This is an interview of Mr. Robert L. Deaux, a retired Air Force officer who now cuts gems as a hobby.

Interviewed by: Debbie Ulmer and Donna Thomas

Q. How long have you been in Savannah?
A. I came in 1951 from the Far East.

Q. What reason?
A. I was stationed at Hunter out here, rather, stationed under Hunter, but I was chief Air Force Rescue Boat Squadron which was out at Thunderbolt and we worked airplane crashes and stuff like that when airplanes went down at sea. I was the rescue boat skipper. It sounds funny to say that you're a skipper in the Air Force but I was. Tow skipper that is and I retired from Hunter in 1960. Since my children grew up here I just stayed here. And it's a good town.

Q. What are you doing now? This?
A. This is what you call lapidary work. It is the art of cutting gemstones. I learned this in World War II in the Philippine Islands on the Isle of — London Isle in the southern Philippines. I learned it from a Philppino.

Q. How long did it take you to learn how?
A. Not very long.

Q. How long is that?
A. Three months.

Q. How did you start out?
A. Well, just by taking and working with soft stones like the mother of pearl. You can take an ordinary hack saw like you cut bolts and metal with. And cut it, and then you can shape it with a file and sand it down with sandpaper and polish it with ordinary metal polish. Mother of Pearl is so easy to work with.

Q. Have you been doing this as a hobby since then?
A. Since 1945.

Q. Is it very expensive?
A. No, it isn't.

Q. What kind of stones do you work with now?
A. All minerals excepting precious stones. I do cut opal but no other precious stones. Rubies, emeralds, sapphires, diamonds I don't fool with. Too much money. After all, I do it for a hobby and I'm not trying to make any money out of it.
Q. What kind of equipment do you need for this?

A. Well, you have to have, or else buy in the beginning material that has been slabbed up from an ordinary bolder. You first take the bolder, usually a small bolder, and you slab it—just like slicing a loaf of bread except you have to slab it with a diamond saw. Then you mark out what stone you want to cut out of it, the area you want it cut out of for a stone, I should say, and the size and shape that you want it in. Then grind it down on a rough wheel with water running over the wheel to keep it cool until you get it the exact size and shape you want and then you fasten it with ordinary stationery sealing wax to a short piece of round dowel. The lapidarians call this dowel a dopstick and it's anywhere from two to four inches long. That's actually the handle you hold it by while you grind the top of it to shape it. From the wheel, the grinding wheels, you grind it on progressively finer sandpaper. You finish it then with a metallic oxide powder. That is your polish. Then you take it off your dopstick by whatever means you want to use. Mount it in whatever mounting you want to use.

Q. Is that kind of gluing it?

A. Sealing wax, ordinary stationery sealing wax.

Q. And it won't come out.

Q. How long have you been working here on River Street?

A. About three months.

Q. Did you ever have a shop before you came down here?

A. No, except in my backyard. I did it as a hobby. I only made it for friends and family, was all.

Q. What kind of experiences have you had through this in Savannah?

A. Very little, frankly. Mr. Roberts, that owns this place, asked me to come down here and do this. Otherwise, I still would have been just fooling with it in my backyard.

Q. What kind of people come to River Street?

A. All walks of life. Everybody from bums to multi-millionaires.

Q. Have you met any interesting people?

A. Lots of people. After I retired from Service in 1960 I delivered yachts up and down the coast here and met a lot of quite wealthy people. Some of them have come in here in the last three months since I have been in here. They're on the way back to Florida for the winter.

Q. Who did you do that for? Were you working for a private company delivering yachts?
As working for myself, the mariners know you; if you're reliable the mariners know you.

Q. Oh, it was their yachts?

A. The owners would approach a mariner operator and ask if he knows a skipper that will take it. He'll get off and catch an airplane or something usually and go on and leave the boat and you deliver it wherever he wants it delivered to.

Q. So you've worked down on the river front a good bit?

A. Well, yachts don't come up on the river front. The Marina is on the inter-coastal. I skippered research boats for oceanography laboratories, oil companies looking for oil and oil explorations.

Q. Working on the river front you've met quite a few interesting people. Have you met like famous, I mean, important people in Savannah?

