THE

MAGAZINE



Here is a story that all rock collectors should read. It is directed especially at those thoughtless or ignorant "hammerhounds" who go slashing and pounding their way through a mineral field leaving nothing but worthless rubble behind them. And also at the "cabochon hunters" who forget that many of their brothers in the rock fraternity are looking for large specimens from which to saw polished slabs or bookends or other useful articles. The proper use of a collector's hammer is to dislodge specimen material from its place, or to remove matrix or other waste material—never to break open a potentially good specimen to see what is inside. One good specimen, sawed and polished, is worth a thousand that have been smashed with a hammer.

By MORA M. BROWN

Have a Heart, Hammerhounds!

UT in our back yard is the "rock" house in which my husband through his hobby has unfolded a new world. Rocks, that once meant little to us except stubbed toes, have changed to adventures in which the outcome is revealed only after long sessions with diamond saw, grinding wheels and polish. For we have learned that underneath their uninviting jackets rocks conceal more design and color than a desert scene in spring.

We were discussing this hobby of rocks one evening last winter. Appropriately we were in the "rock" house, and we shouted because my husband was at the saw cutting the first one of a pair of geometrical Howlite bookends. To add his bit to the noise my son was at a grinding wheel shaping his first cabochon.

This whole rock idea was new and fascinating to him, but already I detected in him the symptoms of that malady known as rock-fever.

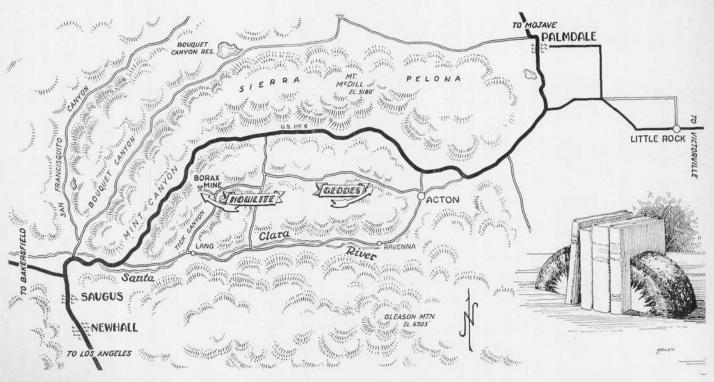
Now rock-fever has plenty of symptoms, but just one cure—and that one only temporary. It is a trip to the desert after rocks. So, on this night, when my husband maneuvered us into an examination of raw materials on hand, I knew what was coming. We had, he was appalled to find, absolutely no Howlite from which to cut the second bookend, and less than no material for making cabochons. We would have to go hunting.

"I do wish, though," he said, "there was one place left where hammer hounds haven't been working."

"What," son asked, "are hammer hounds?"

"They are people with good intentions and bad habits," husband stated flatly. "They go along with rockhounds for the trip and smash everything they can reach with hammers."

We went over Cajon pass and took the Palmdale road to Mint canyon. About four miles west of the intersection of the Acton road with the main highway we took a dirt road to the right and followed it until we reached a series of flat grey dumps left there from borax mining. The place is





These specimens show what the saw and polishing wheel will do with desert rocks—if the hammer hounds will only leave them intact. The right half of the set of Howlite bookends shown in upper center was made from the nodule discarded by the man in Tick canyon.

called Tick canyon, and when we arrived many other cars were there ahead of us.

We parked and walked up a narrow gully, climbed steeply to the right and came at last to the foot of a huge dump thickly dotted with rocks. There, as on previous trips, we saw many of the big knurled grey nodules known as Howlite. In the trough where the dump ended against a curve of hills were many more. But this morning, search as I would, I could not find a Howlite nodule, large or small, not marred by ugly white scars made with hammer blows.

"Hammer hounds," I thought, and watched the people climbing around that dump to see if some of them were doing the damage. But I was baffled. Everybody was hammering with vim, and those who seemed the most aware of what they wanted were hammering the hardest.

I decided to ask questions. I do not know the name of the man I found energetically whacking the knurls from a large and symmetrical specimen of Howlite, one which unbroken would have made an interesting pair of bookends. "Why do you knock off the bumps?" He paused long enough to glance at me from a mental height. "To tell whether

"How do you tell?"

it's any good."

He sighed. "Because if the broken faces don't have any fine black lines or brown stains, it's useless for cutting and polishing."

His hammer had exposed several unmarked white faces. It was, he decided, a worthless chunk, and sent it rolling down the dump into the trough. I noted where it came to rest because it looked large enough to be the piece my husband wanted for that second bookend.

Next I approached some students. Their instructor was saying, "Just hammer off a face or two, and discard the ones that aren't marked with black lines." Watching others, I realized that this was the rule apparently followed by all.

One member of the party invited us to go with them that afternoon to hunt geodes in Mint canyon. So, with that rescued Howlite tucked with other pieces in the back of the car, we retraced our road a little more than half way to the highway, then we turned right on another dirt road into the rolling hills of Mint canyon. We stopped in a sort of saucer in the hills and scattered out from there. A few years ago this whole area was comfortably strewn with milky translucent little nodules which, when cut, polished, and the two halves laid side by side, looked like shining grey and white butterflies.

