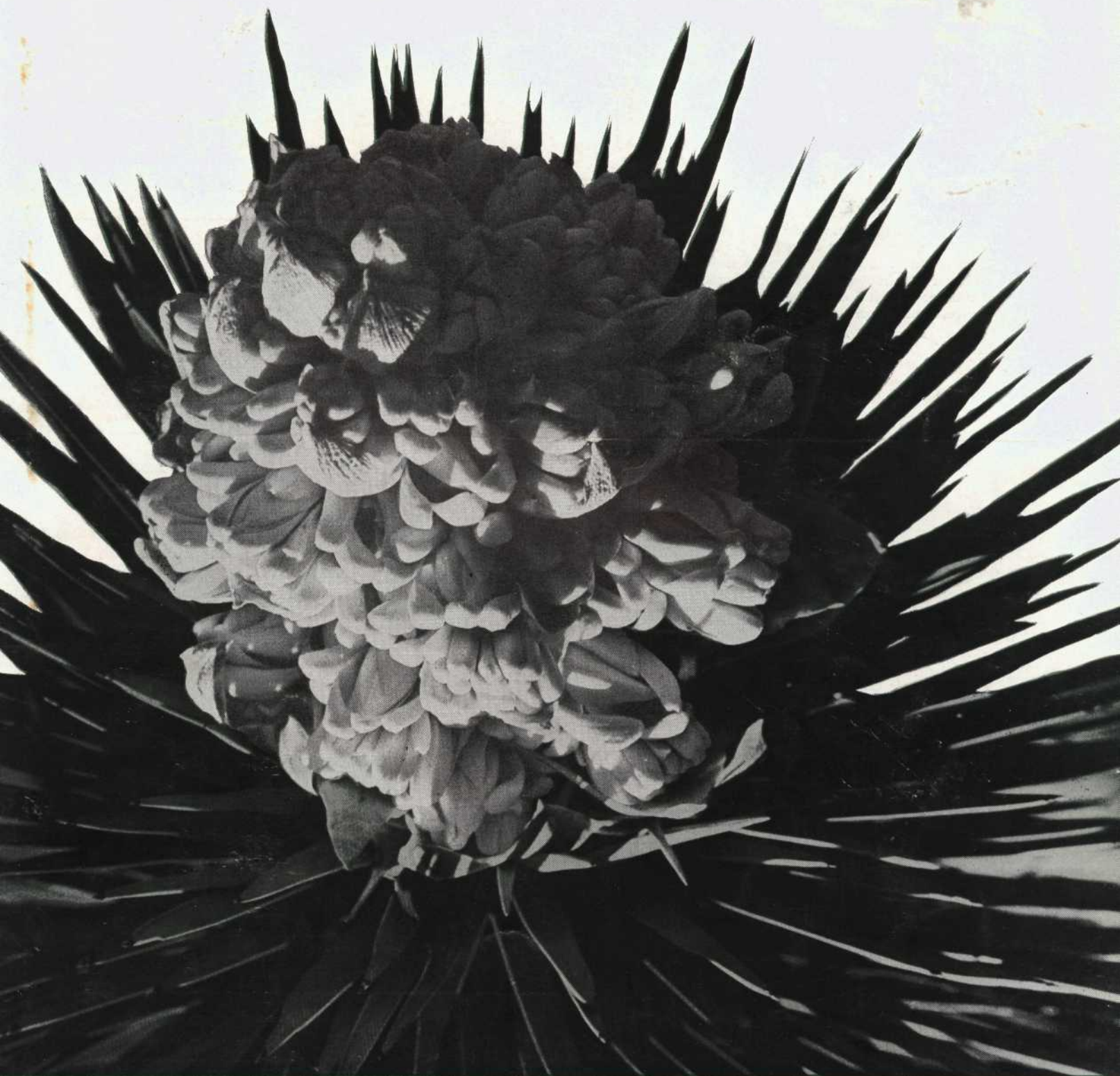


THE

Desert

M A G A Z I N E



JUNE, 1938

25 CENTS

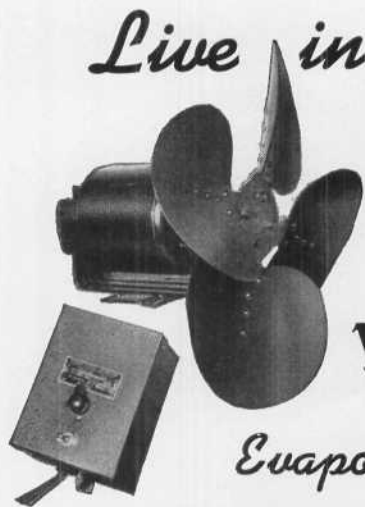
Live in

Cool Comfort

with

Wagner

*Evaporative
Cooling Fans*



With the improvements and increased efficiency offered by Wagner 3-speed, quiet-type, evaporative cooling fan assemblies (a unit is illustrated at extreme left) you can make, have built, or buy complete a home cooler for approximately \$100.00.

It is not necessary to invest heavily to secure satisfactory summer comfort cooling. As a result of much field experience and development on the part of Wagner engineers, a complete evaporative cooler equipped with a Wagner fan is now available at such low costs that all residents in desert regions can afford its welcome relief from the intense summer heat. Wagner evaporative cooling fans are now available at almost any hardware store, utility company store, building supply house, or electrical dealer or contractor store in your vicinity. Their low cost will surprise even the most cautious buyers.

SEND TODAY FOR THE NAME OF YOUR NEAREST DEALER
AND DESCRIPTIVE FOLDER.

Use Coupon at the right



For Your Protection Be Sure
to Insist on Wagner Evaporative
Cooling Fans for Your Coolers.

WAGNER ELECTRIC CORPORATION,
1240 S. Hope Street, Los Angeles, Calif.

Please give me the name of my nearest dealer and send me
your free folder describing Wagner Evaporative Cooling Fans.

Name.....

Address.....

City..... State.....

V238-2Z



VALUABLE FEATURES

1. Large Capacity
2. Low Operating Cost
3. Carefully Engineered
4. G. E. Aphonic Circulator
5. Long Life G. E. Motor
6. Durable Construction
7. Neat Appearance
8. Filters Easily Replaced
9. Proven Efficient Design
10. Easily and Quickly Installed



Evaporative AIR COOLERS

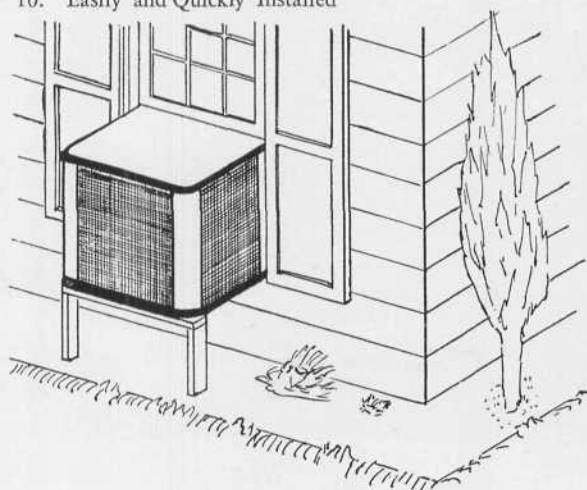
The C-AIR Evaporative Cooler is the result of years of active research in the field of low priced cooling. C-AIR is the first popular priced unit to utilize the famous G. E. Aphonic Air Circulator—quiet, large volume air delivery for less electric cost. It can be purchased in a number of sizes. The C-Air Evaporative cooler can be obtained with large capacity blowers as well.

« ON DISPLAY AT »

Patten Sheet Metal Works Imperial Electric W. W. Cassell
Fresno, Calif. El Centro, Calif. Tucson, Arizona

R. A. Baker
Indio and Hemet, Calif.

A. C. Meyer Banning Electric
Lancaster, Calif. Banning, Calif.



MANUFACTURED BY
AIR CONDITIONING COMPANY

1510 S. Los Angeles Street
Los Angeles, Calif.

PLEASE SEND ME
FURTHER INFORMATION

NAME.....

ADDRESS.....

CITY OR STATE.....

Desert Calendar

FOR JUNE

MAY 28—Six months trout season opens in Arizona.

MAY 28-29—Cowhands of Yavapai districts to compete in "Sports of the Rangeland" at Seligman, Arizona.

MAY 30—Pioneer Days celebration begins at Clovis, New Mexico.

JUNE 2-5—Sixth annual convention of Federation of Natural Sciences of Southern California at Pacific Palisades.

JUNE 11—Annual flower show in high school auditorium in Victorville, California.

JUNE 12—Annual Smoki dance at Prescott, Arizona.

JUNE 13 — Summer sessions to open at University of Arizona at Tucson.

JUNE 14-18—Golden Jubilee program to be held at Manti, Utah, observing 50th anniversary of the completion of Manti Temple which was dedicated by Brigham Young in 1888.

In the Center of Downtown

LOS ANGELES

FOURTH AND
SPRING STS.
DOWNTOWN

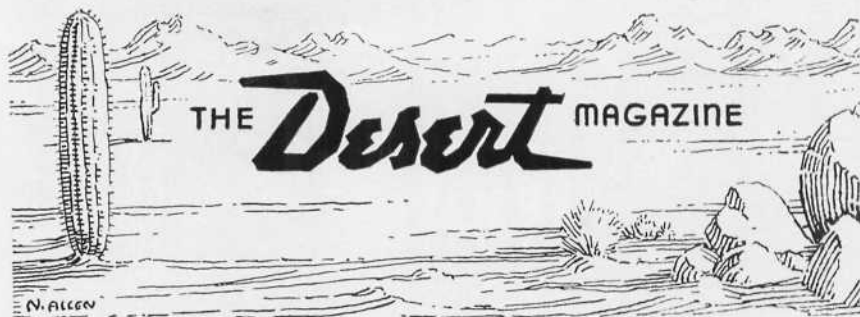


Right in the center of activities.
... a quiet, comfortable hotel
home . . . 200 rooms

From \$2 with from \$1.25
Private Bath

Angelus De Anza

HOTEL



Vol. I

JUNE, 1938

No. 8

COVER

Joshua Tree in blossom
Photo by J. P. KNIPP

CALENDAR

Important events on the desert in June . . . 1

POETRY

Best contributions of the month . . . 2

PHOTOGRAPHY

Prize contest winners . . . 3

PERSONALITY

Trail-Blazer to Rainbow Bridge
By JOHN STEWART MacCLARY . . . 4

TRAVELOG

Hidden Valley—Temple of Mystery
By WALTER FORD . . . 6

PRIZES

Announcement of amateur photograph contest . 8

CAMERA ART

"Feel" of the Desert
Photo by W. M. PENNINGTON . . . 9

CACTI

Queen of the Desert Night
By RUBY BOWEN . . . 10

FANTASY

Gift of the Genii
By WILFRED PARKS . . . 12

GEMS

Desert "Roses" That Never Fade
By JOHN W. HILTON . . . 13

PAGEANTRY

Smoki Clan of Prescott
By OREN ARNOLD . . . 15

CONTEST

Prizes to story tellers . . . 17

DEVELOPMENT

They Defied the Devil-God of San Jacinto
By J. WILSON McKENNEY . . . 18

NATURE

"Ghost Tree" of the Desert
By DON ADMIRAL . . . 21

REPTILES

Saga of the Walking Rock
By R. DeWITT MILLER . . . 22

WEATHER

Reports of the Meteorologists . . . 23

PLACE NAMES

Compiled by TRACY M. SCOTT . . . 24

CONTRIBUTORS

Writers of the Desert . . . 25

BOOKS

Reviews of past and present literature . . . 26

MINING

Highlights of the month . . . 28

FICTION

Hard Rock Shcrty
By LON GARRISON . . . 29

NEWS

Here and There on the Desert . . . 30

LANDMARKS

Prize contest announcement . . . 32

COMMENT

Just Between You and Me—By the Editor . . . 36

The Desert Magazine is published monthly by the Desert Publishing Company, 597 State Street, El Centro, California. Entered as second class matter October 11, 1937 at the post office at El Centro, California, under the Act of March 3, 1879.

Title registered No. 402,937 in U. S. Patent Office, and contents copyrighted 1938 by the Desert Publishing Company. Permission to reproduce contents must be secured from the editor in writing. Subscription rate \$2.50 per year in U. S. A. or possessions. Single copy 25 cents.

RANDALL HENDERSON, Editor
TAZEWELL H. LAMB, Associate Editor
J. WILSON McKENNEY, Business Manager

National advertising representatives: S. H. WILLIAMS & CO., INC.; Los Angeles, Western Pacific Bldg.; San Francisco, 220 Montgomery St.; Chicago, Wrigley Bldg.; New York, 507 Fifth Ave.

Staff representatives: Los Angeles, JOHN C. PUTMAN, Phone FEderal 9495; Phoenix, Stephen C. Shadegg, 14 E. Culver St.; Palm Springs, Don Admiral, Desert Museum.

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

IF LOVE IS THERE

By Lois Elder Steiner
Salome, Arizona

Even a desert a heaven can be
Without so much as the shade of a tree,
It love is there.
A smile and a kiss at the close of the day;
Heaven just can't be far away,
Not if you care.

There's heaven in even the sand at your feet;
It's not always in places where angels
meet—
It's ANYWHERE!

CALICO—1885—1905

By Alice Richards Salisbury
Daggett, California

Bare mountains rise, deep-dyed in lusty hues—
Chrome yellow, turquoise, russet, rose and
green!
Dark crag and shadowed mesa, deep ravine
And peak parade across horizon blues.
Benign they brood, nor note the far-flung
news
Of treasure-trove. Now MEN are here, men
lean
And hard and eager. A score of years they
glean
The metal Ages stamped from primal ooze.
And then the tumult of their warring lives
Dissolves. The bite of drill no longer rives
Red hills. Shy lizards man the ramp
Where that intrepid band once came to camp
In cave and tent and hovel walled from mud.
Across their burial-ground, coyotes scud!

SURCEASE

By Zee Leland
Ajo, Arizona

From teeming haunts of men I came—
Heart-sick and ill—
From river, lake, and trees, and green
Low-sloping hill.

Mile after mile—through city, town, and plain
I sped—and wept, and prayed aloud with pain
Nor found surcease.

Long hours of night and then the morning
came.

The waking sun stretch'd rosy fingers up,
Crasped firm the mountain top, and pulled
herself

To look towards the west,
Shrugging aside soft downs of gray, and pink,
And orchid—bound with gold.

To west—the mountains slipped o'er reaching
heads

Soft underthings of hazy blues and reds,
Then cast o'er all a cloak of purple mist
To wear throughout the day.

Below and far beyond my weary feet
The golden desert sands, with shift and swell,
Whispered of things untold and ages past,
And long since gone from man.

Minute blue blossoms smiled and laid a mat
On which they bade me stay a while and rest.
Life-giving sunlight flooded all the world
Warming my inmost chill.

Sortows, and ills, and heartbreak slipped away;
Peace bathed my weary soul!

No trace of man defaced this wondrous spot.
All nature chimed sweet morning notes of
praise,

Of Hope, and Love, and Strength, and Peace
—ALWAYS.

I stood alone with God—
Surcease!

POETRY

CREED OF THE DESERT

By JUNE LE MERT PAXTON

*Nature is Peace, and in blessing
For those who have gone astray,
She covers with sand in graceful
waves
The mistakes of yesterday.*

DESERT EYES

By Doris I. Bateman
Redondo Beach, California

I see his eyes—this man who knows the hills
And calls them Mother—blue, they are, and
pale

As if long staring in the sun distils
For him the sparse-flung beauty of the trail;
And in their half-translucent depths two
points

Of light pierce far into the mystery
Of his beloved desert which anoints
His nomad soul and sets it reaching, free.

Baffling, his eyes, for while their nameless
quest

Lies still unanswered in his pallid gaze,
They take unto themselves a manifest
Communion with the ageless nights and days:
All mountain lore is his, yet wordless
speaking

Turns inward, while his eyes are seeking—
seeking.

PEGLEG MINE

K. V. Bennis
Temecula, Calif.

Well, stranger, you put an ide' in my head,
Or leastwise it come to me 'count of you said
Somewhere, in these parts, was a mighty rich
ledge

Just lousy with gold from the heart to the
edge.

Discovered, way back in the pioneer days,
By a feller named Smith, so the old story says.
It seems to me, stranger, right careless of you
To tell me all this, for shucks, if it's true
I reckon I'd better be looking around.

That doggoned old ledge might be right on
my ground.

Well folks, I've sure hunted a heap for that
rock.

My wife's plum disgusted; she don't take no
stock

In them kind of yarns, says it's only a myth,
There never was nobody called Pegleg Smith.
Now I've got a notion that story is true;
I've met lots of fellows that think the same,
too.

Some of them's hunted a heap more than me
But nobody's found it and no two agree.

Now I'm goin' at it in the way, instead
Of usin' my feet, I'll be usin' my head.

One of these days when I have some more gas
I'll fill my old truck and go out thru the pass.

When I hit the city I'll start lookin' 'round
To see if some kin of old Peg can be found.

I'm goin' to find out what they have to say,
IF I find a Smith in that town of L. A.

YOU CAME TO ME

By Marty Hale
Steubenville, Ohio

A barren field of sandy waste,
The desert stretched with blinding glare—
For miles the heat-waves spiraled up,
No cooling breath of life seemed there;
Yet God had not forgotten . . . for
Where grassless sod and vastness loomed,
That we might know, and ever feel
His hand . . . He placed a cactus-bloom.

My dusty trail along life's path,
So like the desert did it seem,
The years stretched out in emptiness,
And scorched and seared was every dream;
But God remembered once again . . .
Like jewels in a rosary,
More wonderful than cactus-bloom,
Sweet as your song—YOU came to me!

DESERT MOON

By Sheila O'Neill
Winnemucca, Nevada

The desert moon rides low tonight,
Great golden globe of mystery,
Above the purple hills she peers
Across a gray-green sagebrush sea.

The desert moon rides low tonight,
As far as awakened eye can see
Her magic glory filters down
And banishes reality.

RAIN IN THE DESERT

By Alwilda S. Draper
Artesia, California

Rain in the desert,
Fitful, gusty spray,
Over dune and canyon,
Master for a day.

Rain in the desert,
Gray mists bending low,
Caress the shifting sand dunes
Veiling the sun's hot glow.

Tempest of little waters
Never find the sea
Rushing madly for a moment
Then lost eternally.

HOUSE OF 'DOBE

By Louise C. Rutz
Las Cruces, N. M.

It's a house of earth in New Mexico
Where the sun beats down and the dust clouds
blow

Where fluted peaks of the Rockies rise
With purple spires to pierce the skies.

A house of adobe with mud troweled walls,
Rough hewn vigas and cool dark halls,
Hand carved beams, a blanket gay
And a louvred door in the entry-way.

A house of clay and straw and sand
But fashioned with patience and skill of hand
To the firm content of the earth itself
In sage-brush and sun on a mesa shelf.

The massive walls turn the desert heat
And hold back the worry and cares that bear
From the outside world like winds that blow
On my house of earth in New Mexico.



HONORABLE MENTION:

J. P. Knipp, Long Beach, "Joshua Bloom"

Nicholas N. Kozloff, Riverside,
"Painted Canyon"

John E. Lanz, Glendale,
"Hedgehog Cactus"

Coachella Dunes

First prize picture in the amateur photographers' contest held by Desert Magazine in April. Picture taken by A. Wieder-seder of 153 Manor Street, Altadena, California, with 5x7 Cycle Graphic camera, one second exposure, stop 15, K-2 filter, at four p. m.

Acoma

This picture of the "Sky City" of New Mexico was awarded second prize in the April contest. Photographed by Ralph H. Anderson of Yosemite National Park. Taken with 3½x4¼ Graflex, 1/25 sec. at f11 K-2 filter.





Trail-Blazer to Rainbow Bridge

John Wetherill led the first white expedition to Rainbow Natural bridge in southern Utah in 1909. In the years before and since that date he has played a leading role in many other important discoveries and explorations in the scenic Four Corners region of Colorado, Utah, New Mexico and Arizona. In the accompanying text, John Stewart MacClary has given the readers of the Desert Magazine an intimate picture of one of the outstanding pioneers in the desert Southwest.

By JOHN STEWART MacCLARY

ON a blistering mid-August day in 1909 a little cavalcade threaded its way along an obscure Indian trail which led across northern Arizona and into southern Utah.

John Wetherill was the guide who rode ahead. Behind him came Dr. Byron Cummings, then of the University of Utah, and W. B. Douglass of the U. S. General Land office. There were others in the party, and pack animals to carry the camping equipment.

Vague stories had reached the outside world of a strange rock formation of such colossal proportions as to excite wonder and interest. So far as was known, no white man ever had seen it.

But Wetherill, seasoned guide and explorer, had undertaken to lead Dr. Cummings to see this natural phenomenon. Douglass and members of his party had

joined the expedition in northern Arizona.

Probably no other white man knew this wild northern Arizona region as well as Wetherill, but eventually the trail led into an area where he had not gone before. He knew, however, he could depend on the directions given by his Indian friends, and so he led the way without thought of failure. And as the sun was dropping down toward the western horizon the party reached its goal—the Rainbow Natural Bridge of southern Utah.

It was a momentous day for John Wetherill as well as for the men who accompanied him. That great span of rock which arches over Bridge canyon at a height of 309 feet probably has stood there for a hundred thousand years—but it has never failed to bring a gasp of awe from the visitor who sees it for the first time—just as it inspired countless generations of Indians with a feeling of superstitious reverence.

I wanted to meet the man who had led that first party of explorers to the site of this great scenic masterpiece. And so, with my trailmate Will Evans, I paid a mid-November visit to the Wetherill home at Kayenta, Arizona.

As pioneer traders on the Navajo reservation, Evans and Wetherill already were acquaintances. I first had heard John Wetherill's name mentioned in connection with the discovery and excavation of certain ruins in the Mesa Verde group in 1888. I knew that he had taken

part in many important explorations in American archeology.

The air was chilly and it was growing dark as we stopped before the vine-covered stone home of the Wetherills. Bright lights shining through the windows revealed a tree-bordered lawn and a lawnmower—here in the Arizona desert, nearly 200 miles from a railroad.

"Guess they're at home," surmised my trailmate, "I'll ask John about a good place to pitch our tent. Then we can pay him a call after we make camp and eat our supper."

A big black dog signalled the arrival of visitors. His bark didn't sound like a challenge. More like a cordial "Howdy, pard." Another light flashed on and the massive front door swung open. White haired, white bearded, dressed in riding clothes, John Wetherill stood in the doorway.

"Howdy, Will," I heard him say in cordial tones, "Long way from home, aren't you? Come in—and bring your friend."

Bewhiskered after ten days neglected shaving, trail-dusty and weary, we felt hardly fit to enter the orderly home without first cleaning up a bit. But the sincere hospitality of our host and his wife induced us to abandon our plan of making dry camp and brewing mulligan. The rhythmic tunk-tunk-tunk of the electric power plant's engine, the burning logs in the stone fireplace, the appetizing smells

wafted out through the door of the dining room—

"Bring in your bags," Wetherill insisted, "You're just in time for dinner."

