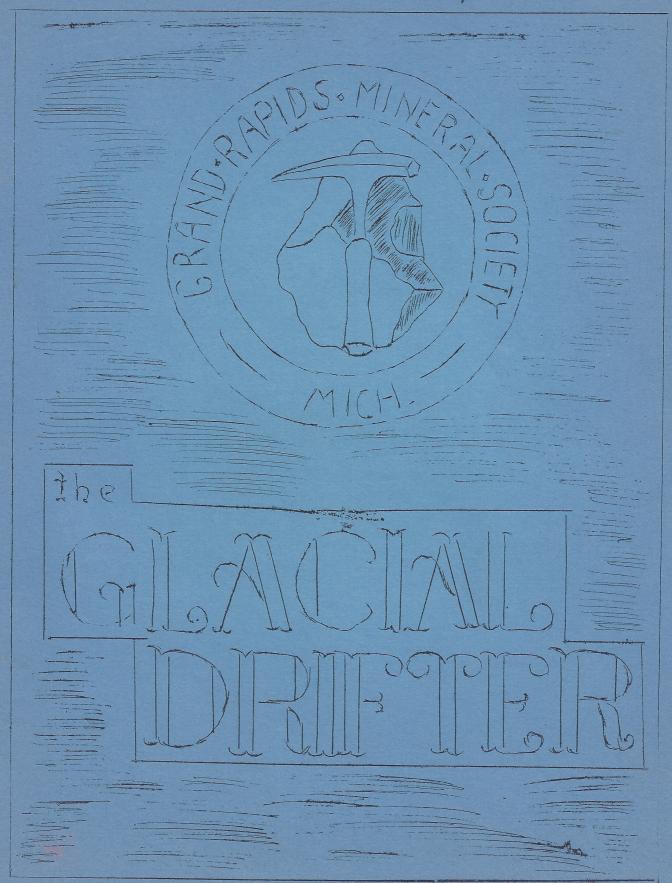
volume 7, no 8~ ~ april, 1965



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The Grand Rapids Mineral Society is a Non-Frofit Corporation affiliated with the Midwest Federation and the American Federation of Mineral Societies.

Meetings are held the 2nd ..ednesday of each month at 8:00 F.M. at RIDGEVIEW JUNIOR HIGH SCHOOL, Rosewood at Burton S E ( Sept. thru May ) Summer meetings are at various parks as announced.

Advertising in the GLACIAL DRIFTER is at the rate of 3.00 per issue (Sept. thru May only)

All material to be published must be in the hands of the editor no later than the 25th pf the month preceding publication, unless notified of an earlier closing date.

Permission to reprint material appearing in the DRIFTER is hereby granted provided proper credit is given.

Member - Bulletin Editors Association.

Fage 1

At the April 14th meeting to be held at RIDGEVIEW JUNIOR HIGH at 8:00 F.M. members and friends will have an opportunity to hear Mr. Bill D'Amour, a jeweler from Sparta and a registered gemologist give a talk on DIAMONDS. He will have a display of replicas of world famous diamonds for your inspection.

The Nominating Committee will present its report, after which there will be reall for nominations from the floor. The election will take place at the Annual Meeting in May.

Also, thanks to Henry Tchozeski's forethought in supplying slabs of cutting material to all interested lapidarys at the March meeting, there will be a Lapidary-of-the-month contest. All of you who accepted the challenge by taking a slab of this cutting material supplied by Henry will bring their finished product to this meeting for judging. Let's make this a bang-up contest!: If you haven't finished YOUR entry - get at it NOW! Let's see what YOU can do.

Joe Farish will have a number of door prizes for some lucky ones.

How about bringing your Betty Crocker coupons to this meeting.

"e have a good-sized box nearly full to send to the Scholarship
Committee and would like to get it off to them shortly after the
April meeting. These may be given to Nina Rozema or any other
member of the board. Used postage stamps are also needed for milk
for children who never get enough to eat. Let's get this box off
to the Old Timers Club too.

## MINERAL STUDY GROUP

The Mineral Study Group met at the home of Mr. & Mrs. Arnold ...endt in March. ...e were happy to have the Reeds back with us after an absence of a couple months while Fay was recovering from an operation. ...e also were happy to have Mrs. Max Ross as a new member of this group as well as two juniors whose names we didn't get.

