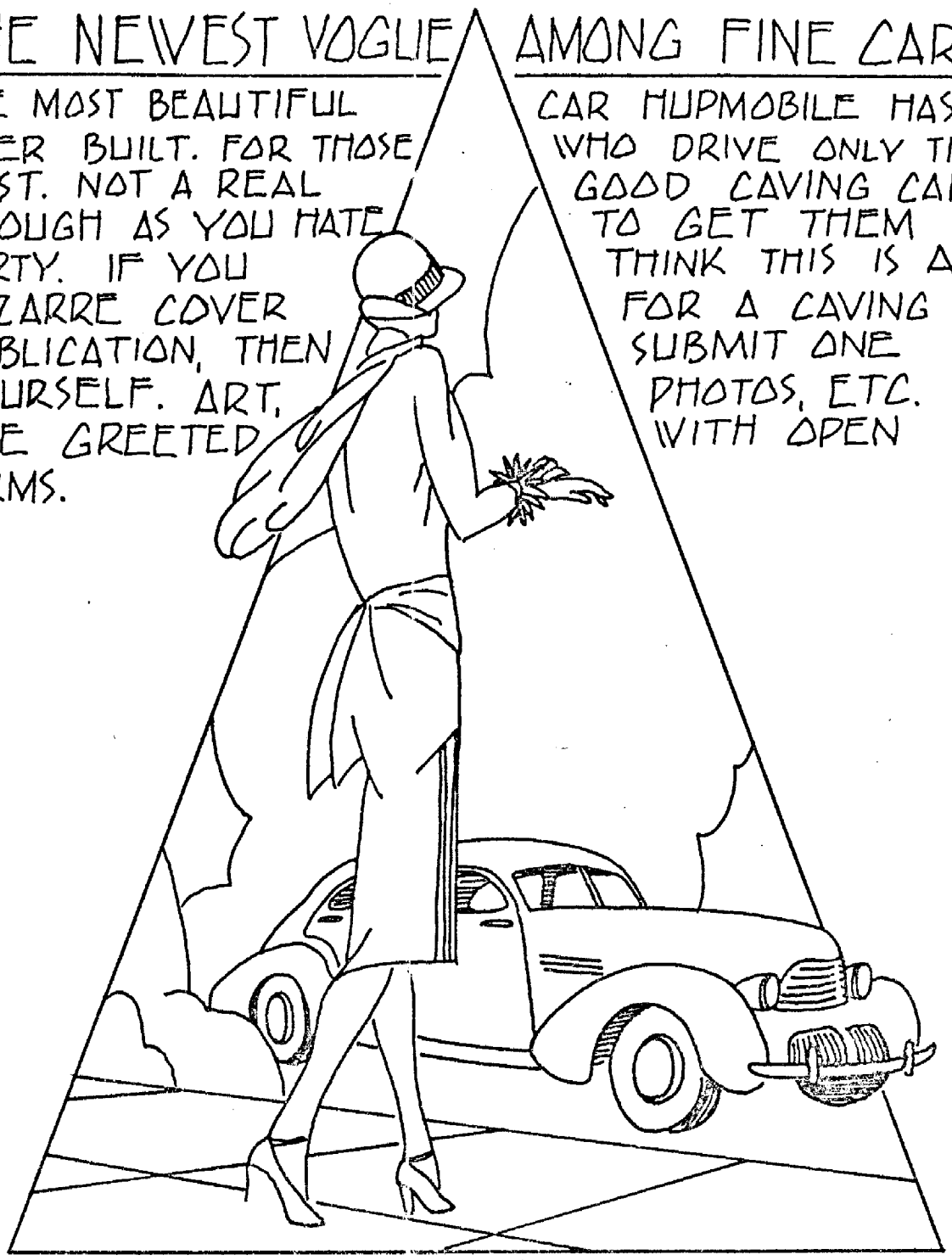
BIRMINGHAM GROTTO NEWSLETTER
NATIONAL SPELEOLOGICAL SOCIETY
JANUARY 1980

HUPMOBILE



THE NEWEST VOGUE AMONG FINE CARS

THE MOST BEAUTIFUL CAR HUPMOBILE HAS EVER BUILT. FOR THOSE WHO DRIVE ONLY THE BEST. NOT A REAL GOOD CAVING CAR THOUGH AS YOU HATE TO GET THEM DIRTY. IF YOU THINK THIS IS A BIZARRE COVER FOR A CAVING PUBLICATION, THEN SUBMIT ONE YOURSELF. ART, PHOTOS, ETC. ARE GREETED WITH OPEN ARMS.