We removed the topsoil from our sun-baked skin in a civilized bathroom. Our luggage was taken to a cozy guest room equipped with modern twin beds and warmed by an inviting grate fire. When the dinner bell rang we were ready to do full justice to the appetizing meal.

One impression I recall was the quiet efficiency of Fanny and Betty Wetherill who served us. These two Navajo girls—adopted and reared by John and Mrs. Wetherill after their own two children had matured and established their homes—showed interest and consideration for guests that often is lacking in more sophisticated dining rooms. There was no nervous clattering of dishes—no spilling of soup and beverages—no frantic tapping of hard heels on the wooden floor. The Indian girls of the desert exhibited the poise of cultured hostesses.

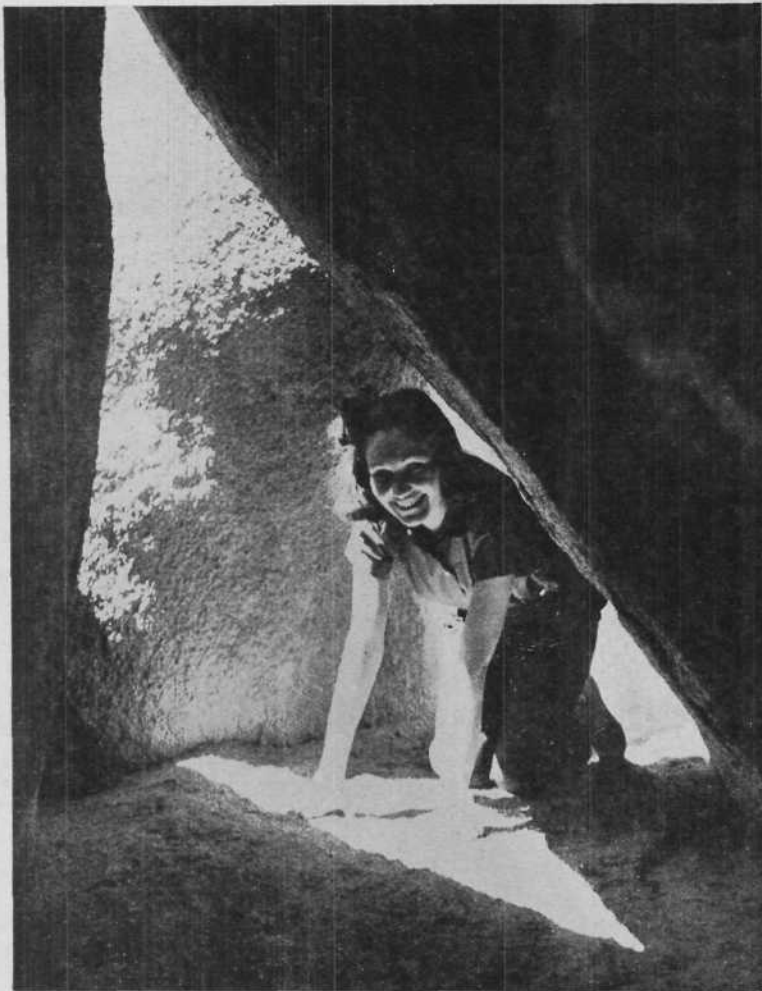
There are people who think desert Indians are doomed to lives of savagery—that it is impossible for them ever to absorb understanding of white men's customs. I have come to the conclusion that it all depends upon the skill and understanding of the teacher. The adopted daughters of John Wetherill brightly reflect the personality of Mrs. Wetherill.

During the dinner hour Mrs. Wetherill discussed an interest of hers which may contribute valuable knowledge in fields of scientific research. Over a period of

*Wetherill home at Kayenta, Arizona
—a tree-bordered lawn and a lawnmower
in the heart of the Navajo desert.*

Continued on page 34





Visitors to Hidden Valley have the choice of scaling the rocky walls which surround it, or crawling through a tunnel, the entrance of which is shown in the accompanying picture.

Last December Walter Ford was awarded a prize by the Desert Magazine for a picture taken in Hidden Valley in the Joshua Tree National Monument of Southern California. When the picture was published inquiries began to come in "Where is Hidden Valley and how may I find it?" The answer is given by Ford himself in the accompanying article. It is an answer which will interest all those who like to get away from the paved highways and visit the remote corners of the undisturbed desert.

Hidden Valley --Temple of Mystery

By WALTER FORD

"**Y**OU have to crawl through a narrow tunnel to reach the valley." The speaker gazed reflectively at the campfire and continued, "I reckon it's pretty safe to go in there nowadays, but back in the 70s a feller that wanted to remain healthy gave the valley a wide berth!"

We had camped for the night at Quail Springs in the Joshua Tree National Monument of Southern California. In the little group seated around our campfire was one of those hopeful patriarchs of the desert whose strike is always just one day ahead—tomorrow, and tomorrow. From tales fanciful and real of lost mines, bonanza strikes and frontier justice, the talk turned to cattle, cattle rustlers, and to the activities of the thieving fraternity in the area in which we were then camped.

Although it was overlooked by the Forty-Niners during the first gold rush, the territory which comprises the newly created Joshua Tree playground drew many gold seekers during the following years. After the miners had dispersed to other fields, cattlemen appeared on the

scene. Galleta grass grew in abundance. The water problem was solved by building reservoirs or "tanks" to catch the rainfall. As the cattle operations spread out it was inevitable that the gentry whose livelihood was gained by extra-legal methods should make their entry. Inaccessibility of the region made it ideal for their calling. Here stolen livestock could be kept from the eyes of the law until it could be driven across the Arizona border and sold.

"I said that you have to crawl through a tunnel to reach the valley," the old prospector resumed, "but when those rustler fellers were active they built a regular stairway for their cattle on the south side of the valley. There is a steep wash cut through the rocky walls from the floor of the valley to the desert outside. When they were moving their stolen plunder those rascals would move enough boulders to make it passable, and then roll them back into place."

This was my introduction to Hidden Valley. The rustlers are no more. Time and the elements have removed all traces

of the precipitous trail over which they drove their stolen cattle, but a narrow tunnel still affords access to one of the most picturesque spots in the Southwest. From the huge stone figure of a bird which appears to stand guard over the outside entrance, to the granite bull high upon a rocky abutment at the western end of the valley, a fantastic array of stone figures meets the eye of the visitor.

Foremost among these is the "Trojan," a grim-visaged resemblance to a warrior of ancient Troy, which adorns the inside wall at the right of the entrance. A few feet away another figure appears in the making, crude as yet, but sharply enough defined as an iceman with a block of ice on his shoulder. Because of its perfect outline and the commanding position it occupies, the stone bull presents perhaps the most startling figure in the area and, incidentally, a challenge to those who take pride in their ability as mountain climbers. Access to the figure is not easy. The way leads over huge boulders with spaces up to several feet between them. But if one has the sure-footedness of a mountain

sheep, he should be able to reach the top without much difficulty.

Only from such a vantage point as the stone bull affords can the remoteness of Hidden Valley and its advantages as a rendezvous for early-day cattle rustlers be fully appreciated. Not more than a few hundred feet apart, the two piles of granite boulders comprising the walls of the valley extend parallel for a distance of approximately one-half mile, then converge to form the western end. So deceptive are these walls when viewed from the outside that they appear as a single ridge of granite. Attesting this fact is the experience of a friend of the writer, who ignoring definite directions as to how to reach Hidden Valley, came back with the vehement assertion that no such valley existed! He had viewed both walls from the outside and had decided that nothing larger than a kangaroo rat could pass between them.

The region surrounding Hidden Valley has been a fertile field for archeological explorations for the past decade, but the valley has been overlooked. That it may have been inhabited by some aboriginal race in times past is indicated by the fragmentary pieces of pottery which have been found on the floor of the valley. Of added significance is the fact that in the area surrounding the valley crude thick pottery has been found along with the thin highly decorated type, while only pieces of the latter have been found in the valley. Archeologists who have worked in the surrounding territory are not sure whether these two types of pottery mark definite and separate periods in

The "Trojan"



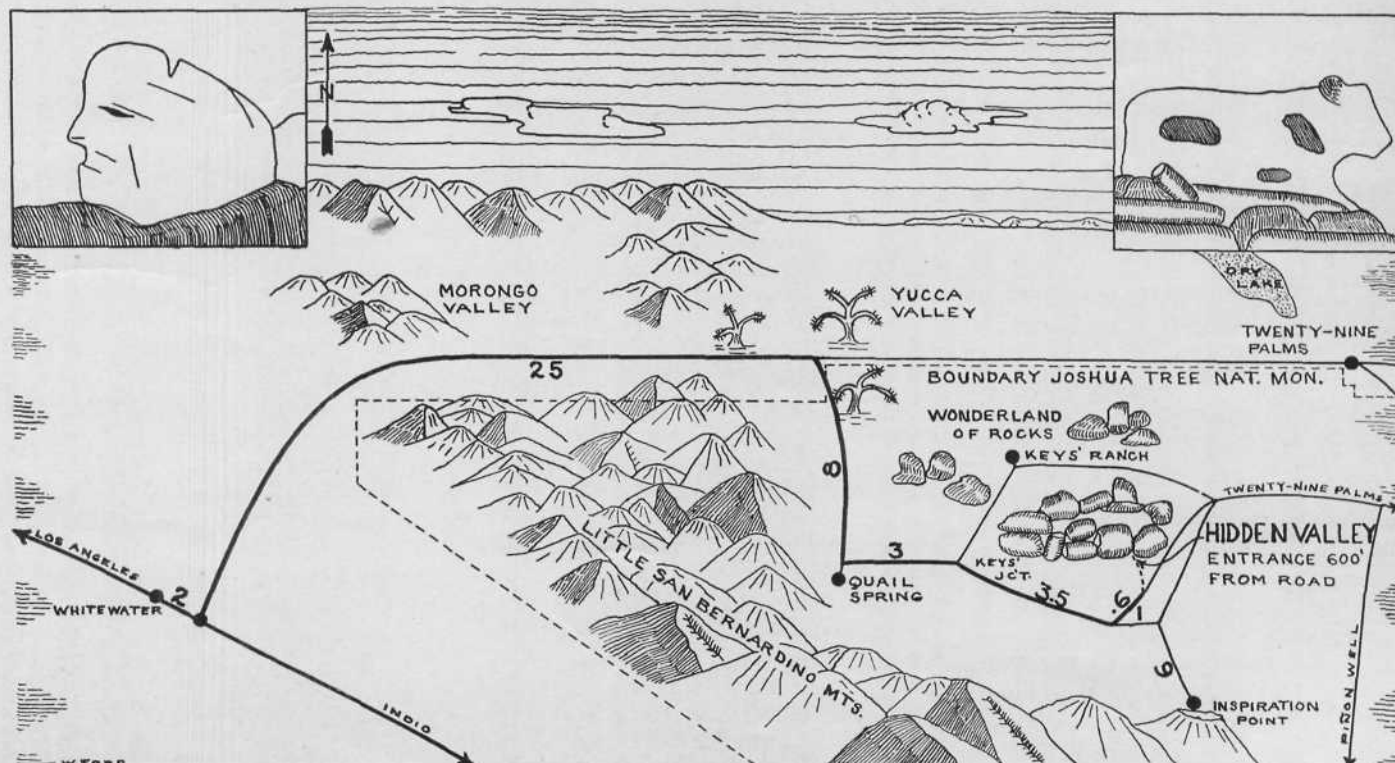
Recently the Sierra Club of California spent a weekend exploring Hidden Valley. This picture shows a group of Sierrans who made the difficult climb to the top of Bull Rock, one of the many odd formations found in the enclosing walls of the valley.

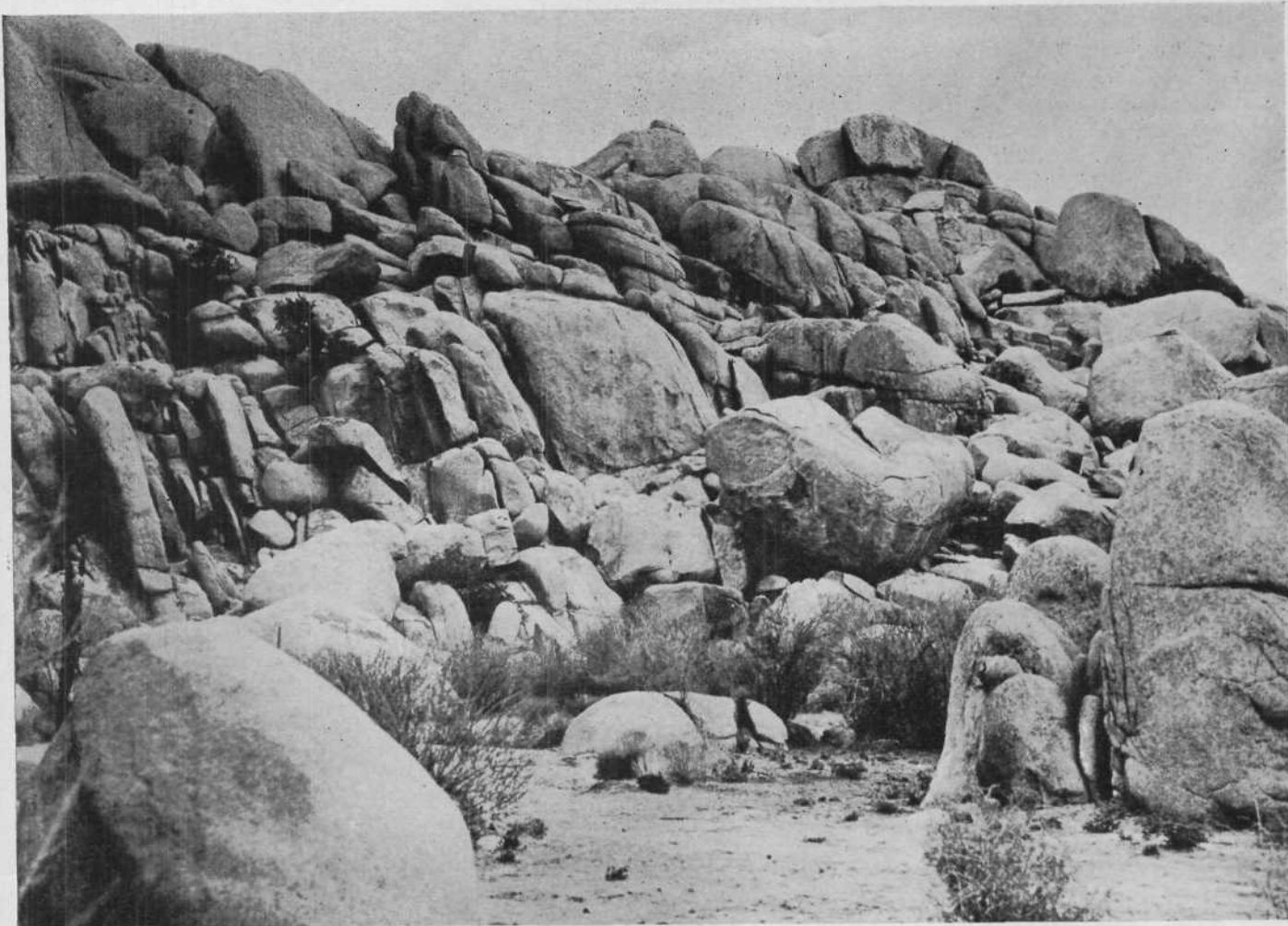
the prehistoric life of this region or the colored earthenware was brought in through barter with tribesmen residing at distant points.

Seeking to learn more about the aboriginal inhabitants of Hidden Valley, I engaged one of the numerous Indians who drift down into Banning from the reservation to accompany me into the valley. Old John, as he was known, came well recommended. He could read petroglyphs, it was said, and even determine the tribe of Indians that occupied certain

campsites. Upon being shown some writings incised in the rocks adjacent to Hidden Valley he made no comment, but over pieces of thick pottery he grew quite voluble. They were, he indicated, left by members of his tribe, the Cahuillas. After entering Hidden Valley, Old John became sullen and morose. A fragment of highly decorated pottery brought forth the cryptic remark, "Injun no live here." Undismayed, I led him to where some petroglyphic figures showed faintly through a covering of moss. Again the curt re-

The "Bull"





One might easily imagine that a race of prehistoric giants piled boulder on boulder in the creation of the granite walls which surround Hidden Valley.

ply, "Injun no live here." Whether the failure of my guide to reveal the history of the valley was due to some ancestral taboo, or to just plain ignorance of his surroundings, I was not able to determine. If the former, it may be affirmed that Old John did nobly in keeping the taboo intact.

For those lovers of the desert to whom the beaten path has become commonplace, and who feel that there are no new trails, a trip into Hidden Valley should prove a revelation. With its bizarre examples of Nature's handiwork, its thrilling possibilities of additional discoveries, and the restful isolation that its location affords, the valley will undoubtedly take its place as one of the most attractive spots in the whole desert area.

Hidden Valley may be reached by following the Quail Springs road where it branches off to the right from the Twenty-Nine Palms highway, 29.2 miles from U. S. highway 99. Six and three-tenths miles beyond Quail Springs the road forks to the left to join the Twenty-Nine Palms to Mecca road. Continue along that road seven-tenths of a mile where the car may be parked and the rest of the journey made afoot. The tunnel entrance may be found approximately 600 feet from the road.

PRIZES TO AMATEUR PHOTOGRAPHERS

Increasing numbers of camera fans are entering pictures each month in the contest conducted by the *Desert Magazine*. These monthly contests are open to all amateurs and the range of subjects includes close-ups of plant and animal life, desert homes and gardens, odd rock formations, landscapes, unusual personal pictures with a desert slant.

Prizes are \$5.00 for first and \$3.00 for second place winners. Composition, lighting, focus and other fine points of photography are no less important than subject.

Recently the *Desert Magazine* obtained two fine cover pictures from among the prints submitted by the amateurs.

Following are the rules governing the contest:

1—Pictures submitted in the June contest must be received at the *Des-*

ert Magazine office by June 20.

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

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

4—Prints must be in black and white, 2½x3¼ or larger.

5—Pictures will be returned only when postage is enclosed.

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

Winners of the June contest will be announced and the pictures published in the August number of the magazine.

Address all entries to:

CONTEST EDITOR,
DESERT MAGAZINE,
El Centro, Calif.



"Feel"
of the
Desert

MOTHER-LOVE

Photo by W. M. Pennington

Mother-love is the same in metropolitan penthouse and in humble hut of the desert Navajo.

The cradle which holds the Navajo papoose is of a type long known in the desert Southwest. Ancient cradle boards unearthed in the ruins of cliff dwellings are much the same as those used by modern pueblo mothers to carry their infants.

In childhood and maturity most Navajos are straight-limbed and erect in posture. The nose is strongly arched. The lips are firm and naturally shaped. It seems probable that the early months in the papoose cradle may have contributed to these characteristics.

Sheltered from direct sun rays by the canopy above its head, tiny feet supported on a board that is part of the cradle, the Navajo baby rides backward in this prehistoric rumble seat.



Queen of the Desert Night

By RUBY BOWEN

Papago Legend of the Desert Queen

Long ago, says a Papago legend, there lived a wrinkled and bent, kindly old Papago grandmother, who all her life had yearned to be beautiful. When it came time for her to set her burden basket down, Great Spirit heard her and granting her life-long wish he touched her shriveled arms, so like dried sticks, and wherever he touched them flower buds appeared. Once each year thereafter the little brown Papago grandmother is permitted to reign for one magic night as the beautiful Flower Queen over all other desert blossoms.

On a warm June evening as that haunting perfume of the Night-Blooming Cereus which Indians call the "Ghost Smell" drifts across the desert sands knowing Papagos will tell you that Great Spirit's promise has again reached fulfillment, and she who carried beauty unrequited in her heart those many years reigns again in floral loveliness.

Thus the desert Indians explain simply and beautifully that which has baffled botanists for many years, the presence of the indescribably lovely Queen of Night on our southwestern deserts, fragantly blooming, inexplicably carrying on her traditions during one of the hottest, driest seasons of the year.

OUT on my desert homestead west of Tucson, Arizona, as I watch my Night-Blooming Cereus cacti develop and make ready for another blossoming, I am inclined to agree with the Papagos that, truly, a Great Spirit walks these sands. Those who live in an arid, sun-parched region the whole year through inevitably come to regard the exquisite flowering of this plant with something of the awe reserved for birth, death, and other of Life's mysteries.

For months our desert Queen apparently was just a bundle of rather dry nondescript-looking sticks growing obscurely in the sand, quite like the plain, wrinkled, bent old grandmother of Papago lore.

Near the blooming time the plant stalks grow plumper and the buds with their white hairs begin to develop. Last year I watched my Night-Blooming Cereus buds for a week for tell-tale signs of their opening. During the last four nights they seemed unchanged, and then one evening suddenly the lovely petals began to unfold.

It takes the Night-Blooming Cereus about an hour to open fully, but during

the night the blossom continues to widen and elongate until it is said to reach its maximum size and the fullest perfection of its beauty in the hour before dawn.

Watching the blooming of a *Cereus* is a wonderful and never-to-be-forgotten experience. The large white petals sweep back in amazingly wide arcs before one's very eyes. Large, white moths flutter out of the desert moonlight, hover near and drink the nectar of that exquisite fragrance, making of our patio an enchanted place.

The blossom, measuring from three and one-half to almost six inches across and from seven to nine inches long, is a soft waxen white with slender gracefully-pointed petals. The lovely white under-petals are faintly tinged with shadowy lavender, blending to soft maroon tints near the stem, which gives the flower a distinctive, rather exotic appearance. These tints merge into the brown of the ovary and calyx tube and into the brownish-green fluted stems. A few slight pinkish bracts grow on the under side of the blossom. The dark, spiny stems by con-

trast accent the extreme delicacy of the flower.

Silvery pollen, powdery as star dust, rests lightly on the stamens which extend an inch above the blossom to form a corona about which moths hover.

Like its near-relative, the Giant Sahuaro, the flowers are funnel-shaped; but with the petals infinitely more graceful and recurved. The cactus stems are also fluted, as in the case of its giant relative.

When the first rays of the rising sun touch our *Cereus*, she begins to droop like a sleepy child, and her petals close. The blossoms, normally, are tight-shut before noon.

My finest photographs are not taken at night, but shortly before the rising sun peers over the mountain. By transplanting my Night-Blooming *Cereus* in the

shade in my cactus garden, and by screening them well, I find that I may enjoy the blossoms in all their loveliness until about 8:30 to 9:00 o'clock in the morning before they begin to droop.

As the petals start to close, the enchanting nectar, as if drawn out by the sun, increases in quantity, attracting wild desert bees which take the place of the night moths in continuing the pollinating process.

I have often wondered why someone doesn't give us the perfume of the Night-Blooming *Cereus* so that we might enjoy it the whole year through, instead of on just the magic night. Perhaps the relative rarity of the cactus may preclude this. The Night-Blooming *Cereus* is so very fragrant that one blossom will perfume a

Continued on page 35

There is neither beauty nor symmetry about the Night-Blooming Cereus until that eventful night when it bursts forth in radiant blossom. Because of its scraggly growth good pictures of the plant are not easily obtained. The Desert Magazine is indebted to George Chambers for this photo.