The next meeting will be held at the home of wir & Mrs Fay Reed, 425 Lafayette N E on Thursday, April 22 (note the date) at 8:00PM with Joe Parish giving the lesson on Chapter 7 of Zumberge's Elements of Geology.

YOU too, are invited to attend this meeting. Remember the date April 22, Thursday.

To our Annual Rock Show exhibitors - a big bouquet of roses! Under the guidance of Nellie Mead we have again put on a wonderful display. The crystals, mineral specimens, fossils, and crafts were displayed in a masterful manner. The silversmithing group had an outstanding exhibit of their skills. From arrow heads to the cave men to the huge mural that graced the north wall, everything was tops! Again, congratulations to you all!!

In addition to a diamond studded program for April, we are again concerned with the nomination of officers for the next year. It is hoped that you will attend this all important meeting for the future benefit of our organization.

Jerry worris, Fresident Junior Gottes ja-

Although, while writing this the snow is still two feet deep, we know that spring will soon be here. Do you realize what nice mineral specimens can be found right around Grand Rapids? ..e suggest that the gravel pits around Grandville, Pla nfield Bridge, c and Cascade, are good locations. Look for banded chert, jasper, Fetoskey stone, and "pudding stone". Occasionally a fine Lake Superior agate is found also. Some really nice concretions, fossils, and strange unidentified specimens await you.

Always remember the safety rules:

Be careful when near the water, the edges are usually soft and the water deep. If chipping stone, always wear safety glasses. Don't go alone.

Take your book and magnifying glass, so you can identify your specimens. Good hunting, and bring your discoveries to the meeting for the rest of us to see.

Sincerely, wirs. Marilyn Damstra, Junior Jottings Editor 

## PRIZE WINNERS AT MARCH MEETING

Jade bracelet, donated by the Giffords, won by Edward Fryce Tourmaline group, donated by Lowell Palmer, won by James Van Vuren Pyrolucite slab, donated by Newton Cairns, won by Esther Hall onderstone specimen, donated by Helen Rigney, won by Lucile Pearl Package of cabs, donor unknown, won by Nellie Wead.

Joe Farish, Door Prize Chairman

# Calendar of Events

- April 14 Wednesday at 8:00 P. M. Regular monthly meeting at Ridgeview Junior High, Rosewood at Burton S E Nomination of Officers a talk on DIAWONDS by Mr. Bill D'Amour of Sparta
- April 19 Wonday at 8:00 P M. Board of Control meeting at home of Miss Jane Cichniewicz, 809 Franklin S E
- April 22 Thursday at 8:00 P M Mineral Study Group meeting at home of Mr & Mrs. Fay Reed, 425 Lafayette N E with Joe Parish presenting the lesson on chapter 7 of Zumberge's Elements of Geology
- May 1 2 Saturday and Sunday Field Trip to Indiana for geodes.

  Meet at 10;00 A M in front of the courthouse in

  Nashville, Indiana on Saturday and the same place
  on Sunday, but at 9:30 A M . There is good camping
  at Brown County State Park for those interested.
- may 12 mednesday Annual meeting Election of Officers Potluck dinner - outstanding speaker
- May 17 Monday Board of Control Meeting at home of Mr & Mrs August Post, 8200 Thornapple River Drive, Caledonia
- May 22-23 Field Trip to Rogers City as guests of the Muskegon Rock Club
- Way 27 Thursday Mineral Study Group meeting at the home of Mr & Mrs Joe Parish, 2212 Thornwood S W
- July 29-30-31 and August 1 MIDWEST SILVER JUBILEE CONVENTION in Evansville, Indiana

#### MINERAL SHOW 1965

Now that over 6000 people have viewed our sixth Annual Gem & Mineral Show, its chairman would like to thank all who have spent so many hours, not only fashioning their own very fine exhibits, but have given of their time during the past three weeks.

First to Dr. Rose who not only gave one Saturday program but two others for school children on Thursdays, displayed his beautiful cross, installed the two long cases of specimens in the center aisle and loaned the volcano display in the front window. He also arranged with Dr. Stonehouse at Michigan State for the very fine meteorite display inthe second front window. The show wouldn't have been nearly as good or my job half as easy without Dr. Rose's help and suggestions.

Lowell Palmer also contributed tremendously with a case of Thomsonites (both polished and in the rough), his diorama of Herkimer Diamonds, a large side case of specimens, and a Saturday afternoon talk in the Auditorium.

