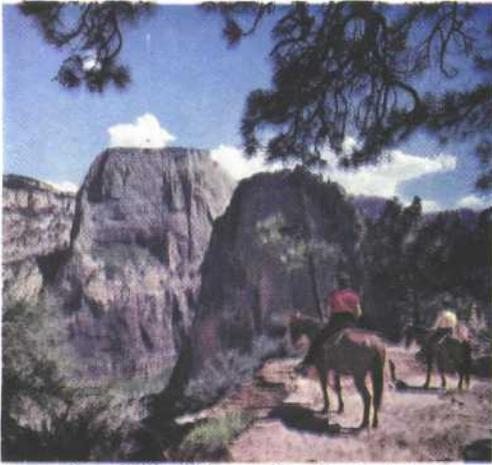


# DESERT



MAGAZINE of the OUTDOOR SOUTHWEST

March, 1961 40 cents



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# Desert --magazine of the OUTDOOR SOUTHWEST

## Contents for March, 1961 / Special Issue on Southern Utah "America's Last Wilderness Frontier"

### Posterity's Playground

An interview with Utah Governor George Clyde on the subject of Southern Utah Tourism

Southern Utah is one of America's last major wilderness frontiers. Certainly, its outdoor recreation potential is unmatched in the Southwest.

What the future holds for this majestic land is of vital importance to a nation whose cities and suburbs are pressing outward, and whose citizens are overgrazing those outdoor recreation areas close by the major population centers.



GOV. CLYDE

California's Mojave and Colorado deserts are both taken up with population booms; Armed Forces and Atomic Energy Commission bombing ranges have carved-out the heart of Nevada's treeless expanse; Arizona is one of the fastest growing states in the Union, and it manages to fill its own choice recreation areas without too much help from Southern California's motor-minded millions (witness Oak Creek Canyon). Homes are springing up around the rim of Salton Sea; the Navajos are encouraging tourists to visit their reservation; Death Valley is invaded by 70,000 persons during the summer months; the California Highway Patrol is using airplanes to patrol

—continued on next page

### COVER

This month's wrap-around cover shows the "hamburger rocks" of southern Utah's Water Pocket Fold (see story on page 14). The explorers are, from left, Lurt and Alice Knee, professional guides, and Joyce Muench, wife of the man who took the picture: Josef Muench.

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The Desert Magazine, founded in 1937 by Randall Henderson, is published monthly by Desert Magazine, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the postoffice at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U.S. Patent Office, and contents copyrighted 1961 by Desert Magazine, Inc. Permission to reproduce contents must be secured from the editor in writing.

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Address all editorial and circulation correspondence to Desert Magazine, Palm Desert, California.

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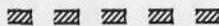
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## Gov. Clyde . . .

(continued from preceding page)

crowded desert highways in San Bernardino County; the government is attempting to clear out squatters on land bordering the Lower Colorado River.

All this is not to say that the desertlands of Arizona, California and Nevada have lost their outdoor appeal. It is to say that the boundaries of absolute wilderness—areas still a couple of day's travel from the clangor of civilization—have been pushed back to encircle the general vicinity of southern Utah.

Recently, *Desert Magazine* asked Governor George D. Clyde of Utah 12 questions touching on the outdoor recreation future of the bottom half of his state. Here are those questions, and the governor's answers:

#### 1. Is Utah planning a long-range tourist promotion program?

*Gov. Clyde:* Yes, we have set up the outline for a long-range tourist promotion program. It should be noted that Arizona and California accomplished remarkable tourist promotion programs without direction from an official state agency. Both of these states now have such an agency, but they both have done an outstanding job with the efforts centered around local groups, such as chambers of commerce and travel promotion associations. On the other hand, Utah's effort has largely been the effort of the Tourist and Publicity Council, with very little or no cooperation from either public or private enterprise on the local level.

#### 2. Will southern Utah be developed, tourist-wise, by Utah primarily—or by Federal agencies?

*Gov. Clyde:* Insofar as possible, Utah should develop its own areas of recreation under our State Park and Recreation Commission, rather than calling upon the Federal government to establish more national parks and monuments.

#### 3. What are present plans for the Glen Canyon Recreation area?

*Gov. Clyde:* The National Park Service's Glen Canyon National Recreation Area Master Plan provides for the development of seven recreation sites on Lake Powell, and one site on the Colorado River below Glen Canyon Dam. The dam, Lee's Ferry, and the Wahweap site on Lake Powell are in Arizona. The remaining six sites—Warm Creek, Hole-in-the-Rock, Oil Seep Bar, Bullfrog Creek, Hite Basin

and Shock Bar—are in Utah. The Navajo Indians are also planning recreation developments on the Navajo side of Lake Powell.

Glen Canyon National Recreation Area Administration Headquarters will be located at Wahweap. Other facilities there will include: roads and parking areas, air strip, visitor center, marina, campground, picnic area, swimming beach, and concession facilities such as a trailer village, stores and eating and lodging facilities. This construction program is tentatively scheduled for fiscal years 1961 through 1964.

At Lee's Ferry, limited facilities will be provided including boat launching ramp, campground and picnic area. Plans call for 1962-64 construction.

Bullfrog Creek and Warm Creek will be comparable to Wahweap. Work at Bullfrog Creek is slated for 1964-68; Warm Creek: 1967-69.

Oil Seep Bar, Hole-in-the-Rock and Shock Bar will be accessible by boat only. Future demands may necessitate the construction of access roads to the latter two sites. Boat moorage, limited overnight lodging, campgrounds, picnic areas, and eating and store facilities are planned for these three sites. An existing road and air strip will be utilized to make Hite Basin accessible.

#### 4. At present there is no paved east-west link across southern Utah. Are plans for such a road on the drawing boards?

*Gov. Clyde:* The earliest paved link on the east-west highway system in southern Utah will come about with improvement of U-24. This route has been a very popular tourist route into the Wayne County Wonderland. The Department of Highways in recent years has completely surfaced the highway from Green River south to

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Hanksville and several miles westward. Complete surfacing within the Capitol Reef National Monument to Giles is under consideration by the Bureau of Public Roads.

**5. Are there any new undeveloped park or scenic areas in southern Utah that are earmarked for early development by the state?**

*Gov. Clyde:* These areas are in some stage of acquisition or development:

Brigham Young Winter Home in St. George. Restoration is planned.

Jacob Hamblin Home, Santa Clara, will be restored to its original condition.

Dixie State Park north of St. George. Washington County has contributed 295 acres. The State Park Commission has acquired 1138 acres of land, and water has been successfully filed on.

Coral Pink Sand Dunes. The state plans camping, picnicking and overlook improvements at this site.

Kodachrome Basin and Grosvenor Arch. The state has made application for purchase of this land from the Bureau of Land Management. Overnight camping and trailer park facilities are planned.

Escalante Petrified Forest in Garfield County. The state has applied to purchase the land, and it will protect petrified wood, develop trails and prepare local interpretive displays.

Monument Valley. The state plans an information center and an entrance portal at the state line.

Anasazi Indian Village State Park. The state is in the process of acquiring eight acres of land at this prehistoric Indian village in Garfield County, and is contemplating an area museum and headquarters development.

Goosenecks of the San Juan River. San Juan County has improved the road to a 10-acre overlook site, and the state expects to install a picnic shelter, parking area and sanitation facilities.

Newspaper Rock, Indian Creek, San Juan County. The state has made application to purchase 200 acres of land in this area. Contributions from *Desert Magazine* to aid in the purchase of the protective fence have been received.

Dead Horse Point. San Juan County contributed 627 acres, to which the state has added more land. Developments are underway.

Valley of the Goblins. The state has requested the Bureau of Land Management to make a survey of this area so that applications to acquire land can be submitted.

Green River, Emery County. Approximately 53 acres of land has been acquired from the state. A boat ramp was constructed, and development of picnic, parking and sanitary facilities are planned.

**6. What is the state's attitude toward maintaining certain areas as primitive or wilderness areas?**

*Gov. Clyde:* It is my feeling that the primitive and wilderness areas on the national forests and national parks in Utah would provide enough of the large undeveloped areas to be maintained in primitive conditions.

I believe, however, that areas of restricted or limited use should logically be a part of the state park program. We might consider the Needles Area as an example of such areas. It is a very unique and unusual area. It is so rugged and primitive that we feel transportation should be limited to four-wheel-drive vehicles, horses and foot travel, and camping and sanitation facilities should be of rustic nature with administrative buildings located only at the two points of entry.

Such a designated area in the state park program might be advertised as a four-wheel-drive wilderness area, and would attract much national interest from four-wheel-drive travelers and horse and hiking clubs in the western country. It is an area that would require a minimum of protection and could be used by this type of travel with a minimum of damage and destruction.

There are probably other areas in the state, such as Land of Standing Rocks, Valley of the Goblins, Circle Cliffs, and Grand Gulch that would have a minimum of development of blacktop highways.

**7. What do you regard as southern Utah's prime tourist market?**

*Gov. Clyde:* More of Southern Utah's tourists come from California than from any other state. Counts at Zion National Park and other places in southern Utah



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indicate that approximately 30% of the visitors to Southern Utah are from California. We would assume from our surveys that the prime tourist market for Southern Utah is Southern California.

**8. Has the State of Utah taken any steps to control safety on guided river tours?**

*Gov. Clyde:* The State Park and Recreation Commission has developed an application form that is required for regattas and special boating events

such as the "Friendship Cruise" and "Marathon" on the Colorado and Green rivers. This form is not necessarily required by individuals conducting guided tours of the rivers, but we would be very happy to work with such groups if we have the opportunity. Much of this application deals with safety items.

The Attorney General has informally advised me that the state is not authorized to restrict the public use of streams. We feel certain that each year there are many boat trips made on the rivers of Utah without our knowledge or supervision.

The United States Coast Guard has classified certain portions of the Colorado, Green and San Juan rivers as non-navigable. A particularly dangerous portion of the Colorado—Cataract Canyon—is under this classification.

Thus far our Boating Division has spent much time and attended many meetings in all parts of Utah stressing safety and good manners on the water. Boat safety and safety equipment inspection is a part of every boat registration, and patrolmen are constantly correcting unsafe driving and making suggestions on use of safety equipment.

**9. Do you anticipate any immediate**

**upswing in southern Utah's tourism when the Monument Valley road is completely paved?**

*Gov. Clyde:* Definitely. Completion of this road will make it possible for Southern California people to travel into Monument Valley via Flagstaff on a paved road. Our experience indicates that there is a great deal of interest in Monument Valley among Southern Californians.

It will also be possible, when this road is paved, for visitors coming from the other direction to travel into Monument Valley, thence on a paved road to Tuba City, and on to Glen Canyon Dam, which holds a great deal of interest to our visitors.

**10. What of southern Utah's Indians? What does the future hold for them?**

*Gov. Clyde:* As far as the tourist industry is concerned, the Indians can do much to benefit themselves in the tourist trade through the development of their arts and crafts. Most visitors who come West expect to see the Indians, and learn more about them. It is important, therefore, that our Indians, and people and agencies working with them, realize the great potential in the development of arts and crafts, and other elements of an historic program to portray the Indians in their natural culture.

**11. Would you say that southern Utah's business people are as tourist conscious as they should be? What is the state doing to encourage these people to recognize the importance of a healthy tourist business?**

*Gov. Clyde:* Southern Utah's business people are not as tourist conscious as they should be. However, there has been a lot of work done to alter this situation. State officials have appeared in, and have conducted, economic development clinics, meetings of service clubs and special tours in this part of the state. As proof that this effort is paying off, we cite last year's excellent "Indian Summer Days" promotional program carried on by the people of southern Utah. Sponsored by the Five-County Organization, it was the first real step taken locally to assist and augment the state's tourist promotion program:

**12. How does hunting and fishing revenue compare with tourist dollars from non-hunters and non-fishermen in southern Utah? Does the state anticipate a shift in this balance as recreation increases in the Glen Canyon Reservoir area?**

*Gov. Clyde:* Figures are not available, but a shift in this balance is anticipated. ///

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# AN ARTIST ON THE COLORADO

**W**HERESOEVER the carcass is, there will the eagles be gathered together.

These words of Our Lord came naturally to mind when five not particularly eagle-like voyagers descended upon the remote dorp of Hite, situated on the Colorado River, whose vermicular Glen Canyon provides the analogue of the carcass in this instance. From central and southern California, from Kentucky and from New Mexico, five of us came churning over some of Utah's vestigial roads to fling ourselves, boats, food and gear onto the river's restless bosom. For some 150 miles she would carry us, in however erratic and refractory fashion, into a little-known wilderness abounding in grandeur, surprise, history and prehistory. And mud.

A hoary aphorism, "too thick to drink, too thin to plow," was coined to describe the Colorado, but I suspect this has been accepted in a dull unthinking fashion, never given the benefit of a fair trial. A fine crop could be raised, I feel sure, if only some way can be devised to keep the fish from eating the seed before it takes root. Of course you might plant in one state and harvest in another, but such details can be ironed out. Meanwhile the other two boats have started down the river, and we'd best catch up, since they contain the painting equipment and food.

Glen Canyon is not a "thrill trip" as are the Grand, San Juan and Cataract. Three of our group were artists, and the expedition sported a dozen assorted cameras with a half boat-load of film, so this was to be primarily a pictorial jaunt. Bill and Scotty, both rangers, are semipro photographers, and a third ranger, Bill Hoy (on the trip and hereinafter referred to as 'Billhoy' for obvious reasons) was an avid learner. The only purist was Pauline, who stuck to pencil and crayola throughout the trip, doubtless an expression of pent-up artistic fury at having her muse held so long at bay by housewifely devoirs. One night as I creaked into my bedroll after a hot tiring day, I thought my fatigued

deluded eyes beheld an *ignus fatuus* in the brush upstream, but it was only Pauline sketching by flashlight. Once, as she faithfully copied a 300-foot wall of petroglyphs, Bill asked why she didn't omit the duplicates, the imperfect and the insignificant. "Oh," answered Pauline with never a pause in her pencil, "I don't want to stop and sort them out."

At first I was apprehensive that I'd somehow fallen in with a gang of fugitive blackguards, for Scotty and Bill seemed always to be hiding under black rags, which they also used in the evening for some sort of arcane ritual, but it eventually dawned on me that this all had something to do with view cameras and film-changing. However, it did make for some silly-looking landscapes, to see, wherever one looked, grown men hunched under black cloths and stumbling about over the terrain, colliding with one another and like as not including each other in a good share of their exposures.

Nearly anything one can say about the river suffers the disadvantage that it ain't so—at least part of the time. For what is true of a particular spot at one moment may not be so next day and almost certainly will be mendacious at another season. We went down on a very high and generally rising river which all but covered a wicked rock below Powell's Music Temple where, just a year before, the assault raft in which Billhoy and I made the journey had been upended so that my companion, sans life jacket, came within seconds of drowning before the intrepid Bill Jones could maneuver his fold-boat to the rescue. And only a year previous to this incident, the same rock claimed the life of another traveler whose body, like Billhoy's entire outfit, was never recovered. Yet when we passed, a slight swirl was the only evidence of this monster. A difficult landing may be a bagatelle in lower water, or higher; a bar may have become an island, and a favorite camp may be invisible on your return visit. I even saw one stretch of river that appeared fresh and clean, though I suppose it was merely full of water-colored dirt at that point.

Variety is the Colorado's one constant. We spent many delightful hours

drifting through quiet sunshine as an imperceptible current wafted us gently through halcyon vistas. Tremendous cliffs, carved and figured with inconceivable patterns, soared from the water into the sky. Gradually these ramparts declined and permitted us sweeping views of tumbled hills and mesas, with rugged castlelike buttes or a snow-covered mountain blue in the distance. Herons frequently plummeted from their perches and planed over the water in a long, leisurely course. An occasional egret graced our vision with its undulant flight to some aerie where boats and men do not intrude. Now and again a heavy-bodied beaver would hurtle from the willows into the water, and it became a game to chase him over the river's quiet reaches in an effort to anticipate the spot where he would surface.

It is strange that in this crowded scurrying world, whose reflective people are concerned about a population explosion, the river world is less busy than it once was. First the Indians ranged the river, then the white man came with cabins and mines to leave his mark in numerous places throughout the canyon. The traveler now stops at any number of shacks and shafts that once kept at least part of the river humming with activity. A great many markers are still to be seen along the canyon walls, placed there a half-century ago by a prospective railroad builder, the same gentleman whose big dredge now thrusts a few rusty feet of steel above the waters which long since have claimed the rest of the machine and its builder's dreams of empire. Some of the shanties and wickiups along the river are so situated they give one to wonder about the owner's character and relationships with the law. At any rate, we could not explain why a stone hut should be erected in a spot waterless, invisible, inaccessible and inhospitable, when immediately across the river lay a broad sunny bar with all the features of a fine homesite. A riverman showed us relics from what must have been a considerable establishment in some fastness of the White Canyon region, but no one can guess the reason for such a hostelry, or its means of support, unless it was run for rough individuals on pelf illgotten in more civilized areas.

By R. BROWNELL MCGREW

One interesting thing about the Curlyrado (as a glance at the map suggests it should be called) is that the bottom of the river is quite as active as the top, often more so. Queer chuggings, gluggings and swirlings seemed continually to menace the boats even in the calmest stretches, and we felt the river gods were grumbling at our impudent presence. Sure enough, they would soon begin to roar in earnest as we approached a rapid, when invariably someone would endeavor to unsettle Pauline by reaching for his life-jacket, remarking with an air of forced casualness that the map said this was a bad one, as the increasing bellow of the water told us the river was demanding human sacrifice. It engendered feelings both of relief and indignation that our party was rejected *en toto*. We still think we're human. Sort of.

In the rapids, too, the river asserted her feminine characteristics by giving us a merely pleasurable tossing in those stretches that were advertised as Glen Canyon's not-very-formidable worst; but at Oak Creek and Twilight Canyon, which are usually the merest ruffles, she gave us a splendid drenching which necessitated unpacking and overturning the raft to get the river back where it belonged.

Here I ought to pass along a technique evolved by Bill to obviate all possibility of capsizing, even in the Grand. As the accompanying sketch shows, his device consists in piling

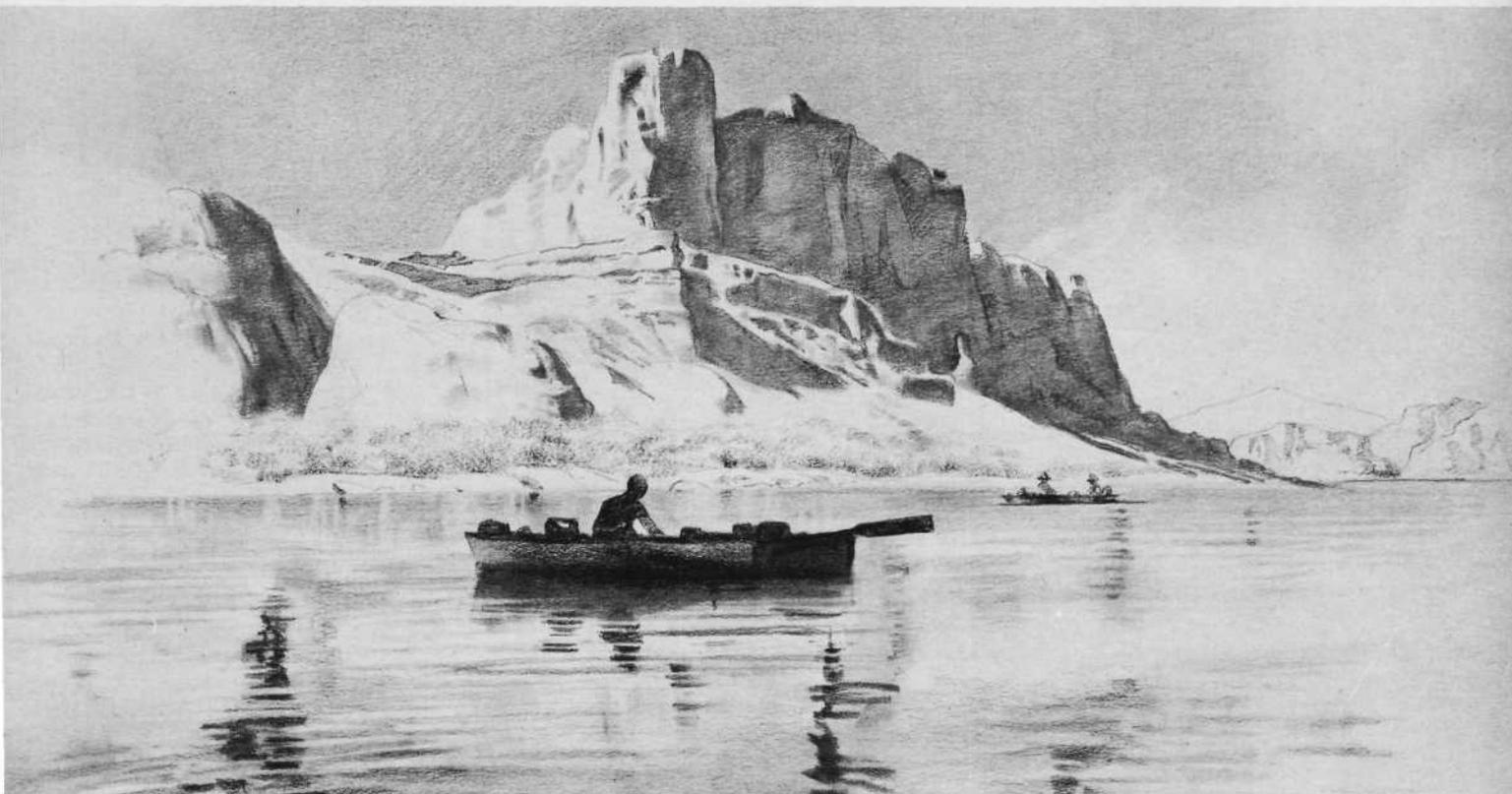
gear and boxes haphazardly into the boat until there is no room for water to get in. Of course, his craft looked like a bachelor's kitchen in the ghetto, but that's a small price to pay for plenary safety. He didn't lose a thing even from a shelf at the rear of his boat where Pauline's acquisitions of purpled glass nestled among several dozen jars of marmalade, mustard, catsup, jam, taco sauce, sunburn lotion, anchovies, peanut butter, Schenley's, lint and whatnot, till the whole looked like Manet's painting of the bar at the Folies Bergere.

