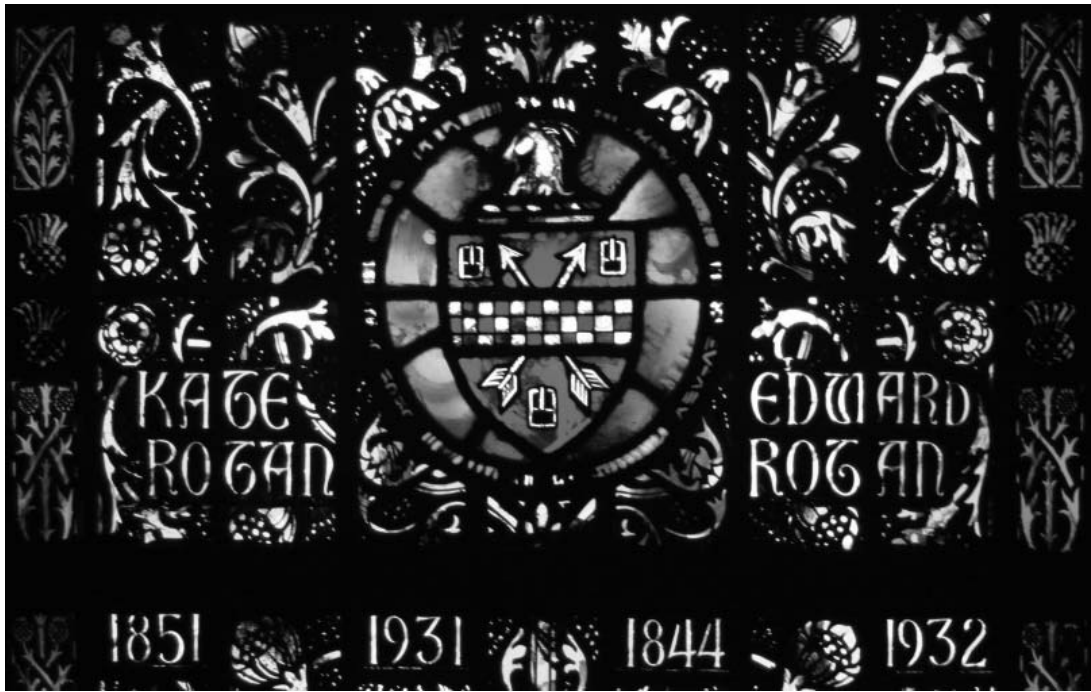




# Screens of Light, Tapestries in Glass

The Stained Glass Windows of  
First Presbyterian Church  
of Waco, Texas



## The Rotan Window

Dedicated June 11, 1933  
(Balcony, facing Austin Avenue)

In this design the rich and varied imprint of Kate and Edward Rotan on the life of their time is expressed in terms of color and symbolism; characteristic episodes and spiritual qualities are reflected in the pattern of distinctive figures and symbols.

The two central medallions present a significant experience from the life of each. Above is symbolized Edward Rotan's journey on horseback from Tennessee to Texas. In the small upper circles the Pegasus symbolizes his love of poetry, and the "Castle in Spain," his unceasing aspiration. Those below recall his experiences in the Confederate Army, his early school teaching, and his special fondness for motoring. The lower circle symbolizes the McCall's journey by covered wagon to Texas, when Kate was three years old and Waco was still an Indian village. The future city of Waco is symbolized within cloud-forms in the upper circle. Trees and flowers symbolize her love of gardening; the Scotch hills, lochs and thistle, her love for Scotland, and the arms of Sir Walter Scott, her fondness for his novels. The lower left circle represents Mrs. Rotan reading to their nine children. The arms of the McCall family appear below.

At the very top of the lancet is the figure of Virgo, the Sign of the Zodiac presiding over the date of their wedding anniversary, August twenty-second.

In the two lancets at the left, four medallions, above them the crossed arrows from the McCall arms, symbolize Mrs. Rotan's varied interests and activities: the founding of the Presbyterian Church, the making of the River Drive, presiding over the Federation of Women's Clubs, and managing the Old Women's Home. Symbols of women's activities, related to August and the sign of Virgo, appear at the top: picking fruit and gathering flowers.

The right-hand lancets are devoted to Edward Rotan. The medallion subjects testify to his breadth of interests and his activity in the life of his community. He sends books to farm houses where there is nothing to read; as the bank president he stands by the safe as guardian of savings; as chairman of the school board he appears with symbols of a school and school children; and as the successful merchant he serves his neighbors at a counter. His love of poetry is suggested by the Pegasus above each medallion, and by the figure writing under a tree at the top of the left lancet. Chess men also symbolize still another interest, possibly related to the season of Virgo.

