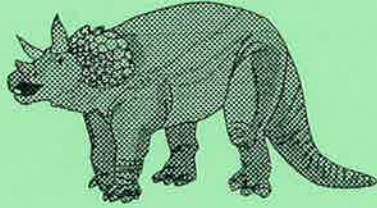


THE ROCKFINDER

Michiana Gem & Mineral Society
Tom Noe, Editor
305 Napoleon
South Bend, IN 46617



THE ROCKFINDER

MICHIANA GEM & MINERAL SOCIETY

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The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques.

General meetings are held the fourth Sunday of each month, 2:00 PM, EST, at Our Redeemer Lutheran Church, 805 S. 29th St., South Bend, IN. Regular exceptions include May (third Sunday), July (no meeting), August (club picnic) and the November/December meeting and Christmas party. Board meetings are held before the general meetings. The annual club show is Labor Day weekend.



Yearly Membership Dues (Payable by December 1)

_____ Individual \$10.00 per year
_____ Family \$15.00 per year
_____ Junior \$1.00 per year
_____ Subscriber \$7.50 per year

Please indicate areas of special interest.

General Geology _____ Beads _____
Gems & Minerals _____ Fossils _____
Cabochons _____ Field Trips _____
Faceting _____ Crystals _____
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Name _____

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Please send your dues and this form to
Michiana Gem & Mineral Society
c/o Bob Heinek

7091 E. East Park Lane, New Carlisle, IN 46552

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Membership Sally Peltz 269-683-4088
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The Michiana Gem & Mineral Society, a not-for-profit organization, is affiliated with the Midwest Federation of Mineralogical Societies and with the American Federation of Mineralogical Societies.

The Rockfinder is published monthly except July and August. Editor, Tom Noe, (ph. 574-289-2028). Co-editor, Herb Luckert, 221 Marquette Ave., South Bend, IN 46617 (ph. 574-282-1354). Reporters, Bob Heinek, Herb Luckert, club members.

Permission is hereby granted to reprint any original *Rockfinder* articles, as long as recognition is given along with the reprint.

Additional family names:

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Phone _____

PLEASE READ AND SIGN THIS SECTION:

With my signature I hereby release the Michiana Gem and Mineral Society, Inc., and its individual members and the owners of any premises upon which I enter under permit granted to the society, absolutely free of any liability whatsoever, to my person or my property, and further I will respect the equipment and property of the aforesaid owners.

Signed _____ Date _____

THE ROCKFINDER

Newsletter of the Michiana Gem & Mineral Society

Volume 43, Number 6

June, 2003

**Big interstate field
trip coming up
June 22.
See inside for
details and map.**

**Don't forget the
picnic,
Merrifield
Park,
Mishawaka.**

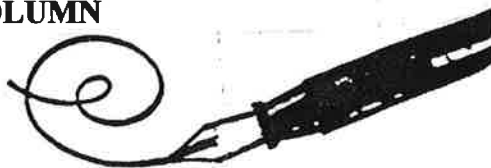


**WE NEED VOLUNTEERS TO WORK AT THE
CLUB SHOW, LABOR DAY WEEKEND.**

UP AND COMING

- June 27-29: Lawrence County Rock Club show, Monroe County Fairgrounds, Bloomington, IN.
- June 28-29: MGAGS Rockhound Seminar, Washtenaw Community College, Ann Arbor, MI.
- July 11-13: Rocky Mountain Federation convention and show, Casper, WY.
- July 30-Aug. 3: "Rockin' Around the World Show," Kingwood Center, Mansfield, OH.
- Aug. 1-3: Northwest Federation convention and show, Kennewick, WA.
- Aug 10: Michiana Gem and Mineral Society annual summer picnic, Merrifield Park in Mishawaka.
More information will be sent in flyer in July. All welcome!
- Aug. 15-17: Midwest Federation convention and show, Cottage Grove, MN.
- Labor Day weekend-our annual MGMS club show at Century Center.
- Sept. 19-21: Michiana Gem and Mineral Society field trip to southern Indiana.
- Oct. 17-19: Eastern Federation convention and show, Poughkeepsie, NY. Oct. 25-26: Evansville lapidary Society show, Washington Square Mall, Evansville, IN.