A. Not that I know of. There may have been some of them in here, though.

Q. Just famous people from all around, then?

A. Yes. You can usually tell if a person is by the way they act, by the way he dresses, and the way they talk.

Q. You were stationed in Savannah is that what brought you here?

A. That's why I came here. My home is Mobile.

Q. Then why did you stay here?

A. Because my children grew up here and to them it was home. They couldn't remember anything about any place else.

Q. Did you ever want to go back?

A. Well, not particularly. I want to stay where my children are.

Q. Did you ever wish that you could go somewhere else, not necessarily Alabama?

A. No! I'm happy here.

Q. What about, weren't you in the Philippines?

A. Right.

Q. What about some of the comparisons between Savannah and the Philippines, how they're alike and different?
A. Well, it's a tropical climate for one thing, it's very very
hot. And the city of Manila is almost identical with the city
of New Orleans except for the color of people. You have the
little narrow streets and narrow sidewalks, one way streets,
crowded old Spanish type buildings and that sort of thing. And
they wander all over the place, no rhyme or reason to the streets
no rhyme or reason to the kind of buildings they have. It's
really, it and New Orleans is almost the same to me. I've
lived in both places.

Q. Is it a good bit different from Savannah?
A. Oh, yes. No comparison between it and Savannah. None.

Q. Well, what are some of the differences? How is it different?
A. Well, Savannah is a nice planned city. The streets are planned
and laid out. They don't wander all over the country like they
do in New Orleans and Manila. The buildings and boat cities are
entirely different. Except for the downtown buildings. They
resemble one another, but that's all.

Q. Are French Quarters in Savannah kinda like that aren't they?
A. That's like the intramuros in Manila - it's exactly the
same thing. Same type of area in Manila. Just about like
the French Quarters in New Orleans. Lot of people won't
agree with that, but I think so. The girl that was in here
a moment ago - her brother is outside of Manila now. The
one that this stone belongs to.

Q. What kind of stone is that?
A. Regular Quartzite.

Q. Where does it come from?
A. Argentina.

Q. Where do you get these stones?
A. Buy them from mineral supply houses.

Q. In Savannah?
A. No. Closest mineral supply house, I know of, is Atlanta.

Q. They get them from the mines?
A. They get them from the mines, usually. I can order them
from the mines, too, but I don't buy that much of them.
These mineral supply houses buy 10 or 15 tons of a particular
mineral at the time. Whereas I only need - say - 5 pounds.
Q. How long will that last you - 5 pounds?

A. Six months, of one particular material, you see. When you've got several hundred different minerals, then that runs into a lot of different things, see. Like this right here. That's Mexican lace agate.

Q. Mexican what?

A. Lace agate.

Q. Do you have one already polished like that? That's what it looks like?

Q. How many different materials do you work with?

A. You can't say that. There's no way. I suppose in here right now - I probably have 200 different minerals. And you can't name all of it, for example there are over 5,000 named agates.

Q. What's an agate?

A. Well, at one time, agate was quartz. It's undergone compression and heat changes and stuff of that kind. These are little round agates, right here. Some that's been cut out. These large gem bells there are all agates. This is Carnelian. You've heard of Carnelian, I know. Carnelian's nothing but a reddish agate; that's all it is. That's what I mean by named agates. Jasper, Bloodstone, for example, is a Jasper.

Q. Jasper is not precious?

A. Semi-precious.

Q. What's the difference in precious and semi-precious?

A. Well, there's really no difference. Whoever dreamed up that difference didn't know much about what they were talking about. The diamonds, rubies, emeralds, and sapphires, and opals - those five - are considered precious gems, because they're usually so much higher than the others.

Q. More expensive?

A. Uh-huh. Of your semi-precious gems - or - minerals or materials, whichever one you want to call it, about the cheapest and easiest to work would be your mother of pearl and obsidian.

Q. Why is that easier to work with?

A. Because it's so plentiful and so soft. Your diamond is the hardest.
Q. What makes them soft, and what makes them hard?

A. Made up of different minerals. That's about the only answer I can give you. That's the way they form in nature. Nature makes one mineral harder than it does another. The diamond is the hardest of all, and talc is the softest of all.

Q. Do you get them already cut in these slabs?

A. No, I cut them with a diamond saw.

Q. So, actually, you just get a boulder, then?

A. Yeh, like this right here. That material is called lachter lazuriite, and it comes from Grave Mountain, Georgie. This is a slab of it, and this is a boulder of it. And you slice that thing with a diamond saw just like you'd be slicing a loaf of bread with a knife.

Q. Do you have to get it a certain thickness to work with it?

A. No, usually, if I'm going to make a large stone with it, I'll slice it a little thicker than I do if I'm going to cut a small stone. Because if it's cut real thick and cut a small stone it sticks up too high. But if it's going to be a large stone you don't want it to come up for height.