The inscription is from II Samuel 1:23: "(They) were lovely and pleasant in their lives, and in their death they were not divided."

The upper portions of the design suggest, in the lovely figures of Saint Francis' Canticle of the Sun, the spiritual harmony with nature characterizing these pioneers. The central figures of "Sister Moon" and "Brother Sun" are attended by those of "Sister

Water,” Mother Earth,” “Brother Fire,” and “Brother Wind.” In the openings below are symbols of the elements Water, Earth, Fire and Air.

Angels of Praise and Prayer, a Seraph and a Cherub, appear in the outer openings.

The background pattern is developed in a blossoming form, repeating the symbolism of growth throughout the window.

Symbolic color enriches the entire design. Blue is the traditional color of spiritual truth and wisdom. Red symbolizes love, sacrifice, devotion. White is for faith, green for youth, hope, and the renewal of life, and gold for spiritual riches and victory.

## Charles J. Connick (1875 - 1945)

Charles J. Connick was one of the great American stained glass artists.

“I want to make beautiful interiors for both Churches and souls. I want (all people) to hear my windows singing...”

Today the Boston Public Library and the Charles J. Connick Stained Glass Foundation, Ltd. care for the archives of the Connick Studios. The Foundation publishes an occasional newsletter containing thoughts, news and comments concerning the art of Connick stained glass.

In the Rotan Window, First Presbyterian Church is blessed by the beauty of light and color of the Connick Studio. The window was dedicated on June 11, 1933.

Stained glass windows designed by the Charles J. Connick Studio of Boston are a national legacy. From 1912 to 1985 the Connick Studio created stained glass work found in many of America’s great edifices. His windows may be found in the Cathedral of St. John the Divine, New York; the Mellon Church, Pittsburgh, the Woodrow Wilson Memorial, Princeton University, and locally at the Armstrong-Browning Library, Baylor University.

## Sanctuary Windows



After this sanctuary was constructed in 1911, the large windows on the East and West sides were gradually provided as memorials to many first families of our church and city. The authority on the history of these windows was our second minister, Dr. Charles T. Caldwell, who gave a talk one evening concerning them. The talk was tape recorded and preserved in the Minutes of the Session. Excerpts follow.

“The first window on the right, from the pulpit looking toward the entrance of the Sanctuary, is the Cooper window, and depicts Christ as the Good Shepherd. It was taken from a painting by Plockhurst, and was made in Birmingham, England. The donors were Mr. and Mrs. M. A. Cooper, in memory of a little daughter who had died in infancy. John 10:1-18

“The next is a memorial to Dr. W. L. Prather, from his family. It also was made in Birmingham, England, in 1912. The two figures represent the Angels of the Resurrection with their wings of flame, and they bespeak the ascending spirit, or the life everlasting. Luke 24:1-12

“The third is the Pace window, contributed by Miss Kyle Pace in memory of her mother and her mother’s sister, Mrs. McElveen. She chose as the symbols of their lives the two figures Hope and Charity. All who remember Miss Pace like to feel that it is a very appropriate memorial to her as well, as she had both faith and Christian hope in great abundance. I Corinthians 13

“The fourth window on this side is the one moved back to that location in 1949, at the time of the erection of the new educational building, which necessitated the opening of another door into the sanctuary from the west side. Prior to that time, the window in this fourth position had been a plain non-pictorial stained glass



window, upon which it had been the plan of the Session, for many years, to memorialize the deceased elders of this church. The window which was moved back to this spot from the front of the sanctuary, is the Brazelton window, a gift of the W. B. Brazelton family. It is to many the loveliest of all, depicting the story of Christ's Birth, and the shepherds abiding in the fields. Luke 2:8-14

"Mr. Brazelton also had the little gem-like Cross and Crown window put in, high up in the gable of the church, above the pipe organ. This window has as its most brilliant moment of the day at just about eleven o'clock, just as the worshippers are entering the sanctuary. James 1:12, Rev. 2:10

"Across the sanctuary, at the rear, near the balcony, is the Neale-Cooper window, and it is in memory of the father and mother of Mr. W. J. Neale, and Mrs. John B. Cooper. It shows as its subject the Woman at the Well, and depicts faithfulness. John 4:7-26

"Next to it is the beautiful Good Samaritan window, erected by the order of Elks in memory of our member John Fall. The choice of subject was indeed appropriate, according to his many friends." Luke 10:29-37

"Next is the Sleeper window, in memory of Judge Fabius H. Sleeper and his wife. It tells the story of redemption – "I am the Vine, and ye are the branches." This window is to many of our members the most appealing. John 15:5-11

"The last and front window on this side is in memory of Elder Louis Crow, who met a tragic accidental death at Lorena in 1923. It portrays the lesson of the five Wise and Foolish Virgins, and includes the vivid picture of Christ with finger pointing upward – "I Am The Way, the truth and the life." Matt 25:1-13, John 14:6

"The majestic window on the Austin Avenue side of the church memorializes our pioneer members Mr. and Mrs. Edward Rotan, and was presented by their daughter, Mrs. Thorndike Howe, formerly Miss Anne Sturm Rotan. It was designed and created by Mr. Charles J. Connick of Boston, Massachusetts, who was considered by many to be the greatest window designer in America. Mr. Connick died about 1949."

