Front, 14 karat yellow gold... \$4.00 pair, \$18.00 doz.
- No. 10A—Half Ball Sterling Silver or Gold Filled—this is a very heavy, well built earwire... \$1.00 per pair, \$4.50 doz. Christmas Gift Special, 3 doz. for \$10.65
- No. 6A-14B—Ball, Sterling Silver or Gold Filled... \$1.25 pair, \$5.50 doz. Christmas Gift Special, 3 doz. for \$12.95
- No. C-100—Sterling Silver or Gold Filled... 50c per pair, \$1.50 doz. Christmas Gift Special, 3 doz. for \$3.55
- No. F-100—Sterling Silver or Gold Filled... 50c per pair, \$2.00 doz. Christmas Gift Special, 3 doz. for \$4.65
- No. 2-AS—Pad, Sterling Silver or Gold Filled... 80c per pair, \$3.50 doz. Christmas Gift Special, 3 doz. for \$7.95
- No. 2—Pad, Sterling Silver or Gold Filled... 50c per pair, \$2.50 doz. Christmas Gift Special, 3 doz. for \$5.95
- No. 2—Pad, 14 karat Yellow Gold... \$2.30 per pair, \$10.20 doz.
- No. 2—Pad and Peg, Sterling Silver or Gold Filled... 60c pair, \$2.75 doz. Christmas Gift Special, 3 doz. for \$6.55
- No. 2—Pad and Peg, 14 karat Yellow Gold... \$2.55 pair, \$11.50 doz.
- No. 32—Ster. Sil. \$1.00 pr. \$5.50 doz. pieces Christmas Gift Special 3 doz. for \$12.95
- No. 5904—Ster. Sil. \$1.00 pair, \$5.00 doz. pieces Christmas Gift Special 3 doz. for \$11.95
- No. 5903—Ster. Sil. \$1.25 pair, \$6.00 doz. pieces Christmas Gift Special 3 doz. for \$13.95
- No. Cuffmaster, Type H... \$1.00 pair, \$4.50 doz. pcs.

CUFF LINK BACKS



- BELL CAPS—Sterling Silver... \$1.50 dozen Christmas Gift Special, 3 doz. for \$3.55
- BELL CAPS—Gold Filled... \$1.75 dozen Christmas Gift Special, 3 doz. for \$4.15

"GROSS LOT PRICES ON REQUEST"

SEND FOR OUR COMPLETE CHRISTMAS BARGAIN BULLETIN

All prices F.O.B. Pasadena. Add 20% Fed. Tax to above prices. Add 3% Sales Tax if you live in California

GRIEGER'S • 1633 E. WALNUT ST. • PASADENA 4, CALIFORNIA

Open Friday and Saturday only from 8:30 a.m. to 5:00 p.m.

NEW—Sensational! GEIGER COUNTER



"The SNOOPER"
LOW PRICE ONLY \$29.95 COMPLETE

Find a fortune in uranium with this new, super-sensitive Geiger Counter. Get one for atom bomb defense. So small it fits in the palm of the hand or in the hip pocket, and yet more sensitive than many large, expensive instruments. Weighs only 1 1/4 lbs. Uses flashlight battery. Low price includes earphone, radio active sample, instructions. Sold with ironclad moneyback guarantee.

ORDER YOURS TODAY — Send \$5 with order or payment in full to save C.O.D. Write for free catalog on larger, more elaborate Geiger Counters, metal locators and our Scintillator Counter.

Dealer Inquiries PRECISION RADIATION INSTRUMENTS Invited 2235D So. La Brea Ave., L. A. 16, Calif.

BRADLEY-REHRIG has ON HAND

6 styles of DOWN JACKETS \$29.95
 DOWN CAPS \$5.95
 WOOL SOCKS
 MITTENS and GLOVES 98¢ to \$3.50
 Hunting Knives \$5.75
 Wool Blankets
 40 styles of RUBBER BOOTS and RAINCOATS \$11.95 to \$25.00
 COMPLETE LINE of RUBBER BOOTS and RAINCOATS
 BACK PACK CAMPING & SKI RENTALS
 COMPLETE FISHING TACKLE
 SKI BOOTS Fine imported, hand made—\$22.50 FIS \$27.50 KITZBUHEL
 SWISS WATCHES 7 JEWEL \$20.00 14 JEWEL \$25.00 18 JEWEL \$30.00
 PASADENA 99 E. COLORADO-SY 3-8137 • RIVERSIDE 4023 MAIN

AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

As this appears the Christmas season will be coming upon us and we would like to use these columns to climb upon our soap box for a cause. The cause concerns our favorite hobby of gem-cutting, the Christmas spirit, the generosity of American hearts and international goodwill and ties them all into a neat package.

We think that most readers are acquainted with the wonderful work that is done all over the world by the Society of Friends. That is the official name of the settlers of our native state—the Quakers. Another Pennsylvania religious sect, not so well known, is the Brethren. The Brethren are the world's best farmers. While the wonderful unselfish and practical work of the Quakers is often detailed in the press we have never read of the similar work of the Brethren. Information comes to us that the Brethren are sending whole boatloads of heifers to Germany and other countries to replace the valuable dairy herds that were destroyed during the war or used as needed food. Trained young men accompany the herds on the cattle boats and stay with them at their destination for a full year to help the farmers who receive them free to start their new herds.

The Brethren have established a training school at New Windsor, Maryland, called the Brethren Social Service Center. Here come the young folks as volunteers for two year's service in domestic and foreign fields. These young people are not missionaries in the same sense as the missionaries who go into the four corners of the earth to save the heathen. These young people are just trying to help other people in the true Christian spirit to rehabilitate themselves.

Now it happens that their work came to the attention of James Anderson of Baltimore, founder of the Gem Cutters Guild of Baltimore. An old friend of ours, and the originator of silverware with agate handles, Mr. Anderson is well known to all who have followed this page through the years and to the thousands who have seen his master-crafted silverwork at various shows.

Last year Mr. Anderson taught 50 young workers at the Brethren Social Center to do gem cutting. These 50 youngsters are going to take the idea all over the world. Why? The Brethren are smart enough to know that among the people they visit, the greatest need is not food and clothing but something that will give them a new interest in life. Gemcutting is not the answer but it is recognized as one of the answers.

Anything that will encourage people to practice an art form and do something with their hands, that will encourage them to study the world about them and even explore it with greater attention, is indeed an answer to the problem of starvation of another kind. The gem cutting hobby is a perfect answer to such a requirement. Do you think, it will do any harm anywhere in the world for anyone to learn, with surprise perhaps, that Americans are not grubbing for money all their waking hours, that they have more fun than the people of any other nation on earth, that an estimated three million of them have their fun playing with rocks?