Bob and Nina Rozema were wonderfully helpful in arranging for the display of handwrought silver jewelry, large mineral specimens, and machinery. Nina was most prompt in getting out the necessary mimeographed sheets and putting the program into the Drifter. Bob did a splendid job of photographing the displays as you will see at a meeting in the near future.

Jane Cichaniewicz put in an eight-hour day typing labels, etc. as the entries arrived.

Lucile Pearl took care of the ribbons and insurance.

Jerry worris and Jim DeZwaan were most helpful with suggestions though Jerry would sometimes tell me to ask the chairman for permission to do something.

Russ Girard took complete charge of the Junior Lapidary demonstrations and the children, as always, were a big success.

Fay Reed scheduled most of the demonstrations before going to the hospital and Mrs. Reed had the hosts and hostesses well lined up. To the Reeds and to the hosts and hostesses, my thanks for coming in spite of the wintery weather: Mr. & Mrs. Robert Beauvais, Mrs. Gerald Morris, Mr. & Mrs. Glen Marvin, Mr. & Mrs. Ernest Gifford, Joan Afton, Larry Fegel, Russ Girard, Mr. & Mrs. Arthur Ferguson, Marie Spielmaker, Mr. & Mrs. Horace Merrick, and the Potter family.

The crowds surrounding the demonstrations spoke eloquently of the interest shown by the public in the field of lapidary work. The Silversmithing demonstration was followed on successive week-ends by Jerry M rris, Ernest Gifford, the Damstras, Donald Bowers and his son, and the Junior Lapidary Class. Henry Tchozeski was kept busy identifying rocks. (continued next page)

## MINERAL SHOW 9165 (continued)

Barb Roys, Jerry Morris and Joan Afton took time out from their busy schedules to help me with posters that were put in various shopping centers.

Tim Palmer came to our rescue and gave us some much needed publicity in her section of the Press.

Thanks also to my fellow painters: Mary Anne Maldron, Dorothy Materman and her daughter Adele, Clarence Ryan, and my own daughter Marian. The dinosaur mural was really a fun project and the twenty two children from the Saturday Geology Class seemed to enjoy painting the animals.

Eesides those already mentioned as giving programs, my sincere thanks to Mr. James Marron, Augie Post, Professor Lucke, Mr. Frank-forter, and Dr. & Mrs. Robert B. Smith. Each gave a splendid talk, and we hope it proved a well-rounded program.

To Mr. Frankforter, especially to Miss Allen, and to all the others of the Museum staff who helped so much working behind the scenes, (the mural had to be rolled up and carried to a safe place after each painting session) my sincere appreciation. Maybe they were glad there wasn't time to do a sea-bottom mural as originally planned:

And last but not least by any means, my thanks to Joe Parish who helped with moral support and with his "know-how" acquired in previous shows, in getting the displays in and out on schedule.

Thank you all.

Nellie Mead, 1965 Show Chairman

# FIELD TRIP-- MAY 1 and 2 - INDIANA for GEODES

Field trippers will meet at 10 o'clock Saturday morning at the courthouse in Nashville, Indiana and again on Sunday morning, but at 9:30 at the same place. It will be a good idea to bring your boots as you may be wading in the creeks.

# FIELD TRIP - MAY 22 & 23 - ROGERS CITY

The Muskegon Rock Club has invited members of our club to join them on a field trip to Rogers City on Saturday, May 22. Meet at 9:00 A M at the gate of the United States Steel Quarry. They are planning on camping at Black Lake State Park.

Be sure to wear a club emblem on these trips. If you don't have one you may obtain them from Jane Cichaniewicz at the April meeting for the low price of 75¢ each.