DIANE'S COLUMN



Would you believe I went to California to make rocks? Well, I really went to visit my sister, but she had a great plan for us to "make rocks." I had a hard time understanding the concept of making boulders until someone showed me an article in the *South Bend Tribune*, May 17, "Plasterer's Fake Rocks Find Real Market." Some advantages of fake rocks are: you have an opportunity to play with cement and plaster, you can make them a custom size, and they are a lighter weight so you don't need a backhoe to move them.

A trip to her favorite building-supply store provided us with ready-mix concrete and chicken wire. We used old buckets to shape the wire around, and then put concrete around that. The finishing touches were plaster and some color. It was quite an adventure, and we made several good-sized boulders. Then the weather became too hot to work outside: it was 100 degrees.

My sister has continued to make more rocks. I think I will stick to natural rock and I don't need boulders. It is more fun to go collecting with our club.

I hope to see many of you soon at our next collecting trip. Don't forget about the picnic on August 10. Make plans to help out at the Michiana Gem and Mineral Show on Labor Day weekend.

Enjoy your summer!

MINUTES OF THE MAY 18 MEETING

President Diane Gram opened the meeting at 2 p.m. In the absence of the secretary, Margaret Heinek read the minutes of the April meeting, which were approved as printed in *The Rockfinder*.

Hostesses providing refreshments were Pam Rubenstein, Mary Rumble, Lana Wright and Margaret Heinek.

Treasurer Bob Heinek read the treasurer's report, which will be filed for audit.

Committee reports: David Peltz reported that

Michiana Aggregates, between Niles and Buchanan, will allow us to make a field trip to their gravel p on June 22, so the June meeting will be a field trip.

David also reported that he had boxes of rocks for sale at his home.

Field Trip Chair Kathy Miller reminded members that she will need to have the money for Saturday's dinner ahead of time. The cost is \$13.00 per person, and the money can be given to her sometime before the trip or on the bus.

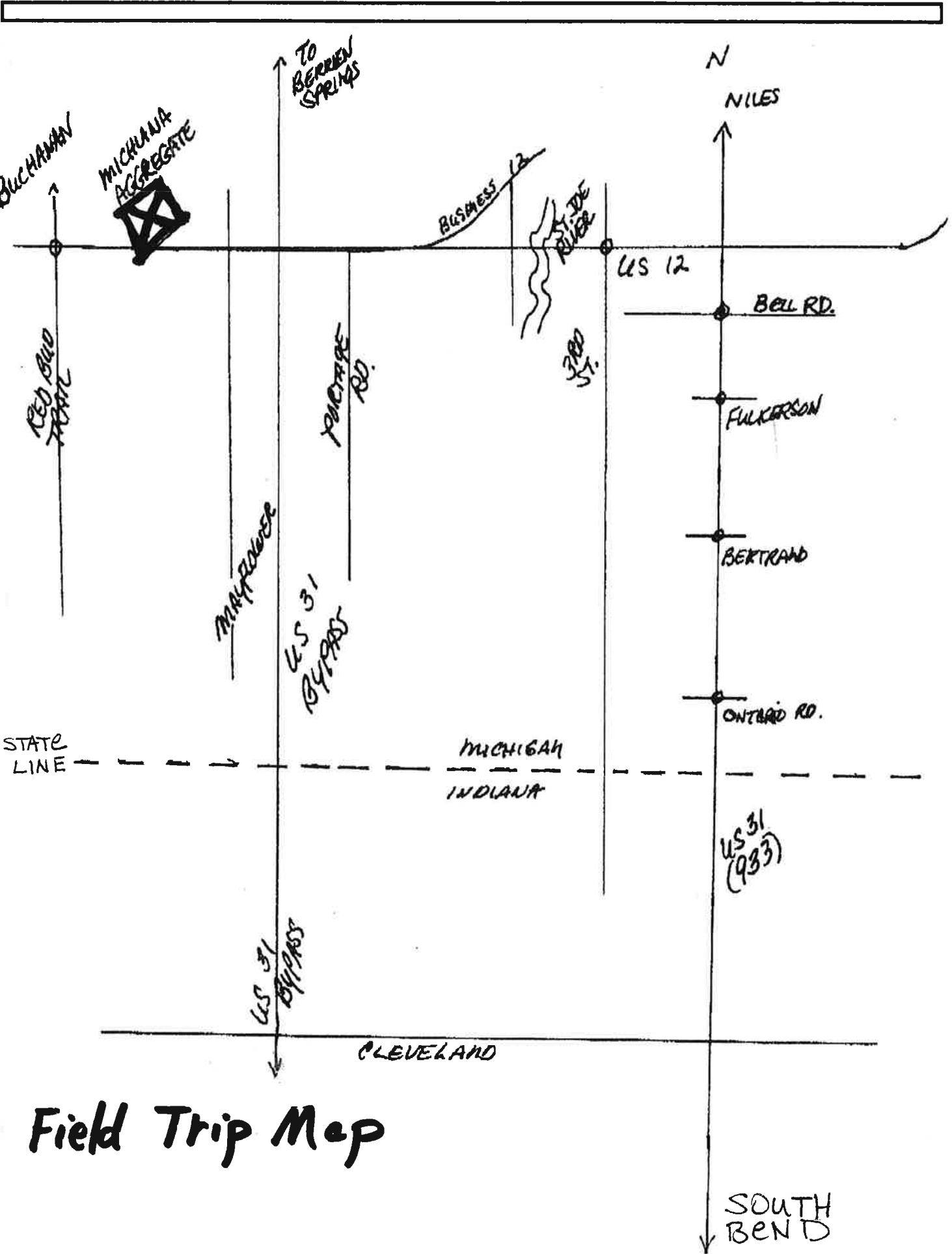
Speaking for the Bylaws Committee, Tom Noe asked that we consider and vote on the bylaws revisions which had been printed in *The Rockfinder*. Herb Luckert moved that members vote without discussion, since everyone had already read them. That motion was seconded and passed. So, Tom called for a vote on the changes and all were passed. One change needed discussion—a change which would have required that members must participate in at least three club activities before receiving free bus transportation on the annual weekend field trip. After discussion, this change was amended to read that only members who have participated in three club activities can go on field trips, with exception to be decided by the board. This change reflects provisions of our insurance coverage as well as concern for participation in activities. With new phrasing, this change to the bylaws was voted on and passed.

