

POWER FROM THE SUN...STAINED GLASS

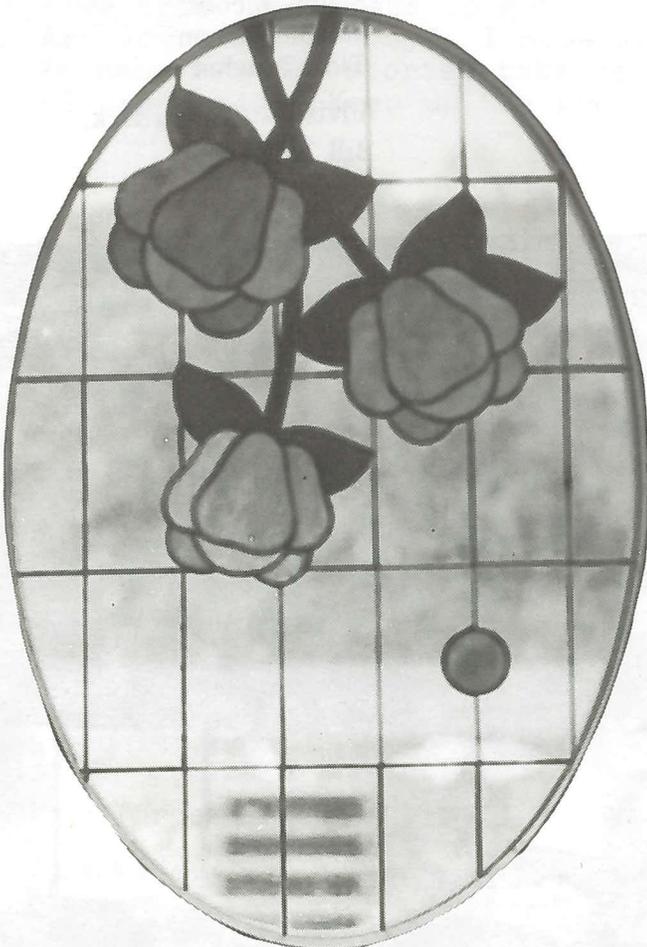
BY MELANIE GRILLO

JORGE TORRUELLA,

A spectrum of stained glass reflections splash a room with exciting colors. Prisms of multi-hued shapes enhance and balance the decor. These designs of colors reveal not only the artist's ability as a creator, but his/her personality as well.

Steamboat Springs is fortunate to have several stained-glass workers who exhibit their talent throughout town. I visited with three well-known people who do amazing work with colored glass.

Jorge Torruella, a soft-spoken, enthusiastic stained glass worker moved to Steamboat Springs three years ago after growing up in California and attending USIU college. "As I was attending college I had been working in glass on the side and had done quite a bit of work for my parents and friends."



JORGE DID THIS WINDOW FOR HIS FRONT DOOR.



Although Jorge has learned to put out fine work from his own experiences, he mentions a little side help. "At one time in Alabama there was a stained glass studio that I kept going to and buying supplies. I asked questions and they gave me advice. Mr. Lumpkin, the proprietor, asked me to bring in one of my windows, and I did. He liked it and asked me if I would like a job, so I wound up working for him for a while. But the attractions of Colorado were too great, so I left soon after that."

Jorge does stained-glass for his own pleasure, commissioned work and also teaches beginning and advanced classes. His classes are taught at the Colorado Northwestern Community College here in Steamboat.

"I've really been enjoying teaching glass," Jorge expressed. "I love my classes, love the students, and the response is tremendous in this town. I can only see the future getting better. This town is getting more and more involved in aesthetics all the time."

Jorge begins his classes with a slide show to tell about the art of glass. He discusses the creative process which begins with "having an

idea of what you want, basically determined on either the architectural setting of creative impulse."

Recently Jorge and his wife, Barbara, have been constructing a workshop specifically designed for making glass products, in the garage next to their house located in town. Through teaching classes and displayment of work in various homes and businesses, Jorge's work has been inspirational in spreading the art of stained glass.

JEFF SIMON,

Jeff Simon, another artist in glass is also known for his creative ability. He recalls his first interest in glass.

"Basically I got started in stained glass as a hobby in my first year of college when I helped a friend do a high school senior project. I got really hooked on it and just started doing it.