Everybody had a hammer. And here, once more, the hammers worked, but their activity did not compare with that of the morning; there was so much less to work on. It was quite an event even to find a first class geode. But over the ground where they had been were countless fragments with tiny crystals glittering in their hollows.

I saw an attractive woman eagerly place each small geode she discovered on a rock and deal it a blow. Sometimes the blow smashed the geode. Sometimes the geode did not break. I asked her the reason.

She answered me simply and honestly. Mint canyon geodes, she had been told, were good for polishing only when they were solid. "It is only the hollow ones that break—the ones not any good." And yet, I know many people—and I am one—who especially favor those little hollow geodes because they love the miniature beauty of the tiny crystal caves. But the only way to preserve those crystals is to saw the geode—not smash it with a hammer.

The following week we went to Opal mountain seeking geodes and opal material suitable for cabochons. I had not seen this area for three years, and this day I did not recognize it when we reached it.

On our first visit we found the hills spotted here and there with the dull rust-colored nodules which, when cut, produce such striking sea-scapes. Also, there seemed to be white opal and jasper enough for everybody for years. But, three years later the surface geodes were gone, but there were geode fragments made by hammers. Hammers had found the opal and jasper, too, and had made an unbelievably wide swath of rubble along both sides of the road. In those three years the rock patterns it had taken nature a million years to create had been reduced to scraps.

This year even the scraps were gone. Bit by bit they had been gathered up by those who came too late. And nature, ashamed I guess, was doing her best with desert scrub to cover up the scars.

The man I questioned at Opal mountain was digging hard and long in his search for geodes. He was alone, and when he made a find he whacked a corner with his hammer. If he still was uncertain, he broke off more.

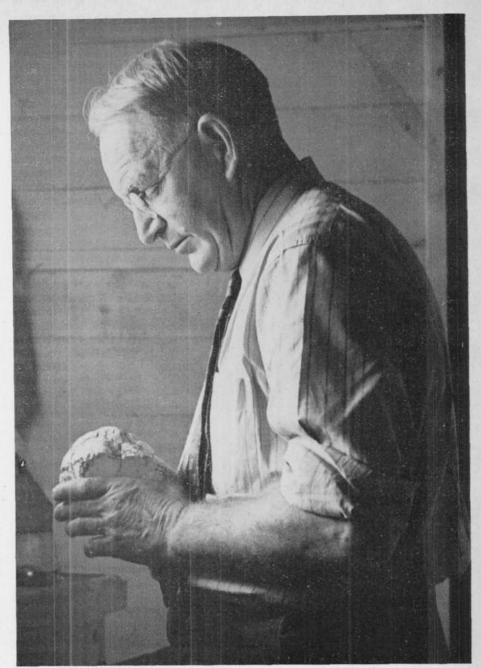
"You have to break 'em," he answered me, 'to see whether they're worth the trouble to take home."

I ached to suggest to him that surely they were not worth the bother when a hammer was through with them. I was discovering that this hammer-hound business went deeper than I had thought.

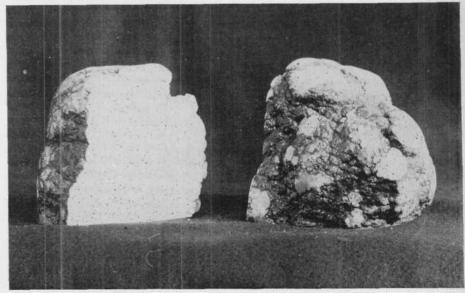
Now I am a rockhound, by marriage. In my role of mascot I have tagged all kinds of rockhounds over all kinds of desert, and I have yet to see a blessed member of the tribe who would deliberately ruin good rock specimens. And yet, my discoveries on these three hunts, and on other trips also, show that, while the goalongs break more rock material than they should, we rockhounds are also doing a lot of damage without realizing it.

Why is it then, I wondered, that we who most sincerely prize the desert's offerings of minerals are the ones who most readily break them up? And, as nearly as I can learn, this seems to be the answer:

Every mineralogist who goes to the desert after rock has in mind the particular use he intends to make of what he finds. Every specimen is studied from that viewpoint. And there seem to be as many viewpoints as there are mineralogists. For instance, a man whose hobby is to make cabochons will hammer away a large part



Amon Brown, husband of the author, at work on his special hobby-bookends.



Set of Howlite bookends made by Mr. Brown, as described in the accompanying text.

of a stone, which another would use for polished slabs, in order to take home the small well-marked piece he wants to grind. The geode hunter who wants cabochon material will smash the hollow geodes-and leave nothing but broken pieces for the collector who comes later seeking the crystal-lined hollow specimens to take home and saw. For that is the only way that the beauty of a hollow geode can be preserved.

For a more specific example, let us go back again to that big Howlite nodule we salvaged at Tick canyon. I do not know the use the man who rejected it had in mind, but I do know that when it was cut and polished it was more beautifully lined with black and more effectively spotted with brown than any Howlite nodule my husband has ever cut. And he has made at least 20 pairs of Howlite bookends.