SECRETARY'S REPORT

MINUTES OF JANUARY 7, 1980

The meeting was called to order by John Attaway, Chairman.

The minutes were approved as read.

All visitors were recognized.

TRIP REPORTS

HARBIN PIT TUMBLING ROCK TOMS PIT	Jay Clark
CUMBERLAND CAVERNS Christmas Party	Ken Kifer
Paint Rock Valley Ridgewalk	
ANDERSON CAVE	Greg McGill
LONG ISLAND SALT PETER CAVE	Milo Washington
Sand Mountain Ridgewalk	Tom Chamblee
Mt. Carmel Ridgewalk	Steve Durham
GUFFEY CAVE	John Attaway
GRAVES CAVE	Larry Moore

Sat.January 26, Greg McGill will lead a ridgewalk in the Toney's Gulf area. The group will camp at Bryant Mill Hollow and join Dave Howell's clean-up trip to GUFFEY CAVE the next morning

Sat.January 12, Milo Washington will lead a mapping/exploring trip in Blount County.

PROGRAM

Greg McGill gave a talk on cave surveying.

The meeting was adjourned to Guido's for pizza and beer.

Respectfully Submitted,

Lynn McGill

DATES TO WATCH

January 26 GROTTO RIDGEWALK
Toney's Gulf area
Leave Krystal in Tarrant at 6:30 AM. Overnight camping Bryant Mill Hollow
TRIP LEADER: Greg McGill.

& 27 GUFFEY CLEANUP PART II
Leave Krystal in Tarrant at 7:30 AM, or meet at cave at 9:00 AM.
TRIP LEADER: Dave Howell

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Submit materials for publication directly to the Editors. Deadline for receiving materials is the 20th day of the month preceding the month of issue. Materials received after this date will be published in the following issue.

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Equipment and the Art of Cave Exploring or, Everything You Always Wanted to Know About My Early Caving Trips

by Ken Kifer

Back in High School I was interested in Chemistry, so I bought some calcium carbide to play with. I tried making an acetylene generator, using acetone to slow down the reaction, but the acetone would boil over and the generator would blow up. So I bought a carbide lamp. I got the cap with it and we would walk the woods at night. When some friends wanted me to go see a cave, I took along my carbide and thus invented the use of the carbide light in caving. After my second caving trip I immediately sat down and drew up a map of the cave, thus independently inventing the cave map, since I had never seen one before.

But to get back to the light. Everyone insisted that their flashlight or spotlight was superior, but the truth was that they couldn't hold a candle to a carbide. (Definition of a candle: a unit of luminous intensity equal to 1/60 of the luminous intensity pe square centimeter of a black body radiating at the temperature of solidification of platinum (2,046 degrees K). Also called a standard candle.) On our early caving trips the carbides were not only brighter but also had a wider spread and burned longer than anything anyone else had. So the others all got carbides. Then Steve Spencer got everyone wearing coveralls, helmets and boots. Good grief! Didn't they know that cloth shoes, shorts without a T-shirt and a cloth hat were better? I had less trouble getting mud off me than off the coveralls; and cloth shoes cleaned up easier and were cheaper than boots.But for some strange reason, that winter I began dressing better too.