The annual picnic will be held on August 10 at Merrifield Park in Mishawaka at noon.

A scholarship check for \$150.00 was given to Bill Nelson, Jr., to help in college. Bill will attend Indiana University and study business, and the society extends our best wishes to him.

Door prizes were won by Margaret Heinek, Ed Miller, Phyllis Luckert, Yvonne Church, Ed Enos and Pam Rubenstein.

Margaret Heinek, Secretary Pro Tem



Field Trip Map

**Field Trip
For All Club Members**

June 22, 2003

*Michiana Aggregates
3265 West U.S. Highway 12
(just west of Niles and South Bend)*

See the map on page 3.

Contact person, David Peltz, 269-683-4088.
(Thanks to David for setting this up.)

There will be piles of glacial rocks (brought down from Michigan and Canada) sorted by size. You can hunt through the piles for fossils, minerals, etc.
No climbing necessary.

**Starting at 10 a.m. Michigan time; 9 a.m. Indiana time
(You can come later.)**



Fun!

Picnic News

Fun!

**The annual club picnic will be held at Merrifield Park in Mishawaka.
(Merrifield Park is where Mishawaka Avenue crosses the river.)**

August 10 at Noon

Bring a dish. Meat will be provided.

**There will be a flyer sent out in July
with a map and more information.**

Set this date aside on your calendars.



SALT IN ANCIENT ISRAEL

By Sam Shapiro

Since the Industrial Revolution 200 years ago, common salt (sodium chloride, NaCl, halite) has become exceedingly plentiful and cheap; the United States uses about 25 million tons a year, and it sells for about seven cents a pound. In the ancient world, however, salt was rare and expensive.

The Hebrew people recognized it as an important element in their religion. Here are some quotations from the Hebrew Scriptures that exemplify the use of salt in 3,000-year-old religious ceremonies.

1. "You shall season your every offering of meal with salt" (Lev. 2:13). Leviticus 2:11 prohibits the offering of honey or leavened bread, foods which ferment, or which grow stale and deteriorate; salt does not, especially in the dry climate of Israel. The oldest slogan in American advertising is for Morton's Salt: "When it [the weather] rains, it [the salt container] pours."