The leader of the group at New Windsor, Maryland, is Rachel Garner, a graduate of Cornell University and a trained social

worker. The Gem Cutters Guild of Baltimore is supplying Rachel Garner with a portable gem cutting outfit that she can take from camp to camp and the interest is so wide that she could use several more outfits. We applaud the gesture of the Gem Cutters Guild of Baltimore and we toss the idea into the Board meetings of all of the 600 gem and mineral clubs all over America. Across our desk in the month of December will come the bulletins from many of these clubs. The bulletins, almost without exception, will say "a formal program was dispensed with because of our annual Christmas party with turkey and all the fixin's etc." Now that's all very good. It's very, very good indeed and we don't want any reader to get any idea that we are opposed to the good old American custom of breaking bread together at Christmas time and getting our feet under a common table that bears the "groaning board" in greater proportion than anywhere else on earth. But everyone knows that nothing helps in having a good time so much as the knowledge that you have also helped some others have a good time too; usually people who would not have a good time at all if someone else did not provide it.

It has never been intended that the gem and mineral clubs of America had any need to help anyone. They were never organized for that purpose. The only "cause" they support is the promotion of knowledge about their own interests among their own members. Now we know, from the information we receive in club bulletins, that many of these clubs have lots of money in their treasuries that isn't working. We know of one club that actually has more than \$5,000 in a savings account drawing interest. Wouldn't it be a good idea, friends, to cast some bread upon the waters at Christmas time by either giving Rachel Garner some cash contribution or even donating some portable gem cutting outfits for use abroad? These outfits will be sent by our Government freight free to any part of the world.

If the idea meets with favor anywhere we will be happy to spearhead the distribution of donations into the proper channels. Take this column to your next Board meeting and see if you can get your club to enter into this practical and unselfish Christmas program. To indicate our own sincerity in plumping for the idea we will do this—we will make a cash contribution of \$10.00 each toward the purchase of any gem cutting outfit donated to the Brethren by any Club regardless of the price of the outfit but it must be a complete outfit of some kind. We necessarily limit this offer to the first 15 clubs to write us that they will buy an outfit. In that way we feel that we will be donating a complete outfit if as many as 15 clubs respond to the idea. If the donation of an outfit is too rich for the blood of some clubs then a cash contribution will be welcome indeed to be used for supplies to go along with the outfits that are donated. Under no circumstances will we recommend any particular equipment. Each club is to buy what they will and we will advise you where to have it shipped. All donations will be acknowledged in these columns and we hope that the list will be long. Mail may be addressed to us at Palm Desert, California.

*A new book for
rockhounds!*



Here at last is a guide to rocks and minerals illustrated in full color and black and white and complete enough for both amateur and professional, usable anywhere in the world, and yet compact enough (like the other famous Peterson Field Guides) to carry with you on field trips.

You'll find:

- 254 photographs, 72 in full color
- a simplified approach emphasizing identification in the field
- chemical and blow-pipe testing procedures, plus new ones such as ultraviolet light
- chapters on crystallography and mineral environments
- crystal drawings and end-paper diagrams
- glossary of geological terms

A Field Guide to Rocks and Minerals

FREDERICK H. POUGH

Published Nov. 30

**\$3.75 at your lapidary
supply house or bookstore,
or from**

**Houghton Mifflin Co.
2 Park St., Boston 7, Mass.**

A

Abbott, Chuck, Co-author of—	
<i>Papago Well of Sacrifice</i>	Jul p22
Adams, Jeff, Author of—	
<i>Roving Reporter of the Desert</i>	Jul p11
Agate—Jun p15, Oct p19, Nov. pp13, 23,	
Dec p19	
Agave.....	Sep p14
All-American Canal.....	Dec p4
Allen, Ernest K., Author of—	
<i>Life on the Desert</i>	Apr p17
Allen, Ernest K. (<i>Close-ups</i>).....	Apr p33
Ammobroma.....	Apr p22
Animal life—	
Bighorn sheep.....	May p9
Buffalo.....	Jun p29
Burro, Jan p29, Mar pp32, 42, Jul p42	
Coyote.....	Jun p27
Packrat.....	Feb p21
Porcupine.....	Dec p32
Wild horses.....	Jun p31
Anza Desert State Park, California	
Jan p33; Feb p33; Aug p26	
Applegate Trail, Ore.....	Jan p23
Aravaipa Canyon, Ariz.....	Feb p17
Archeology.....	Jun p13
Arches Nat. Mon.....	Dec p32
Arrastre.....	Mar p17
Arroyo Grande, Baja California.....	Apr p10
Artifacts.....	Dec p27
Artillery Peak, Ariz.....	Mar p7
Aurora, Nev.....	May p25

B

Backpacking.....	Jan p11, Feb p16, May p5
Baja California.....	Jan p11, Apr p10, Oct p5
Bane, Mrs. Roxie.....	Dec p18
Baroque gems.....	Feb p36, Mar p41

PAINTINGS

of the desert scene

Again this year, Director Harriet A. Day of the Desert Magazine Art Gallery has arranged a number of special exhibits of desert oil paintings by foremost Southwestern artists.

Jan 14-29—

Freda Marshall, Bill Bender

Jan 31-Feb. 15—

Olaf Wieghorst

Feb. 16-Mar. 1—

John Hilton, Marjorie Reed

Mar. 15-Apr. 1—

Burt Procter

Desert readers are cordially invited to see these special shows as well as other individual paintings. The Desert Magazine Pueblo is located on Highway 111, 12 miles east of Highway 111, 12 miles east of Palm Springs and 10 miles west of Indio. The Art Gallery and Book and Craft Shop are open daily, including Saturday and Sunday, from 9 a.m. to 5 p.m.

Beal, Mary, Author of—	
<i>Desert Cousins of Candytuft and Cauliflower</i>	Jul p27
Beal, Mary.....	Mar p11
Belmont, Nev.....	Oct p11
Big Bend National Park, Texas.....	Jul p4
Big Bug Creek, Ariz.....	Apr p5
Bighorn sheep.....	May p9
Birds—Blackbirds, Feb p33; Condors, Feb	
p33, Apr p29	
Blue Gem Mine, Nev.....	Jan p4
Blue River, Ariz.....	Dec p23
Bodie, Cal.....	Feb p27
Book Reviews—	
Bailey, Paul, <i>Sam Brannan and the California Mormons</i>	Aug p43
Barker, Elliott, <i>Beauty's Cabin</i>	Sep. p41
Brininstool, E. A., <i>A Trooper With Custer</i>	Mar p43
<i>Fighting Indian Warriors</i>	Dec p47
Broderick, Harold J., <i>Agatized Rainbows</i>	Jan p43
Caruthers, William, <i>Loafing Along Death Valley Trails</i>	Aug p43
China Lake AAUW, <i>Indian Wells Valley Handbook</i>	Dec p47
Corle, Edwin, <i>Billy the Kid</i>	Sep p41
Dobie, J. Frank, <i>Guide to the Life and Literature of the Southwest</i>	Mar p43
Doolittle, Rosalie, <i>Southwest Gardening</i>	Apr p43
Dunne, Peter Masten, <i>Black Robes in Lower California</i>	Nov p43
Dykes, J. C., <i>Billy the Kid, The Bibliography of a Legend</i>	Jun p43
Ewing, Belle C., <i>When California Was Young</i>	May p43
Farquhar, Francis P., <i>The Colorado River and the Grand Canyon</i>	Jun p43
Gregg, Kate L., <i>The Road to Santa Fe</i>	Feb p43
Haley, Earl, <i>Revolt on the Painted Desert</i>	Feb p43
Hancock, Ralph, <i>Baja California</i>	Dec p47
Hanna, Phil Townsend, <i>Marked Historical Sites of California (Map)</i>	Jan p43
Higbie, Hamilton A. and An L., <i>Pictorial Guide to Nevada</i>	Feb p43
Hinds, Norman E. A., <i>Evolution of the California Landscape</i>	Nov p43
Jaeger, Ellsworth, <i>Woodsmoke</i>	Oct p41
Kelly, William H., <i>Indians of the Southwest</i>	Aug p43
Klinck, Richard, <i>Land of Room Enough and Time Enough</i>	Oct. p41
Long, Dr. Margaret, <i>Shadow of the Arrow</i>	Apr p43
Miller, Joseph, <i>The Arizona Story</i>	Jan p43
O'Kane, Walter Collins, <i>The Hopis: Portrait of a Desert People</i>	May p43
Ostroth, Vera E., <i>Colorful California</i>	Dec p47
Paine, Swift, <i>Eilley Orrum, Queen of the Comstock</i>	Jul p43
Parsons, John E. and John S. du Mont, <i>Firearms and the Custer Battle</i>	Nov. p43
Pillsbury, Dorothy, <i>Adobe Doorways</i>	Jan p43
Richardson, Margaret Stimson, <i>A Handful of Nuggets</i>	May p43
Schneider, Herman and Nina, <i>Rocks, Rivers and the Changing Earth</i>	Apr p43
Smith, Watson, <i>Archeological Excavations at Awatovi, Arizona</i>	Jun p43
Roylance, Ward J., <i>Rainbow Roads to Romance</i>	Sep p41
Shirley, Glenn, <i>Toughest of Them All</i>	Oct p41
Steere, Collis H., <i>Coachella and Imperial</i>	

