

Introduction

Toledo glass was used to make the spacesuits of the astronauts who landed on the moon in 1969, and it was used by Admiral Richard E. Byrd in scientific experiments he conducted at the South Pole in the 1930s. It covers the airport in Mecca in Saudi Arabia, where millions of Muslims come each year in their pilgrimage to pray, and it encased the towers of the World Trade Center. It protected America's Declaration of Independence in the National Archives, and it has been used by revolutionaries around the world to convey their beliefs with Molotov cocktails. It has held the punch served at receptions in the White House, and the alcohol in the brown bags of paupers on street corners everywhere. It insulated the Alaskan oil pipeline, and it is used in solar energy panels. It is displayed in some of the finest art museums in the world, and every day it is tossed into garbage pits. It literally surrounds us in our windows, walls, and roofs, and it holds our water as well as our wine.

But while Toledo glass has impacted the world, its most important impact has been on the city where it began. In Toledo, glass has been king since it was so declared in a headline in the *Toledo Blade* 125 years ago.¹

Glass became king because city fathers were looking for an industry that would ensure Toledo's destiny of greatness that was proclaimed by real estate investor and newspaper publisher Jesup W. Scott in 1868. While today we may chuckle at Scott's vision of Toledo as the "Future Great City of the World," that vision of greatness led to Toledo becoming the "Glass Capital of the World." It is the vision that propelled city fathers to offer a struggling glassmaker in East Cambridge, Massachusetts, \$4,000 and land in 1888 if he would bring his failing company to Toledo. That man—Edward Drummond Libbey—arguably is the most important individual in the city's history. The enormous fortune he made from the glass company that bears his name today still funds one of the premier art museums in the country, which

he and his wife, the granddaughter of Jesup Scott, founded. In addition to bringing high culture to the city, that fortune has also helped generations of the young, the poor, and the disabled of Toledo.

Libbey's one company spawned three more major corporations. While the technological innovations that would produce Owens-Illinois, Libbey-Owens-Ford, and Owens Corning were the work of others, it was Libbey's success that was at the root of all. It was Libbey who discovered the genius of Michael Owens, and funded his work to develop a machine to automatically produce bottles that led eventually to Owens-Illinois. At Owens's request, Libbey also invested heavily in a machine to draw flat glass that, while not invented by Owens, was perfected by him. That effort produced Libbey-Owens-Ford. And while Owens-Illinois began experimenting with the production of Fiberglas in the 1930s—experiments that would lead to Owens Corning—it was Libbey who, 40 years before, had dazzled the country with a glass fiber dress displayed at the World's Columbian Exposition.

What has Libbey's legacy meant to Toledo? One need only take a drive through the downtown to see that the tallest buildings that dot the skyline once housed the corporate headquarters of Toledo's glass companies. From their offices on the top floors of the building on Madison Avenue, the Fiberglas Tower, and One SeaGate, the corporate leaders of Toledo glass shaped the city's physical landscape, exercised control over huge aspects of its economy, and held sway over the decisions of its political leaders. The companies brought great wealth to their leaders, but they also brought prosperity and a path to the middle class to tens of thousands of other Toledoans.

Yet the glass industry today seems more a part of the city's past than its future. While Toledo may continue to claim that it is the "Glass Capital of the World," that title is in some doubt. An article appearing in the *Wall Street Journal* in 2010 claimed that several Chinese cities more rightfully are vying for the title.² Today, 45 percent of all glass is produced in China, where there is less environmental regulation and cheaper labor. Even the glass that encases the award-winning Toledo Museum of Art's Glass Pavilion—a gallery that honors Toledo's glass heritage—was made in China.

Regardless of where the glass industry's future lies in Toledo, this book attempts to examine how important it has been to Toledo's past. It also attempts to put that history within the context of other historical events—to be more than just corporate history. Looking through history's rearview mirror, one cannot help but see that some decisions made by the glass corporations were not always good for the city, but it is important to understand how those decisions produced the city that exists today. If there are any les-

sons to be learned in examining the history of the glass industry in Toledo, it might be that like rubber in Akron, steel in Youngstown, and automobiles in Detroit, a city's economy based largely on a single industry may not be sustainable.

While the glass industry may play a much smaller role in Toledo's future, the common history between the city and the industry forever binds the two together, and it should not be forgotten.