Q. Well, to get the curvature of the stone that you want, is that just kind of learned?

A. Yeh, you have to judge that with your eye while you cut them. If you hold it up and see if both sides and the end have as close to the same curve as you can judge with your naked eye. You've nothing to measure it with — no way to measure it, except the naked eye. A lot people, when they're cutting it, one end of it will drop down a little sharper than the other end. This is a badly cut stone. Both ends and both sides must taper downward exactly even.

Q. Well, if you cut one end low or something, would you just throw that stone away?

A. You'd lay it aside if you couldn't recut it for something else, into a smaller stone. I'd lay it aside and probably cast into a rosin object of some kind like a table top or a toilet seat.

Q. How do you do that — make the toilet seat?

A. Well, you mix your casting rosin — in here and let it get almost hard and then you put all your gem stones that you're going to put in it. And then you mix up some more rosin finish filling up the mold with that rosin. And when it hardens your gem stones are embedded in it.

Q. What color does it come out?

A. Comes out crystal clear.
Q. What do you make the casting rosin of? What's in it?

A. That's what it is. It's a polyester rosin.

Q. When you buy--say a ring with a stone in it in a jewelry store, is it done by people that just cut it by hand or is any of this done electronically?

A. Well, most of it is cut in a jewelry manufacturing center. New York is a big manufacturing center for jewelry. And Newing Brothers in Atlanta manufactures mountings, cut stones and all that. Most of your diamonds are cut -- in this country -- in New York.

Q. So, it's still hand-cut?

A. More or less, yah. Now in Eberoverstein, Germany, they use automatic machinery over there. But, for example, a diamond that's cut on automatic machinery only has 52 facets on your standard brilliant round cut diamond. Whereas if it's individually cut on an ordinary faceting machine that most of these hobbyists use or the professional diamond cutter uses -- there's a couple here in Savannah; I don't know who they are, but they're here -- will have 58 facets instead of 52.

Q. What's a facet?

A. That's the flat spot on your stones. On the faceted stones.

Q. And, the more facets you have, the more sparkle it has?

A. The better, more sparkle it has, and the more expensive it's going to be. But on automatic faceting machinery where they cut 5 or 600 stones on one machine at one time, they only have 52 facets on your standard round-cut brilliant. These are faceted stones right here.

Q. How many facets do they have?

A. I don't know. I haven't counted. I would imagine they have 58, but I don't know that.

Q. Did you cut these?

A. No. You can cut a small stone into as many as 120 facets. But it takes a long time, and it makes the stone very expensive.

Q. Does it make it more fragile?

A. No, the material is still the same material. No matter how many facets it has on it, it's still the same material.

Q. Wouldn't it make it easier to be chipped?
Q. Well, then, how expensive a stone is, depends on how long it took to make it?

A. A lot depends on it, yes. An awful lot depends on it. You take diamonds, for example. Diamonds are one of the most common of all gemstones, and the price is artificially high because of the monopoly that the Beirs Corporation has on the supply of diamonds. If it wasn't for the monopoly that they have, you could buy diamonds as cheap as you could buy garnets. It's not because they're scarce or anything like that. The prices are kept up there artificially by artificial means. They can't operate in this country. If a diamond cutter or diamond-cutting company wants to go buy rough diamonds to cut in this country, he has to go to England or Antwerp and buy them there and then bring them back because it's a monopoly, and that's against the laws of this country.

Q. You can't buy them from them?

A. You have to go over there and buy them from them.

Q. Oh, but it's still buying them from the company?

A. Right. You're outside this country. See what I mean?

Q. Uh-huh.

A. You could... you could probably buy diamonds as cheap as you can buy a garnet, if it wasn't for that.

Q. How'd they get the monopolies?

A. 'Cause they control most of the diamond mines in the world.

Q. They own the diamond mines?

Q. How do you get into doing this? Say a professional gem-cutter. He just starts from the bottom learning from somebody?

A. No, there are schools in this country that teach you how to cut gems. I don't have the address with me, but the Geological Institute of America has schools. I think there's one in New York, one in Chicago, Detroit - somewhere where they teach them. Most people learn to cut gem stones by joining some lapidary club like the one here in Savannah.

Q. Where is it?

A. Well, it meets at the Savannah Science Museum every second Wednesday night of each month. It's a club that has about 35 members. And you can join it, and they have programs that show procedures to different minerals, the values of the different minerals and all that sort of thing. They have one piece of equipment at the Savannah Science Museum
where they try to get classes and get somebody that knows how to teach, to teach the ones that want to learn.