<i>Valleys: An Illustrated Guide</i>	Jul p43
Swan, Howard, <i>Music in the Southwest</i>	Mar p43
U. S. Dept. of Agriculture, <i>The Mesquite Problem on Southern Arizona Ranges</i>	Apr p43
Weight, Harold and Lucile, <i>Rhyolite: Ghost City of Golden Dreams</i>	May p43
Wolle, Muriel Sibell, <i>The Bonanza Trail</i>	Oct p41
Booth, John.....	Feb p11
Borax mining, Death Valley.....	Apr p17
Borrego State Park, Calif.....	Aug p26
Botany—	
Agave.....	Sep p14
Ammobroma.....	Apr p22
Candelilla.....	Jul p8
Creosote bush.....	Dec p27
Desert parsley.....	Jul p27
Desert star cactus.....	Aug p24
Desert wallflower.....	Jul p27
Desert willow.....	Jun p42
Giant dagger.....	Jul p7
Greasewood.....	Dec p27
Ipo.....	Jan p23
Juniper.....	Mar p34
Night blooming cereus.....	Mar p4
Nolina.....	Mar p10, Sep p13
Pinyon pine.....	Jan p30
Sotol.....	Sep p13
Turpentine broom.....	Mar p11
Wildflowers—Jan p42, Feb p29, Mar p26,	
Apr p16, May p20	
Yampah.....	Jan p23
Yucca.....	Feb p31, Sep p15
Brethren (religious sect).....	Dec p41
Buckland Ranch, Nev.....	Dec p13
Buckland, Sam.....	Dec p15
Buffalo.....	Jun p29
Bumblebee, Ariz.....	Apr p7
Burridge, Gaston, Author of—	
<i>Last of the Mountain Men</i>	Dec p23
Burridge, Gaston (<i>Close-ups</i>).....	Dec p22
Burro.....	Jan p29, Mar pp32, 42, Jul p42

C

Calico, Calif.....	Jul p14
Candelilla.....	Jul p8
Canned water.....	May p25
Cantu, Estaban.....	Oct p6
Cantu Grade, Baja Calif.....	Oct p7
Canyon de Chelly, Ariz.....	Nov p10
Carlile, Robert N., Author of—	
<i>Life on the Desert</i>	Oct p22, Dec p22
Carlile, Robert N. (<i>Close-ups</i>).....	Oct p30, Dec p22
Carson, Kit.....	Nov p20
Castle Hot Springs, Ariz.....	Oct p17
Castle Park, Colo.....	Dec p8
Cedar City, Utah.....	May p11
Chalcedony.....	Dec p19
Chimayo, New Mexico.....	Aug p12
Chiricahua National Mon., Ariz.....	Jun p9
Chisos Mountains, Texas.....	Jul p4
Christman, A. B., Author of— <i>Johnny Shoshone of Death Valley</i>	Dec p10
Churchill, Capt. Charles C.....	Dec p13
Clifton, Ariz.....	Dec p20
Clyde, Norman.....	Jan p11
Coachella Valley, Calif.....	Jan p35
Cobb, Lamar.....	Dec p20
Cochise.....	Jun p11
Coke, Larry and Lucille.....	Jul p17
Coleman, W. T.....	Apr p18
Colorado Fuel & Iron Co.....	May p11
Colorado River—Jan p35, Feb. p11, May	
p24, Jun p21	
Columbia Iron Mining Co.....	May p11
Connor, Col. Patrick.....	Dec p15
Cooke, Clair V.....	Jun p10
Copper Basin, Nev.....	Jan p4
Coxcomb Mountains, Calif.....	May p5
Coyote.....	Jun p27

Creosote bush Dec p27
 Crystals Sep p9
 Cudahy, John Apr p10
 Cummings, Dr. Byron Dec p28
 Custer, Gen. Geo. A. Mar p43, May p25

D

Daggett, California Jun p20
 Davis Dam, California Jan p33, Feb p34
 Death Valley, Calif. Apr p17, May p19
 Nov. p6, Dec p10
 Death Valley Encampment Jan p2, Nov p33
 Death Valley '49ers Mar p18, Nov p33
 Desert agriculture Jan p32
 Desert parsley Jul p27
 Desert star cactus Aug p24
 Desert wallflower Jul p27
 Desert willow Jun p42
 Devil's Elbow, Calif. Feb p14
 Dinosaur Nat. Mon. Dec p5
 Dinosaurs Nov. p23, Dec p7
 Disaster Falls, Colo. Dec p8
 Dodge, Natt N., Author of—
*Confusing Quartet of the
 Plant World* Sep p13

Douglass, Dr. Earl Dec p7
 Dowd, M. J. Jan p35
 Drury, Newton Dec p6
 Duchesne Tunnel, Utah Dec p32
 Duncan, Lloyd E., Author of—
Death Valley Caricatures Jan p25

E

Eagle Mt. Aqueduct Sta., Cal. May p6
 Earthquake Valley, Cal. Dec p27
 Echo Park, Colo. Dec p5
 Echo Park Dam (proposed) Dec p6
 El Mayor, Baja Calif. Apr p11
 El Picacho del Diablo, Baja Cal. Jan p11,
 Mar p27
 Enchanted Mesa, N. M. Mar p27
 Essene School of Health Culture Oct. p7