CEREUS BLOOMS

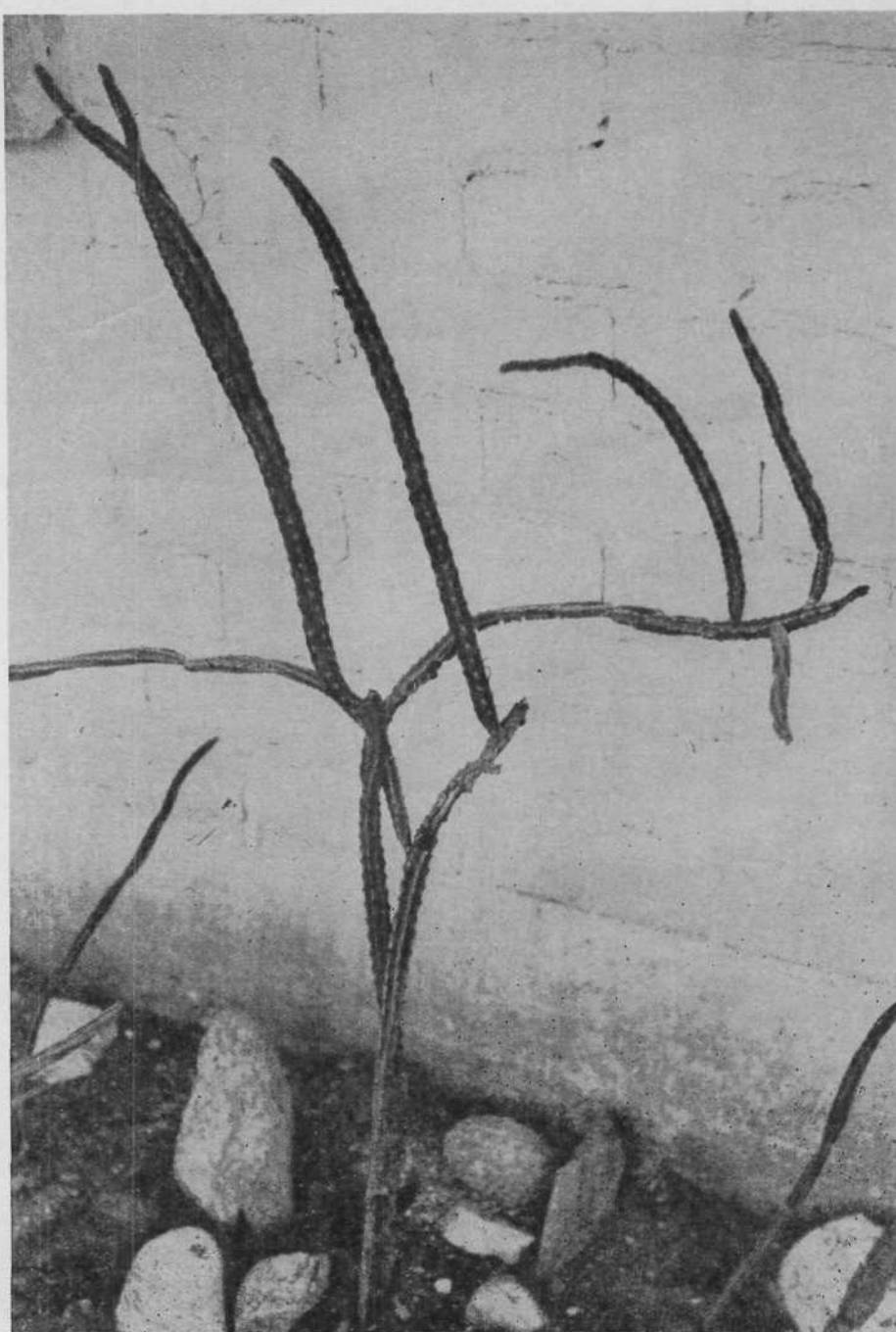
By the author of the
accompanying article

Refuged in purple shadows
Of desert mountains
In midnight darkness
On the desert . . .
A *Cereus* blooms.

Waxen petals, virgin petals lifted
To pale desert starlight
In the silence,
A slow measured silence . . .
A *Cereus* blooms.

All is still
As in death . . . quiet
Only a perfume,
A perfume seeping through darkness,
A hidden perfume
Haunting us, telling us
A *Cereus* has bloomed.

Putting on white robes
In unison; mysteriously,
In the quiet, hidden sanctity
Of desert altars;
Like virginal girls, veiled;
Veiled nuns taking final vows
In white robes,
Vows of purity, chastity, constancy
A desert *Cereus* blooms.





Gift of the Genii

By WILFRED PARKS

*I*N THE beginning of time, an Earth Magician sat in his enchanted grotto surrounded by the Seven Fairies of Creation. They were pondering their next gift to man. Many beautiful projects had been considered, but none seemed suitable to the moment. Finally the Earth Magician spoke:

"I will cleave a great chasm deep in the earth, deeper than any other earthly gorge, that man may have something to wonder at."

"And I," said the first Fairy Genius, "will write on the walls of this gorge the Story of Geology, that man may learn the history of our work."

"I," said the second Fairy Genius, "will toil with infinite pains with the Chisel of Erosion, so that man may learn the architecture of the elements."

The third Fairy Genius proposed: "Let me put in the bottom of this wonderful chasm a silver stream, more beautiful in its setting than any precious metal, so that man may be humble in his desires."

"Then," said the fourth Fairy Genius, "I will put along the glorious rim of this gorge a purple garland of cedar and pine with their silhouetted tips reaching mutely toward the violet canopy of the sky, a symbol of hope, for man to see."

After a moment of thought, the fifth Fairy Genius said: "When you have done all this work, I will grace its breadth and depth with morning and evening veils

—each veil tenuous and illusive, so that man may see it always as a pageant of mysterious color."

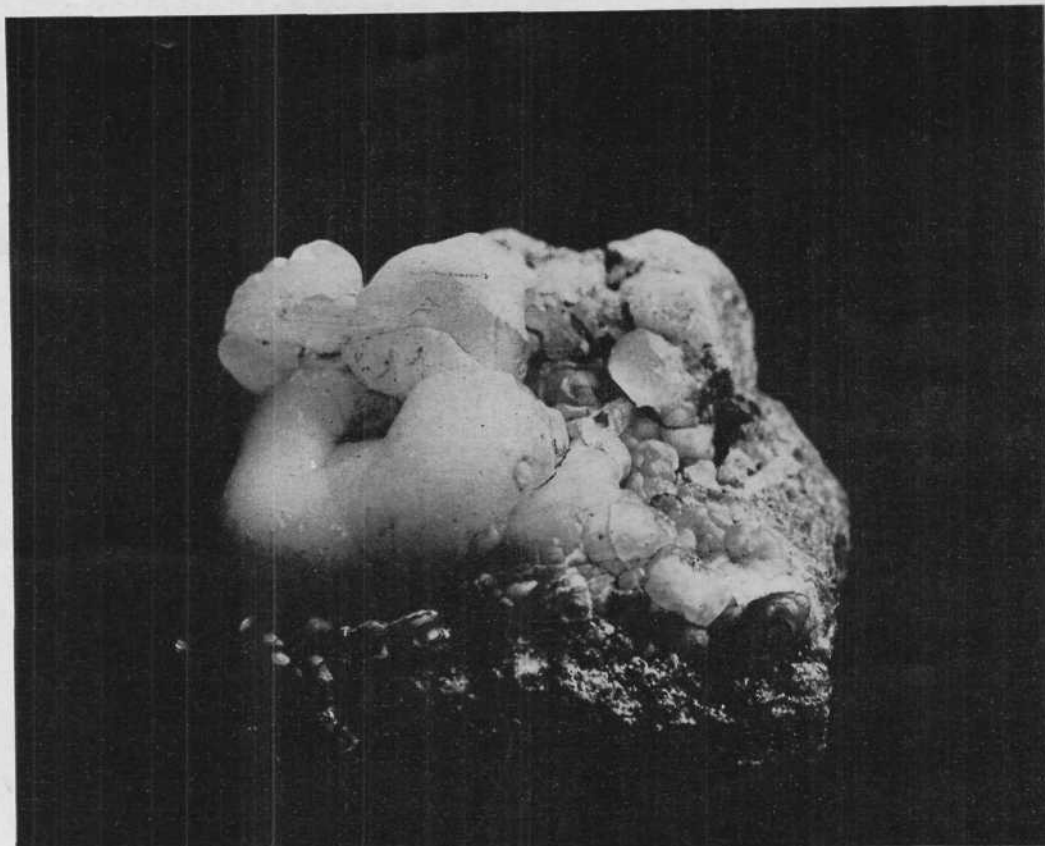
The sixth Fairy Genius considered sadly: "What is there left for me to do? You have done everything; nothing else can be added, unless . . . ah! I will cast over all a profound silence, so that man may find peace in his soul as he stands at the brink of the precipice."

They turned then to regard the seventh one, who sat in silent contemplation, undismayed. They wondered what might be his final contribution. At last the Fairy Genius spoke:

"And I will give to this Beauty, Grandeur and Mystery a dream quality, so that none can capture its exact image to take away with him for the purpose of barter or trade."

Thus the making of the gift began. Year followed year, to the hundred, to the thousand, to the million. Perennial floods cut their way down through the sleeping strata. Snows and frost expanded minute particles on the shoulders of the cliffs, thaws crumbled them, and rain washed them away. Contributing to the task was the sun's everlasting smile, while always at their lacework were the careful fingers of the wind. And when it was done, man came and gazed at all this majestic loveliness, and called it the GRAND CANYON.

This photograph, natural size, shows a "petrified flower" in its original matrix. This specimen was picked out of an exposed fissure in the rocks.



Desert "Roses" That Never Fade

By JOHN W. HILTON

"A PETRIFIED flower!" That is what the old prospector called it and little wonder that he did, for it resembled nothing so much as a camellia. This stone (for stone it was) had the appearance of having been carved by some expert oriental craftsman. It had the fine silky polish of an old piece of jade.

He had brought it to me from the Arizona desert. He knew that such an odd and pretty stone would be a welcome addition to my collection.

The next day at school my chemistry teacher identified it as a chalcedony "rose" and explained that the concentric arrangement resembling petals was due to an attempt at crystallization on the part of the silica of which it was composed. She had seen others of this type and said

there were areas on the desert where they are not at all uncommon.

Later, in the library I learned that chalcedony is a fine grained or cryptocrystalline form of quartz and gets its name from a Greek word meaning wax.

As a lad in school, the idea of roaming over the desert described by my prospector friend and seeking these strange and beautiful stones had a great fascination for me. From that day I have been deeply interested in these graceful little rose-ates of chalcedony. After reading everything available in the school library I felt that I knew all about how they were formed. But today I would not care to venture an opinion on the subject. There is an element of mystery that has never been explained to my satisfaction.

I do know they are found in igneous rock, or in alluvial fans and washes

In one of her artistic moments, Nature created a waxy flower-like gem which has been given the common name of "chalcedony rose." Generally they occur in fissures in the rock, but dislodged specimens frequently are picked up on the slopes of the desert mountains and in the arroyos. They are valued mainly for display and souvenir purposes. The gem-cutting fraternity admits frankly that it cannot improve on the natural craftsmanship of these stones.

where they are deposited after having weathered out of rocks. Although they were formed in rock which was very hot and their general shape resembles the melted wax they were named for, it is highly improbable they were a molten mass themselves. The evidence points rather to the theory that as the lavas began to solidify, hot silica jell condensed out of the gases and formed these odd shaped masses in the cavities and seams of the rock.

Although no two of them are ever shaped alike, still their composition is quite similar, indicating that some definite law of crystallization is involved in their formation. I have noticed that different localities run to definite types, showing that these laws must have been modified by varying temperatures and other conditions. One notable variation

seems to hold true. Those found in the fissures of rock are of the very smooth type, showing little if any actual crystals on their surface. Those found in the floors of gas pockets, although they may resemble in general shape the fissure stones, have a tendency toward definite crystallization. These crystals range in size from microscopic crusts resembling frost, to brilliant little gems a quarter of an inch long. Whether the crystals are large or small they are arranged in concentric form following the general outline of the rose.

There also seems to be quite a color variation but so far I have not examined any of a very bright hue. Most of them are either white or just off white running through pale pinks, orchids, greens, blues and light tans. A few have markings in concentric lines of light orange or rust color but these are not common.

It is surprising what a beautiful and interesting collection could be made of just this one mineral formation. Single pieces may also be used for paper weights, ash trays, match holders or other decorative objects, depending upon their size and shape. Some of the small smooth specimens make lovely charms or pendants. These do not require polishing or cutting as in most cases this would de-

tract rather than add to their individual character. A small diamond drill-hole to attach them to a chain is all the preparation necessary to make an interesting and beautiful piece of jewelry.

In my wandering about the desert I have encountered this mineral in perhaps 20 or 30 localities. There are probably hundreds more that have not been recorded or studied. I would be interested if any of my desert readers would send me information about chalcedony roses in their vicinity. I would like to use this material to compile a map of our southwest desert area, shading the portions where they are known to occur.

One of the places where fissures in the rock yield very beautiful specimens of chalcedony roseates is along the ridge at the top of the Kofa (S. H.) mountains in Arizona between Yuma and Quartzsite. Since it requires a strenuous 2500-foot climb to reach the ridge, it is not likely this field will be over-crowded with collectors. For those who are interested, however, the ascent of the Kofa massif should be undertaken from the northeast approach. Kofa is inaccessible on the

Typical chalcedony roseates found in many places on the desert. At the left a specimen taken from a fissure and at right one which had been dislodged and was picked up in an arroyo.

west and north sides except to the most skilled climbers.

Occasionally a pretty roseate may be picked up far down on the slopes of the mountain. Specimens also are found on the gravel slopes at the south and east base of the Cargo Muchacho mountains in eastern Imperial county, California, although they are by no means plentiful there.

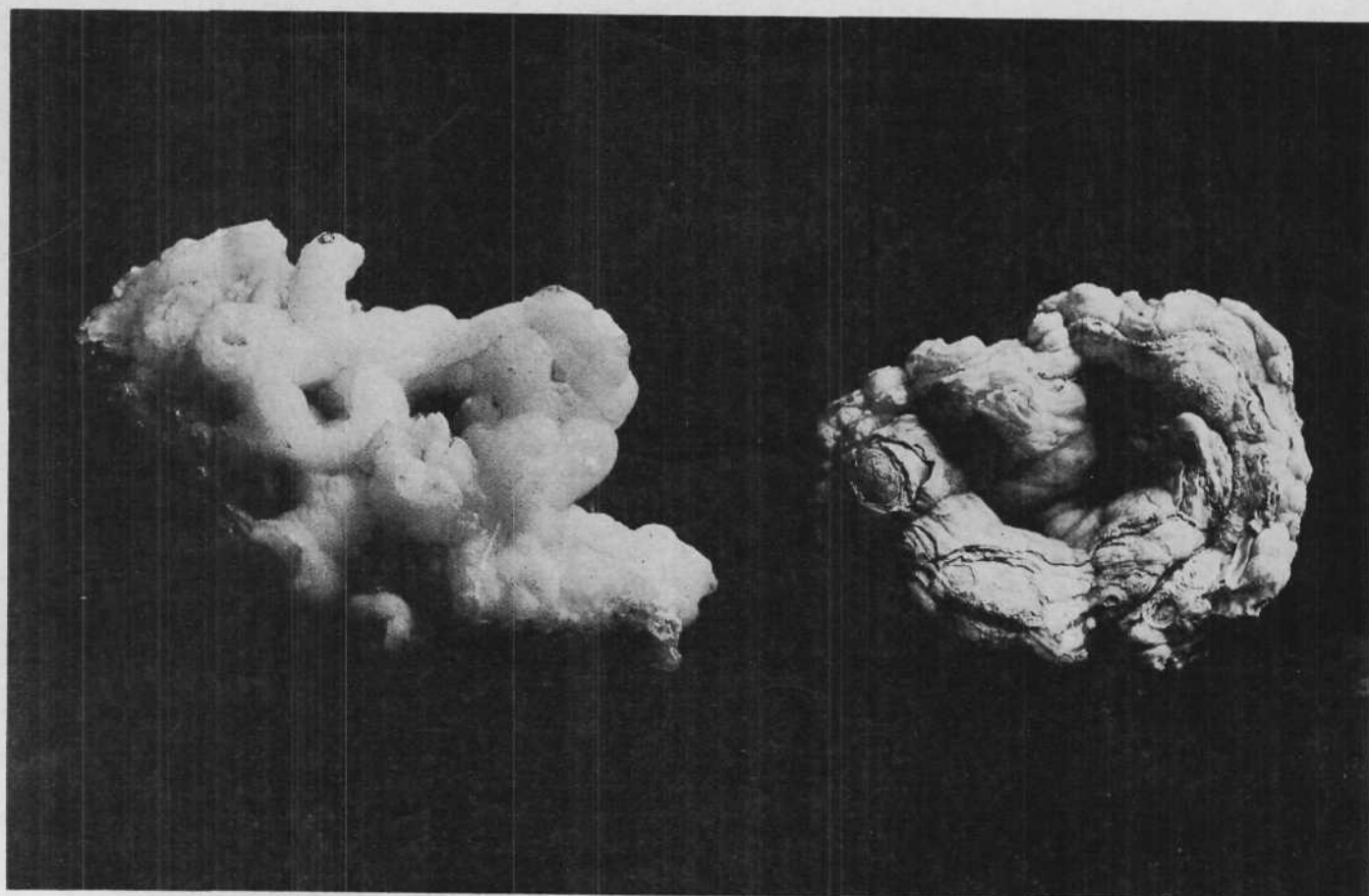
The value of this form of chalcedony depends largely on its attractiveness for display and souvenir purposes. Gem cutters prefer other forms of chalcedony for marketable stones. Nature has done such a lovely job of casting these roseates it would be rather presumptuous for man to seek to improve their natural beauty.

• • •

NEW GEODE FIELD IS FOUND NEAR 29 PALMS

A new geode field in which some of the stones contained crystals ranging from pale green to black green recently was discovered by a group of gem-hunters residing in the 29 Palms area of Southern California.

Following up arroyos 25 miles north of 29 Palms where specimens of agate have been found, members of the party came to embankments of pink clay conglomerate and discovered the geodes in their original matrix. A number of fine specimens were collected by those in the group.



Once each year certain business and professional men of Prescott, Arizona, don the paint and feathers of savage tribesmen and present a program of weird Indian ritual, including a modified version of the famous Hopi Indian Dance. The Desert Magazine asked Oren Arnold, Arizona writer, to go behind the scenes of this strange spectacle and find out just what kind of spiritual overhauling is necessary to bring a civilized white man to the point of dancing with a writhing serpent in his mouth, merely for the love of doing it. Here is the answer—an answer which will give you an intimate understanding of one of the strangest pageants on earth.

Smoki Clan of Prescott

By OREN ARNOLD

Date of Smoki Dance in 1938, Sunday, June 12



Prescott youths are being trained to carry on the traditional Smoki Dances in future years.

IF PRESIDENT Roosevelt were to offer me a place in his cabinet and a million dollars to dance publicly or otherwise while holding live snakes in my hands and mouth, I would turn him down and join the Republican party. But I know at least 40 or 50 otherwise normal white Americans who do dance publicly with reptiles in their hands and mouths—and call it art!

Moreover, I have no doubt it is art. It certainly isn't letters. Or science. Or horseplay. It is an extremely serious non-profit matter to them, and they make preparations and rehearse for weeks in advance. They are sensible business and professional men — salesmen, doctors, lawyers, grocers, dry goods merchants, car dealers, neighbors all. They go to church and honor the flag and love little children. In short, they apparently are quite American and sane.

Very likely you will know I refer to that amazing citizenry in Prescott, Ari-

zona, known as the Smoki People. They are world renowned; the chamber of commerce there has seen to that. But they do not thus make savages of themselves just for advertising. Nor is their performance any sort of travesty. It is quite unlike anything else anywhere in the whole world of the dance.

The Smoki Snake Dance was originated in 1921 as a little Trades Day entertainment on the village green. But the trading that day was forgotten because of the bizarre nature of the entertainment, and imaginative citizens straightway set out to make the dance an institution to perpetuate ancient American Indian ceremonials.

"Let us study the rituals of Southwestern Indians," they said, "and do what we can to preserve them, recording the chants and songs, studying and re-enacting the dance rhythms ourselves; otherwise these manifestations of real American art soon will be lost forever."

It was a meritorious plan. The older

generation of Indians were dying, and young Redskins were taking more to pale-face ways. Aboriginal art would die with the old timers. The white folk of Prescott set about the difficult task of preserving this art before it was too late.

Two dozen or so of the whites signed up for it. They had an idea it might be fun. It was. But it was exacting work, too. They thought of dropping it, but western folks are not quitters; tradition will not permit that.

Next they made it even harder on themselves by imposing the mask of anonymity. That is, each Smoki swore never to reveal his membership in connection with his personal business, never to try to capitalize on it, never to claim prestige because of affiliation with the strange clan. To this day the full membership list has been published only once, —and a storm of protest followed.

Look at the base of the left thumb of a man in Prescott. If you see a blue tattooed dot there, he has danced one year

in the Smoki Snake Dance. If two dots, two years.

Some now have six or eight dots and are very proud of them. These are the only badges of membership. Question one of these men, and he will answer you impersonally. They appoint a clan chief to answer questions. For such publicity as the chamber of commerce considers indispensable mimeographed releases are issued to the press. This is one show that is better than the ballyhoo; those who motor 100 or 200 or 500 miles to see the Dances feel that they have made a pilgrimage infinitely worth while. In these columns recently, Virginia Duncan lauded the Dons of Phoenix for their unselfish contribution to southwestern culture in the annual Superstition Mountain Lost Gold Trek, and urged that more enterprises of this nature be sponsored. Applauding that, I would like to add the Smoki People of Prescott to the hall of honor reserved for those who are preserving the finest traditions of the desert frontier.

The amazing circumstance of staid business men turning savage always evokes discussion. What spiritual overhauling is required for a civilized white man to strip off his clothing, dress and paint himself like a savage, and hop around with a snake in his mouth.

The answer is not easy. The *genus homo* has been desperately afraid of snakes since Adam and Eve had their encounter with one. Even the utterly harmless grass snakes cause terror in most yards, and a man must rationalize himself forcefully before he will handle one of the things. But the men of Prescott do it.

The Hopi Indians in their age-old dances use venomous rattlesnakes with poison fangs intact, but that's another story. The Prescott Smoki handle only the non-poisonous bull or gopher snakes, coach whips, chicken snakes, and sometimes an old rattler which has been doctored. Those Smoki snakes do bite, however. Incensed, frightened, they strike their men at every rehearsal and every dance, puncturing naked shoulders, arms, chests, occasionally a man's cheeks. I maintain that takes—let us say, fortitude—on the part of the men.