2. "It shall be an everlasting covenant of salt before the Lord for you and for your offspring as well" (Num. 18:19). This refers to salt's role as a preservative in the days before refrigeration, as in our salt codfish, corned beef, salted herring, pickled cucumbers, etc. The covenant, like salted meat, would be everlasting.

3. The Temple of Jerusalem, destroyed several times and never rebuilt after the Roman conquest, had provision for the washing and salting of sacrificed cattle with brine according to ritual prescriptions. (Ref. "Salt," *Encyclopedia Judaica*, pp. 719-711).

4. Elisha purified the water of Jericho with salt. "The water is bad, and the ground barren. And [Elisha] said, 'Bring me a new bowl, and put salt in it.' Then he went out to the source of the water, and cast in the salt there, and said, 'Thus says the Lord: "I have healed this water; from it there shall be no more death or barrenness."' (II Kgs. 2:19-21). Today, rather than salt, we use chlorine in our drinking water and our swimming pools.

5. Newborn infants were "rubbed with salt" (Ez. 16:4).

6. Orthodox Jews would put salt on the bread used to bless a meal before it began ("Salt," pp. 710-11).

GET READY FOR THE CLUB'S FALL SHOW AT CENTURY CENTER

This year, the club's annual show is scheduled for Labor Day Weekend at Century Center in downtown South Bend. This is our big annual fundraiser, and we hope that all the club members can help out with the many things that need to be done.

What can you do?

1) *Make some displays.* Put together a display case with some of your recent finds or put some old finds together in a new way. Sue Brown is organizing displays. Once you know how big your display will be, she can order the appropriate number of tables.

2) *Help out at the entrance table.* Contact Kathy Miller (574-291-0332 or kanbrock@aol.com) to volunteer to sit at the entrance table and sell tickets, greet patrons and answer questions about the Michiana Gem & Mineral Society.

3) *Help out at the silent auction.* Contact Tom Noe (574-289-2028 or toaf@bigfoot.com) if you can spend a few hours staffing the table, taking money, getting items ready for auction, etc.

4) *Donate or consign items to the silent auction.* All the money we collect on donated items goes into the club treasury. On consigned items, the owner keeps a percentage of the proceeds. Items should be geology- or lapidary-related: tools, rough rock, cabs, fossils, etc. Contact Tom Noe to discuss donations or consignments.

5) *Help out at the Kiddies Korner.* We need several people to staff this area of games and activities for young people. This is always lots of fun for everybody. Contact Diane Gram (574-272-6885) to volunteer.

6) *Help pick up or return items* that we need to move from the club's storage shed in New Carlisle. Pick up on Thursday night; return on Sunday after the show ends. Do you have a van or pickup truck? Call Diane.

All volunteers should contact the appropriate person well in advance so that you can be scheduled in for a few hours on the Friday (2 p.m. to 7 p.m.), Saturday (10 a.m. to 6 p.m.) or Sunday (10 a.m. to 5 p.m.) of the show.

Our annual show is ALL volunteer-run (this means you), so your help is important! The club is counting on you.

MOTHER LODE OF JADE FOUND IN GUATEMALA

The Olmecs flourished in the southern Gulf Coast area of Mexico and highly prized a beautiful blue jadeite that they carved into thousands of artifacts, including human forms and masks. The Maya prized jadeite as well, making use of it in funerary suits, jewelry, and even inlaying it into their teeth! These jade items are found all over Mexico, Costa Rica and Honduras, but where was the original source or sources? Was there any jadeite left? And how did knowledge of the source get lost?

The last question was most easily answered. With the coming of the Spaniards in 1519, a people who craved gold and had no use for jade, the indigenous pre-Columbian civilizations fell victim to the diseases of their foreign conquerors, and the knowledge of jade carving, mining and mine locations disappeared.

What about the source of the material? Scientists and archaeologists have been looking for the original source of Olmec-style jadeite for decades. Jade-hunting parties were sponsored by the Peabody Museum at Harvard, the American Museum of Natural History in New York, several universities, the Boston Museum of Fine Arts, and even a well-to-do jade collector, among others.