One day during lunch Uncle's three minions fell into an erudite discussion of the Colorado's topography and geology, with particular reference to the bend of the river where we were stopped. Eventually they got the whole matter straightened out to everyone's satisfaction, and I spent the following hour or two just feeling grateful to my learned companions for the light they had shed on this abstruse problem. This benevolent feeling was holding up just fine when we rounded a curve where the conditions discussed at lunch were precisely reversed. The whole enigma was cleared up for me, however, on the return by air to Hite, for any fool can see from this vantage point that the whole thing was done by a giant with a big stick, a theory nearly as scientific and vastly more enjoyable than the jejune pedestrianism of the textbooks.

When the wind blows, as it does

with regrettable frequency and enthusiasm, the river is not the most pleasant place in the cosmos, especially if you are endeavoring to keep a 400-pound pontoon raft from being blown back to Hite. In these circumstances, a few hours on the business end of a paddle goes a long way towards trimming the midriff and eliminating restless tossing and turning in the bedroll. Just why these malign gales never blow downstream is a conundrum I'm still working on.

Shortly after returning home I saw a movie in which a boat glided smoothly alongside its wharf as a crewman, line in hand, stepped casually from craft to planking. This gave me a wry chuckle as I sat there cossetting a double-hernia acquired from scrambling on and off boats in a 10-mile current, jumping into two feet of mud with a carton of canned food, faced with a 12-foot bank whose vertical slope managed to support an impenetrable growth of tamarisk. All my notions of boating had been formed by "The Wind in the Willows," and these fond illusions were summarily fragmented by the Colorado, or the "Carariver" as the rat pack call it, in deference to one of the best-known guides. But if one is not to stay on the river till he finds himself plugged into the generators at the Glen Canyon Dam, he gets ashore somehow, never mind eyes full of twigs, shattered shins and 18 pounds of gumbo on each foot. If there is no tree or



"... WAFTED US GENTLY THROUGH HALCYON VISTAS"



#### THE JONES ANTI-CAPSIZING TECHNIQUE

rock to which a mooring line may be secured with some degree of assurance, the technique is to dig a short trench in the sand parallel to the river, perhaps 10 inches deep. This forms the cross bar of a "T" whose other member is a trench sloping out toward the river. Your mooring line is tied to a short stout stick which is buried in the first trench, the line running out the sloping ditch. *Voila!*

Now we are ashore, probably on one of the numerous bars that line the river. Being unfamiliar with this sort of thing, you might think the first thing on the program would be the bandaging of wounds, or counting survivors, gathering firewood and preparing a meal, finding a place to sleep—but you would be wrong. The first thing is taking pictures and sketching.

Eventually, however, the light gives out and mundane matters compel our attention. A rock fireplace must be constructed to support our cooking grill, and Scotty is uncontested champion at this. Some of his examples were so fine he couldn't bear to leave them and we concluded our trip with about 1½ inches of freeboard. What with these masonry masterpieces and Pauline's indefatigable rockhounding, we had probably the first rock-bottomed cobbledstoned boats ever to make this voyage.

Scotty did find a way to preserve his feet from this harsh pavement. We had been out only a day or so when he began walking on the bread, which was dandy for his bunions but mighty rough on our sandwiches. Another interesting feature of our camps was

watching the antics of our grill, which had evidently been fabricated from solder or old chewing gum. As soon as the match was struck, the grill began sagging into the flames while we watched with bated breath to see if the coffee water would boil before the increasing cant of the grill dumped it into the fire. Next meal we would reverse the grill, starting it in a convex position and letting it melt straight.

We ate well, however, since all three rangers were good cooks. By common unspoken consent, I was relieved of cooking after one meal, and not long afterward I contrived to acquire a slight burn on one hand (not my brush hand, of course) which lasted, by an odd coincidence, exactly to the end of the trip and excused me from any further dishwashing. Experience and resourcefulness in these matters are invaluable.

This hour of gloaming, when the roar of camera shutters had subsided for the day, was the best time for talk, and since we were a literate group, all having got safely past Dick and Jane, the conversation ranged far and free. There were, as I remember, only two camps which did not provide the scene for another installment of a trip-long argument between the two Bills over the merit and relevance of some book which contends that a certain James White was the first man to run the Colorado, not Major Powell as is thought by the unwashed. In our lighter moments we discussed the impact of American civilization on others, the relationship of color to chiaroscuro, the use of the indefinite article in Lope de Vega, symbolism in Tom Swift, how to tell Head Rangers from the animals, the Oedipus Complex in Beatrix Potter, and Franz Kafka on Elvis Presley as well as Elvis Presley on Franz Kafka. Anyone wishing reprints of these conversations may have same by sending in \$100 in check or money order.

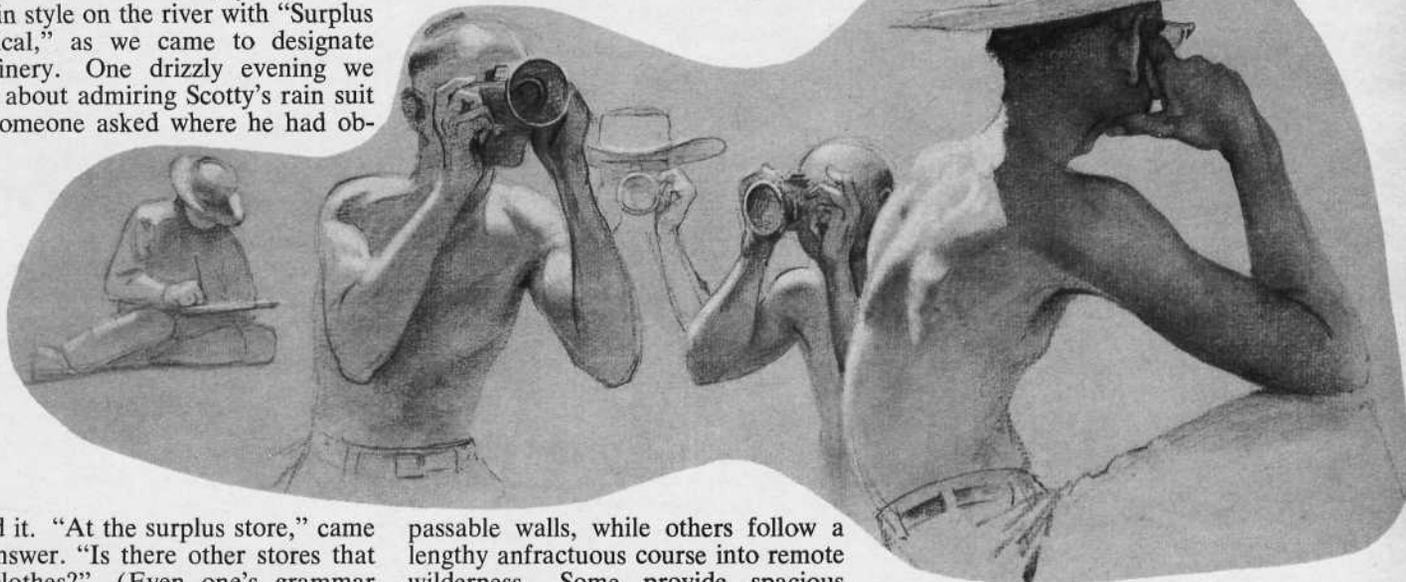
Those casual, relaxed moments toward the end of the evening meal were frequently utilized to check up on the day's wear and tear on clothing and gear, for the river, oddly enough, is harder than the mountains on these items. This is due, no doubt, to the mud and muck that expedite the disintegration of almost everything. Scotty's boots looked like something the Donner Party threw away, and he stood contemplating them one evening, wondering if they would last out the trip. "Well," he said, consoling himself, "these boots have really been around, though." He drained his coffee cup and continued thoughtfully, "This is the second pair of soles I've put on 'em." A pause, then a barely



"... REACHING FOR HIS LIFE JACKET ... AS THE INCREASING BELLOW OF THE WATER TOLD US THE RIVER WAS DEMANDING HUMAN SACRIFICE."

audible afterthought: "And the third pair of tops."

A word about clothing may be in order for those who contemplate a similar expedition. The oldest and rattiest you have should do nicely, as you'll probably throw away whatever tatters still cling to your frame at trip's end. If you must acquire a few outdoorish togs and have in you something of the conformist, you can be right in style on the river with "Surplus Classical," as we came to designate our finery. One drizzly evening we stood about admiring Scotty's rain suit and someone asked where he had ob-



tained it. "At the surplus store," came the answer. "Is there other stores that sell clothes?" (Even one's grammar tends to get sleazy on the river.)

These rain, or clown, suits are excellent sartorial additions for the river's distaff weather. They're very roomy; in fact the wearer generally takes two or three steps before the suit moves, and there's plenty of room for your bedroll, cameras, air mattress and dry firewood. In a pinch the rest of the party can climb in with you. You'll want a hat, but take Billhoy's advice and eschew straw. He left Hite with a fine new bonnet whose crown and brim began to part company after some three or four hours, and only the latter was present at Kane Creek, the take-out point.

No doubt the real rationale of a Glen Canyon excursion does not concern the river at all, except as it provides entree to the myriad side canyons which would be otherwise accessible only with the greatest expenditure of effort and time merely to examine one such locale. Literally hundreds of invitations are extended to the boatman—a genuine *embarras de richesses*—ranging from nooks and crannies to gorges almost as large as the Colorado's own mighty defile.

Powell named this section of the Colorado for the plethora of side canyons and tributaries, which he called "glens." Some of these are navigable for a short way, usually with considerable effort to get through the river's

current and over sandbars which pile up in the mouths of such small streams. Many of the glens are accessible only in this fashion, but some issue into the river through large bars where ample space and wood afford fine camps. Though this country is almost exclusively sandstone, the character of the side canyons is surprisingly varied. In some it is possible to proceed only a short distance before coming to im-

passable walls, while others follow a lengthy anfractuouse course into remote wilderness. Some provide spacious forested glades, while others confine the wayfarer with sheer gigantic walls which seem nearly to meet in the sky and into which chasms the sun can penetrate only at a few points and for a short while.

Often such canyons form enormous grottoes and caverns that remain deliciously cool and shadowed on scorching afternoons. Most such places have a small stream, at least early in the year, or a spring or two so that the area supports its quota of greenery and wildlife. Cottonwoods and oak seem to predominate in the canyons, whereas willow and tamarisk pre-empt the river banks and bars. Redbud is seen rather frequently, and any number of small flowers abound, all which are put to shame when blooms appear on the beavertail cactus that actually carpets some areas of the region.

In the canyons, as well as on the river, beaver are active, some of them evidently a peculiar subdivision of the species, characterized by extraordinary energy and witlessness. I saw one tree that looked like a crankshaft, so often had brother beaver chewed up and down it from various sides, and the pile of chips must have got so deep the tree couldn't fall. In the bed of one creek were deer tracks that measured a full 3½ inches across, half again as long, I should guess, as any I've seen in the mountains. Wild horses are supposed to frequent some

areas of the Glen, but we saw no traces of any.

Delight and surprise await the explorer anywhere in the glens. We were evidently the first group down the river this year, for we found no fresh camps or sign of boating parties. What

"THIS WAS PRIMARILY A PICTORIAL JAUNT"

then was my astonishment one day as I wandered up-canyon alone, to discover that I was following fresh bare-foot human tracks. By way of contrast, a few days later Billhoy and I were making our way up another canyon which seemed to be leading us into a wild fastness untrodden by the foot of man, when we rounded a bend to behold a shiny new helicopter squatting beside the stream, looking for all the world like a big toy hung in a Christmas tree. One does need to exercise a little caution, howbeit, for quite a few of these areas have some quicksand, and I can testify to the disconcerting unpleasantness of going in a flash up to the knee in the stuff while alone and well away from any possibility of help.

Typical of the larger glens was Lake Canyon, up which we rowed a short distance to make camp. The stream was rather larger than most we saw, and provided a happy reminder of many a night in the Sierra when I spread my bedroll beside musical waters and lay listening to the soothing frolicsome sound at my feet. When the moon cleared the opposite wall of the canyon, it gleamed through a tracery of tamarisk that nodded in the night sky and lulled the watcher through drowsiness into deep cool

—continued on page 35



# HUNTER, MUSICIANS, SORGHUM MAKER

**J**ACK BUTLER WAS born in Little-rock, Arkansas, in 1885. His father was a New Mexico rancher and cowman. Other than this, little is known of his formative years.

While most of his peers were struggling to master the McGuffey Reader, Butler was drifting through Texas into Arizona and Utah. Before he was 20, he had killed his first mountain lion.

The instinct to hunt is in most men. Some—like Butler—it possesses. He hunted twice with Jim Owen, who was known in his later years as "Uncle Jim," the great hunter of the Kaibab. Butler remembers Uncle Jim as an old man with old dogs, but it wasn't always so. Jim Owen and his trained pack practically eliminated the cougar from the high country of northern Arizona. Owen gained much of his fame by serving as a guide for Theodore Roosevelt.

Uncle Jim's career pointed the way for other lion hunters. It was not the bounty on lions, but the money to be had from guiding wealthy clients that made it a lucrative sport. Butler learned the trade quickly, and settled in southern Utah where lion were still plentiful and a tolerable living could be made from dude hunting.

A professional lion hunter has two things in common with an aerial trapezist. It's not the safest way to make a living, and insurance is impossible to come by. Although Butler has never been maimed by a lion, he has brushed death several times. The mountain lion is one of the most powerful and fleet-footed predators on the North American continent. Only the Mexican jaguar is more ferocious. The world's record for a lion is 300 pounds, measuring eight feet from the tip of the tail to the tip of the nose. A big cat will average over 200 pounds. The cougar ranges from Canada to Central America, feeds mostly on deer, wild horses, and occasionally, livestock.

Butler's biggest cat dressed out at 217 pounds at a time when you could

track-down a lion a day. "In them days a hunt would cost a customer \$300 for 10 days," Butler recalled, scratching at the gray stubble on his chin. "And the hunter furnished his own gun, ammunition, and bedroll.

"The most lions I ever caught in one day was five—all of 'em members of the same family in one tree."

On other occasions Butler has lifted his dogs over rocky ledges to hold a cornered lion at bay. Once he shot a treed lion on the edge of the Grand Canyon. His partner wound the tail of the dead cat around the tree trunk to keep the animal from slipping over the edge of the precipice.

In a half-century of hunting, Jack Butler has killed or caught more than a thousand mountain lions, and with such men as Jim Owen and Ben Lily, ranks as one of the great Western hunters of all time.

At 75, Butler still rides his own horse, and hunts occasionally. His craggy face is lined with the marks of a life lived hard, and at a fast pace. A recluse at heart, Butler would rather tend sheep than be caught-up in the melee of a civilized world. When the conversation turns to something other than lion hunting, Butler will turn away dreamily and look toward a mountain pass.

"That yonder ridge," he says, "is great lion country.

**T**HE TRADITIONS of a pioneer past are carried on by such organizations as the DUP (Daughters of Utah Pioneers) Granny Band from the farming village of Washington in southwestern Utah. Its members are all descendants of Mormon pioneers who came to Utah's Dixie in the 1850s to plant cotton.

Washington was named for the Nation's founder, and was the first town to be settled by the Cotton Mission of 1857. The Granny Band was organized in 1957—the town's centennial year—as a county DUP band. It later changed its name to the Granny Band since all of its members are either grandmothers or great-grand-

mothers ranging in age from a youthful 61 to 80-plus.

The band has more than 100 numbers in its repertoire, from "Whoa, Mule, Whoa," to "Doggie in the Window."

"We don't like to think we're limited to that ancient stuff," says its outspoken bandmaster, Misha Nielsen Bigler.

Since its founding four years ago, the band has grown in popularity, finding itself in demand for parades, weddings, concerts, and old-time square dances. The secret of the Granny Band success, confides Mrs. Bigler, is that the band plays "for the sheer joy of playing." Occasionally the grandmothers are carried away by their own renditions, waltzing or jiggling in time with the music.

The Granny Band has its versatile members. Among them is 79-year old Nellie Jolley Pectol who doubles on the harmonica and as a whistler for the "Mocking Bird." She also does a dog barking bit for "Doggie in the Window." Another grandmother, Manya Sprowl Mathews, who is 70, plays the mouth organ and the guitar at the same time.

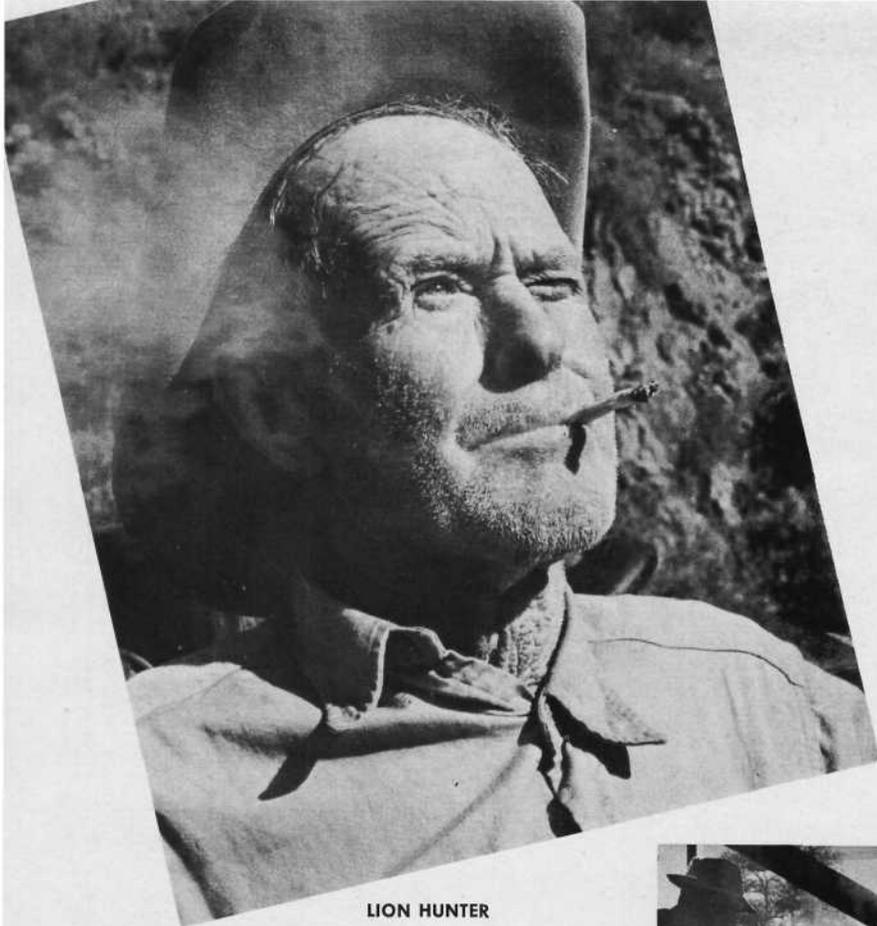
The Granny Band is not a true martial band since its instruments consist of harmonicas, guitars, a baritone ukulele, snare drum, and piano.