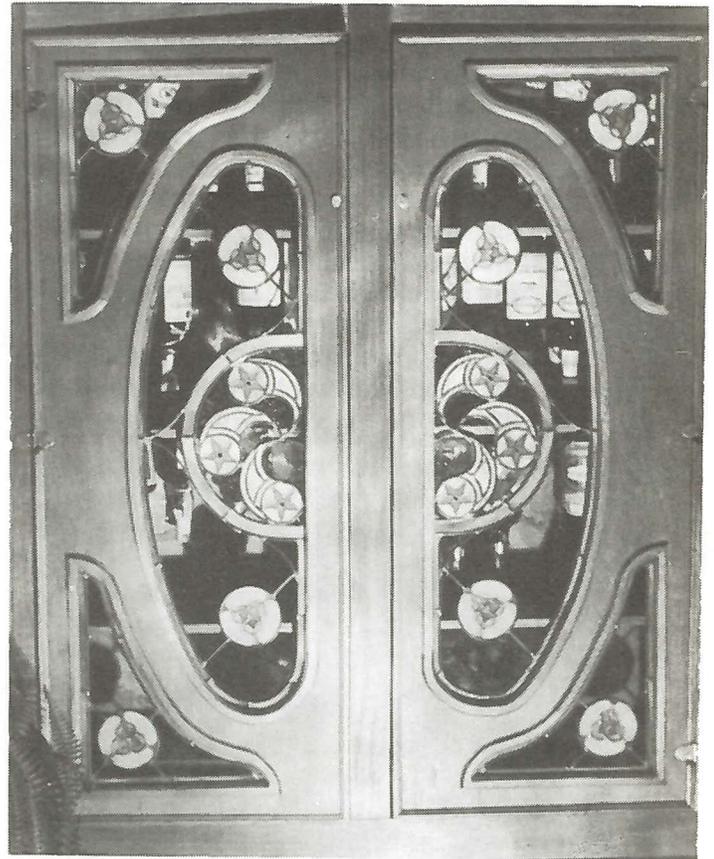
"Then I got an opportunity to become an apprentice for this guy named Bent Antofti. He learned the trade in Denmark as a kid. I used to go buy materials, watch him work, and talk to him a lot. I did that for a couple of years and kept on trying to get him to take me on as an apprentice. Finally, after he figured that I was serious, he did, and I worked for him for two years. I started out at a dollar an hour doing all the grunt work, but then eventually doing everything in all parts of the trade. It was a good experience, and I really learned a lot.

"I was involved in a lot of different kinds of work and I wasn't really responsible for design. I was just responsible for doing the craft part, and I really learned the trade well, working eight hours a day, every day. Once you get that down it frees you up to where you think creatively. You know what your limitations are and you can think glass. Glass is something really special other than just art, because you are limited by media.

"Then I went to Northern California and opened up my own business. The Inverness Art Class. Did that for four years, then came out here. I've lived here about two and one half years. Peter Roehrs and I got to be real good friends doing a job in Boston on the Rusty Scuppers Restaurant. He did carpentry work, and I did all the glass. Actually I was just passing through Steamboat, came to visit, and just kinda stayed.

"Right now I'm not doing glass for a living, I'm doing carpentry. Keeping glass at the hobby level. I did glass for a really long time on a commission basis where everything was sold before it was even made. People would want something for their house, and I'd go talk with

them and give them a bid. I'd come up with a design and then build it. I keep track of time and materials and all that and then add a little bit for the shop. When I had a studio I was doing mostly lead work which is a lot quicker, and you can build bigger stuff faster, and you can do square foot price ranging anywhere from twenty to thirty-five dollars a square foot. But since I've been here, my workshop is a lot smaller and I've been into making small pieces and really getting into the details.



THIS BAR CABINET DONE BY JEFF SIMON SITS IN THE BRANDYWINE RESTAURANT.

"I got pretty burnt out on that, and I now want to do stuff just for myself. I don't have to worry about what I want or what colors, or to fit this and to fit that, I just make it for myself, and if people like it they can buy it. It got to the point where glass became just work. It's a drag going to work, 'cause it used to be real exciting. The colors are real exciting, and it's really a lot of fun. So I got it down to hobby level, and then it became lots of fun again, because I'm doing stuff for myself. I just take some time out, and, you know, I'm single and my living expenses aren't that much, so I can work carpentry for a while and then take a chunk of time out and do glass or other carpentry projects for myself. It's a lot of fun. Most often if I get turned on by an idea I just can't wait to see it done. I'm just unstoppable until the project gets done.

There are three main types of glass, antique named because it is hand-blown by skilled craftsmen, cathedral or commercial glass which is machine made, and opalescent glass.