F

Fewkes, Dr. Jesse Walter Jun p13
 Fish Spring, Calif. Jan p29
 Ft. Churchill, Nev. Dec p12
 Ft. Huachuca, Ariz. Jun p29
 Ft. Union, N. M. Feb p5
 Fossils Jan p37, Feb p32
 Four Corners Jun p13
 Frank, Marjorie, Author of—
Life on the Desert Dec p25
 Frank, Marjorie (*Close-ups*) Dec p22
 French Creek, Ariz. Apr p8

G

Gem and Minerals (Collecting Areas)—
 Bouse, Ariz. Nov p13
 Bradshaw Mts., Ariz. Oct p17
 Muggins Hills, Ariz. Jun p15
 Peloncillo Mts., Ariz. Dec p19
 Pinto Mt., Baja Cal. Jul p40
 Quartzsite, Ariz. Sep p9
 Rawhide, Ariz. Mar p5
 Gems and Minerals (Specimens)—
 Agate—Jun p15 Oct p19, Nov pp13, 23,
 Dec p19
 Chalcedony Dec p19
 Crystals Sep p9
 Geodes Dec p19
 Gold Apr p5
 Jaspagate Mar p8
 Limonite cubes Sep p9
 Obsidian Dec p19
 Petrified wood Feb p27
 Quartz Mar p8, Oct p17
 Turquoise Jan p4
 Geodes Dec p19
 Ghost towns—
 Aurora, Nev. May p25
 Belmont, Nev. Oct p11
 Bodie, Calif. Feb p27
 Calico, Calif. Jul p14
 Copper Basin, Nev. Jan p4
 Johnnie, Nev. Sep p18
 Panamint, Calif. Mar p16

Rawhide, Ariz. Mar p5
 Giant dagger Jul p7
 Gifford, Rich. Author of—
Life on the Desert Aug p19
 Gifford, Rich (*Close-ups*) Aug p16
 Gillette Stage St., Ariz. Apr p6
 Gleeson, Ariz. Apr p7
 Gold panning Apr p5
 Goldwater, Barry Jan p42, Mar p29
 Gonzales, Don Manuel Jan p27
 Goodwin, T. R. Mar p32
 Gorin, Jim Sep p5
 Gould, Jay Aug p11
 Grant, Maj. Gen. U. S. III Dec p6
 Grape Valley Lodge, Baja Cal. Oct p7
 Gray, Col. Asa B. Apr p22
 Greasewood Dec p27
 Greene, Art Jun cover, p13
 Green River Dec p5

H

Hand, Lee Jan p4
 Hansen, George Dec p10
 Hard Rock Shorty of Death Valley
 each issue
 Harmony Borax Works,
 Death Valley Apr p18
 Harpers Corner, Colo. Dec p6
 Harquahala Bonanza Mine, Ariz. May p15
 Harquahala Mts., Ariz. May p15
 Hassayampa R., Ariz. Apr p7
 Hatch, Bus and Don Dec p8
 Haury, Dr. Emil Mar p29
 Hawk, Gregory, Author of—
Crisis in Taos Nov p20
 Hays, Col. Jack Dec p13
 Hazen, Guy Jun p15
 Heald, Weldon F., Author of—
Bed and Grub in a Knapsack Feb p16
 Heald, Weldon Feb p42, Jul p24
 Heald, Weldon and Phyllis, Authors of—
A Day in Chiricahua Jun p9

Hell's Half Mile Dec p8
 Helm, James P., Author of—*Did They Find
 the Lost Breyfogle Mine?* Sep p17
 Helm, James P. (*Close-ups*) Sep p24
 Henderson, Bill May p5
 Henderson, Esther, Co-author of—
Papago Well of Sacrifice Jul p22
 Henderson, Randall, Author of—
*We Climbed El Diablo from the
 Desert Side* Jan p11
The Ancients Were Here Apr p10
Field Day in Muggins Hills Jun p15
Boat Ride on the Big Bend Jul p4
Miracle in Parker Valley Aug p6
*Seldom Seen Canyon in the
 San Jacintos* Sep p4
Mexican Tour for Motorists Oct p5
Trader at Canyon de Chelly Nov p10
Graveyard of the Dinosaurs Dec p5
 Henderson, W. T. Nov p6
 Hickok, Kenneth E., Author of—
Lost Lode of Sierra Sombreira Jun p25
 Highway and roads—Tijuana to San Luis,
 Baja Cal. Oct p5
 Highways & roads, litter along Feb p27, 28
 Higley, Ariz. Feb p31
 Hiking Feb p16
 Hillery, W. R., Author of—
Lost Desert Queen Mine Dec p18
 Homesteading Oct p22
 Horses Jun p31
 Horton, Harry Jan p11
 Hough, I. M. "Dad" Apr p17, Jun p27
 Hovenweep Nat. Mon., Utah—Apr p17,
 Jun p13
 Huey, Malcolm Jan p11
 Hull, Clinton, Author of—
Boat Trip in Mojave Canyon Feb p11
 Hull, Clinton R. (*Close-ups*) Feb p29
 Humbug Creek, Ariz. Apr p8
 Hungry Bill Mar p15
 Hunt, Jefferson May p12

*Here's a Christmas suggestion . . .
 Your friends will be thrilled with*

**LOST MINES
 & BURIED TREASURES
 ALONG THE OLD FRONTIER**

Friends of Desert readers are friends of ours—and we'd suggest for every one of them who enjoys following outdoor trails a copy of this fascinating, map-packed, mystery jammed book by John D. Mitchell, dean of Southwestern lost mine authorities. We know your friends will love these legends and stories (fun for campfire reading aloud) and be itching to pack their camp gear and follow the maps on the bonanza trail.

SEND US YOUR GIFT LIST TODAY!

Desert Magazine Press
 Palm Desert, California

(We'll be happy to Christmas wrap gift books, mail them either to you for under the Christmas tree or directly to your friends. Indicate instructions on order.)

I

Imperial Valley, Calif. Jan p35
 Indians—
 Agriculture Aug p6
 Arts and crafts Aug p12
 Administration of — Jan pp9, 34; Feb pp32, 33
 Ceremonials — Hopi Snake Dance, Oct p42; Inter-Tribal Indian Ceremonials, Gallup, Aug p4; Shalako, Jan p29; Smoki Snake Dance, Oct p42
 Education Jan p34
 Food Jan p23, Apr p22, Dec p26
 Games Dec p26
 Legends—Lichii, the Red Horse, Jan p17; Enchanted Mesa, Mar p27; *ho yeeh* spring, Dec. p25; Papago Well of Sacrifice, Jul p22
 Medicine Jul p27
 Petroglyphs—Jan p17, Apr p13, Jun p19, Oct p20
 Prehistoric Apr p10, Jun p13
 Tribes—Agua Caliente, Mar p42; Chemehuevi, Feb p12, Aug p6; Cahuilla, Sep p5; Colorado River, Aug p6; Hopi, Oct p42; Klamath, Jan p23; Modoc, Jan p23; Mojave, Feb p12, Aug p6; Navajo, Jan p17, Nov pp10, 18, Dec p25; Paiute, Jan p34; Papago, Apr p22, May p29, Jul p22; Smoki, Oct pp29, 42; Shoshone, Mar p17, Dec p10
 Welfare Jan pp33, 35; May pp29, 33
 Inter-Tribal Indian Ceremonials, Gallup Aug p4
 Ipo Jan p23
 Iron Mountain, Utah May p11
 Irrigation Aug p10
 Ives, Lt. J. C. Feb p11