"We'd look foolish carrying around a base drum or trying to blow a trombone," says Mrs. Bigler. In spite of this unconventional ensemble, the Granny Band manages to be musical, and its rendition of the "Mocking Bird" usually brings down the house.

Members of the band can play by ear or note. Most come from families where mastering one or more musical instruments was taken for granted. The bandmaster's grandfather, for example, was a Dannish fiddler who came to Utah as a Mormon convert. Another member's father was a bandmaster, while his father before him played a fife and base drum.

The Granny Band meets every Monday to practice, and when the weather is favorable, as it is most of the time

By **FRANK JENSEN**



LION HUNTER



SORGHUM MAKER

A MEMBER OF THE  
GRANNY BAND



in Washington, the members play out-of-doors on the church lawn.

For public appearances, and occasionally in private, the Grannies wear the old-time bonnets, empire cloaks, and ankle length dresses with tiers of lace that were part of a bygone age.

**T**HE MAKING OF sorghum molasses is an old Southern custom not necessarily limited to the South. A taste for the bitter-sweet syrup was acquired more than a century ago by Mormon pioneers who settled southern Utah.

Just who it was that first introduced sorghum-making to Utah's Dixie is lost in memory, although the technique of boiling the cane juice to a syrupy molasses remains essentially the same as in pioneer days.

One man who still practices this art is William McMullin, a 72-year-old sorghum-cooker from the farming hamlet of Leeds. McMullin, who learned sorghum-making from his father, cooks the juice in eight open inter-connected vats, while his forebears used a single large wooden trough with an iron bottom.

"You tell from the bubbles and the color of the juice when the vat is ready to tap," says McMullin, who compares making sorghum to a woman baking a cake. The waste is skimmed off the top with wooden paddles, while the juice is transferred to the next tub for further distilling. The skimmings make good hog feed, and in the past have been used as an essential ingredient in the distilling of white mule whiskey.

A century ago the cane was ground in the field by two horses yoked to a 20-foot post which turned the cylindrical mills. Today a machine does the same job, producing 100 gallons of juice where the pioneers made 25.

The sorghum juice is actually pressed from the stalk of the cane which grows 10 to 12 feet high. The tassel, which contains the seed, is used for next year's planting, while the pulp is used for livestock silage.

Sorghum molasses itself is used to make such delicatibles as molasses cake, corn bread, sorghum cookies, and as a sweetening on hot cakes and baked beans.

Youngsters also go for sorghum taffy and old-fashion sorghum syrup candy, designed to satisfy any sweet tooth.

McMullin is proud of the goodness his skill produces. ///



# EXPLORING THE WATER POCKET FOLD

**I**F PLANE WINDOWS opened, I would have been leaning out to get a better view of the exciting relief map over which we were flying. But, few of my fellow passengers bothered to look out when a disembodied voice announced over the loudspeaker that we were high above Zion National Park.

As the lofty temples of Zion, and then the pink filigree work of Bryce Canyon, flashed under the wings, I was seized with a mad desire to stand up and shout: "Why don't you look? We're over the Colorado Plateau—the most rugged and colorful province in the world!"

Instead, I excused myself, climbed over several pair of feet, and went to the opposite side of the plane to glimpse whatever aspect of the amazing terrain would be revealed from that perch.

It was a strange sight: a great uplift, extending as far as I could see, swinging in a great arc from a mountain mass to the Colorado River, where it disappeared from view. Along one side of this uplift ran a trough, seemingly gouged-out by gigantic earth-moving equipment. The crest of the uplift rippled with intricately - cut rocks of many tints and shades.

This was the Water Pocket Fold, perhaps the grandest feature of its kind in the Plateau Country—a region specializing in the immense, the awesome, and the weirdly beautiful. It was a phenomenon of nature that I determined to see and explore first hand. Months later, after studying all the geologic maps I could find, and then arranging for guides to take my photographer husband and me into the area, we started off for Southern Utah and the fulfillment of a wish born 18,000 feet above the desert. It was early September when we left our home on the Pacific Coast, and headed east through Las Vegas to reach U.S. 89 via St. George and Zion Canyon. At Sigurd, we took Utah

State 24 to Capitol Reef National Monument.

Our first discovery came when we learned that Capitol Reef actually embraces the first 20 miles of the Water Pocket Fold. A national monument since 1937, Capitol Reef boasts access by pavement and a great future. While this is only the beginning of the Water Pocket Fold (where it emerges from the flanks of Thousand Lake Mountain), this section displays the deep canyons, the rugged walls, brilliant colors and individual formations which typify the entire uplift. Early Mormon settlers knew something of this region, but there has been little geologic study here and the tourist seems content to let the Capitol Reef speak for the entire length of the Water Pocket Fold. Having viewed the full 150-mile stretch from the air, I wanted to see more than its start.

We spent the first several days in and around our headquarters at Sleeping Rainbow Ranch, which is tucked into a little (on the map) square, surrounded on three sides by the Capitol Reef National Monument. The ranch is 10 miles east of Fruita.

Our hosts, Alice and Lurt Knee, both tall and lanky and very much in love with their self-appointed task of showing off this brilliantly-colored area, are licensed guides. They offer from half-day to overnight jaunts through the countryside.

In this region you need a guide. Main roads naturally favor the easier routes which are apt to be less dramatic than the tracks followed by cattlemen and ranchers, or the network left by the now-past uranium hunt. These back-country trails are unmarked, changeable as the seasons and frequently don't seem to know themselves where they are leading.

We've taken many trips with the Knees, and always feel a tingle of anticipation when we turn off at the mailbox on State 24 (at the head of Capitol Gorge) to drive the three miles over juniper-studded hills and across dry-washes to their hilltop guest ranch.

Their location along Pleasant Creek is a fine spot to study some of the

remarkable features of the fold. Standing on the rounded hill upon which the motel units and lodge are situated, one has a magnificent view in all directions. Lofty cliffs of sandstone rear in a semicircle, with a hint of the northernmost crags of the reef retreating into the distance. To the west, dark slopes of Miners Mountain, under which the Water Pocket monoclinical runs, are topped by the high volcanic walls of Boulder Mountain (the local name for a portion of the Aquarius Plateau).

Pleasant Creek descends from those alpine slopes, already running with gold as the aspens put on fall color, to enter our picture through a notch in Miners Mountain. After meandering past fields, farmhouse and duck-pond below the hill, it goes off east, desertward, to an ultimate junction with the Fremont River. The canyon it has gouged through the thick tilted layers of the reef provides a lovely "V" through which the Henry Mountains add the grace of high peaks to our circular panorama.

The little farm at the foot of the hill, complete with vegetable garden and pasture, was the site of a small settlement in the 1880s and '90s when Ephraim K. Hanks, famous scout, and several other Mormons brought their families here. They raised cattle, fruit and children in the idyllic spot. Indian pictographs on the rock walls that shelter the little valley prove that this place was inhabited for hundreds of years. Today, visitors find it a delightful stop-over on their travels, and a point from which they can make trips into the whole country.

The present occupants, the Knees, combine a remarkable amount of know-how out in the field, both as to things geologic and gustatory, with an unbounded enthusiasm for this great piece of our American Desert.

On this visit, my husband and I wanted to look at the Capitol Reef as part of the Water Pocket Fold. We wanted to have this better-known portion fresh in mind before following the uplift southeast into unsurveyed territory.

There is a splendid view of the great reef from numerous places on the

**By JOYCE MUENCH**

Photographs by Josef Muench  
— See Cover Illustration —

highway within the monument. You stand upon the red beds of Moencopi shale. In ascending order are the grayish Shinarump, the colorful Chinle clays (of the Sleeping Rainbow), then the sudden lofty upsurge of Wingate sandstone cliffs, topped by rounded domes of Navajo sandstone for which the reef is named. Here and there a final capping of Carmel can be distinguished.

While these names may mean little to the average spectator, the way in which they have been pushed up and then eroded into a medley of shapes—pinnacles such as Chimney Rock, the elaborateness of the Fluted Walls, the splendid domes—doesn't need scientific explanation to be appreciated.

Only in a few places have these tremendous walls been breached. The Fremont River achieves it first through a gorge which may some day carry the highway. Another cut is through the Capitol Gorge.

One morning found us on our way,

moving east on State 24 between 1000-foot walls edging so close together at one point that there is room only for the road. During the rainy season, flash floods have the right-of-way, and cars don't challenge it.

As we twisted and wound our way, there were occasional glimpses of the tops of the reef. At one point a trail leads to a closer inspection of The Golden Throne, an immense bulk of Navajo sandstone, "painted" with a surface that scientists seem unable to account for.

The deep cut continues for three miles before reaching the eastern exit where the traveler emerges into an expansive desert panorama swirling with color. The banded Pinto Hills, the orderly bastions of the Caineville Mesas draped in squawskirts of elephant gray, and on top along the skyline the peaks of the Henry Mountains provide wonderfully photogenic views.

We turned south at Notom, a little settlement on Pleasant Creek. The

stream has by now emerged from its canyon confines and is close to its junction with the Fremont.

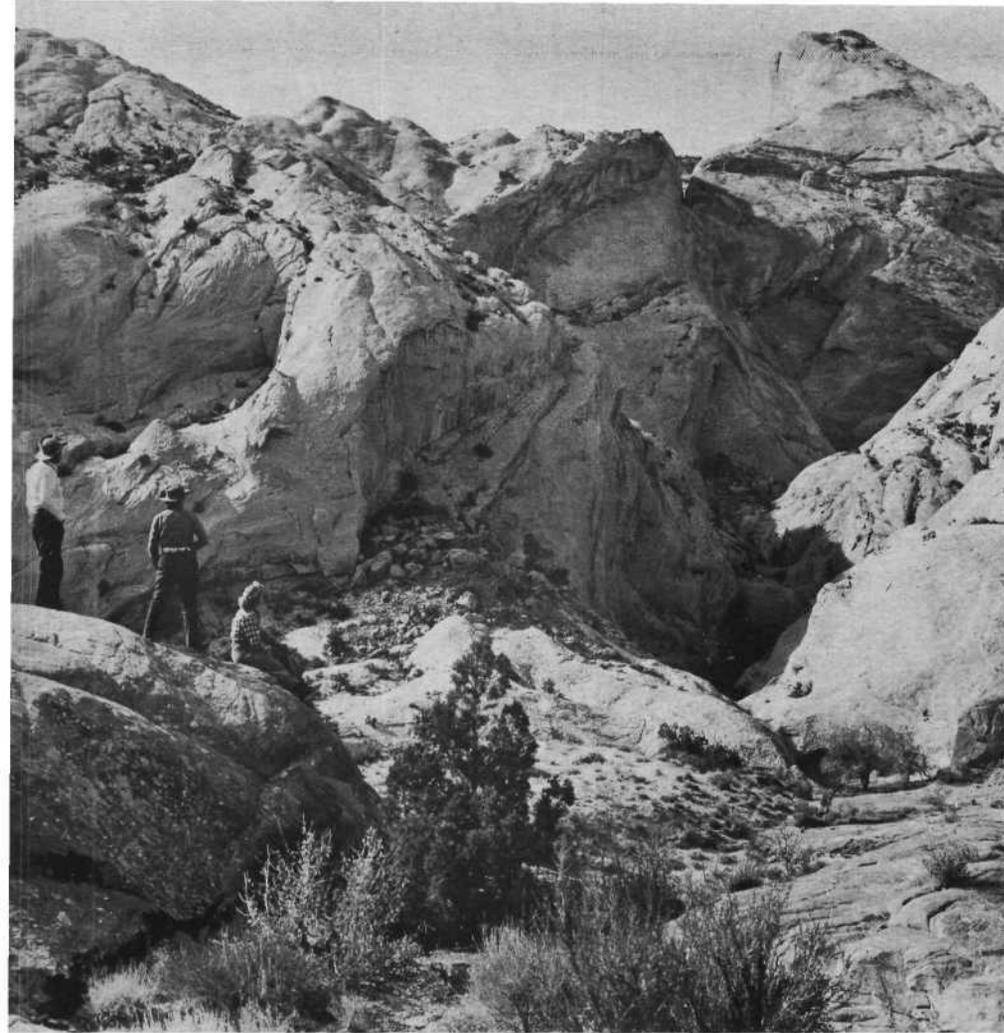
Tarantula Mesa rose on our left, distinctive desert foothills to the Henrys that suddenly seem quite close. When we stopped to chat with two cowboys who were driving some cattle to water, we had our last contact with people. There is one ranch here along the Sandy River, and another high on the slopes of the mountains, but few other people seem to find their way into this rock fastness.

On our right as we traveled down the main road was the Water Pocket Fold, hidden sometimes by sandy hills, but always immense and commanding. One of our first stops was made to walk up a gray incline that Alice said was the Morrison formation. The ground dropped sharply at our feet and then lifted again to show off in perfectly diagrammatic fashion exactly how the formation had been distorted.

Rock layers are set on edge like a



THE DRAMATIC WESTERN SCARP OF WATER POCKET FOLD



A HIDDEN RETREAT WHERE VEGETATION HAS BEGUN TO TAKE HOLD

deck of cards, with the top ones slipped down and the bottom ones sticking out above. The Morrison is the youngest of the series, yet we were standing hundreds of feet below older rocks. We could count several distinct layers: Sommerville, Curtis, Entrada, the dark red Carmel, and swooping up into a mountainous slope, dotted with dark blobs of vegetation, the soaring white Navajo sandstone. If we could have flown over this mass and slid down the other side, the same formations would have been viewed in their appointed places on the western scarp.

Some 25 miles from Notom is the junction with the Burr Trail, the only road that dares climb up over the top. Its destination is the strange country of the Circle Cliffs. Several years before, a group of us under Lurt's guidance discovered whole forests of petrified wood there. That was before the Burr Trail had been built, and we had found our way in over the western crest.

As the name suggests, this was originally a stock trail, and a steep one at that. When it was rumored that it would be improved to accommodate vehicles, local people were very skeptical. But the road, inspired by the uranium boom, was built. It enters a big bay and then zigzags up

from one level to another cut out of the rock or steep shaly slopes. The spread of panorama increases in each turn in the road, and from the top is most impressive.

Pleasant as it would have been to again visit the Circle Cliffs, we retraced our way down the road to continue south into what we think is the most thrilling part of the Water Pocket Fold.

Here the great uplift explodes in new and unexpected shapes. The conspicuous Navajo sandstone rises in great hills, indented by numerous valleys—and all on a tilt. The Wingate walls rise in more convolutions behind, and now and then red Carmel sandstone clings to the white slopes like crabs on the back of a whale.

Giant canyons have been carved throughout this heaving mass of stone. They open wide gaps through the top of the Fold, toward the base, thus preventing complete passageway through the rock barrier.

Reason for the uplift's name becomes apparent here. From tiny thimble-size indentations to big swimming pools, the rock has been worn into pockets that hold water after a rain. Next time I visit this area I will have a bathing suit handy. There are rocky basins, often at a canyon's

mouth, that are too wide to jump and too deep to wade—blocking the only ingress to some very inviting spots. The pockets are everywhere in evidence on slopes as well. Some are set in a line so that eventually they will be worn into troughs.

I believe we stopped to explore every canyon mouth wide enough to squeeze through. In some we found shrubs and even young trees growing in the debris that has gathered around a pool, making idyllic picnic sites—miniature desert resorts. Shaded by great rock walls, water in these pools usually lasts through the dry season.

Sometimes we were able to find water by following the tracks of deer, wildcats and smaller animals in the sand at the canyon entrances. Following such a tell-tale trail into one gorge, we hiked several hundred yards through forbidding ground until the canyon walls suddenly opened into a great chamber. Around a spacious grassy mound were big cottonwood trees and a delightful pool of water set in the shade of a cliff. Cattle thieves could have brought whole herds to this place offering plenty of browse, ample water, shade, and perfect security from detection. No doubt some did.

A fawn had found this retreat to be not as safe. Wildcat tracks beside the remains of the unfortunate creature told us what had happened.

Sometimes, instead of delving into a canyon, we climbed the slickrock slopes to widen our outlook and examine strange phases of erosion. One that I recall particularly was covered with a layer of Carmel sandstone. The softer material had been washed into pedestals to hold up great hamburger-shapes of red rock. Explorers have the right to name new discoveries, but we couldn't agree on a sufficiently appropriate title for these rocks. Alice thought they looked like muffins that had failed to rise; Joe insisted they were misshapen potatoes; Lurt voted for "Frozen Mud Pies." I still say they look like out-sized hamburger patties.

The trough beside the fold, which I had seen from the air months before, is the valley through which Hall's Creek runs south to the Colorado River. Sometimes it was a smooth grassy floor, sometimes a narrow rocky channel. We came to where the stream managed to stay above-ground, often swinging around bends crowded with great cottonwood trees. These sites offer delectable camping places.

Our road was an old pioneer route to Hall's Crossing on the Colorado River. The Mormon scouts no doubt

chose this way because of the availability of water offered by the water pockets, where wagon parties could be sure of drink for animals as well as themselves.

Water in a desert streambed is apt to present some disadvantages to vehicular travel. There is usually some quicksand in what Lurt calls his "desert freeways." (You are free, he claims, to go anyway you like, which usually means you have to hunt for a passable route through the country.)

The closer we approached the Colorado, the more difficult the going became. The Mormons had built short dugways at places, but erosion has rendered some of them impassable.

When water backs-up behind the dam under construction in Glen Canyon, this road may be revived to take fishermen and picnickers to the shore of the vast desert lake.

Until then the only "hamburger stand" apt to be seen in this country is the one I so named on a great sloping face of rock, and the "soft-drinks" will be rainwater in a thousand large or small pockets.

When it was time to return to the ranch, we could absorb no more of twisted form and earth-formed color. It had been a fascinating day—an opportunity for rare exploration. After a ranchstyle dinner, we sat in the comfortable lounge in front of the fireplace and relived our trip.

I think no one can see the Water Pocket Fold without wanting to know something of how it came into being. So there, with the fire winking at us, we went back through eons of time, and watched it grow.

First we had to lay down the successive layers of stone, starting with the oldest visible, Moencopi, probably 185 million years old. Then, while the younger layers were being put into place, during Cretaceous time, we watched an extensive ocean come in to cover the land. It spread from the Wasatch Mountains in Utah to eastern Kansas, Nebraska and Dakota, and from the Gulf of Mexico northward toward the Arctic Circle. There were islands and perhaps even continents in this vast ocean. About 60 million years ago the waters began receding, and what today we know as the Colorado River may then have been a strait.

