So You Think You Know the Great Lakes State?

A Story of Michigan Told in 100 Buildings



CRUDEN BAY BOOKS

SO YOU THINK YOU KNOW THE GREAT LAKES STATE? A STORY OF MICHIGAN TOLD IN 100 BUILDINGS

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INTRODUCTION

If those walls could talk...this is what they would say. A story about Michigan.

Pre-historic mounds... octagon houses... horeseless carriages... iron horses... Utopian communities... fire towers... windmills... plank roads... copper... furniture... the Great Migration... the CCC... Art Deco stunners... kit houses...the golden age of motoring... canals... ice hockey... cereal... ski jumping... land grant colleges... wonder drugs... World War II POWs... Frank Lloyd Wright... drive-in movies... Motown... Carnegie libraries... the Big House... cherries... horse rac- ing... rural cemeteries... mimetic architecture... the Toldeo War. This book will have you telling stories like a native in no time.

The photos and stories collected here are a fast and fun way to learn the explanations behind the quirks, the traditions and the secrets that make Michigan uniquely Michigan. Where is one of the few Negro League baseball stadiums in the country? Solved. Where was the first roadway rest stop built? A mystery no more. Where is America's largest walled prison? Identified. What is the oldest land office building in the one-time Northwest Territory? Revealed.

Imagine a group of settlers arriving in an undeveloped location. First come shelters in which to live and then structures in which to work and shop. There are buildings for worship and education. As the community grows government buildings are required. With prosperity comes places in which to spend leisure time. And each step along the way builds a story only Michigan can call its own. A story told in 100 buildings. Almost all of the selections within are open to the public, or at least visible from public spaces. So, if you haven't seen these landmarks in person, fire up your GPS and get out and see the story of the Great Lakes State standing in plain sight on Michigan streets!

Detroit-Windsor Tunnel

Detroit 1930



Michiganders had long been itching to dig under the Detroit River for guick access to Canadian markets. Digging finally got under way in 1871 at the foot of St. Antoine Street in Detroit. Workers were 135 feet under the river when they tapped into deadly sulphur gas which scuttled the project. During a subsequent attempt steam shovels bored into unexpected limestone foundations and went bankrupt as expenses soared. By the time the Detroit & Canada Tunnel Company organized the world had its first two underwater vehicular tunnels the Holland Tunnel in New York and the Posey Tube in California. The Detroit-Windsor Tunnel would be the third - and the first international vehicular tunnel. Sandhogs, as the tunnelers were called, clawed 700,000 tons of dirt out of the Detroit River bottom using a 32-foot shield - the largest yet seen - pushed by 30 hydraulic jacks to create the mile-long tunnel. The first motorist through the tunnel was Joseph Zuccatto, a sandhog driving his cement truck. The original roadway under the river was composed of two million granite blocks. A quarter-million tiles lined the walls. Construction took 26 months, today the Detroit-Windsor Tunnel is a National Historic Civil Engineering Landmark. Only the Ambassador Bridge carries more traffic annually between America and Canada.

Second Street Bridge

Allegan 1886



The land around the Kalamazoo River was pegged for industry by its founders in the 1830s. To facilitate travel a wooden bridge was erected in the heart of the growing village. It served community for half-a-century, used until it was literally disintegrating under crossing wagon wheels. Given its condition, the replacement wrought iron bridge was raised in only ten weeks. The simple truss design was drawn by Zenus

King who founded the King Iron Bridge & Manufacturing Company in Cleveland, Ohio in 1858. King was responsible for many bridges in America's westward expansion including spans across the Ohio, Mississippi, and Missouri rivers. The Second Street Bridge would be one of King's last works before he turned the company over to his sons. The 225-foot bridge was reaching the end of its service in 1982 when the local citizenry outflanked demolition-minded officials to save the 18-foot wide crossing. The cost of restoration for the National Historic Civil Engineering Landmark was \$552,000; the total for the original tab was \$7,532.25. The Old Iron Bridge now resides on the Allegan City logo and is the centerpiece for an annual summer festival.

Saint Marys Falls Hydropower Plant Sault St. Marie 1902



The first hydropower plant in the world began cranking out electricity on the Fox River in Appleton, Wisconsin in 1882. By the time the Edison Gault Hydroelectric Plant came online two decades later 15 percent of all the power generated in America was coming from water. The turbines of these pioneering hydropower plants were not simply housed in utilitarian buildings. The architectural detail given to the powerhouses speaks to the esteem early electricity was held. On the St. Mary's River locally quarried sandstone was handed over to the chisels of skilled Italian masons before assembly in a Romanesque Revival design. When completed only the hydropower complex at Niagara Falls produced more energy. The Saint Marys Falls Hydropower Plant was built to last and endure it has, thanks to a multi-million dollar modernization of the 74 turbines in the 1980s.

St. Clair Tunnel

Port Huron 1891



The Grand Trunk Railway was the dominant railroad in British North America, responsible for a long line of railroading innovations. From the earliest days of the iron horse engineers blasted tunnels through rock but soft ground, such as was encountered under rivers, was always an impassable barrier. By the closing of the 19th century that barrier was beginning to fall with the development of compressed air and the invention of mammoth tunneling shields that provided temporary support while sturdy cast iron arches were erected around them. In 1888 the Grand Truck was ready to tackle the first underwater tunnel in North America. Diggers were paid 17.5 cents per hour with an additional dollar a day for working in compressed air. When completed the St. Clair Tunnel was an engineering marvel, sending the first trains ever to run underwater more than one mile between Sarnia and Port Huron. No longer did freight trains have to stack up in railroad terminals waiting for ferries to resume their journeys across the continent. The single track original tunnel operated for more than 100 years until it was closed by the Canadian National Railway and replaced with a larger tunnel.