Jarie Spielmaker, Field Trip Chairman

This much for alchemic theories and the illogically logical thinking behind the often-times eccentric experiments of the alchemists. While there were many genuine enthuaiasts in the science, such as some of the men we shall list further on, the annals of alchemy are filled with accounts of charlatans whose antics shunted alchemy into one of the greatest frauds in history. The writings of these muddle-headed hoaxters are for the most part a meaningless mumbojumbo of cryptic terms and strange symbols that at the very best were not even fit for decorative purposes. While there was no sense behind the antics involved, public demonstrations of the "art" were often clever enough to fool the most cautious observers. wany people came to witness the "miraculous" change from common lead to gold and went away honestly convinced that it had been done. After all, had they not seen iron pots dipped into certain natural springs come out covered with a reddish yellow coating that looked like gold? In their fraudulent attempts at gold production, especially when endeavoring to gain royal patronage - some alchemists were led even to such devides as crucibles having fake bottoms of wax that concealed particles of real gold. In heating the rest of th the alchemic mess put in the crucible, the wax would melt and burn away without a trace, leaving a very convincing appearing gold residue. Of course, there was always the danger of the "fraud" being caught, and then the false pretense of obtaining gold was considered a felony. While these frauds flourished, they did so only as long as one could believe in their actions. It was a different story once they were actually proved to be fakes. History records the execution of morethan one imposter. Some were hanged, some - according to the custom of the times - labeled witches or wizards and burned at the stake. To discourage fake imposters, Frederick of Wurzburg (Germany) maintained a special gallows, ironically painted in gold - especially for those charlatans who failed in their promise to produce gold.

Medieval alchemy has gone down in popular history as a muddled sheaf of superstitious nonsense. Despite all the wild claims and attempts of the alchemists to reproduce various precious metals - notably gold - it must be admitted that many of the men aid have a quite realistic viewpoint about their own practices. At no time was the process of alchemy claimed as being supernatural or miraculous even by the greatest frauds of the lot and regardless of the farfetched results the men themselves hoped for. Rather, although, they tried to understand and reproduce the methods used by Nature herself and imitate them artifically. Thus among the conscientious alchemists, for example, a man well known as Albertus Wagnus, states honestly in his Do Mineralibus that alchemy cannot actually change species but only imitates them. For example, he admits, metals can be colored white to make them resemble silver or yellow to make them appear like gold. Furthermore, he adds, the "gold" he himself has tested that reportedly has been made by alchemists, he had found to be unable to withstand six or seven exposures to fire without alteration. Consequently, he has proved this "gold" to be only an alloy. (continued next page)

Unfortunately, such clear-sighted men were few, and the main body of alchemists preferred to close their eyes to facts and still lived in dreams and hopes that with the "philosophers stone" someday they might accomplish the impossible and render them selves rich by transmuting any base substance into the precious gold and silver. There were two groups of men in this latter "school of thought". We have already seen and discussed the hoaxters and charlatans who operated on pure greed and men's general credulity deliberately ignoring the impossible in order to put over a more convincing performance. The rest of the "believers" were the men who - while seeking gold - honestly hoped and believed that this could be accomplished in all reality.

Let us now review briefly some historical examples of this whole practice and see some well-known men who got entangled in this socalled science. Roger Bacon - the most learned man of his day believed in transmutation. During the Middle Ages, in nearly every European court alchemists worked to transmute lead into gold to improve the financial status of the kingdoms giving them patronage. For a good example of this we can list Emperor Rudolf II of Prague who had a number of small houses set up for the use as laboratories. These "cottages" were situated near his castle for the use of the alchemists who worked for him in attempting to make gold. England, some clearer heads in the Parliament, apparently seeing that the practice was futile, forbade the making of gold by alchemy in 1404, but later Henry IV overruled the parliamental decree and permitted a few alchemists to make gold for the king by transmutation. Henry IV, in 1445, granted two soldiers the right to make the yellow metal that was later used for coinage - some type of brassy alloy.

we sometimes think of alchemy as confined solely to the Dark or Middle Ages. As mentioned before, this idea is erroneous, caused by the developing of chemistry which thereafter held the major place in historical stage with alchemy far inthe background. We shall vet see that there is such a thing as alchemy even today. Meanwhile - man's yearning for gold did not stop with the conclusion of the Middle Ages, even though most of the devotees of alchemy turned to the new science of chemistry as it sprung up. As late as the 17th century, while the stage was alreadybeing set up for the Enlightened Age in world history, Robert Boyle (1627-1691), the president of the Royal Society of England himself, was so impressed, that he helped to obtain the repeal of an Act of Parliament against the manufacture of gold by artificial means. Even as clear a scientific thinker as Isaac Newton (1642-1727) couldn't resist the temptation to meddle with "philosophers stones" in that hope ..... and built a small laboratory in Trinity College where he tried various transmutation experiments.