In this instance, because the bookends were sawed on all sides, the broken knurls had not ruined it for him; but there is a certain type of Howlite bookend impossible to make with broken knurls. For these he selects one symmetrical unbroken nodule. From the most suitable side he cuts the bases. Then, after due thought, he cuts the nodule in half to achieve the greatest symmetry. These are the bookends in the rough. Carefully then he grinds off the grey surfaces of the most prominent knurls to expose round white faces with their markings. By lapping, by sanding, by polishing, he makes these faces shine. Then he entrusts to me the careful work of brushing clear lacquer over the grey stone without infringing on the polish.

Nature suggested these bookends. She is, we have found, much better at designs than we are. She has individuality. And certainly she used skill and artistry enough in creating her amazing rock formations and patterns to be equal to suggestions for their use. Most of us realize this and turn to nature for ideas. What we do not seem to realize is that even in another million years nature cannot replace for our use the stone beauty which our hammers have destroyed.

I am reporting here only what I have seen. Other rockhounds tell me that hammers deal out tragedy wherever we rockhounds go. And so, if as it seems we are largely guilty, I wonder if we, our families and our friends can't get together, in thought at least, and make a resolution. This resolution:

As a lover of the desert, and as one who has the best interests of all desert lovers in my heart, I promise to think in terms of conservation and fair play. When I raise my hammer to break a rock, I promise to withhold the blow until I have considered, "If I break this specimen simply to find out if inside it is what I want, I am not only NOT getting the most out

of it for myself, but I am ruining it for the use someone else might make of it."

If we should pause only long enough to think that, I wonder if we would ever let the hammer fall? Instead, I believe, we would take the doubtful specimen home; and then, if after due consideration we felt it did not meet our wants, we could trade with someone who had the rock we wanted.

That way, and only that way, can we have-and continue to have-not a selfcreated monument of rubble-but a brotherhood of happy and cooperative rockhounds.

DESERT QUIZ The old desert rat who writes the Quiz questions for Desert Magazine must have been suffering from the summer heat when he compiled this month's

list. Anyway, the questions are a little harder than usual. They cover a wide range of subjects-geography, history, mineralogy, botany, Indians, books and recreation. If you can answer 10 of them correctly you are a pretty fair student of desert lore. If you get 15 right you know more than most of the desert rats. Better than 15

qualifies you as one of those superior persons who observes carefully and remembers well. The answers are on page 38.	
1—Hogan is a Navajo word meaning—	
Village Dwelling house Medicine man Food	
2—The berries on a juniper tree are—	
Black Grey-blue Red Green	
3—Bill Bradshaw is known to southwestern desert dwellers as the man who—	
Discovered gold at La Paz Blazed the way for the Butterfield trail	
Conquered the Yuma Indians Built a wagon trail from San Bernardino	
to the Colorado river	
4—Pajarito plateau is in— New Mexico Western Utah	
Mojave desert Southern Arizona	
5—According to legend the Lost Breyfogle mine is located in—	
San Diego county, California Death Valley region	
Superstition mountains Southern Utah	
6—A mescal pit was used by desert Indians for—	
Storing grain Punishing wayward tribesmen	
Ceremonial purposes Roasting food	
7—The book, The Land of Poco Tiempo, was written by—	
Harry Carr Bandelier Zane Grey Chas. F. Lummis	
8—Western gecko is the name of a desert—	
Bird Snake Lizard Moth	
9—Brigham Young brought his Mormon settlers to the West primarily to-	
Find more fertile farm lands Seek gold	
Gain freedom to worship as they pleased	
Acquire a federal land grant	
10—Fish most often caught in Lake Mead are—	
Bass Mountain trout Catfish Mullett	
11—Coolidge dam impounds the waters of the—	
Colorado river Salt river Bill Williams river Gila river	
12—The Montezuma's Castle Indian ruins are protected by—	
U. S. Park rangers Forestry service men	
Arizona state park custodians Private guards	
13—In the following list, the one mineral harder than quartz is—	
Calcite Feldspar Topaz Fluorite	
14—"Slip" is the name of a material used by the Indians in—	
Making pottery Weaving blankets Preparing food	
Making dance costumes	
15—Lorenzo Hubbell is widely known through the Southwest as—	
A veteran Indian scout An Indian trader	
A Colorado river boatman A writer of western fiction	
16—Houserock valley in northern Arizona is famed as—	
The scene of a historic Indian battle A rich placer field in the gold	b
rush days The place where Geronimo surrendered	
An open range where buffalo may still be seen	
17—Going east on Highway 80 Pacific time changes to Mountain time at—	
El Centro Tucson Yuma Gila Bend	

18-Most important crop raised by the Hopi Indians on their dry farms is-

Wyatt Earp...... Pat Garrett...... Apache Indians...... Accident.......

is— Carlsbad....... Roswell...... Socorro...... Alamogordo.........

20-Nearest important town to White Sands National monument in New Mexico

19—Billy the Kid was killed by—