Some of the modern streams show clearly that they worked out their course on an earlier landscape and kept digging down as the lands around

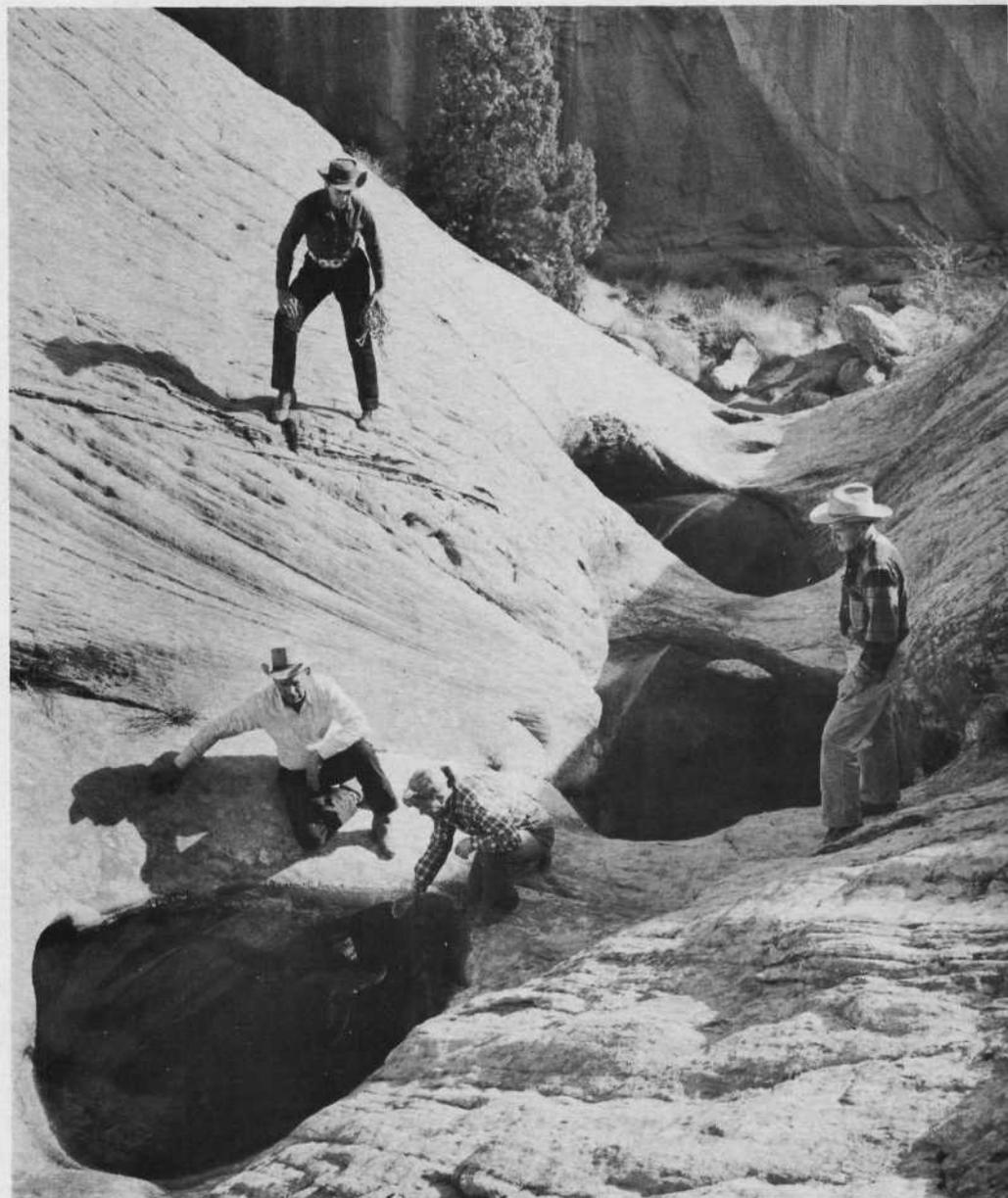
them were raised. Pleasant Creek and the Fremont River both cross a great fault from its downthrow to upthrow, transect a monocline, and pass in and out of canyon walls. Contrary to common belief about water, rivers often take the harder path—against rock formations—instead of the easier course.

Having drained-away the water and started the uplift of the Colorado Plateau as well as the entire Rocky Mountain chain, we mentally reconstructed the Water Pocket Fold. Where a fault occurred and pressure was exerted upward, the flat layers were lifted and tilted. The high scarp of Capitol Reef (and on down the fold) was the result. On the opposite side, the layers slip back down to the horizontal. In Capitol Gorge we had seen the rock layers sliding down under the ground—the same great thick layers

that a few miles west had towered above in 1500-foot cliffs.

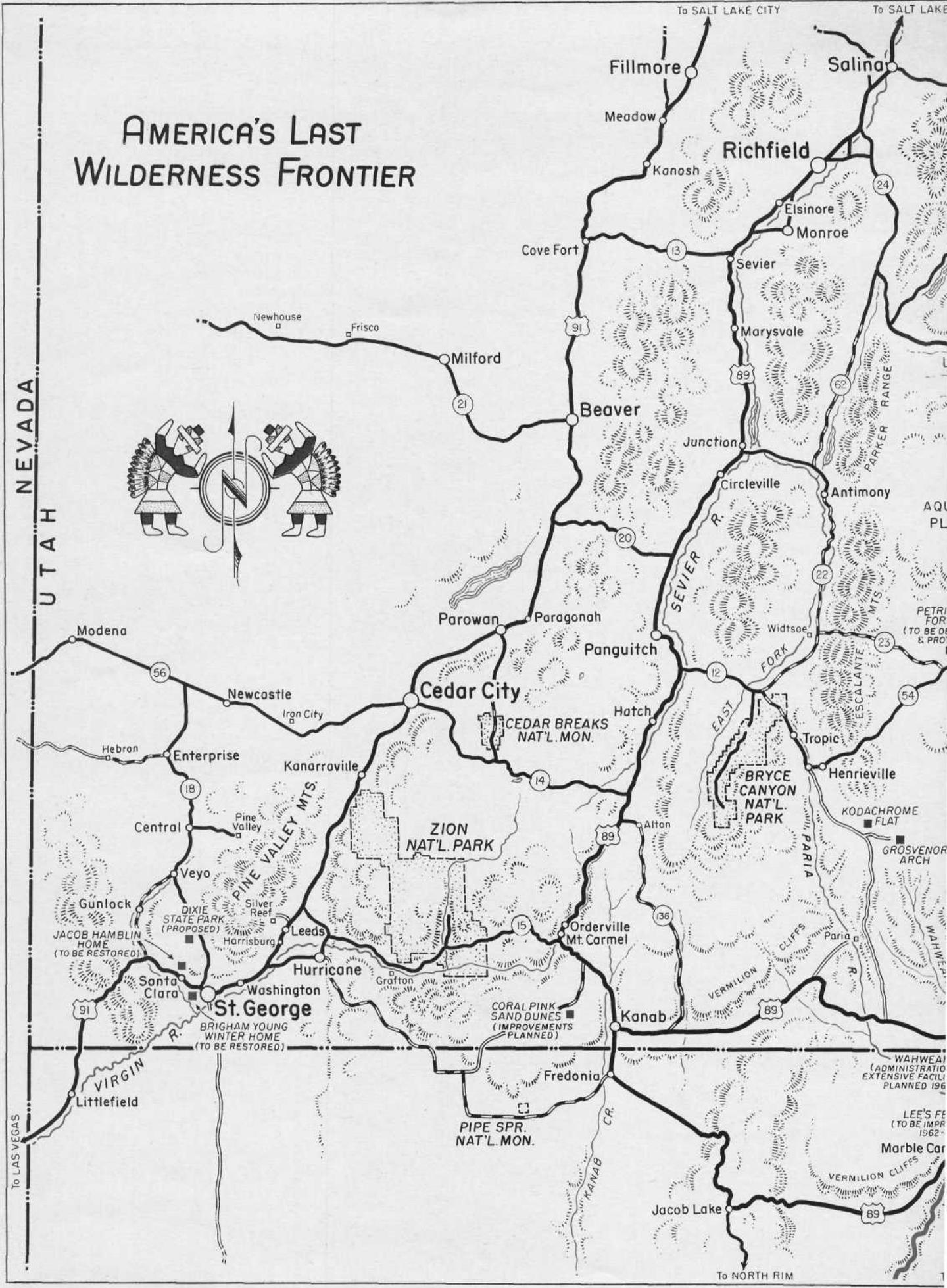
After the lift came erosion, and we could imagine the water working on pockets first, building them into canyons, rounding domes on top, scouring and shaping.

"Rebuilding" the Water Pocket Fold sounds almost simple as I describe it. We found, when our "game" was over, that we had stretched our imaginations about as far as they could go. Beyond lay the full grasp of what nature has accomplished. The vastness of time, the immensity and complexity of the formations, and the breathtaking beauty of coloring, must be seen before it can be real. And whether from a swiftly moving plane, or among its lovely canyons and splendid slopes, the sight must leave the spectator full of great wonder. ///



A POOL IN THE WATER POCKET FOLD—ALICE KNEE (TOP) AND FROM LEFT, LURT KNEE, AUTHOR JOYCE MUENCH, AND JOSEF MUENCH

# AMERICA'S LAST WILDERNESS FRONTIER

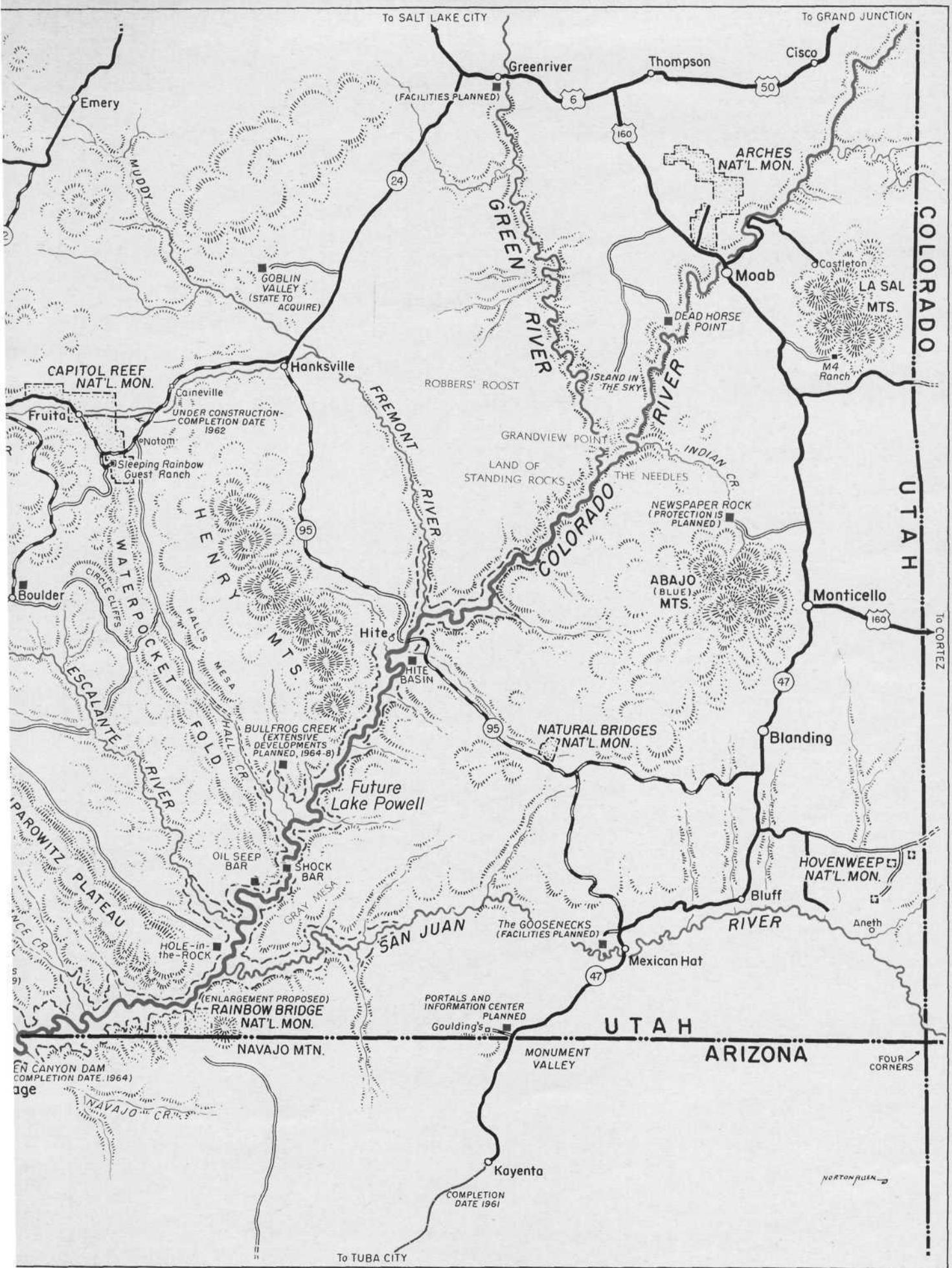


NEVADA  
UTAH

To SALT LAKE CITY To SALT LAKE

To LAS VEGAS

To NORTH RIM





# SPECTRAL CITIES OF THE SAGE

**I**N THE FIELD OF Southwestern American ghost towns, southern Utah's abandoned settlements stand unique in many respects.

More than 95 percent of all ghost towns in Nevada, California and Arizona, for example, originally were engaged in the production or reduction of ore. In contrast, less than half of Utah's deserted villages are former mining camps; most of the remainder having been once-prosperous farm centers abandoned because of water—either its lack, or its unwelcome presence in the form of devastating and recurrent floods.

In such agricultural centers, peopled largely by hard working Mormon colonists, erection of schools and churches invariably antedated commissioning of the first saloon, and law and order prevailed. Even Utah's mining camps, operated and occupied chiefly by non-Mormons, in the main were peaceful and respectable, with little of the lawlessness that plagued many of the mining camps in adjacent states. Here in the Land of the Saints, the typical badman and troublemaker was given short shrift, and Boothill went hungry.

Especially was this true in Silver Reef, largest and most famous of southern Utah's mining camps—and today her most fascinating ghost town. Even since March, 1950, when my story of Silver Reef appeared in *Desert Magazine*, fortunes of the old camp have vacillated between hope and despair. Several years ago the camp's main properties were acquired by Western Gold and Uranium Company, which brought in modern equipment, engaged a force of men, and resurrected the old Wells Fargo Bank building as an office and museum of Silver Reef relics. Everything looked promising until WG&U suspended operations at The Reef to concentrate on development of its wonderful Orphan Mine in Grand Canyon National Park. So, once again, the Reef's only citizens are Mr. and Mrs. George DeMille, caretakers, who live in the old Rice Bank building and keep a watchful eye

on the ruins of this old town which has seldom, in the last 50 years, numbered more than two inhabitants at a single time.

In Iron County, 20-odd miles north of Silver Reef, is the fascinating ghost camp of Iron City, or Ironton, said to have been the second place west of the Mississippi river where native iron ore was mined and smelted into the pig iron of commerce. Points of ghostly interest include one large and well-preserved charcoal kiln, and ruins of others; also remnants of a blast furnace and part of the stack, an old stone arrastra, and ruins of many stone buildings. The townsite is easily reached via two miles of unpaved road leading off State Route 56 between Cedar City and Newcastle.

In Beaver County, 15 miles northwest of Milford and adjacent to State Route 21, lies the ghost mining center of Frisco, which took form around the rich Hornsilver Mine discovered in 1875 and four years later sold to Jay Cooke, New York financier, for a neat \$5,000,000. On the hillside back of the camp, squat five large charcoal kilns of the beehive type, and the former townsite is further defined by many stone foundations and crumbling walls.

At a point 15 miles northwest of Frisco, and reached by a desert road leading two miles easterly from Route 21, is the ghost town where Samuel Newhouse, soon after the turn of the century, founded a model mining camp, gave it his name, and in the next five years (ending in 1910) harvested from his Cactus Mine a reported \$3,500,000. Marking the site of these past activities are stone and wooden ruins, a former railroad grade, and mine dumps.

The one-time sawmilling center of Pine Valley, in Washington County, is one of the prettiest ghost villages I have encountered anywhere. During summer months the little town still harbors a handful of pleasant neighborly folks, but winter finds it completely deserted except for deer and other creatures of the wild. Here, the most outstanding building is the Church of Jesus Christ of Latter Day Saints. Built almost 100 years ago, its rough-

hewn timbers, one-and two-feet thick, are fastened with wooden pegs driven into auger holes and lashed in place with green rawhide. In addition to the lovely old church, the town includes a graveyard with century-old monuments, and many stout log dwellings erected by fourth generation forebears of the present owners.

To travelers on US 91 between Las Vegas and Salt Lake City, the most readily accessible of southern Utah's agricultural ghosts is Harrisburg, which lies athwart the pavement at a point 15 miles northeast of St. George. Founded a century ago by Mormon colonists, this was soon a pretty village of some 200 inhabitants all housed in substantial stone dwellings surrounded by well-tended fields, vineyards, and young orchards. As population and the extent of tilled land increased, scarcity of water became a major problem and by 1869 the residents of Harrisburg had begun drifting away. Marking the site are extensive stone ruins, miles of rugged stone fences, and a picturesque old cemetery.

Another Washington County town that succumbed to lack of water and patronage was Hebron, five miles west of the present town of Enterprise. Settled by Mormon colonists in 1862, Hebron soon became a prosperous center with stone and brick buildings, stores, schools and churches. Cattle raising flourished in the vicinity, and as long as mines and mills in eastern Nevada and southern Utah were operating, Hebron's farmers had a lucrative outlet for their meat and other farm products. When mining declined, Hebron followed suit, and a growing scarcity of water forced complete abandonment of the town. Caving cellars, a few gnarled fruit trees, and a cemetery remain.

Among the once prosperous Utah farm communities sacrificed to the destructive force of water is Grafton, remains of which are situated on the south bank of the Virgin River, two miles west of Rockville. Settled by LDS colonists more than 100 years ago, Grafton expanded to include stores, a school, post office, church, and numerous homes. Years of losing battle against the flood-swollen waters of the Virgin wore down even

By **NELL MURBARGER**

the strongest determination, and Gratton was virtually abandoned when, several years ago, its site and remaining buildings were purchased by a Hollywood concern for use as a motion picture set. During periods of low water the old townsite may be visited by fording the Virgin River, but persons unfamiliar with the crossing should not attempt it without the services of a competent local guide.

Among other ghost villages of southern Utah are Caineville, on State Route 24, 24 miles east of Fruita, where tenantless houses and old fruit orchards mark the site of a once-prosperous farm colony. Still standing is the tiny Behunin log cabin. One of the first dwellings erected in the new townsite, it is a little larger than a child's playhouse and it seems incredible that Elijah Behunin and his wife could have reared herein a family of nine.

Widtsoe, on state Route 22, 13 miles northeast of Bryce Canyon National Park, is the ghost of a farm community settled in 1876 but not platted as a townsite until 1910. Ten years later the town embraced some 1100 residents served by four stores, two hotels, post office, church and school. Due to a long continued drouth, farms in the vicinity gradually failed and by 1935 most of the settlers had moved away. Except for a few wooden buildings and a cemetery of about 100 graves, little of historical significance remains.

After considering separately these several mining ghosts and agricultural ghosts, it seems fitting that this necessarily abridged survey should be brought to conclusion with brief mention of one southern Utah ghost town that embraces both cultures. This is Paria, situated on the east bank of the Paria River, 40 miles northeast of Kanab. With adjacent land settled by Mormon farmers in 1868, at first this Kane County town grew rapidly, but soon became plagued by recurrent floods. Formal abandonment took place about 1912 after flood-swollen waters of the Paria had virtually annihilated the town. Later, the townsite was re-possessed by a gold-mining company which erected new buildings, and installed sluiceways. But dreams of realizing riches from placer mining also were doomed to failure, and Paria's assorted and doubtless frustrated ghosts today hold carnival over the chicken houses and rusting plows of vanquished grangers, an assay office and splintered sluice boxes from the mining regime, and over a small cemetery where stalwarts of both eras sleep in nameless oblivion. ///



GENERAL STORE, FRISCO, UTAH



OLD  
BLAST  
FURNACE,  
IRON CITY,  
UTAH



RUINS AT NEWHOUSE, UTAH



# Just Between You and Me

By RANDALL HENDERSON

“RAINBOW BRIDGE, located in a deep canyon of red sandstone with 10,000-foot Navajo Mountain as a backdrop, is unquestionably the most awe-inspiring work of natural sculpture anywhere in the United States. . . . For many miles the area which surrounds the bridge is a series of deep canyons and towering sandstone monuments which have a rugged beauty comparable only to that of the Grand Canyon itself.”



This description of Utah's great natural arch of stone is quoted from a report made by Stewart L. Udall, formerly congressman from Arizona and now Secretary of Interior. He visited Rainbow Bridge last summer in order to make his own appraisal of factors involved in a controversy which now centers around this spectacular landmark. The issue is one of conservation policy, and may be stated briefly as follows: The Colorado River Storage and Development Act of 1956 which authorized the construction of Glen Canyon dam, specified that the "Secretary of Interior shall take adequate protective measures to preclude impairment of Rainbow Bridge National Monument."

Engineers have determined that when Lake Powell behind Glen Canyon Dam is filled to near capacity, a narrow estuary of water will back up in Bridge Canyon immediately beneath the arch. Engineering studies are in agreement that the water will constitute no impairment of the arch itself nor its foundations. To prevent this intrusion of water, the Bureau of Reclamation has formulated plans for three alternative barrier dams, a tunnel and a pumping plant at cost estimates ranging from \$25 to \$40 millions. So far, Congress has failed to appropriate any money for protective structures.