## The Quatrefoil Windows

Beginning on the West side, above the pulpit:

- Q1 Simon: The oar signifies that he traveled the sea. The saw and the battle-ax signify that he was either sawed apart or beheaded.
- Q2 Thaddeus or Jude: Knotted club for his martyrdom; a lance with which he was run through, and a boat-hook for his sailing journeys.
- Q3 Thomas: Carpenter's square because he was said to have built a church with his own hands. Also the form of a Christian church (the Thompson Church in northwest India); arrows signify his death.
- Q4 Matthew: The purse depicts his original calling as a tax collector. The battle-ax depicts his martyrdom by decapitation.
- Q5 Bartholomew: Open Bibles before him, book marks exactly as we have on our lectern, and a flaying knife to signify his martyrdom.
- Q6 James the Less: Depicts his death by stoning and then after his death, his body sawed in half.

- Q7 Peter: To whom was given the keys to the kingdom; upside-down cross was the way he chose to be crucified, feeling himself unworthy to be crucified after the manner of our Lord.
- Q8 James, Brother of John: Vertical cross-hilted sword represents the way in which he supposedly was martyred; scalloped shell is the symbol for his pilgrimage.
- Q9 John: Was one of the few, or perhaps the only Apostle, who did not die a horrible death. Died in exile on Isle of Patmos. Chalice out of which issues a snake depicts an attempt to slay him with poison.
- Q10 Andrew: Shows a Saltire cross, which is also called St. Andrew cross. Anchor through the cross symbolizes Andrew as a fisherman.
- Q11 Philip: Basket symbolizes his helping to feed the multitudes. Tau Cross, simply a piece of wood nailed across another, for the letter "T" to symbolize the manner of his death.

## Other Church Windows

### Narthex

South Narthex Window: St. Luke

Given by the Colgin family in memory of Dr. M. W. Colgin. Depicts Luke and his teachings.

North Narthex Windows: Seals of the Southern and Northern Presbyterian Churches

Given in memory of Mr. W. B. Wilie, by his wife.

Windows along back wall of Sanctuary: The Life of Christ Series

Given by Dr. and Mrs. Clifford Knappe in memory of their parents. The windows were designed by Harold Rams of San Antonio.

### Second Floor, King Building

Hall next to west Sanctuary door: Communion Window

In memory of James Henry Sturgis, 1887-1946, and Lula Carroll Sturgis, 1877-1971.

Hall next to east Sanctuary door: Baptism Window (Descending Dove)

In memory of James Henry Sturgis, 1887-1946, and Lula Carroll Sturgis, 1877-1971.

Chapel: Seal of the Southern Presbyterian Church

In loving memory of Frank J. Trau, by his wife.

Chapel Parlor: Cross & Crown

Honoring the 150th Anniversary. Gift of Helen Day Mitchell.

### Third Floor, King Building

Youth Suite: Fragment from sanctuary of First Presbyterian Church at 8th & Austin Ave.

Lilies. William H. Godber

Kindergarten/Pre-Kindergarten Room: Two fragments from sanctuary of First Presbyterian Church at 8th & Austin Ave.

Lilies. Elizabeth E. Godber, Color wheels, in Memory of M. B. McMullen.

Computer Room and Elevator Lobby: Rectangular casement windows from sanctuary of First Presbyterian Church at 8th & Austin Ave. Colored squares of glass, generally yellow tones.

### Bell Tower

Small lancet windows from First Presbyterian Church at 8th and Austin.

# How Glass is Made and Windows Crafted

## Glass

Glass is a rigid liquid. It is made of sand, lime and soda, all melted together. The colors are created by adding various metallic oxides to the molten glass before it is formed into a sheet. The colors are permanent and do not alter with time. The colored glass is called Stained Glass.