Q. Are you a member of this club?
A. Uh-huh. Sure.

Q. Do you teach?
A. I don’t have time. I would teach. I’ve taught down here. Once in a while, somebody comes in, and I’ll teach them how - the very basics. It doesn’t take them too long to learn.

Q. Where can you get the equipment if you wanted to learn?
A. Well, there are many companies in this country, like this one right here, and you can buy this equipment. Most of this stuff here I made up myself - most of this equipment.

Q. You made this equipment?
A. See, it’s just electric motors with a sanding disk on the end of them; that’s all they are. I order the findings out of this catalogue. Most of this here and those rocks and diamond saw over there and all came out of this catalogue here.

Q. Is this a very big thing in Savannah? Do a lot of people know how to cut them?
A. It’s very popular. I think there’s 35 members in that gem club.

Q. Is this only club of this sort?
A. In Savannah, yeh.

Q. Do you know how long it’s been in Savannah?
A. I think it was found about 8 or 9 years ago, somewhere in that area.

Q. It’s relatively new, then.

Q. It is mostly people that just do it as a hobby or does it include professionals?
A. It’s a social club. Actually, it’s a social club, you know? And they just work at it as a hobby. You have some members that do it as a business - try to do it as a business. I don’t know whether they make any money at it or not; I don’t. It’s still a hobby even if I am down here.
Q. Do a lot of people come in and buy your rings?

A. Uh-huh. Lots of them. Most of them bring their own pretty rock in and want me to make them a set out of it.

Q. And then they can pick out the setting?

A. Uh-huh.

Q. In the club, is it mostly people that are retired or have their own business?

A. Most of them are retired, yes.

Q. Are there very many young ones that are just learning how to do it?

A. A few young ones. We have one girl, she graduated from Armstrong in the spring. Carol Owens. You know her?

Q. I don't think so.

A. She's going to vocational school up here right now. She'll probably be down here after awhile. She usually is. And a couple of her friends are starting to join now. And we have some that are around 30 to 35 years old. But most of them, like you say, are retired people.

Q. Did most of them just start out as a hobby, like you did, or did very many of them go to school for it.

A. That's right. Start out as hobby, and some of them go to the trouble to teach them how to do it. I used to when I was working for the Science Museum. I taught a lot of them down there. See, all the lapidary club's equipment is at the museum in the workshop. And I taught a lot of them how to use that equipment - that slab saw and trim saw and the rocks and sanding disks and stuff.

Q. How was the club started?

A. I don't know. I haven't been in it very long. About 3 years is about all.

Q. You taught at the Science Museum? You worked there?

A. No, I worked for a science project they have down there at the Science Museum. I didn't work for the museum; I worked at the museum. It was a biological science class they have at the museum that is sponsored by the federal gov't. And funds are paid out through Chatham County Board of Education. They take high school students and send them through this course down there. It lasts about 6 weeks, I think.

Q. What does it involve?
A. It involves a little chemistry. What they do is take these students from the local high schools, and they take them out on the boat — shrimp boat, which is chartered — and they pick up samples of the bottom and samples of the sea-life in the estuaries, and they bring these specimens that they catch back to the museum and run them through the laboratories — find out just exactly how many they caught, what kind of water they were in, the salinity of the water, the temperature, the oxygen, dissolved oxygen content, and all that sort of thing, and dissect them, find out the contents of the stomach — see what they've been eating. It's a short biological science course, really, of the estuary life — marshland, sounds, and the creeks and rivers.

Q. Seems like it'd be interesting.
A. It is.

Q. Exactly what did you do?
A. I was an engineer. I built and repaired, and that sort of thing, all the equipment. They have quite a bit of laboratory equipment down there, electronics equipment, watered still, and you name it, they've got it. It's one of the best equipped laboratories around here.

Q. Did you ever go to a technological school or anything, or did you just learn this in the air force?
A. No, I went to an aircraft engineering school. And you learn a lot of different things in an aircraft engineering school. That was years ago.

Q. Has the Air Force changed very much?
A. Oh, yes. Not even the same thing.

Q. Why?
A. Well, when I first got in the Air Force, they had old bi-planes -- a fabric covered airplane. And from that, your super-sonic jets is quite a step.

Q. Has the way they make the men act changed?
A. Oh, yeh. Discipline in the service today is different between the way it was back in the 30's and the way it is now. Another thing, I've been away from the service for 14 years.

Q. How do you think the discipline has changed?
A. It's terrible.

Q. Why do you think so?
A. You don't have an armed forces in this country anymore. All you got is a mob.
Q. Are they taught as many things? Was it more specialized or versatile when you were in it?