Novices in the Smoki clan of course are squeamish. They are told, though, that a snake is really clean. He may be washed, and become more sanitary than a cat or dog, or than human fingers which are eternally in germs! He is cold to the touch, which is the first shock, but this "snakiness" is a god-given thing just as is the dancer's warmth. Come to think of it, the snake probably imagines that the man is obnoxious too; and it is absolutely certain that the snake is more afraid of the man than the man is of the snake. In time, doubtless, they evolve a mutual respect.

Membership in the Smoki People has become the highest social honor that a Prescott citizen can have. Almost anybody with a friend can join the Rotary, the Kiwanis, the Lions, the Country Club. But only a man willing to devote long hours to reading and rehearsing his dance part can join the Smoki. Sometimes youngsters are admitted to the rehearsals, so that they may start training early and develop exceptional skill.

Because, you see, handling snakes is

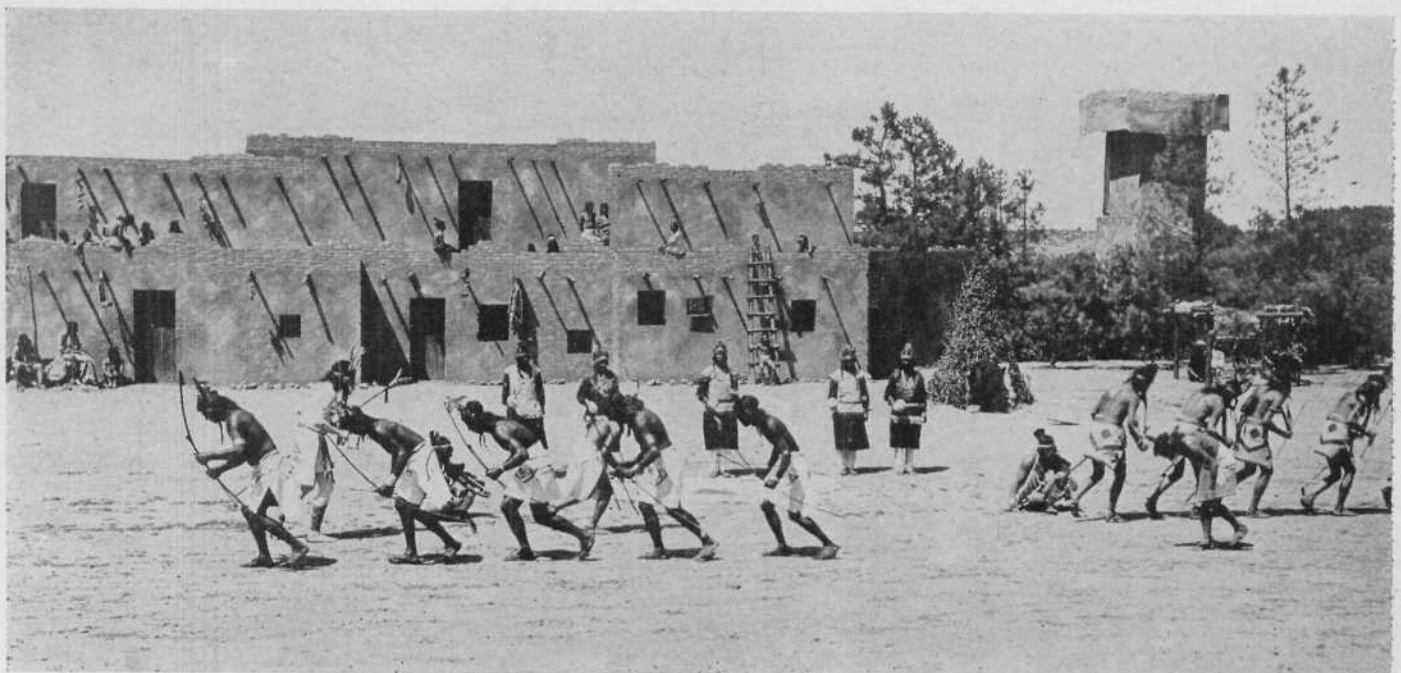
To the cadence of Indian Tom-toms the Smokis stage the Arrow Dance

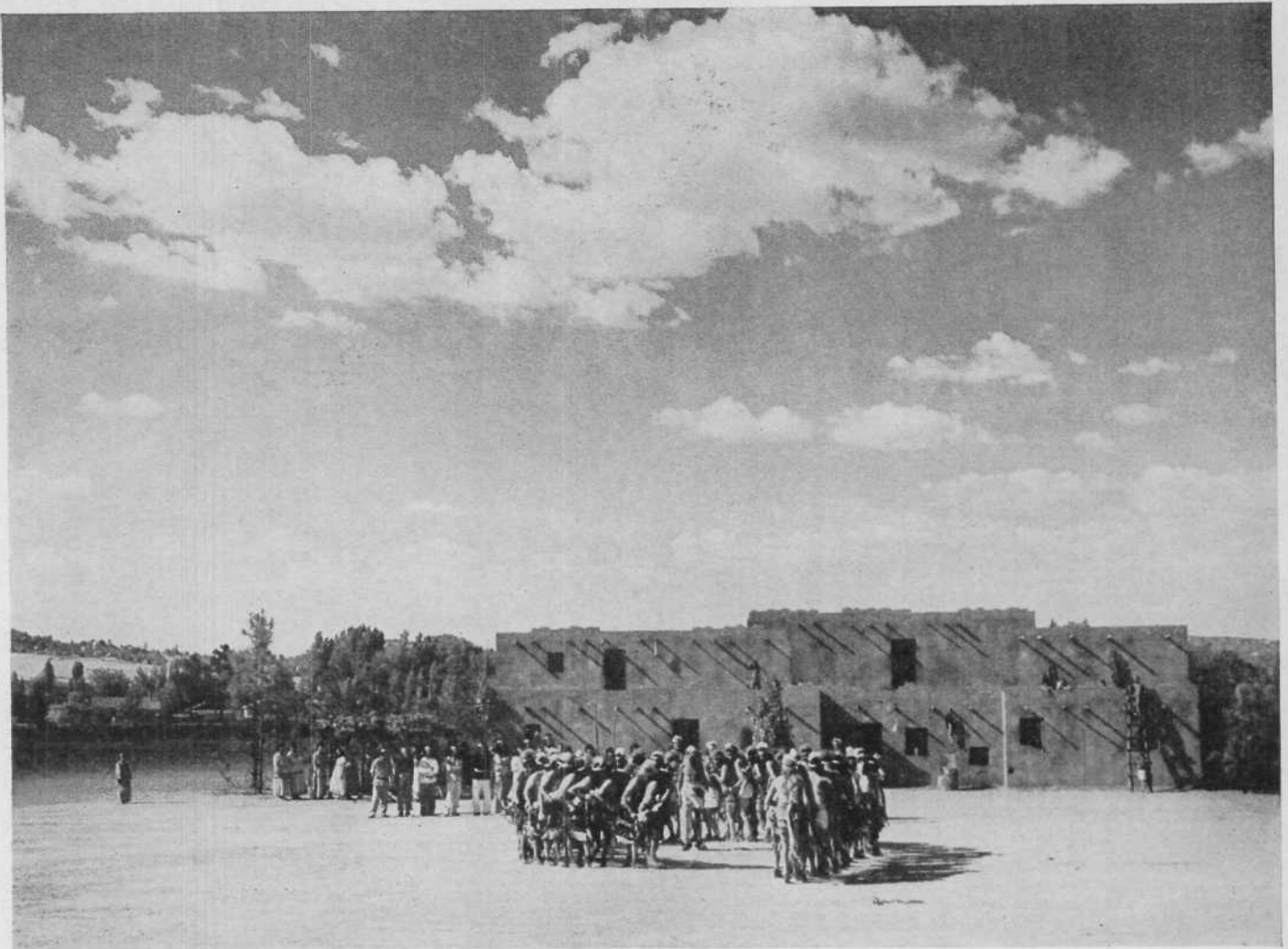
really the superficial part of this amazing dance ceremony. The rhythm and intricate pattern of the dance itself demand practice. The first Smokis had to be self-taught. No Broadway dancing master could be hired, because these were religious dances of the Indians, and even yet the Indians resent the white man's adopting their rites. Persons who have seen an Indian dance under the stars will know that it is a long, rhythmical, complicated thing, with intricate steps by individuals, and with strange routines by what pale-faces would term the ensemble or the chorus. The group moves in perfect unison, with no orchestral accompaniment save that of tom-toms and chanting. A man cannot go out before breakfast and learn to do that. He must work at it, slave at it, skip lodge to practice it, forsake the family fireside to rehearse it, neglect his business to travel around and steep himself in it. That's why my hat's off to the Smoki. They are GOOD, and they didn't get that way by accident.

Occasionally some hypercritical spectator is heard lamenting this "travesty on the Indian dances." He will look unctuously at the program, fleck a bit of honest dust off his Manhattan lapel, and ask, "How would you like it if some foreign race mocked your Catholic High Mass, or your Protestant ritual of the Lord's Supper?"

Well, he would have something there—if the Smoki People were MOCKING. But they aren't. They are re-enacting.

If the whites' High Mass or Communion ceremony were in danger of being lost and forgotten, then the Hopi Indians would be rendering a service to civilization and human knowledge by trying





faithfully to copy them and preserve them. You see?

One common error, on the part of people who have not seen the performance, is to assume that the Smoki do nothing but snake dances. Actually, there is a two-hour program of 12 or 14 dances, only one of which includes snakes.

The Fire Dance, the Buffalo Dance, and many others are shown first, and many are more beautiful than the snake rhythm. All in authentic costume, the men of Prescott, abetted by their costumed squaws and by harmonizing chanters, do the things that have constituted a good time on the high mesas of Navajo land or Zuni land, or the wilderness camps of the Apaches and Comanches, for at least a thousand years.

But the grand finale is the Snake Dance copied from the Hopis, and so profound is the white American love of the spectacular, the sensational, that we tend to forget the other rituals and center on this. Lou Gehrig at a baseball game will command all the applause and interest because of three lucky home runs, when maybe eight other players really won the game.

The Smoki People have performed twice away from their pine-guarded hill-

Indian architecture provides a realistic stage for the Smoki dancers

top near Prescott, once at Philadelphia and once at Phoenix. A great deal of love and a great deal more money, probably will be required to move them again. Something was lacking when the ritual

was enacted in an auditorium near Independence Hall, and in a football stadium at Phoenix.

It all boils down, I think, to the fact that—except for color of skin and the actual worship—these "Indian" dances of the white Smoki People in Prescott are REAL.

LIARS! HERE'S A PRIZE CONTEST

In order to settle a long-standing dispute as to which community has the highest temperatures, the Desert Magazine will conduct a contest during the summer months for hot-weather story tellers.

The first contest starts with the publication of this announcement and will end June 30, 1938. For the best hot air yarn submitted during that period a cash prize of \$5.00 will be awarded. For non-prize winning stories accepted for publication the rate will be one cent a word.

Here are the rules:

Stories may be submitted by any reader of the Desert Magazine regardless of place of residence. Yarns must be about the heat, and applicable to the desert region of Arizona, California, Nevada, Utah or New Mexico.

Stories may be either truth or fiction—preferably fiction.

The prize winning answer in the June contest will be published in the August number. Address entries to Hot Air Contest, Desert Magazine, El Centro, California.



They Defied the Devil-God of San Jacinto

Here's one spot on the edge of the desert where it is always raining—in the San Jacinto tunnel of the Colorado river aqueduct. Water pouring in from the roof and walls in parts of the 13-mile bore has been a terrific obstacle to engineers and workmen. It was no simple problem for Will N. Fox, photographer for the Metropolitan Water District, to secure this and other pictures accompanying this story.

By J. WILSON MCKENNEY

TAHQUITZ, devil-god of the Cahuillas, hides in his cave among the high peaks of San Jacinto mountain and grumbles. Many years ago, according to legend, he warned his dusky neophytes who occupied the desert canyons to the east that any who dared transgress the sanctity of the mountain would come to grief.

Indians still believe in the legend of Tahquitz. But the white men, in defiance of the pagan admonition, are drilling a tunnel straight through the heart of the devil-god's sacred domain.

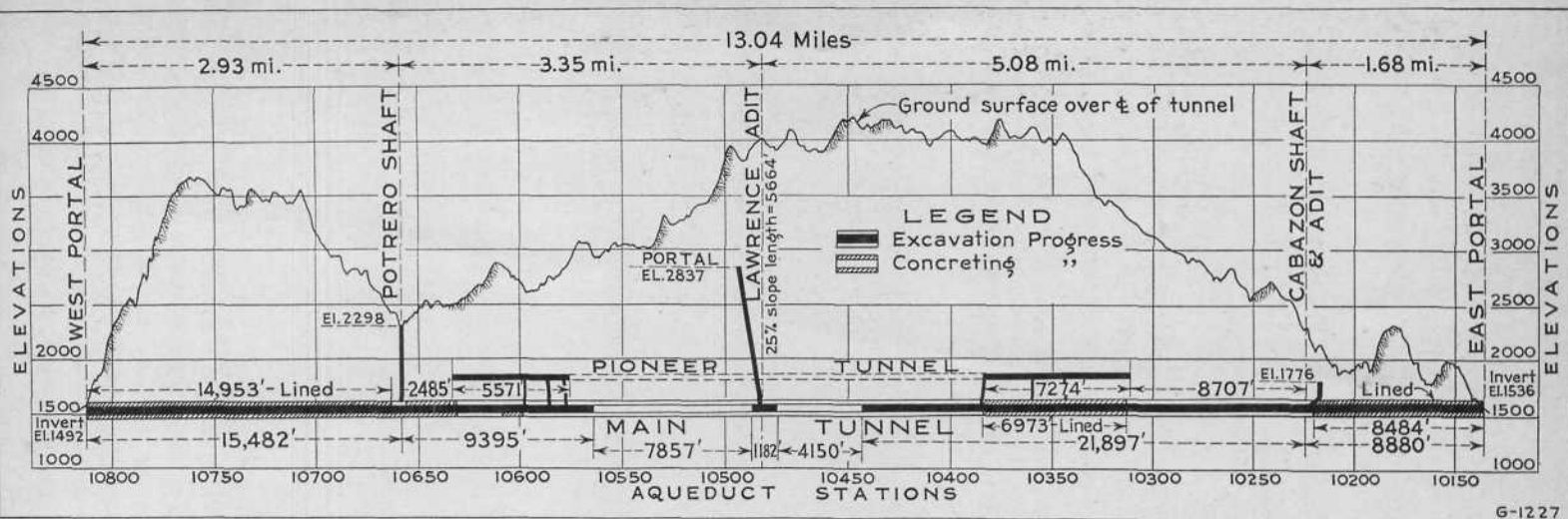
Five years ago engineers blasted the

first rock on the mountainside south of Banning as the Metropolitan Water District of Southern California began the gigantic task of bringing Colorado river water to the Pacific coast. Every day since that blast in May, 1933, old Tahquitz has rumbled his protest, and every day the white men have battled their way against seemingly insurmountable obstacles.

Practically all the work on the 242-mile aqueduct and the upper feeder system on the Southern California coastal plain has been completed—with the exception of the pumping plants and the San Jacinto tunnel. Only a few weeks of cleanup

work remain on the three plants. On May 15 it was estimated that the aqueduct was 85 per cent completed. But the San Jacinto tunnel, first to be started, will be the last section finished. Nearly 80 miles of tunnel have been completed on other parts of the aqueduct but only a little over 11 miles have been penetrated in San Jacinto. Is it any wonder that the Cahuillas speak of the supernatural powers of Tahquitz?

What is the reason for this slow progress through the mountain? The Indians say it is the wrath of Tahquitz. The en-



This progress profile chart was prepared especially for the *Desert Magazine* under the direction of Don J. Kinsey, Assistant to the General Manager of the Metropolitan Water District of Southern California. It shows the state of construction work on the San Jacinto tunnel of the Colorado river aqueduct as of April 15, 1938. It is expected the tunnel bore will be finished before next fall. It will be completely lined and ready for operation in 1939.

gineers say it is due to unexpected inflow of underground water.

Progress of construction work along the aqueduct and in San Jacinto tunnel is reported in a news bulletin published every week by the District. But it is impossible to draw from these sources the tenseness of the underground drama, the reality of physical combat, the romance of men achieving over great odds.

Determined to see and hear, for myself, I interviewed General Superintendent B. C. Leadbetter and received from him permission to visit the project. Office Engineer Dick Stephens took me in hand and related the story of conquest from beginning to end.

From the headquarters in Banning, Leadbetter phoned to Don DeWitt, chief inspector at Potrero, and sent me on my way, giddy with facts and figures. In a few minutes I had driven south over rolling hills to Potrero camp, nestled in the San Jacinto range. I parked in the only available spot, where the sign read "No Parking," and entered the frame shack labeled "Engineers."

DeWitt traced the history of the job for me on outspread blueprints and charts. The accompanying sketch shows distances, elevations, and progress of construction.

Contractors who started the tunnel at the west portal were flooded out at Potrero shaft. Declaring that the company had made unsatisfactory progress, District engineers took over the job on force ac-

count in February, 1935, installing huge pumping systems capable of lifting 16,200 gallons a minute by way of the 815-foot Potrero shaft. It would be virtually impossible to drive a tunnel this length from only two working faces: fresh air must be forced in, foul air drawn out, muck carried out, and excess water drained away. When ground conditions were found to be worse than anticipated, the Lawrence adit was added to

the original plans and the location changed to accommodate it. The change in course increased the length of the tunnel from 12.7 miles to 13.04 miles. At present the tunnel is being advanced at four faces.

The distance originally planned between Cabazon and Potrero shafts—8.22 miles—was the longest ever attempted without adits. Engineers believe that it would have been possible to drive this



View of a small portion of a "Face" in San Jacinto tunnel, showing water pouring from fissures and drill-holes. Larger streams under tremendous pressure are sometimes opened when the face is blasted. Fox photo.



A tremendous amount of wood and steel is used in supporting the roofs and walls of the tunnel. The miners will work in the "rain" until the cement arch is completed. Fox photo.

distance if they had encountered only dry rock. But they did not count on the curse of Tahquitz.

At the point in the discussion where I was nearing danger of statistical indigestion, DeWitt asked me the size of my hat, shoes and coat. For the trip underground I was garbed in hard-fiber helmet, hip boots, and rubber raincoat.

We waited at a tower of girders and cables until the last load of muck came up the shaft. A watchman swung open a steel gate and we stepped into a small elevator cage. Quickly and quietly the car dropped, dim lights flashed by, damp air struck our faces. In a little over a minute we had passed 815 feet, the equivalent of an elevator ride from roof to basement of a 60-story building. Another gate swung open and we stepped into the tunnel, a well-lighted world of metallic noises and musty odors. Everything was dripping wet. There was the sound of running water.

A train was ready for the eastward trip and we climbed on the front end of the squat electric power car. As we moved off into the tunnel I had the expectant thrill of a youngster embarking on a roller coaster ride. The inspector shouted in my ear and pointed downward. We were riding on an elevated track and under us a dark river was flowing toward the west portal. Above the noise of clanking cars, he shouted that the flow reached maximums of over 20,000 gallons a minute.

The mountain seems to be literally saturated with water, the good clear mountain variety that municipal councils would give their eye-teeth to have in city water mains. But to the District engineers this

good water is the curse of Tahquitz. As we rolled swiftly along on our 9400-foot ride, I turned over in my mind a strange paradox: here is a great desert project, an aqueduct laid across the most arid lands of the continent, yet its builders find their Nemesis in the very element it is destined eventually to transport.

The District does not want the mountain water. As fast as possible the tunnel is being sealed with stout cement walls and the crevices behind them are being grouted with liquid cement under pressure. The walls must be absolutely smooth and impervious to outside intrusion.

The miner who sat next to me on the car borrowed a cigarette. He started digging five years ago with the sun on his back at the top of Potrero shaft. Not all the men underground have been on the job that long but his experience expresses the spirit of the District, "We can't quit; the job must be finished." From Chief Engineer Frank E. Weymouth down to the lowest greenhorn track-layer that spirit prevails. If modern engineering can overcome the doubtful power of an ancient superstition, the Colorado river aqueduct will be ready to deliver water to the 13 member cities of the District in 1939 in spite of Tahquitz or hell 'n high-water.

The San Jacinto is not the longest of the tunnel series in the aqueduct: east Coachella bore is 18 miles in length. Why should this excavation under the snowy crown of Mt. San Jacinto be more difficult than the others? The Cahuillas have their answer: the engineers have other convictions.

Engineer Leadbetter had given me a

brief glimpse of the troubles which confront him daily. Down in the tunnel I began to understand what those problems are. The tunnel pierces dozens of ancient slanting faults, places where the rock mass has slipped in some prehistoric age. Melting snows above seep down to these faults and flow into the cracks. When a blast makes an opening in the fault, water spurts forth under pressure ranging from 100 to 600 pounds to the square inch. Miners work day after day in a heavy rain from the roof of the heading. The sight of new outpourings from the face just opened sometimes strikes terror to the heart of even the most seasoned underground man. But electric pumps drone endlessly behind him and a 30-inch pipe boosts the water out of the way.

Water rose 500 feet in Potrero shaft after the contractor was flooded out in 1934. Miners began to repeat an old Indian legend about a great underground lake. Fear that the tunnel had encountered it—or certainly would soon—threatened for a time to break down the morale of the workers. Since the District has completed the tunnel from Potrero westward, the gravity drain has dissipated the lake legend.

The "quicksand" scare about a year ago was in reality due to a quantity of fine material known technically as "gouge" which lies on the under side of the old faults. Although impervious to water, it flows when penetrated. A miner with a handful of excelsior can "plug the dike" against a flood if he acts quickly. The roof and floor of the tunnel are built on a firm foundation and no quicksand has been encountered.

I asked the inspector about the arsenic water which was said to have been a menace to stock along the San Jacinto river. For answer, he invited me to drink from a small pipe which had been stuck in a flowing fissure. The water was delicious. Chemists test it regularly. There has never been any contamination.

Farmers who rely on pumped water in the nearby valleys complained that the tunnel was tapping their irrigation supply and that the water level was lowering. Geologists proved, however, that the 20,000 gallons a minute coming from the mouth of the tunnel is less than one per cent of the available water supply in the mountain. Incidentally, heavy rains raised the water table in the valleys this season.

The most interesting point of all the complex mechanism of construction is at the working face, where men advance into unknown rock. Three shifts every

Continued on page 29



"Ghost Tree" of the Desert

By DON ADMIRAL

RULERS of the ancient empires are reported to have worn gorgeous costumes, but it is doubtful if old King Solomon himself ever was arrayed in the regal splendor of a desert Smoke tree at blossom time in June.

Smoke tree's display of color is especially conspicuous because it comes at a season of the year when most of the other plants and all of the creatures of the desert are in retreat from the withering rays of the summer sun.

Writers have never agreed as to whether the flower is indigo, purple or deep violet-blue, but it is a colorful blossom and grows in such dense clusters as to change the entire color scheme of the desert arroyos during the period when it is in flower.