Antique glass has many interesting variations consisting of air bubbles, waves and streaks. A sheet will have a great deal of difference in color and thickness. Most antique glass is imported from France, England and Germany, and is the more expensive of the two.

Streakies are a type of antique glass imported from England which contains highly transparent streaks of delicate colors. Because of its beauty the artist often hesitates before cutting.

There are four kinds of cathedral glass, which is just glass with different textures to it.

Jewels, often like chandelier crystals, and roundels, circular pieces of glass with a raised tit in the middle, are often leaded into a window and can add unique effects.

Opalescent is opaque and "milky" and doesn't require any backlighting to appreciate its streaks and whirls of beautiful color.

Jeff remarked, "You can experiment with the types of glass for different effects, and if you have enough colors you can adjust your design accordingly."



JEFF SIMON

"Patterns in stained-glass are important in delivering effect. The artist must take into account such considerations as the amount of light the window will receive, the distance and direction the viewers will be from the window, any objects or views one may wish to include or exclude from the picture plane, color of the room, etc." stressed Jorge.

Jorge suggests, "Do the cutting free hand. For a real long cut off of a sheet of glass, it's good to use a straight edge which you clamp to the glass."



ESTER DELLI QUADRI CUTS OUT A PIECE OF GLASS FOR A CHRISTMAS WREATH.

Holding the cutter in a vertical position apply a firm constant pressure drawing the cutter away from you. This is called scoring the glass. Next make a fist with each hand, holding the glass between your thumb and index fingers, on each side of the scoreline. Use a quick downward motion breaking the glass along the score. If it doesn't break, tap underneath the glass with the ball end of the cutter. By doing this it'll crack and sometimes that'll cause the break to run all the way down. If you have a small piece of glass to break you'll need to use the glass nippers. Safety glasses are recommended to wear in case any glass should shatter. A file can then be used to take the rough edges off to avoid cuts.

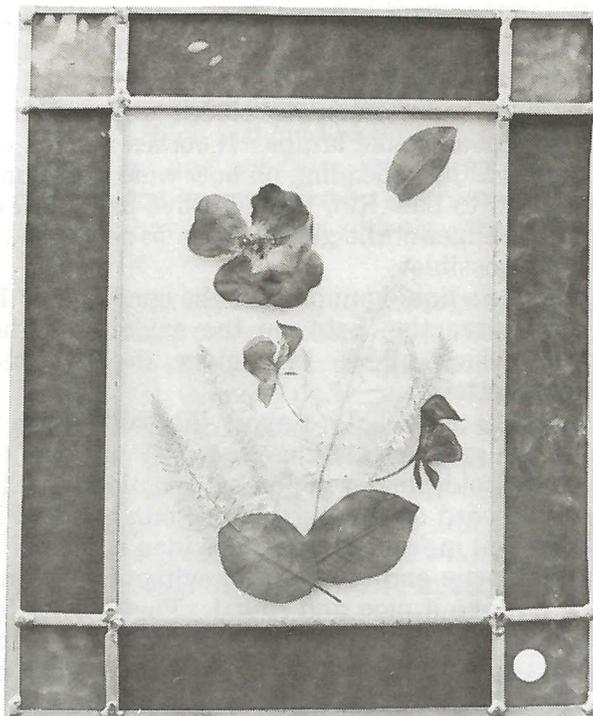
After deciding upon a pattern a full size drawing called a scale is made. One way to cut glass to fit this scale is to transfer by carbon the drawing to a heavier piece of paper. Each section should be numbered before cutting.

A glass cutter which is like a little carbide wheel, is held between your index and middle fingers with your thumb pressing from beneath.

“I get a lot of ideas out of books and from things I see, but I modify it to fit my own tastes. To what I’m doing. It’s like a colored picture in a book, but you don’t pick the exact same colors. You work with the colors that you have, and you put it together the way you’d like to see it. They did it on paper, I did it in glass, so it is a little bit different. It used to be at one time that I wouldn’t do anything unless it came strictly out of my head. It would always have to be what I thought was original and do only one of a kind pieces. Now if I see some kind of design I really like I’m more free to use it.”



MOLDS CAN BE USED FOR MAKING LAMPS. THIS ONE WAS DONE BY JEFF SIMON.



Esther has lived in Steamboat for seven years. She moved here after growing up in Wisconsin and living in Boulder, Colorado for five years. She and her husband, David, have three children and reside here in town in the old Crawford house. Other than stained-glass, Esther enjoys a hobby of gardening.