J

Jaeger, Edmund Jan p32
 Janish, Jeanne (*Close-ups*) Sep p24
 Jaspagate Mar p8
 Jayhawkers Nov p6
 Jerome, Ariz. Jul p18; Oct p29
 Johnnie, Nev. Sep p18
 Johnson Canyon, Death Valley Mar p15, Jun p28
 Johnson, Mrs. Rose Long May p18
 Jolliff, Henry Apr p13
 Juniper Mar p34

K

Kerley, Joe, Author of—
 His Own Horse to Ride in the Happy Hunting Grounds Nov p18
 Close-ups Nov p33
 Kingston Pass, Cal. Mar p10

Keep Your Back Copies of Desert for Quick Reference

Attractive loose-leaf binders in Spanish grain leather, gold-embossed, are available for those Desert readers who want to keep their back copies for the maps and travel information they contain. Each binder holds 12 issues. Easy to insert, and they open flat.

Mailed postpaid for \$2.00

THE *Desert* MAGAZINE

PALM DESERT, CALIFORNIA

Kirk, Ruth E., Author of—
 Where Hungry Bill Once Lived Mar p15
 Klotho Temple, Ariz. Jun p15
 Knapsack Feb p18
 Knott, Walter Jul p14
 Koch, Peter Jul p7
 Kolb, Emery Jan p31

L

Lajitas, Texas Jul p7
 Lake Havasu Feb p11
 La Paz, Ariz. Apr p7
 Lapidary—
 Amateur Gem Cutter, by Lelande Quick each issue
 Sanding Apr p40
 Tumbling Feb p36, Mar p41, May p35
 Larson, Gustive O., Author of—
 Where Mormons Found a Mountain of Iron May p11
 Larson, Gustive O. (*Close-ups*) May p28
 Layton, Alvin Jan p5
 Lee Vining, Calif. Jun p31
 Lee, Wally and Martha Jan p8
 Lewis and Clark Jan p23
 Lewis, W. Scott Jan p42
 Lichii, the red horse Jan p17
 Life on the Desert (1953 contest winners) Jul p32
 Lila C. Borax Mine, Death Valley Apr p20
 Lilly, Ben Dec p23
 Lincoln Mine, Utah Jun p4
 Little Kimball Mine, Ariz. Mar p5
 Lodore Canyon, Colo. Dec p8
 Logan, Richard F., Author of—
 Lilies of Kingston Pass Mar p10
 Logan, Richard F. (*Close-ups*) May p28
 Lombard, Jess Dec p7
 Lost mines—
 Gold Behind a Waterfall Mar p22
 Lost Blue Bucket Mine Aug p17
 Lost Breyfogle Mine Sep p17
 Lost Desert Queen Mine Dec p18
 Lost Ebner Mine Nov p21
 Lost Lode of Sierra Sombrera Jun p25
 Lost Mine of the Blond Mayo May p22
 Lost Treasure of Carreta Canyon Jan p27
 Lost Treasure of Sonoyta Apr p25
 Peralta Gold Ledge Feb p22
 Lumholtz, Carl Apr p22
 Lynx Creek, Ariz. Apr p8

M

MacClary, John Stewart Jun p13
 Manly, Wm. Lewis Mar p16
 Mantle, Mr. and Mrs. Charley Dec p8
 Maps—
 Arizona—Arivaca, May p23; Bouse, Nov p14; Canyon de Chelly, Nov p11; Castle Hot Springs, Oct p18; Coolidge Dam, Jul p20; Colorado River Indian Reservation, Aug p8; Harquahala Mts., May p16; Muggins Hills near Wellton, Jun p15; Peloncillo Mts., Dec p21; Placer mining sites, Apr p6; Quartzsite, Sep. p10, Rawhide, Mar p6; Southern-central, Apr p6
 Baja California — Picacho del Diablo, Jan p11; Mexicali-San Felipe, Apr p11; Tijuana-San Luis Hwy., Oct p6
 California—Calico Ghost Town, Jul p15; Colorado River near Needles, Feb p12; Death Valley, Mar p16; Coxcomb Mts., May p8; Kingston Pass near Baker, Mar p13; Palm Canyon, Sep p6
 Nevada—Belmont, Oct p12; Congress and Johnnie mines, Sep p17; Copper Basin near Battle Mt., Jan p6; Ft. Churchill Dec p14
 New Mexico—Fort Union, Feb p6; Trail to Sign of the Red Horse, Jan p19
 Texas—Big Bend Nat. Park, Jul p10
 Utah—Cedar City, May p13; Minersville, Jun p6
 Utah-Colorado — Dinosaur Nat. Mon., Dec p6
 Wyoming—South Pass, Aug p21
 Maps, topographic Oct p39

Martinez, Julian Mar p27
 Massai Point Ariz. Jun p10
 Maxwell, Dr. Ross A. Jul p5
 McKenney, Wilson Jan p14
 McKenzie, Ollie Aug p14
 McLeod, Edith Rutenic, Author of—
 Where Indians Dug for Ipos Jan p23
 McLeod, Edith Rutenic (*Close-ups*) Jan p21
 McSparron, L. H. "Cozy" Nov p10
 McWilliams, Monty Oct p17
 Mesa, Arizona Mar p29
 Mesa Cabresta, N. M. Jan p18
 Meteors Sep p42; Nov p23
 Metropolitan Aqueduct May p6
 Mineral Mts., Utah Jun p6
 Minersville, Utah Jun p4
 Mining—Iron, May p14; Turquoise, Jan p4
 Mining news each issue
 Mission San Ysabel, Baja Cal. Jan p13
 Mitchell, John D., Author of—
 Lost Treasure of Carreta Canyon Jan p27
 Lost Treasure of Sonoyta Apr p25
 Lost Mine of the Blond Mayo May p22
 Lost Blue Bucket Gold Aug p17
 Modoc Mine, Death Valley Dec p10
 Mojave Canyon, Cal. Feb p11
 Mojave Rock Feb p14
 Montes, Francisco Dec p19
 Montgomery, Bob Dec p10
 Monument Valley Mar p20
 Moore, Dewey (*Close-ups*) Apr p33
 Morgan's Wash, Ariz. Apr p6
 Mormons May p11, Jun p4
 Mountaineering Jan p11, Feb p16
 Muggins Mts., Ariz. Jun p15
 Murbarger, Nell, Author of—
 Turquoise Miner in Nevada Jan p4
 Ghost Fortress in New Mexico Feb p5
 Forgotten Mine of the Mormon Pioneers Jun p4
 Silver Strike at Belmont Oct p11
 When the Troopers Came to Nevada Dec p12
 Murbarger, Nell Jul p11
 Musgrave, Mark Dec p23
 Museum of Northern Arizona May p29
 Myers, Mr. and Mrs. Moroni Jun p4