## A Plan to Preserve the "Stone Rainbow's" Setting

Conservation leaders interested in this matter have aligned themselves in two opposing camps. One faction is demanding that barrier dams be installed; that water in the creek beneath

the arch constitutes an impairment contrary to National Park policy; and that to permit the intrusion of water from a man-made lake would set a dangerous precedent.

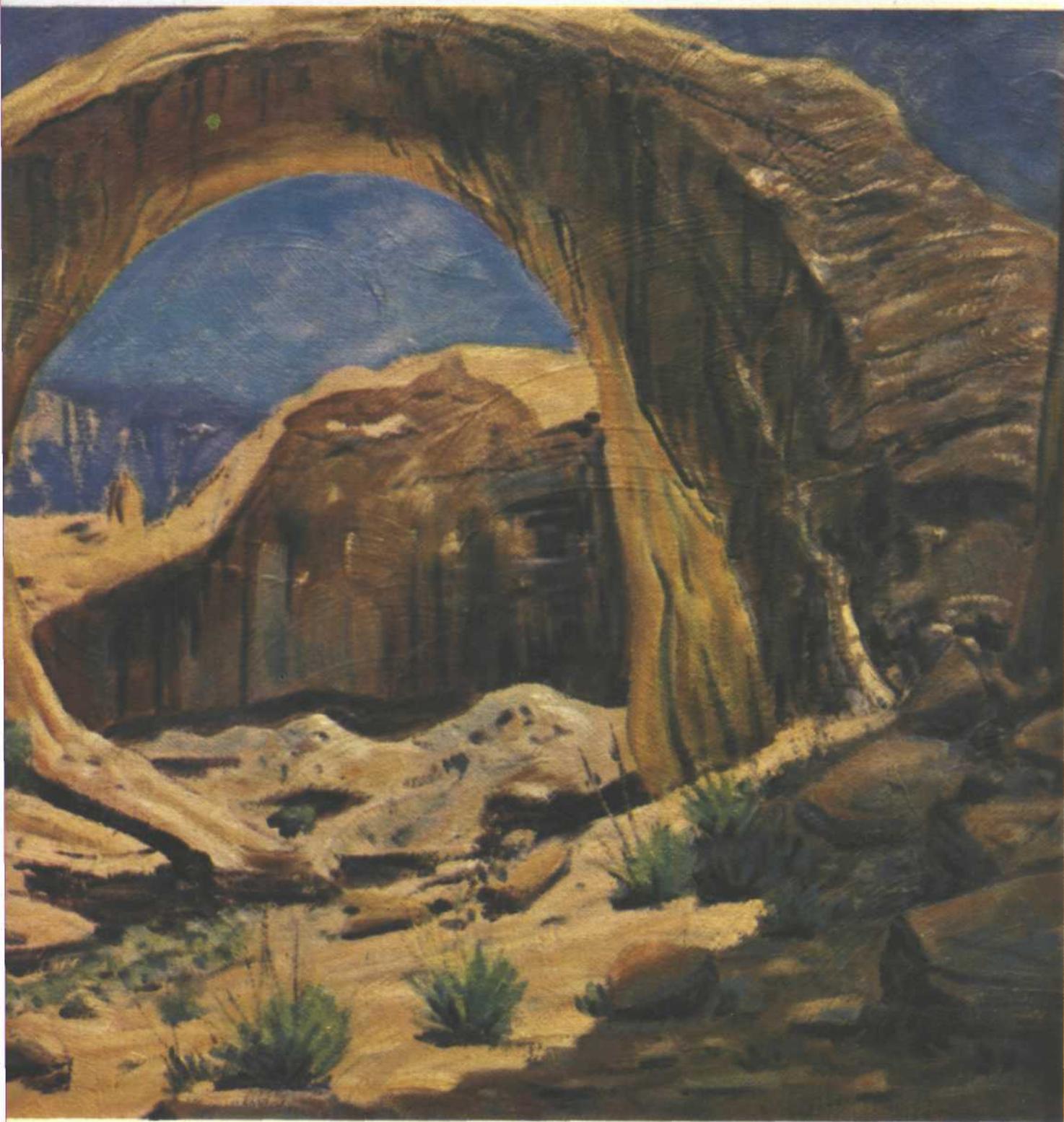
Opposing this conservation dogma is a large group of nature-lovers who feel that the blasting of nearby cliffs, the construction of roads necessary for the moving of heavy equipment, and the defacing scars left by the construction of barrier dams would constitute a more serious impairment of the immediate landscape than would backwater from the lake. At least one engineer has expressed the opinion that dynamiting operations necessary to secure rock-fill for a dam would itself constitute a hazard to the arch.

Secretary Udall proposed that in lieu of any construction work, the 160-acre National Monument be enlarged to include the entire scenic area from Navajo Mountain to the shore of Lake Powell (see map on page 18-19). The Secretary has made clear that economic factors had no part in his decision. He feels it would be a breach of integrity for Congress to solve the problem by default—by simply failing to appropriate funds. He wrote: "I believe Congress should clear itself of any imputation of bad faith by passing an appropriate resolution spelling out, in terms of sound conservation principles, the reasons why protective measures were not taken."

As one who has signed the register beneath Rainbow Bridge four times in recent years, I concur in his appraisal of the problem there. I think he expressed sound conservation policy when he wrote: "Although the lake water offends a basic principle of park conservation, it is my conviction that the construction of any man-made works within five miles of the present Monument boundaries would do even greater violence to the first commandment of conservation—that the great works of nature should remain in their virginal state wherever possible. The natural setting of Rainbow embraces a much larger area than the box-like 'Monument'; and it is a gross mistake to detach the arch itself from its environment."



Color separation through the courtesy of Conco



ing House

## **RAINBOW BRIDGE**

**ARTIST: AL NESTLER**

For a framing print of "Rainbow Bridge," same size as shown, lithographed on high-quality paper stock, send \$1 to: Reprint Dept., Desert Magazine, Palm Desert, Calif. (Other \$1 prints available by mail: Bill Bender's "Desert Wash," John W. Hilton's "Whispering Canyon," and Ted DeGrazia's "Papago Harvest.")



# A NATURALIST IN SOUTHERN UTAH

**I**N EXTREME southwestern Utah is "Utah's Dixie," an area of unusual interest extending along the lower Virgin River from a short distance above St. George southwestward to the Arizona and Nevada lines. Here are floral and faunal communities found nowhere else in the state. It is the most north-eastward extension of the great Sonoran Creosote-Bush deserts of Arizona, California and Nevada. The summer heat may be intense with a surprising number of days showing maximum temperature of 100° Fahrenheit and above, even occasionally up to 112° and 116°. Sunny days are predominant, and the active frost-free growing season is near 210 days. The average yearly rainfall is less than 10 inches.

In the warm valleys, figs, grapes and other Mediterranean-type fruits are cultivated successfully. A sight familiar to the summer motorist passing this way is of charming well-mannered boys and girls standing along the highway holding out fruit and crying, "Feeegs, feeegs for sale!"

It not only may surprise some to see the familiar desert Creosote Bush (*Larrea*) growing so far north; but to find here and there the Mojave Desert's Joshua Tree and the acaulescent Big-fruited or Banana Yucca (*Yucca baccata*). Among other common Sonoran desert plants equally at home here are the Burrobush (*Franseria dumosa*), Arrowweed, Mojave Aster, Beavertail Cactus, Brittlebush and Catsclaw, the latter often parasitized by the Leafless Mistletoe (*Pharadendron californica*). About the few saline depressions are many salt-bushes common to southern Nevada and southern California residents, among them the Four-wing Saltbush (*Atriplex canescens*), Quailbush (*Atriplex lentiformis*) and such succulent shrubs as Greasewood (*Sarcobatus*), Pickleweed (*Allenrolfia*) and Seepweed (*Dondia*).

One of the dominant streamside trees is the widespread Fremont's Cottonwood, esteemed by all desert people because of its welcome summer shade and glowing autumnal colors.

The animal life of this unique region is wholly adapted to the same condi-

tions that prevail much farther south. The many small rodents, from Kangaroo Rats to Round-Tailed Ground Squirrels, dig deep burrows to protect themselves from high diurnal temperature. In contrast are the shallow tunnels of related rodents in the nearby pine-forested Pine Valley Mountains where winters are severe, but summers are comparatively mild.

A real surprise inhabitant of this corner of Utah is the obese-bodied Gila Monster, generally associated in mind only with hot sandy southwestern Arizona. Other Sonoran Desert reptiles seen in this Creosote Bush and Yucca desert are the Chuckawalla, Desert Crested Lizard, Zebra-tailed Lizard, Yucca Night Lizard, and Horned Lizard. Sonoran Desert snakes, here reaching their northernmost home limits, are the Sidewinder, Western Worm Snake, Patchnosed Snake, Mojave Rattlesnake, and Utah Black-head Snake.

In long-ago Pleistocene days, when the climate was warm but the rainfall greater than at present, the large Three-toed Sloth doubtless roamed and lived on the tough green fibrous leaves of the Tree Yucca. Fossil remains of this grotesque-bodied slow-moving upright-feeding mammal have been found in caves in nearby southern Nevada.

I first went into this picturesque land in the early 1920s. Where today we find excellent paved highways, then we traveled the most primitive of "engineered" roads—often stony, dusty, narrow and not too well aligned, with steep gradients and numerous "tight spots" on curves. St. George was a charming "sleepy" village with practically all of its inhabitants frugal friendly Mormons, their homes, often morning-glory-clad, clustered about the meeting house and the impressive well-designed and stately Temple. Water ran in lively little streams in the roadside gutters, supplying water for gardens, Locust trees, Box Elders and Lombardy Poplars. Almost every family had chickens, milk cow, and garden patch.

After several days we left St. George, motoring eastward at 20 miles-per-hour in our Model-T Ford to Toquerville. That evening rain threatened to wet my precious bundles of drying plant specimens, so my two young companions and I sought shelter in the old "Nagle

House," now abandoned and with its tiers of now windowless bedrooms upstairs, its doorless downstairs rooms, and big basement "where agin' the rule, wine was once surepticiously made." The great brick house was built by a thrifty well-to-do Mormon "who practiced polygamy when yet it was legal."

Next day I visited "old Grandma Nagle," who was "still strong with her needle" despite her nearly 90 years. I had been told that she knew much about the Indian uses of native plants, and I was not disappointed in the information she was able to give me on this subject.

A large black kettle hanging on a crane over a backyard firepit elicited my attention. I was told that it had been retrieved from the meager possessions of a Mormon Bishop murdered by Indians. The man had carried the kettle on his back from Missouri to Utah during his westward migration with the Mormon Handcart Brigade. The kettle fell from his back as he was killed.

"My mother rescued that kettle as it rolled down a gully," a lady standing nearby remarked. "It's been in use almost ever since for various purposes—from heating bath water to making soap."

After returning to St. George, we followed an old Mormon road southward across a remarkably beautiful and unspoiled piece of high desert populated by few people, but seemingly uncountable desert Junipers (*Juniperus monosperma*). Many of the high desert birds were nesting, and from dawn until late in the morning, and again at eventide, the air was filled with the sweet songs of the males. There were House Finches, Mockingbirds, Sage Thrashers, and Sparrows. The best music we heard came from the throats of Black-Chinned Sparrows and Sage Thrashers. Along the way there were a number of small earth dams impounding water in gullies. The water in each was swarming with tadpoles, and at night came the chorus of adult toads.

The days had been warm enough for lizards and snakes to be out of winter hiding. At one point where the road led over some dark red volcanic rocks, we came upon a snake with spade-shaped head much like that of a rattlesnake, but with no rattles. It was an

By **EDMUND C. JAEGER**

Arizona Lyre Snake (*Trimorphodon lambda*). This was my first meeting with one, and I was certainly much impressed by its unique behavior. It showed its strong fighting spirit and irascible temper by churning about and striking at us with great fury.

This snake is very poisonous, but since its fangs are small and far back on its jaw, the danger to man is not great. One would have to thrust a finger deep into the snake's mouth to receive a bite. It is called a Lyre Snake because of the lyre ("U") shaped mark on the top of the head. The ground color is tan, upon which are laid large dark blotches and transversé black bands. This is a rock-dwelling snake which hides in crevices or beneath flat-tish rocks where it finds its prey of small lizards. It is most active at night, and has been known to capture bats. Southern Utah is the northern limit of its habitat.

It was over this stretch of desert trail, locally known as the Temple Road, that the builders of the St. George Temple, with aid of oxen, hauled the long pine logs used as rafters and supporting timbers in the big building. This was a labor of love for these devout pioneers—a long brave haul over miles of poor road, part of it over one of the steepest switchback logging roads I have ever traveled. The logs were cut on 7700-foot Mt. Trumbull.

Having spent some time collecting plants on the greener slopes of the mountain, we descended to a broad valley covered with Nut-Pines (*Pinus edulis*), Junipers, and Three-tooth Sage. At the valley's middle was situated the post office of Toroweap.

That night we camped on the very brink of the Grand Canyon at Toroweap Point. Not 20 feet from our bedrolls was a nearly vertical drop of 4000 feet. On hands and knees we crept out on a flat projecting rock to look straight down through nearly a mile of clear desert air to the fast-flowing Colorado River below.

A trail of sorts descends the long drop to the Colorado River, and at its end is one of the most unique outposts of Colorado Desert plants in the United States. Here, of all things, is a garden of ocotillos and several other plants of the warm southern deserts. They have made a jump of many miles to occupy this favorable climatic niche. Ocotillos in the Grand Canyon! It seems impossible, but there they are, happy to grow in a place so warm and quiet and undisturbed by man.

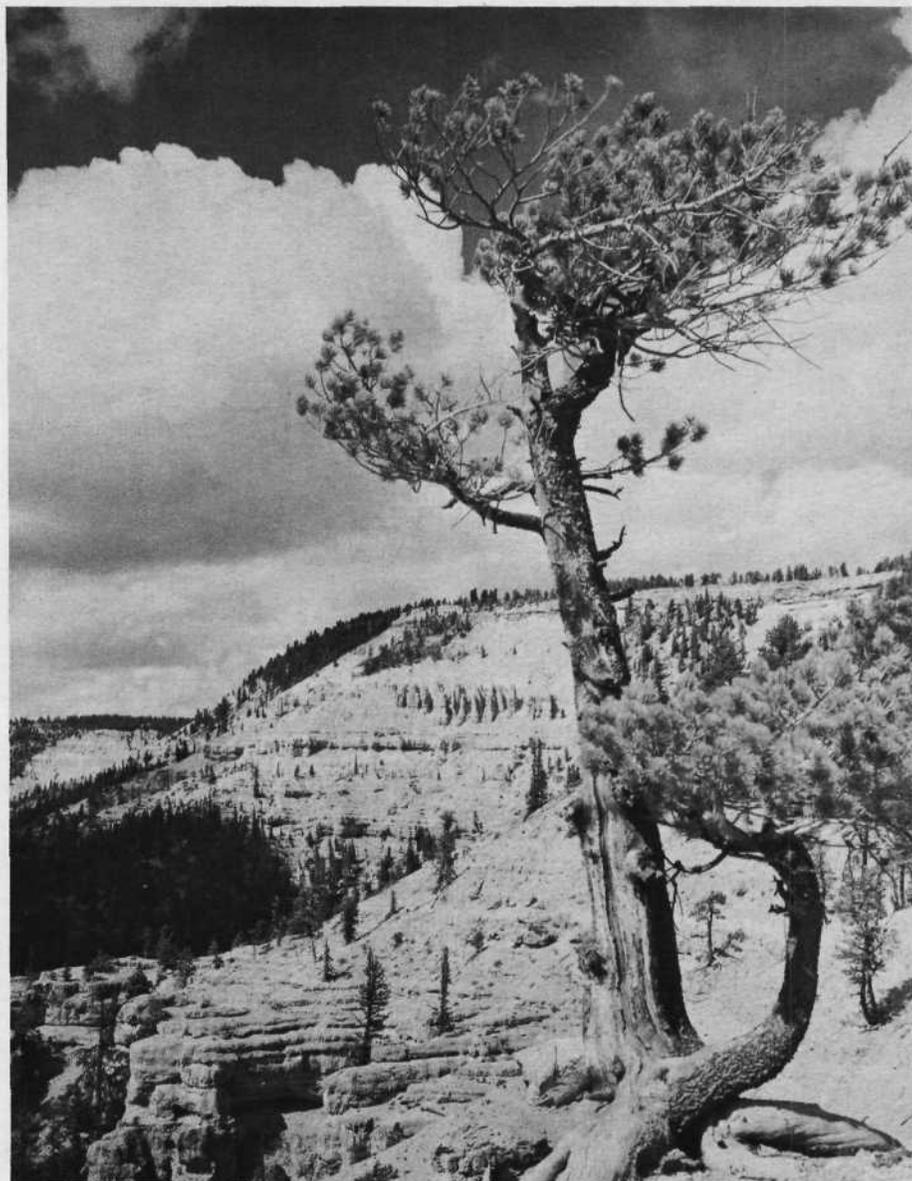
A broad ridge of high pine-clad mountains runs from north to south through the center of Utah. On either side of

this mass lies an arid upland strip in places comprising a large Sagebrush-Pinyon desert. Desert conditions are most pronounced in the west and northwest, especially near the Great Salt Lake where numerous salt-flats and wide flat areas are covered with xerophytic shrubs. Where the salt content of the near-barren flats is exceedingly high (up to 2.5 percent) and the ground water is close to the surface, Samphires (*Salicornia*) and Pickleweed (*Allenrolfia*) abound. More removed from the highest salt concentrations are Greasewood (*Sarcobatus*) and Gray Molly (*Kochia*). All are low squat bushes. On the high desert plains where better soil conditions prevail, a fairly dense cover of Winter-fat (*Eurotia*) and Shadscale spreads over enormous areas.

The Sagebrush flats are the summer home of the remarkable sweet-songed Sage Thrasher. And high in the Sagebrush - scented air we saw gracefully swarming Red-tail and Marsh Hawks,

and Falcons — each scrutinizing the ground with sharp eyes for squirrels and rabbits. The common Jack Rabbits of this high desert, Black-tailed and White-tailed Hares, were frequently seen. From time to time the tiny and agile Sagebrush Chipmunk was sighted sitting atop Sagebrush bushes, or with vocal sputters hurriedly retreating to places of concealment on the ground.

Later on this memorable trip of many years ago, we journeyed to the far southeastern corner of the state where lie portions of the colorful Painted Desert, called by the Hopi Indians, "Country of Departed Spirits." Much of it is a scenic plateau, where Pinyon Trees and round-crowned Junipers cover the highest of the mesas, and the ubiquitous Sagebrush the intervening troughlike valleys. Glorious were the sunsets, clear and crisp the night and morning air. As Alexander Powell said: "The marls and rocks . . . are of many colors, chocolate, red, vermilion, pink, buff and gray." ///



ON THE FLANK OF THE MARKAGUNT PLATEAU



# THE MIGHTY DAM IN GLEN CANYON



EXCAVATING FOR THE EAST KEYWAY

**T**HE TEMPO of construction activity at Glen Canyon Dam is increasing daily. The huge keyways and foundations for the dam and powerplant have been excavated, the Colorado River has been diverted through tunnels flanking each side of the construction site, and concrete placement is underway.

Today, a visitor to the site has a "box-seat" view of this spectacular activity from the highest steel-arch bridge in the world. Spanning the 1100-foot

wide Glen Canyon, this \$5-million structure provides the critical highway link to a previously inaccessible area.

Eight-hundred feet below the bridge, the foundation of the massive dam begins—carved from the sandstone of the prehistoric riverbed. Ponderous blocks of concrete rise in a checkerboard pattern toward the final crest, 710 feet above. Over a million cubic yards of concrete is scheduled for the first year of placement — one-fifth of the total yardage in the dam.

Just downstream the broad foundation of the powerplant stretches across the width of the canyon. Each of the eight imposing blocks of concrete, called unit bays, contains a large opening in preparation for installation of the 155-

500 horsepower turbines. Water will be delivered to the turbines through 15-foot-diameter penstock pipes spanning the distance between the powerplant and the dam across concrete piers.