..e delight in the clear thinking of our present times which permits no superstition and unmasks all false pretenses. Surprising though it may seem, when reading in history we can find that we have been somewhat guilty of belief in old-fashioned alchemy ourselves here in the United States. At the beginning of the 20th century an (continued next page)

# METAL OF MAN'S DREAMS (continued)

alchemic enterprise was started in this country by a Dr. Stephen H. Emmens. This Englishman claimed to have discovered "argentaurum" - a modern-day 'philosopher's stone". And it may seem perfectly incredible, but he actually sold the United States Assay Office ten pounds of "precious metal" - an alloy which he himself had prepared.

we must admit that much or rather most of alchemy was nothing but hocus pocus. However, made up of dreams and avarice or no, it must be conceded that some actual good did result from the alchemists garbled science. Advances in early chemistry were the direct result Some of the utensils and tools used in modren of such experiments laboratories even today were first discovered and introduced by alchemists. And - when we come right down to it - strangely enough even all the gold-researching attempts were not outright in vain. Rather - the extraction of gold from ores by amalgamation with mercury, which process we shall see shortly, was re-discovered during this period of avaricious seeking for the precious metal. Many of the chem cals common to us today were discovered in those early days - such as: alum, borax, ether, fulminating gold, iron and silver salts, etc. Ferhaps the alchemist never did really find the "philosophers stone", yet they did pave the way for modern chemistry and modern "alchemy". Since alchemy was a science based on the belief in transmutation, modern version of it can be said to have come about with the first real case of natural transmutation, that took place not along after the Curies discovered radium in in 1898. It was noted in observation that by a perfectly natural process this element gradually changed to lead. Later, in 1919 first man-made transmutation was brought about by Ernest Rutherford who changed nitrogen gas into oxygen and hydrogen by bombarding it with swiftly moving helium ions. Only a short thirteen years later another Ernest - Ernest O. Lawrence of California in transmuting many elements on a very minute scale with the aid of the newly invented machine - the cyclotron. These were the beginners, and finally during the work on atomic energy in the 1940's modern . alchemy became a proper science as American scientists achieved transmutation on a relatively large scale. Not only six brand-new elements were created, (neptunium, plutonium, americum, curium, berkelium, and californium), but thus it has come about that the dreams of the old alchemists have finally been realized. Not only the age - old attempts of transmuting lead into gold have been finally accomplished, but modern scientists (or shall we call them alchemists?) have now learned how to extract gold from such apparently unlikely material as sea water. The mythical thing called "Philosopher"s Stone" is outdated in the laboratories, though, an atom smasher is employed in making gold from lead. This same atom smasher can also produce an unstable form of gold even from platinum and irridium. However, since both of these substances are more valuable than gold, this method is not really very practical. Needless to say, that alchemic accomplishments notwithstanding, the bulk of the gold produced still comes from Mother TO BE CONTINUED IN MAY DRIFTER Earth.

Look for Chapter II, Part 3 next mombh.

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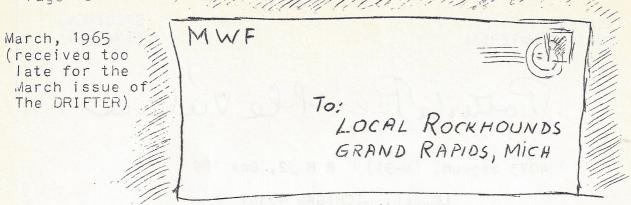
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WYOMING MICHIGAN



THE 100 PERCENTERS CLUB OF THE AFMS SCHOLARSHIP FOUNDATION

To those clubs and societies whose contributions to the Scholarship F Fund to date total 1.00 or more per member, the Foundation wishes to issue a ONE HUNDRED PERCENTERS CERTIFICATE.

This is in recognition of the fact that it takes real interest and real doing to achieve such 100% participation.

If your Club has made e ther one or several contributions, in money or coupons, or both, during the years that the Fund has been building up, totalling as many or more dollars asyou have members on your roster -- here's what you do:

Write to the Foundation Treasurer, giving the approximate dates and a and amounts of your contributions also state the number of members on your roster.

He will verify this date from his records and, if correct, will certify it to the President of the Foundation; the President will thereupon issue a Certificate to your Club or Society, and will send it to the Officers you designate, in grateful recognition of your special efforts and support.

It is not possible for the Treasurer to initiate this Award, since that would involve setting up a separate according for each of our 800 or more member Societies - an obviously tremendous undertaking. The records do show all contributions, in the order of their arrival, by donor and amount, and it will be readily possible to verify the data you submit in response to this announcement.