Mackinac Bridge

St. Ignace/Mackinaw City 1957



When the first vehicles rolled across the Mackinac Bridge in November 1957 Virginia became the only state in America where it was not possible to drive to every corner of the state without passing through a neighboring state. The dream of uniting the Upper Peninsula to the rest of Michigan had been percolating as far back as the 1880s when the opening of the Brooklyn Bridge ignited Michigander imaginations. In those days the UP may as well have been Alaska. Michigan came into the Union in 1837 as a separated land mass after the Territory of Michigan militia stared down the Ohio State militia over the proposed Ohio-Michigan Boundary line. Shots were fired into the air in the socalled Toledo War but the only casualty was a Michigan sheriff who was stabbed with a penknife in a bar brawl. The resolution left Ohio with a strip of land along Michigan's southern border that included the mouth of the Maumee River and the new state to the north got 9,000 square miles of land. Most Michiganders groused about the one-sided deal that left them with a "barren wasteland." The exact location of that southern boundary would not be settled until 1915 when Michigan was not about to offer the UP, with its rich deposits of iron and timber, back in trade. The Mackinac Bridge designed by David Steinman, who grew up under the Brooklyn Bridge, spans more than five miles in total and the main span is the longest between anchorages in the Western Hemisphere. It is an iconic symbol of Michigan but somehow got left off the reverse of the Michigan State quarter in 2004.

Portage Lake Lift Bridge

Hancock/Houghton 1959



The copper veins of the Keweenaw Peninsula were so valuable that the federal government teamed up mining interests to gouge a waterway out of a small river in the 1860s. Ships eagerly took advantage of the 25-foot deep canal to spend less time plying Lake Superior's icy waters. The waterway dissecting the peninsula did, however, isolate the newly named Copper Island from the mainland. To accommodate the shipping lane a wooden swing bridge was erected in 1875 that pivoted in the middle to be perpendicular to the shoreline. Despite a few knocks from water traffic through the decades this style bridge operated in the Keweenaw Waterway until 1959. It was replaced with the world's heaviest vertical lift span ever constructed, a unique design that allowed for railroad traffic on a lower deck and vehicular traffic on an upper deck. It is the only bridge of its kind in Michigan and the towns of Houghton and Hancock are rightly proud of their National Historic Civil Engineering Landmark, maintaining a two-tone paint scheme and illuminating the lift bridge with special lighting. Trains no longer rumble across the lower deck which is mostly the purview of snowmobilers these days.

Quincy Mine

Hancock 1846



Today 99 percent of all America's copper is pulled from the ground in five Western states. But in the middle of the 19th century the Upper Peninsula was the epicenter for the country's copper boom. Lake Superior country copper was graded as mass (large sheets), barrel-work (stringy veins) or stamp (trapped in rock) before being shipped to mills. The Quincy Mine was the most successful of the operations, in some years producing more copper than any mine in the country. Meanwhile most of the Michigan mines were shutting down as laws changed to favor the larger mines like Quincy. To keep up with the new copper-producing states Quincy extended its Number 2 shaft to the longest in the world at nearly two miles. To service the mine the world's largest steam-driven hoist was built and it needed the largest concrete slab ever poured. One of the wonders of the mining world, the Nordberg Hoist weighs nearly two million pounds, designed to raise a load of 10 tons of copper ore at a rope speed of 36 miles per hour. In 1945 the Quincy Mine, known as "Old Reliable," shut down. Much of the mining district was preserved to be the centerpiece of Keweenaw National Historical Park.

Bay View

Petoskey 1876



Religious camp meetings, often led by Methodists, can find their roots in America as far back as 1799 but the movement really exploded after the Civil War. In 1874 Lewis Miller founded the Chautaugua Institution in western New York to better train Sunday school teachers. The center's summer programs expanded to include lectures on the arts, culture and outdoor recreation. The Chautauqua ideal for adult education became a phenomenon with thousands of tent camps sprouting across rural America. The Chautauguas had their own magazine and rivaled vaudeville as an entertainment circuit for lecturers who were the live act rock stars of the day. Teddy Roosevelt opined that Chautauqua, with its emphasis on self and civic improvement, is "the most American thing in America." At the peak of the movement in the 1920s the total audience in Chautaugua tent camps was said to be 45 million. Michigan Methodists started Bay View as a camp meeting that drew from both movements. In the 1980s Bay View was designated a National Historic Landmark as "one of the finest remaining examples of two uniquely American community forms, the Methodist camp meeting and the independent Chautauqua. Today Bay View is known for hosting the longest running music festival in America.

Cranbrook

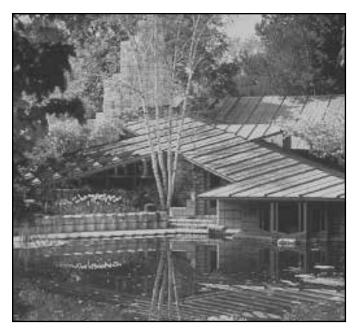
Bloomfield Hills 1926



Canadian-born George Gough Booth married into the Scripps family of newspapermen who founded the globe-spanning United Press International news agency. Booth went on to build an independent news empire across southern Michigan. But in a life of accomplishments the one Booth chose to feature on his gravestone was "Founder of Cranbrook." George and his wife Ellen started modestly by opening a co-ed school on their Bloomfield Hills property in 1922. A college prep school for boys followed five years later, named for Booth's ancestral home in Cranbrook, England. Next came a "finishing school" for girls, in the fashion of the day. The campus eventually spread to 319 acres and the Booths never skimped on the architecture. One favorite was Eliel Saarinen, a Finnish architect and leading cheerleader for modern design. Cranbrook would be designated a National Historic Landmark, garnering praise as one of the nation's finest campus complexes. Cranbrook Schools students have long been accustomed to architecture buffs snapping photos as they move between classrooms.