N

National Parks and Monuments, new fee schedule Aug p34
 Needles, The, Calif. Feb p12
 Newby, Edith O., Author of—
 Life on the Desert Mar p20
 Newby, Edith O. (*Close-ups*) Mar p26
 Night blooming cereus Mar p4
 Nolina Mar p10, Sep p13
 Noller, Calico Fred Jul p16
 North, Arthur W. Apr p10

O

Obsidian Dec p19
 Old Spanish Mine, Utah Jun p7
 Oliver, Harry Jan p2
 Oregon Trail Aug p20
 Overland Telegraph Co. Dec p15

P

Pacific Telegraph Co. Dec p15
 Packrat Feb p21
 Palm Canyon, Calif. Sep p4
 Palmer, Dr. Edw. Apr p22
 Palmer, Paul Mar p18
 Palomar Canyon, Calif. Jun p42
 Panamint City, Calif. Mar p16
 Panamint George Nov p7
 Parker Dam, Calif. Mar p31
 Pat's Hole, Colo. Dec p5
 Patton State Park, Calif. (proposed) Jan p32
 Pegleg Smith Liars Contest Dec p18
 Peloncillo Mts., Ariz. Dec p19
 Pensoneau, Clyde Aug p7
 Peralta, Pedro Feb p22
 Peshlakai, Elanor Mar p26
 Petrified Forest Nat. Mon. Jan p43
 Petrified wood Feb p27
 Petroglyphs Jan p17, Apr p13, Jun p19, Oct p20

Photography (contest winners)—	
Susie Reilly, Paul E. Black	Jan p22
Warren K. Smith, Dr. J. Robert Lindsay	Feb p4
Richard Randall, Frank Meitz	Mar p14
Barbara Bixby, Hetty Cooper	Apr p4
Clair Stone, A. La Vielle Lawbaugh	May p21
Dr. J. Robert Lindsay, Hetty Cooper	Jun p23
Andrew Crofut, Adrian Atwater	Jul p23
R. Van Nostrand, Adrian Atwater	Aug p5
Bill McLemore, Nell Murbarger	Sep p23
Clyde B. Smith, Dr. J. Robert Lindsay	Oct p4
Paul E. Black, Art Miller	Nov p9
Andrew Crofut, A. Wiederseder	Dec p17
Photography (covers)—	
<i>Thousand Palms Oasis</i> , Josef Muench	Jan
<i>Desert Lily</i> , Harry Vroman	Feb
<i>Inhospitable Land</i> , Chuck Abbott	Mar
<i>Nolina</i> , Josef Muench	Apr
<i>Goodbye Death Valley</i> , sculpture by Cyria Henderson, photo by Josef Muench	May
<i>Art Greene</i> , Josef Muench	Jun
<i>Summer Fun</i> , Esther Henderson	Jul
<i>Jemez Harvest Dance</i> , Ray Manley	Aug
<i>Bryce Canyon</i> , John Blackford	Sep
<i>The Lighthouse</i> , Josef Muench	Oct
<i>Reflection, Palm Canyon</i> , Hubert Lowman	Nov
<i>Big Bend Prospector and his Burros</i> , Josef Muench	Dec.
Pillsbury, Dorothy, Author of—	
<i>Weavers of Chimayo</i>	Aug p12
Pinyon pine	Jan p30
Placer mining	Apr p5
Porcupine	Dec p32
Powell, Maj. John Wesley	Dec p5
Pratt, Parley P.	May p12
Prospecting	Mar p35
Providencia Canyon, Baja Calif.	Jan p12

Q

Quartz	Oct p17
Quick, Lelande, Author of—	
<i>Amateur Gem Cutter</i>	each issue

R

Rainmaking	Feb p31, Apr p21, Aug p19
Ransom, Jay Ellis, Author of—	
<i>Ghost Town Prospector</i>	Mar p5
<i>Harquahala Bonanza</i>	May p15
<i>Historic Pass in the Wind River Country</i>	Aug p20
<i>Crystal Field at Quartzsite</i>	Sep p9
<i>Gem Stones in the Bradshaws</i>	Oct p17
<i>Agate-seamed Butte at Bouse</i>	Nov p13
Rattlesnakes	June p28, Nov p23
Rawhide, Ariz.	Mar p5
Reed, Mr. and Mrs. Jim	Nov p15
Reptiles—	
Desert tortoise	Jun p27
Rattlesnakes	Jun p28, Nov p23
Sidewinders	Aug p31
Richardson, Gladwell, Author of—	
<i>Gold Behind a Waterfall</i>	Mar p22
Rich Gulch, Ariz.	Apr p5
Riley, Mat	Jan p29
Rodriguez, Gen. Abelardo	Oct p7
Ruess, Everett	May p19

S

Salton Sea State Park	Jan p33
San Felipe, Baja Calif.	Jan p13
San Jose, Ariz.	Dec p19
San Juan R.	Mar p33
San Manuel, Ariz.	Jun p35
San Pedro Martir Mts., Baja Cal.	Jan p11
Santa Elena Canyon, Texas	Jul p7
Santa Fe Trail	Feb pp7, 43
Schiele, Lewis F.	Feb p10
Scorpions	Apr p27
Scotty, Death Valley	Jul p25
Selvas, Carita, Author of—	
<i>Life on the Desert</i>	Jun p20
Shiprock, N. M.	Feb p25
Shoshone, Johnny	Dec pp10, 29
Sibley, Gen. H. H.	Feb p9

Sidewinders	Aug p31
Sierra Club of Southern California	May p5, Sep p4, Nov p4
Sign of the Red Horse, N. M.	Jan p17
Silverlock, C. H.	Feb p22
Simpson Trail, Nev.	Dec p12
Six Springs Canyon, Death Valley	Jun p28
Smith, Francis M. "Borax"	Apr p19
Smith, George A.	May p12
Smith, Olga Wright, Author of—	
<i>Life on the Desert</i>	Jul p20
Smith, Olga Wright (<i>Close-ups</i>)	Jul p24
Smith, W. E. "Doc"	Jul p17
Snakebite, treatment of	Sep p24
Sotol	Sep p13
South Pass, Wyoming	Aug p20
Spell, Leslie D.	Jan p2
Stanton, Robert Brewster	Aug p25, Oct p26
Steamboat Canyon, Ariz.	Dec p25
Steamboat Rock, Colo.	Dec p6
Stewart, Col. Jos.	Dec p12
Stokes, Wm. Lee	Dec p7
Stratton, Fred	Aug p20
Superstition Mts., Ariz.	Feb p22
Szekely, Dr. Edmund	Oct p6

T

Tanner Trail, Grand Can., Ariz.	Mar p22
Tarantula	Mar p14
Tate, Earl E.	Mar p5
Taylor, Fenton, Author of—	
<i>Gem Stones in the Peloncos</i>	Dec p19
Telescope Peak, Death Valley	Nov p4
Thackery, Franklin A., Author of—	
<i>Sand Food of the Papagos</i>	Apr p22
Thackery, Franklin A. (<i>Close-ups</i>)	Apr p33
Thompson, Louise Switzer, Author of—	
<i>Life on the Desert</i>	Feb p21
Thoroman, E. C., Author of—	
<i>There's Still Color in the Old Placer Fields</i>	Apr p5
Thoroman, E. C. (<i>Close-ups</i>)	Apr p33
Thousand Palms Oasis, Cal.	Jan cover
Toledo, Jose	Jan p17
Tonopah & Tidewater RR	Apr p20