High above the site, 50-ton-capacity traveling cableways carry concrete to the forms from a 21-story batching plant, erected on a ledge blasted from the orange sandstone. Above the plant, other facilities for the sustained production of concrete can be seen, including a 4000-ton refrigeration plant, seven 10,000-barrel-capacity silos for cement and pozzolan, and huge piles of concrete aggregate.

The prime contract for Glen Canyon Dam and powerplant was awarded to the Merritt-Chapman and Scott Corporation for \$108 million — the largest single contract ever awarded by the Bureau of Reclamation. The powerplant structure is scheduled for completion in 1962, reservoir storage initiated in 1963, and completion of the dam in 1964.

Contracts to supply thousands of different materials and equipment for the dam-powerplant are being awarded, geared to the construction schedule. Some of the larger contracts, in millions of dollars, include: \$9.7 for cement, \$2.5 for pozzolan, \$3.8 for penstock and outlet pipes, and \$6.4 for turbines.

One of the more impressive sidelights to the actual project construction is the growth of the city of Page. Built on a mesa overlooking the canyon, permanent businesses and residences are already forming the nucleus of a new Arizona city. A modern shopping center is under construction, flanked by spacious parking areas and wide city streets.

For the comfort of visitors, tourist facilities are available, including restaurants and two modern motels. Another 100-unit motel is also under construction.

On the west side of the river, the National Park Service has initiated construction on the first phase of the Glen Canyon National Recreation Area. By early summer, the first 62 camping sites will be available along the Wahweap Creek site. ///

**By E. D. REYNOLDS**

Civil Engineer, Bureau of Reclamation



HIGSCALERS DRILL ON THE CANYON WALL JUST ABOVE THE RUSHING WATER



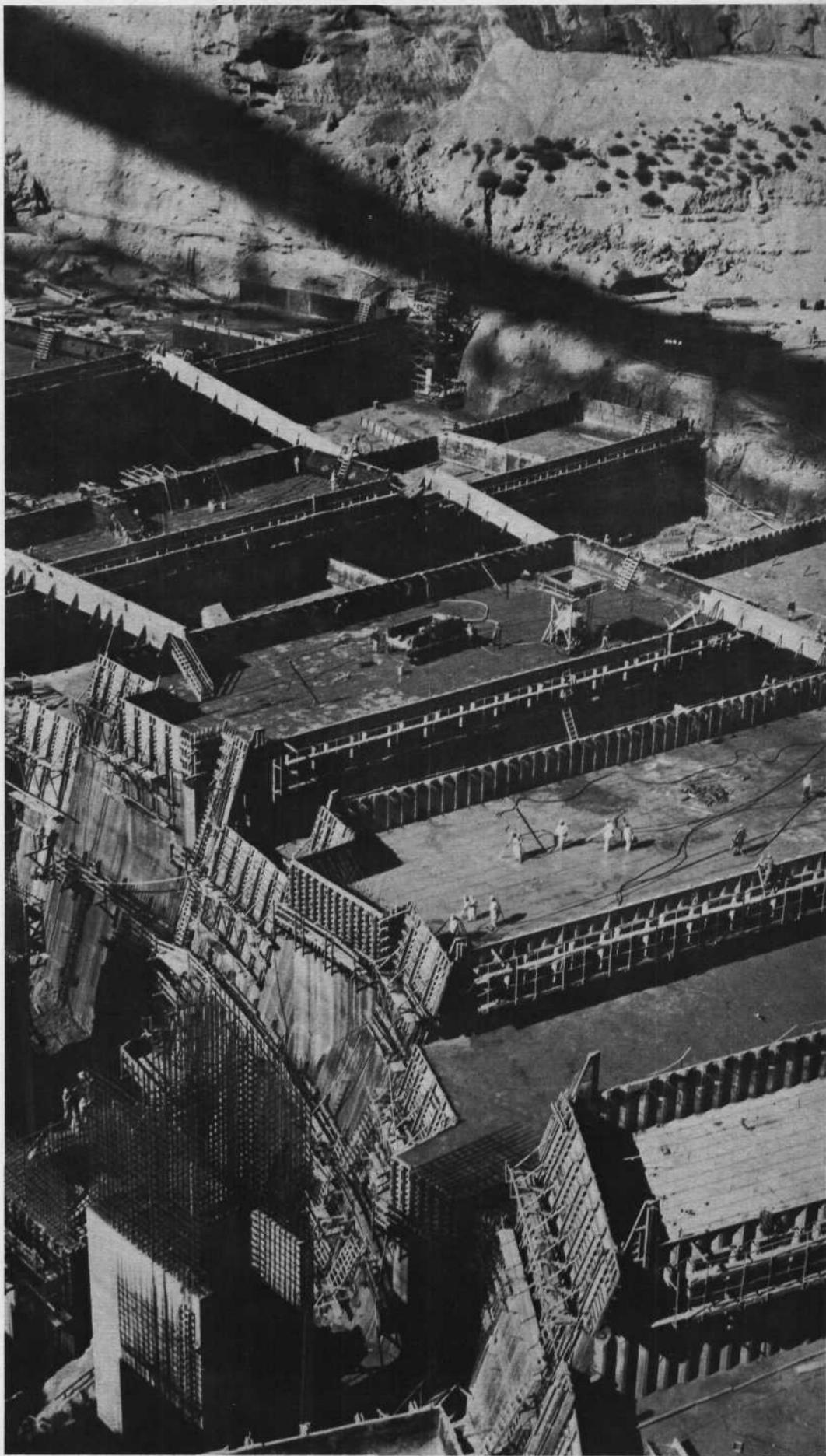
LOOKING THROUGH THE DOWNSTREAM PORTAL OF THE LEFT DIVERSION TUNNEL



A HUGE PAYHAULER LOOKS LIKE A TOY AS IT IS LOWERED INTO THE CANYON



TRAFFIC MOVES ACROSS GLEN CANYON BRIDGE, 865 FEET DOWNSTREAM FROM DAMSITE



THE GREAT CONCRETE DAM BEGINS TO TAKE SHAPE



## OUR "ISLAND IN THE SKY"

**I**MAGINE A LOVELY rugged island with more than a hundred miles of shoreline with long peninsulas, points and promontories, as well as many beautiful coves, bays and harbors. The whole surrounded by a deep shimmering blue-violet ocean, except for a 30-foot-wide causeway over which a road connects your island with the mainland.

Now, imagine if you can—and this won't be quite as easy—a sprawling many-fingered island 6000 feet in elevation perched atop sheer sandstone cliffs more than 2000 feet above the mighty Colorado River on one side and about the same height above the looping turbulent Green River on the other. On this "island" are hundreds of grand view points overlooking a vast sea of towering buttes, spires, mesas, canyons and distant mountain ranges in three states, filling the vast purple distance in every direction.

This "Island in the Sky" is located in Southeastern Utah high above the triangle where the Green and Colorado rivers join forces to form the wildest, most cutting river on the face of the earth. Happily, you can drive to this sky island in your own car across a 30-foot roadway called "The Neck."

Now mark well, that whether you come by car, horseback or afoot, this extremely narrow neck is the only possible approach to this vast island mesa whose cliff-edge "shoreline" is hundreds of feet above the rock-strewn talus slopes below. Only mountaineers using pitons and ropes would be able to scale the sheer cliffs to reach our island were it not for the narrow roadway approach at "The Neck."

Through our good friend, Paul Mudra, a geophysicist with the Atomic Energy Commission, we obtained some excellent maps of the area. From these contour sheets we discovered that this mesa is completely supported atop tremendous cliffs of Wingate and Navajo sandstone. Had civilization arrived one or two thousand years hence, perhaps even "The Neck" would

have eroded away, making access possible by helicopter only.

On a recent trip to our island, Paul, Olive and I were out for the weekend to see what new discoveries might be in store for us. We had to stop anyway to open and close the gate at The Neck, and before driving on we walked the few feet to the left of the roadway where the whole countryside seemed to fall away into a vast basin down which we could see the Shafer Trail switchbacking for a thousand feet to the white rim bench of the Colorado River. Looking on down another 1000 feet in the blue haze of the early morning light, we even caught a glimpse of the river itself.

The Shafer Trail was built some 40 years ago by Frank and John Schafer, early day cattlemen, for the purpose of getting their stock down to the river benches. (The "c" in their name was dropped by map-makers.) The grazing was good, and being protected by the great cliff walls, the grass came on somewhat earlier than up on the high mesa. Actually the trail takes off the main road about a mile-and-a-half back, winding along a narrow ledge to a point just below the cliffs supporting The Neck, where it starts down the great 1000 foot talus slope. During the recent uranium boom, Federal and State funds made the old trail into a road for access to numerous uranium claims in the shinarump conglomerate at the bottom of the cliffs.

Turning our backs on the Shafer Trail, we looked down to our right into the head of Taylor Canyon which drops away almost at once into a tremendous sheer gorge to the Green River a few miles away. After taking a number of pictures here, we hopped back into our wagon and started climbing rather steeply. We drove through the beautiful juniper and pinyon forest, and a mile beyond The Neck came to the "Y" in the road. Taking the left branch, a single track road, we passed an island "landmark"—a 1939 Packard with '52 California license plates. The old car had been abandoned squarely in the middle of the road where it had given up the ghost. Bearing to the left, we soon came to

an old sheep camp. A corrugated iron storage shack and a dugout cabin remain. A short hike of about 100 yards to the north brought us to the edge of the rim with breathtaking views unfolding at every step. It was here that Olive let out a whoop, her standard reaction when she finds an arrowhead; this one a beautiful little white birdpoint. Following the rim around to the right, towering Square-Mile Butte soon came into view. Actually another island, this huge pedestal stands apart from the main cliff and is utterly inaccessible. Some day we hope to land on it by helicopter to see if it bears any evidence of man. There are many other such buttes near the Island, and it would be great fun to explore them.

We have been hiking and prowling over the Island for several years, chiefly because of the varied and paintable subject matter throughout the area. We have sketched and painted the great butte many times and in varied lighting. The early morning light is especially beautiful. We have painted and photographed through the changing seasons, in summer calm and in sweeping thundershowers. It is never the same; always fascinatingly new. It was here opposite Square-Mile Butte on another trip that a sudden gust of wind carried a watercolor, on which I had been working, a quarter-of-a-mile before I finally rescued it neatly spiked on a yucca.

Here too, we explored some huge orange-pink dunes covering many acres. The prevailing southwesterly winds have piled the sands in rich and colorful, ever shifting, rippled mounds of sunlight and shadows.

Continuing on, we found the shoreline bending back to the south and west with magnificent vistas from every vantage point and cliff edge.

Back at the "Y" on the main road, we drove south through rolling grassland with rock piles and ridges of Navajo sandstone liberally sprinkled with clumps of pinyon, oak and juniper. Segó lillies, Utah's state flower, were blooming here in abundance, as were flaming Indian Paintbrush, Trumpet Phlox, Wild Galardias and

By **ALFRED NESTLER**

many other species common to the desert and lower mountain regions.

Soon we reached another branch in the road. Signs here pointed us to the left five miles to Grand View Point and to the right five miles to Upheaval Dome. We took the left road first since we had planned to camp that night somewhere on the long finger of the mesa which ends at the Point.

The rugged terrain unfolding to right and left of us is beyond description. Our eyes were literally swimming trying to take in the amazing jumble of towers, buttes, island mesas, immense cliffs, and, through all the blue and purple haze of those vast spaces, the mighty Colorado, cutting its way deeper into the rock layers of the ages.

The snow-spattered La Sal Mountains pushed their sharp peaks into the eastern horizon. Until July their 13,000-foot summits are shimmering white or patched with snow to form lovely backdrops for this entire region. To the southeast we could see the Blue Mountains behind Monticello. They had huge piles of cumulus boiling over and around them, with long slanting streaks of rain pouring from their dark bottoms foretelling possible showers for us later in the day. On the western side of the Blues, between the mountains and the Colorado River, our binoculars picked out the famous Needles Area, a wild rugged section accessible only by four-wheel-drive vehicles. Far to the south we could see Navajo Mountain on the Arizona line. This landmark mountain, sacred to the Navajos, piles its dome-shaped head above Rainbow Bridge.

Five miles beyond the second "Y" we came to the end of the road. Four-wheel-drive will take you a short distance further, but we hiked the half-mile to the extreme tip of Grand View Point.

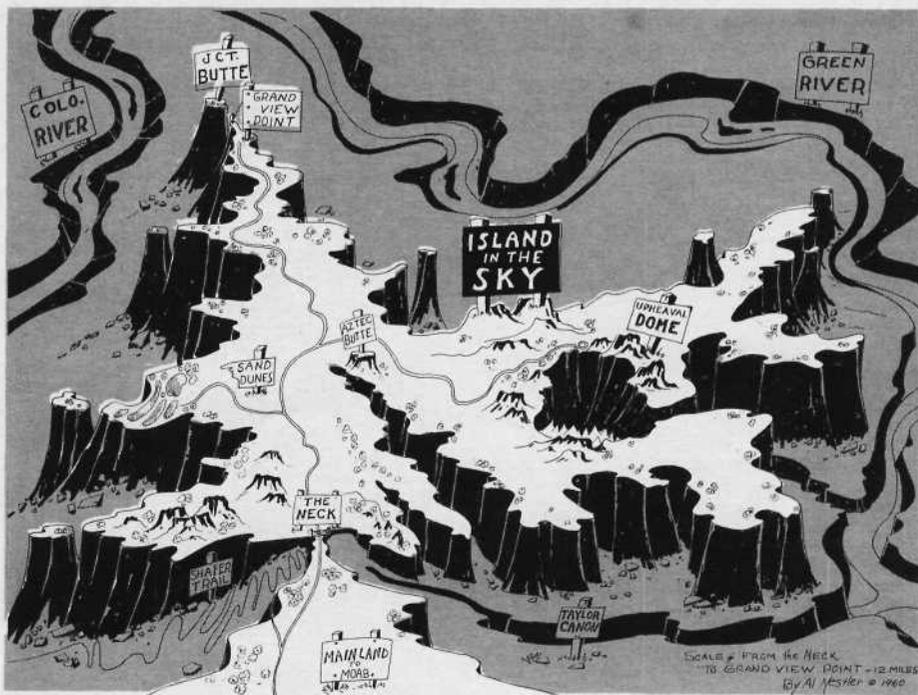
There is no trail, so we just picked our way over rocks and ledges and through scattered groups of gnarled and twisted junipers. The east and west rims are very close together here and the view is pure magnificence.

To the west and northwest our eyes followed the looping Green River until it disappeared into the magenta haze a half-hundred miles away. This is the stretch of the Green over which the boat race is run each June from the community of Green River to Moab. The previous year we sat on a point overlooking the Green River on the west-end of our island and watched the boats go by like tiny water skaters a thousand feet below us.

On the horizon far in the west we



EAST CLIFFS OF THE "ISLAND," NEAR THE SAND DUNES



could see the Henry Mountains. Blue and alone they stood, cloud-capped and aloof. Few roads touch their flanks.

Dark cloud shadows were scudding across the Point now, pushing up from the storm over the Blues. Clouds spread rapidly out across the great basin of the Green and soon we were treated to that beautiful site of intermingled rainstorm and sunshine. We counted no less than five distinct shower areas. Soon the clouds joined those from the Henry Mountains, and the curtains of rain and mist, interspersed with shafts of sunlight, brought

into sharp view many buttes, canyons and mesas of which we had not even been aware. It was a truly inspiring experience to sit in grandstand seats to watch nature fling her sunshine and rain with reckless abandon across the inaccessible miles spread out before us.

The sun was dipping toward the Henry Mountains, and it was time to find a campsite and get the cooking fire going.

Shortly after dawn on a brilliant cool and cloudless morning, we were on our way to Aztec Butte where we planned to do some archeological exploring. This flat-topped elongated

butte of Navajo sandstone is within a few feet of being the highest point on the Island. We parked our wagon off the road, and with cameras, canteens and sketch pads, started hiking across the open flower-spangled grassland toward the butte.

The early cliff dwellers were well acquainted with our Island and, no doubt, made good use of it for summer hunting expeditions. Many arrow-points and shards have been found here and flint chips are abundant in several places.

We found some very large and luxurious juniper and pinyon trees growing around the base of the butte, plentifully watered by the run-off from the sandstone slopes above. Climbing the butte's west flank is not too difficult, and again we found new views unfolding before us. The very steep north slope drops sharply down into the blue depths of Trail Canyon.

High in a group of caves, just under the east and north rim of Aztec Butte, we found a stone-walled room with a natural "hole in the rock" entrance. It was built of flat sandstone blocks laid in mud mortar. Fingerprints pressed into the mud still are visible. On the top of the butte itself we found a partially constructed room of stone which was evidently never completed. It seems likely that the early dwellers here were more or less temporary and probably came for the hunting. However, partial walls in several of the caves, and the incompleted room on top of the butte suggest that they may have stayed or planned to stay at least for a season. There was no evidence of fire-stained walls or permanent dwellings such as found further south at Mesa Verde and other ruins. We never excavate or molest ruins. Such work we are content to leave to the skilled archeologists. The only things we carry away are many happy sketches and memories.

Hiking down to the head of Trail Canyon, near the east-end of Aztec Butte, we could see the flowing spring at the base of the cliffs with a great deal of green vegetation below it. Undoubtedly this spring was the chief reason for the existence of the ancient ruins in the area. The early cliff dwellers must have had a series of ladders or found some means of getting down to the water, for the spring canyon is a box surrounded by high sheer walls.

Returning to our car, we headed west over the rambling primitive road to Upheaval Dome. At about four-and-a-half miles from the "Y", we parked the station wagon, deciding to walk the last quarter-mile to the end



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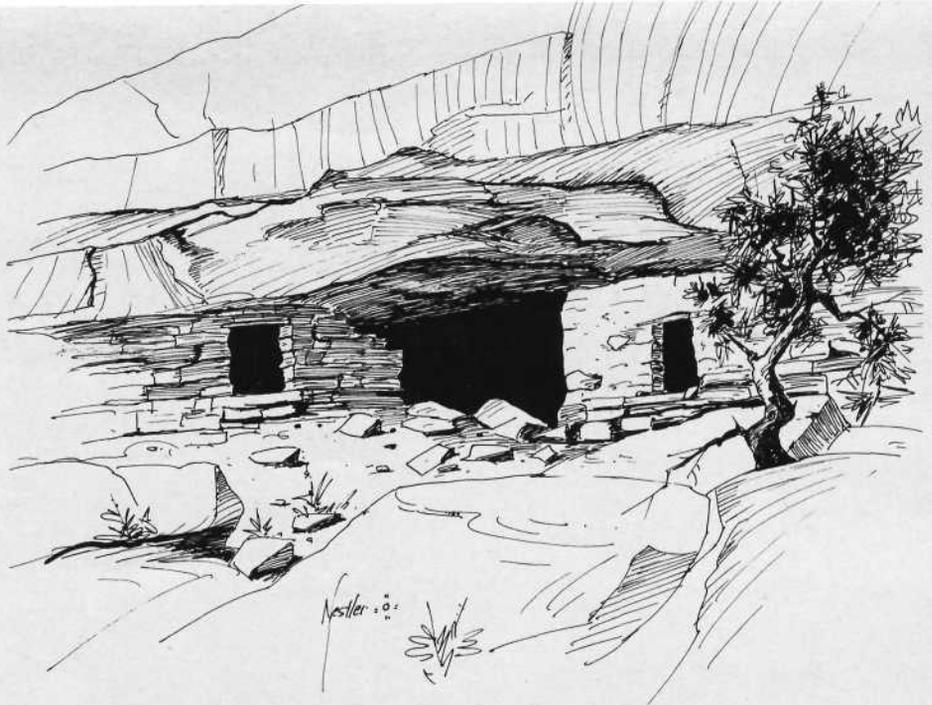
of the road. A four-wheel-drive vehicle could have made it with ease.

From the end of the road we followed a foot trail another quarter-mile to the edge of Upheaval Dome. After catching our breath at the site of the tremendous hole in front of us, our first instinct was to sit down and try to figure out what had happened here. We decided that the place had been well and also poorly named. The fact that a tremendous upheaval had taken place here in some dim and distant period of the earth's making was everywhere apparent.

Huge upthrust rocks and tremendous masses of strata on edge formed a great circle around the mile-wide hole before us. But instead of a dome this is a crater more than 1200-feet deep and 5000-feet across. Sharp ridges and peaks of what appeared to be soft and erodable clays formed the bottom of the crater. One geologist told us later that upheaval Dome's origin is a complete mystery. All about the area we found some of the most fascinatingly rugged terrain that we have ever hiked through.