ESTER DELLI QUADRI

Esther DelliQuadri got started in glass in quite a different way. Her husband bought her a glass kit which she enjoyed so much that three years later she opened up her own shop setting stained-glass. “Rainbow’s End” is located in the Steamboat Village Plaza at Mt. Werner where a wide variety of creative gifts can be found.

A large quantity of her work is shipped to different shops throughout Colorado to be sold. Esther does something very unique in the field of glass, and that is putting pressed flowers between the colored glass. She goes out and picks the flowers and puts them immediately in a book to press them. After she gets home they are rolled in newspaper and silica jell which takes the moisture out of the flowers. After the flowers are dry she backs each one with a dot of glue so they won’t move around between the glass. A border is made out of stained glass which picks up the vivid colors in the flowers.

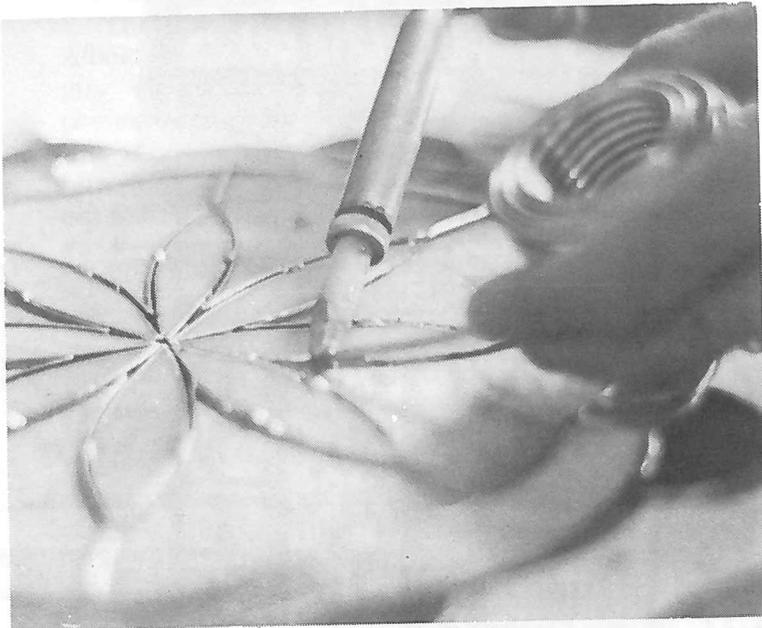


ESTHER’S DISPLAY AT THE ART IN THE PARK.

“Next wrap all your pieces with foil. This method was developed around the turn of the century by Louis C. Tiffany because he wanted to work with more intricate pieces and also on curved surfaces like lamps. It comes in rolls of various widths depending on how wide you want your lines to be. Run the adhesive-backed foil along the edges of the glass trying to center it as well as possible.

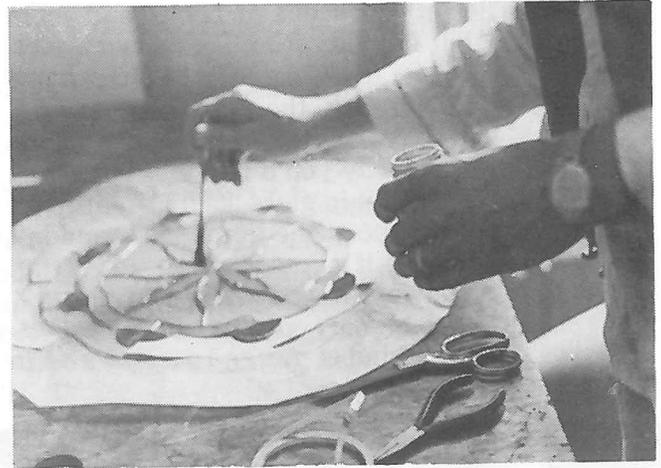
“Flux is a liquid put on over the copper foil. It causes a reaction between the solder and the copper which allows the solder to flow and adhere better.”

Now you are ready to apply the solder which holds the glass pieces together. “You want to hold the soldering iron like a pencil trying to keep the cord on the outside of your hand so it doesn’t fall in front of you. The idea is to pull a line from one end to the other without stopping and to make it nice and round. That’s done by applying solder into the tip of the iron at the right speed in relationship to the width and depth of the line. If one line of solder comes a little flat, a way to build it up is not only to go over it again, but sometimes you may run the iron up and down while applying extra solder. This will give that little bit of extra height which it needs in order to match with other lines. If you have a situation where there’s a fat section of solder, pull it into the middle of the glass, and it will come off later since the solder will only adhere to the foil. Then turn the glass over and run solder on the other side, and it forms a piece of H shaped lead.