Topock Bay, Ariz.	Feb p11
Tortoise	Jun p27
Townsend, Everett E.	Jul p5
Travel, Mexico	Aug p31, Oct p5, Dec p26
Turkey Mts., N.M.	Feb p6
Turpentine broom	Mar p11
Turquoise	Jan p4
Twenty-mule borax teams	Apr p17

U

U. S. Department of Interior	Jan p42
U. S. Indian Bureau	Jan p9

V

Van Dyke, Judge Dix	Mar p10
Van Valkenburgh, Richard	Jan p17
Vulture Mine, Ariz.	Apr p8

W

Walter, Rose and Jack	Oct p14
Warner, Monte	Jul p4
Watrous, N. M.	Feb p5
Watson, "Long Tom"	Mar p22
Weavers Needle, Ariz.	Feb p23
Weight, Harold, Author of—	
<i>Man Who Bought a Ghost Town</i>	Jul p14
Wells, Ina M., Author of—	
<i>Life on the Desert</i>	May p27, Sep p20
Wells, Ina M. (<i>Close-ups</i>)	May p28
Werner, Louise, Author of—	
<i>We Climbed Rabbit Peak</i>	May p5
<i>We Climbed Telescope Peak</i>	Nov p4
West Fork, Palm Canyon	Sep p4
White, James	Aug p25, Oct p26
White, Seward, Author of—	
<i>Life on the Desert</i>	Nov p21
Wildflowers—Jan p42, Feb p29, Mar p26, Apr p16, May p20	
Williams, James, Oscar, David	Dec p13
Williams Station, Nev.	Dec p13
Wolfe, Irene	Jul p17

Y

Yampah	Jan p23
Yampa River	Dec p5
Young, Brigham	May p12
Yucca	Feb p31, Sep p15

A New Edition of Reg Manning's WHAT KINDA CACTUS IZZAT?

Who's Who of Strange Plants of the Great American Desert

"You'll love the desert if you don't get stuck on it," promises Cartoonist Reg Manning. In his famous cartoon guide, now in its second printing, he describes the "stickiest" of the botanical denizens of the desert land.

"Fortunately for you, we ain't educated enough to regale you with the scientific classifications of desert plants," Reg apologizes—but with his clever pen this famous Southwestern cartoonist creates animated caricatures of the cactus family and with delightful humor describes their forms, blooming habits, range—and their threats to the unwary.

Hilarious - Informative

... after laughing through 106 humor-choked pages, you'll be surprised how much you've learned from Manning's cactus critters.

\$2.25 postpaid

California buyers add 3% tax

Desert Crafts Shop

PALM DESERT, CALIFORNIA



Just Between You and Me

By RANDALL HENDERSON

THE OTHER DAY I was looking back through an old notebook—the book in which 18 years ago I compiled numerous charts and tables of figures in an effort to determine whether or not the publishing of a Desert Magazine would be a paying venture.

One of the tables was a compilation of population figures for the American desert — the states of New Mexico, Arizona, Utah, Nevada and the desert drainage of California. I used the 1930 census reports.

And now I have before me the 1950 census report, and here are the comparative figures of desert population for 1930 and 1950:

	1930	1950
Arizona (entire state) _____	435,573	749,587
California (desert sector) _____	110,400	295,522
Nevada (entire state) _____	91,058	160,083
New Mexico (entire state) _____	423,317	681,187
Utah (entire state) _____	507,847	688,862
Totals	1,568,195	2,575,241

So, our desert has been gaining—more than a million people in 20 years. That is a very fair showing for a land which our forefathers once feared and shunned. They thought it was a place only for jackrabbits, lizards and Indians—and now their descendants are finding that it is a place where folks may go and add years to their lives.

Some of my neighbors are complaining now that people are becoming too thick out here on the desert. They do not want this to become crowded like the metropolitan areas. I don't like too much fencing myself, but I am not worrying about this desert becoming over-crowded.

It is true that many new subdivisions are springing up along the desert highways where unimaginative real estate men are crowding houses together on 60-foot lots. But that merely is human folly. There is no need for it.

For those who still have a bit of the pioneering spirit in them, there are millions of acres where humans can find health and happiness—and such freedom as is possible only for those who are willing to forego some of the luxuries of a pampering civilization.

Yes, as you may have guessed, I decided after looking over those 1930 census figures that the desert country had population enough to make the publishing of a Desert Magazine a sound adventure—and I am glad to report that it was the best business decision I ever made. I confess I do get a little out of patience with the poets sometimes—I have to say no to two or three hundred

of them every month—but aside from that I do like my job.

* * *

Storm clouds are hovering over the San Jacinto range today. On the coastal side of the range it is raining. On this side, a hundred miles from the coast, the sun is playing hide-and-seek in a deep blue sky flecked with wandering clouds.

The San Jacinto range plays a tremendous role in the making of our climate. This is desert because those mountains are a barrier which keep the sea breezes and the rain clouds bottled up on the other side. But they also keep the Los Angeles fog and smog away from us—and for that we are grateful. Most of the time our air is clear and dry, and the late afternoon sun forms fantastic shadow patterns on the Little San Bernardino range which is visible from every north window in Palm Desert.

Every geographical location has its disadvantages. Ours, of course, is the summer heat. But the most of us who live on the desert side of the mountains prefer the high summer temperatures to the eye-smarting smog which seems to be increasing in density on the coastal side of the range.

American genius has been able to conquer the heat insofar as our homes and stores are concerned. But the scientific men on the other side of the range haven't even been able to agree as to the main source of the smog—whether it is factories, automobiles or incinerators.

* * *

The first Christmas was on the desert—a very humble Christmas in a land of arid horizons and lowly home-loving people. The central character in that first Christmas scene was a Child, whom we Christians now regard as the greatest Teacher of all time.

And so, to those of us whose homes are on the desert, Christmas has a special significance. There are many homes and hogans in this desert land where there will be no Christmas tree, no gorgeously wrapped packages, no tinsel or electric lights, and no radio to bring sweet Christmas carols. But there were none in the stable when Christ was born—nor did He ever know the glamor of such a Christmas.

His messages: "And on earth peace, good will toward all men," and "Whatsoever ye would that men should do to you, do ye even so to them"—these are words which express the true spirit of Christmas. And they are just as true and significant for the occupants of a lonely shack in a treeless land as for those who dwell in palaces.

BOOKS of the SOUTHWEST

ILLUSTRATED HANDBOOK OF INDIAN WELLS VALLEY

Native residents of Indian Wells Valley, the northwest portion of California's Mojave Desert, are few. The population is comprised of former citizens of every state in the Union and several foreign countries, most of them employed at the Naval Ordnance Test Station at China Lake.

The desert is strange to most of these newcomers. To help them become acquainted with their new surroundings, the China Lake Branch of the American Association of University Women several years ago undertook to publish a handbook of the area. A revision of the first *Indian Wells Valley Handbook*, published in 1948, has just been issued—and an excellent guide it is for valley visitors.