The sun was again slipping away toward the far west and our weekend was fast coming to a close.

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# AMERICA'S LAST INDIAN WAR

**T**HE DAYS OF Southwest Indian insurrection are recent enough for some men still to have memory of them. Here and there along the Utah highway from Bluff north through Blanding, Monticello and Moab, I found Mormon pioneers who can talk for an hour or a day about the troubled time in 1923 when the Ute renegade, Posey, drew the last battle-line between white men and red in this nation. It is logical that the Last Uprising took place in the arid and eroded land drained by the San Juan River, for this was the last wilderness stronghold of Indians to be penetrated by the white man—much of it unexplored to this day.

From the sober and industrious character of San Juan's citizens, best reflected in the neat no-nonsense-farms bordering the highway near the towns, it is obvious why Posey's Battle has achieved quasi-epic status: it is easily the most exciting event ever to take place in this country. That is, if we discount the annual opening day of deer hunting season when the tiny towns are overrun by bearded gun-toting men.

Posey was many things to many men. C. R. Christensen, 85, first constable of Bluff and a former sheriff of San Juan County, describes the Ute as being "small in stature . . . 140 pounds . . . alert and interested in every subject . . . intelligent . . . a man who thought ahead of his people . . . a gambler who usually won . . . the acknowledged leader of his people . . ."

Albert R. Lyman, respected first settler of Blanding whose book, *Voice of the Intangible*, is a classic portrayal of his boyhood in the San Juan country, paints a different picture of the Ute who on occasion worked for the Lyman cattle outfit: "Posey was a small man . . . wily and active . . . a gambler . . . but he was an agitator, not a chief . . . he had few real followers . . ."

Participants make poor historians. The written accounts of The Last Indian Uprising differ in details, major

and minor. To understand what happened in 1923—and why it happened—we must go back to much earlier times.

The Utes had always been a warlike people, holding sway over western Colorado and eastern Utah. They existed by hunting and raiding, for they did not practice agriculture. Their way of life became doomed when the Mormons came to settle the Great Basin area. Admonished by Brigham Young to feed rather than fight the Indians, the whites side-stepped serious head-on clashes with the Utes. From the outset of these brushes (around 1880), the Utes misinterpreted the reason behind the invaders' avoidance of violence. What was, in actuality, prudence, was thought by the Indians to be cowardice of an "inferior" race, for the Utes regarded violence and thievery as cultural norms. Hence there evolved among the Indians certain renegade leaders whose contempt for the white man was in no way masked. Such a man was Posey.

As the white man's civilization took root and began spreading through the San Juan country, and the pressure of encroachment mounted, the incidences of Indian depredations increased accordingly.

The Utes held that anything belonging to the white man was fair game. Livestock suffered the most, the Indians often attempting to satisfy their growing resentment by gouging cattle's eyes and cutting off horses' ears.

In 1914 the murder of a Mexican by a Ute ignited the smoldering fire. Not until after a gunfight and surrender of the Indians involved (and their subsequent acquittal by the authorities) did the hot war return to its cold war status.

The Utes, including the segment that followed Posey, agreed to return to their reservation. But the problem presented by relocation, as was often the case, was insurmountable. The land assigned to the Indians made poor cattle range; there was no market for the scrawny horses they were able to raise; the white men held most of the good farming land. Authorities were faced with three alternatives: Keep the Utes

on the reservation under armed guard; Give them better land; Let them return to their former ways. Through default, the latter course won out, and the friction between whites and Indians—which was to burst into flames in 1923—returned.

During this interim period, Posey emerged as the dominant renegade leader. He was in scrape after scrape with white men and Navajos (bitter enemies of the Utes), and he came out of each without a scratch.

"Me all same Jes' Christ," Posey was fond of saying. "White man's bullets no can hit." This bit of braggadocio did not sit well with the devout Mormons.

And thus the stage was set for this nation's last battle between Indians and settlers. The following account is taken, in the main, from the written report by George Hurst, Jr., a participant in the fight. I write it with full knowledge that some of these "facts" are a composite of conflicting reports. I believe, however, that this chronicle represents the "essential truth" of the Posey affair.

In the fall of 1922, Joe Bishop Boy and Sannip (Shanup) Boy, members of Posey's band, shot-up and robbed a sheep camp. The luckless herder was made "to dance to the tune of a six gun."

The sheepman reported the incident to the peace officer in Blanding, and warrants for the arrest of the two Utes were issued. But, winter set in before the law could take action, and it was not until early February of the following year (1923) that the boys were brought to trial. Albert Lyman, the Blanding pioneer whose description of Posey appears above, was chosen to defend the lads.

Early on the day of the trial, Posey and his bucks, wearing their brightest colored shirts, rode into Blanding on their best horses. Hurst says they were wearing war paint, but this is doubtful.

Court convened at 9 a.m. in the basement of the school, and the situation was tense. Posey sat through the proceedings with his men, taking in every detail. Their horses were tethered near the door.

By **EUGENE L. CONROTTO**



C. R. CHRISTENSEN

At noon the verdict was rendered. The boys were found guilty, but under Utah law at least six hours had to elapse between verdict and sentencing, so the white men went home to lunch and the Indians gathered around the schoolhouse.

In all probability, the camp-wreckers would have received light sentences—perhaps 10 days in jail. But white man's justice was not about to be understood by the gang of Utes standing in the schoolyard. The convicted boys were led out of the courtroom by Sheriff Bill Oliver, and when they saw their tribesmen in a mood to lend them assistance, Joe Bishop Boy and Sannip Boy balked. The sheriff had to make the next move, and when he prodded the lads, they broke away from his clutches, one of them grabbing a pistol and firing point blank into the sheriff's stomach—the gun misfiring!

In a matter of seconds the Utes and the rescued pair were racing out of town, heading south to where the band's women and children were camped.

The sheriff and two or three volunteers at the scene piled into a car (yes, a car!) and took off down the Bluff road after the Indians.

Soon word arrived back at suddenly-alerted Blanding that the Utes, about 150 strong, were entrenched on high ground. It was apparent, the sheriff reported, that Posey had planned the escape all along, for the Indians were well supplied and well armed. Sheriff Oliver called on every able-bodied man in Blanding "that had a gun and some guts to get down here and get here quick."

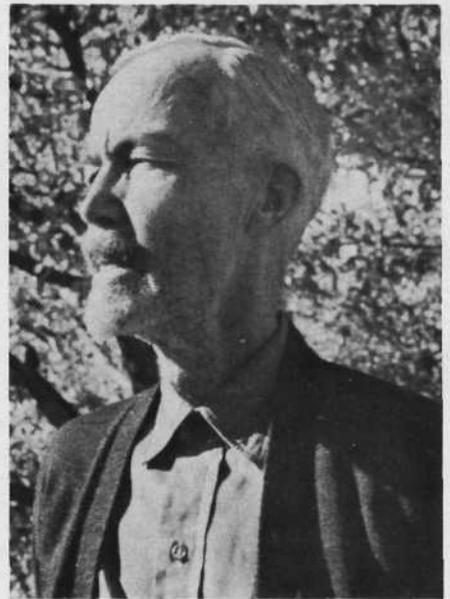
About 50 men answered the call,



POSEY

and Sheriff Oliver swore them in with these words: "Every man here is deputized to shoot anything that looks like an Indian. I don't want any of you to say that you could have done thus or so but did not have the authority." This is quoted from the Hurst report. Some disagree that Sheriff Oliver, a man of gentle character, issued such harsh orders. Among those who say Oliver did not tell his men to shoot every Indian in sight is Lawrence Black, one of the first men to enter the fray.

The sheriff deployed his forces



ALBERT R. LYMAN

along a quarter-mile front, and the Battle was on. The firing, most of it at long range, continued throughout the day with damage only to ammunition supplies. Posey had the only high-powered rifle on either side. The Indians had gone first into Comb Wash and then up onto a mesa, and Posey's fire kept the white men at a respectful distance.

The broken terrain seemingly gave the Indians an advantage, for this is country made for hiding—not finding. (Pioneers once described the San Juan as "A lot of rock, a lot of sand, more

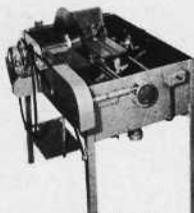


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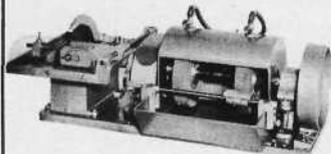
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rocks, more sand, and wind enough  
to blow it away.") However, by night-  
fall this entire corner of Utah was in  
alarm and there could be no question  
as to the eventual outcome of the Up-  
rising.

That night, while preparing supper,  
the Indians quickly retreated westward  
onto Cedar Mesa. They left most of  
their food and coffee on their camp-  
fires. Most of the white men retreat-  
ed, too—back to Blanding for supper.  
Afterward, at a mass meeting, Dave  
Black was named the sheriff's first  
deputy. When morning came Black  
led the posse and its reinforcements  
back to the "front."

The Indians, meanwhile, made trail  
over the steep face of a hill; moving  
westward toward the Clay Hills in the  
triangle formed by the junction of the  
Colorado and San Juan rivers, where  
they hoped to disappear into the land-  
scape.

But, such was not to be the case.  
Toward the end of the second day,  
the superior white force caused the  
Indians to surrender. The renegades  
were brought back to Blanding and  
placed in a 12-foot-high barbed-wire  
stockade. Joe Bishop Boy had been  
killed in the fighting—a bad trade for  
a 10-day jail sentence.

Posey was not among those captur-  
ed. Somehow he had slipped through  
the lines, and now rumor took over.  
Some said Posey had been killed;  
others that he was alive and furious  
for revenge, that he was gathering a  
force to punish Blanding and free the  
Utes in the stockade.

And then came a reliable report  
that during the Battle, Posey had been  
wounded in a skirmish with a small  
party of possemen; that the Ute re-  
negade had died a few days later of  
gangrene and had been buried by those  
companions who had escaped with  
him. Dave Black, some informants  
said, had fired the mortal shot. Others  
gave the credit to Bill Gillespie. Posey,  
at 50 years of age, had met the bullet  
he bragged didn't exist.

"A group of us men who had risked  
our lives gathering this tribe up," wrote  
amateur historian Hurst, "were not  
satisfied with the explanation." Hurst  
and a self-appointed "delegation" rode  
to where Posey was said to have been  
buried, and there they "dug up Old  
Posey—just to make sure."

And now there could be no doubt.  
Defeated and leaderless, the Indians  
and their trouble were through. To make  
doubly sure, a group of government  
officials scrubbed 20 of the captured  
Ute children, ran combs through their

hair for the first time, and herded them  
off to learn new ways at the white-  
man's school. When the old people  
were released from the stockade and  
sent on their way, the warlike spirit  
was no longer in evidence.

"We'll never do this again," said  
Joe Bishop, father of the lad who had  
been killed. "If you ever want to arrest  
us again, we'll stick up our hands."

Today an estimated 125 Utes live  
in the San Juan country. Their unkempt  
camps contrast sharply with the sturdy  
Mormon farms. What the future holds  
for these descendants of warriors is  
anyone's guess.

There is a footnote to this story  
worthy of mention. While in Mon-  
ticello gathering information for this  
story, I met the grandson of Dave  
Black. This handsome high school  
student told me that one of Posey's  
grandsons had borrowed \$2 from him,  
and so far showed little intention of  
paying it back. ///

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# An Artist on the Colorado . . .

continued from page 11

sleep. In the still small hours of early morning, I was awakened by the loveliest sound imaginable—a low liquid bird-call that flowed through the dark like a benediction. The boats were moored below in companionable intimacy, and they sent up an occasional friendly “clunk” by way of assuring us all was well.

Like dutiful *touristas*, we hiked to Rainbow Bridge which is much easier to reach from the river than via the eastern overland route. At risk of the heretic's stake, I must admit my own reaction to freaks of this sort is a

yawning “so what.” I'd rather have to carry it to Flagstaff in a wheelbarrow than paint a picture of the thing. Its chief use seems to be a sort of peristaltic effect on people who relish the production of execrable rhyme. Just place good fat registers and plenty of pencils in the vicinity of these abortive phenomena and you will shortly have a Niagara of kitsch. One gem I recall from the Rainbow register bleated through several lines of awe-struck praise and concluded,

*Of nature's wonders, this bridge  
is one of many,  
The Lord God made them all,  
if any*

a sentiment to which the most militant atheist could subscribe with no slightest feeling of compromise. But I apologize to all lovers of Rainbow Bridge and I'm really happy it is there, since it siphons crowds away from the real beauty spots. Eventually it will be covered over with Kodachrome boxes and be but a memory in the maunderings of old-timers.

A major incitement to explore the canyons and the river itself are the plentiful Moqui evidences, dwellings, shards, petroglyphs, pictographs, weapons, and tools remaining from the rude life of these vanished Indians who lived here, it is thought, as long ago

as the Sixth Century, depending, I suppose, upon who does the thinking. I am informed, perhaps more colorfully than reliably, that “Moqui” is the Navajo word for “dead man” and that it is applied by its originators to the Hopi, which in turn means “the people of peace,” as the Navajo hold there is no qualitative difference between a dead man and one who won't fight. Be that as it may, the occupants and artificers of the Moqui remains are ostensibly dead, and the peace of undisturbed centuries cloaks their quondam haunts.

Archeological groups and sundry unlicensed vandals have pretty well eliminated any possibility of finding pottery, but one can scratch about in the dirt and generally get some shards, interestingly painted or decorated with tooled impressions. It's easier to buy them at Woody's White Canyon emporium.

On Talus Bar ruins we found the ground almost littered with primitive corn cobs, very small in diameter but otherwise looking as though some picnicking slob had thrown them away just a few weeks before. Which touches upon one of the saddest aspects of such journeys, to wit, the depredations committed by the large and growing tribe, genus *Americanus Slobovius*. It passes comprehension to imagine the mode of consciousness of these jackals who leave behind them a trail of filth and damage. Many petroglyphs have been defaced, some by



Bill Hoy photo

## THIRD 1961 INVITATION

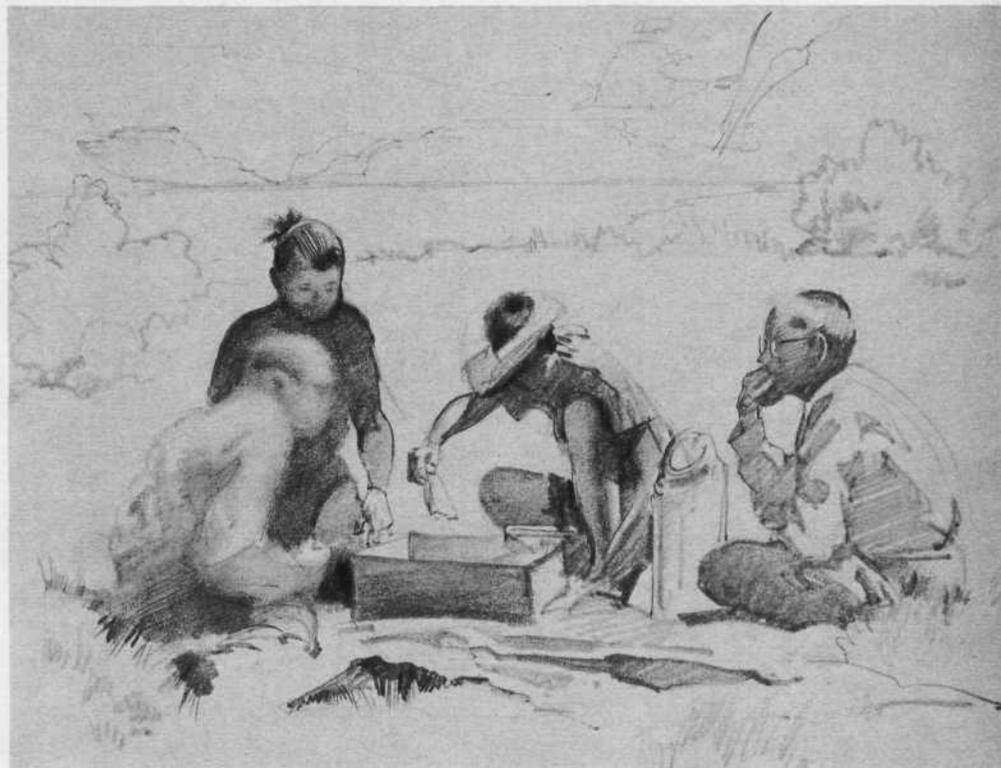
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- Come visit A Land of Great Beauty.

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Richfield, Utah



THE SECOND OF OUR THREE DAILY EATING CONTESTS—THE ECTOPLASMIC BLUR ON THE LEFT IS ALL WE EVER SAW OF BILL AT MEALTIME

people (to use the term loosely) who went to all the trouble of carrying paint for the purpose. Hidden Passage is a spectacular little chasm which is rather heavily visited by reason of its extraordinary character and its proximity to Music Temple. Maiden-hair fern garlands the walls above a small stream that struggles to force its way through the trash with which campers have littered the narrow canyon floor. We stood looking at this shame, and Bill remarked, "When I see this, I think, 'Go ahead, flood it. It's too good for the American public.'" It is.

Solomon's aphorism about novelty finds renewed vindication in the split-level homes of these ancient cliff-dwellers. Some of the dwellings we visited are in remarkably good condition, others have only a crumbling wall or two remaining, while still others are so vestigial they could easily be overlooked. Only a few ovens, perhaps, to tell that in this grotto small brown humans once laughed and sang at their work. The dwellings were of course situated for defense in inaccessible places, usually high in the wall of a canyon, often reached by means of hand-holds cut in the rock and requiring some exertion to reach. We five went up one morning to view ruins high in an enormous cavern in a bluff near Hidden Passage, and the trip required considerable scrambling and clambering up rocky slopes and over huge tumbled boulders. Pauline commenced to have difficulty, but our ungentlemanly crew found this an occasion for merriment rather than concern, and cameras began to record her plight. At the worst spot in her tribulation, wedged on a slope where she could go neither up nor down, she was adjured to stay put while Scotty edged onto the rock below and prepared to take the picture. Heels, Linhof and Contaflex dangling over the precipice, he teetered there imploringly and coaxed, "A little more agony, please." Poor Pauline; I wonder if she ever got down.

As the mists of memory close over our trip, minor annoyances and inconveniences fade from view, and there remain bright and happy images, lovely, humorous, thrilling, or peaceful, as the river brought them to us . . . the endlessly helpful and tireless Bill Jones, always first up in the morning, lifting his head from the cookery to bellow "Eggs!" . . . or his 150 miles of tuneless lament over a maiden styled "Water Lou" . . . the spring foliage of cottonwoods brilliant against shadowed sandstone . . . waterfalls springing magically from the top of a sun-scorched cliff after a rain . . .

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Scotty's unflagging wit convulsing us . . . the shaggy German dialect in which it usually was offered . . . silence brooding over all the river land, and dim, lonely trails wandering away into the barrens . . . my companions' invariable good humor and competence . . . a hillside blazing with cactus blossoms, and still pools lying in penumbra at the feet of colossal stone walls.