Alden Dow House

Midland 1936



"Crazy Dow" they called him. The 24year old newcomer to Midland in 1890 was trying to tap into the vast prehistoric saltwater sea lurking beneath Michigan. But it wasn't salt he was after like everyone Herbert Henry else. Dow was determined distill bromides used in photography and medicine from the brine using electric current - at a time

when electricity was so foreign that President Henry Harrison refused to touch the newly installed light switches in the White House for fear of electrocution. From the strange experiments he conducted in a shed on the edge of town sprouted Dow Chemical which boasted a roster of 500 products when Herbert died in 1930. Dow's son, Alden, was also unconventional in his field - architecture. Alden set out at the University of Michigan to prepare for entry into his father's chemical business but instead wound up with an architecture sheepskin from Columbia University. It was the 1930s and America was just shaking itself loose from the neoclassical designs that dominated public architecture. Dow would do more than anyone to put a Modernist face on Michigan with scores of churches, schools, and commercial buildings. His own home and studio was a prototype for over 70 residences in the state. It would become a National Historic Landmark. Months before his death at the age of 79 in 1983 Alden Dow was named the architect laureate of Michigan. There has never been another one.

Durant-Dort Office

Flint 1895



Among the founding fathers of the American automobile industry Billy Durant is often overlooked, his contributions relegated to a few paragraphs. But it was his energy and entrepreneurial savvy that created General Motors. His fly-by-the-seat-of-his-pants style was deemed not professional enough for the growing corporation and he was forced out of management in 1920. While GM would grow to produce one of every two cars sold in the United States Durant was battered by the stock market and unsuccessful in finding magic in the auto industry again. He was last seen running a bowling alley in the 1940s in the shadow of the massive Buick complex, the nameplate he had started General Motors with in 1903. The unassuming three-story brick office building in Flint where Durant built horse-drawn carriages is a fitting monument as the birthplace of General Motors. While the flamboyant Durant was promoting his wagons and then the innovative horseless carriages of David Buick the even-keeled Josiah Dallas Dort was keeping a level-headed watch over the day-to-day operations in the Flint office. Durant's reputation was being resurrected around the same time his old building was being rediscovered in the 1970s - together they are responsible for Flint being the home of General Motors.

Greenfield Village

Dearborn 1929



"Historic Preservation" was a concept unknown in America until the 1920s. Before that the United States was just a young country pushing forward, always under the whip of "progress, progress." One of the first to stop and start looking back was Henry Ford. He could certainly afford to, he was the wealthiest man in the world in 1922. Ford began buying historic buildings - the courthouse where Abraham Lincoln practiced law, the bicycle shop of the Wright brothers, Thomas Edison's laboratory - and having them shipped to Michigan. In addition to buildings Ford purchased locomotives and paddleboat and collections of Americana for his outdoor living history museum. Ford named his collection after his friend Edison and dedicated the exhibits as a "history of our people written into things their hands made and used." A Ford Model T gives rides around the 90 acres dedicated to the Greenfield Village.

Fisher Building

Detroit 1928



Art Deco of the early 1900s was the modern architectural expression of luxury and exuberance, blending bold geometric forms with vivid colors grounded in the art of exotic cultures. The forward-looking Art Deco style found its champion in the great skyscrapers that were constructed in the 1920s, foremost among them the Chrysler Building and Empire State Building in New York City. Detroit's entry in the pantheon of iconic Art Deco skyscrapers came courtesy of Albert Kahn who designed so many buildings in town he was sometimes simply called the "Architect of Detroit." Kahn was deep into his fifties at the time but quickly showed his facility with the new style. It helped that the seven deep-pocketed

Fisher brothers provide Kahn with a virtual blank check to create the new headquarters for the Fisher Body Company across the street from their biggest clients, General Motors. The ceilings were barrel-vaulted, the stone for the facade was marble and tiles on the roof were covered in gold-leaf. Michiganders called it "Detroit's Largest Art Object." The National Park Service certainly agreed. When the Fisher Building was declared a National Historic Landmark the nomination gushed that Kahn's masterwork was a "superbly designed complex which displays some of the finest craftsmanship in any Art Deco style building constructed in the U.S. in the 1920s."

Piquette Plant

Detroit 1904



Before Detroit became shorthand for the automobile industry it had grown into the 13th largest city in America with more than 285,000 people in 1900, first through fur trading and then on the manufacture of tobacco and varnish and shoes and pharmaceuticals and, most fortuitously, carriages and bicycles that would lay the foundation for production of cars in the 20th century. In 1903 Henry Ford and eleven others pooled \$28,000 to start the Ford Motor Company. By 1930, after decades as the fastest growing city in America, the population was north of 1.5 million and no other city in America was as identified with a single industry as Detroit was with automobiles. No building was more associated with that growth spurt than the Ford Piquette Avenue Plant, the firm's second assembly plant. It was here the Ford Model T was first produced and where Henry Ford introduced the assembly line to the auto industry. By the time Ford sold the building to the Studebaker Brothers in 1911 the company was the largest of the 500 or so automating companies in America. Studebaker built cars in the brick factory until the Great Depression of the 1930s. The three-story Piquette Avenue Plant managed to survive the rest of the century and emerged as a museum - the oldest purpose-built automotive factory open to the public in America.

