

# Stained Glass

**W**hen your clothes are stained, they need to be laundered. When glass is stained, it means something very different. Making decorative windows out of pieces of colored glass is an ancient art—some sources say the practice is more than 1,000 years old! Other historians say it is even older than that since glass-making itself was known in ancient Egypt and Mesopotamia. Whether it's 1,500 years old or 15 years old, one thing is certain—stained glass is astonishingly beautiful.

## How does stained glass get stained?

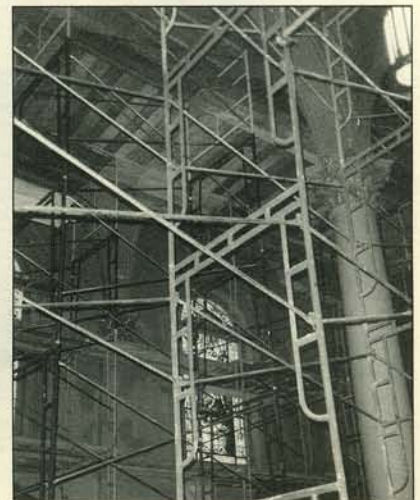
As we all know, glass is made from sand, which is seldom blue or purple or gold (at least not on any beach that Young FRIENDS has visited). The staining process begins when the translucent, or clear glass is in a molten state. Different metallic oxides are added to the hot, liquid glass and they produce the color. From there, the glass hardens, and the stained glass artist begins a lengthy process that involves cutting, painting, and joining.

First, the artist has to decide what the window will depict. Will it be a religious scene? a design? chocolate chip cookies? Whatever it is, the artist starts out with a drawing of it. This drawing, called a cartoon, acts as a blueprint for the stained glass window. With it, the artist lays the different sizes and shapes of glass on the cartoon to make the window. For added detail (like faces, folds of material, etc.), the artist might actually paint onto the glass. Finally, when the artist is happy with the design, and the glass has been fired (to bake the painted design into the glass), the pieces are joined with pieces of lead called cames.

**Voila! Stained glass window.**

## Stained Glass Restoration

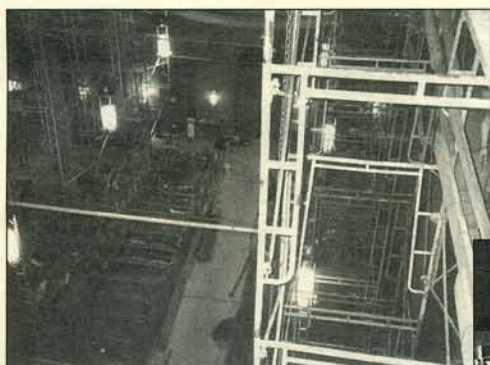
**S**tained glass windows are designed to last hundreds of years. But, like anything else that gets old, they do reach a point when they need a little TLC (tender loving care). Young FRIENDS recently had the opportunity to visit a church here on the Upper East Side where the stained glass windows are being restored. At Eglise St. Jean Baptiste (on Lexington Ave. and East 76th St.), glass restorers are working on



Scaffolding fills the interior of Eglise St. Jean Baptiste.

the windows on site—on scaffolding, on platforms they have built, even 130 feet up in the dome! It's as if a stained glass clinic sprung up in the middle of the church. Each window

is carefully removed, cleaned, repaired, and replaced, shinier and readier than ever to inspire for the next hundred years.



**1** Going, going, going up to the dome where stained glass restorers are working. Look down at the pews!

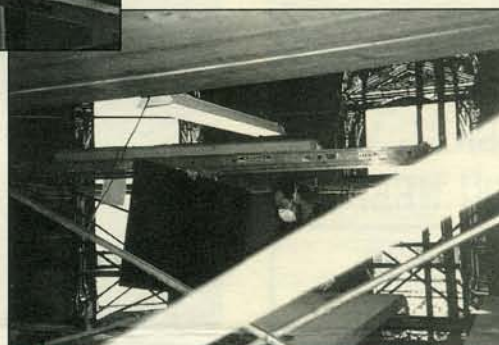
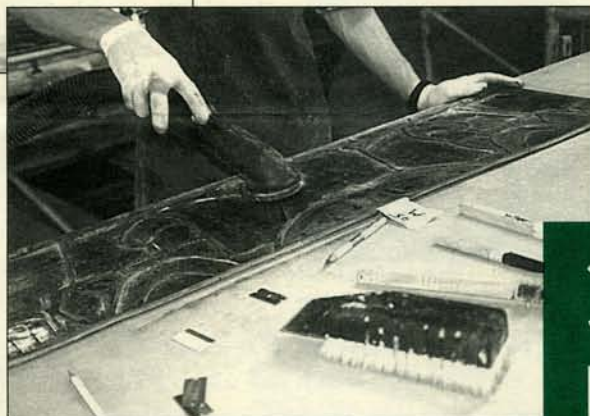


**2** 130 feet high in the dome (about 13 stories). A stained glass panel is removed...



**4** Loosen debris underneath comes with a razor.

**5** Vacuum loosened dirt, dust, and lead particles. These windows haven't been cleaned in nearly 100 years!



**3** ...and carried to the table.



**6** Polish and buff.

**7** A restored panel back in place. Look at the difference between the restored and non-restored section of the window.



## BRAIN TEASER!

Why are the stained glass restorers wearing masks and gloves?

If you were working with 100-year-old lead which has loosened and turned into debris, you'd want protection too. Lead particles can be absorbed into the bloodstream either through inhalation or skin contact, and lead is poisonous. Find out more about lead poisoning at your library.