**Frederick Carder, Artist in Glass**

**1**An artist does not always use a painter’s brush or a sculptor’s blade. Frederick Carder is remembered today as one of the world’s greatest artists, but he did not use paint and canvas or chisel and stone. His chosen medium was glass. In seven decades as a productive artist, Carder produced thousands of remarkable works of art with this fragile material. Carder combined a historian’s perspective with an artist’s sensibility to create stunning works of brilliant shape and color.

**2**Frederick Carder was born in 1863 in Staffordshire, England, to a family with a long history of producing pottery and glass. Carder took up the skill as a young man, and his first artistic efforts involved sculpting clay and carving figures on stone. Working as an apprentice at Stevens & Williams glass company in the 1880s, he began experimenting with cutting glass. He would design a glass vessel, such as a vase, and then carve and polish simple designs into it. Although the company mostly produced clear glass, Carder used bright reds, greens, blues, and yellows in his designs. Doubting that Carder’s experiments would sell, the firm was surprised by the immediate demand for Carder’s elegant, colorful vases.

**3**Having proved his decorative works would sell, Carder began experimenting with more elaborate pieces. These pieces combined Carder’s interests in glass and sculpture. As a teenager, Carder had been enthralled by a picture of the Portland Vase, a dark cobalt blue and white masterpiece carved in the first century. Some of his more complicated works were inspired by vases like this from ancient Greece and Rome. Wanting to re-create this style, Carder would begin by making a plain vase with a dark background. Over the background he would outline in white a scene from ancient Greek or Roman culture. Next, he would carve the white portion of the vase by hand to create a cameo, a delicate picture that appears to rise out of the vase itself. One famous example of this type was his Cupid and Psyche. Made of dark amethyst, this vase featured intricate raised carvings of the mythological Cupid and Psyche frozen in time like a snapshot.

**4**In 1903 he moved to America to work in the Steuben Glass Works in Corning, New York. From the very beginning, Carder combined the efficiency of mass-produced glass with the quality of glassware carved by a single artisan. He would create the designs then supervise apprentices while they did the carving and polishing. Using this method, Carder could produce many pieces of “art glass” in mass quantity. From 1903 to 1932 he designed more than 8,000 distinct pieces of glassware.

**5**Carder carefully supervised the entire process of creating the art glass. First “blanks” were made by pouring hot glass into a mold. Then his employees painstakingly carved diamond shapes, sunbursts, and many other detailed designs into vases, lampshades, bowls, jars, or even candlesticks. By all accounts, Carder maintained very high standards throughout his career. He was a demanding supervisor, known also for his colorful, mischievous personality. No imperfect pieces escaped from Carder’s studio. A vase with a flaw would be smashed onto the floor.

**6**Carder’s artistic vision also expanded into an exploration of new colors and finishes. Inspired by ancient Roman glass, he experimented with ways of re-creating the unique color and sheen by adding different chemicals to the glass while it was being made. His most famous creation was his Aurene glass that he patented in 1904. Carder found that tin chloride would produce a lustrous golden hue when sprayed onto hot glass and then exposed to flame. He derived the name Aurene from the chemical symbol for gold, Au. The next year he patented a color called Blue Aurene, which is made by adding the element cobalt to the process. Both were tremendous successes. While at the Steuben Glass Works, Carder seemingly produced every color of the spectrum; in fact, he created more than 140 distinct colors.

**7**During World War I, glass companies shifted their production away from ornamental tableware and art glass. Instead, the Steuben Glass Company began producing essentials like sheet glass, light bulbs, and glass tubing. During the war, Carder closed his art glass studio, but he remained a manager at the company. He never stopped dreaming of using glass both artistically and functionally, though. Carder, always experimenting, turned his attention to architectural glass designs. Monumental glass panels of his creation can be seen today in Rockefeller Center and the Empire State Building in New York City.

**8**Carder continued working until the age of 96, when he retired to paint and garden. He lived to be 100 years old. As an artist, Frederick Carder saw glass as a material of infinite possibility. By heating it, he could bend and shape it. By carving it, he could sculpt it like marble. By studying ancient examples, he could develop vibrant colors and techniques. Today, museums such as the Corning Museum of Glass feature Frederick Carder’s masterpieces alongside the ancient vases that first stirred his artistry.

**Stampede**

Our class follows the guide around the gallery

Then turns the corner into the next space.

The walls are blanketed with paintings:

Fancy gold frames of gilded wood containing

Portraits of people dressed in fussy clothes.

We turn another corner. Sam, Jamal, and Brett

Stop stock-still in front of me. We pile up.

Then I see why. One huge, vast canvas called

*Stampede.*

White-faced cattle, their horns pointed,

Seem to lunge toward us out of the frame.

“Run!” I say aloud. “They’re coming right at us!”

Sam laughs. There is no more of the hushed silence

That we felt in the other rooms. Horse hooves thunder.

Cowboys powdered in dust wave their hats and yell.

I cautiously walk closer to feel the tumult for myself.

The colors are as loud as the horses, cowboys, and cattle—

A golden brown palomino,

A pinto pony of black and white marble,

Cattle shadowed dark as night

Against an orange sun.

Cowboys’ gray and weathered faces

Between rumpled hats and red bandannas.

Green cactus, purple grasses.

The docent**1** details the enormous size of the canvas.

Still, that does not explain its dynamic power.

How did the artist capture this energy? I imagine

The painter is a cowboy, a brush for a lasso, riding

Stampeding cows into the corral of the frame.

Capturing for a moment the movement

Of the beasts.

My class leaves reluctantly. Like me,

They glance over their shoulders as we depart.

Is it that they half expect the stampede to follow,

Trailing after us through the museum, onto the streets,

Into the bus, and home to our school?

**1**docent – a lecturer or tour guide in a museum