The helmet is an invention of the devil! People are always writing about how one saved their lives. Unfortunately, the poor souls killed by hard hat never had a chance to say their piece. I have never once hit my head on the ceiling when not wearing a helmet, but I have scrambled my brains when wearing one. In one cave where I camped, I repeatedly passed a rock jutting out of the ceiling. Most of the time I did not have my helmet on and never noticed it. The four times I passed it with my helmet on I hit it full force, nearly knocking me down an embankment to the stream below. "How much clearance does this &*@!! rock give me?" I thought. The answer was five feet. Each time without the helmet I had ducked without thinking. At any rate, I've worn a helmet, or a dozen helmets to be more exact, ever since those early days. Even when I explored a cave nude, I had my helmet on. (Nude caving is popular in the Smoky Mtn. region, I understand).

But back to lights (this article is basically about lights; I just had to change the name because I couldn't stick to the topic.). In '66-'67 we began our first trips to larger caves - caves over 1000 feet long with at least one pit. There the carbides began letting us down. Oh, they were pretty good the first two hours, fair the next hour and a half, and maybe give off a feeble glow for the next hour, but then they would always be found hopelessly flooded. No one had discovered baby bottles, and only a few brave, dumb souls would carry in a 2-lb. can. And there were more problems. According to Murphy's Law, 1. Everyone runs out of carbide at the same time; 2. while everyone is soaking wet, mudddy and freezing cold, 3. when no flashlight will work, 4. when the reflector sparkers are all wet, muddy, and/or jammed, and 5. you watch one damp match after another sputter or fail to light!

The flashlight has got to be the worst lighting device ever designed. It will jam into your side throughout the cave and then quietly sneak out of your pocket without a word. Water will cause it to quit working and moisture will corrode it solid in a week - if the batteries don't leak first and destroy your 400' of Bluewater IV. The beam angle is narrow and the beam is weak. Furthermore, it won't get you out of the cave if your carbide fails, because it's good for less than 2 hours and you need both hands for that final climb. However, the flashlight has one use: whenever you open your caving pack it will be brightly illuminated because the flashlight is on.

We had electric cavers back then, in fact I tried it for a while. My pet name for them was Fireflies, because invariably the connection would be poor, somewhere, God knows where, and the light would blink on and off throughout the cave. For instance, the light would be bright and powerful at the bottom of the

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climb, and at the top. But while climbing, halfway up, it would go out and nothing could get it to work. The Firefly had a second handicap. His battery was good for x number of hours, and after that...Since the poor Firefly would never know how good the store battery was, and perhaps may have used it on another trip, he never knew what x was.

During this time, to cover my bets, I carried four sources of light: a carbide and and electric on my head, a 6-volt hand lamp tied with a prussik sling around my waist, and a match safe with candles. By this method I was always able to get out of the cave by using someone else's flashlight. I would first lose a tip, then a filament, then abattery. I only used the candle one time, in Newsome Sinks. Imitating the famous Baltimore Grotto, I stuck the candle to my helmet and explored away!

Everyone laughed at my two lights on a helment. Everyone who laughed later did the same thing. I have always wanted to have ahelmet with two reflectors molded into it, one carbide, one electric. Whenever your backup light is in your hand you've got to stop and get your light working before you can proceed. In climbing or rappeling or in water, it's rough. At any rate, they now wear two lights in Mexico, and whether I am in some small way responsible for that (through Lin Guy) or not, I feel vindicated.

I need to mention the famous miner's electric, which Birmingham introduced to the caving world. Back then they were about ten bucks. Now you can get the same thing by Koehler for $115. No one I knew ever complained about this lamp. They would wear them boastfully on many caving trips without a spare light, and then show up pne day wearing a carbide! No explanation was ever given. We all admired the lamp, but never bought one, even when they were $10 and I can't really say why. To avoid criticizing Koehler, perhaps those early lights had been through most of theircharge-discharge cycles being new lamps, and of course spare parts were hard to find.