By the 1950s, geologists had studied Burma and other jade deposits enough to know that jadeite occurs in association with serpentine. They also knew that much serpentine is found in the Sierra de Las Minas and the nearby Motagua River Valley in Guatemala. By the 1970s, low-quality jade outcrops had been identified near the river, but it took the hurricane destruction of 1998 to set off floods, start landslides, expose veins of jadeite, and wash new chunks of it into rivers.

In 1999, one of the original jade hunters, Russel Seitz, was on vacation in Antigua when he spotted a very translucent hunk of blue jade about the size of his hand in a local jade shop. The shop owners did not know where the jade came from. So, in 2000, Seitz returned to Guatemala several times, climbing higher into the mountains north of the Motagua, finally reaching a vein uncovered by local workers which was six feet wide and 50 yards long! Samples tested out as high-quality jadeite. In 2001, Seitz and

a team of university archaeologists returned to Guatemala to find an ancient stone pathway, an old mining area, a habitation and a tomb site.

So there is jadeite left. South of the Motagua, giant boulders of blue jadeite were found, and the extent of the deposit is said to rival that in Burma. Just think, the Motagua deposit was worked for millennia, rather than the mere centuries in Burma.

Summarized by A. Schafer from an article by William J. Broad in the *New York Times*, May 23, 2002, and taken from *The Pegmatite* (June-July-August, 2002).

FOSSILS AND MEDICINE

by Fred Labahn

Now that you have collected fossils of many varieties and from many classes, I have some information of a historic nature for their practical use. In the end it could reduce your medical expense and save you some money. How so, you say. Well, I say, read on.

As I so often do in my spare time, I take a book or magazine from the shelf and glance through and perhaps recall something of interest. Recently I came across an article, "A Fossil for What Ails You." What follows is a review of part of the folklore connected with customs and practices dating back to the Paleolithic tribes of Europe.

As recently as 200 years ago many people in the world, including scientists and doctors, believed that among other things fossils had remarkable power to cure different ailments. Physicians and folk doctors didn't agree on why fossils cured people and animals, but they agreed fossils were good medicine. Would it surprise you to know oil of amber was listed in an important pharmacopoeia (list of drugs, their use and amounts) as a bonafide medicine as late as 1948?

The use of fossils reached their peak just after the Middle Ages. Physicians and folk doctors collected and prepared their own medications. In the 13th century, Emperor Frederick II of Germany set down strict rules ordering a separation of roles for the physician and apothecary. These rules, however, did not apply to the folk doctors. The apothecaries prepared the fossils for use by grinding them to a fine powder and then mixing them with wine, water or

other liquids for internal use. Honey, wax or other things were used to make ointments or salves.

In 1700 a large deposit of mammoth bones was found near the Neckar River. The Duke of Wurttemberg ordered a scientific dig. The scientists of the day did so and in the process got into an argument whether they were elephants brought to Europe by Hannibal, bones from old Roman sacrifices or animals destroyed by the great flood recorded in the Bible. While this was going on, the pharmacists, who collected materials for their own use, calmly gathered all the teeth and powdered them for medical use.

No one seems to know why certain fossils were used for specific illnesses, except that the shape of the fossil determined its use. An example, in Scotland the oyster *Gryphaea*, commonly called the Devil's Toenail, was used for arthritic joint pains.

Amber is the fossil sap of ancient pine trees. It has been used longer and for a greater variety of medicinal purposes. Powdered amber mixed with other medicines was given to pregnant women to prevent miscarriages. Powdered amber mixed with wine eased the pain of childbirth. A necklace of amber beads worn by small babies protected against secret poisons, witchcraft and sorcery. Callistrus, a Greek of the fourth century BC, believed that yellow amber if worn as a collar about the neck cured fever and diseases of the mouth, throat and jaws. Powdered and mixed with honey and oil of roses, it was an excellent salve used to improve dim eyesight. In the 16th century a doctor found a way to make oil of amber and from then to the 19th century it was used by many doctors for gout, rheumatism, whooping cough, bronchitis and other ailments.

Ammonites are the favorite fossil of many collectors all over the world. The Greeks of the third century used ammonites as a cure for blindness and snake bites. The snake bite remedy came from the belief that ammonites were petrified snakes.

Sea urchins were also part of the pharmacists' stock. A Cretaceous sea spine, found in Palestine, was used for almost 2,000 years. Pliny, the Roman historian of the first century, said that whoever licked it would find his gallstones broken and voided in short order, but Galen, a second-century physician, said that they should be crushed in mortar and mixed with water to be effective.