River Rogue Complex

Dearborn 1928



On May 26, 1927 Henry Ford fired up the motor on the 15th million Model T and drove it out of the factory with his son Edsel. There would never be another Model T manufactured. The car that brought motoring to the average consumer was being sidelined for the new Model A. The Model A was going to be produced in Dearborn, on the banks of the River Rouge. Construction had been going on in the new facility for a decade and was still a year from completion. When it was finished the River Rouge complex was the largest integrated factory in the world. It had its own docks for Ford-owned freighters, its own electric generating plant, its own steel mill. More than 100 miles of railroad track connected the 93 buildings in the 900-acre factory, the most important designed by Albert Kahn. River Rouge is still Ford's largest factory, although the last car - a red convertible Mustang - rolled off the assembly line in 2004.

Fort Michilimackinac

Mackinaw City 1715



The French constructed a wooden outpost at the narrowest point where Lake Michigan meets Lake Huron in 1715 to service the fur trade. After the British defeated the French in the Seven Years' War in 1761 one of their "prizes" was Fort Michilimackinac, which they kept running as a frontier trading post. The French residents at Michilimackinac were none too pleased with their new Brit-

ish overlords but their displeasure was nothing compare to the local Ojibwe. The Indians had long grown accustomed to yearly gifts from the French and one one the new British policies ended that largesse. In fact, Native Americans throughout the region were unhappy with the new English rules and in 1763 there were loosely co-ordinated revolts across the Great Lakes. As part of Pontiac's War Fort Michilimackinac was breeched and most of the British killed. British order in the former French territory would not be restored for another year. Peace conferences were held, successful enough that the British were able dispatch war parties against American rebels in the Revolutionary War. Eventually the British concluded the mainland location was too vulnerable and moved their defensive position out to Mackinac Island in 1781. What was not moved was burned and the remains of the fort shortly covered by shifting dunes. The site was preserved as a city park until 1959 when the Michilimackinac Archaeological excavation started. To date more than one million artifacts have been recovered and 65% of the fort has been unearthed.

Fox Theatre

Detroit 1928



Hungarian-born William Fox was brought to America in his first year in 1879. When he was 21 he started his own textile company which he sold to buy his first movie theater. In 1915, he started Fox Film Corporation, becoming a pioneering motion picture executive. In addition to making movies, Fox personally oversaw the construction of many Fox Theatres including this one, the largest of his movie palaces. The Detroit Fox

was the first movie theater in the world to be constructed with built-in equipment for sound films. Designed by Charles Howard Crane, a self-taught local architect who created some 250 theaters, in a blend of exotic Burmese, Chinese, Indian and Persian motifs. Crane took time off from his busy schedule of theater commissions to create the LeVeque Tower in Columbus, Ohio that was the tallest building between New York and Chicago - one foot taller than Washington Monument by design - when it was topped off in 1927. The massive 5,174-seat Fox remained Detroit's premier movie destination for until it was closed in the 1980s for restoration.

Cadillac Place

Detroit 1922



The golden age of building on Detroit's streets enaulfed the city in the first decades of the 20th century. The most enthusiastic observers called the Motor City the "Paris of America." Every year seemed to bring a new "biggest" or "tallest" this or that. Detroit has not been shy about tearing down historic structures but many skyscrapers remain from that era that have long formed one of America's most prominent skylines. None is more dramatic

than this one-time permanent headquarters of General Motors on Grand boulevard. Albert Kahn dressed his Neoclassical statement in marble and limestone and punctuated the exterior with lonic columns. When it opened the General Motors Building was the second largest office building in the world, appropriate for America's most powerful corporation. "What's good for GM is good for the country," company president Charles Wilson said when testifying before Congress in 1953. His words were misquoted and perhaps misconstrued but the sentiment resonated with the ethos of mid-century America. As the company's market share and influence waned GM headquarters was relocated to a more appropriate space along the Detroit River in 2001. By then the only employer large enough to fill that space was the government. The State of Michigan relabeled the historic building Cadillac Place - not for the legendary auto nameplate but for the founder of Detroit, Antoine Laumet de La Mothe, sieur de Cadillac.

Grand Hotel

Mackinac Island 1887



In 1872 President Ulysses S. Grant approved the establishment of Yellowstone National Park "as a public park or pleasuring-ground for the benefit and enjoyment of the people." Three years later Grant was at it again, transforming a budding summer resort into the nation's second national park - Mackinac. It was an easy bill to sign at the time. No actual federal money was allocated to run the new park. Fort Mackinack on the island was included in the park and troops served as rangers and trail builders. Also, if the United States went to war the park grounds had to be used for military training. Geological wonders such as Arch Rock and Sugar Loaf, souvenirs from the Ice Age, sort of paled next to Old Faithful and Yellowstone Falls. Mackinac National Park did not survive as an esteemed part of "America's Best Idea" and the fort and park were transferred to the State of Michigan in 1895 to become the first state park in the Michigan system. The Grand Hotel was built when Mackinac was still a national park but its demotion scarcely dimmed the star power of the 5-story, whitewashed quest house. Presidents, industrial barons, and A-List celebrities would continue to sign the guest register and enjoy summer breezes on the 200-foot wide front porch, said to be the longest in the world.