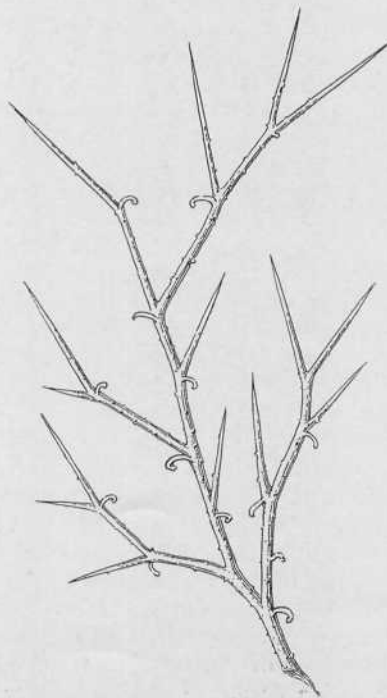
Smoke tree is another of the desert shrubs favored with a common name which accurately describes the aspect of the plant. Seen at a distance, the pale gray-green tops of the trees may readily be mistaken for the smoke wisps of a dry campfire. Among Mexicans it has been called "ghost tree." Tiny leaves appear on the stems at times but are hardly no-

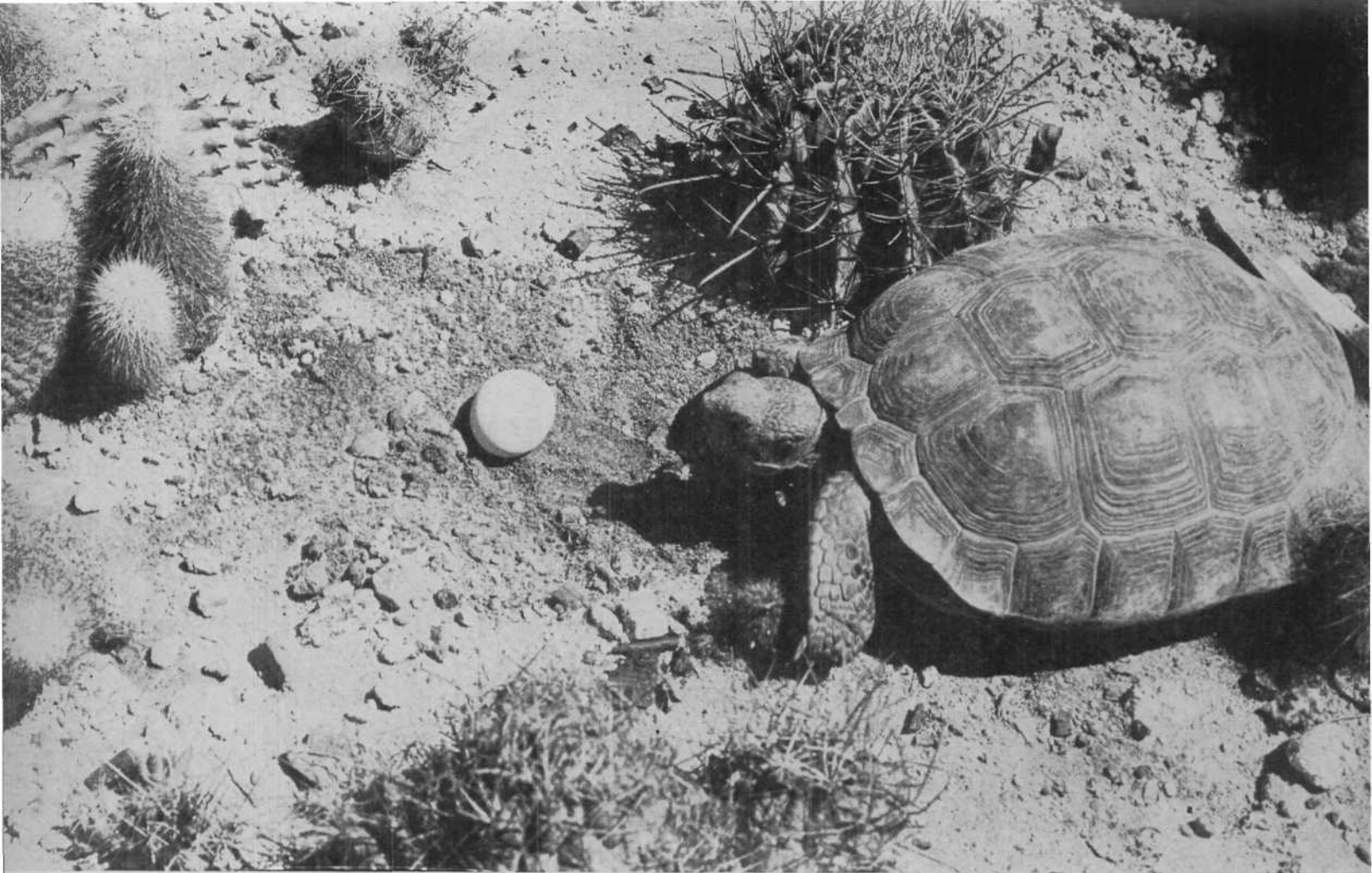
ticeable, and soon fall off. Generally the tree has the appearance of being entirely leafless.

Originally the tree was named *Dalea spinosa*. Later the name *Parosela spinosa* was given. Recently, however, *Dalea spinosa* has again returned to favor. The genus name is in honor of Thomas Dale, an English botanist. *Spinosa*, the species name, refers to the sharp pointed twigs or branches.

Habitat of the tree is the dry wash beds in the deserts of Southern California, Arizona, and Sonora and Lower California in Mexico.

The tree in its native state is protected by law. It is difficult to transplant, and those who wish to secure Smoke tree for gardens or exhibition purpose will have better success in growing it from seed. The plant grows rapidly under favorable conditions and becomes a fair-sized tree in three years' time. Its mature height is from 12 to 15 feet. Mature trees may be pruned severely if new growth is desired. Pruned trees should be given plenty of water.





Tortoise eggs are buried in shallow holes scooped in the desert sand by the reptiles. This female is about to cover her egg with sand. It will be hatched by the sun. Tortoise eggs vary in size, the larger ones being very similar to bantam eggs.

Saga of the Walking Rock

By R. DeWITT MILLER

RISE in defense of the desert tortoise. With the world pock marked by war and tumult, a little consideration of the calm visage and philosophical habits of the strangest reptile on earth seems rather in order.

The desert tortoise has good reason for being philosophical. Behind him is an unbroken heritage of 100,000,000 years. In the Mesozoic period when there was scarcely an animal alive which would be recognizable today, tortoises existed which were practically identical to those now crawling about the California deserts. The dinosaur tramped and ranted, the flying reptiles beat the air with their twenty-foot wings, the sloth slithered indolently through the jungle—but they have long been relegated to quiet corners in the museums. Meanwhile, the tortoise plods on, unchanged and tireless.

The most advanced species of the tortoise family inhabit the Southwestern deserts. Among these, the *Gopherus*

agassizi is commonest in the California dry lands.

Brother *agassizi* has a high backed shell which will take a beautiful polish. By pulling in his armored front legs, he presents a united front that would turn a labor leader green with envy.

Not only is the tortoise built for maximum protection, but he has become adapted to the desert climate to a truly marvelous degree. For food he loves young cactus. Tougher varieties of desert plants are too much for him. Instead of teeth he has horny ridges that look like petrified gums.

Once anything goes down a tortoise's throat the problem of digestion is solved. A tortoise's stomach can digest anything. One member of the family was found to be able to digest small wire nails in forty-eight hours.

He can go weeks, probably even months, without drinking. Rain water puddles, small springs, and certain desert plants provide sufficient sources

of moisture. Tortoises may have died of thirst, but there are no cases of it on record.

Nor has the desert sun any terror for Señor Tortoise. The reptiles are practically inactive until the temperature rises to around 80°, and the higher it goes the more lively they become. One woman puts her pet tortoises in the oven for a few minutes on winter days to make them active enough to amuse her guests.

But if the tortoise likes lots of heat and little water, it can't stand to have things reversed. Although they can swim for a few minutes, they soon drown or die of a kind of pneumonia caused by getting water into their lungs. There is a high tortoise mortality caused by well meaning pet collectors who put them in fish ponds, under the impression that they are over-sized turtles.

Tortoises and turtles belong to the

same order, but the tortoise is the land branch of the family.

In the mating season they perform a courtship rigamarole which is a combination of a war dance and a sort of head wagging bee. When a male sees a likely pick-up, he goes over to her, sticks out his accordion neck and waves it back and forth. If this brings any response in kind, he gets up on his feet and starts swaying his body in rhythm to his neck. The young lass (she may be close to fifty) does likewise. This goes on for an hour or so, and they're ready for the honeymoon.

It all ends up with a number of eggs, about the same size and appearance as bantam eggs. These are buried in a shallow hole and covered with sand. The desert sun does the rest.

Around about the end of October, a tortoise selects a suitable piece of desert, and begins to dig. The result is a slanting burrow, roughly conforming to the size of the excavator. When the job is done, the tortoise crawls in and sleeps until spring.

In captivity they may be bedded down in a number of ways. Mine sleep under the water heater in the basement. A woman in Inglewood, California, puts hers in a barrel, with padding between them. Another tortoise owner

stores his in bins, while a Los Angeles man with over fifty allows them to bury themselves in his cactus garden.

At present the desert tortoise's cash-money usefulness is limited to making ideal material for novelty baskets. The commercial tortoise shell comes from another source. The California Indians, however, ate the tortoise meat as a kind of early day caviar. It is said to have a rich twangy flavor, similar to Chinese smoked pork.

In song, story, and legend—even in music—the tortoise has starred. Three of Aesop's best known tales center around it. The god, Vishnu, Hindu deity of creation, is believed to assume the form of a tortoise. In ancient Egypt the tortoise was sacred. Cleopatra is said to have had two, studded with precious stones. The earliest Greek lutes were modeled after tortoises and named for them.

How much the intelligence of the tortoise justifies this attitude is rather a moot question. Many are known to answer their master's call. One of mine remembered the location of his house through a hibernation period of six months.

Raymond L. Ditmars in *Reptiles of the World* states that "to the tortoise we must award the highest intelligence among reptiles. They appear to exhibit reasoning powers equal to the warm blooded animals."

The popular belief in long life span of these creatures is no myth. They have been known to reach an age of 300 years. Queen Victoria had one of the giant variety, which differs little except in size from our desert tortoise, which was 250 years old.

Perhaps it is inevitable that this defense of the "walking rocks" should close with the story of Jack Dempsey. Jack was found in the desert near Victorville by Carl J. Hoffman of Los Angeles. Hoffman collects tortoises. He has about a hundred.

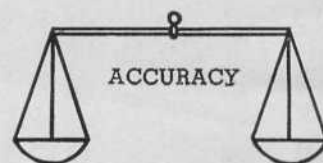
From the first Hoffman took a fancy to Jack Dempsey, so named because of his delight in picking fights with other tortoises and turning them over with his powerful "ram," a bony projection just under the neck. After a year or so of training, Jack Dempsey learned to run (yes, *run*) in a straight line when called by his master. Then one day Hoffman made the final test.

Before five hundred people he staged a genuine Hare and Tortoise race. Jack Dempsey and a large rabbit were let loose in the center of a ring, the object being to see which would get out of the ring first.

The rabbit started first. Then he

stopped, and started twice as fast the opposite way. That didn't seem right either, so he turned around again.

In the meantime Jack Dempsey was plowing along in a line as straight as a surveyor could draw. He finished in high, while the rabbit was still trying to make up its mind.



Metal Recovery Process, Inc.

MINING AND MINERAL RESEARCH
LABORATORY

Assaying Gold and Silver - \$1

Telephone ROchester 5510

3703 S. Vermont Ave.

LOS ANGELES, CALIFORNIA

Weather

APRIL REPORT FROM U. S. BUREAU AT PHOENIX

Temperatures—	Degrees
Mean for month	69.0
Normal for April	67.0
High on April 18	99.0
Low on April 1	38.0

Rain—	Inches
Total for month	Trace
Normal for April	0.40

Weather—	
Days clear	19
Days partly cloudy	8
Days cloudy	3

W. B. HARE, Meteorologist.

FROM YUMA BUREAU

Temperatures—	Degrees
Mean for month	70.7
Normal for April	69.5
High on April 24	102.0
Low on April 1	43.0

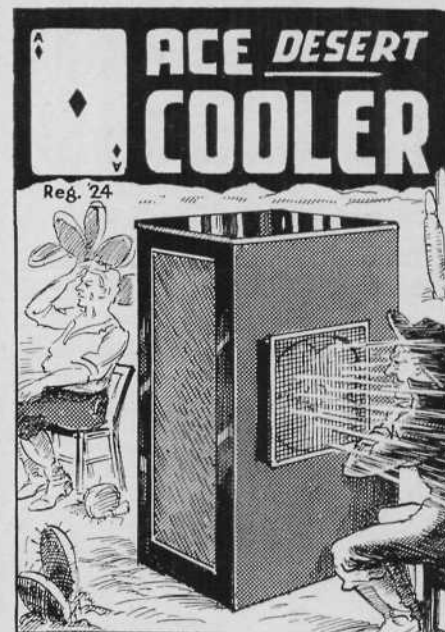
Rain—	Inches
Total for month	Trace
69-year average for April	0.10

Weather—	
Days clear	26
Days partly cloudy	4
Days cloudy	0

Sunshine 97 per cent (377 hours out of possible 390 hours)

Colorado river—
April discharge at Grand canyon, 1,550,000 acre feet. Discharge at Parker 558,000 acre feet. Estimated storage behind Boulder dam May 1—16,440,000 acre feet.

JAMES H. GORDON, Meteorologist.



This evaporative water recirculating cooler is economical and easy to install and maintain.

AVAILABLE IN FOUR SIZES

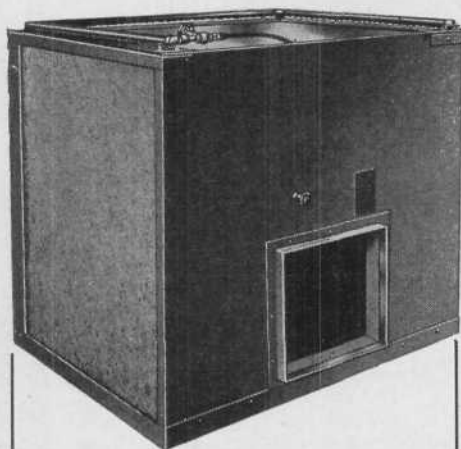
From \$45.00 up

For further information write
Ace Metal Products Co.

"Everything in the Sheet Metal Line"

5702 SO. BROADWAY
LOS ANGELES, CALIF.





KEEP KOMFORTABLE
and KOOL with . . .

HAFER House Kooler

- INEXPENSIVE
- EFFECTIVE

Send today for new
descriptive folder!

Hafer Sheet Metal Wks.

515 BROADWAY
EL CENTRO, CALIFORNIA

DESERT PLACE NAMES

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

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

CALIFORNIA

AMARGOSA (ah mar go'sa) Inyo county

Sp. for "bitter," referring to mineral water. Mountains, river and mine near Death Valley. First desert gold mine was found by Mormons near Amargosa in 1854.

EDOM

Riverside county

Hebrew word for "red." Once applied to area from Dead sea southward. Supposed to have been given as name for this California settlement because the district resembles the territory in Palestine.

JULIAN

San Diego county

One of the early stations along the Emigrant trail. Formerly the Julian ranch house was here, the place shown as Julian's ranch on San Antonio-San Diego mail stage route in 1859; also station for Butterfield stages from Yuma. Gold mining district since 1870. Highway through Julian was made from old mine tailings, said to contain more than \$7,000 gold per mile. Kunzite, mined near Julian, is found elsewhere only in Madagascar.

MUSCUIABE (mus cue pie'a bee)

San Bernardino county

Shoshonean Indian place name. Literally "the piñon pine." Original word *mus-ku-pia-bit*.

ARIZONA

BLANCHARD CROSSING Navajo county

Rock crossing on Little Colorado river, 8 miles east of Winslow. Blanchard was one of the firm of Breed and Blanchard who had a store here 1878-1883. Stage station on two routes, one through Chavez Pass and the second going west through Sunset pass. Blanchard and Joe Barrett were found dead in the store, December 1881. A posse followed the murderers' trail, captured "Thick Lipped Joe" Waters and William Campbell. At St. Johns they were taken from the jail and hanged by "unknown parties."

LAVA

Yuma county

Station S. P. R. R. about 93 miles east of Yuma. "Country near station is covered with lava rock, hence the name."—Letter from Paul Shoup.

SAAVEDRA SPRINGS (sah vay'd rah)

Mohave county

After one of his Mexican guides of whom Beale says, "He was absolutely worthless as a guide or anything else." Shows on Beale's map (1847-58). They were suffering for water when the guide discovered this spring on the west side of the Corbat range at its northern end.

NEVADA

GOSIUTE

Elko county

Mountains sometimes written Gosh Ute. From Gossip, Go Shute or Go-ship, an Indian chief; also a Shoshonean tribal name.

TIMPAHUTE

Lincoln county

Range (town name spelled Tem Piute) Tam Pahute, local subtribal name. They formerly inhabited the valley of the Utah Lake. Original name was Tim-paiavats (Timpanagatzis). The Spanish name of "fish eaters" was probably literal translation of the Indian word.

TOQUIMA (To kee' mah)

Nye county

Mountains. Literally "black backs." Mono Indian tribe formerly living in lower Reese river valley.

TRUCKEE

Washoe county

River. Indian chief with Fremont in 1844. Died October 1860.

MINDEN

Douglas county

Settled January 1907. Named after Minden, Germany, home town of prominent farmer, H. F. Dangberg.

NEW MEXICO

ELIZABETHTOWN

Coffax county

Named for daughter of John Moore, one of the discoverers of gold in 1866. Name later abbreviated to E'Town, although most maps show the original spelling.

JEMEZ (hem mez)

Sandoval county

Mountains, Indian reservation, pueblo, town, springs, state park. Peak 8589 elev. From *ha-mish*, Keresian word of uncertain meaning.

FRENCH

Coffax county

From Capt. William French, author of "Some Recollections of a Western Ranchman," who came to the United States from Ireland in 1883.

Spend Your Summer with a Sea Breeze

LOW COST OF OPERATION

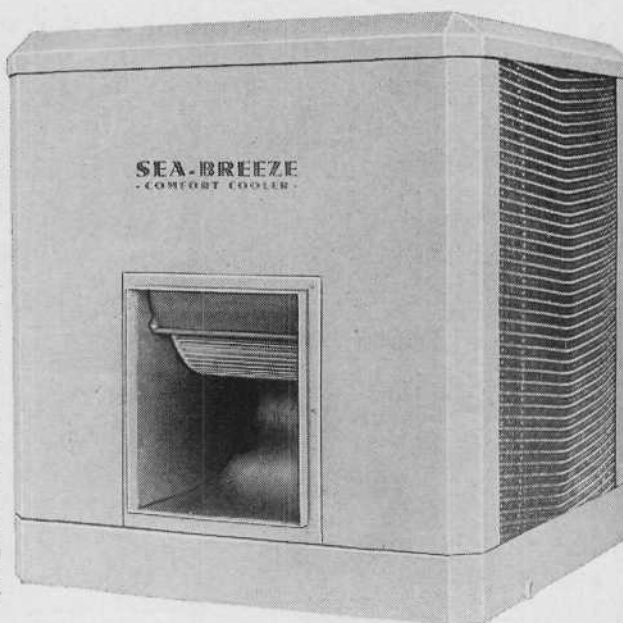
The SEA BREEZE comfort COOLER is operated with the minimum of cost by small, efficient motors and delivers the maximum efficiency and comfort.

MOTOR

Westinghouse motors are quiet in their operation and are the best of their respective make.

BLOWER

SEA BREEZE is equipped with a California Centrifugal Blower (not a propeller fan), which is quiet in its operation and delivers air under pressure. The bearings are self-lubricating and are mounted in rubber for quiet operation.



See it on display at your dealer's or write to:-

DEFIANCE FAN COMPANY

LOS ANGELES, CALIFORNIA

1866 W. Washington Blvd.,

Telephone REpublic 9064

UTAH

OREJAS DEL OSO (oh ray' hahs del o' so)
San Juan county
Mountain ridge. Means literally "ears of the bear," perhaps from peculiar outline of the summit.

PARAGONAH (par-ah go' nah) Iron county
The Pi Ede name for "little salt lake."
Settlement formed in 1852.

ASHLEY
Lake, river and fort. Named for William Ashley, American trapper who built a fort there in 1825.

WAH WAH Beaver county
Mountains and valley. May be "Wa-wah," "the people; the Indians, strangers." Pahute word for Indians of the Sacramento valley.

(CORRECTION)

ESCALANTE (es cah lahn' tay) Iron county
Town and valley. Literally "scaling or climbing a slope." Also Sp. surname. Derived from Franciscan Father Silvestre Velez Escalante, who, with Fray Francisco Atanasio Dominguez, made their celebrated journey from Santa Fe, New Mexico, into Utah in 1776 and gave name to El Vado de los Padres, the "Crossing of the Fathers," of the Colorado river.

Note—The Desert Magazine is indebted to F. W. Hodge of The Southwest Museum for the above correction in data published last month.

Writers of the Desert

WALTER FORD, whose Hidden Valley motorlog in this number of the Desert Magazine makes one want to climb right in the car and go out and explore that mysterious hide-away, is an engineer by profession. He has traveled widely and is a member of the Adventurers' Club of Los Angeles. Ford is one of those triple-threat writers who not only turn out readable copy, but also take the photographs and furnish the art work to go with their manuscripts.

Another writer new to Desert Magazine readers this month is **RUBY BOWEN** of Tucson, Arizona. Material for her interesting story about Night-Blooming Cereus was gathered largely from actual observance of the cacti at the desert homestead west of Tucson where she and her husband have resided for the last eight years. Mr. Bowen is night editor of the Arizona Daily Star at Tucson.

Mrs. Bowen has made "desert living" a hobby and her spare time has been devoted to many phases of study and recreation—among them, cactus gardening, desert cookery, bee-keeping, bird study and coyote taming. Her excursions out into the untamed desert are often made on the back of a burro.

GEORGE CLAYTON, whose prize winning photo appeared in last month's edition is a linotype operator at Long Beach, California, and follows photography as a hobby. Clayton's employer is Raymond G. Green now serving as district governor for the 100th district of Rotary International.

J. P. KNIPP, whose Joshua Bloom photo appears on the cover of this number, is an officer of the Farmers & Merchants bank of Long Beach, California. He and Mrs. Knipp are interested in photography as a hobby, and bring their camera to the desert whenever they have the opportunity.

WILFRED PARKS, who wrote the Grand Canyon feature, Gift of the Genii, for this number of the Desert Magazine, is to be stationed at the Canyon as a guide during the coming summer. Wide travel over the desert region has given Parks an intimate knowledge of many phases of desert lore.

MRS. DOROTHY C. CRAGEN, winner of the April Landmarks contest conducted by the Desert Magazine, is general supervisor of Inyo county schools and her home is at Lone Pine, California.