A. Now, it's more specialized. They teach a man one job, and they're making him stay on it. Used to, you went from one job to another. For example, you could be a radio operator, and if you got promoted, you might go to the motor pool or something, you see.

Q. Do you think you learned more that way?

A. Oh, yes. You learned a lot that way.

Q. Were they skills you could apply when you got out?

A. Yes.

Q. I guess you could.

A. I could have gone to work for an airlines if I had wanted to when I got out.

Q. Doing what?

A. Aircraft mechanic. I could have gotten out before World War II and gone to work for an airline. Eastern Airlines, when I graduated from school, wanted me to work for them, but I stayed in the service. Lot of those people, now, that was working with me went to China—ended up in the Flying Tigers. I used to be Chennault's secretary, too, incidently. Lot of the people working with Chennault, then, went to China when they got the Flying Tigers.

Q. Who's Chennault?

A. Claire Lee Chennault was the commanding general of the Flying Tigers in China.

Q. Mind if I ask what the Flying Tigers were?

A. You've never heard of the Flying Tigers?

Q. I've heard of them, but I'm not sure what it was.

A. That's a famous fighter unit that was in China before we got involved in a war fighting the Japanese on the Chinese side.

Q. No, I didn't know.

A. You missed it. You missed a lot.

Q. That was before our time.

A. Sure, but you read history, I know.
Q. What time was it? What year?
A. Well, most of them left to go there about 1939. About 1939.
Q. And you weren't a member of this?
A. I didn't go.
Q. Any special reason why?
A. No, I had a family for one thing.
Q. So, you were Chenault's secretary?
A. For a short while.
Q. How long?
A. About 3 months. Then I became an aircraft dispatcher.
Q. What did you do then?
A. Well, you wrote out clearances, filled out weather report slips and that sort of thing for pilots before they took off on a trip.
Q. Where was this?
A. Maxwell Field, Alabama.
Q. What did you do as Chenault's secretary?
A. Just typed stuff for him. Regular secretarial work.
Q. Did you meet any interesting people through him?
A. Oh, yeh, practically every general that we had in the Air Force in World War II was at Maxwell Field between 1934 and 1941 at same time going to that school they had over there - Air Corps technical school.
Q. Did you ever meet General Strong?
A. I can't answer that. The name sounds familiar, but whether I did or not...
Q. He lives down on Burnside Island, now.
A. I don't know him. Now, you have a native Savannahian - lives at Hilton Head, now - General Heyward Hansel; he was first lieutenant over there then. And Chenault had a stunt team at Maxwell Field, and Heyward Hansel was in that stunt team. He came from Savannah originally. He lives over here at Hilton head, now.
Q. What did they do?
A. They just gave demonstrations, something like these Blue Angels - same thing except earlier model - earlier version, I should say - same thing.

Q. What kind of planes did they use then?
A. Boeing P-12 or fabric covered bi-plane, single-seat -- did about 180 miles-an-hour. That was real fast then.

Q. You used to work on those planes, didn't you?
A. Uh-huh.

Q. Has that part changed a lot?
A. Oh, yeh. No resemblance.

Q. The skills you needed?
A. Yeh, no resemblance. A lot of similarity in instruments, electronics equipment, your electrical systems and all that. If you worked on them then, you could work on those component parts now, because they're about the same thing. About the same kind of equipment.

Q. After you worked for Chenault, then what did you do - After the dispatching job?
A. Well, that was still under Chenault. It was a different type of a job. He was operations officer. And after that I went on rescue boat.

Q. Was this in Alabama?
A. No, down at Portal Canal - What is now Eglen Field, Florida.

Q. What was it then?
A. That's what it is then. There was only 65 men there when I was there. Now there's about 14 or 15 thousand there.

Q. Still troops?
A. Uh-huh.

Q. I want to know how the stones get so shiny.
A. From that little buffing wheel right there.

Q. What's it made of? Is that sandpaper, too?
A. Felt. Not felt, leather, sorry.

Q. And that makes them shiny?
A. Well, it's the material that's on it really. This is tin oxide. Rust, you know is iron oxide. And this is tin oxide.
Q. And you put that on the stone?

A. Put that on the buffing wheel. It smooths it. Gives them
the fine polish. These wheels over here and this sandpaper
here is what smooths them off. But this tin oxide acts
just exactly like a metal polish does on metal, except
that the melting temperature of the tin oxide is high enough
that it actually melts the top of the stone and causes it to
flow, the molecules to flow, and it gets smooth.