Guardian Building

Detroit 1929



After serving in the Civil War, Frank J. Hecker, still in his teens. went to work on the railroad, first as an agent and then as project manager. In 1879 Hecker tapped the seemingly unlimited supply of Michigan pine to begin manufacturing box cars and the Peninsular Car Company made him rich. In 1890 he was the prime mover in organizing the Union Trust company which became the city's largest bank by the 1920s. When it came time to construct a new headquarters the bank decided to not build

the expected powerful monument to capitalism and instead opted to project an image of trustworthiness and friendliness with its building. In response architect Wirt Rowland delivered a 36-story vision of orange executed in brick and glazed tile and polychrome terra cotta. Rowland outfitted his building with Mayan-influenced decoration and an interior so lavish the building was nicknamed the "Cathedral of Finance" after it was completed in 1928. Warm and fuzzy, however, was no match for the Great Depression and Union Trust closed its doors in 1932. Attempts to reopen, including a stab as the Union Guardian Trust Company, all came to nothing except a permanent re-naming of the Art Deco landmark.

State Capitol

Lansing 1878



This is the third building to serve Michigan as state capitol. The first two, one in Detroit and one in Lansing, each were eventually destroyed by fire. It cost less than \$50,000 combined to construct those two buildings - \$1.2 million was earmarked for this capitol building when its cornerstone was laid in 1872. The architect was 39-year old Elijah E. Myers who moved to Michigan from Springfield, Illinois for the project and never left. Myers would go on to design the statehouses in Colorado, Texas and the Idaho Territory - more than any other architect. Myers favored the Renaissance Revival style and here he constructed four stories of

buff sandstone with a cruciform floor plan to house the two legislative chambers and governor's office. The cast iron dome was at first painted to match the light tan of the building, then spent decades painted a bright white and is currently back at its off-white hue. The grounds contain a prominent statue of Austin Blair, Michigan's Civil War governor, and several notable trees, including an Eastern White Pine, the state tree. A catalpa tree that was planted during dedication in 1873 is now anointed as the largest living catalpa in the United States.

Minong Mine

Isle Royale prehistoric



The first Native Americans are often thought of in terms of hunters and gatherers. But scientific investigation has revealed that the people of the Great Lakes were mining as long ago as 10,000 years, digging pits as deep as 30 feet to tap into pure copper deposits. Once extracted the copper was worked with cobbles used as hammer stones to fashion spearpoints and ornaments. The people of the Old Copper Culture may well have been the planet's first coppersmiths. The Minong Copper Mining District on Isle Royale is one of the largest indigenous copper operations ever uncovered with hundreds of shallow pits concentrated in a 200-acre area. Some of the pits were fortified with boulders to create mine walls and displayed evidence of drainage. With modern settlement copper mining resumed on Isle Royale in the 1840s but lasted only a few decades. The engineered prehistoric pits are now a National Historic Landmark.

Lifesaving Station

North Manitou Island 1854

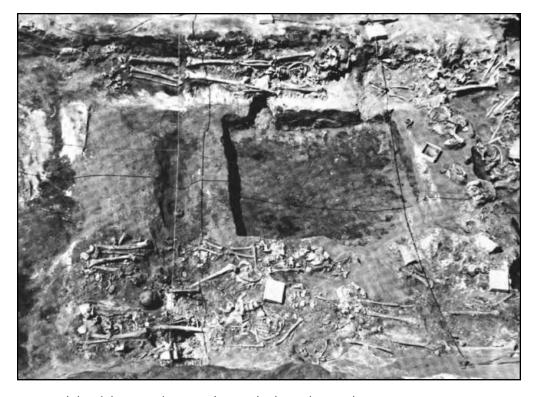


Congress established United States Life-Saving Service in 1872. Before that, foundering ships had to rely on being spotted by farmers onshore to come out and offer assistance. With the new station regular foot patrols would scan the waters ready to dispatch a boat in an emergency. In 1915 the 270 stations of the Life Saving Service combined with the Revenue Cutter Service

to create the U.S. Coast Guard. But before that the federal government did not leave the shore patrols totally on their own. In 1854 the Department of Treasury authorized 19 surfboats for rescues on the Great Lakes, sending one to Nicholas Pickard who was running a ship fueling business on North Manitou Island. Pickard constructed a new boathouse from cedar boards to house the new rescue craft. When the Life-Saving Service was formed North Manitou received an official lifeboat station that was manned by a paid six-man crew. Today Pickard's makeshift life-saving station is the only remaining structure from the federal government's first effort at the rescue of distressed sailors.

Norton Mound

Wyoming prehistoric



Mound building cultures that inhabited North America 2,500 years ago constructed mounds for religious, ceremonial, burial, and elite residential purposes. The Hopewell culture was a network of early North American peoples who actively traded along the waterways of the eastern part of the continent from roughly 100 BCE to 500 CE. This tradition of widespread trade led to an active sharing of ideas and helped fuel a tradition of engineering among the Hopewell. The group discovered on Captain A.N. Norton's property in the 1870s have been winnowed by development but those that survive - some more than 100 feet in diameter and 15 feet in height - are considered "the most important and best-preserved Hopewell mounds in the western Great Lakes region." The 55-acres of Hopewell handiwork are are designated by the U.S. Department of the Interior as a National Historic Landmark.