Three Types of Glass:

1. **Antique, or hand-made, glass.** This type glass is characterized by its production method, not its age. It is produced by blowing, using a medieval technique. This glass is colored, transparent, and has an irregular optical quality, often with bubbles. This technique dates to the 8th or 9th century. Two methods are used in “antique” manufacture. The most common is the muff or cylinder method, where a long tubular bubble is blown, and while still molten, the bottom and top of the tube are cut off. The tube is called the muff. After cooling, the tube is cut lengthwise and the glass is reheated to allow the tube to open up flat. The second method is called the crown method. In this method a round bubble of glass is blown. The bottom of the bubble is cut open, then the blow pipe is spun rapidly, causing the glass to form a flattened, plate-shaped disc, called a table. Crowns are usually less than several feet in diameter or smaller. The center piece (called the bulls-eye) is attached to the blow-pipe and is very thick. The bulls-eye is usually discarded, but sometimes is used in decorative windows.
2. **Cathedral Glass.** This transparent glass is made by pouring the molten glass onto an iron table and rolling it flat. Some rollers have a design in them which is imparted to the glass, much as cookies are made with a special rolling pin. Machine-rolled glass was first made in the 18th Century, and were rolled on one side only. In the 1870s double-rolled glass was invented in England, so that both sides of the glass were textured. Cathedral glass is less brilliant than antique glasses because of its regular and somewhat dull surface texture.
3. **Opalescent Glass.** This glass has a milky opacity. Particles are suspended in the glass, rather than fully melted. The particles diffuse light, but do not allow it to pass straight through as in Antique or Cathedral glass. A sheet may have more than one color. Sometimes the sheet is manipulated before it sets to create drapery, mottled or catspaw glass. Opalescent glass was developed for windows in the late 1870s by John LaFarge and Louis Comfort Tiffany.

## Paint

A monochromatic paint is used to create details (for instance facial features, folds in clothing, architectural details) and to control light transmission in stained glass since at least the 10th century. Silver stain (transparent yellow) was developed in the 14th century; colored enamels became popular in the 16th century. The “paint” or “glass paint,” as it is known, is made from glass-based powder, mixed in a liquid medium, and applied to the flat glass. Then the glass is fired in a kiln at temperatures between 800° and 1300° F. The painted features melt and fuse to the surface of the glass during firing, becoming permanently affixed. (Most of us see this process at the grocery store every week on “painted” soda pop bottles, vinegar bottles, etc.)

## Cames

After the glass is cut, painted and fired, it is held together with “I”- or “H”-shaped metal strips called comes. The pieces of glass fit between the flanges, or parallel legs, of the comes. The came is fitted around the shape of the glass and joined at the ends by soldering. A stained glass artist often uses the placement and soldering of the comes to complement and enhance the design of the window.

## How Stained Glass Windows Are Made

1. A small-scale drawing is made for the architect and the patron’s approval.
2. When the drawing is accepted, a full-size drawing called a cartoon is drawn, usually in charcoal.
3. From the cartoon, two sets of tracings of the leadlines are made, one for a glazing guide and one to cut up as patterns for the individual pieces of glass. (The original cartoon is kept for reference).
4. A special, three-bladed pair of scissors is used which cuts a narrow strip of paper from between the pieces to leave room for the heart of the came.

5. The colored glass is selected, one piece at a time.
6. The pattern pieces are placed on the glass and cut, using a diamond or steel-wheel glass cutter.
7. Rough edges are smoothed with a tool called a grozing plier.
8. The paint is applied to the pieces and fired.
9. When all decorative pieces are completed and fired, the panel is ready to put together.
10. The glazing diagram is placed on the bench. The pieces are assembled on top of the diagram, inside a lath frame, which keeps the pieces from moving around.
11. All the joints are soldered on both sides. Unlike welding, the lead, zinc, brass or copper of the came or foil is not melted – only the solder is melted. It is melted and applied to the metal with a soldering iron. When the upper side is finished the lath is carefully removed and the piece turned over to solder the opposite side.
12. The piece is carefully cleaned, then waterproofed by forcing a putty made of boiled linseed oil, whiting, red or white lead, kerosene and lampblack beneath the flanges of the came.

A single window is usually made in several sections for ease in manufacture, handling and installation. Support bars are applied both outside and inside the window.

## References

“How Stained Glass Windows Are Made” (Part One, October 2006) By Julie L. Sloan; Featured in: “Connick Windows,” The Charles J. Connick Stained Glass Foundation, Ltd.

“How Stained-Glass Windows Are Made” (Part Two, February 2007) by Julie L. Sloan; Featured in “Connick Windows,” The Charles J. Connick Stained Glass Foundation, Ltd.

Julie L. Sloan is a stained-glass consultant in North Adams, MA. She is the author of *Conservation of Stained Glass in America* and many articles about stained glass history and conservation.

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