ZEE LELAND of Ajo, Arizona, whose poem "Surcease" is printed this month, writes "These verses were written 10 years ago when my first desert morning dawned. I came to spend a year—and hope to remain always."

Chee Dodge, grand old man of the Navajos, will be the subject of a character sketch written by **MRS. WHITE MOUNTAIN SMITH** for the July number of the Desert Magazine. **OREN ARNOLD** will also be in the July number with a story of the annual Indian Powwow held at Flagstaff, Arizona.



ATTIC HEAT

is your
unwanted
summer
furnace - -
INSTALL
TURBINE
VENTILATORS

POSITIVE PERPETUAL PERFORMANCE

NO POWER COST

Ideal in conjunction with air conditioning . . . Also equipped with exhaust fan.

Consult your local sheet metal contractor or write for catalog.

Engineering Service Free.

Western Rotary Ventilator Co.
INCORPORATED

1720 E. 14th St., Los Angeles, Calif.

Refrigeration and Air Conditioning Systems

installed and repaired

General Machine Work

Gear Cutting

L. A.
Automotive Works

1020 TOWNE Ave., LOS ANGELES
PROSPECT 9217

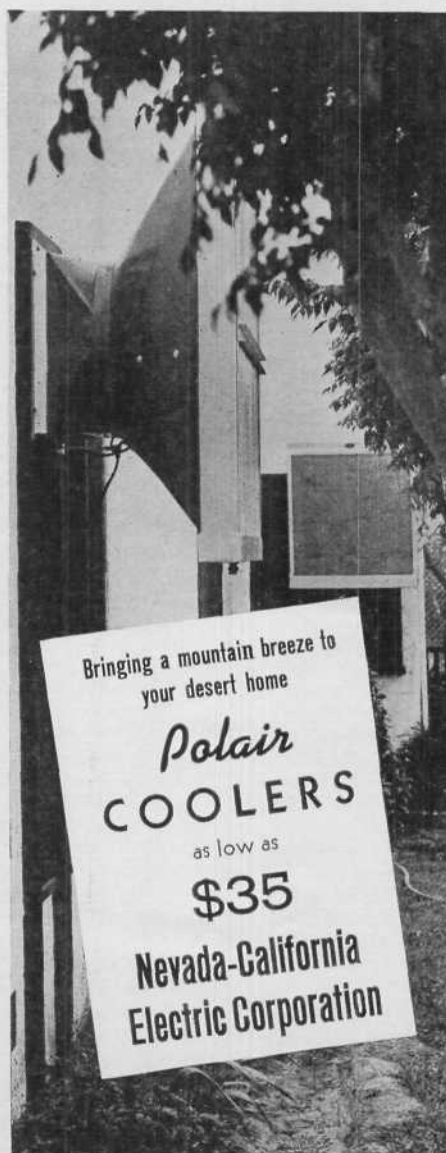


CAVCO
VENTILATING
EQUIPMENT
COMPANY

Manufacturers of

Ventilating Fans and Blowers
Equipment Parts and Repairs

Phone TUCKER 7080
509 East Ninth Street
LOS ANGELES, CALIFORNIA



BARBECUE DELUX \$9.75



Burn charcoal and get the real flavor in your meats. Grilling surface 24 inches. Spit for fowl or beef. Mail orders promptly filled. Also special arrangements for fireplaces or built-in barbecues. Will make barbecue grates and fire boxes. Phone Wy-0101.

CHARLES A. ROBINSON-7471 MELROSE AVE. HOLLYWOOD

J.S. LOUIS

FORMER PACIFIC COAST MANAGER
CARBONDALE MACHINE COMPANY

Louis has designed and installed refrigeration plants in:

- Los Angeles Biltmore Hotel
- Los Angeles Ambassador Hotel
- Good Samaritan Hospital
- Jonathan Club
- Pioneer Hotel-Tucson

AND MANY OTHERS

Specializing in used air-conditioning and refrigeration equipment.



3634 BEVERLY BLVD. LOS ANGELES, CALIF.
PHONE EXPOSITION 6303

BOOKS OF YESTERDAY AND TODAY

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

A DRAB LITTLE HOME— BUT LIFE WAS INTERESTING

Telling the story of a "Desert Wife" (Little, Brown and company) Hilda Faunce paints clearly her four years at a remote trading post on the Navajo Indian reservation in Arizona and her finished work is the portrait too, of a woman of courage, loyalty and fine sensibility.

In a prefatory acknowledgment, Mrs. Faunce says a series of letters she wrote to her cousin, Ruth Wattle, form the kernel of the book. The author pays a graceful tribute to Miss Wattle for her "guidance and literary aid."

Her desert-bred husband had never been happy in the fogs and rains of the Oregon coast. He felt that "all man's ownership of earth was gone, where there were so many to claim it." When financial worries were piled on top of annual rainfall of 97 inches, homesickness for the desert caused the Faunces to set out in a wagon drawn by two horses to return to a country of little rain and few people.

Mrs. Faunce's love of home and loyalty to her husband are shown in the attachment she felt for her garden and all the little, strong ties of association which tugged at her heart-strings when they loaded their few possessions into the wagon. She had been married seven years to a taciturn man, considerably older than herself, but "I had been willing to go anywhere, anyhow, with Ken—and I still was."

They drove 1300 miles in the camp wagon, their destination a two-room shack at Covered

Water, 100 miles from the railroad at Gallup. Main room was the store, the other room was living quarters. The building had walls of rough boards set on end and held together by a horizontal strip of box boards at top and bottom. For furniture there was a bed, a stove, a sewing machine and dry goods boxes converted into a window seat and dressing table. Only neighbors were Indians who had a way of materializing, apparently out of the thin desert air, astride wiry ponies. At first it was a "terrifying loneliness of yellow rim rock, gray sand, red buttes, black streaks of volcanic ash, and waterwashed clay hills." It was "an immense world of sand and sunshine."

And at first, too, the Indians were not friendly. The trader who had preceded the Faunces at Covered Water had not been popular.

How they made friends with the Indians—ways and wiles of the redman—stories of birth, life and death in the hogans—humor and tragedy in trading post days and nights—and finally how the Faunces saved to buy a farm on the San Juan river in New Mexico—(she says it was like planning for paradise) are chapters in Mrs. Faunce's book. Summing it up, she writes, as she tells of departure from Covered Water in the same camp wagon they had used when they moved from Oregon "I had not realized we had woven so many threads of friendship that it hurt to break them. In all my life these four years were the most isolated and the most colorful."

TAZEWEEL H. LAMB.

• • •

IN THE WEST—NOTHING IS COMMONPLACE

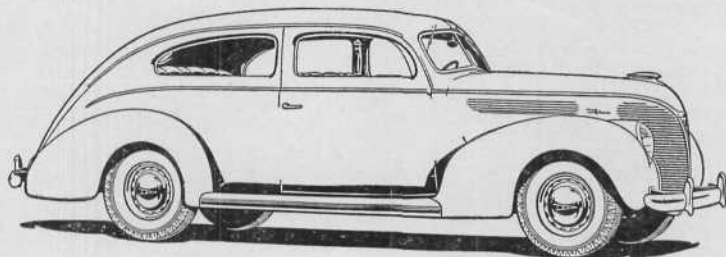
In WESTWARD, HIGH, LOW AND DRY by Dorothy Childs Hogner with illustrations by Nils Hogner we have a travel story that is truly modern—a sort of motorlog in diary effect, so popular in these days of drive-out, look-over and rush-on. These two New Englanders, aware that the West is no longer wild, have undertaken a motor trip of 15,000 miles, to include the real West as they have learned about it from the libraries.

They have the happy faculty of observation; and have seen beyond the rough surface that so often sends tourists scurrying back to the nearest filling station. There is a pleasant humanness about their travels—the accidents, the usual incidents of long-distance motoring, with none of the rush and dither so common to tourist traffic. It is obvious that this writer and artist husband are real people who actually hoped to enjoy their outing, and were not undertaking it simply to make the neighbors jealous.

A new view is presented of some of the old well-known places—Grand Canyon, Death Valley, Arizona, the Giant Cactus forests, the All-American canal, Imperial valley, and remote outposts and ghost towns. We find new interest in some of the things we regarded as commonplace.

My streak of thrift rebels at the price of \$3.75 for this volume, although the print is easy to read and the illustrations are distinctly novel—albeit a bit heavy and not too pretty. Published by Dutton, 1937, 310 pp.

TRACY M. SCOTT.



Ride in the New Ford V8

You will be thrilled with the power of the 85-horse power engines and with the economy of the new "60." The streamlined body makes Ford the queen of the highways . . . the quality car in the low priced field. In Imperial Valley, let Edgars' demonstrate the new Ford without obligation to you. Ford sells itself.

Edgar Bros. Company

BRAWLEY

EL CENTRO

CALEXICO

FATALITIES FROM SNAKE BITES HAVE BEEN REDUCED

Snakes have a definite place in Nature's scheme of life, says James M. Dannaldson, and none but venomous reptiles should ever be killed. In the United States there are only four species poisonous to man—the rattler, copperhead, water moccasin and coral snake.

Dannaldson's 72-page book, *SERPENT TRAILS*, is a practical handbook for those whose work or recreation may bring them in contact with members of the reptile family. Chapters are devoted to the rattler, gopher and king snakes, lizards, Gila monsters, sidewinders and the desert tortoise.

Many of the so-called remedies for treatment of rattlesnake victims are foolish and ineffective, says the author. Among these "absurd cures" he lists alcohol, potassium permanganate crystals, hot branding iron, turpentine and kerosene. The most effective treatment is incision of the wound and suction of the poison. As a result of scientific research in this field the mortality rate among victims has been greatly reduced in recent years.

Dannaldson's book is illustrated with a number of unusual reptile pictures. It was published in 1937 by Kellaway-Ide of Los Angeles, \$1.00. Dannaldson's home is 14710 Greenleaf Ave., Van Nuys, California.

• • •

YUCCA LAND IS THEME FOR BOOK OF SONG-POEMS

"Songs from the Land of the Yucca," written and published by Anna B. Stevenson of Las Vegas, New Mexico, is truly a book of song, although only a few of the author's verses actually have been scored to music.

The versatility of the author is disclosed in the wide range of subject matter. There is a song for every mood and fancy. The beautiful "Call of the Canyon Resort" is followed by a realistic little jingle "I'd Hate to Be a Man—and How!"

Mrs. Stevenson is musician as well as author and has written the music for two of her numbers. The song of her own state, "New Mexico" she regards as her best.

• • •

HANDBOOK WRITTEN FOR VISITORS TO PETRIFIED FOREST

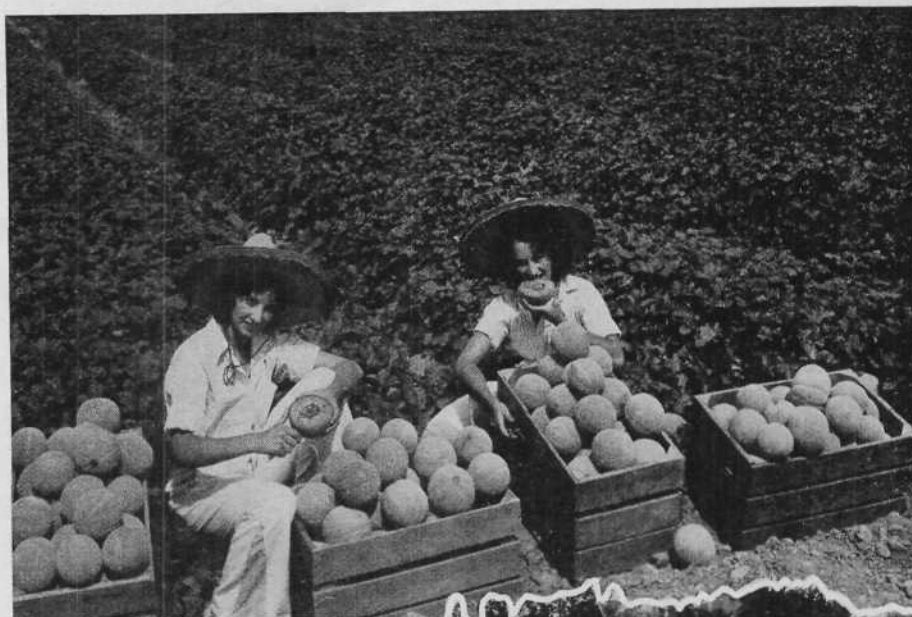
For visitors to the Petrified Forest National Monument in Arizona who desire to know more about this strange geological formation than can be learned during a casual visit, Mrs. White Mountain Smith has written an informative little handbook.

Mrs. Smith's story takes the reader back millions of years to the probable origin of the colorful petrified wood and other fossils found in the park area, and then describes briefly the wide range of scenic wonders found in this national reserve. The books are sold at the National Monument headquarters near Holbrook at 25 cents each.

• • •

STATE MINERAL BULLETIN READY FOR DISTRIBUTION

Bulletin No. 114 of the California division of mines is ready for distribution according to the announcement of Walter W. Bradley, state mineralogist. The bulletin contains data concerning the state's mineral resources, information as to the use and treatment of many mineral substances. It may be obtained from Sacramento, price 80 cents.



Imperial Valley

SERVES the **NATION'S** BREAKFAST TABLE



Delicious Imperial Valley cantaloupes are rolling to markets all over the United States. From the

"Winter Garden of America"

comes a summer crop known far and wide as the choicest melon on the American breakfast table.

While cantaloupes lead in quantity the many fine melon varieties grown in the county, watermelons, honeydews, and honeyballs are also sought in the market-places. The melon growing and marketing industry in Imperial County presents agriculture's finest example of scheduled production.

Because of the dependability of climate and reliable irrigation, harvesting may be regulated to provide a constant flow of good melons to all parts of the country.

Melons offer only one of many diversified fields for investment in Imperial County. While cantaloupe growing and shipping requires considerable financing and marketing connections, other crops offer profitable openings for small farms and limited equipment.

For further information regarding

Scenic Attractions . . Dairying . . Agriculture
write today to B. A. HARRIGAN, Secretary

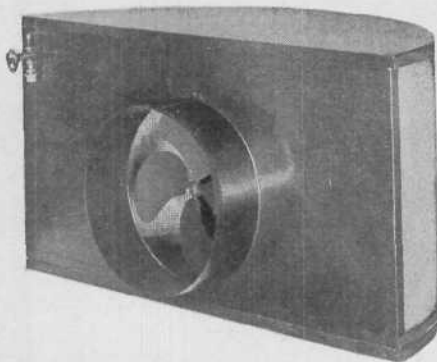
Imperial County Board of Trade

Court House

El Centro, Calif.



DESERT COOLERS



*Save
Money*

**LOW-COST
Evaporative
COOLING**

*No installation
costs —*

MODEL	SIZE	Cu. Ft. Capacity	PRICE
A	Portable	800 CFM	\$ 37.50
B	46x24x23	2000 CFM	49.50
C	48x36x23	3000 CFM	69.50
D	48x48x23	4000 CFM	87.50
M	34x34x34	2100 CFM	119.50
	Blower type		

If there is no dealer in your neighborhood, mail this coupon:
Manufactured and sold by

AIR-RITE, Inc.

2218 WEST SEVENTH ST.
LOS ANGELES, CALIFORNIA

Please send me folder describing
your desert coolers.

NAME

ADDRESS:

CITY..... STATE.....



Golden Rod Units and Bedell Compressors

combine to produce
the latest, most
efficient and
economical . . .

AIR-CONDITIONING SYSTEM

suitable for any space . . . any climate
Cost—far less than you would expect

BEDELL ENG. CO.

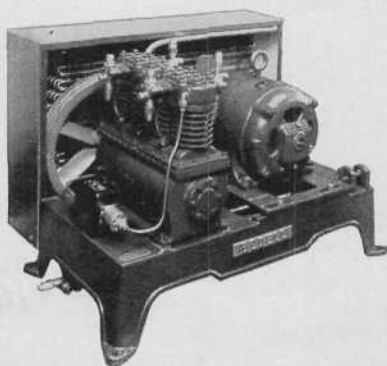
5400 SANTA FE AVE.
LOS ANGELES, CALIF.
PHONE LA 1188

**Commercial
Condensing Units**

...

**AIR CONDITIONERS
I N C.**

4819 EXPOSITION BLVD.
LOS ANGELES, CALIF.
PHONE RO 8595



DESERT MINING BRIEFS

TOMBSTONE, ARIZONA . . .

Written by Dr. B. S. Butler, head of the geology department of the University of Arizona, a bulletin recently has been issued by the university covering the mineral possibilities of the Tombstone area. Associated with Dr. Butler in the preparation of the book were Dr. Eldred Wilson and Dr. C. A. Rasor.

Although Tombstone already has yielded \$37,000,000 in gold, silver, copper and lead, the ore bodies are by no means exhausted, according to the survey.

OGILBY, CALIFORNIA . . .

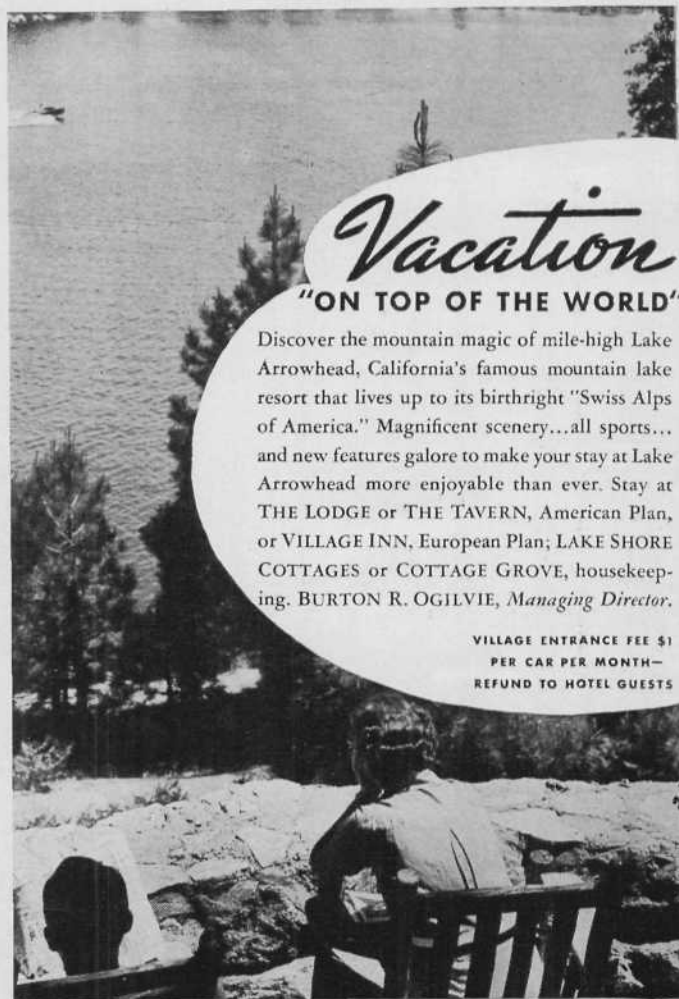
Rumors that an ore body assaying \$100,000 had been encountered by Holmes and Nicholson, operating at the old Padre-Madre mine in Cargo Muchacho mountains, were denied by M. A. Holmes, father of Kenneth Holmes, who is one of the owners. The father stated that a very rich pocket had been struck, but added that a pocket does not constitute a gold mine. It was explained that the rumor was started when the owners placed an armed guard to watch over the newly discovered pocket for one night.

GOLDFIELD, NEVADA . . .

One of the largest gold nuggets to be taken out of the placer fields at Osceola in recent years was discovered a few days ago by George Grabe Jr. The nugget weighs 7.84 ounces and contains gold worth approximately \$250. Grabe picked the lump of gold off a conveyor belt as gravel was being put through the recovery plant.

WINNEMUCCA, NEVADA . . .

Discovery of an ore body which runs \$1,000 to the ton near Unionville, was reported recently by Roy B. Whitman, Nevada mining man. The values are 60 percent gold and 40 percent silver and are on the Otto Cline property, Whitman said.



Vacation "ON TOP OF THE WORLD"

Discover the mountain magic of mile-high Lake Arrowhead, California's famous mountain lake resort that lives up to its birthright "Swiss Alps of America." Magnificent scenery...all sports...and new features galore to make your stay at Lake Arrowhead more enjoyable than ever. Stay at THE LODGE or THE TAVERN, American Plan, or VILLAGE INN, European Plan; LAKE SHORE COTTAGES or COTTAGE GROVE, housekeeping. BURTON R. OGILVIE, Managing Director.

VILLAGE ENTRANCE FEE \$1
PER CAR PER MONTH—
REFUND TO HOTEL GUESTS

LAKE ARROWHEAD

2½ Hours from Los Angeles, Scenic High Gear State Highway

Sez Hard Rock Shorty of Death Valley

By LON GARRISON



"WELL, it's just like this," announced Hard Rock Shorty, "Speakin' o' burros, lemme tell you about Panamint Pete an' Doleful."

Hard Rock scrooched up and down three or four times against the porch post, took a look to see how much longer he'd be in the shade, and settled down to his dissertation.

"I guess ever'body's hear tell 'o Panamint Pete an' that Jackass mine o' his, but not so many know about Doleful. Pete had this Doleful burro for about 20 year, an no tellin' how old he was when he got 'im—I mean the burro, not Pete.

"Ol' Doleful tagged along while Panamint prospected the hull of the Panamints an' Death Valley. Come late years, he started havin' trouble with his teeth—Doleful, not Pete—they was plumb wore out from gnawin' on ham bones an' coffee grounds. So Pete starts fixin' 'im hotcakes an' beans.

"One day Pete was chasin' a lead that petered out right to nothin' when he seen ol' Doleful pick up a rock an' start chewin' on 'er. He spits it out an' picks up another'n an' does the same thing, an' keeps that up for some time. Pete was too bothered about that lead to figger much on Doleful's antics, but in a day or two he sees ol' Doleful is doin' better in his eatin'. So he pries his mouth open, an' there was a full set o' gold fillin's in Doleful's teeth! Pete run for his pick to start extractin' gold teeth, but he just happened to think about the donk a chewin' on them rocks an' he gallups over there an' found the Jackass Mine!

"Richest mine around here. True story, too!"

Devil-God of San Jacinto . .

Continued from page 20

24 hours go into the heading and each crew advances from one to seven feet, depending on the conditions.

With water swirling around my knees I watched a shift at work while DeWitt marked the center point in the face for the drill carriage. This contraption is an ungainly framework on which miners operate seven jack-hammers simultaneously. It is pushed up to the face, holes are drilled from 10 to 12 feet deep, dynamite is placed and fused. Then men and machines evacuate the heading while the blast is touched off by electricity. Back into the face goes a mucking machine, an adaptation of shovel and conveyor-belt loader. Over an ingenious system of track switches, empty cars are brought up to the mucker and carried away without appreciable loss of time.