Q. You don't see that happen, do you?

A. No. For many years it was a mystery as to how this material
polished a stone. And the electron microscope discovered
that there was actually no material removed by the polishing
phase of cutting a gem stone. So the only conclusion was that
it had to melt the molecules or the crystals in the stone
and cause it to flow and smooth out.

Q. The electron microscope saw it flowing?

A. No, no, the measurements were made with electron microscope
In other words, the measurements that you can make with it
is so minute that they discovered that no material - not even
one atom of material - had been removed from the stone between
the pre-polish and the post polish. It was all still there.
And you cannot polish a stone with a material like iron oxide,
for example, that has a melting point that's lower than the
melting point of the stone. It won't polish the stone.

Q. And tin oxide....

A. Is higher. Has a real, real high melting point.

Q. Is that the only one that's used?

A. No, unh-unh. There's iron oxide on that other buffing wheel
over there. I use that to polish your abseidian, which is
glass, really, that forms in a volcano, and mother of pearl
and that sort of thing.

Q. That's because they're softer?

A. Softer and the melting point is real low.

Q. Is there anything used besides those two?

A. Oh, yeh. You can use serium oxide. I use serium oxide
to polish jade with.

Q. Is it higher or lower than tin oxide?

A. I don't know. Well, the melting point's got to be higher
than that of jade or it wouldn't polish it. But why it
polishes jade better than the other materials, I don't know.
That's a seashell.
Q. Was this polished, too?
A. Just like it come out of the ocean.
Q. You haven't done anything to it. How will you use it?
A. Make a dangle for an earring with it. From about 120 billion years ago until about 200 million years ago, the eastern part of this continent was under the Atlantic Ocean, or rather under an ocean. And these little seashells lived in that ocean and they're tortilla shells. They still live in the warm seas of the world. And they die, drop to the bottom in the mud, and eventually the mud and the shells turn to agate. And they make very, very beautiful gemstones - cut out and put in - like that one right there. Put in a ring or something.
Q. Have you got one that's finished?
A. well, I've got one, but it's not a good one. It doesn't have the shell like that. It had it, and I ground it away accidently.
Q. You said agate was quartz?
A. It was quartz at one time. It's still considered a quartz stone. See the little shell there.
Q. That's pretty.
A. It was a large shell on there, and I accidently hit the rock just right and ruined it. When I got the groove ground out of it, the shell was all gone.
Q. How is the agate formed?
A. Well, quartz crystals will accumulate in one place and form a soft boulder - I say soft; it's the same hardness as any other quartz. But many different things take place, like pressure, heat, and all that sort of thing, and compress this quartz and harden it. Then after it gets harder, they call it agate, but it's still quartz.
Q. What is the distinction between quartz and agate or is there one?
A. I can't explain it to you, really, but that it's just harder than quartz as it originally was.
Q. Why will you work with opal and not any other precious stones?
A. Work with what?
Q. Opal.
A. Well, opal's easy to cut, and most of your other precious stones are so hard you have to use diamond powder and diamond disks in order to cut it. You don't have to do that to opal. Opal is very soft, very brittle. And you can work with it
on this kind of equipment. If I wanted to facet rubies and sapphires and emeralds and that sort of thing, I would have to have a faceting machine and diamond disks and diamond polishing powders.

Q. When you're making a ring out of opal, do you put the whole opal?

A. Sometimes, depending on how thick the opal is. Now, if it's thick enough and solid enough to make a solid opal, I'll make a solid opal out of it. If not, then you thin it down until you have a real thin slice, and then you put a quartz cap on it. Actually, this is better than the solid opal, because the quartz cap is harder than the opal and it will protect it -- keep it from getting scratched. Thi one right here has a quartz cap on the top. You can see it.

Q. It's real thin?

A. Yeh, the opal is on the back of the quartz cap, see, and if you hit something on that, then you're hitting the quartz and not the opal.

Q. About how much of that is quartz cap?

A. About 2/3 of it.

Q. Does that make it more expensive?

A. No. It's about the same.

Q. But it will last longer.

A. Practically all of them you buy up here in the jewelry store will have a quartz cap on them. Also, the next thing it does is you save opal. You can cut three opals out of the same material that you can make a solid opal out of, if you're putting a quartz cap on them. The little quartz caps only cost about a few cent - seventy-five or eighty cents for a cap, where the opale very expensive. And if you can cut three stones out of the same material and put a quartz cap on it that you could make an entire opal with a solid on it. There's a solid opal out there in the showcase.