"Sightseeing" by Mrs. C. E. Paulsen describes the area's many points of interest, from Death Valley National Monument to Calico, Ballarat and Panamint City ghost towns, Rand Mining District, Fossil Waterfall, the Devil's Postpile, Darwin Falls, Coso Hot Springs, Aguerreberry Point and the many scenic canyons and mountain ranges. Other chapters tell of the area's history, geology, climate, botany, wildlife, birds and communities. A final chapter is devoted to desert first aid.

Eighty-nine pages, photographs, map, sketches of wildlife and botany. \$1.00, including sales tax.

GUIDE FOR MOTORIST, SPORTSMAN, EXPLORER

From Tijuana on the California border to San Lucas at the tip of the Lower California peninsula it is 1150 miles—with atrocious roads most of the way. Fifty to 100 miles is an average day's travel over much of the distance.

But as a reward to the venturesome explorer who undertakes this journey there is the thrill of penetrating one of the most primitive areas on the North American continent. The botanist will find many strange forms of plant life. The historian will recreate from scores of ruins along the way the mission life of Jesuit, Dominican and Franciscan padres who first brought Christianity to the peninsular Indians 256 years ago. For the sportsman there is abundant game and some of the finest fishing in the world. And while the population is sparse, the natives are most hospitable.

It was for the purpose of writing

an authentic guide book for the motorist in this region that Ralph Hancock, the author, and his sportsman friends, Ray Haller, Mike McMahan and Frank Alvarado, journeyed the length of the peninsula in a specially equipped car. In fact, Hancock has made several trips into the region.

And now the book, *Baja California*, with map and many photographs, is off the press in Los Angeles.

The narrative is a day-by-day story of what the travelers encountered along the way—the conditions of the roads, the availability of supplies, food and accommodations, the interesting side-trips to be made. There is much human interest in the book—glimpses of the natives who operate the onyx mines at Marmol, the copper miners at Santa Rosalia, the truck drivers along the road, dwellers in the peaceful pearl fishing community of La Paz.

Ralph Hancock is a very observing reporter, and has given more life and color to that rocky Baja California terrain than one usually finds in a guide book. For those who dream of a trip down the peninsula *Baja California* is essential reading.

Published by Academy Publishers, Los Angeles. 180 pp. Map, photos, index. \$5.00.

EPISODES IN THE CONQUEST OF THE WEST

Half a century of research and the writing of scores of western history magazine articles, books and pamphlets dealing with Indian wars and the Indians have undoubtedly made E. A. Brininstool an authority on his subject. His latest book, *Fighting Indian Warriors*, contains true and stirring accounts of some of the most famous Indian battles such as "Fetterman's Folly," "The Wagon Box Fight," "The Modoc Indian War of 1873."

In his preface the author states frankly that his sympathies are with the Red Man. The Indians fought for their homes and their lands — lands ceded to them by solemn treaty with the United States Government. The tidal wave of whites which overflowed the wild frontier country advanced civilization—but in too many instances irrespective of the rights of the Indian and without regard to his future.

Author Brininstool's tales are stirring reading with history and facts so interwoven that there can be little doubt of their accuracy. Famous Indian chiefs, brave white officers and troops, renowned scouts and trappers march through the pages. Heroism,

foolhardiness, treachery — all are blended in these tales of the winning of the West. All who read it will understand better the tragedy of the red men who tried vainly to stop the march of progress.

Published by The Telegraph Press, Harrisburg, Pa. 353 pp. 45 photographs, sketches and maps. \$5.00.

YOUNG CALIFORNIANS' GUIDE TO THEIR STATE

Travel can be enjoyable and educational too, the Johns family found when they moved to California and decided to get acquainted with their new state.

Colorful California is Vera E. Ostroth's story of Ginger and Jack and their mother and the weekend trips they took. Included are two chapters on the desert: "Desert Holiday," which tells of their visit to the date gardens and the National Date Festival at Indio, California; and "Springtime in Death Valley." Other sections describe Yosemite National Park, the Mother Lode country, Santa Catalina Island, Southern California, San Francisco and farming and recreational areas elsewhere in the state.

Written for children, published by Academy Publishers. 118 pages, 17 halftone illustrations. \$2.00.

Books reviewed on this page are available at Desert Crafts Shop, Palm Desert

BAJA CALIFORNIA

Hunting, Fishing and Travel in Lower California, Mexico

by

RALPH HANCOCK

with

Ray Haller, Mike McMahan and Frank Alvarado

SPORTSMEN: This is the guide to Lower California you asked for. Nearly 200 pages, 155 photographs, four-color jacket, end sheet maps, imitation leather bound and packed full of the kind of information you have long wished for.

THE AUTHORS: Hancock is an authority and well-known writer on Mexico; Haller, McMahan and Alvarado are sportsmen of repute and experience. This is the writing team that guarantees that this is a book you will enjoy reading or want to keep in your travel kit.

\$5.00 postpaid

(California buyers add 3% sales tax)

Academy Publishers
5299 Fountain Ave.
Los Angeles 29 California

This Christmas give **DATES**

... Golden California Soft Dates

direct from **RIPPLE'S GARDENS**



For Christmas giving, for holiday entertaining, there is no more welcome treat than Ripple's California Fresh Dates—the very choicest Algerian variety, Deglet Noor. Preserved in their own sugar, packed under the most sanitary conditions, packaged for smartness and long retention of their distinctive and delicate flavor, Ripple's Dates will brighten holidays wherever they are received as gifts or served by the discriminating, thoughtful hostess.

ORDER TODAY — FOR GIFTS OF DISTINCTION — FOR HOLIDAY ENTERTAINING
We Guarantee Safe Arrival Anywhere in the United States

GROUP No. 1

Premium Quality Dates. Only our very finest, golden, natural dates are used in the following packs. Excellent for gift purposes.

2¼-lb. box—\$3.50

3-lb. box—\$4.25

Delivered in U.S.A.

GROUP No. 2

Select Dates. Natural dates of exquisite flavor—recommended for either gift or family. Handsomely packaged.

2¼ pounds—\$3.00

5 pounds—\$4.75

GROUP No. 3

Beauty Can. Beauty and unsurpassed quality are combined in this pack of Premium Quality Natural Dates, neatly packed in our artistically labeled round gift can.

3 pounds—\$4.75

All above packages trimmed with Christmas Greetings in pleasing colors. All prices include delivery in United States or to any A.P.O. address.

Order With Confidence

- Ripple's Dates have enjoyed a nationwide reputation for top quality for more than 20 years.
- We GUARANTEE safe delivery and complete satisfaction, or duplicate order at no extra cost.
- Our thousands of regular customers re-order year after year—best evidence of our integrity.

ORDER WITH THIS COUPON

or send us your gift list with remittance and necessary information

SENDER'S NAME _____

ADDRESS _____

My check (or money order) for \$_____ enclosed.

Please send Size _____ Group No. _____

TO _____

ADDRESS _____

SEND TO:

RIPPLE

DATE GARDENS

DEPT. D — P. O. BOX 3

PALM DESERT
CALIFORNIA

GROWERS—For more than
20 years