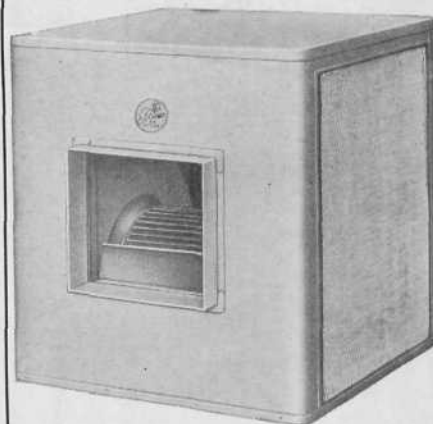
After the loose rock has been removed the track-laying crew goes to work. When the rails again reach the face, the drill carriage comes into place and the same routine is repeated. Ordinarily a shift will complete a cycle in its allotted eight hours.

This explanation sounds simple enough, but words do not convey the odor of water-soaked timbers, the sound of running water, and the hiss and clamour of pneumatic drills. Nor can I describe adequately the speculative gaze of a young track-layer as he looked up at a fresh outburst of water.

It was something of a triumph last month when a little pilot tunnel was pushed through the treacherous Goetz fault, one of the worst spots encountered on the Potrero-Lawrence section. When it appeared impossible to penetrate it, engineers made a crosscut into a smaller parallel "pioneer" tunnel, attacked the fault from a different angle, and were successful. Then the fault was worked from two headings—on the east and west. The pilot drift, much smaller than the final excavation, is now "holed through" and another major fault has been conquered.

We took the electric train back to Potrero shaft and were soon standing in the sunlight again. As I took off the hip-boots I thought of those fellows down there doing their routine job over and over again, pecking away at the "sacred ground," confident that they would keep at it until the day when they hole through to the crew coming from the opposite direction. Then I saw this serious business touched with humor. Won't old Tahquitz be angry when that tunnel is finished and a billion gallons a day pass through his sacred mountain? Perhaps he will continue to grumble and growl but so far as the white men are concerned, the story of the old devil-god will remain just a legend.

Eskimo AIR KOOLER



When you feel all petered out with the heat . . . when sweltering days and sleepless nights have sapped your vitality and frazzled your nerves, it's time to buy Eskimo Air Cooler.

Low Cost of Operation

The tremendous cooling effect is produced by a small motor with a positive type blower, for a few cents a day.

The water consumption cost is so small that you will not notice the amount on your water bill.

Low Cost of Maintenance

Filter pads are easily replaced each season at a cost that is less than the amount you spend each week for cold drinks and refreshments during the summer.

Easy to Own

You may enjoy your Eskimo while paying for it on easy terms.

SEE OUR DEALER IN YOUR NEIGHBORHOOD OR WRITE FOR DETAILS

S T A R Radiator Company

649 Ceres St.

Los Angeles, Calif.

ESKIMO AIR COOLERS

DISTRIBUTED IN
IMPERIAL AND YUMA VALLEYS BY

I.V. HARDWARE CO.
TEN STORES
IMPERIAL AND YUMA VALLEYS

30 years successful service

GOING TO San Diego?

SAVE THIS MAP



Stop at the
U.S. GRANT Hotel

DRIVE-IN GARAGE LOBBY - LEVEL

RATES

\$1⁵⁰ Bath Detached • **\$3** With Bath

Famous for COMFORT SERVICE - CONVENIENCE

LOS ANGELES BOOKING OFFICE
BILTMORE HOTEL



for Year 'Round
LOVELINESS

TWENTY-TWO square miles of landlocked bay around which crescent-shaped **San Diego** lies ... afford just one more notable asset to this lovely Southern California community where a perennial balmy climate coaxes subtropical blooms in anybody's garden the whole year through.

Come and enjoy San Diego, where ... "California began and Mexico begins".

FREE BOOKLET
Address - Room 476
San Diego-California Club

San Diego CALIFORNIA
Include **SAN DIEGO** on your ticket
AT NO EXTRA COST!

Here and There ... ON THE DESERT

ARIZONA

Holbrook ...

Navajo Indians under the leadership of Spencer Murphy, president of the Indian Wells tribal chapter, have threatened to stage a sit-down strike at the central agency at Window Rock as a protest against the stock reduction program sponsored by the Indian Bureau.

Nogales ...

Recent sale of the Joe Menager ranch along the Mexican border to the United States government will add over 50,000 acres and valuable water rights to the Papago reservation of Arizona. Friends of the Papagos had been working years for the government's acquisition of this ranch which takes out the last great "salient" in the reservation.

Fort Apache ...

Dr. Byron Cummings, University of Arizona archeologist, is spending his seventh summer excavating the Indian pueblo ruins of Kinishba on the White Mountain reservation near Fort Apache. John D. Fletcher, a former University of Arizona student will assist him.

Quartzsite ...

Work of restoring old Fort Tyson by WPA workers will soon be completed according to J. P. Thurman, foreman. The grounds surrounding the fort are being landscaped and facilities installed for picnic parties. The project is sponsored by the Arizona State Highway department and Felix Sefcovic is in charge for the state.

Willcox ...

In order to protect scenic rock formations which are now outside the Chiricahua National Monument, the federal park service is sponsoring a plan to annex 10 additional sections of land to the present reserve. This would double the present area of the monument. As the new area already is in the national forest reserve, state authorities in Arizona have indicated they will not oppose the move.

Flagstaff ...

Coconino county supervisors recently passed a resolution asking that Grand Canyon be abandoned as a national park and the area turned back to the county for supervision and management. Reasons given were that "the existence of said National Park within the boundaries of this county has resulted in depriving this county of a large source of taxable wealth, and has hindered the development of the mineral resources of this county."

Kingman ...

Field men for the Northern Arizona Museum report they located more than 70 sites of prehistoric Indian settlements in the Kingman and Seligman area during a recent archeological survey. Lyndon Hargraves of the Museum was in charge of the survey.

Yuma ...

Setting a new high record, 36,208 gophers were trapped in Yuma county during the annual contest sponsored by the Yuma Valley Water Users' association. The contest ended last month. Prizes were offered by the association as a means of ridding fields and canal banks of the rodents. Winner of the contest was Juan Castillo with 4,046 gopher tails.

Tucson ...

Dr. Andrew E. Douglass, through whose efforts the work of tree ring analysis has developed into a recognized science, is to retire as director of the Steward observatory and devote only part time to duties at the University of Arizona in the future. At a recent meeting of the board of regents Dr. Douglass was named director emeritus of the observatory in recognition of his fine service over a period of more than 30 years. Dr. Edwin F. Carpenter, assistant in the observatory since 1930, will assume the post left vacant by Dr. Douglass.

CALIFORNIA

Lone Pine ...

Sequoia National Park officials announce that within the boundaries of the park 300 lakes and 650 miles of streams will be available to fishermen during the 1938 season.

Only three per cent of available fishing waters have been closed to use and large plantings of Rainbow, Golden, Eastern Brook and Loch Leven have been made, which should afford many a thrill for the angler. Limits on catches will be 15 fish per day, caught or in possession, or seven pounds, except Wolverton Reservoir where the special limit of five fish, regardless of size shall apply. A California State Fishing License is required of all persons over 18 years of age.

Needles ...

W. B. Carty, civic leader in Needles for many years, was elected governor of the 111th district of Rotary International at the recent district convention held at Tucson, Arizona.

Thermal ...

One of the three known specimens of white Ocotillo growing in the Southwest is now in blossom (May 15) in the cactus gardens of John W. Hilton at Valerie's corner on U. S. highway 99.

El Centro ...

Imperial valley legionnaires are planning to present a pageant of the Juan Bautista de Anza trek across the desert as part of the parade to be held in connection with national Legion convention in Los Angeles next September. Dr. O. H. Van Eman is chairman of the committee which is preparing costumes and securing properties for the parade event.

Palm Springs ...

Following the election on April 12 at which Palm Springs electors voted to incorporate the village, George Welwood Murray, New York attorney, presented the new city officials with a site for a public library. The donor is the son of Dr. Welwood Murray who founded a sanitarium at Palm Springs in 1886 and remained there until his death in 1914. The property given for library purposes is valued at \$25,000 and is now occupied by a memorial to Dr. Murray.

Blythe ...

Through the efforts of the 20-30 club of Blythe, the state fisheries have arranged to stock Palo Verde lagoon and other water channels along the Colorado river with 20,000 bass, blue gill and crappie. The bass season opens in this area May 29.

Blythe . . .

Ed. F. Williams, veteran rancher and civic worker in the Palo Verde valley, was re-elected president of the chamber of commerce at the annual reorganization last month. Directors of the chamber decided to launch a campaign to regain tourist travel which has been diverted from U. S. highway 60 to other routes.

Indio . . .

California State Highway commission has let a contract for the elimination of the much maligned "bottleneck" in U. S. highways 99, 60 and 70 at Indio, and the work is expected to be completed during the coming summer. The project is designed to eliminate the narrow crook in the highway in the center of the Indio business district and give motorists a straight boulevard through the town.

Coachella . . .

Coachella valley dates will bring the grower approximately $5\frac{1}{2}$ cents a pound this season according to estimates quoted at the annual meeting of the United Date Growers of California. The association elected the following directors for the next year: Dr. Harry W. Forbes, William W. Cook, H. L. Cavanagh, Bryan Haywood and Leonhardt Swingle.

Barstow . . .

The 2,000-acre alfalfa ranch developed by Arthur Brisbane, who until his death was editorial writer for the Hearst publications, has been sold to Robert W. Wilson of Pasadena, according to information received here. The ranch is located on the Mojave desert and has a 17-room house. It is understood the new owner will change the name to San Carlos Guest ranch.

NEVADA

Las Vegas . . .

Ralph Lowry, engineer on Boulder dam project since 1930 and chief of construction since 1935, has been transferred to Shasta dam of the Central Valley project of California where he will be in charge of building operations.

Overton . . .

New recreational area will be opened with construction of a road in the Overton district according to Supervisor Guy Edwards. The road will lead from Overton along the border of the Valley of Fire state park to the shore of Boulder Lake near the former site of St. Thomas. Boat docks and a bathing beach will be constructed. Work is going ahead on a highway to Detrital Wash, on the Arizona side of the lake, where fishermen are said to make good catches.

Carson City . . .

Out-of-state visitors to Nevada this summer will be given two types of windshield stickers. Both are printed in red, black and white. One shows silhouette of a prospector with burro and pick and carries the words: "Visitors to Nevada, 1938." The second sticker is a silhouette of the statue of John W. Mackay in front of the school of mines. Reverse sides give suggestions for safe driving, pictures of driving signals.

Lovelock . . .

While Mr. and Mrs. Leslie Vannoy and Mr. and Mrs. Doman were hunting Indian arrowheads recently a sudden rainstorm converted the dry flats of Carson sink into an impassable bog. Result, the party became hopelessly mired in the mud on the return trip. A rescue party on horseback finally reached the motorists while an airplane reported the progress of the search.

Boulder City . . .

Flood waters pouring into Mead Lake from the upper watershed raised the water level in the reservoir 3.75 feet during the last four days in April, according to figures given out by the Reclamation Bureau. On April 27 the water in storage in the lake reached 16,000,000 acre feet. When filled to capacity it will have 30,500,000 feet.

Boulder City . . .

St. Thomas, historic old Mormon settlement in the Moapa valley, will be submerged by the rising waters of Lake Mead early this summer, according to the estimate of government officials. The 11 inhabitants of the town already have left, and material worth salvaging is being removed from the old buildings.

Austin . . .

Dismantling of the old Nevada Central railroad has been started, and the rails are to be transported to Battle Mountain and shipped to San Francisco. This is one of Nevada's oldest local railroads.

UTAH

Monticello . . .

Anthropologists from the University of Utah have located a hitherto unknown "sky house" on an almost inaccessible table rock near Nine Mile canyon. Evidently an ancient Indian structure, the house is well adapted for either lookout or defense purposes.

Moab . . .

Under the leadership of James M. Sargent, president, and T. W. Jensen, advertising chairman, the Associated Civic clubs of southern Utah are arranging to have highway markers erected to point the way to scenic points in the southern part of the state.

Provo . . .

Fifty Utah Boy Scouts are being enrolled for a 10-day camping and exploring trip to be made into the Northwest where three of the national parks will be visited.

Delta . . .

Clifford Ashby recently found a $3\frac{1}{2}$ -inch spearhead made of brown obsidian. The relic was in perfect condition and is especially prized because of the rarity of obsidian of this color.

NEW MEXICO

Shiprock . . .

Longest structure of its kind in the state of New Mexico, the new bridge over the San Juan river was christened on April 23 by Mrs. W. W. McClellan of Shiprock. The bridge has six spans of 165 feet each. The dedication was sponsored by the Farmington Lions club.



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

Si, Si, the

HOTEL DE ANZA

on the border of
Mañana Land

CALEXICO, CALIF.

Rates from \$3.50

Roland L. Still, Mgr.



HOTEL LAFAYETTE

BROADWAY AND LINDEN
LONG BEACH
CALIFORNIA

A Distinctive Hotel reflecting the utmost in refinement and comfort. All outside rooms with combination tub and shower bath.

TARIFF FROM \$2.50

CAFE LAFAYETTE

with its chaste decorations provides the Cafe par excellence serving the choicest of foods prepared for those who are accustomed to better than the average.

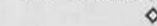
Modest Prices Prevail

EARL R. MILTON, MANAGER



HOTEL CHANCELLOR

3191 WEST SEVENTH ST.
LOS ANGELES, CALIFORNIA



1 Block East of Ambassador
GARAGE IN CONNECTION

Rates per Day, European Plan
Single, \$2.50 to \$5 -- Double, \$4 to \$6
Write for Special Monthly Rates
CLAUDE A. PARKER, MANAGER
Phone: FEderal 1183

Air Cooled Hotels « IN » BRAWLEY

... when traveling by auto through Imperial Valley this summer, stop at one of Brawley's modern air-conditioned hotels.

... while here visit the melon packing sheds. This is the shipping point for thousands of carloads of cantaloupes every summer ... this agricultural industry is an interesting and spectacular sight.



... Brawley is a logical stopover point between Phoenix and Los Angeles ... every comfort is available to the traveler.



FOR FURTHER INFORMATION ABOUT BRAWLEY, WRITE TO SECRETARY

Chamber of Commerce
BRAWLEY, CALIF.



"DESERT STEVE" RAGDALE

invites you
to visit
him at ...

Desert Center CALIFORNIA

On U. S. Highway 60-70-93

Hotel service, cabins, cafe, store, garage, free swimming pool and showers, largest landing field between Los Angeles and Phoenix, lighted all night. Good mechanic, tow car service. Everything for you and your car day and night.

**WE HAVE LOST OUR KEYS
—WE CAN'T CLOSE**

*The sky is our limit, hell is our depth,
We have sunshine the whole year
round.*

*If you wish to get fat, or wish to be
lean,
D. C. is the best place to be found.*



50 MILES WEST OF BLYTHE.
50 MILES EAST OF INDIO

CAMEL ROCK

Dorothy C. Cragen of Lone Pine, California, is the winner of the \$5.00 cash prize offered by the Desert Magazine for the best letter identifying and describing the landmark below. Mrs. Cragen's winning manuscript is printed below.



By DOROTHY C. CRAGEN

THE scenic picture in the "Who Can Name This Landmark" section of the April Desert Magazine is known as the "Camel Rock" and is located at the northeast edge of Red Rock canyon on the Mojave desert of California.

This odd rock formation which resembles a kneeling camel is not far from the little store known as Ricardo which is in Red Rock canyon about twenty-two miles north and east of Mojave on the Three Flags highway.

Camel Rock looks down from the north into Red Rock canyon. So real does it seem at times, that one can imagine the camel resting after a weary trek across the desert sands; and as it rests there motionless, head lifted, it gazes down into that strangely beautiful canyon whose wall time and erosion have carved into intricate and strange designs. So enigmatic are these carvings at eventide that they look not unlike Egyptian obelisks and colossi of the Ancient World.

Camel Rock is east of the Three Flags highway, but is quite discernible as one leaves the canyon and goes north to the Owens valley country, or, as one enters the canyon from the north.

TYLER INSURANCE AGENCY

W. H. Tyler, Jr. J. W. Tyler
Complete Insurance Service, - Realtors
Phone 660 520 Main St.
EL CENTRO, CALIF.



Just a Little Different

We have at this time, in our larder,
freshly caught

TROUT, FROG LEGS, YOUNG PIGEON,
GUINEA HEN, PHEASANT, QUAIL,
WILD MALLARD DUCK

Ready to be deliciously cooked and daintily
Served.

Meals such as the above can neither be prepared nor served in haste; therefore it is most important that we know when you will arrive and how many there will be in party.

Our Tavern is located eleven miles east of downtown Pasadena, 4 miles directly east of Santa Anita Race Track, on the southerly side of Huntington Dr. (Route 66).
LILLIAN M. WADSWORTH, ADELINE E. BAKER, Hostesses. Not Open Mondays
1452 Huntington Dr., Monrovia, California
For Reservations, PHONE MONROVIA 3211

Jordan Hot Springs

Not on an Auto Road

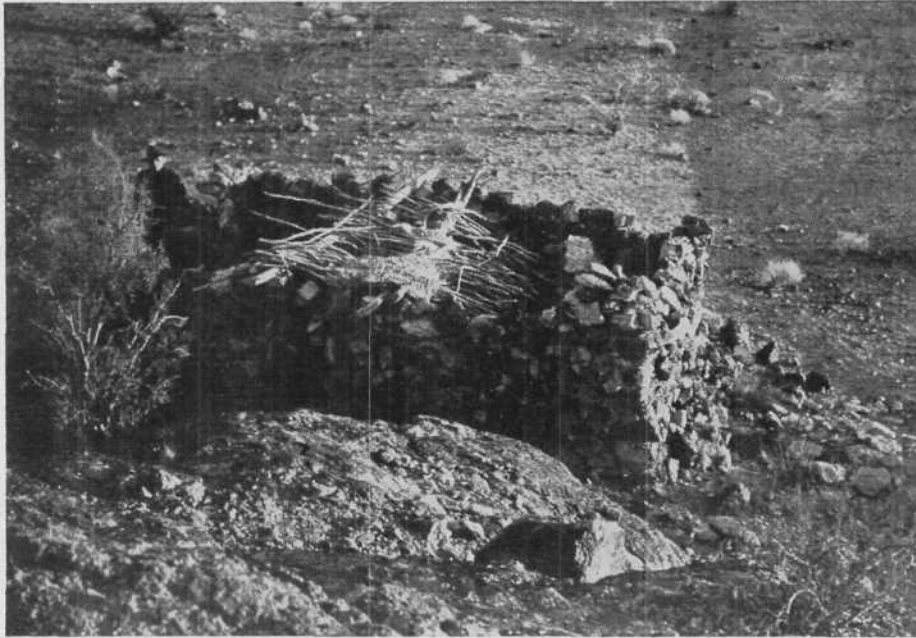
FISHING, RIDING, HIKING



J. N. HOLLIDAY, Olancho, Calif.

HISTORIC OLD LANDMARK

Somewhere in western Arizona



PRIZE IS OFFERED

Along one of the well-graded gravel roads in western Arizona the observing motorist will see a sign pointing to the

long-abandoned structure shown in the above picture. Evidently it is the ruin of a building erected many years ago by white pioneers. It is not Indian architecture.

This picture is being used in the Landmark contest this month in the hope that much hitherto unpublished data bearing on the origin and history of this old building will be brought to light.

To the person who writes the best story identifying and describing this ruin a cash prize of \$5.00 will be paid. The manuscript should be limited to 300 words and should include all available information as to exact location, identification of the builders if possible, age and any other data available.

This contest is open to all entrants without restriction as to age, race or place of residence. Answers must be in the office of the Desert Magazine at El Centro, California, by the evening of June 20, 1938. The name of the winner together with the prize winning answer will be published in the July number of this magazine.

...

COLORADO FLOOD DISCHARGE TO BE HIGHER THAN NORMAL

Flood discharge from the Colorado river during the annual runoff this season will be 15 per cent above normal and 23 per cent more than the 1937 discharge, according to the report of E. B. Gittings, U. S. Meteorologist at Denver. This forecast is dependent, of course, on normal weather conditions on the watershed following the date of the report.

Desert Trading Post

NEW—Just Out—Greeting or souvenir cards made from genuine Joshua tree wood. Your friends will treasure them. Send dollar for dozen or dime for sample. C. E. WATERS, 656 Seventh St., San Bernardino, California.

DON ADMIRAL'S new 56-page booklet "Desert of the Palms" gives colorful descriptions of Colorado desert life and background. Sent postpaid in U. S., ea. 50 cents. Desert Crafts Shops, 597 State St., El Centro, Calif.

GEM CUTTING—Send your rough desert gemstones to F. H. Wallace, Box 344, El Centro, Calif., for expert facet and cabochon cutting and polishing. Gems and gem minerals for sale. Prices on request.

FOR SALE—White Star Cafe at junction U. S. 80 and State Hwy 94. Five acres. Business established 19 years. Sacrifice at \$10,000. Write Adam Witcher, Boulevard, California.

TRAVELING THIS SUMMER? Write for descriptive pamphlets to help you plan your vacation. No obligation. Desert Magazine Travel Bureau, El Centro, California.

ROCKWOOD'S own story of the reclamation of the Imperial valley. Beautifully printed book with art paper cover also includes Dr. W. T. Heffernan's "Reminiscences." Postpaid 50c. Desert Crafts Shops, 597 State St., El Centro, California.

ARMY SADDLES—(McClellan) leather covered wood stirrups complete with luggage straps \$5 ea. Work harness (U. S. Army Wheel) complete with bridles, lines and collars \$30 per set. TENTS NEW 8x10 \$8, 10x12 \$11, 14x16 \$20. All merchandise in good condition. Mail orders filled same day received. Sam Robinson, direct buyer of U. S. Gov't since 1925—2612 So. San Pedro St., Los Angeles, Calif.

JACUMBA HOT SPRINGS



Cool. and Convenient

SWIMMING . . . DANCING
RIDING . . . TENNIS

Relaxation or Recreation

45 miles west of
El Centro on U. S. 80

MODERN ACCOMMODATIONS
AT REASONABLE RATES

**HOTEL, AUTO COURT, COTTAGES
APARTMENTS**



BERT L. VAUGHN, MGR.
JACUMBA HOT SPRINGS, CALIFORNIA



"THE PRIDE OF LONG BEACH"

Chief Auto Inn

10 Minutes from the Ocean

MEMBER UNITED MOTOR
COURTS.



MR. AND MRS. P. D. STOCKWELL

3932 Long Beach Blvd.
LONG BEACH, CALIF.

New 1938 Edition

THE CALIFORNIA DESERTS

EDMUND C. JAEGER

A visitor's handbook that tells all about the desert and its plants and animals.

Illustrated \$2.00

Stanford University Press

STANFORD UNIVERSITY, CALIF.

Hetzel The Photographer

... of the desert

Since 1913

EL CENTRO, CAL.

Phone 34



HILTON'S

Art and Gem Shop

John W. Hilton, Owner

You are invited to stop and see our 40-foot wall of semi-precious gems and minerals.

Desert Paintings—Cactus

Gems—Pottery

Cutting and Polishing

HIGHWAY 99

Across from Valerie Jean Date Shop
P. O. Address, Thermal, Calif.