Parke-Davis Research Laboratory Detroit 1902



There is not question we are living in a golden age of pharmaceuticals. The proliferation of so-called "wonder drugs" has become so commonplace that a vaccine to combat a worldwide pandemic can be created in less than a year and be greeted with an expectant shrug. Ground zero for the modern pharmaceutical industry was Mich-

igan. In the 1860s Samuel Duffield ran an apothecary in Detroit. Like hundreds of fellow "chemists" Duffield conjured up homemade cures that were collectively known as "patent medicine." Purveyors of these concoctions sold them with fantastical claims that were beyond scientific scrutiny. Often the main ingredient in these "secret" drugs was alcohol and sometimes they could be deadly. Duffield's curatives were advertised as "ether, sweet spirits of nitre, liquid ammonium, Hoffman's anodyne, mercurial ointment, etc." As he sought to expand Dr. Duffield brought promoters Hervey Parke and George Davis into the business. When he decided to practice more medicine Duffield left the company to the businessmen. They built Parke-Davis into the world's largest drug maker and their Building 55 housed the first laboratory devoted solely to pharmacological research. Among the miracle medicines developed here were the first anti-bacterial vaccine, a Salk polio vaccine suitable for the masses, and oral contraceptives.

Pewabic Pottery

Detroit 1908



In 1894 Michigan artist Mary Chase Perry had found a profitable niche for herself traveling the country and teaching women how to paint Chinese Porcelain. She found one particular high-heating kiln to be especially effective for applying mineral paints to clay porcelain and purchased one for her own studio. Imagine her delight when she discovered the inventor of the Revelation China Kiln, Horace Caulkins, was one of her Detroit neighbors. He hired her to help promote the kilns and in 1903 they founded Pewabic Pottery is a Midtown carriage house. Perry's mineral-infused iridescent glazes and handcrafted ceramics emerged in the art world at the ideal time - the Arts and Crafts movement was reintroducing design and decoration to a world increasingly dominated by mass-produced machinery pieces. Pewabic glazes were adopted by renowned architects across the country, including in Perry's backyard. They became de rigueur for high fashion homes in southern Michigan and were especially in the new corporate palaces being constructed for the automobile industry. Michigan's only historic pottery maintains its legacy of hand craftsmanship in the same building designed by William Stratton. Stratton was not adverse to mixing business with pleasure - he and Mary Chase Perry were married in 1918.

St. Ignace Mission

St. Ignace 1837



Father Jacques Marquette established Michigan's first European settlements in this area in the early 1670s. In 1673 Marquette and Louis Jolliet took on the task of first spreading Christianity and European culture to the northern Mississippi River Valley. They made it within 435 miles of the Gulf of Mexico before turning back to avoid an encounter with the Spanish. Marquette never made it back - he contracted dysentery and died at the age of 37. As was his wish, his remains were brought to Saint Ignace. In 1877 those bones were accidentally discovered and the location of the original Saint Ignace Mission determined. By that time a second mission had begun with Michigan statehood as new settlers came to the region. In 1954 the chapel from that site a mile away was relocated in the park dedicated to the original mission and Marquette's burial site. With the gang altogether the site became one of Michigan's earliest additions to the pantheon of National Historic Landmarks.

Fort Gratiot Light

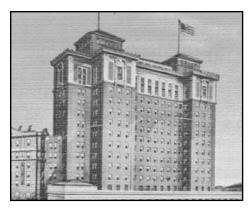
Port Huron 1829



With more than 3,200 miles of shoreline Michigan has more lighthouses than any other state - 129. The first erected on Michigan shores went up in 1825. The Erie Canal had just opened and ship traffic on the Great Lakes was growing so Congress set aside \$3,500 for "a lighthouse near Fort Gratiot, in Michigan Territory." That first effort proved to be a money pit. Another \$5,000 was needed to finish the 32-foot tower and the first official keeper was too big to fit easily though the trap door to access the lantern. The workmanship was so shoddy the walls were cracking within three years and during a November storm in 1828 collapsed completely. Luckily, the lighthouse was located in the wrong place anyway, too close to mouth of the St. Clair River. Congress ponied up \$8,000 and tried again. This time 29-year old Lucius Lyon, a surveyor by trade, was put in charge and he delivered a 74foot high brick tower that is still on duty today guiding ships through one of America's busiest waterways. When Michigan became a state eight years later Lyon was one of her first two senators.

Battle Creek Sanitarium

Battle Creek 1903



William Keith Kellogg once estimated that 42 cereal companies launched in the breakfast cereal boom during the early years of the 20th century. His, the Battle Creek Toasted Corn Flake Company, started when he was 46 years old, was among the last. How did his company become the most famous? Today Battle Creek, Michigan is widely known as the cereal food capital of

the world. But in the middle of the 19th century it was a small town of 1000 where the seeds of the Seventh Day Adventists were sown. The Kellogg family made the pilgrimage to Battle Creek to be nearer the center of Adventist teachings. Kellogg's father manufactured brooms in addition to his church activities. Dr. John Harvey Kellogg became a celebrated physician and director of the Adventist Battle Creek Sanitarium. Kellogg invented various health foods based on Adventist beliefs in health reform. While searching for a more digestible form of bread the brothers were running boiled wheat through rollers in the Sanitarium basement. The day was long and one failed experiment followed another. They retired for the night. The next day they discovered the wheat had dried out. When broken up by the rollers thin flakes fell out. Flaked cereal was born. The original flakes would be unrecognizable today. They were tough and rather tasteless but popular with patients at the Sanitarium and soon mail-orders came in from ex-patients. The factory on the Sanitarium grounds turned out 100,000 pounds of flakes in the first year. This sort of profit did not go unnoticed. The secret of the flakes leaked out and triggered a cereal boom in Battle Creek. Soon there were 30 cereal companies in a town of 30,000 people. The modest "health reform institute" morphed into a wellness center with a grand hotel. The Wall Street Crash of 1929 cratered the health spa but those corn flakes survived.