APPLYING SOLDER

“After cleaning grime and extra flux from the glass you are ready for the final step. Get a rag, dip it in some patina and rub it on the solder. It’s an acid which causes a reaction with the solder, and turns it into a bronze type color. Then turn your glass over and do the same process on the other side.”



APPLYING PATINA

Jeff articulated, “Copper foil is more like jewelry. You’re creating a structure, where as with lead you buy these long strips of lead which bend around the glass to be soldered where they intersect.

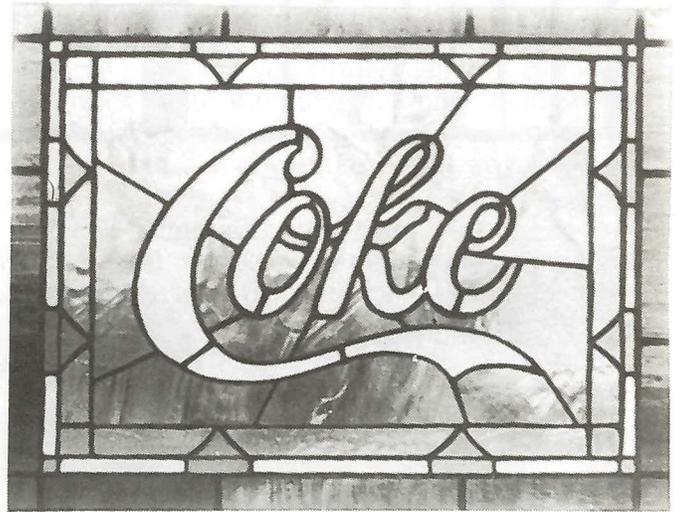
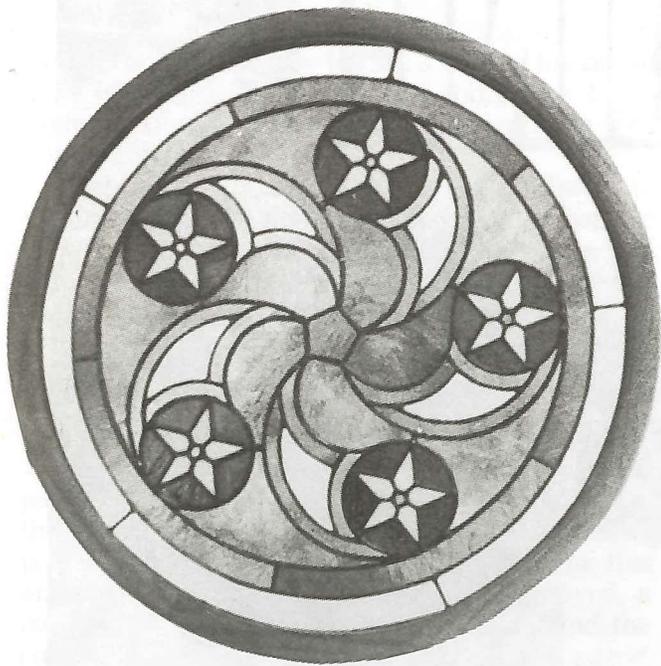
“These long strips of lead, called ‘lead came’,” Jeff said, “come in a wide variety of face widths ranging usually $\frac{1}{8}$ ” on up to more than 1”. Using different widths of lead you can vary your line size easily in a window, using the smaller size leads for pieces of glass in intricate work.

“The cutting of a window for lead is slightly different than for the copper foil method. When cutting glass for lead a definite space has to be allowed for between each piece of glass for the heart of the lead. The ‘heart’ of lead is $\frac{1}{16}$ ” thick and if you don’t allow for this space your window will grow as you put it together.

“Using lead, your line width is always very uniform so your cutting can be less precise and you can still have a tight window with uniform lines. However, with copper foil, if your cutting is off, then it would be reflected by noticeable variations in line width. This can sometimes have good effects on your window but is also something that should be controlled as part of mastering the technical aspects of the art of stained glass.”

WHAT YOU NEED TO GET STARTED

1. Metal square
2. Metal ruler
3. Masking tape
4. Lead came
5. Hammer
6. Pattern scissors
7. Regular scissors
8. Table brush
9. Lead knife
10. Grozing pliers
11. Liquid flux
12. Brush to apply flux
13. Adhesive-backed copper foil
14. Soldering iron
15. Solder
16. Soldering gun



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