Q. How much longer will it last with the quartz cap on it?

A. Oh, it'll last 75% longer with a quartz cap on it.

Q. What is that in years?

A. Opal is a short-lived stone. Most people don't take care of them and bang them around, wash dishes with them, and that's the last thing you should ever do is em-verse opal
in any liquid whatsoever unless it's distilled water. And about once a week you should take an opal and put it in distilled water because opal is anywhere from seven to eleven percent water. And the water will dry out, and, sometimes, it will cause the opal to crack.

Q. So, putting it into distilled water will...
A. It will reabsorb some of the water that dries out of it.

Q. What happens if you put it in the other kind of water?
A. Then when the water dries out, it leaves whatever minerals behind that was in the water, see? And if you put it in detergents and that sort of thing, the detergents get in it, and, after awhile, the opal is just ruined.

Q. Could I tell that it was ruined or would it take somebody with experience?
A. Well, it loses its color and gets brown spots, white spots, black spots into it where this material has gone into the stone, because it's very porous. Same thing with a piece of amber. You should never put amber in anything, because amber is not a thing in the world but a piece of resin. Had a woman tell me one time, she cleaned her amber every once in awhile with alcohol. Alcohol dissolves resin. And it had ruined the stone. Wasn't nothing really left.

Q. Does cleaning rings with ammonia or something like that hurt?
A. It won't hurt it.

Q. Why is ammonia different?
A. Well, now, you don't want to clean an opal with ammonia because it's going to absorb some of it.

Q. But a hard stone is okay?
A. Right. You can clean a hard stone with almost anything.

Q. Does the quartz cap make any difference in the color anything?
A. Uh-huh.

Q. On the ring, it's completely clear?
A. Yeh. See, that's optical quartz. It's perfectly clear.

Q. Is it just your interest that because you know so much about the different stones or have you just researched?
A. Well, if you're gonna work with them - do anything with them - you should do some research on what they are, where they came from, how hard they are so's you'll know what to expect when you start cutting it, whether it's heat sensitive or not. Opal is very heat sensitive. And if you get it too
hot while you're cutting it, it'll break all to pieces. It'll just shatter. Mother of pearl is most sensitive. It'll turn brown or crack. I like Mother of pearl.

Q. Do you work with mother of pearl much?
A. Yeah, that's the first thing I learned to cut - mother of pearl. That's a piece of mother of pearl. That's just like it comes out of the ocean.

Q. That's like a shell?
A. That is a shell. That's the pearl oyster shell.

Q. Oh, so mother of pearl comes from an oyster shell?
A. Uh-huh. Well, it's really a clam, but they call it the pearl oyster. And this is the little animal that you get pearls from. It grows in the flesh of the little animal, and the shell, then, is what you call mother of pearl - the same animal.

Q. Then the pearl forms from something getting inside the...
A. Getting inside the flesh, and then he just begins to build material around the object that got in his flesh, because it irritated the flesh. And he built it around and forms the pearl.

Q. Is this the same kind of material?
A. Same kind of material. It's really a calcium carbonate - limestone. Would eventually become limestone if it stayed in the bottom of the ocean a few million years.

Q. Is pearl very heat sensitive?
A. Yeah, very much so.

Q. I found on in an oyster that had been cooked one time. Somebody told me that it wouldn't be any good.
A. Now, if it was fried, it probably wouldn't be, but if you found it in oyster stew it might be good.

Q. No, this one was fried.
Q. Where did you get this from?
A. I ordered it from a mineral supply house in California.

Q. The oysters that we get here in Savannah, you can't use those?
A. This is not really an oyster. It's a clam. I forget the exact kind or particular name of the clam. Here's a piece of mother of pearl with the back cleaned off of it. Now,
I brought that back with me at the end of World War II.

Q. Which side do you use?
A. The back side. You can get more color from it if you’re going to polish it from the backside than you can from the front side.

Q. Oh, I thought you use the inside.
A. Most of your natives from the Far East - when they’re cutting mother of pearl, they’ll use the inside rather than the cut-side. That’s one way you can tell, if you go somewhere and buy mother of pearl, as to whether it’s been cut in the Far East or not. If this is topside, then it was cut somewhere in the Far East. If it’s here, it may have been cut in Europe, South America, or the United States.

Q. Well, most of the mother of pearl that I see is the white.
A. Yeh, well, it comes in more than one color. Here’s some black mother of pearl right there.

Q. So you never know what color you’re going to get?
A. Well, you look at the raw shell, you can tell whether it’s going to be brown, black or yellow, or white.