DATES

from a
desert
oasis

Write R. C. NICOLL, Prop., Thermal, Calif.

TRAIL-BLAZER TO RAINBOW

Continued from page 5

years she has collected and preserved specimens of native plants—particularly the herbs whose medicinal qualities are known and employed by Navajo medicine men. Her work in this field has attracted the attention of botanists in Arizona and California. Her collection—numbering more than 300 specimens—now is being studied and classified in the laboratories of Harvard university.

Clyde A. Colville—partner in the Wetherill & Colville Guest Ranch—was one of our little group in the dining room. Like most men whose days are spent in studying the moods of the desert, Clyde Colville spoke little and listened much. I somehow felt he was gauging the caliber of my trailmate and myself—estimating our wavelengths, so to speak. When he joined our little semi-circle in front of the living room fire after dinner, I felt sure we had been admitted into his friendly regard.

To catalog the contents of that fascinating room would require the skill of a trained museum curator. The splendid Navajo blankets and rugs alone—among them some valuable *bayetas*—would provide material for a sizable volume. Frontier weapons and an old Spanish kettle on the wide mantel of the fireplace, vases and bowls of prehistoric Cliff Dwellers, more than a score of pictures on the walls—each telling a story.

Many Autographed Volumes

The library of John and Mrs. Wetherill contains hundreds—perhaps thousands—of volumes. I noticed works ranging from autographed novels of Zane Grey and Harold Bell Wright to the numerous bound reports of the Bureau of American Ethnology of the Smithsonian Institution. And the books are not merely on display as bits of background. They had been read, studied, discussed.

To me the most interesting volume of all was the Guest Register which we were invited to sign. Covering a period of many years, the pages of that book carry the names of hundreds of persons who are well known in the world-beyond-the-desert. Scientists, artists, actors, bankers, authors, health seekers, adventurers—nearly all have contributed something.

I turned to my host, smoking his pipe and listening as my trailmate described our journey from Shiprock. "What are the reactions of visitors who view the Rainbow Bridge for the first time?" I asked.

Wetherill took the pipe from his mouth: "I'll always remember the words of my friend Teddy Roosevelt,"—stroking his closely trimmed beard—"After

looking at the Bridge—gauging its size and admiring its graceful proportions—the Rough Rider said in a solemn voice, 'It's the greatest natural wonder in the world!'

"Another expression I can't forget came from a cowboy: 'When I seen it I couldn't swear!'"

Although his name perhaps will always be linked with the Rainbow Bridge, John Wetherill denies credit for its discovery. "Not that I didn't try to find it," he admitted. "I did hunt for the Bridge, but I was led away from the search by the discovery of three groups of hitherto unknown cliff ruins—Betatakin, Inscription House, and Kietsiel. After all, archeology is my line. Nasja and Nasja-begay—the Pahutes—led us to Rainbow Bridge. The Indians found it long before the white men came."

Pioneers in Archeology

Reared on his father's ranch in the fertile Mancos river valley at the northern base of Mesa Verde near the southwestern corner of Colorado, John Wetherill's interest in archeology was born in the potsherd found in the soil beneath his feet. With his brothers he explored, excavated and collected—exhibiting a large assortment of relics at the Chicago World's Fair in 1893.

Mrs. Wetherill also was reared in the Mancos valley. There she and John were married. In collaboration with Frances Gillmor, Louisa Wade Wetherill has written and published a book: "Traders to the Navajos." In this book is the true story of a half-century's struggle with the southwestern desert—colored with adventure and romance, tragedy and happiness, disaster and triumph.

During their long years spent in the heart of the Indian country the Wetherills have gained real understanding of the problems faced by Stone Age Americans in becoming adjusted to Steel Age American civilization. Having the confidence of the shy native desert-dwellers, they are in position to interpret strange laws and regulations—gaining loyal co-operation where strangers might find stubborn resistance.

They are pioneers who have helped establish goodwill in a region where previous generations of white men had brought misunderstanding and bloodshed.

Trail-blazer to Rainbow Bridge? Yes, John Wetherill was that.

More important, Mr. and Mrs. John Wetherill have been trail-blazers of courage and integrity on a frontier where there was a very great need for that type of character.

QUEEN OF THE DESERT NIGHT

Continued from page 11

considerable area, not only on the opening night but into the afternoon of the following day.

Each blossom opens but once. Other buds on the same plant may bloom the succeeding night. This is especially true if there are several buds on one plant, about half opening one night and half the next. A latent bud may flower weeks later. But such an occurrence is rare.

Tradition that the Night-Blooming Cereus (*Peniocereus greggii*), no matter where it may be, has a single flowering night each year was carefully checked near Tucson in recent years. It was found that it would be more nearly accurate to say that the greatest profusion of blooming takes place within a period of two or three nights, the whole arid desert country about Tucson and the carefully watered and tended cactus gardens in town being perfumed simultaneously with that delightful, spicy fragrance during this brief flowering time. It was also noted that the blooming was especially heavy in specific neighborhoods during each one of those nights, about 98 per cent of the plants flowering on one night and the rest on the succeeding night.

Has Religious Significance

Because of the frequent proximity of its blooming to San Juan's Day (June 24th—the birthdate of John the Baptist) and to Indian tribal events, the flowering is of a deep religious significance to reverent Mexicans and Indians who refer to their "*La Reina de la Noche*," Queen of Night, also as "Night Goddess," "Goddess of the Night," with the white ethereal blossoms sometimes spoken of as "Angels of the Night."

It is also traditional that no matter the degree of drought or extremity of heat upon our deserts, the Night-Blooming Cereus always blooms. I have found this holds true on our homestead; but one cannot help notice how much larger and finer the blossoms are and how much earlier they bloom in years of adequate rainfall.

The Arizona Night-Blooming Cereus grows from a bulb-like tuber resembling a large overgrown turnip. This tuber is located from 15 to 18 inches below the surface, with small rootlets climbing upward in search of moisture which it stores. It grows along the sandy washes of the desert where moisture is more often available. In older plants this tuber



Fruit of the Night-Blooming Cereus matures in October. It is relished by the Papago Indians, but is never plentiful.

Photo by F. S. Wartman.

may weigh as much as 100 pounds. It is so bitter as to be practically immune to attacks by desert rodents, but native Indians sometimes use it for medicinal purposes. Old specimens of this cactus sometimes attain a height of six to eight feet with as many as 19 or more blossoms.

In its native habitat the Night-Blooming Cereus asks little of nature, growing in the shelter of creosote bushes or climbing into the sturdy branches of mesquite trees, seeking protection from devastating winds and scorching sun. Good drainage and a sandy loam soil also seem essential. The cactus itself is delicate. The woody stem connecting the top of the tuber to the main body of the plant is its most vulnerable point, being so brittle and fragile that it snaps off easily at this juncture. When this happens the cactus sends up a new shoot from the tuber but like all cacti it is of slow growth. Older specimens are found usually as cultivated plants growing in cactus gardens, since in their wild state these plants break off so easily.

The gay fruit of the Night-Blooming Cereus is bright red, egg-shaped and much relished by man as well as by birds, rodents and other native fauna. It is never plentiful, a cactus seldom bearing more than a few fruits. This picturesque fruit ripens in late October, the only time of year except its blooming night that this cactus is at all conspicuous on the desert.

Besides QUEEN OF THE NIGHT (*Peniocereus greggii*) native to our own Southwest, other varieties of Night-Blooming Cereus from the deserts of the world may be found growing side by side

in western cactus gardens. The Mexican SNAKE CACTUS (*Nyctocereus Serpentinus*), a prolific bloomer and climber; HONOLULU QUEEN from Hawaii, where it flowers in the Night-Blooming Cereus hedge at Punahou College, Honolulu; and PRINCESS OF THE NIGHT, a dainty South American variety, are among those more frequently seen.

NOTE: Night-Blooming Cereus cacti (*Peniocereus greggii*) are fully protected by state law as a conservation measure lest they disappear entirely from our deserts. However, they may be procured through the usual channels from cactus fanciers and nurserymen.

PRINTING

FOR THE DESERT

For business and professional people wanting

- STATIONERY
- BOOKLETS
- CARDS
- MAILING PIECES

Suggestive of the desert.

WE SUPPLY ART WORK,
ENGRAVING AND PRINTING

*Dummies and quotations gladly
furnished.*

ELITE PRINTING COMPANY

597 State Street
EL CENTRO, CALIFORNIA

DESERT MAGAZINE BINDERS

Hold twelve copies—Attractive and Durable.
Delivered, each\$1

Imperial Valley Bindery

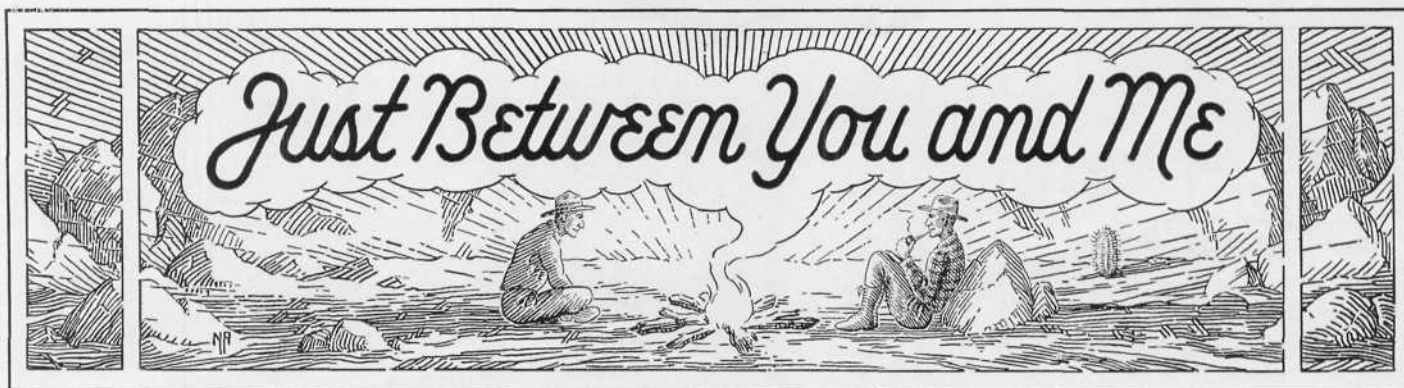
129 No. 6th St. El Centro, Calif.



Finest Saddles, Polo and Racing
Equipment

Lichtenberger-Ferguson Co.

SINCE 1900
352-354 So. Los Angeles Street
Los Angeles



By RANDALL HENDERSON

AS I write this, early in May, the desert landscape is daubed with the golden blossoms of a million Palo Verde trees. In another month the bright hue of the Palo Verde will have given way to the rich purple—or is it deep blue?—of the Smoke Tree. And some time during the intervening period the Desert Willow will put on its robes of white, tinged with pink.

When it comes time for these desert trees to blossom they hold nothing back. Every tree is a masterpiece of color.

I am rather partial to the Smoke Tree. Along toward the middle of June I will take the road which leads south from Coyote Wells on Southern California's sector of Highway 80. Eight miles from the paved highway the road comes to a gravel bluff overlooking Pinto Wash where there is one of the finest forests of Smoke Trees to be found in the Southwest. The natural elements carved out this arroyo before there was an international boundary line, and today part of it lies on the Mexican side of the border and the remainder in United States.

Pinto Wash is a place of regal splendor when the pale ghost-like branches of *Dalea spinosa* put on their annual flower show. It is worth noting that the flowers are not less colorful on the Mexican side of the line than the American side. The political boundaries we humans worry so much about just do not mean a thing to old Mother Nature.

* * *

This month's problem in the office of the Desert Magazine is to find a common name for the fruit which grows on the various species of cacti. Some writers use the name "cactus apples", and others just call it cactus fruit. Cactus really deserves something more distinctive than either of these terms. Perhaps the Papago Indians or the Mexicans have the answer. I will be interested, if any of the readers can throw any light on this subject.

And after I learn what to call those delicately flavored edibles which are found later in the season on many species of the cactus family, I will be ready for a feast—as soon as I learn how to pick and eat them without getting my fingers and tongue full of splinters. Probably my Indian neighbors can tell me something about that too.

* * *

Congressman Izac of San Diego is sponsoring a federal measure, H. R. 1876, which would authorize the Secretary of Interior to sell five-acre tracts of public land to American

citizens for "home, cabin, camp, health, convalescent, recreation and business sites."

The land would be sold at nominal cost and the purchaser would obtain title without the loss of time and expense involved in the regular homestead procedure. The act is designed primarily for those who would go to the desert for health rather than financial profit. It is understood that irri-gable lands which may come under reclamation projects are not to be sold under this act.

For city dwellers who dream of owning a little cabin on the desert where there will be neither telephones, traffic signals, gossiping neighbors nor high taxes, this seems a partial answer at least.

The limited area of habitable land which still remains in the public domain needs to be guarded well. But I can think of no better way of utilizing it than as cabinsites for men and women who are seeking relaxation between rounds in the fierce competitive battle in which the whole business world is engaged.

* * *

Writing about Beavertail cactus in the April number of the Desert Magazine, Don Admiral stated that he had counted 237 blossoms in various stages of maturity on a single plant. Well, I'll have to award second prize to Don. Mary Beal of Daggett, California, recently wrote: "I have a photograph of one with 250 blossoms, and counted 267 on another." Until some one comes along with evidence of bigger and more prolific Beavertails, we'll award the championship to the Mojave desert.

* * *

We have had a cool spring on the desert this year—too cool for the good of the cantaloupe industry. But the hot days are coming. I will guarantee that. It really wouldn't be much of a desert if we did not have a blistering sun pouring down on us for a few months of the year.

If we had a perfect climate 12 months in the year, the exploiters soon would have a road in every canyon and a cocktail resort at every waterhole—and the desert would become as snooty a place as Hollywood. Thank heaven for the heat!

Those who can afford it and have the time, will migrate to the mountains or coast when school is out. And the other three-quarters of us will remain at home and cuss the weather and with few exceptions be just as happy as we would be elsewhere. Hot weather is not a serious annoyance to people with good health and active minds.

As my old friend Slim Wallace of Dixieland remarks: "Yes, it does go up to 115 degrees in the shade some days—but you don't have to stay in the shade if you don't want to."

The *Fabreeze* EVAPORATIVE COOLER

The "FABREEZE" cabinet is the neatest, best designed and most sturdily built unit on the market.

Made of galvanized iron, aluminum painted. Well constructed . . no vibration. Improved adjustable trough for distributing water on excelsior. No clogged pipes.

Cabinet easy to install. Excelsior pads may be easily removed for servicing.

Water flow is regulated by valve inside the building.

Dimensions—51" high, 36" wide, 24" deep. Pan at the bottom is 5" deep, making an ample reservoir.

Distributed by

I.V. HARDWARE CO.
TEN STORES
IMPERIAL AND YUMA VALLEYS



Manufactured by
W. H. FABRY MFG. CO., INC
700 SO. DATE ST. ALHAMBRA, CALIF.



.. a desert gold mine...

*You'll find nuggets galore
in a file of Desert
Magazines*

In the first seven editions of the Desert Magazine you can find no less than 71 nuggets: 16 personality sketches, 9 articles on desert plants, 9 travelogs with maps, 4 mining stories, 7 landmarks pictures, 5 features on the Indian country, 3 desert home sketches, 8 historical sketches, 4 gem-hunter's features, and 6 articles on development of the desert. Then there are more riches you can "pan out" . . . poetry, editorial comment, the Pennington photos, humor, news . . . items of interest and value to any desert lover.

We will give you an interest in this gold mine for only \$2.50 a year. Send us the attached postage-paid card and mark it "start with November issue". Or if you have been buying the Desert Magazine on the newsstands and want to be sure you will not miss a copy for the next year, mark it to start any month you wish.

The DESERT MAGAZINE . . El Centro, Calif.



for 1938
Santa Fe
presents
**AMERICA'S
LARGEST FLEET**
of ultra-modern
STREAMLINED TRAINS
for **Chicago—**
AND ALL
BACK EAST EXCURSIONS

This fleet, the very latest in rail travel, beauty and speed, includes by far the largest array of modern passenger equipment on any American railroad. It is designed to add new dash and joy to economy travel and deluxe travel alike. It is ready, NOW, to fit into your spring and summer travel plans.

Briefly:

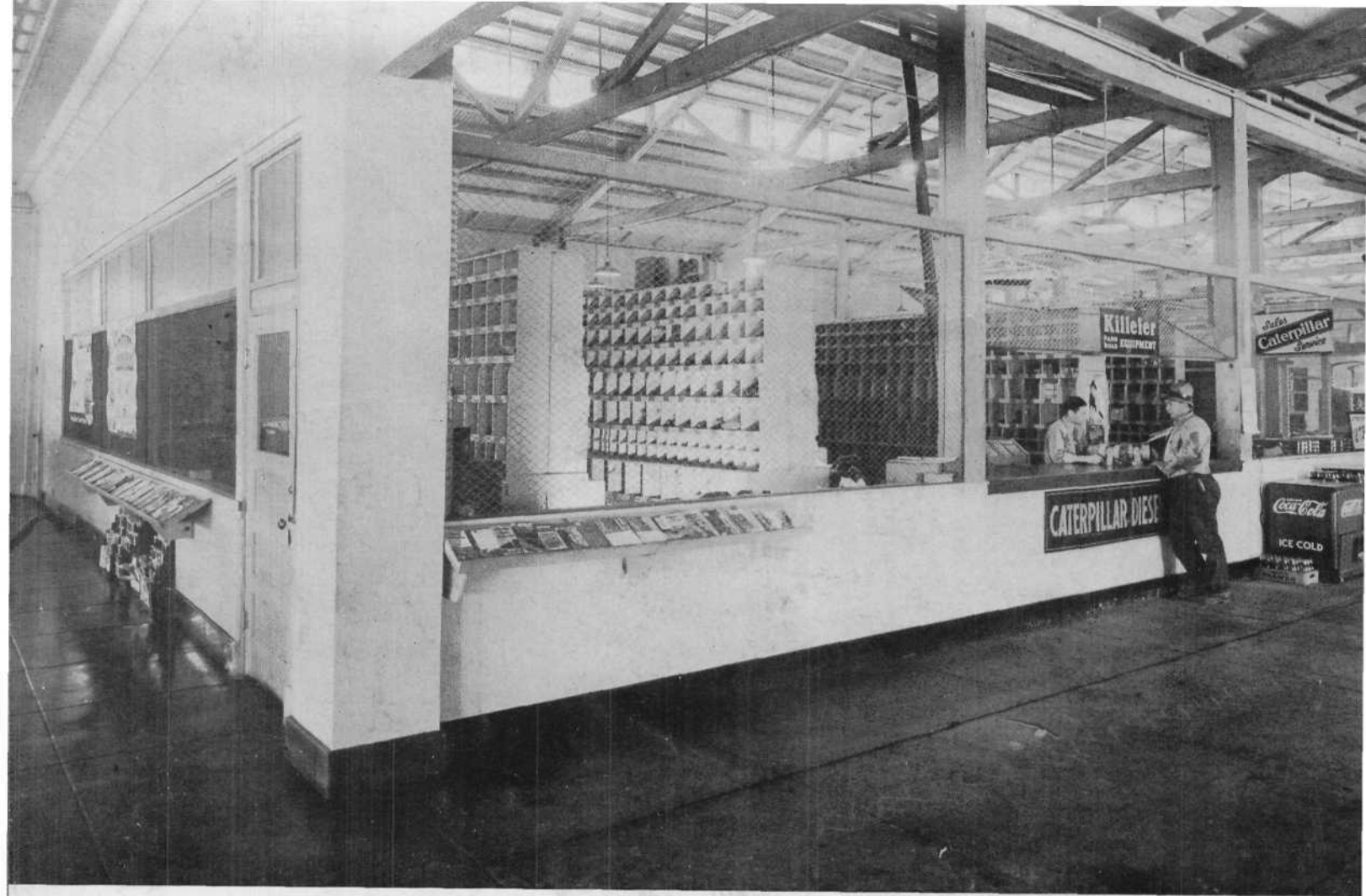
- The superb **Super-Chief**. Solid Stainless Steel Pullmans. 39¾ hours Los Angeles—Chicago.
- Six New Streamlined **Chiefs**, finest, fastest and only first class daily extra fare Chicago train.
- New Streamlined **El Capitan**—the only all-chair-car transcontinental train. Economy in every part of the service. Speed of the Super-Chief. Diesel locomotive.
- Other daily through trains without extra fare to Chicago, Kansas City, Denver, Houston and New Orleans.

SANTA FE TICKET OFFICES AND TRAVEL BUREAUX

743 S. Hill St., L. A.
5th Ave. & B. St., S. D.
601 Market St., S. F.

7-28

Santa Fe



PARTS AND SERVICE

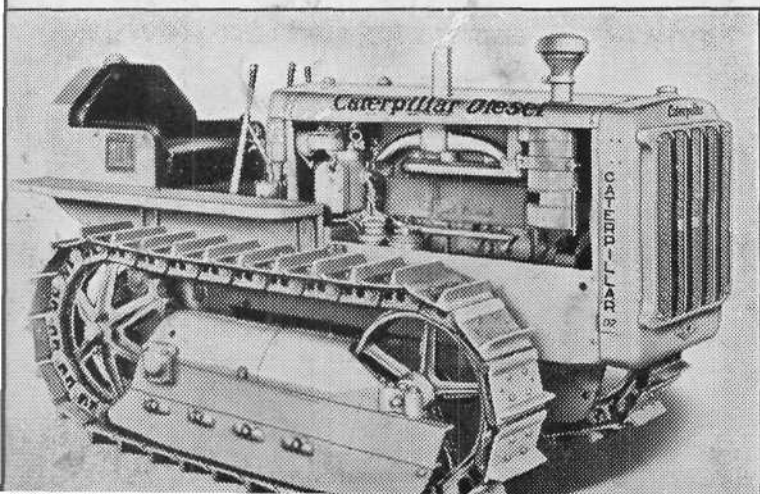
When They're Needed . .

A "CATERPILLAR" operator in Imperial Valley finds that his tractors stand up longer than his neighbor's who uses another type of power machinery. His "CAT-ERPILLAR" tractor operates more economically in the long run. But better than that, it works regularly with fewer stops for repair and part replacement.

He has faith in steady performance from his "CAT-ERPILLAR" because he knows that within easy reach of his ranch is a complete stock of genuine parts, made and recommended by the manufacturer of the tractor. Skilled mechanics are available for immediate repair if necessary. The operator is assured of a minimum of delay.

Serving the 604,000 acres of Imperial Valley are three strategically placed Ben Hulse service and parts stores. The photo above shows the parts store at Brawley. Equally well-stocked stores are in El Centro and Calexico. A fourth serves the 69,000 acre Yuma valley.

Practically every demand for parts or service on "CATERPILLAR" equipment is met at the counters of these four Ben Hulse stores. This is an added assurance to "CATERPILLAR" owners . . . knowledge that Ben Hulse's interest does not cease when he sells new "CATERPILLAR" equipment.



Ben Hulse

Tractor and Equipment Co.

EL CENTRO BRAWLEY YUMA CALEXICO