Belemnites were thought to be thunderbolts by people in the Middle Ages and still are in some parts of Great Britain. They were crushed, and the powder kept a person from being struck by lightning or bewitched by demons from the sky. They were also used to cure a variety of illnesses and prevented nightmares.

Fossil shark teeth were thought to be tongues of serpents which St. Paul had turned to stone on his visit to the island of Malta. Because of this myth they were believed to have power against the bites of any reptile. Wine in which shark teeth had been soaked was thought to be a good antidote for snakebite or any other poison.

Cures for ailments were also found in the use of jet, a very hard coal, dragon bones, unicorn horns (which were probably the horn of the narwhale) and toadstones, which were the teeth of rays.

I enjoyed reading of this use of fossils in early medical practice. For me, I will stay with modern medicine.

RFMS Newsletter (no date available)

DOUBLETS

By Bill White

Why Make Doublets? Two main reasons! To beautify and to cap the surface for protection, increasing the stone's usefulness.

Base Stones: I look for nice plume agates for most of my work but there is no reason to limit oneself (whatever you want). I have capped dino bones, malachite, opal, etc. In fact, one of my favorite stones was made from a very soft piece of chrysocholla; it now has a tough quartz cap.

The Cap Material, Quartz: Any good quartz that shows no internal flaws is fine. I like to use the synthetic (man-made). Cut these crystals parallel to the growth lines. By the way, if you have cut exactly parallel to the growth lines you have cut at the right angle to the C axis of the crystal. Try polishing a small piece on both sides. Place it between polarizing light filters. You should see brilliant colors and the interference figure of quartz.

The thickness of the material to be capped is stone-dependent but thin is best. I like to cap plume agates cut about 1/16th of an inch. If you do your own sawing, make a thin cut on all agates. You may find a big surprise. Sometimes an iris will drop; some people call them rainbow agates. Keep your eyes open at rock shows, since nice doublet material is hard to find.

Equipment Needed: The basic cabochon-making equipment is required: saw, grinder and polisher. You will also need a good adhesive. Use epoxy 330. It's clear and stays clear. There are other glues that hold well but they may yellow in time.

Prep, Prep and Prep: Flat means FLAT: Clean and reclean: All oil residue must be removed. Use your high-speed thinner, acetone, alcohol, etc. Now boil in water and pour off the excess.

Dop and Dop Well: Small stones are easy but large stones are a bit of a problem. Try hand-lapping on glass using 220 grit. The grit breaks down fast. Use thick glass, or glass will flex and stones cut thin will bend a tad. With your stone dopped from end to end, the rocking action which bows the stone should not be a problem. **FLAT MEANS FLAT** on both the base and cap stone. The epoxy will hide any scratches left by the lapping.

Adhesive: Glue pieces together: One more time: clean and reclean. Air trapped in the epoxy or between the cap and base is bad news. A vacuum

pump will pull out all trapped air. Most of our home shops have no vacuum pumps; my answer is the flame of a torch. Prep your work area in advance with waxed paper, a place to lay the stone, a small clamp, and a safe place to use the torch. Disposable latex gloves are useful. On stones 25 mm. or larger, I mix the epoxy on the base stone. A two-part epoxy must be stirred well, mixing the two parts. When well done you have a ton of bubbles and only a few minutes to work with. You may be able to squeeze them out on small stones but not large stones. A flame passed over the mix will pull out the bubbles. Fire loves air.

Do Not: Spread the epoxy on both pieces, only in the center of the base. Be careful not to touch the sides to be joined with your fingers.

Mix: More than you feel the job will take. Press the cap down on the base and clamp. Small pieces of polypropylene will prevent the clamps from being bonded. Epoxy will not stick to this stuff. A lot of foods are packed in this, but run a quick test to make sure the epoxy will not adhere. Place on a level surface to set. They can slide off center.

From time to time it may be necessary to take a doublet apart. Soak it in acetone or some other high speed thinner. It takes days or maybe weeks. Heat is a fast way. Place base down on a hot dop pot. It must be hot. The epoxy breaks down at 225 degrees. Wear gloves and slide apart. Quartz is not a good conductor of heat!

Midwest Federation Bulletin (Feb., 2003)