In retrospect, the river country seems to me unique in some senses that other recreational areas are not. The great, moody, silent, timeless stream seems to unify all one's experi-

ence of it as the high mountains, for instance, do not. As in memory, so in the experience, days, camps, streams, mines, Indian ruins and rapids all flow together so that it becomes difficult to separate them, or to keep straight the sequence of days and events. An almost Oriental oneness, though not of negation, hovers over this strange contorted country through which the uneasy river writhes toward the distant sea. The few folk who live here bear the mark of it, and so will the mind of him who is fortunate enough to make pilgrimage on the changing changeless way of the Colorado. ///

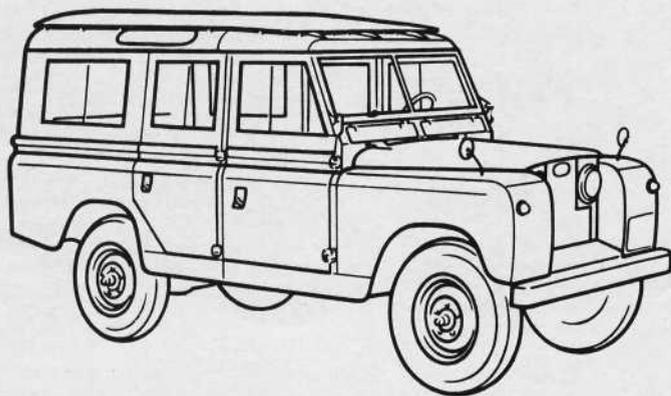
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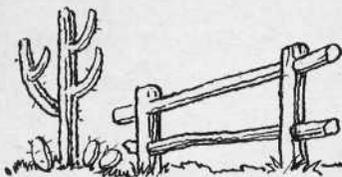
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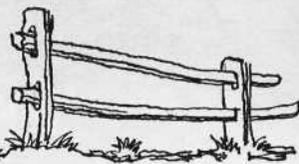
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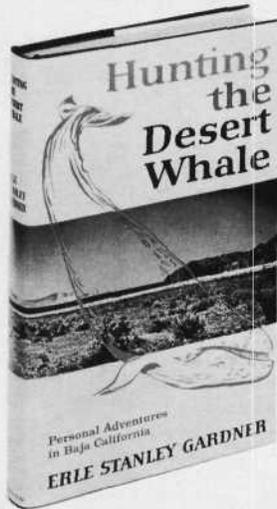
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**BERYLLIUM ASSAYS** with gamma-neutron Beryllium analyzer. Presence or absence, \$1. Quantitative BeO, \$6. Boulder Scientific Co., 250 Pearl, Boulder, Colorado.

### ● OLD COINS, STAMPS

**RARE UNCIRCULATED** Carson City mint dollars, 1878, \$5. 1882-83-84-90-91, \$7.50 each. 100-page catalog 50c. Shultz, P.O. Box 746, Salt Lake City 10, Utah.

**STAMP COLLECTORS** — profitable opportunity, high type approvals sent to serious investors in stamps. Joshua K. Bolles, 1813 Miraceros, Alamogordo, New Mexico.

### ● PHOTO SUPPLIES

**COLOR SLIDES.** Re-live your vacation trips. 3000 travel Kadochromes, parks, U.S., foreign, nature, etc. Free list (sample 30c). Send today. Kelly D. Choda, Box 15, Palmer Lake, Colo.

**5x7 COLOR enlargement** 1c with regular order from any size Kodacolor negative. Regular price \$1.25 or \$1.26 for two. Quality finish guaranteed. Arrow Camera Shop, Pottstown, Pennsylvania.

**35 mm. EKTACHROME** developed and mounted \$1.50. Same as above including refilling your cartridge with 20 exposure fresh daylight Ektachrome \$3. Send no money—we will bill you later. Norman Studios, 9315 Elm, Fontana, California.

**COLOR SLIDES:** Railroad, ghost town, scenic southwest, California missions, Calico, Marineland. Sample and list 25c. Longstreet, 5453 Virginia, Hollywood 29, California.

### ● REAL ESTATE

**ONE ACRE** near Salton Sea, near Box Canyon, lovely soft well water, private road, shade and seclusion, total price \$5000. Write Ronald L. Johnson, Box 162, Thermal, California.

**FOR INFORMATION** on desert acreage and parcels for sale in or near Twentynine Palms, please write Silas S. Stanley, Realtor, 73644 Twentynine Palms Highway, Twentynine Palms, California.

**FOR SALE** — nursery, cactus, succulents, semi-tropicals, garden ornaments and gift shop. Retail and wholesale. Located on Highway 99, the gateway to southland's summer and winter resorts. Long lease. \$14,000 down can purchase property with two modern apartments (optional). Established 10 years. Must retire. Rosso's Cacti Nursery, 25399 Highway 99, Loma Linda, California.

**"THE DESERT Tomorrow."** A quick look at real estate and building in the Coachella Valley in 1961. Amazing summarized factual article on land value. Brief, to the point. \$1 postpaid or free with \$3 trial five weeks of Wheeler's Desert Letter, Drawer WW, Palm Springs, California.

**HOUSE, TWO** bed-room, furnished, electric range, refrigerator, water. Randsburg, California. All clear. Full price, \$1950 cash. Montana G. Cozad, 10900 Jamie Avenue, Pa-coima, California.

**10 ACRES** land approximately 13 miles south of Salton Sea, \$750. \$10 down, \$10 monthly. 2106 Pershing Avenue, San Bernardino, Calif.

**FOR SALE**—Rock and Mineral shop, five acres, 1100 square feet store and living quarters. Some modernizing to be done. Natural gas, good well. 182 feet on Highway 91. Underpriced at \$10,500. Cash. Calico Mts. Trading Post, Box 6069, Yermo, California.

**4000 FOOT** frontage on Highway 380, 700 feet depth, 33 miles east Roswell, New Mexico. \$3 per front foot. 500 feet or more: \$2 front foot. Good roadside business location. Cozzens, Box 2064, Milan Station, Grants, N.M.

**RANCH.** 40 acres fenced, 60 miles from fabulous Las Vegas in beautiful Pahrump Valley. Large house partly furnished. Wonderful fertile soil, shade trees and water. Sacrifice. \$18,500. Mrs. Art Revert, Box 135, Beatty, Nevada.

### ● PLANTS, SEEDS

**CACTUS AND** succulents from the deserts of the Southwest. Free illustrated catalog. Davis Cactus Garden, 1522 Jefferson Street, Kerrville, Texas.

**OLD FASHIONED** large gourd seeds, mixed types, certified, 50c. Ornamental, useful for birdhouses, utensils, Christmas decorations, conversation pieces, etc. Certi-Seeds, 5815 Shoshone Avenue, Encino, California.

**WILDFLOWER SEEDS:** catalog offers over 600 different kinds of wildflower and wild tree seeds. Catalog 50c. Clyde Robin, 4233 Heyer Avenue, Castro Valley, California.

**IF YOU** are interested in growing iris, we have some tremendous bargains. Send stamp for list. Roy Rogers Iris Gardens, Box D, West Arapahoe, Boulder, Colorado.

### ● WESTERN MERCHANDISE

**FOR SALE:** My collection of sun colored glass, antiques and unusual pieces. Mrs. A. E. Wyc-koff, 11501 Davenport Road, Auga Dulce, Cal.

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

### ● MISCELLANEOUS

**ARTIST SUPPLIES** of all kinds. Oil colors, water colors, brushes, etc. Send us list of your needs. R.C. Color Store, 1834 South Hill, Oceanside, California.

**PLASTIC EMBEDDING** for fun and profit, no oven. Make beautiful jewelry, decorative panels, science specimens castings. Catalog 25c, Natcol Plastics, Box 444, Yucaipa, Calif.

**SIMULATED ENGRAVED** business cards \$3.95 and \$4.95 per thousand. Write for samples. Tumble polished baroques \$2.50 per pound postpaid. Doney's Printing & Rock Shop, Box 246, Lucerne, Lake County, California.

**PACK TRIP** with horses into primitive country soon beneath Lake Powell. Object: photography, exotic scenery, majestic arches, caverns, canyons, fleeting profusion of desert flowers, Indian ruins. No roads and, for a good part of the trip, no trails. Salt Lake City doctor would like to make trip but guide requires party of 6-10. May 13-19. Flowers should be out. Cost \$150 each. Write: Paul R. Milligan, M.D., P.O. Box 2451, Salt Lake City 10, Utah.

**WAMPLER TRAIL** trips—wilderness trips—hiking or riding. Year around activities at moderate prices with experienced organization. Visit California Sierra Nevada, Arizona Havasu Canyon and Chiricahua Mountains, Carmel back country and Mexico. Couples, families, groups—many come alone, make lasting friends. For details: Box 45, Berkeley 1, California.

**SUMMER IN Europe.** Visit Scotland, Wales, England, Belgium, Holland, Germany, Switzerland, Liechtenstein, Austria, Italy, Monaco, and France. All-expense \$1440. Optional extensions to Scandinavia, Greece, Spain. Address inquiries to Professor Erwin Ruff, University of Redlands, Redlands, Calif.

**ULTRAVIOLET LAMPS** from \$14.50. Accessories, tubes, filters, electrical parts, batteries available. Free literature. Radiant Ultra Violet Products, Manufacturers, Cambria Heights 11, New York.

**CALIFORNIA GOLDEN,** black and silver bears, also skunks, made from weed burrs, delightful gifts, \$2 each, plus 25c postage. Lola Gulan, 230 Paloma Avenue, Salinas, Calif.

**PAPER POTTERY** kit, \$2 postpaid: potter's wheel for spinning colorful serpentine, glue, flame-proof streamers, hobby-craft instructions. Make bowls, horns, bells, animals. Bulk rates. Inquiries invited. Write: "Spinfetti," Capitola, California.

**IMPORTED FRAGRANT** bouquet greeting cards for all occasions! Roses, pansies, violets, orchids, etc. Assortment of six, \$1.65. Package of 12, \$2.95. Postpaid. Rameline Gifts, 569 Geary Street, San Francisco 2, California.

**JEEP MILITARY** for sale, \$450. New clutch, cam, rod and main bearings, timing gears, chain, valves, guides, pistons, etc. Reborned. Reground crankshaft. F. Bush, 1229 Olantha Drive, Los Angeles 65, Calif.

**JEEP REAR** power takeoff and custom power, rear mounting, heavy duty wench. Each cost over \$150. Will sell either for \$75. Roy Tate, 510 South La Brea, Inglewood, California. OR 7-3707, OR 4-2921.

**RECORDS—45 rpm,** new condition from jukebox route, all different, mixed, hillbilly, popular, blues and rhythm. Minimum order 50—\$5. 100—\$9. Postpaid. Records, 8712 Dodson, Houston 16, Texas.

**500 GUMMED** stickers, your name, address—50c. Boxed stationery, 240 pieces: 80 6x9, 80 6x6 sheets, 80 6¾ envelopes, printed with name and address \$3.49 postpaid. Kalataprint, Ironwood, Michigan.

**\$2 FOR** any size dull finish landscape photos colored in oils. 18x34" serape direct from Old Mexico, \$4. Allow three weeks. Taylor, 4327 Edgewood Place, Riverside, Calif.

**PHOTO and ART credits**

(Unless otherwise specified below or in text, photographs and art work are by authors of features in which they appear.)

Pages 18-19: Map by Norton Allen. 22: Robert E. Phair. 25: Frank Jensen. 26-27: Bureau of Reclamation photos by A. E. Turner. 33: (top center) Bureau of Indian Affairs. 43: Robert M. Morris.

# LETTERS

... FROM OUR READERS ...

## Add Gran Quivira . . .

*To the Editor:* I think that your recent December issue was especially good, but I couldn't help but notice that you indicated the church ruins at Tumacacori as being the only church in the U.S. preserved as a National Monument. Although Tumacacori is a lovely and significant site, your statement is not accurate. We at Gran Quivira National Monument are rather proud of our mission church ruins here, which have been preserved as a National Monument for more than 51 years.

Gran Quivira contains the ruins of two seventeenth-century Franciscan mission churches, the earlier one dating back to 1629.

RICHARD M. HOWARD  
Gran Quivira, New Mexico

## A Trip to Mexico . . .

*To the Editor:* We would like to hear from some camping folks who have outfits like ours: a new pickup truck on which is mounted a lovely big camper. My husband takes colored slides and I do some oil painting. We would like to hear from a group who plan a trip to the Sonora area described in your December magazine. We have had some Spanish lessons, and are familiar with parts of Mexico.

EDYTHE L. McCALLEIR  
493 Merritt Ave., Apt. 2  
Oakland 10, Calif.

## Losing a Friend . . .

*To the Editor:* We are among the "intruders" who have been or are to be evicted from the Colorado River lands below Parker Dam.

To build dreams of a future of happiness and contentment on such disputed land is foolish, we know—but to feel and see the majesty of the area is to become helpless before it. We mourn the loss of our Desert Paradise as one would mourn the loss of a dear irreplaceable friend.

MRS. W. T. KUHLMANN  
Long Beach, Calif.

NEW . . . NEW . . . NEW

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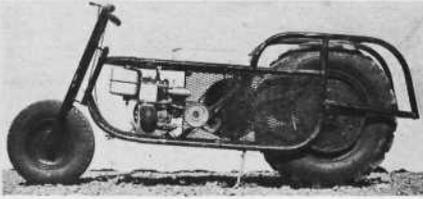
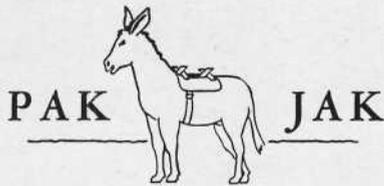
where the road ends  
TOTE GOTE begins!

# TOTE GOTE

AMERICA'S NO. 1 OFF THE HIGHWAY CYCLE!

Ride the Tote Gote to new vistas of adventure. Travel off the highways and the roads far back into the mountains and desert areas where the scenery lies in untouched beauty. Geared low for power, the lightweight Tote Gote (115 pounds) will pull 45% grades with ease, shifting automatically between speeds of 1 to 18 miles per hour. Capable of carrying loads of 400 pounds in rugged terrain, the Tote Gote is like a mechanical horse for the hunter, rock hound, or desert adventure seeker. **TAKE A FREE DEMONSTRATION RIDE WITH YOUR LOCAL DEALER.**

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The PAK-JAK is very ruggedly built and will last many years with little or no upkeep.

You have power to spare due to the large rear wheel, geared with a 40 to 1 ratio, using a 4 ply heavy duty 670x15 tractor type tire, the front wheel also has a 4 ply heavy duty tire.

There are many other uses for this marvelous machine, Farmers, Ranchers, Rock Hounds, Mineral Seekers, Beach Combers, U.S. Forestry Service, Sheriff's Dept., Division of Fish and Game, U.S. Armed Forces, and many others are interested. Some of these are now using this PAK-JAK and have found that it has many uses.

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**SOUTHWEST**  
**MARCH, 1961**  
**CALENDAR**

*Arizona*

- 3-5—Phoenix Gem & Mineral Show at State Fairgrounds.
- 5—Don's Club Lost Dutchman Mine Trek, from Phoenix.
- 9—Mesa Miniature Parade.
- 9-13—Livestock Show and Pima County Fair, Tucson.
- 12—Desert Sun Ranchers' Rodeo at

- Rancho de los Caballeros, Wickenburg.
- 16-19—Phoenix Jaycees World Championship Rodeo.
- 17-19—11th Annual Square Dance Festival, Yuma.
- 18—Rededication of Roosevelt Dam on 50th Anniversary.
- 23-26—State Flower and Garden Show, Fairground, Phoenix.
- 26—Desert Sun Ranchers' Rodeo at Monte Vista Ranch, Wickenburg.

*California*

- 1-5—25th Annual Desert Circus, Palm Springs.
- 3-12—Mid-Winter Fair, Imperial.
- 10-12—12th Annual Almond Blossom Festival, Quartz Hill.

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POEM OF THE MONTH

**MARCH MARE**

By MAUDE RUBIN

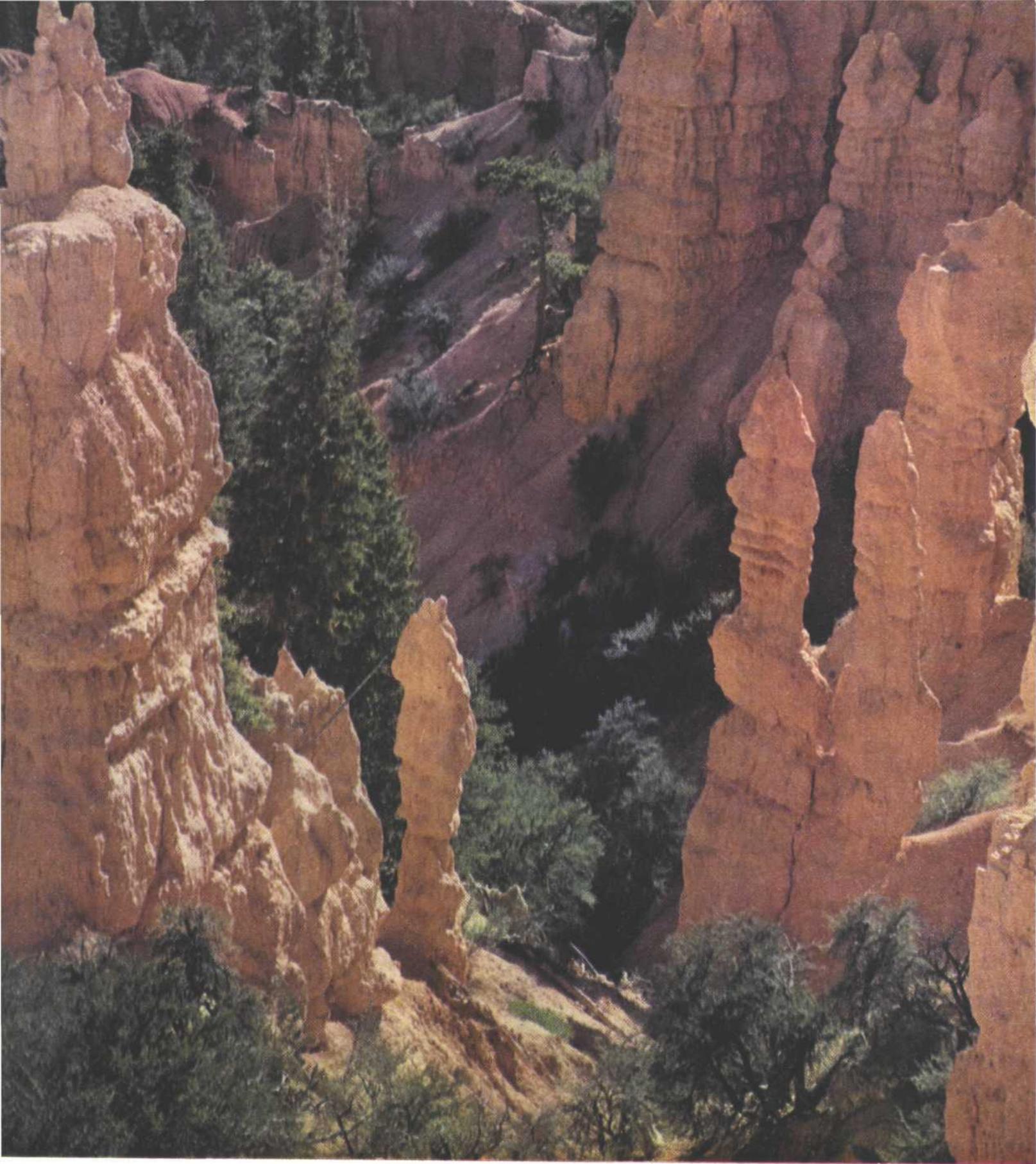
Now March has broken her tether  
And a locoed wind is loose,  
A bronco that gallops the roof-tops  
And chases the last wild-goose;  
A mare that takes to the sky-ways,  
And neighs at the midnight stars,  
Calling the colts of April  
To come for a run to Mars.

**MONUMENT VALLEY, Utah-Arizona**



*Harry Goulding's* **MONUMENT VALLEY**  
**Lodge and Trading Post**  
Post Office: Kayenta, Arizona

Unique scenery, found no where else in the world; remnants of mesas millions of years old left in fantastic monuments. See this at sunrise and sunset from picture window of your comfortable, refrigerated room; and via several all day trips in 4-wheel-drive station wagons. • Lodge located on a high bench at the base of a thousand-foot red sandstone cliff. • Excellent ranch style meals. • Highway from Grand Canyon Nat'l Park via Monument Valley to Mesa Verde Nat'l Park will be BLACKTOP all the way by early summer. The few miles of remaining dirt roads at this writing, are in very good condition.



## The Beauty of Bryce Canyon

*The first man to write about Bryce Canyon, now a national park, was T. C. Bailey, a U.S. Deputy Surveyor. The year was 1876. "There are thousands of red, white, purple and vermillion rocks of all sizes, resembling sentinels on the walls of castles; monks and priests with their robes, attendants, cathedrals and congregations," wrote*

*Bailey. "There are deep caverns and rooms resembling ruins of prisons, castles, churches, with their guarded walls, battlements, spires and steeples, niches and recesses, presenting the wildest and most wonderful scene that the eye of man ever beheld, in fact it is one of the wonders of the world."*

# SPECIAL

## Southern Utah

# ISSUE

“America’s  
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Wilderness  
Frontier”

All about people and  
places in our most  
important and exciting  
outdoor recreation  
empire

Exploration

Adventure

Personalities

Development

History

Travel

Recreation