Whitefish Point Light

Whitefish Point 1849



This is the oldest operating light on Lake Superior - and the most important as it overlooks the "Graveyard of the Great Lakes." Since navigation records began in 1816 there have been some 550 shipwrecks on Lake Superior and some 200 of them have occurred in the vicinity of Whitefish Point. This eastern end of the lake funnels vessels into a narrow passage through which every ship entering or leaving Lake Superior must pass. The traffic has caused many collisions, especially in decades past when more than 3,000 commercial vessels would ply Lake Superior at one time. Today, with mostly enormous freighters, the number is closer to 200. The point is often plaqued by poor visibility from fog on the water and forest fires on the land. And if a storm comes up there are no natural harbors to seek safety along the shoreline, leaving ships to battle bad weather on the open water. Underneath the waves the Whitefish Point Underwater Preserve protects the remains of the shipwrecks, including the SS Edmund Fitzgerald, the largest ship ever to sink in the Great Lakes and immortalized in song by Canadian balladeer Gordon Lightfoot.

Horton Bay General Store

Boyne City 1876



Nothing was more central to rural Michigan life in the 19th century than the general store. The stores stared in America's colonial period to serve pioneers who pushed away from urban markets. Often they were started by itinerant peddlers who earned enough to get off the road and open a shop at

a dusty crossroads or in a mining camp. Inventory would come from buying trips to the city that would last weeks. Some in these rural communities would be fortunate to come in a browse for "store-bought goods" buy everyone was a regular at the general store. The post office was usually in the back of the store and it was the place to come for provisions, local news, a game of checkers, or just to warm up by the ubiquitous pot belly stove. The coming of Rural Free Delivery by the U.S. Postal Service in 1896 marked the beginning of the end for country stores. Not only was it not necessary to come in for the mail but catalogs from the likes of Sears & Roebuck and Burpees - the merchants called them "town killers" - began to become commonplace. Horton's Bay General Store started in 1876 to service the small cadre of sawmill workers that had settled along Lake Charlevoix and has been in business ever since. The love for most general stores is confined to the local patrons but Horton's Bay had one very famous patron. Ernest Hemingway spent many childhood summers on Walloon Lake and wove the general store into the plot of several of his short stories. Hemingway's affection for Horton Bay was so great he insisted that his first marriage be held in the Michigan woods away from his wife's formal St. Louis, Missouri surroundings.

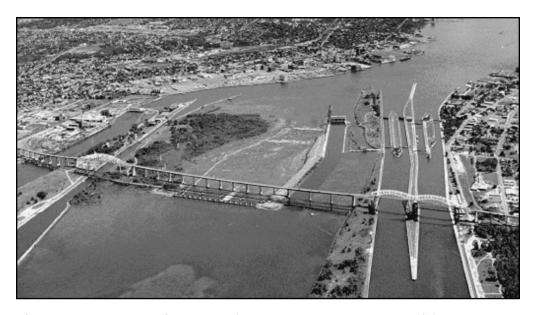
Hartwick Memorial Building Grayling 1929



Franklin Roosevelt's greatest contribution to building in Michigan came with the establishment of the Civilian Conservation Corps (CCC) to put young men to work during the Great Depression developing parks and rural roads. Until the program ended with World War II more than 100,000 men (no women were permitted in the program) found employment in the Great Lakes State, housed in an average of 57 government-run camps each year. Enlistees made \$30 a month, \$25 of which was sent straight to the families. "Roosevelt's Tree Army" operated on steroids in Michigan - planting 484 million trees, more than twice as many as in any other state. The CCC energized the Michigan State Park system; Hartwick Pines State Park was typical. The land for the park was donated by the Hartwick family in 1927 but construction had halted with the Depression. With the arrival of the CCC structures were completed, trails carved, and forests restored. The memorial buildings constructed with local timber and stone and is one of Michogan's best surviving examples of the signature rustic style dubbed "parkitecture."

Soo Locks

Sault Ste.Marie 1900



The Ice Age came thaaaaat close to creating a navigable waterway between Lake Superior and the lower Great Lakes. As it was the Ojibway Indians had to portage canoes around the rapids on the St. Marys River. When Europeans arrived fur traders had to offload cargo onto wagons to continue their journeys. The Northwest Fur Company dug a 38-foot navigation lock for small boats in 1797 but it was destroyed in the War of 1812. By the 1850s the government was so desperate to open a shipping channel out of Lake Superior that they offered 750,000 acres of Michigan land to any company that would build one. The Fairbanks Scale Company raised its hand and earned the deed in 1855 with a lock that conquered the 21-foot difference in water levels using only gravity. Things got so busy the federal government stepped in and put the U.S. Army Corps of Engineers in charge of building new locks. Today there are four locks, two of which are operational and the largest, the Poe Lock, that can handle the 13 1,000-footers that ply the Great Lakes waters. Each time the Poe Lock opens it displaces 22 million gallons of water. Each year 10,000 ships pass through the Soo Locks and they all do so absolutely free of charge.