Q. How can you tell?
A. Because it’s colored.

Q. Oh, the outside of the shell will be that color.
A. Yeh. Now, those over there will be perfectly white. This was a yellow one. See how white that is.

Q. Is there anything special that makes the different colors?
A. No, it’s just the type of water they lived in when they’re growing.

Q. If you were given the opportunity to go some other place doing this work and making money by it or something, would you go?
A. I doubt that. I’d consider it. But I doubt that.

Q. Why?
A. Well, I’m just happy here, that’s all. Don’t make any money down here, but we have a lot of fun. This whole bunch down here on the river is a lot of fun.

Q. What are some of the other shops? You know, the people that run them?
A. The Lady Print Shop's over on this side. There's going to be a glass shop right next door. Then the basket shop's on the east side. Then on the east side of the basket shop is the leather shop. I've got a bunch of belt buckles down there that the boy's going to put belts on.

Q. What was this before y'all came?

A. This was just empty. It used to be at one time cotton bays. They stored bales of cotton in here to load aboard the ships outside - tied up at the dock many years ago.

Q. And Mr. Roberts bought this?

A. Rents it.

Q. From who? Who owns it?

A. Tony Ryan. He owns this whole building here.

Q. When did all of this start building up like this down here?

A. I think it was about two years ago. About that time.

Q. So they're really trying to build it up to get more tourists down here?

A. Yeh, and, too, it's an outlet in many ways for all the different crafts. This particular shop here is an outlet for local artists. And, Mrs. Roberts takes material from them, local artists, on consignment and sells it for them. Is what she does, actually. Most of these other shops are artist's shops of one kind or another. Handicraft shops like the basket shop down here. That's all hand made. And the leather shop, he makes everything that's in there, Himself. And then there are galleries up there - it's the same way - artistic things: paintings, tables, brass, metal work.

Q. Do you think hand crafts are going to start becoming a bigger thing now?

A. I think so.

Q. Why?

A. Well, art is an indication of prosperity. The more prosperity, the more art people buy. That's the facts of history.

Q. Because of more leisure time?

A. Right. Because of more leisure time to create it, more money to buy it with or have it made, and that sort of thing. You take a poor, poverty-stricken country, there's very little art there - or area even.
Q. Why would a lot of the handicrafts have been dying out over the past few years?

A. Well, they died out because people just lost interest in it.

Q. Would electronics have a lot to do with it, too?

A. Probably. Sitting watching the boob-tube, instead of using their hands and their head, letting somebody else do it for them.

Q. Mass production would have a lot to do with it, too, then. And laziness.

A. You may take a child that sits and stares at the T.V. all the time, he may learn a lot, but he can't do anything. It's a terrific center for information, but what are you going to do with that information? What good is it, if you're not going to use it and do something with it?

Q. Do you think then, that there should be more craft schools and skilled schools and things?

A. Definitely. There's not enough of them. Now, the question is this: Will they fail to go there because they can't afford it, because they're not interested, or for whatever, but I think more craft schools should be made available. Definitely. I think they should have more crafts in school, especially high school and college. There's a school over in Alabama - Dalton County, Alabama, little town called Fairhope. This school has been there about 90 some odd years. And it's called the Fairhope School of Organic Education, and each student advances according to his own ability in each subject. They teach all kinds of handicrafts, folk dancing, as well as academic subjects. A child may be in third grade arithmetic and tenth grade reading, ninth grade history. Because some children are better in this particular subject than they are in other subjects. And you take another child over here, and it'll be right the reverse. So, they progress through school according to their own ability. It's very successful. And they teach a lot of handicraft stuff in that school.

Q. Do you think people in Savannah are more interested in stuff like this? Do you think they would take advantage of craft schools?

A. I think so, because Savannah is a very artistic town. A lot of artists in all areas come from Savannah.

Q. Why do you think that's true?

A. It is a fact, not because I just think so. It is a fact.

Q. I mean, why?
A. Well, all you have to do is to look around on T. V. - Johnny Mercer and all of these other playwrights and actors and singers and so forth that come from Savannah. Just compare them, when you see them on T. V. and in the movies. And that's just one area.

Q. Does Savannah give young people the incentive to be artistic?

A. I suppose so. I don't know why. I don't know why it is, but it's a fact of life. You check. The bigger percentage of artists have come from Savannah than there is in any other comparable town in the United States, so far as I know of. Go to the Pirates' House Hall of Fame around there and take a look at some of them that's in there sometime. And they have only a very small percentage of the ones that have come from Savannah. Charles Coburn's from Savannah, you know.