Send the suggested data now, or at any time in the future, to the Foundation Secretary, W. H. deNeui, 6600 Cornelia Drive, Minneapolis, Minnesota 55424.

Richard ... Burnbam, President, AFMS

NOW HEAR THIS - from Bill deNeui, Foundation Treasurer

The Scholarship Fund has just been enriched by a further check from the Stone Steppers Club, Forthworth, Texas. With the check comes this letter, written and signed by it's president, Donald B. Langston, so apparently, it means business. Proclaims Wr. Langston: (continued next page)

#### MWF march Letter (continued)

"Since our Club was the first in the nation to contribute 1.00 per member to the Scholarship Fund, we have now set a goal to contribute 1.00 per member each year. Le hereby challenge all other Clubs in the AFMS to do likewise".

How do you like that? Are you folks going to just sit and let this guy from Texas get away with this sort of talk, or are you going to do ammething about it?

#### AFMS SCHOLARSHIP FUND

Your direct and active interest in making your club a ONE HUNDRED PERCENTER CLUB as helped make possible the Fund increase this year from \$2,772.00 on November 1, 1963, to the present \$9,091.00

17 clubs are being awarded the gold 100 Per Center Certificate.
Many clubs require but a few more dollars to qualify. AFMSwishes
to include your club in the next listing. This and personal gifts
pending, with Betty Crocker coupons, will put the Fund over the
"10,000 mark, making possible the first AFMS Scholarship of \$300.00

There are many ways in which this has been accomplished: by budgeting, by matching club member gifts from the club treasury; by auctioning mineral specimens; and by contributing from funds raised that were not of an educational nature, such as profits from Christmas parties, etc.

The program is now under way for selecting the outstanding earth scientist who will receive the plaque and make the first AFMS Scholarship Award.

Two AFMSDirectors have completed the first step. Mr. Russell kemp of our own midwest Federation, working with Mr. Merton Young, President has secured the acceptance of the following two men: Dr. millard Parsons, Detroit, michigan; head of Geology Dept. Mayne Univ., a past president of the Michigan Gem & Mineral Society, and Dr. Benjamin Moulton, Terre Haute, Ind. head of the Earth Science Dept., Indiana State College, a past president of the Terre Haute Society.

Mr. Paul Seel of the Eastern Federation, working with Mr. Francis Trapp, President has secured the acceptance of the following two men: Dr. D. H. Donnay, Dept. of Chemistry, John Hopkins Univ., Baltimore, Maryland, a world wide scientist in the field of crystallography and Dr. Arthur Montgomery, Dept. of Geology, Lafayette College, Easton, Penna., teacher in mineralogy and geology and active in the Mineralogical Society of Pennsylvania.

(continued next page)

## MWF LETTER for April (Continued)

Other AFMS directors are completing their selections. These men are well qualified to select people who have made an outstanding achievement in Earth Science and state the qualifications for the selection.

You can see that the directors are doing their part in preparing to issue the AFMS Scholarship which you are making possible with your increasing contributions.

#### ONE HUNDRED PERCENTER CLUBS

In addition to the Texas club which we reported in our March "Letter" as the first club to be a 100 percenter we have word that the Rocky Mountain Federation leads in number of clubs qualifying with a total of 9. The Northern Oklahoma Gem and Mineral Society has contributed on the basis of over 2.50 per member. The Texas Federation follows closely with a total of 6 clubs.

The California Federation has submitted two clubs.

NOT ONE midwest club appears in the first published list now out, although word is coming in that one or two are sending in for certificates and will appear on the next. BUT... all Midwest clubs should take an active part in this great work ... get busy now and have your name on the coming lists. THANKS

# A TIP FOR THE LAPIDARIES) - by Russ Girard

..ith due apologies to the little old brush maker, Fay Reed, I would like to submit my father's method of making acid brushes for applying polishing compound, etc.

The materials needed are an old worn out paint brush, and a small scrap of 5/16 or 3/8 copper tubing. Simply cut off enough of the bristles from the paint brush to fill the copper tubing,

Put the bristles in one end of the copper tubing. Squeeze the end of the tubing in a vise, and voila, an acid brush. The craftsmanship leaves something to be desired, but you will come up with an exceedingly practical gadget. You can leave this in the polishing compound without danger of rusting.

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