Richter Brewery

Escanaba 1901

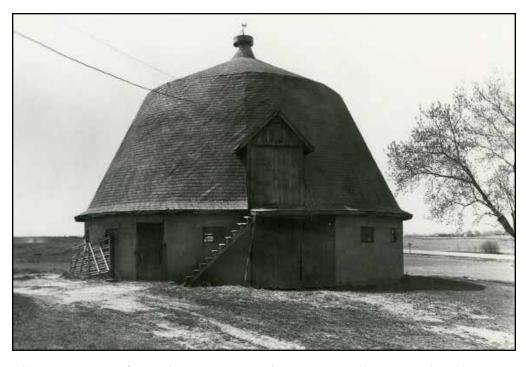


Failed democratic revolutions in Germany in 1848 compelled nearly one million Germans to set sail for America over the next decade; by 1860 there would be more than 200 German language newspapers publishing in this country. Bernhard Stroh, 28 years old in 1850, was one one of those boats.

He was headed for St. Louis but was much impressed by Detroit on the way. There he stayed, introducing his distinctive light lager beer to the city from his Lion's Head brewery. Michigan was drunk with breweries in the latter half of the 1800s, thanks to the waves of German immigrants. Escanaba was a typical beer city of the times. The citizenry was well-lubricated from the Escanaba Brewery so, the thinking went, it just proved there was a need for another brewery. John Richter left his job as head brewer at Escanaba and set up his kettles in a handsome new brick Romanesque-styled brewhouse. Meanwhile Michigan's "dry staters" were gathering strength. Michiganders would approve a law banning alcohol in 1916, three years before national Prohibition. When Prohibition was repealed in 1933 Michigan brewers were eager to get started again. The Delta Brewing company began churning out Hiawatha Draught and Peninsula Pride in the old Richter Brewery but like most of the re-starts there was not enough business to weather the Great Depression. Some large brewers like Stroh's survived; the Detroit institution even became America's third largest brewer. But the beer industry was consolidating and in 1985 Stroh's closed its Detroit facility, bringing a 135-year tradition to a close. The Richter's brewery stands as one of Michigan's best souvenirs from the Golden Age of Brewing. But - the story is not over. Michigan's local hops fields sprung to life again in the 1980s, stoking the craft beer revolution. Michigan today ranks fourth among all states in the number of commercial breweries, led by Grand Rapids, anointed Beer City USA.

Round Barn

Goodrich 1920



Elliott Stewart of Hamburg, New York was touted in agricultural magazines as a "Farmer of the Future" in the 1870s. After losing his barn to fire he replaced it with an octagonal version capable of sheltering 40 cows. He was so pleased with the ease of construction, low carpenter's bill and sturdiness that he sang its praises in the Buffalo Livestock Journal, where he moonlighted as editor. Stewart's article ignited a "round barn movement" among dairy farmers from New York to Kansas. Michigan farmers, who rank sixth in the United States in milk production, would certainly have taken notice. Erwin Gabel fashioned this round barn from cement blocks and lumber harvested from his property. Local 4-H members from the largest youth development organization in Michigan chipped in with help for construction.

Suicide Hill

Ishpeming 1925

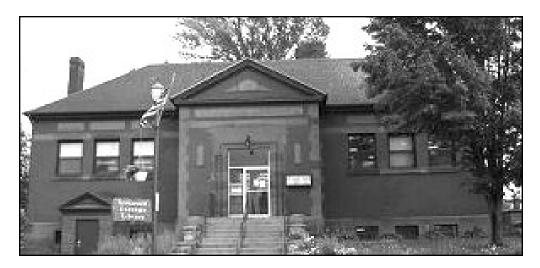


Skiing began ten centuries ago with the Norsemen. Skiing associated principally with warfare until the mid 1800's when Sondre Nordheim invented ski bindings that enabled both jumping and turning. "The Father of Skiing" also developed a basic ski design which has never been im-

proved upon. In 1866 he won the world's first ski-jumping competition. Ishpeming's highest elevation soars to only 1434 feet, although the name is thought to mean "high ground." But organized skiing in America began here in 1887 when three Norwegian immigrants formed the Norden Ski Club. Ski jumping was done from hills at the time and backyard jumps became as common around Ishpeming as basketball hoops would be generations later. Arriving in town around this time was Carl Tellefsen, founder of the prestigious Trondheim Skiing Association in Norway. After demonstrating an impressive 42-foot jump he quickly rose to the forefront of Michigan skiers. In 1904 Tellefsen oversaw the construction of a 40-foot timber jump and staged the "greatest ski tournament ever held in the United States." The next year he became the first president of the newly formed United States Ski Association. The Suicide Hill Ski Jump opened for 90-meter competitions in 1925. Three decades later the U.S. National Ski Hall of Fame would be founded at the foot of Suicide Hill where it remains today. The first inductee was Carl Tellefsen.

Carnegie Library

Ironwood 1901



When he decided to retire in 1901, while in his mid-60s after building the world's greatest steel works, industrialist Andrew Carnegie met with financier J.P. Morgan to discuss a sale. It was not a difficult negotiation. Morgan asked Carnegie to write down a price. The steel magnate scribbled "400 million" and slid the paper across the table. "Congratulations, Mr. Carnegie," said the banker. "You are now the richest man in the world." That's over \$5 billion in today's dollars. When Carnegie got his first raise as a teenager working in the offices of the Pennsylvania Railroad - to \$35 a month - he wrote years lat- er, "I couldn't imagine what I could ever do with so much money." Carnegie then set out to give away all the money. He only managed to disperse \$350 million, with much of the largesse going to construct more than 2,500 public libraries across the world. Michigan received grants to build 61 libraries. Ironwood received \$17,000 and the brick building was the first build in the Great Lakes State. It still operates today with the original tables and circulation desk. Andrew Carnegie would later run into Morgan again, lamenting, "I should have asked for \$100 million more." "You would have gotten it," said Morgan.