I should mention the old handline. I couldn't count the number of trips on which the thing choked me to death. The handline was also subject to Murphy's Law. If we took it we did not need it; if we left it, we had to have it. I've done almost no pit exploration, but I'm sure that those experts have found that if they took 400 feet of rope, they would have 2 ten foot pits, -400 feet apart and if they took 50' they would have a 60' pit. I heard of one case where a spool of rope was taken to a popular vertical cave and for every pit the rope was cut the exact length. Then when they returned they found every rope had shrunk by 10%!

I'm going back to coveralls now. No one who has ever backed out of a muddy crawl without them will ever go caving without them again. Your shirt slides up over your face and arms while your belly is rubbed raw and covered with mud. On the other hand, no one who has climbed a mountain is 100 degree heat with coveralls on will ever wear them again. Perhaps the moral of this whole epistleis "if you love caves, don't go caving". Let me not forget the famous ammunition cases. For a long while, everyone who had a camera bangedtheir way through the cave with one of these. "It's easy to see"... bang...bang...bang...."how much these cases"...bang...bang...bang..."protect the camera." Unfortunately, they didn't protest the caver or his buddies. I quit using one when the attachment broke after going through GARY SELF. If it had broken when I was on rope, I could have killed someone. Besides, I felt there were better ways to protest a camera than to wrap it in foam and steel and use it for a rock hammer. In fact, I've never had a camera damaged in a cave after I quit using the ammunition case.

I'm not going to say anything about vertical caving. If I have had fewer mishaps than others in this area, it's not been due to lack of effort. Just lack of experience.

To get back to lights again, since I really wanted to write about lights, only these other things keep squeezing in. The best argument for the use of the standard carbide light, outside of the fact that everything else works just as poorly, is the exercise it gives your neck muscles. Back in '67 or so, someone put half of the light (the generator) on the back of the helmet connected by a tube to the front. This way, instead of your neck hurting from the weight, it hurt from the heat. Or so I suppose, since the idea has been dropped.

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Everything (cont'd)

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In '68 I started using the Justrite belt generator with a rubber hose and helmet reflector. The helmet (or head) attachment was overly complicated and poor, and the hose was so soft that I was forever relighting my lamp. Then on one trip the hose broke in half and I had to comne out bent over. With a new simple helmet bracket and the vacuum hose from a car, I quit having any troubles at all. I have been told that I had both the disadvantages of an electric (the hose and with the generator on my belt) and the disadvantages of a carbide. But actually I had neither. The cord and battery are not the real weaknesses of an electrric light. The real weaknesses are 1. poor quality workmanship in the switches, 2. poor electrical connectors, and 3. the limited life of the battery.

The problems of a carbide lie in 1. its heavy weight on the front of the helmet, 2. the need to frequently refuel, 3. the small generator size, making for irregular generation, and 4. it's being put out by wind or water and being hard to relight. My lamp has the last fault and none of the others. My complaint is that I always get cold waiting for others to recarbide. On one trip, after 11 hours, I did run out of carbide, so I put on my extra bottom. Normally I carry no extra carbide or water and only a pocket flashlight. And I'm sure that if I would clean my reflector once every five years, that I would have the brightest lamp in the grotto. I can't claim to have been the first with the belt generator. I got the idea from pictures of the European cavers who, while behind us on vertical caving, are not lacking otherwise.

For the Fireflies I would add that led-acid gel-cell rechargeable 6-volt bateries are now available with charger for about $20. Eight trips will pay for the battery, compared with conventia batteries, and if you can keep th battery together for its full life, i will be cheaper than carbide. Do not ge any tips from Milo Washington on you electric rig.

It is now the last paragraph in thi article, and as we learned in school, i is now time to sum up. Only I can' remember what I was talking about. If yo will wait until the next Grotto Newsletter, I will have an even longe article explaining what I was trying t say in this one.

EDITOR'S PAGE

Now that you've made it this far, you don't need us to tell you what is in this issue. We need you to tell us what will go in the next one.

We received this photo in the mail not long after reports of our MIRKWOOD find. It's been beautiful weather for ridge-sloshing, cave rafting and rapid rappels. Despite that, we're looking forward to a fine ridgewalk etc. this weekend and beyond. Keep each other informed of trips!

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